



## Permitting for Environmental Results (PER)

# NPDES Profile: Indiana

### PROGRAM RESPONSIBILITY

**State of Indiana:** NPDES authority for base program, general permitting, federal facilities

**EPA Region 5:** NPDES authority for pretreatment and biosolids

### 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 Bruno Pigott, Indiana DEM, at (317) 232-8631, or Peter Swenson, EPA Region 5, at (312) 886-0236.

## Section I. Program Administration

### 1. Resources and Overall Program Management

#### The State of Indiana:

Indiana's NPDES program was authorized in 1975; authority to regulate federal facilities was approved in 1978; and general permitting authority was approved in 1991. Indiana does not have authority to implement the pretreatment and biosolids programs. The Indiana Department of Environmental Management's (IDEM) NPDES program resides in the Office of Water Quality (OWQ) and involves the efforts of the Permits Branch, Compliance Branch, and Assessment Branch. The Permits Branch issues individual and general NPDES permits, pretreatment permits, and State construction permits for wastewater treatment facilities and sewer systems. The Branch also administers the State's combined sewer overflow (CSO) program and the stormwater program. The Compliance Branch directs the inspection of NPDES facilities, tracking of compliance data submitted by regulated entities, response to complaints, sewer bans, operator assistance, laboratory analysis quality assurance/quality control program, operator certification, and data management. Data management was incorporated into the Compliance Branch during the past year, and the CSO and pretreatment permits programs were incorporated into the Permits Branch in an effort to increase efficiency. The Assessment Branch performs stream surveys and compiles water quality data from sampling, which are used by the modeling staff in the Permits Branch to perform wasteload allocation studies for individual NPDES permits. For State fiscal year (FY) 2004, resources involved in administering the NPDES program include 130 full-time equivalents (FTEs) and more than \$7 million in funds, including over \$700,000 in federal funding.

According to the Management Report, the State has 191 major facilities and 1,095 minor facilities covered by individual permits. There are also 331 non-stormwater minor facilities covered under general permits-by-rule.<sup>1</sup>

In recent years resources for carrying out NPDES activities have been strained by staffing needs in other new or growing programs, especially total maximum daily loads (TMDLs), wet weather, and Phase II stormwater permits. It should be noted that in 1994 the State approved a permit fee hike that provided increased revenue for NPDES programs, and staffing was increased at that time. For the past 10 years, however, funding (and therefore staffing) have remained fairly static, resulting in a net loss of resources for “core” NPDES permitting. Recently, IDEM has received approval to hire seven additional staff persons in the Permits Branch to assist in meeting goals to eliminate any backlog of NPDES permits by the end of 2005.

Although IDEM does not have authority to implement the pretreatment program, EPA has encouraged IDEM to take on program administration responsibilities. No date for delegation has been set.

In August 2002 pretreatment staffing decreased from three to two full-time staff because of reassignment of one pretreatment staff person to assist in implementation of the wastewater operator certification program. In March 2003 the pretreatment staff was further reduced to one because of staff resignation. The remaining staff person was the senior pretreatment program coordinator, who subsequently retired in March 2004.

Resources were reallocated within the OWQ in May 2003 to address and prioritize the pending permitting and compliance-related needs of the pretreatment program. As of October 2003, two full-time staff persons in the Permits Branch were directed toward pretreatment permitting and two staff in the Compliance Branch were focused on pretreatment compliance. The compliance-related tasks included providing initial permit and compliance training to reallocated staff, providing training for compliance field staff, and completing annual pretreatment program audits.

As noted above, the senior pretreatment program coordinator retired in March 2004. This position was filled in June 2004 with the promotion of one of the existing pretreatment compliance staff. The vacancy created by the promotion remains unfilled because of current State hiring constraints. It is anticipated that this vacancy can be filled in early 2005.

Field inspection staff conduct unannounced on-site inspections at both major and minor NPDES permitted facilities. The 15 inspectors also investigate citizen complaints and participate in specific compliance initiatives. Minor permitted facilities include industrial user/pretreatment permits prepared by OWQ pretreatment staff. These industrial user permitted facilities receive field inspections two times every 5 years.

IDEM conducts NPDES training for new permit writers by assigning a senior writer to work with new permit writers and to provide training. IDEM has also assembled an “On the Job Training Manual” that includes a written overview of the program as well as step-by-step procedures for writing permits.

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<sup>1</sup> The National Data Sources column on the Management Report, measure #3, states that there are zero non-stormwater minor facilities covered under general permits in Indiana. The State reports that it has issued 7 non-stormwater general permits-by-rule, covering 331 minor facilities. This discrepancy is due to the fact that data on these facilities were not entered into ePIFT.

IDEM provides new employees with EPA's "NPDES Permit Writers' Manual," and employees are required to attend EPA training. Current permit writers are encouraged to attend the training as a refresher. Permit writers are also involved in the development and review of water quality standards. Although a separate group is responsible for the required mathematical modeling, permit writers are in charge of soliciting comments from stakeholders and modifying the standards accordingly.

Senior wastewater inspectors provide field training to new inspectors. The OWQ Wastewater Facility Inspection Section developed and implemented revised inspection protocol procedures in March 2003. Comprehensive training courses, provided to inspectors in March 2003, covered current operating procedures, inspection protocol (inspection types, inspection reports, inspection checklists, and inspection letter types), and the enforcement referral policy. The new protocol procedures were immediately implemented for all regions within Indiana after personnel received the training. This training and a copy of inspection procedure documents are provided to new wastewater staff. Each month the Wastewater Inspection Section conducts regularly scheduled staff meetings and presents updated materials and guidance related to the new protocol.

NPDES requirements related to concentrated animal feeding operations (CAFOs), including permit review and compliance evaluation, are administered by the Office of Land Quality in conjunction with the State's Confined Feeding Operation approval program.

#### EPA Region 5:

Although IDEM has been authorized to implement the NPDES programs within Indiana and issues all NPDES permits in the State,<sup>2</sup> EPA Region 5 carries out direct implementation activities in two programs; pretreatment and biosolids.

The Region has approximately 0.5 FTE committed to these programs in Indiana. This staffing is adequate for the current workload (pretreatment program reviews, limited biosolids permitting). However, Congress intended 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 it 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 Indiana. Additional enforcement and compliance staff would also be needed to monitor compliance.

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

The Region has worked with Indiana to prepare several submissions necessary for pretreatment program delegation. This work has included assistance in revising State rules, drafting revisions to State/EPA Memoranda of Agreement, and preparing program procedures and resource assessments. The most recent submission was made by Indiana in 2001. The Region provided support in developing revised rules and in completing the other elements of the authorization package, and the Region provided comments on the program submission. Comments focused on the need for adequate staffing to support program activities. IDEM has been unable to address these comments.

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<sup>2</sup> The National Data Sources column on the Management Report, measures #6 and #7, indicates that there are 24 industrial facilities and 42 POTWs covered under individual permits issued by EPA. However, this number is the result of an error in the Permit Compliance System (PCS), which has since been corrected. All permits are issued by IDEM.

Resource limitations have been the greatest impediment in pursuing authorization of the biosolids program in a number of Region 5 States. To assist the States, the Region has provided contractor support for reviewing State legal authority; grant funding for program development; and timely Regional reviews of draft rules, program descriptions, and Attorney General Statements.

## **2. State Program Assistance**

Region 5 carries out direct implementation of the biosolids program within Indiana. The level of effort has been reduced because of 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. For Indiana, the Region sends out reporting forms to all major publicly owned treatment works (POTWs) in the December/January time frame, and to others required to submit annual reports by February 19. The annual report data are entered into the Permit Compliance System (PCS) database. Because of limited resources, EPA Region 5 does not verify that all annual reports have been submitted, nor does it proactively track compliance. Enforcement actions related to biosolids are typically initiated in response to complaints or are part of more comprehensive enforcement actions.

## **3. EPA Activities in Indian Country**

There are no federally recognized Tribes within Indiana State borders.

## **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.*

On September 24, 2004, George Pandygraft, an attorney, filed a petition for withdrawal of Indiana's NPDES authority, raising issues associated with judicial review and CSO requirements.

## **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 Indiana:

IDEM is required by rules and statutes to involve the public in its decision-making process regarding NPDES permits. In addition to the public notice requirements set forth in both the federal and State NPDES regulations, several additional public notification requirements have been established in State rules and statutes. For example, whenever a new NPDES application is received, IDEM is required to send a written notification of that application to the county commissioners, the nearest town or city official, and the county surveyor. If an application for a variance, site-specific request, or antidegradation demonstration is submitted to IDEM, public notice of the receipt of that application must be given.

A State statute (IC 4-21.5) also requires the applicant to identify any persons potentially affected by a proposed discharge. Although that statute requires such notification for only the final decision regarding an application, IDEM has also used this list when sending out notices regarding the draft permit action.

IDEM has created several on-line guidance documents, including the “IDEM Permit Guide” and “IDEM’s Guide for Citizen Participation.” The latter, which is located on IDEM’s Web site at <http://www.in.gov/idem/guides/publicparticipation/index.html>, is a “plain English” guide designed to help the public understand State and federal environmental laws. It explains how the public can participate when IDEM proposes changes to environmental rules or makes decisions on environmental permits or cleanup actions. The guide also points the public to other government agencies that help to protect the environment or that might have authority over activities not regulated by IDEM.

The public has access to all permit records, including fact sheets, permits, inspection records, correspondence, and enforcement documents, including notices of intent (NOIs) not protected by attorney-client privilege. (It should be noted that the State has a database for submission and issuance of NOIs in addition to hard copies.) Documents are kept at a central file room at IDEM. Interested parties may visit IDEM’s offices to view these documents or, in some cases, may have information emailed to them. They can obtain hard copies for a fee, which covers the State’s costs. State staff were not aware of any complaints from the public about difficulties obtaining information, or any legal or procedural barriers to providing it.

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

#### EPA Region 5:

As the pretreatment approval authority in Indiana, the Region is responsible for review and approval of new POTW pretreatment programs and all modifications of existing programs. In approving these programs, the Region follows the public notice requirements in the General Pretreatment Regulations. Once the Region’s review determines that a new or modified proposed program is approvable, the Region requests that the State provide the public notice in the relevant local community. If, as usually is the case, no comments are received, the Region transmits an approval letter to the POTW. If comments are received, the Region considers these, makes any necessary revisions, and requests that the State issue another public notice of the changes. The Region has also encouraged the POTWs to use the option provided in 40 CFR 403.18 whereby the POTW provides the public notice, and the Region has provided guidance on the necessary contents of such notices.

## **6. Permit Issuance Management Strategy**

#### The State of Indiana:

In Indiana there are 191 individual NPDES permits issued to major dischargers and 1,095 individual permits issued to minor dischargers. During the past 3 years (calendar years 2001, 2002, and 2003), IDEM issued 24, 13, and 27 major permits and 170, 176, and 232 minor permits, respectively. Currently, IDEM has an expired permit backlog of 43% for major permits and 12% for minor permits. Nineteen major and 13 minor permits have been expired for over 10 years, and 63 major and 28 minor permits have been expired for over 2 years.

Indiana's percentage of current (unexpired) minor permits is well above the national average (the backlog of expired minor permits is below the national average). However, the backlog of expired major permits is high. This has been a long-standing problem for IDEM, and reducing this backlog has been difficult for a number of reasons. In addition to writing permits, members of IDEM's permits staff are responsible for performing periodic reviews of existing NPDES rules and for developing new rules and implementation procedures. High turnover rates of the permits staff result in the need to provide frequent training for new employees and reduce the efficiency of the permit writing staff. Further contributing to this backlog are the recent Indiana revision to the 1990 water quality standards and the adoption of the Great Lakes Initiative rules. These changes have increased the complexity of permits and added new requirements to the permit development process, such as the antidegradation requirements. Finally, permit negotiations are more complex and lengthy because the permits are more complex than in the past, public interest has increased, and the process is more resource-intensive than ever before.

Indiana is working to eliminate the backlog of major NPDES permits. Almost all permit writing staff are currently focused on addressing renewals for major NPDES permits that expired prior to 2003. By the end of calendar year 2004, IDEM anticipates issuing public notices or final decisions for almost all NPDES permits that expired prior to 2003. By shifting some federal funds through the Performance Partnership Grant, IDEM is using staff overtime, pursuing contractors to provide modeling assistance, and working to increase staffing levels to be able to reduce the permit backlog.

IDEM has developed a backlog reduction plan to meet the goal of having 90% of NPDES permits current by the end of 2005. The State has provided the Region with a Milestone Report for major NPDES permits with a projected completion date for each permit on the list. Indiana plans to provide monthly progress reports to the Region. The Region also plans to track these projected schedules on a monthly basis and work with the State to ensure that the permits are issued on the projected schedule.

Indiana's management strategy includes the issuance of general permits for specified categories of point sources. EPA approved Indiana's general permits program in 1991. The program involves the use of administrative rulemaking procedures to establish and issue general permits. EPA perceives this approach to general permitting as imposing unnecessary burdens on the State. EPA plans future discussions with the State to identify ways in which the general permits program could be improved. These discussions will include consideration of the option whereby Indiana can issue general permits as administrative rather than as rulemaking actions.

Indiana is considering additional approaches for streamlining the permit issuance process, including administratively extending minor permits, and options for electronic submission of documents.

#### EPA Region 5:

The Region is working with the State on the development of mercury variance guidance and has offered technical assistance on thermal discharge issues and review of CSO long-term control plans (LTCPs). The Region has provided contract assistance to the State for drafting steel mill permits. It is also assisting the State in developing a streamlined mercury variance procedure.

**Table 1: Percentage of Facilities Covered by Current Permits in Indiana**

	2000	Nat'l Avg.	2001	Nat'l Avg.	2002	Nat'l Avg.	2003	Nat'l Avg.
Major Facilities	56%	74%	56%	76%	57%	83%	58%	84%
Minor Facilities	90%	69%	91%	73%	95%	79%	93%	81%
Minor Permits Covered by Individual or General Permits	N/A	N/A	N/A	N/A	95%	85%	93%	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.)

## 7. Data Management

### The State of Indiana:

Indiana is a direct user of PCS and uses this database to record Water Enforcement National Database (WENDB) data elements for major and minor dischargers. All individual NPDES stormwater permits are also entered into PCS.

Indiana also employs a number of internal databases for tracking specific data. Of particular interest to EPA's enforcement program are the Multimedia Enforcement Tracking System (METS) database (used to track administrative compliance orders), an Access database tracking CSO events (sanitary sewer overflow [SSO] events are tracked in PCS), an Access database tracking NOIs to be covered under the State's general permits for stormwater discharges, a database tracking inspection events and responses, and a database containing an inventory of CAFOs and related information.

The State has undertaken several activities to make more efficient use of PCS. IDEM is purchasing the software and equipment necessary to scan all hard copy discharge monitoring reports (DMRs) and monthly reports of operation (MROs). The scanned information will be transferred automatically to PCS, significantly reducing the time needed to input data to PCS.

Indiana records 128 WENDB data elements. A program highlight is that these data are maintained for almost all dischargers, including minor dischargers. Normally, the only data fields not completed are those where the required information is not readily available or is not applicable to Indiana.

Latitude and longitude data are not yet entered into PCS for all facilities. However, Indiana is using a number of approaches to acquire these data, at both the facility and the pipe level. First, locational information is provided by the facility on its permit application, either as latitude/longitude data or in the form of a map. Staff members collect and enter these data into PCS. Second, Data Management staff issue letters requesting that facilities provide these data. Last, wastewater inspectors equipped with global positioning system (GPS) field units collect locational data while conducting routine inspections. Computer data validation is used to check the data, including automated removal of coordinates outside the State of Indiana. In addition, regular manual checks using geographic information system (GIS) maps are conducted to visually verify that facilities are properly located in the correct county.

The State ensures the quality of the laboratory analyses supporting the reported data in DMRs through its DMR-Quality Assurance (QA) program. The program is mandatory for all municipal and industrial major dischargers. These dischargers are closely monitored for participation in the program. If required results are not submitted within the acceptable time frame, the permittee is in violation and subject to the Enforcement Response Plan. Dischargers are required to correct cited problems and retest for all unacceptable results. NPDES inspectors are informed of the outcomes for their area by the program QA coordinator. A similar DMR-QA program has been developed for minor municipal dischargers, and it is being expanded to include minor industrial dischargers as well as both public and private minor dischargers. Again, the program QA coordinator informs NPDES inspectors as to the outcomes for their area participants.

Indiana will be the first Region 5 State to convert to modernized PCS and will begin that conversion in 2005.

IDEM's Data Management staff conducts an initial routine quality control check, reviewing the DMRs for common problems and calculation errors, such as data reported in the incorrect columns, missing data, and incorrect averages. Where problems are discovered, staff call the operator to discuss the problem, write a letter explaining how IDEM expects the data to be completed, or bring the problem to the attention of the compliance staff for their subsequent action. Indiana follows EPA's guidelines for data entry and maintenance. When Data Management is fully staffed, timelines can be met. When staff vacancies occur, resources are temporarily shifted within the Compliance Branch to cover the data entry and maintenance needs until new staff are hired and trained.

#### EPA Region 5:

The Region uses PCS to track all biosolids data required in the annual report for Class 1 sludge management facilities and major facilities. The Region provides preprinted DMRs for these facilities, which 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 reviews all permits through multiple peer reviews, expert reviews, and unit supervisor reviews prior to issuance, using a permit review checklist.

On a real-time basis, the strategy for Regional assistance in reducing the backlog calls for Region 5 staff to review a sample of draft permits each year to assess the adequacy of IDEM's permit writing and provide suggested changes as needed while still allowing the State to take primary responsibility for this task. The State provides EPA copies of the permit application, public notice, fact sheet, draft permit, and supporting documents. Public notices, fact sheets, and final issued permits are to be sent to EPA for all major permits and certain other permits. An annual list of about a dozen projects, both municipal and industrial, is developed jointly by IDEM and Region 5 staff. Factors considered include such criteria as design flow, whether the permit has been expired for a long time, whether there is a discharge to a Great Lakes drainage area, whether the permittee is a power plant, and whether the permit authorizes CSO discharges. An attempt is made to include variety in the list. However, most of the proposed permit renewals on the submitted lists have not been processed, so few of these joint reviews have actually been completed.

Region 5 works with the State to ensure that permits implement key program elements, particularly new or modified requirements such as controls on discharges of toxic pollutants (including mercury and whole effluent toxicity [WET]), CSOs, and CAFO manure and wastewater, and to establish effluent limitations based on wasteload allocations.

The State has recently expressed a preference to incorporate CSO LTCP implementation requirements into permits rather than judicial or administrative enforcement actions. Because CSO control is a priority focus for EPA, Region 5 will ask the State to forward the LTCP to the Region for review and concurrence prior to issuance.

The State's NPDES program meets minimum federal WET requirements and uses EPA's WET guidance for determining appropriate WET requirements in permits, including testing procedures. In 2002, 13 members of IDEM's permit writing staff attended 3-day EPA training in the policy and technical aspects of WET testing. IDEM does not have any WET testing educational or outreach programs for permittees. Indiana has narrative standards for toxicity.

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

## 2. Pretreatment

### The State of Indiana:

IDEM is not authorized to administer the pretreatment program. As a result, Region 5 continues to be the approval authority and to conduct certain direct implementation activities. In Indiana, 45 POTWs implement approved pretreatment programs. The Region reviews and approves submissions for new and modified POTW programs; the State or local POTWs carry out necessary public notice procedures.

Virtually all of the State's 670 SIUs discharging to delegated pretreatment POTWs are addressed by control mechanisms (normally permits issued by the POTW). The State assesses the status of local permits or other control mechanisms in pretreatment inspections and annual report reviews, with follow-up action as appropriate. (The Region does likewise during EPA-led pretreatment audits.)

The State identifies potential SIUs as a result of contact from industry and consultants, and from State inspectors and technical assistance providers. After a potential SIU has been identified, a permit application is sent to the facility. A review of the application determines whether the discharger is actually an SIU and needs to be issued a pretreatment permit. Once permitted, the permittee receives an unannounced on-site inspection at least two times every 5 years to determine compliance with its permit and with pretreatment regulations. Federal DMRs and State monthly monitoring reports (MMRs) are also reviewed to check the permittee's compliance status with permit limits and compliance schedules. The State has issued pretreatment permits to 175 SIUs, 80% of which are estimated to be categorical industrial users (CIUs).

In the past 5 years, Indiana has conducted 55 audits and no pretreatment compliance inspections. IDEM is on schedule to complete 9 of 45 planned pretreatment audits (20%) for this annual EnPPA cycle.

Because IDEM staff resources are limited, annual reports are not routinely reviewed for substance. The Region has provided suggestions on the State's annual report format to improve its value. The Region will work with all States to develop a model reporting format.

Within 45 days of an audit, a follow-up letter is sent to the mayor describing deficiencies and the required resolution. The city is given 30 days to respond to the letter. The response must include documentation of the corrected deficiencies and a compliance schedule for addressing remaining deficiencies. The city must respond within 15 days of resolving each remaining deficiency. The response must include documentation of the resolution. If the matter is not promptly resolved, IDEM pursues appropriate enforcement, consistent with its enforcement management system.

### EPA Region 5:

As discussed above, Region 5 is the approval authority and conducts certain direct pretreatment implementation activities, including review and approval of submissions for new and modified POTW programs.

The Region has conducted four audits in Indiana in the past 5 years to supplement efforts to achieve the national goal for audit frequency.

Following completion of a pretreatment audit, the Region strives to transmit reports with required and recommended actions to POTWs within 180 days. Because of delays in receiving contractor drafts and

other priority activities, this time frame is not always met. To assist POTWs in improving their programs, however, the Region also holds detailed conferences at the conclusion of all audits, which provide POTWs immediate feedback on the findings of the audit. Administrative orders are often issued to track cases where numerous deficiencies have been identified. The Region plans to work with the States to develop a streamlined audit checklist, which might also improve the turnaround time on audit reports.

In addition to formal oversight, the Region provides proportionately more compliance and technical assistance to POTWs and industrial users in Indiana, compared to assistance provided in States authorized to implement the pretreatment program. The Region also participates at least annually in pretreatment workshops in Indiana to provide updates on developments in the program.

### 3. Concentrated Animal Feeding Operations

CAFO Permitting: In May 2003 the Indiana Water Pollution Control Board invoked emergency procedures to issue an NPDES general permit rule for CAFOs. Among other provisions, the rule required that by the end of 2003 all CAFOs must apply for a permit or certify that they are not obligated to apply for a permit until 2006. As of February 2004, 244 CAFOs had notified the State of their intent to be covered under the emergency general permit, and an additional 46 CAFOs had applied for individual permits. One hundred eighty-three CAFOs had certified to the State that they are not obligated to apply for a permit until 2006.<sup>3</sup> The State used normal procedures to issue a general permit rule for CAFOs in March 2004. The permit contains effluent limitations based on the effluent limitations guidelines and new source performance standards, and it requires implementation of nutrient management plans and practices that meet the nine minimum requirements in the 2003 changes to the federal NPDES regulations for CAFOs.

Through amendments to administrative rules that went into effect in March 2004, Indiana established the legal authority needed to administer the 2003 changes to the federal clean water program for CAFOs. The rules allow the State to establish effluent limitations in permits for Large CAFOs, based on the effluent limitations guidelines and new source performance standards. They also include technical standards for nutrient management and require implementation of specific soil conservation and nutrient management plans and practices. In March 2004 Region 5 received the rules from the State. The Region anticipates completing a review of the rules, and nutrient management standards, in the near future and will work closely with the State to enhance the documents as may be necessary.

Compliance Evaluation: Indiana has a very good inventory of Large CAFOs. It completed periodic (i.e., proactive) inspections of all Large CAFOs in 2001. Currently, the State is inspecting Large CAFOs, consistent with the Region 5 goal that all Large CAFOs be inspected at least once every 5 years.

### 4. Stormwater

Progress in Implementing the Phase II Regulations: Overall, Indiana has four stormwater permits in place. The stormwater permit for the City of Indianapolis was reissued in September 2004.

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<sup>3</sup> The 473 (244 + 46 + 183) CAFOs described here are a more refined and detailed accounting of the estimated 450 CAFOs that will require coverage under the February 2003 revisions to the CAFO regulations shown in Management Report measure #11.

Stormwater from Construction Activities: The State revised its stormwater general permit rule for construction activities (Rule 5) on November 26, 2003, to implement the small construction site discharger requirements of EPA's Phase II stormwater regulations. Under Rule 5, persons who disturb 1 or more acres of land must obtain permit coverage. Rule 5 requires the development and implementation of a stormwater pollution prevention plan, including practices to control erosion and sedimentation.

Stormwater from Industrial Activities: The State revised its stormwater general permit rule for industrial activities (Rule 6) on November 26, 2003. Rule 6 also requires implementation of a stormwater pollution prevention plan.

Municipal Separate Storm Sewer Systems (MS4s): Municipal systems subject to Phase II must submit NOIs to be covered under Indiana's new municipal general permit rule (Rule 13). Rule 13 requires a water quality characterization and implementation of the six minimum measures EPA established in the Phase II regulations. Over 90% of the 193 municipalities designated under Rule 13 have applied for permit coverage. The City of Indianapolis and the Indiana Department of Transportation (INDOT) are the only MS4s subject to Phase I of the national stormwater program. The State is negotiating an individual permit for the INDOT.

IDEM's stormwater enforcement has focused on construction site erosion control measures. Other wet-weather enforcement focuses on communities with SSOs and POTWs that fail to submit their LTCPs.

## **5. Combined Sewer Overflows/Sanitary Sewer Overflows**

Indiana has 106 CSO communities to regulate, all of which are covered under NPDES permits. NPDES permits are issued in conformance with EPA's National CSO Control Policy. Permits require that permittees submit a report containing a plan for implementing the nine minimum controls (NMC). Once the plan is approved by IDEM, it must be implemented immediately. In addition, nearly all permittees either have conducted sewer separation or are required through their NPDES permits or under an enforcement action to develop and implement a CSO LTCP to bring CSO discharges into compliance with the Clean Water Act.

All CSO communities are expected to implement the NMC on an ongoing basis. State inspectors use a checklist to determine whether communities are implementing the NMC. If an inspector finds the community deficient in implementing the NMC, a violation letter is sent to the community for follow-up and response by the community. IDEM has committed to conducting 25 CSO inspections by the end of 2005.

To date, 80 communities have developed and submitted LTCPs in accordance with permits or other enforceable mechanisms. Nearly all the remaining communities are under schedules to do so. Completeness reviews have been conducted on all 80 CSO LTCPs, and IDEM is in the process of conducting a technical review on 17 of them. With respect to the remaining submitted LTCPs, IDEM is coordinating review with EPA for the following:

- Indianapolis
- Fort Wayne

- Mishawaka
- South Bend
- Elkhart
- Monticello
- Gary

IDEM has prioritized the review of the remaining LTCPs based on the submission dates and the complexity of the plans and is encouraging communities to undertake whatever steps are possible now to reduce CSO discharges. Where such “early action” projects clearly will form a part of these communities (the ultimate CSO strategy), IDEM is encouraging communities to proceed as rapidly as practical. Approximately 80 communities have submitted LTCPs, and 20 have received substantive review. To date, IDEM has approved one LTCP, and a few other communities have eliminated their CSO outfalls. Upon approval of an LTCP, the State law allows for the temporary suspension of a designated use (subject to a use attainability analysis and approval by EPA). IDEM has encountered barriers to LTCP development and implementation. These include staff and resource limitations for reviewing LTCP submissions, compared with the large number of LTCPs to be approved. Review of the LTCPs requires a variety of expertise in computer modeling, engineering review, and monitoring and assessment. Because the State has a daily maximum pathogen standard, LTCPs may require review of water quality standards prior to approval.

For these reasons, EPA is concerned with a recent IDEM decision to proceed without EPA enforcement assistance in incorporating LTCP implementation requirements into administrative or judicial actions. EPA will closely monitor IDEM’s progress in reviewing and approving its backlog of LTCP submissions.

SSO events generally must be reported to IDEM within 24 hours of occurrence, but there is no requirement for dischargers to provide public notification in the event that an SSO occurs. If the SSO poses a significant threat to the environment, reporting within 2 hours is required, including notification to IDEM’s Emergency Response Line, which in turn notifies other agencies as appropriate, including drinking water suppliers and health departments. Reported SSO events in Indiana have ranged from a high of 1,248 six years ago to a low of 950 four years ago. IDEM records reported occurrences in a database. The information tracked in the database includes the name of the discharger; date of the discharge; date, time, location, and duration of the discharge; an estimate of volume when available; and reason for the discharge. IDEM prioritizes actions for addressing SSOs by evaluating the frequency of discharge. Generally, communities with greater than 10 events yearly are referred to enforcement, and an administrative order is issued requiring capacity assessment, system management, and operation and maintenance activities. Communities with greater numbers of SSO events may also be placed on a sewer connection ban. For communities with SSO events that do not otherwise hold NPDES permits (because they do not operate a discharging treatment plant), IDEM has issued operational permits under 327 Indiana administrative code (IAC) 3-4 to clearly require reporting of overflow events and development of a plan to eliminate such events.

In addition to joint efforts currently targeted at CSO and SSO issues, the Region hopes to work with the State over the next year to develop a strategy for addressing Stormwater Phase II compliance, as well as the issue of failing on-site systems.

327 IAC 5-2.1 requires that communities alert members of the public who might be immediately affected by a CSO discharge. This rule requires CSO communities to develop a CSO notification procedure. The procedure is developed by the community and submitted to IDEM for review and approval. All procedures were to be developed by November 9, 2003, and must be implemented 90 days after the date that the procedure is submitted to IDEM.

Notification must be provided to the affected public, members of the CSO community who ask to be notified, local health departments, and drinking water suppliers located within 10 miles of the CSO outfall. The rule states that the community must do the following (or establish an alternative set of procedures that are as effective):

- Provide public notice in a newspaper of general circulation that allows media sources, the affected public, or other interested parties to request that they be notified in the case of a CSO discharge
- Provide notification when a discharge is occurring or is imminent
- Provide notification in a manner that is mutually agreeable to recipients and CSO communities.

Communities must also post signs at access points to an affected water body, including boat ramps, bridges, parks, school yards, and along greenways and parkways. The rule provides specific model language. If an access point is on private property or outside a CSO community's jurisdiction, the community must offer to provide the signage.

## **6. Biosolids**

### The State of Indiana:

Indiana does not have authority to administer the federal sewage sludge (biosolids) program. However, State regulations have reflected the federal sludge use and disposal standards at 40 CFR part 503 since June 1998 when the previous regulation, 327 IAC 6, was repealed and replaced with 6.1, which provides authority to regulate land application of biosolids. The State issues 5-year permits to facilities that choose land application as their disposal method and can qualify. The permits require proper management of the biosolids in an agronomically beneficial manner that limits nutrient, heavy metal, and pathogenic content and application.

Delegation of this program to the State level requires routine inspections, which IDEM does not currently perform. The delegation package is on hold at the State until an inspection program can be established.

### EPA Region 5:

EPA Region 5 carries out direct implementation of the biosolids program in Indiana. The level of effort has been reduced due to reduced funding for the program nationwide. Activities include providing outreach to the regulated community, assisting the State in seeking program approval, and providing technical and compliance assistance. The Region sends out forms in the December/January time frame

to all major POTWs and to others required to submit annual reports by February 19. The annual report data are entered into the PCS database but are not reviewed. EPA Region 5 does not verify that all annual reports have been submitted and does not proactively track compliance. Enforcement actions related to biosolids are typically initiated in response to complaints or are part of more comprehensive enforcement actions.

## **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 Indiana:

As described more fully below, the State has developed a Compliance and Enforcement Management System (CEMS, approved by EPA in a letter dated March 11, 2002). IDEM develops and manages against a quarterly noncompliance report (QNCR) and generally keeps the level of significant noncompliance (SNC) for major permittees below the Regional target of 10% in any given quarter. IDEM also manages against a Regional goal of maintaining the active exceptions list to less than 2%. With the advent of the watch list, the Region will seek to apply this goal to that list, rather than the QNCR or the active exceptions list. IDEM goes beyond the EPA definition of SNC by applying the definition to traditional municipal minor facilities as well as major facilities. This is a highlight of IDEM's program, in that a greater universe of potentially significant violations is monitored and responded to in a consistent manner. In addition, IDEM has developed internal thresholds for prioritizing enforcement actions for those discharges (such as wet-weather discharges) for which the EPA definition of SNC is inapplicable.

For example, the State prioritizes SSOs by evaluating the frequency of discharge. Generally, communities with greater than 10 events yearly are referred to the Office of Enforcement for the initiation of formal enforcement action. The objective of IDEM's administrative enforcement actions is to enter into an agreed order containing provisions typically found in a capacity, management, operation and maintenance program. Communities with greater numbers of SSO events may also be placed on a sewer connection ban. Further discussion of wet-weather enforcement can be found in Section II.

The number of Indiana facilities that are in SNC at any time during a fiscal year (as opposed to quarter) was fairly high several years ago, but it showed a steady decrease from 45% to approximately 15% between FY2000 and FY2003, the latest year for which data are available. Though there is no national goal against which to compare this SNC rate (e.g., cumulative annual SNC), the rate in Indiana compares favorably with the overall national average of 18% in 2002 and 17% in 2003.

IDEM's CEMS is used to guide staff throughout the agency to consistently select the appropriate enforcement response and escalate enforcement responses. The CEMS describes the coordinated efforts of IDEM's Office of Water Quality (OWQ) and Office of Enforcement (OE) in identifying and addressing violations. One significant component of the CEMS is the Enforcement Response Plan (ERP), which was completed in 2002. The ERP describes when violations are referred to OE. Other parts of the CEMS describe the various enforcement tools available to IDEM. The great majority of formal enforcement actions taken by IDEM employ the State's statutory authority to issue notices of



violation (NOVs) initiating a case, with the end result typically being entry into an agreed order (AO) between the parties. Failure to settle through an AO results in the issuance of a unilateral order of the commissioner (CO). Appeal of a CO is under the jurisdiction of the Office of Environmental Adjudication (a sister State agency). Civil litigation of COs, or enforcement in the case of contempt of an AO, must be referred to the Office of Attorney General.

The average duration of SNC was 16.1 months in 2000 and 12.8 months in 2001, but this statistic jumped to 27 months in 2002. Consequently, the timeliness of enforcement actions is a matter that may warrant further discussion with Indiana.

Indiana's OE has developed a database called the METS that includes a section for tracking compliance with the various milestones in enforcement orders. Respondents are required to periodically report progress, and this reporting is tracked by METS. Field verification is sometimes part of this tracking.

Typical final orders, either AOs or COs, require injunctive relief in addition to payment of the assessed civil penalty. The injunctive relief typically requires a compliance plan (CP) with a schedule for returning to compliance. As part of a CP, the respondent is required to present to IDEM for approval a description of the actions it plans to take and a schedule with dates for accomplishing the actions. Once approved, the CP becomes an enforceable part of the AO. The enforcement case manager is responsible for the tracking the progress of each respondent in its implementation of and compliance with the approved CP. Where major infrastructure changes are required to ensure long-term compliance (most commonly for POTWs), the CP may extend over a number of years.

IDEM has a civil penalty policy that has been in place for approximately 15 years. The civil penalty policy can be found online at <http://www.in.gov/idem/enforcement/oe/policy/nrp/civil.html>. The great majority of IDEM enforcement cases include the assessment of civil penalties.

The recovery of economic benefit is part of the IDEM civil penalty policy. However, it is not specifically identified in many enforcement cases for a number of reasons. Most cases involve POTWs, nonprofit entities, or small companies where economic benefit is difficult to assess. No data are available on the percentage of orders that include economic benefit.

IDEM has a formal supplemental environmental projects (SEP) policy, which can be found at <http://www.in.gov/idem/enforcement/oe/policy/nrp/supplemental.html>.

An accounting of SEPs is included with the penalty reports referenced above.

As mentioned above, 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 the penalty amounts sufficient. The Region has not evaluated subordinate indicators such as timeliness, penalty amounts, and the number of formal enforcement actions. 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 will be more closely assessed to ensure that historic reliance on the two key indicators has been an appropriate means to monitor the overall health of the enforcement program.

With respect to pretreatment audits, within 45 days of an audit a follow-up letter is sent to the mayor of a pretreatment community. Deficiencies are described, along with the required resolution of the deficiencies. The city is given 30 days to respond to the letter. The response must include documentation of the corrected deficiencies and a compliance schedule for addressing the remaining deficiencies. The city must respond within 15 days of resolving each remaining deficiency. The response must include documentation of the resolution. If the matter is not promptly resolved, IDEM pursues appropriate enforcement.

With respect to requirements related to CSOs, all of Indiana's CSO communities have enforceable mechanisms requiring implementation of the NMC. Inspectors are provided with a CSO checklist that they use to determine whether communities are implementing NMC. If an inspector finds the community deficient in implementing the NMC, a violation letter is sent to the community for follow-up and response by the community.

The State's mechanism to informally address violations is issuance of violation letters sent to the facility or municipality by certified mail. These letters generally require a written response within a stated time frame, or a follow-up inspection may be indicated. Failure to respond as required or failure to adequately address timely correction of the violations based on the criteria found in the ERP would normally result in initiation of formal enforcement action (NOV and AO). IDEM compliance staff prepare the violation letter and are responsible for ensuring that adequate response occurs or for initiating formal enforcement action if adequate response does not occur.

#### 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 QNCR 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. EnPPA 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. Forty-two percent of the nation's CSOs are in Region 5, and over one-fourth of these are in Indiana. As a consequence, priorities for addressing this large universe of facilities have been the subject of ongoing discussions between EPA and IDEM. In early 2004 the Region shared with the State an analysis of CSO communities against a set of criteria (e.g., proximity to a high-priority beach or drinking water source). Using these criteria, the Region developed an initial list of priority CSO communities, and agreement was reached with the State regarding a subset of facilities which the Region would address through formal enforcement action. Recently, however, the State has indicated that it does not want the Region to pursue any new enforcement actions against CSO municipalities, preferring instead to address these through State permitting or enforcement actions. Region 5 is concerned that due to resource limitations within the State, such actions taken by the State might not be timely or appropriate, and consequently the Region will monitor this situation carefully.

The Region has direct implementation responsibilities for the pretreatment program in Indiana, as well as the biosolids (sludge) program. With respect to the pretreatment program, enforcement actions are generally the result of inspections or audits. These inspections and audits are prioritized as described below in the discussion of the Region's inspection strategy. Enforcement actions related to sludge are generally complaint-driven.

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 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 go over the status of cases and potential bottlenecks. In 2002 the Division also consolidated a number of databases, which were used to track permittee progress in complying with enforcement actions, and made a concerted effort to review all open cases and close out those where it was appropriate. Approximately 40% of the open cases were closed out as a result of this effort.

## **2. Record Keeping and Reporting**

As discussed above, IDEM uses PCS as its primary permit and compliance database.

## **3. Inspections**

### The State of Indiana:

The State seeks to ensure a field inspection presence at environmentally significant facilities, using the prioritization system described below. Inspections are used to assist in enforcement actions as necessary. In all cases, the goal is to help ensure environmental improvements.

The Compliance Inspection Section considers risks to public health or the environment in determining inspection priorities. The rationale for determining inspection priorities is focused on environmental issues through the examination of the rating of the last inspection, whether violations have repeatedly occurred at the facility, whether the facility has been the subject of complaints, or whether the facility is currently under a State or federal enforcement action. The agency also considers requests from other agencies such as the Indiana Department of Natural Resources and the U.S. Fish and Wildlife Service.

The State had targeted at least 70% of major wastewater facilities and 30% of minor wastewater facilities for inspection during FY2004, with the intent of providing compliance field coverage for all facilities over a 3-year period. Industrial users (pretreatment facilities) are inspected at least two times every 5 years. Historically, the State has inspected at least 70% of its major facilities, and far more than 20% of its minor facilities. However, the number of major facility inspections has declined in recent years, falling to 60% in FFY 2003 and 50% in FFY 2004. EPA has indicated, in the context of EnPPA discussions, that it would like to discuss with the State the effectiveness of the targeting of its activities in terms of detecting environmentally significant noncompliance, particularly if it appears that the number of inspections might continue to be somewhat lower than what the State had been able to accomplish in the past.

For further discussion of inspection coverage and targeting, please refer to the discussions of CAFOs, CSOs, SSOs, stormwater, and pretreatment elsewhere in this profile.

The inspection and monitoring strategies are tracked in PCS, as well as in a new IDEM compliance branch inspection tracking system. The branch tracking system specifically monitors the status of violation letters sent to the facility prior to referral of the facility to the OE for legal action. Violation

letters are tracked to ensure that the facility responds in a timely and appropriate manner to correct the deficiencies noted at the time of the inspection or noted in a file review of facility-submitted documentation or other requirements in the NPDES permit. Based on review of the violation letter response, a second violation letter is sent, the facility is referred to the OE, or the violation letter is “closed” based on a satisfactory response to the concerns noted in the violation letter.

#### EPA Region 5:

The Region has developed an inspection strategy that describes the manner in which inspections are prioritized and agreed to between the Region 5 States and EPA. As described in this strategy, a variety of factors influence selection of inspection targets, including national and regional priorities, case closeout needs, multimedia initiatives, complaints, and coverage requirements. In Indiana, for which EPA is the pretreatment authority, the Region targets its efforts through evaluation of environmental indicators (e.g., whether the concentration of metals in sludge is increasing) and coverage factors (how long has it been since the State or EPA performed an audit at the municipality). The Region requests that the States perform all other 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 which might result in the greatest environmental benefit and believes that this is an issue that warrants policy discussion at the national level.

## **4. Compliance Assistance**

#### The State of Indiana:

The NPDES program assists the regulated community through its Operator Assistance program, as well as its Laboratory Analysis Quality Assurance/Quality Control (QA/QC) program. The Operator Assistance program sends IDEM employees to facilities that may be experiencing problems to help troubleshoot problems and propose operational solutions that help communities stay in compliance. Assistance is generally targeted toward small communities experiencing compliance problems, older plants that may be deteriorating, new plants for which operator certification requirements have not been met, and more recently, plants that are experiencing difficulties with their pretreatment programs or their collection systems, or where spills have occurred. Operator Assistance is strategically targeted and coordinates activities with the Facilities Compliance Section. The Laboratory Analysis program not only requires QA/QC but also assists facilities with sampling problems. The State also conducts extensive outreach when new rules (such as those relating to stormwater Phase II) are developed by the EPA or the State.

Outcomes of compliance assistance efforts are tracked and followed in the annual reports submitted as a part of section 104(g) grant funding. The outcomes are generally measured in terms of the criteria specified in the grant award. The State also attempts to quantify the pounds of biochemical oxygen demand, total suspended solids, and ammonia that are not released as a result of this assistance.

#### 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 both 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 this 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**

Indiana has a monitoring strategy that addresses most of the elements described in EPA's guidance "Elements of a State Water Monitoring and Assessment Program." The State uses a 5-year rotating basin cycle that includes a probabilistic sampling design for all streams and rivers, fixed-station networks, and other targeted approaches to fulfill objectives. In addition, the State is participating in the national probabilistic stream survey as part of a five-State consortium.

At this time, the Indiana strategy does not encompass all the elements described in the EPA guidance. For example, the Strategy does not address wetlands and groundwater. Although the monitoring program collects data for assessing swimming waters, drinking water, and fish consumption uses, these are not assessed for 100% of applicable waters. Indiana is making changes to its monitoring program in 2004 to provide more specific information on causes and sources of impairment to surface waters, and to sample waters for assessment of recreational uses, using a probabilistic approach to allow for extrapolation of this information to all waters. The State's comprehensive monitoring strategy will address the manner in which the State will improve the number of State waters assessed in order to enhance the understanding and characterization of surface water quality throughout the State. Indiana has submitted its revised monitoring strategy, which is under review by EPA.

Data to support the permit program are provided by fixed-station monitoring (upstream and downstream of some major discharges) and special studies selected specifically to provide information on specific dischargers. Indiana has 163 targeted, fixed-station sites on rivers. Although the State employs a 5-year rotating basin approach, this cycle is not tied directly to permit reissuance because of the unequal distribution of permits throughout the State (some basins have many permits, whereas others have only a few).

In addition to the probabilistic monitoring network, Indiana collects data using targeted designs and special projects. The State has a network of 163 fixed stations, and approximately 75 lakes are monitored each year. Like many Region 5 States, Indiana's program (particularly the probabilistic program) focuses on aquatic life use and biological endpoints for much of its determination of water quality status. Indiana is now implementing a second year of monitoring in each basin to improve the identification of causes and sources of biological impairment. As the State increases its focus on parameters such as nutrients, bacteria, and sediment, the percentage of waters identified as impaired might rise. The inclusion of additional water body types (large rivers, headwater streams) could also result in increased identification of impaired waters.

### **2. Environmental Outcomes**

In 2004 Indiana assessed 35,325 stream miles (or about 99% of the total stream miles in the State) for aquatic life use by using a probabilistic design. Of those stream miles, approximately 62% were estimated to be meeting the aquatic life use. This probabilistic approach is implemented on a rotating basin schedule with about 50 monitoring sites per basin. When the second complete rotation is

completed in 2005, Indiana will be able to start tracking basin-wide and statewide trends using these assessments.

The monitoring sites are also used to make water body-specific assessments that are similar to the assessments made in earlier water quality inventories prepared under Clean Water Act section 305(b). Using the data in this fashion, as of 2004 Indiana has assessed more than 40% of its stream miles for aquatic life use. From 1998 to 2004, the percentage of assessed stream miles supporting aquatic life use shows a positive trend, increasing from 73.8% to 82.7%.

These data should be used with caution because the differences for both recreational and aquatic life uses might be a result of changes in site selection, monitoring methods and parameters, water quality criteria, assessment procedures, water quality, or some combination of these factors. In the future, the results from the probability design will provide Indiana with a more statistically valid comparison of water quality over time.

Current Assessment Status: In 2002, 99% of the stream miles in the State were assessed for aquatic life, 24% for swimming, and 10% for fish consumption. Of the stream miles assessed, 65% fully support aquatic life use, 62% fully support swimming, and 0% fully support fish consumption (because of fish consumption advisories for PCBs and mercury). The State also assessed 13% of the lake acres in the State for aquatic life, 7% for swimming, and 62% for fish consumption. Of the assessed lake acres, 42% fully support aquatic life, 100% fully support swimming, and 0% fully support fish consumption. The State also assessed 25,460 acres for drinking water, and 36% of these fully support the use. Indiana assessed 100% of the Lake Michigan shoreline miles for aquatic life, swimming, and fish consumption. Of the assessed Great Lakes shoreline miles, 98% fully support aquatic life (all but 1 mile), 2% fully support swimming, and 0% fully support fish consumption (because of PCB and mercury fish consumption advisories for Lake Michigan).

### 3. Water Quality Standards

Indiana has numeric water quality standards that reflect the EPA criteria for protection of aquatic life, human health, and wildlife. Indiana has criteria and procedures for evaluating WET and establishing the appropriate WET limitations in discharge permits. Indiana also has narrative biological criteria and a process for evaluating biological communities (both fish and macroinvertebrates) to determine whether the narrative criteria are being met.

In developing the “permit quality” section of the 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 Indiana and routine permit quality reviews performed by EPA Region 5.

Narrative criteria are included in all individual NPDES permits. Water quality-based effluent limits are established based on a wasteload allocation for each pollutant-specific water quality criterion unless specific rules dictate specific effluent limits. Permits are carefully peer-reviewed to ensure that the appropriate water quality-based limits are established, consistent with applicable rules and statutes. Indiana also makes an effort to ensure consistency between permits for similar facilities.

For dischargers within the Great Lakes Basin, IDEM develops water quality-based effluent limits 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). These 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 to account for background concentrations of pollutants in the development of permit limits; and procedures to address situations where discharges are to impaired water bodies for which a TMDL has not yet been established.

EPA disapproved the State’s proposed procedures related to determining reasonable potential for WET and subsequently over-promulgated procedures consistent with the Great Lakes Guidance. The State is required to follow these procedures.

When toxicity is noted in discharges outside the Great Lakes, IDEM’s procedures are to determine the pollutants causing the WET failure based on the toxicity reduction evaluation, place monitoring requirements/limits on the pollutant, and continue WET testing. In determining reasonable potential for chemical-specific pollutant parameters in discharges outside the Great Lakes Basin, IDEM follows separate procedures that are similar to those in place for the Great Lakes. Both Great Lakes and non-Great Lakes procedures are found within 327 IAC, section 2.

The Alaska court decision requiring site-specific limits to be approved by EPA prior to permit issuance makes the process extremely time-consuming in Indiana. Indiana’s water quality criteria are incorporated in rules, and therefore a rule revision is required to revise a water quality criterion.

The designated uses contained in Indiana’s water quality standards are primary contact recreation, aquatic life, industrial and public water supply, and agricultural water supply. Indiana’s last completed triennial review for waters outside the Great Lakes Basin was in 1987, and that for waters within the Great Lakes Basin was in 1997. A triennial review is under way. The triennial review will address issues such as mercury permitting, implementation of antidegradation policies, and implementation of E. coli criteria for the protection of recreational uses. To date, very few use attainability analyses have been done in Indiana to modify designated uses.

Indiana’s water quality standards allow for two additional aquatic life classifications: limited use for “All waters with naturally poor physical characteristics (including lack of sufficient flow), naturally poor chemical quality, or irreversible man-induced conditions” and exceptional use for “waters which provide unusual aquatic habitat, which are an integral feature of an area of exceptional natural beauty or character, or which support unique assemblages of aquatic organisms.” Outside the Great Lakes Basin, Indiana has approximately 30 waters classified as limited use and 11 classified as exceptional use. Inside the Great Lakes Basin, Indiana has five water bodies classified as limited use and three as exceptional use.

Indiana has bacteriological criteria to protect recreational uses that are based on EPA’s most recent recommendations. Indiana is in the process of developing nutrient criteria in accordance with a plan agreed to by EPA.



Indiana's antidegradation policy and implementation procedures are at 327 IAC 2-1-2 (for outside the Great Lakes Basin) and at 327 IAC 2-1.5.4 (for inside the Great Lakes Basin) of Indiana's water quality standard rules. Indiana implements its antidegradation policy in a manner consistent with these rules.

#### **4. Total Maximum Daily Loads**

IDEM's permit program is involved throughout the development of each TMDL. IDEM has designated one person in the municipal, industrial, and stormwater programs to be the contact for the TMDL program. For those TMDLs that IDEM is developing under contract, each contractor is required to submit sub-reports prior to the development of the draft and final TMDLs. Each contracted TMDL requires TMDL modeling training that modelers from the Permits Branch attend. Each sub-report and draft TMDL is sent to IDEM's permit program for review and approval. When necessary, meetings between the contractors and permit staff are scheduled to resolve issues.

For TMDLs developed in-house at IDEM, the permit programs are involved at the data gathering stage. As permit issues arise, the TMDL project manager discusses these issues with the appropriate permit program contact. The permit programs are sent a copy of the draft TMDLs to review and approve prior to the 30-day public comment period.

Concerns have been raised over the progress of IDEM's TMDL program. Through 2003 IDEM had only two approved TMDLs. However, IDEM has begun to increase the pace of TMDL development and has a number of projects scheduled for submittal in 2004, which will address approximately 20 additional impairments. Based on progress to date, it appears likely that most if not all of these TMDLs will be submitted on time. A reorganization of the TMDL program and an increased focus on TMDL development, along with some innovative approaches, suggest that the program will increase TMDL production. Region 5 has provided increased financial and contractor support, as well as increased technical and programmatic support, and will continue these efforts to ensure that the State continues to improve its TMDL production.

The State had previously provided a long-term schedule for completing TMDLs over a 25-year period. Based on EPA's concerns over the length of this time frame, the State has since committed to provide a schedule with its 2004 TMDL list that schedules all TMDLs for completion within 15 years of listing the impairment. The 2002 list identifies 2,038 impairments. Assuming IDEM meets the FY2004 target, the State will have to address approximately 180 impairments per year through FY2015.

#### **5. Safe Drinking Water Act**

IDEM is completing its Source Water Protection Program as required by the 1996 reauthorization of the Safe Drinking Water Act. Its assessments for public water systems that use surface water include information from the NPDES program obtained through PCS and NPDES permits. IDEM has identified in its Source Water Assessment Program that the wastewater permit program has measurable effects on drinking water quality by providing protective measures such as permitting wastewater discharge limits, reducing land application runoff, and limiting animal waste lagoons.

## **Section V. Other Program Highlights**

IDEM has implemented several innovations, including the following.

Permit Streamlining: IDEM has participated in Region 5's NPDES streamlining effort and is working on an NPDES Plan for its administratively extended permits that will include several ways of expediting simpler renewals for minor permittees.

Use of General Permits: The categories of general permits used by IDEM include wastewater from cleanup of water contaminated by gasoline and related products, non-contact cooling water, sand and gravel mining wastewater, stormwater discharges from separate stormwater drainage systems, hydrostatic pressure test water, land application of biosolids, and industrial stormwater. The State has developed a general permit for CAFOs, which is under review by the Region.

Streamlined Variance for Mercury: As the State implements more stringent discharge limitations for mercury, the likelihood of requests for variances to those mercury limits is increasing. IDEM has sought to create a streamlined variance process that provides for consistent criteria under which variances could be granted, as well as specific requirements for granting such variances. IDEM has gathered stakeholders from environmental groups, municipalities, and industry to help develop a consistent, fair, and environmentally protective approach to considering variances from mercury limits. This work is ongoing.

Use of the IDEM Web Site: Several improvements to the IDEM permitting Web site have been made. The Web site provides enhanced public access to permit information and status, including access to all public notices and copies of fact sheets and permits for high-interest permits. The Web site also provides access to the "IDEM Permit Guide," a plain English guide to help identify necessary environmentally related permits or approvals or other requirements that might apply to new businesses or expansion projects. The Web site also provides access to NPDES permit application forms.

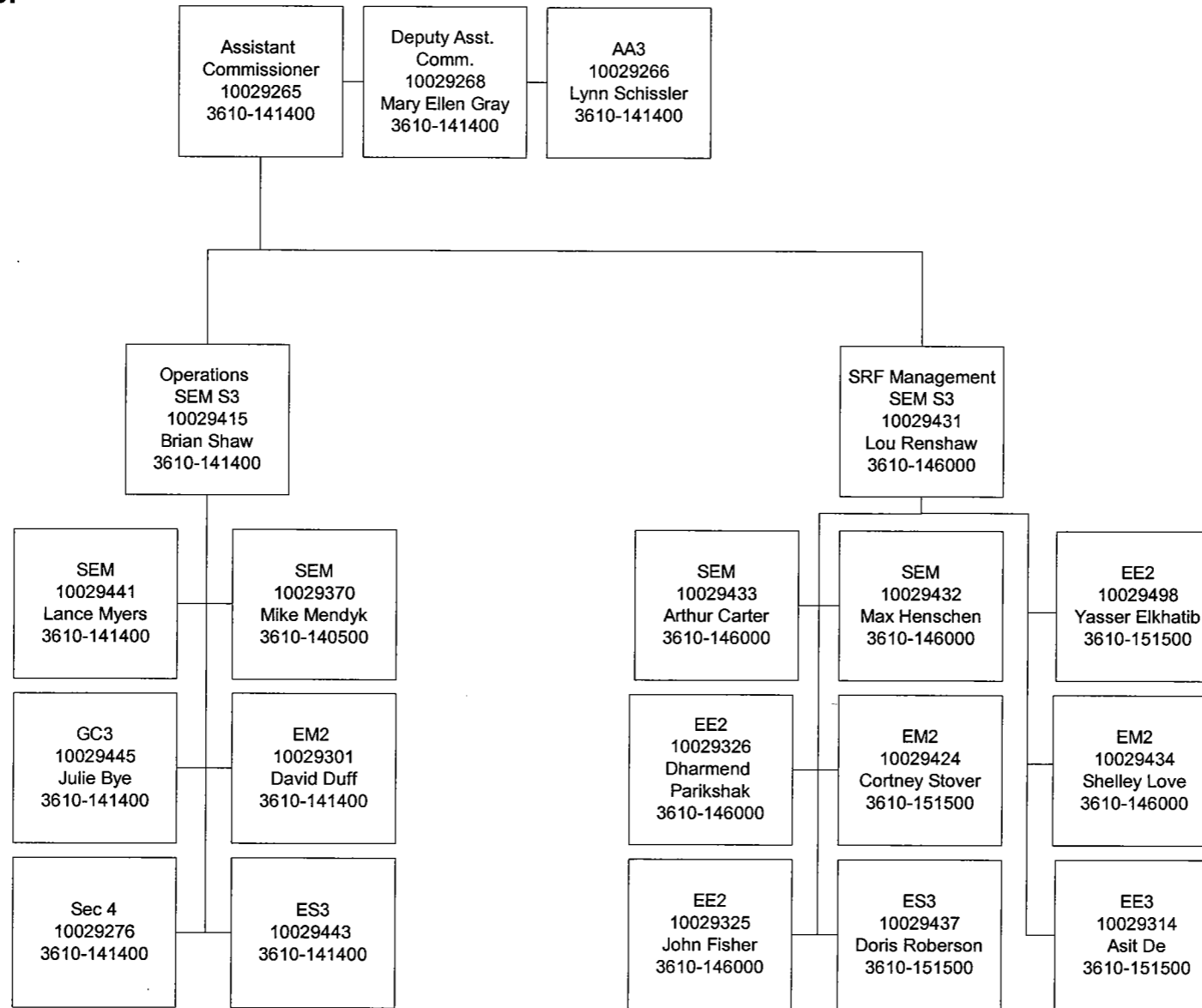
Electronic Submission of Discharge Monitoring Reports (DMRs): The NPDES program is investigating ways of developing electronic submission of documents, including DMRs, within the current State laws.

Automated Input of Discharge Monitoring Reports and Monthly Reports of Operation: The NPDES program has received grant funding for the purchase of equipment and software that would allow DMRs and MROs submitted by facilities to be scanned into the PCS database. This process should expedite the input of important information and save staff resources.

# Assistant Commissioner

Thu, Nov 13, 2003

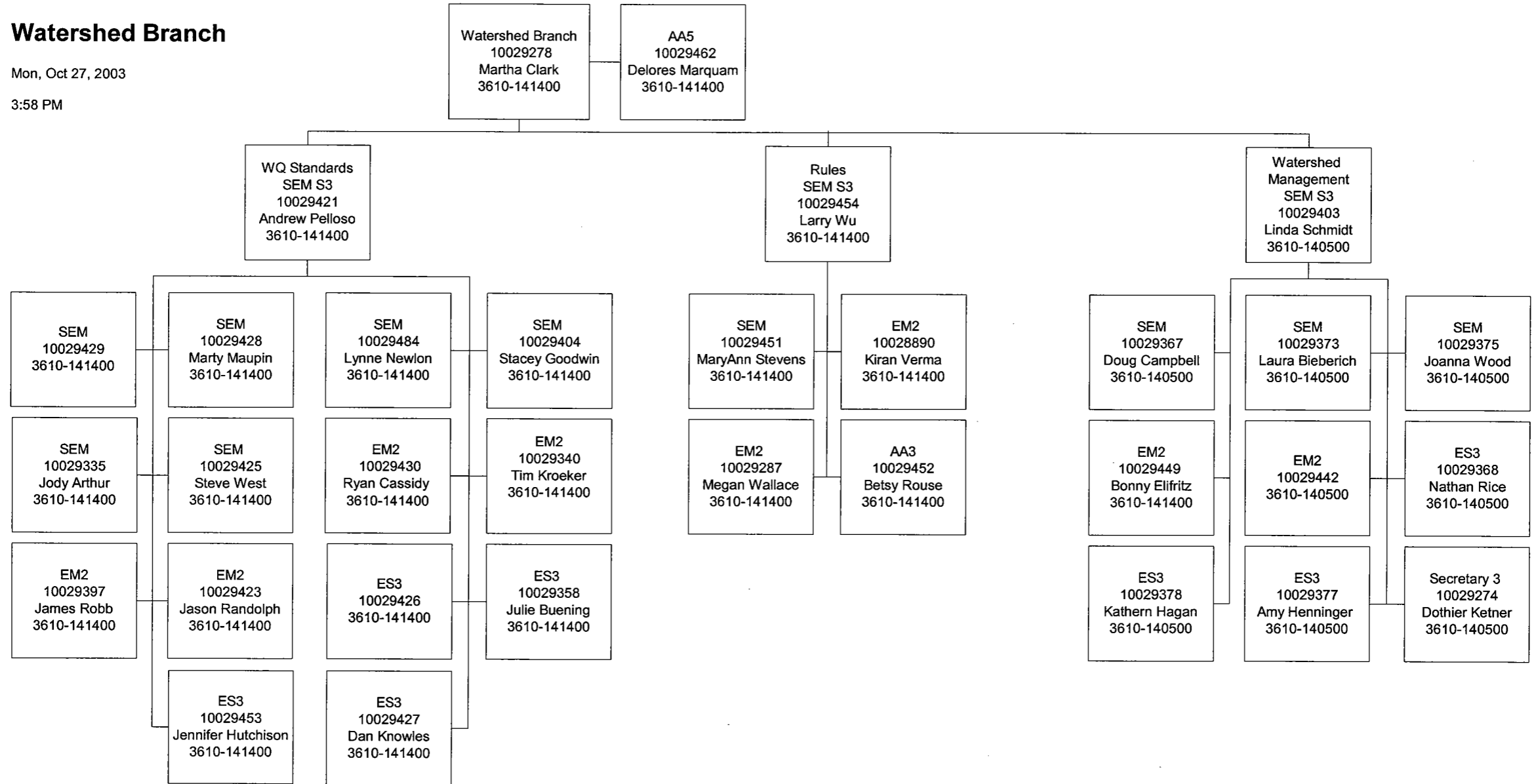
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# Watershed Branch

Mon, Oct 27, 2003

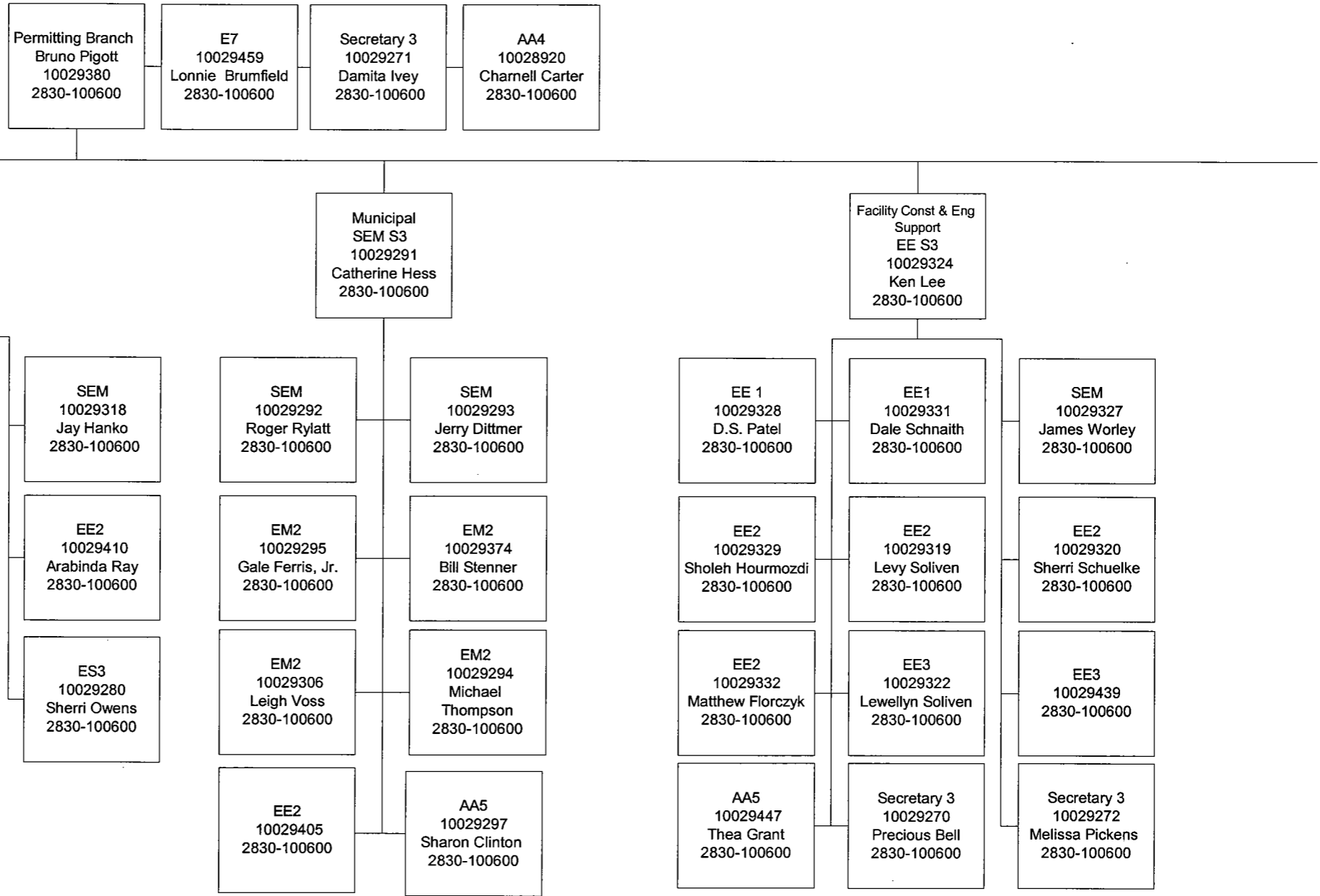
3:58 PM



# Permitting Branch

Thu, Nov 13, 2003

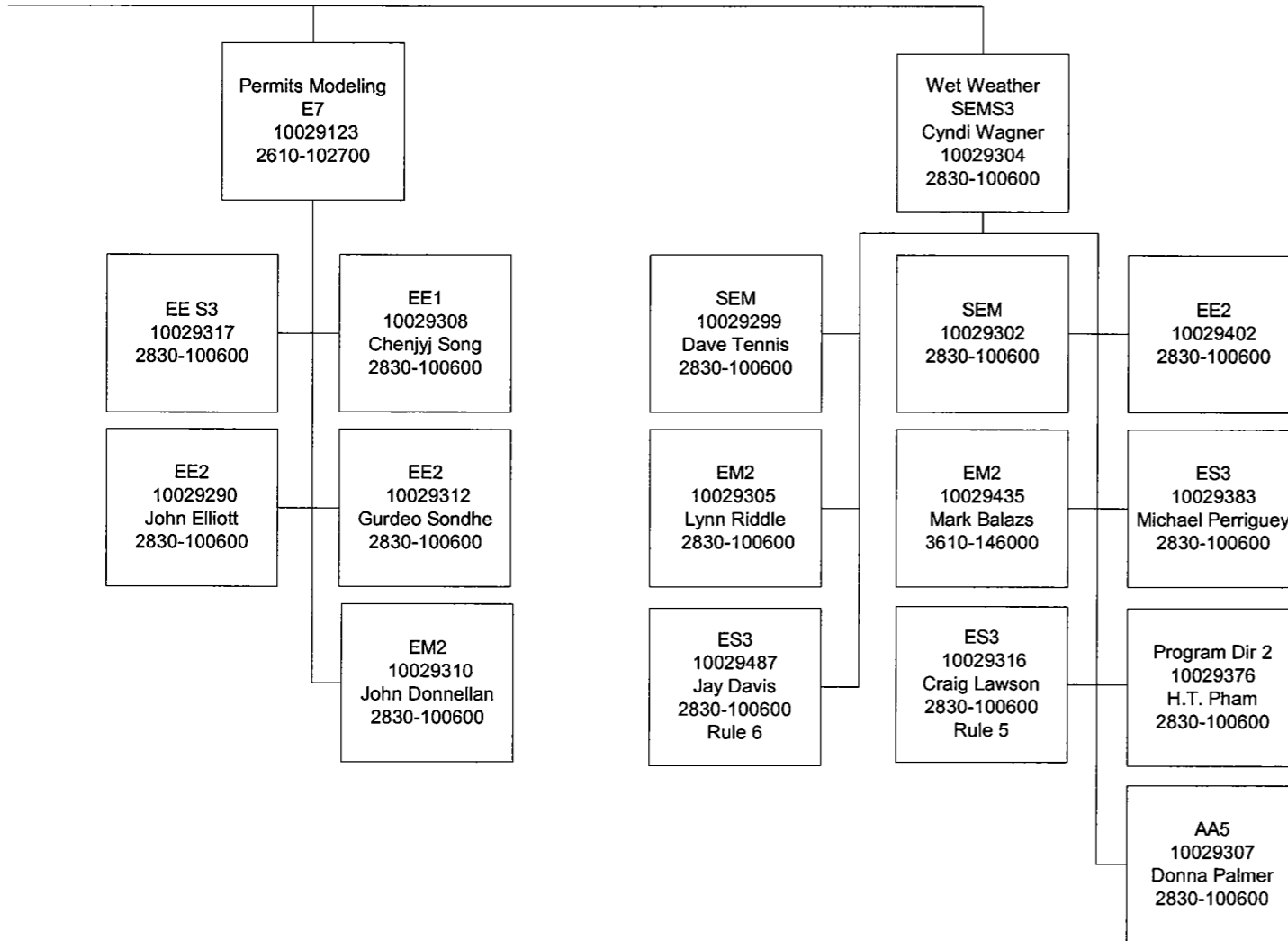
9:39 AM



# Permitting Branch

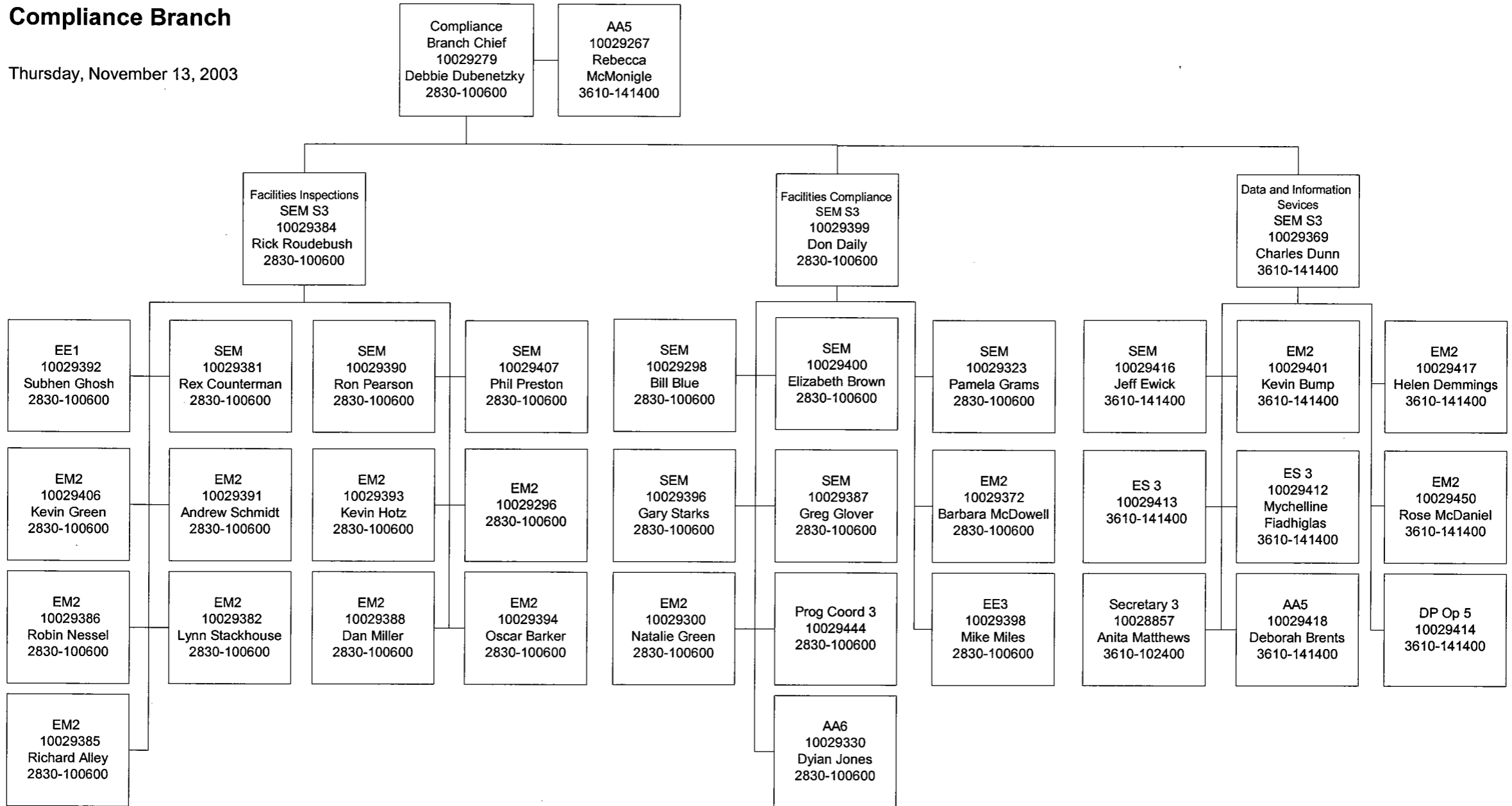
Thu, Nov 13, 2003

9:39 AM



# Compliance Branch

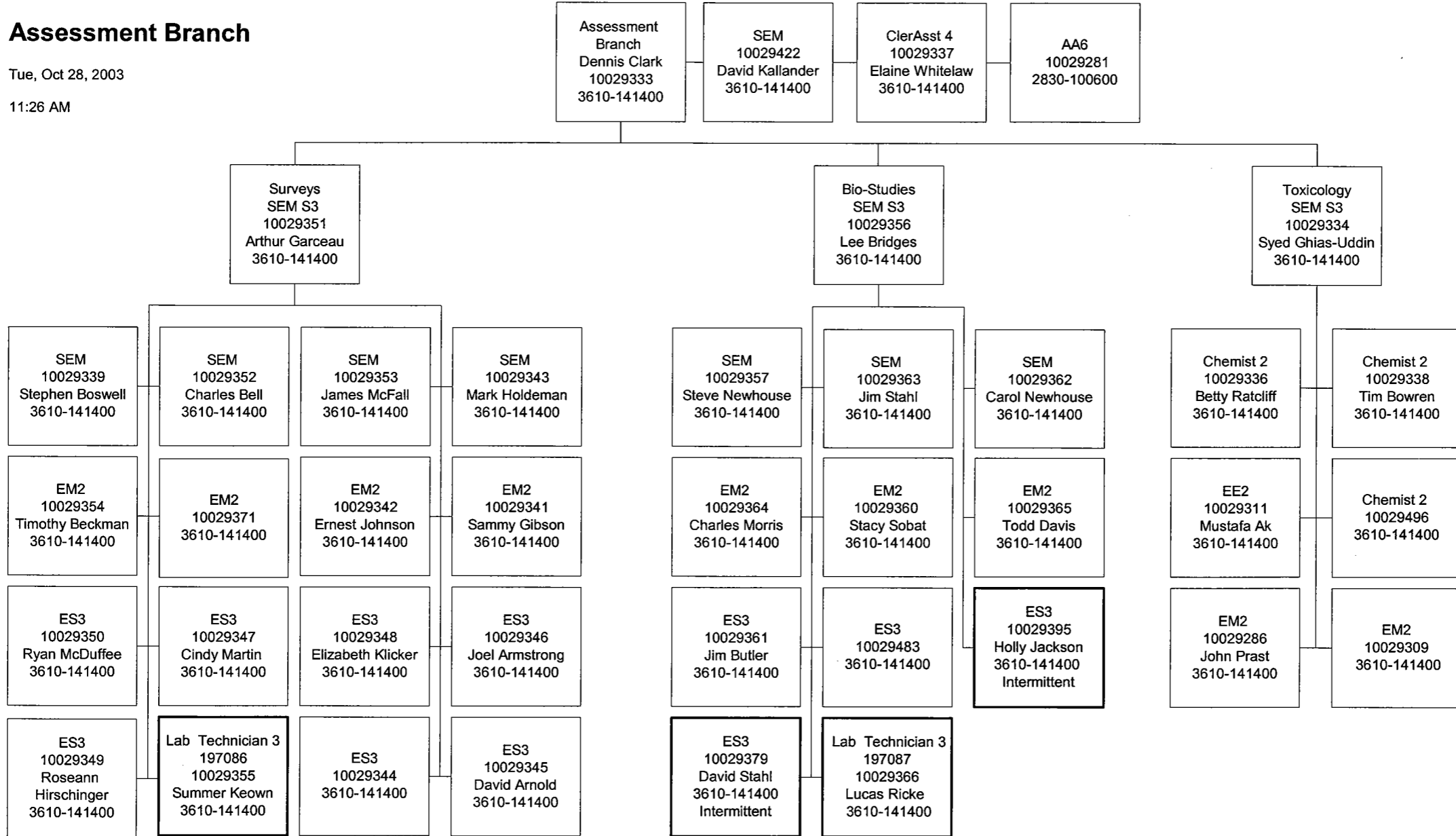
Thursday, November 13, 2003



# Assessment Branch

Tue, Oct 28, 2003

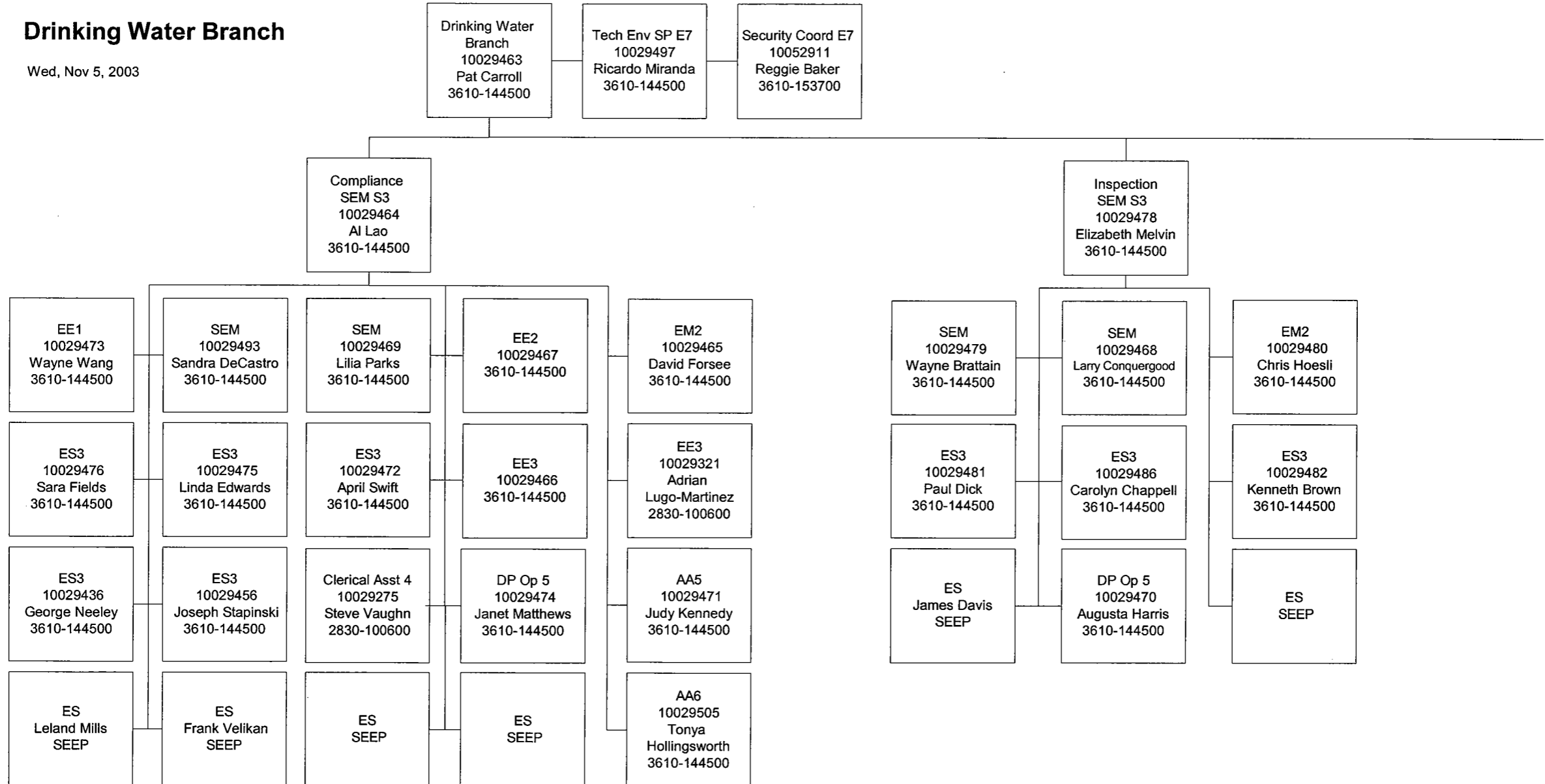
11:26 AM





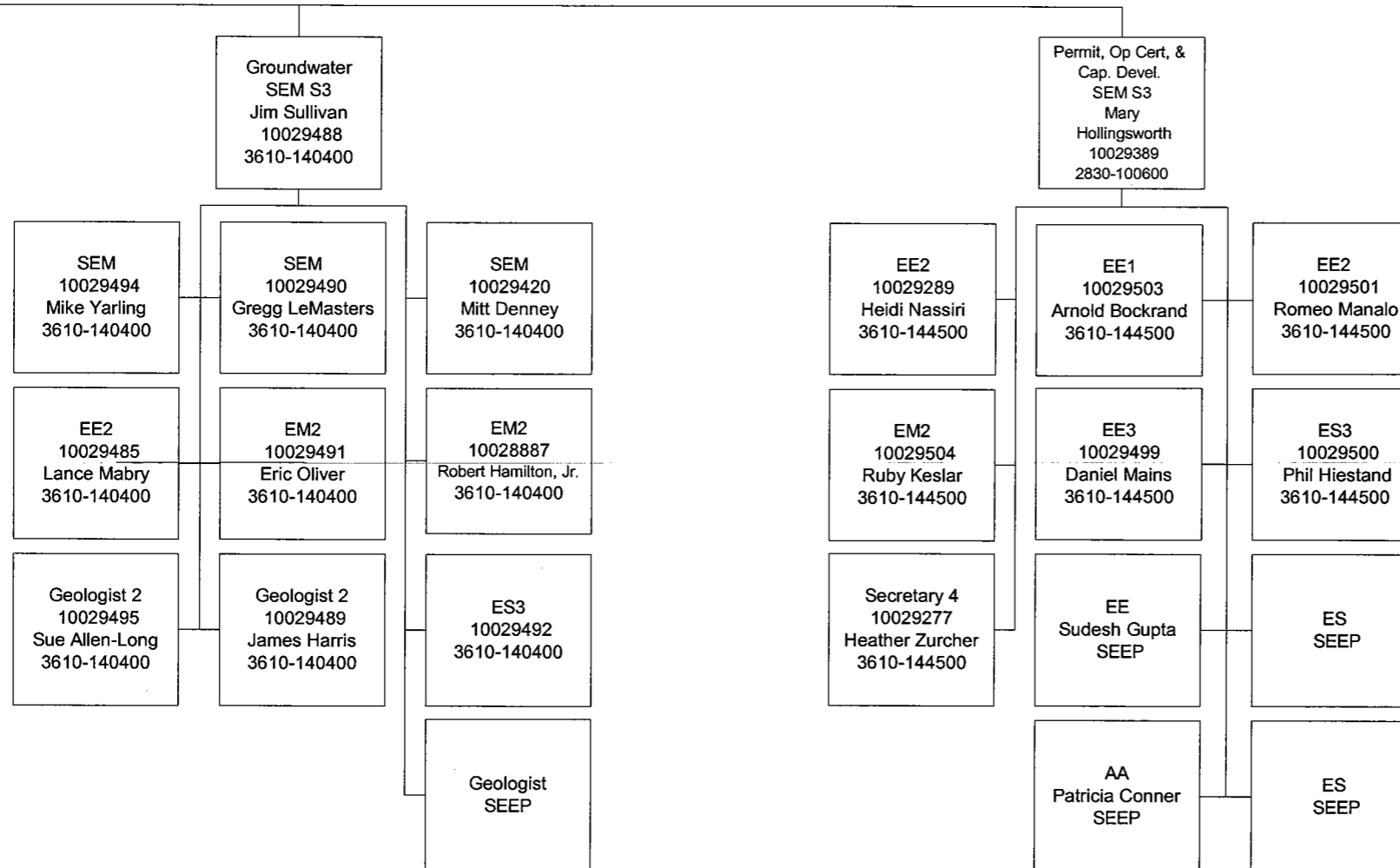
# Drinking Water Branch

Wed, Nov 5, 2003



# Drinking Water Branch

Wed, Nov 5, 2003



# NPDES Management Report, Fall 2004

## Indiana

			Profile Section	GPRA Goal	Nat. Avg.	National Data Sources		Additional Data	
						State Activities	EPA Activities	State Activities	EPA Activities
<b>NPDES Progress</b>									
Universe	1	# major facilities (6,690 total)	I.1		n/a	191	0		
	2	# minor facilities covered by individual permits (42,057 total)	I.1		n/a	1,095	0		
	3	# minor facilities covered by non-storm water general permits (39,183 total)	I.1		n/a	0	0	331	
	4	# priority permits (TBD)	I.6			--	--		
	5	# pipes at facilities covered by individual permits (142,761 total)	I.7		n/a	3,615	--		
	6	# industrial facilities covered by individual permits (32,505 total)	I.1		n/a	807	24	831	0
	7	# POTWs covered by individual permits (15,197 total)	I.1		n/a	411	42	453	0
	8	# pretreatment programs (1,482 total)	II.2		n/a	n/a	45		
	9	# Significant Industrial Users (SIUs) discharging to pretreatment programs (22,158 total)	II.2		n/a	n/a	670		
	10	# Combined Sewer Overflow (CSO) permittees (831 total)	II.5		n/a	106	--		
	11	# CAFOs (current and est. future) (17,672 total)	II.3		n/a	450	--		
	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%	61.2%	--		
	15	State CAFO legal authority expected (mo/yr)	II.3	2005	n/a	3/04	n/a		
	16	# Withdrawal petitions/legal challenges (22 total)	I.4		n/a	1	n/a		
	17	DMR data entry rate	I.7		95%	100%	--		
	18	# permit applications pending (1,011 total)	I.6		n/a	3	--		
NPDES Program Implementation	19	% major facilities covered by current permits	I.6	90%	83.7%	57.1%	n/a		
	20	% minor facilities covered by current individual or non-storm water general permits	I.6	90% 12/04	87.0%	87.8%	n/a		
	21	# major facilities w/permits expired >10 yrs. (56 total)	I.6		n/a	19	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%	n/a	93.3%		
	24	% SIUs w/control mechanisms	II.2		99.2%	n/a	99.6%		
	25	% of CSO permittees with long-term control plans developed or required	II.5	75% 2008	82.2%	91.5%	--		
	26	% CAFOs covered by NPDES permits	II.3		35%	12%	--		
	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	1	n/a		
	29	# Phase I storm water permits not yet issued (5 total)	II.4		n/a	0	n/a		
	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	n/a		
NPDES Compliance Monitoring and Enforcement Response	32	% major facilities inspected	III.3		71%	60%	3%		
	33	(inspections at minors) / (total inspections at majors and minors)	III.3		76%	83%	53%		
	34	% major facilities in significant non-compliance (SNC)	III.1		20%	15%	--		
	35	% SNCs addressed by formal enforcement action (FEA)	III.1		14%	14%	--		
	36	% SNCs returned to compliance w/o FEA	III.1		70%	45%	--		
	37	# FEAs at major facilities (666 total)	III.1		n/a	7	3		
	38	# FEAs at minor facilities (1,660 total)	III.1		n/a	6	3		

### 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 NTTs 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.

**State Activities:** Information in these columns reflects activities conducted by the State program. (Shaded cells in these columns indicate that the work may not be entirely the State's responsibility, but a breakdown of the data into EPA and State responsibilities is unavailable.)

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

# NPDES Management Report, Fall 2004

## Indiana

		Profile Section	GPRA Goal	Nat. Avg.	National Data Sources		Additional Data	
					State Activities	EPA Activities	State Activities	EPA Activities
<b>Water Quality Progress</b>								
Universe	39	River/stream miles (3,419,857 total)	IV.2		n/a	35,673	n/a	
	40	Lake acres (27,775,301 total)	IV.2		n/a	106,205	n/a	
	41	Total # TMDLs in docket at end of FY 2003 (52,795 total)	IV.4		n/a	2,038	--	
	42	# TMDLs committed to in FY 2003 management agreement (2,435 total)	IV.4		n/a	10	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	N	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	1	
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%	24.0%	n/a	
	48	% river/stream miles assessed for aquatic life	IV.2		22.0%	99.3%	n/a	
	49	% lake acres assessed for recreation	IV.2		49.4%	7.0%	n/a	
	50	% lake acres assessed for aquatic life	IV.2		48.5%	13.0%	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	Y	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	2	--	
	55	# TMDLs completed in FY 2003 (2,929 total)	IV.4		n/a	0	0	
Environmental Outcomes	56	# TMDLs completed through FY 2003 that include at least one point source WLA (5,036 total)	IV.4		n/a	--	--	
	57	% Assessed river/stream miles impaired for swimming in 2000	IV.2		--	38.0%	n/a	
	58	% Assessed lake acres impaired for swimming in 2000	IV.2		--	--	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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