



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF  
WATER

**MEMORANDUM**

**SUBJECT:** Moving the NPDES Program to a Watershed Approach

**FROM:** Michael B. Cook, Director *M. B. Cook*  
Office of Wastewater Management

**TO:** Water Management Division Directors, Regions 1-10

I am pleased to transmit to you our report, *Moving the NPDES Program to a Watershed Approach*. As explained during each of the 1994 Regional visits, the purpose of this report is to summarize the status of Regional efforts to implement the NPDES Watershed Strategy and highlight the various approaches used to develop State Assessments, Regional Action Plans, and Internal Strategies. The Report capsulizes the Regional views on issues, needs, and expected benefits with regard to implementing the NPDES Watershed Strategy, and discusses the types of activities Regions believe the Office of Wastewater Management (OWM) should undertake to support Regional implementation of both the Strategy and the broader Watershed Protection Approach.

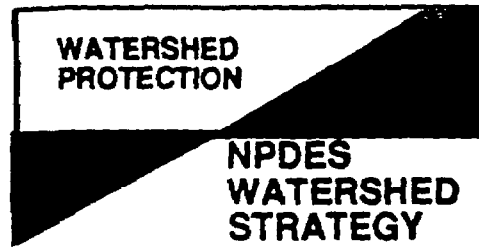
The Report indicates that Regional programs are making progress in implementing the Strategy since it was finalized in March 1994. Nine of the ten Regions projected that they would submit their Internal Strategies and completed State Assessments and Regional Action Plans for 39 States and Puerto Rico in September. Assessments and Regional Action Plans for the remaining 12 States and the District of Columbia are expected to be completed in FY 95. Each Regional office has established some variation of an internal workgroup to serve as a focus for Regional watershed protection efforts. These workgroups tend to have multi-program representation from both the Water Management Division and Environmental Services Division.

The combined list of Regional issues and needs reflect common themes such as coordinated leadership in the Office of Water (OW), and flexibility in implementing watershed protection efforts. These common issues and needs are having an impact on our activities in OWM, and are being shared with other OW Programs. I expect that they will also be considered in upcoming management discussions.

We hope that the Report promotes ideas and stimulates discussion across the Regions and States. Please feel free to call me or Jeff Lape, NPDES Watershed Matrix Manager, at (202) 260-5230 if you have any questions regarding the Report.

Attachment

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# **MOVING THE NPDES PROGRAM TO A WATERSHED APPROACH**

**October 1994**

**U. S. Environmental Protection Agency  
Office of Wastewater Management  
Permits Division  
401 M Street S.W.  
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## EXECUTIVE SUMMARY

The **Watershed Protection Approach** represents the Environmental Protection Agency's (EPA's) renewed emphasis on understanding and addressing all surface water, ground water, and habitat stressors within a geographically defined area, instead of viewing individual pollutant sources in isolation. On March 21, 1994, EPA's Assistant Administrator for Water signed the National Pollutant Discharge Elimination System (NPDES) Watershed Strategy. The purpose of the Strategy is to integrate the NPDES Program into the broader Watershed Protection Approach and support development of Statewide basin management approaches (BMAs)<sup>1</sup>. Basin management is a Statewide approach designed to meet the objectives of the broader Watershed Protection Approach. The Strategy identifies key action items for the NPDES Program and emphasizes critical areas in which the NPDES Program must coordinate its point source control activities with the efforts of other water programs.

The Assistant Administrator for Water requested three products from EPA Regions in the NPDES Watershed Strategy transmittal memorandum:

- **State-by-State Assessments and Regional Action Plans** - An assessment of watershed protection activities and needs in each State and, in light of that assessment, plans that identify how the Region will support and facilitate each State's movement toward the Watershed Protection Approach;
- **State/EPA Workplan Agreements** - Specific activities within State/EPA workplans for fiscal year 1995 that promote the central components of watershed protection;
- **Internal Coordination** - Integrated Regional strategies that describe the Regional decision making processes, oversight role, and internal coordination efforts of the various water programs necessary to ensure support for the Watershed Protection Approach.

During the months of June and July 1994, representatives from the Office Wastewater Management (OWM), Permits Division, visited each EPA Region to discuss Regional progress in implementing the NPDES Watershed Strategy. This report represents a synthesis of the individual Regional reports. In particular, it discusses approaches to developing and progress toward completing Regional Internal Strategies, and State Assessments and Regional Action Plans; activities related to the NPDES Watershed Strategy components; Regional issues and needs concerning the Watershed Protection Approach; and expected benefits from implementing the Watershed Protection Approach.

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<sup>1</sup>For the purposes of this document, the terms Statewide basin management approach (BMA) and Statewide watershed protection approach are intended to refer to the same concept; they are comprehensive Statewide approaches to managing water resources on a geographic basis.

The findings of the Regional reviews suggest that Regions are making progress in implementing the Strategy since it was completed in March 1994. Nine of the ten Regions projected that they would submit their Internal Strategies and completed State Assessments and Regional Action Plans for 39 States and Puerto Rico in September 1994. Assessments and Regional Action Plans for 12 additional States and the District of Columbia are expected to be completed in fiscal year 1995. Most Regional offices have established some variation of an internal workgroup to serve as a focus for Regional watershed protection efforts. These workgroups tend to have multi-program representation from both the Water Management Division and Environmental Services Division.

Regions have also taken steps to implement the six NPDES Watershed Strategy components: (1) statewide coordination; (2) NPDES permits; (3) monitoring and assessment; (4) programmatic measures and environmental indicators; (5) public participation; and (6) enforcement. The report discusses some of the Regional efforts related to these components.

During the mid-year visits each Region was asked to identify issues they felt may impede and activities they felt would assist the implementation of the Watershed Protection Approach. The combined list of Regional issues and needs reflect common themes such as the need for coordinated leadership within the Office of Water (OW) for implementing the Watershed Protection Approach, and flexibility in implementing watershed protection efforts.

During the Regional visits, OWM asked the Regions to identify examples of environmental progress which result from the application of a watershed strategy to address existing issues or problems. The Regions also identified areas where they expect that a broad-scale watershed strategy, such as a Statewide basin management approach, will prove beneficial to the environment and to Regional and State agencies. Examples from both of these areas are compiled in a section of this report.

## **1.0 Introduction**

This section describes the Watershed Protection Approach and the NPDES Watershed Strategy, outlines the purpose of this report, and provides a description of its organization.

### **1.1 Background**

The Watershed Protection Approach is an Office of Water (OW) wide initiative which promotes integrated solutions to address surface water, ground water, and habitat concerns on a watershed basis. The Watershed Protection Approach is not a new program; rather, it is a decision making process that reflects a common strategy for information collection and analysis and a common understanding of the roles, priorities, and responsibilities of all stakeholders within a watershed.

On March 21, 1994, EPA's Assistant Administrator for Water signed the NPDES Watershed Strategy. The purposes of the Strategy are to demonstrate EPA's commitment and approach for integrating the NPDES program into the broader Watershed Protection Approach and to support the development of Statewide basin management approaches. The Strategy identifies key action items for the NPDES Program and emphasizes critical areas in which the NPDES Program must integrate its point source control activities with the efforts of other water programs.

As first steps toward implementing the NPDES Watershed Strategy, the Assistant Administrator requested that EPA Regions complete three products by September 1, 1994. These three products are:

- **State-by-State Assessments and Regional Action Plans** - An assessment of watershed protection activities and needs in each State and, in light of that assessment, plans that identify how the Region will support and facilitate each State's movement toward the Watershed Protection Approach;
- **State/EPA Workplan Agreements** - Specific activities within State/EPA workplans for fiscal year 1995 that promote the central components of watershed protection;
- **Internal Coordination** - Integrated Regional strategies that describe the Regional decision making processes, oversight role, and internal coordination efforts of the various water programs necessary to ensure support for the Watershed Protection Approach.

### **1.2 Purpose and Methodology**

The purpose of this report is to summarize the status of implementation of the NPDES Watershed Strategy. More specifically, the report:

- Highlights EPA Regions' efforts to implement the NPDES Watershed Strategy;

- **Describes issues of concern and needs raised by Regions with regard to the Watershed Protection Approach and the NPDES Watershed Strategy;**
- **Provides information to EPA Regions about the various approaches being used by their counterparts to conduct the State Assessments, Regional Action Plans, and Internal Strategies;**
- **Provides feedback to EPA Headquarters on desired support for implementing the Watershed Protection Approach; and**
- **Offers Regional perspectives on the successes that may result from applying the Watershed Protection Approach to protect and restore water resources.**

During the months of June and July 1994, representatives from the Office of Wastewater Management (OWM), Permits Division, visited each EPA Region to discuss Regional progress in implementing the NPDES Watershed Strategy. These visits were different from those of previous "mid-years" or "Regional reviews" years in four ways. First, the discussions concentrated on planning and future events rather than past performance. Second, the main topics of discussion centered on the NPDES Watershed Strategy and the Watershed Protection Approach. Third, the Headquarters representatives used common questions and Regional report format to maintain consistency in information gathering across Regions. Finally, this year's Regional visits addressed not only on the status of Regional efforts in implementing the NPDES Watershed Strategy, but also afforded the Regions the opportunity to express their needs and concerns relative to the Strategy and the Watershed Protection Approach. During each visit, Headquarters representatives prepared a substantially complete draft of the Regional report and discussed it with each Region. Any Regional comments were incorporated and a final draft report was prepared for each Region. This report represents a synthesis of the individual Regional reports.

### 1.3 Organization of this Report

The remainder of this report is organized as follows:

- **Regional Internal Strategies** - Summarizes the status of the Regions' efforts to establish Internal Strategies to ensure support for the Watershed Protection Approach or its approach to developing one. It also discusses the various procedural and organizational approaches used by the Regions.
- **State Assessments and Regional Action Plans** - Summarizes the status of completion of the State Assessments and Regional Action Plans and describes the range of approaches taken by the Regions to develop the assessments and plans.
- **NPDES Watershed Strategy Components** - Discusses actions being taken by the Regions to address Strategy components such as statewide coordination,



NPDES permits, programmatic measures and environmental indicators, monitoring and assessment, public participation, and enforcement.

- **Issues and Needs** - summarizes issues raised by Regions with regard to implementing the NPDES Watershed Strategy and the Watershed Protection Approach; needs indicated by Regions as necessary to successfully implement the Watershed Protection Approach; and feedback on potential OWM activities intended to support the Strategy.
- **Expected Benefits** - identifies examples of success resulting from application of a watershed strategy to existing issues or problems.

## 2.0 Regional Internal Strategies

The Assistant Administrator for Water requested that each Region submit to the Office of Wastewater Management (OWM) an Internal Strategy dealing with how it plans to make decisions, provide oversight, and coordinate its water management programs to ensure support for the Watershed Protection Approach. A portion of the Regional visits focused on the progress made and approaches taken to develop these strategies.

### 2.1 Status

Nine Regions projected that they would submit an Internal Strategy in September 1994. The remaining Region expects to complete its strategy in the first quarter of fiscal year 1995. This delay is due to extensive State involvement in the strategy development process.

### 2.2 Approaches

Most Regions have taken two basic approaches in developing an Internal Strategy: 1) internal workgroup; and 2) State coordination. All Regions are developing an Internal Strategy document to coordinate implementation of Regional watershed activities and to support States' efforts to implement the Watershed Protection Approach. Most Regions have involved the following programs in the development of their Internal Strategy: NPDES; Nonpoint Source; Wetlands; Ground Water; Drinking Water; Enforcement; Water Quality; geographically targeted programs, such as the National Estuary Program and the Great Lakes Initiative; State Revolving Fund; and Geographic Information Systems (GIS). In most cases, either the Water Quality Branch or the Wetlands and Watershed Branch has the overall Regional lead for watershed implementation. In addition, all but one Region has identified an NPDES watershed lead to serve as point of contact for NPDES involvement in watershed implementation. The NPDES leads are often the Permits Branch Chief or the Permits Section Chief. Attachment A provides a list of Regional and State Watershed Point of Contacts.

*Internal Workgroup:* Most Regions have established some variation of an internal workgroup to serve as a focus for Regional Watershed Protection efforts and to develop their Internal Strategy.

These workgroups tend to be well represented from across the Water Management Division and from the water-related programs in the Environmental Services Division.

*State Coordination:* Many Regions have held State meetings to discuss and to exchange ideas on how to implement the Watershed Protection Approach. Some Regions have taken a more active approach to involving their States in the decision making process. Region 5 has established a State workgroup to comment on and approve the Region's Internal Strategy. Region 5 also has a State Quality Action Team which, among its other responsibilities, serves as a means for developing watershed implementation actions within the Region. Region 1 has created State Coordinator Groups, which include representatives from most of the Region's water programs, to support each State. These groups are responsible for relaying information about the Watershed Protection Approach to the State on a program-by-program level.

### 2.3 Organizational Change

As a result of the Internal Strategy development process, several Regions have made organizational changes to help improve internal coordination. Region 1 is conducting a pilot reorganization of one of its NPDES program sections to better support the State of Massachusetts's implementation of the Watershed Protection Approach. The former MA NPDES Section is now the MA Watershed Section and includes both water quality and water modeling staff. As part of this organizational change, Region 1 has funded a position for a "Resource Protection Specialist" responsible for identifying critical resources in the Region and targeting regional efforts to address those priorities. Region 10 created a "Watershed Coordinator" position to oversee the NPDES program's implementation of the Watershed Protection Approach. The Coordinator is specifically responsible for assisting States in the development of a Statewide basin management approach.

### **3.0 State Assessments and Regional Action Plans**

State Assessments are intended to examine a State's current watershed protection activities and needs. Regional Action Plans then identify how the Region will support and facilitate implementation of the Watershed Protection Approach in each State based on the results of the State Assessment. A portion of the discussion during OWM's Regional visits centered on progress made and approaches taken to develop the State Assessments and Regional Action Plans.

#### 3.1 Status

The Regions projected that they would submit State Assessments and Regional Action Plans for 39 of the States and Puerto Rico in September 1994 and for 12 additional States and the District of Columbia in fiscal year 1995. There are currently no plans to develop a State Assessment or Regional Action Plan for the remaining territories.

Some Regions have developed well planned strategies for completing State Assessments and Regional Action Plans, but believed that submissions for one or more States should be delayed until after September 1994 for a number of reasons, including: insufficient time to complete

thorough reviews of all States; inadequate travel funds in 1994 for State visits that would form the basis of the assessment; and present difficulties entering a dialogue with the State concerning watershed protection. Attachment B lists the scheduled completion dates for each State Assessment and Regional Action Plan and highlights progress in each State at the time of the Regional visit.

### 3.2 Approaches

Regions have taken at least one of four basic approaches to conducting State Assessments and developing Regional Action Plans: 1) internal teams; 2) State meetings; 3) State questionnaires; and 4) facilitated workshops. Some Regions selected different approaches for different States. Most Regions made use of the May 1994 "Regional Guidance for Development of State-by-State Assessments and Action Plans" provided by OWM to complete the State Assessments and Regional Action Plans, and several Regions added contributions from other programs to the material included in the guidance.

*Internal Teams:* By far the most common approach taken is convening internal Regional teams to complete both the State Assessments and Regional Action Plans. Five Regions have formed internal teams for one or more of their States. In general, these teams cut across program lines and include staff and management from the Environmental Services Division in addition to several water programs. Region 10 held a workshop to develop the State Assessment and Regional Action Plan for Idaho. Sixteen staff from the Wastewater Management and Enforcement Branch, Surface Water Branch, Environmental Sciences Division, and the Ground Water/Drinking Water program participated in this workshop. The State Assessment was largely completed by the end of the first day; a conference call on the second day with representatives from the Idaho Department of Environmental Quality was used to fill information gaps.

*State Meetings:* Three Regions held or are planning to hold meetings with one or more of their States. The format for these meetings ranges from requesting information to supplement existing data, such as during a Region 8 State program directors' meeting, to formal assessments, such as those planned by Region 5 during the fiscal year 1995 annual State performance evaluations.

*State Questionnaires:* Two Regions are developing their State Assessments and Regional Action Plans based on the results of detailed questionnaires sent to each of their States. The questionnaires are modeled after the OWM guidance on State Assessments and Regional Action Plans. Regional teams follow-up with States either to get additional information or to allow the State to review the draft assessments and action plans.

*Facilitated Workshop:* Two Regions are using outside facilitators to help them develop State Assessments or Regional Action Plans or both. The facilitator, provided through OWM contract funding, helps Regional teams walk through the process of developing a State Assessment and Action Plan based on the OWM guidance.

### 3.3 Regional Observations

Regions generally believe the State Assessments and Regional Action Plans are helpful tools for evaluating States' progress in developing watershed approaches and for guiding Regional work plans for Fiscal Year 1995. Some Regions commented that developing these products is both time consuming and labor intensive, but they are finding the process beneficial.

The Assistant Administrator for Water asked Regions to include specific watershed protection activities in fiscal year 1995 State/EPA work plans. Most Regions indicated that they would be better able to influence the fiscal year 1996 planning process due to the scheduled completion date for the State Assessments and Regional Action Plans (late fiscal year 1994).

### **4.0 NPDES Watershed Strategy Components**

The NPDES Watershed Strategy identified six components that should be addressed to fulfill the purpose and objectives of the Strategy: (1) statewide coordination; (2) NPDES permits; (3) monitoring and assessment; (4) programmatic measures and environmental indicators; (5) public participation; and (6) enforcement. Associated with each of these six components are actions that EPA Regions may take to support the purpose and objectives of the NPDES Watershed Strategy. OWM assumed that most Regions would undertake such activities after developing State-by-State assessments and action plans. During the Regional visits, however, OWM found that a number of Regions are already making progress in supporting the six Strategy components.

#### 4.1 Statewide Coordination

A number of Regions are supporting their States in developing or implementing Statewide basin management approaches that allow them to integrate management activities (monitoring, assessment, TMDL development, permitting, nonpoint source controls, ground water protection) aimed at aquatic ecosystem protection within the boundaries of a given basin. These approaches are tailored to the unique circumstances of each State, and not all programs or agencies are participating in each State. Support from the Regions for developing, expanding, and implementing Statewide basin management approaches is critical to the success of the NPDES Watershed Strategy. Region 4 is drafting a Statewide Watershed Protection Approach that could be a basis for implementation by Florida Department of Environmental Protection of the NPDES Strategy upon authorization of the Florida NPDES program. Additionally, Region 4 is actively supporting Georgia in their efforts to develop a Statewide basin management framework document.

Regions also are directing 104(b)(3) money to projects that promote Statewide coordination and development of Statewide basin management approaches. Oklahoma received \$100,000 to establish an administrative process that will integrate and coordinate point and nonpoint source pollution control activities within a basin; develop a Statewide basin management framework document; and conduct facilitated workshops that will promote acceptance of the Statewide Watershed Protection Approach at all levels of government. Utah received \$31,000 and Oregon received \$44,251 to develop a Statewide basin management framework document. Montana

received \$20,000 to develop educational materials and a training curriculum to facilitate Statewide watershed planning at the local, State, and Federal levels.

#### 4.2 NPDES Permits

In most Regions and at EPA Headquarters, the NPDES program is a relatively new stakeholder in the Watershed Protection Approach. The NPDES Watershed Strategy represents an attempt by OWM to define the role that the NPDES program can play in developing an integrated, geographically based approach to water resource management. In most Regions, the NPDES program is now playing a role on a Regional watershed team. As Regions develop their internal watershed strategies and assist their States in developing watershed approaches, the NPDES program will be a key contributor. This is evidenced by examples such as the Watershed Coordinator hired within the Region 10 NPDES program and by the pilot reorganization within Region 1's Water Management Division to support MA's implementation of a Statewide BMA.

Regions have also begun to address specific NPDES permitting issues on a watershed basis. For example, Region 6 successfully identified and issued "minor" NPDES permits to several shrimp processors that were contributing to a water quality problem on Bayou Grand Calliou, Louisiana. In setting permitting priorities, the Region focused on the watershed and the known water quality problems rather than the distinction between "major" and "minor" permittees. Region 9 is working with the State of Arizona to demonstrate the utility of NPDES permitting on a watershed basis. The Region and State will work with local stakeholders to sequence the standards and permits process with other water quality management efforts.

#### 4.3 Monitoring and Assessment

To meet the objectives of the NPDES Watershed Strategy, States should develop a Statewide monitoring strategy that assures the most effective targeting of limited monitoring resources and coordinates collection and analysis of NPDES, nonpoint source, and other watershed data. Additionally, the Strategy encourages ambient monitoring requirements in NPDES permits, where appropriate, to support assessment of watershed conditions. Regions have not begun to implement the Monitoring and Assessment component of the NPDES Strategy. However, the Regions are supporting their States who are implementing or developing watershed monitoring and assessment programs. For example: 1) Illinois has a monitoring program which is based on a basin management cycle and; 2) Arizona, with EPA grant assistance, is conducting the monitoring, assessment, and planning activities in the Middle Gila Basin necessary to develop and issue multiple NPDES permits in the targeted basin.

Several States received 104(b)(3) funds for monitoring and assessment projects that support the NPDES Watershed Strategy. California received \$100,000 for a comprehensive watershed project which includes water quality assessment, and monitoring for all the Los Angeles regional watersheds. Iowa received \$25,000 to develop a Statewide monitoring strategy which will reflect the program needs of NPDES permits, non-point source controls, TMDL/WLA, and support a watershed based approach to water quality management.

#### 4.4 Programmatic Measures and Environmental Indicators

The Regions recognize the need for measures of success that better demonstrate the progress of Watershed Approach implementation and the environmental gains and successes within specific watersheds and on a national basis. There did not appear to be a consistent view, however, of what the short and long term measures should be. One Region plans to hold an internal retreat to discuss use of the 33 environmental indicators developed by the Office of Water. This Region believes that environmental measures need to be tailored to each watershed and expressed in clear terms that the public can understand. Two Regions indicated that the State Assessments and Regional Action Plans could serve as benchmarks for progress. Another Region has selected four "indicator basins" which will be evaluated against a comprehensive set of measures. At least two Regions expressed concern regarding the planned use of "loading reductions" as a national environmental indicator for several reasons, such as data quality and the marginal nature of the remaining reductions. One Region suggested that future Branch Chiefs' meetings may be a good forum in which to discuss the development of national programmatic measures of success.

#### 4.5 Public Participation

All Regions understand the importance of and need for effective public participation throughout the watershed assessment and implementation process. Several Regions have begun to undertake new or changed actions to improve public participation and stakeholder involvement. In Region 1, Basin Teams have begun conducting public meetings with watershed stakeholders. Region 5 intends to build on the public participation experience gained from development of RAPs and LaMPs. Region 10 is frequently called upon to facilitate stakeholder involvement and has also awarded 104(b)(3) grants this year for watershed councils. Region 6 has modified the public participation process for NPDES permitting. Before holding a public hearing on a proposed permit, the Region invites the public to an informal question and answer session. At least one Region expressed concern, however, that increased public participation may not lead to efficiency in the permit process or better quality permits.

#### 4.6 Enforcement

The NPDES Watershed Strategy encourages a watershed approach to enforcement. This approach includes emphasizing enforcement for both major and minor NPDES dischargers in selected watersheds and using enforcement authorities to correct violations by dischargers that are causing the greatest degradation in a basin or watershed. A few Regions are implementing their own watershed approaches to enforcement and supporting their States in doing the same.

Region 10 supported the Oregon Department of Agriculture (ODA) in obtaining 104(b)(3) grant funding for a watershed enforcement initiative. ODA is conducting enforcement initiatives in three separate watersheds in western and southern Oregon that fail to meet water quality standards. ODA intends to raise compliance awareness among Confined Animal Feeding Operations (CAFOs) that are significant sources of pollution to these watersheds. This work augments the existing statewide complaint-driven enforcement program. By targeting a small watershed in each of three regions of the State, ODA will increase compliance awareness in the regulated community while maintaining local technical capabilities.

Region 3 is implementing the Environmentally Targeted Enforcement Strategy. This strategy utilizes State-generated information in the Waterbody System to identify waterbody segments impaired by point source discharges. The Region uses information from Permit Compliance System (PCS) and from State data bases on both major and minor point sources in those waterbodies to identify potential linkages to water quality impairments. Contributing facilities are potential enforcement candidates if violations (Significant Noncompliance or other, non-SNC, violations) are found, or may be candidates for further scrutiny of their NPDES permits.

Region 2 was able to convince the New York State Department of Environmental Conservation that more than major point sources were contributing to water quality impairment in the reservoir system north of New York City. NYSDEC now focuses on minors within the watershed and has committed resources to input effluent monitoring reports for minor dischargers into PCS.

## **5.0 Issues and Needs**

During the mid-year visits, each Region was asked to identify issues they felt may impede and needs they felt would assist the implementation of the Watershed Protection Approach and the NPDES Watershed Strategy. Additionally, the Regions were asked to comment on a potential list of Headquarters action initiatives.

### 5.1 Issues

Summarized below are the top five issues that the Regions raised as an impediment to implementing the Watershed Protection Approach. They are listed in descending order according to the number of times they were raised by different Regions (the number is in parentheses). See Appendix C for a complete list of the Regional issues.

*Coordinated/Consistent Leadership at EPA Headquarters:* (6) The primary issue with implementing the Watershed Protection Approach is the lack of a coordinated strategy within the OW at EPA Headquarters. As stated by the Regions, the NPDES Watershed Strategy attempts to pull in all water quality programs, but is still fundamentally an "NPDES Watershed Strategy" The Regions suggest that the Assistant Administrator needs to encourage all OW programs to take a coordinated approach if the overall Watershed Protection Approach is to succeed.

*Flexibility in Implementing the Watershed Protection Approach:* (5) Flexibility was raised as an issue in relation to several aspects of the NPDES Watershed Strategy. For example, the decision about whether to implement a Statewide basin management approach or targeted approach should be afforded to each State. A Statewide basin management approach may not be feasible in States with drastic differences in hydrology, population distribution, and land ownership (e.g., 80% of Nevada lands are owned by federal agencies or Indian Tribes). States that decide to implement a Statewide watershed protection approach, should to be allowed to move at their own pace. Additionally, States and Regions need to have permission to fail and to learn from those failures as well as the successes. The timing for implementation was also raised as an issue. Regions felt that the time frame between the final Strategy (March 1994) and State Assessment Guidance (May 1994) and the due date for State Assessments and Regional Action Plans

(September 1, 1994) was not feasible given available resources and present fiscal year 1994 commitments.

*Multiple Agencies or Regional Offices within States:* (3) The coordination required for effective implementation of a basin management approach, such as agreement within the State on a framework for basin management, can be difficult where water resource management programs are divided among different State agencies. In addition, States which have regional offices often create the appearance of separate States, each with their own water quality programs and watershed efforts.

*Lack of Statutory Authority:* (2) Implementation of the NPDES Watershed Strategy would be simplified if the Approach were specifically authorized in the Clean Water Act (CWA); Regional implementation of the NPDES Watershed Strategy can be difficult since it is voluntary on the part of the States, especially in authorized States.

*Consolidated Grant and Reporting Requirements:* (2) Multiple reporting requirements on different reporting cycles were listed as an impediment to effectively implementing the Watershed Protection Approach. Specifically, Regions identified the need to consolidate §303(d) and §305(b) reporting requirements. As a first step towards grant consolidation, it was recommended that Headquarters enable the Regions to make §319 and §104(b)(3) grant decisions at the same time.

## 5.2 Needs

Summarized below are the top five needs that the Regions stated were important to their efforts to implement the NPDES Watershed Strategy and the Watershed Protection Approach. See Appendix C for an overview of all the needs that the Regions expressed.

*Additional Resources and Contract Support:* (9) Most Regions stated that present resource and staffing constraints will hinder the full implementation of the NPDES Watershed Strategy. Regions indicated they do not have the necessary travel funds or contractor support to provide adequate guidance and outreach to States on implementing the Watershed Protection Approach. Additional resources, both EPA positions and contract support, are needed to complete comprehensive assessments and action plans for States, develop State framework documents, conduct watershed training to expand State monitoring capabilities, and develop GIS capabilities.

*Data Management/Integration:* (8) Most Regions also indicated that EPA needs to play a more aggressive role in addressing data management issues since high quality, reliable data is necessary to effectively implement the NPDES Watershed Strategy. Several Regions identified specific areas where discharger data is either suspect or non-existent (e.g., PCS, STORET). Where data does exist, it often does not integrate well with other data management systems (i.e., GIS). At this time, several Regions do not use USGS basin codes in PCS and conversion to these codes is essential; there is question as to whether PCS can accommodate entry of USGS basin codes for minor discharges.



*HQ Guidance/Training:* (6) EPA Headquarters should serve as a clearinghouse and trainer to promote technology transfer and to communicate watershed protection successes:

- Provide case studies which document specific aspects of State watershed protection approaches including: alternatives for dealing with permit synchronization and backlogs, the cost effectiveness of existing approaches, and changes in the level of effort and efficiencies realized in various program areas (e.g., ambient monitoring);
- Conduct workshops for Regions and States which present the concepts of basin management; provide technical guidance to support implementation of the NPDES Watershed Strategy on areas such as alternative permitting mechanisms, ambient monitoring, and coordinating NPDES permit development with TMDL prioritization; and
- Sponsor a national meeting involving Regions and States across several water programs to discuss issues related to development and implementation of comprehensive watershed protection programs.

*Refinements to Accountability Systems (Strategic Targeted Activities for Results System (STARS) and Office of Wastewater Enforcement and Compliance Accounting System (OWECAS)):* (5) The Regions recommend that Headquarters' accountability measures be revised to reflect the emphasis being placed on implementation of the NPDES Watershed Strategy; continuing the use of accountability measures that are not aligned with the Strategy does not reinforce the message that the Permits Division is committed to implementing the NPDES program on a watershed basis.

Several Regions proposed that accountability measures be revised to reflect a qualitative, or narrative nature. Program measurement discussions that focus on number of permits issued and the administrative distinction between majors and minors have become too much of an institution and are not representative in the context of watershed protection.

Finally, EPA Headquarters' expectations and program measurements should take into consideration a period of transition (e.g., decrease in permit issuance, learning curves, and coordination issues with other programs). States and Regions must also have "permission to fail" and learn from failures as well as successes.

*Coordination with OECA:* (3) Full coordination with and buy-in to the Watershed Protection Approach by the Office of Enforcement and Compliance Assurance (OECA) is essential; compliance assessments, enforcement reviews and enforcement actions are almost exclusively based upon a facility being classified as a major discharger. The lack of information for minor dischargers impedes and limits the ability to deal with all NPDES facilities within a watershed. Additionally, it was suggested that OWM initiate actions, as part of the current actions underway to negotiate a memorandum of agreement with OECA on PCS, to address the data management/integration needs to support the transition of the NPDES Program to a watershed approach.

### 5.3 Headquarters Implementation Plan Feedback

Regional staff and management were presented with a list of 26 action items that EPA Headquarters could undertake to support the Regions in implementing the NPDES Watershed Strategy. Each Region was asked to select the top five activities that they felt would be most helpful to them. Summarized below are the top six EPA Headquarters' Action Items that the Regions voted to have Headquarters undertake. See Appendix D for more details on how each Region voted on the complete list of potential Headquarters' Action Items.

*Regulatory/Policy Support for the Strategy:*(6) Evaluate impediments to implementation of the NPDES Watershed Strategy as a result of the existing regulatory and policy framework. Consider changes that will foster implementation.

*Data Integration (PCS, Storage and Retrieval of Water-Related Data (STORET), Toxics Release Inventory System (TRIS), Waterbody Systems):*(5) Evaluate current data bases and data management systems to determine how they should be used (i.e., data integration) or updated to better support a watershed approach to NPDES permitting. Work with OECA to evaluate and make changes to PCS that better support the Strategy.

*Coordination with OW Offices and OECA:*(5) Communicate with the Office of Wetlands, Oceans, and Watersheds (OWOW); Office of Science and Technology (OST); Office of Ground Water and Drinking Water (OGWDW); and OECA on NPDES watershed activities to gain their needed cooperation and support.

*Conduct Regional Workshops:*(4) Conduct train-the-trainer workshops for each Region in order to facilitate watershed protection training (concepts of basin management and the NPDES Watershed Strategy) for individual States.

*Oversight: Revise STARS and OWECAS Criteria to support Watershed Implementation:* (4) Establish revised measures that demonstrate progress by Regions and States to implement the NPDES Watershed Strategy and integrate the NPDES Program and the Watershed Protection Approach.

*Watershed Matrix Management:* (4) Provide leadership and coordination to achieve the objectives of the NPDES Watershed Strategy.

## **6.0 Benefits of a Watershed Strategy**

During the Regional visits, OWM asked the Regions to identify examples of environmental progress which result from the application of a watershed strategy to address existing issues or problems. Regions also identified areas where they expect that a broad-scale watershed strategy, such as a Statewide basin management approach, will prove beneficial to the environment and to Regional and State agencies.

## 6.1. Potential Benefits of an Overall Watershed Strategy

Regions and States have identified and, in some cases, experienced a number of benefits associated with operating by a broad-scale watershed strategy such as the basin management approach. Some of these benefits are as follows:

*Improved Basis for Management Decisions:* A watershed strategy can improve the scientific basis for decision making and focuses management efforts on basins and watersheds where they are most needed. Some Regions believe that both point and nonpoint control strategies will be more effective under a watershed approach because the approach moves States toward timely and complete development of TMDLs. One Region stated that a watershed-based decision process will help resolve issues related to apportionment of loadings, assimilative capacity of streams, antidegradation, and other historically difficult permitting issues.

*Enhanced Program Efficiency:* A basin focus can improve the efficiency of water management programs by facilitating consolidation of programs within each basin. For example, one Region noted that handling all point source dischargers in a basin at the same time should reduce administrative costs due to the potential to combine hearings and notices as well as allowing staff to focus on more limited areas in a sequential fashion. Another Region is encouraging one of its States to use basin plans as an efficient means for meeting the CWA mandates for §305(b) assessment and §303(d) listing of waterbodies.

*Improved Coordination Among Programs:* Regions and States have found that as they begin to focus on river basins, rather than the programs operating within those basins, they are better able to participate in data sharing and coordinated assessment and control strategies. Several Regions demonstrated improved coordination among their programs through the process they used to prepare for the OWM visit and to develop their Internal Strategies, State Assessments, and Regional Action Plans. Regions have formed teams for these tasks that often include program staff from across the Water Management Division and from other divisions as well.

*Greater Consistency and Responsiveness:* Developing goals and management plans for a basin or watershed with stakeholder involvement should allow Regions and States to be responsive to the public and consistent in determining management actions. Stakeholders can expect improved consistency and continuity in decisions when management actions follow a basin plan. One Region noted that environmental justice issues should be more completely addressed since there will be more comprehensive and complete examination of environmental stressors involving all stakeholders in a basin.

## 6.2. Examples of Watershed Successes

The Regions provided examples where watershed strategies promoting integrated, resource-based decision making are helping to address specific management problems and to resolve NPDES permitting issues. A few of these examples are highlighted below:

*Long Island Sound:* Region 2, New York, and Connecticut agreed to control the discharge of nitrogen into Long Island Sound in order to reduce eutrophication and improve on the low levels

of dissolved oxygen in bottom waters. By bringing the stakeholders together and focusing on environmental problems backed by data, the States focused on freezing nitrogen loadings from all point sources. In one instance, Westchester County, New York has explored ways to obtain reduction in nonpoint source nitrogen loadings in order to provide capacity for increased loadings at POTWs.

*Geographic Information Systems:* Region 3's Water Management Division (WMD) is leading a pilot effort to use environmental data to guide decision making and priority-setting in the Region. The Region has successfully used geographic information systems (GIS) to develop Regional strategic objectives. For example, by aggregating data from the Waterbody System up to the watershed level, the WMD's GIS specialist and other scientists were able to look at the cause of water quality impairment throughout the Region on a watershed basis. They found that acid mine drainage was causing significant water quality problems in most watersheds in the western part of the Region. As a result of this GIS work, addressing surface water quality problems associated with acid pollution became part of the Region's Strategic Plan. GIS also has been used to assist in the planning and implementation of geographically targeted efforts such as the Christina River basin interstate project; the identification of point sources in waters of concern for endangered species in Pennsylvania; and the location of living resource areas of concern in the Chesapeake Bay.

*Remedial Action Plans and Lakewide Management Plans:* In Region 5, Remedial Action Plans (RAPs) and Lakewide Management Plans (LaMPs) serve as watershed management plans addressing stressors which impact, or have the potential to impact, the beneficial uses of the Great Lakes, including stressors such as point and nonpoint sources of pollution, critical habitat, and exotic species. Implementation of the plans is based upon application of base programs such as the NPDES program. Although RAPs and LaMPs are not by themselves reflective of an entire change to a State's program, they reflect the coordinated results that may occur once a State reorders its program on a watershed basis.

*Storm Water Permitting:* The State of Washington is developing a watershed-based municipal separate storm sewer system (MS4) permit. The MS4 permit is expected to cover every municipal storm sewer system, regardless of size, in the Green/Duwamish and Cedar River basins. These basins encompass Seattle and approximately 98 percent of King County, including some smaller municipalities.

## 7.0 Summary

The NPDES Watershed Strategy issued in March 1994 represents a statement of commitment and an action plan for moving the NPDES program to a Watershed and Ecosystem Approach. In a further demonstration of commitment to the Strategy and the Watershed Approach, the Office of Wastewater Management fundamentally changed the focus of the Region reviews in fiscal year 1995 to address implementation of the NPDES Strategy. The results of these reviews demonstrates that Regions are making progress. Regions are evaluating State NPDES programs and establishing specific action plans to support the comprehensive State water resource protection programs. The Regions have also developed internal strategies that are designed to coordinate water program efforts within the Region.

## **Table of Regional and State Watershed Contacts**

### **Appendix A**

Region	Role	Name	Title	Telephone	Fax
1	Regional Lead for Watershed Implementation	David Fierra	Water Management Division Director	(617) 565-3478	(617) 565-4940
1	Resource Protection Specialist	Rosemary Monchan	Environmental Scientist	(617) 565-3518	(617) 565-4940
1	NPDES Watershed Lead	Kevin McSweeney	Permits Branch Chief	(617) 565-3560	(617) 565-4940
1	Lead Coordinator - CT	Mel Cote Doug Corb	CT Permit Coord.	(617) 565-3519	(617) 565-4940
1	Lead Coordinator - MA	C. Kilbride S. Sarker	Env. Prot. Spec. Env. Engineer	(617) 565-3514 (617) 565-3573	(617) 565-4940
1	Lead Coordinator - ME	Michele Notariani Doug Corb	Env. Scientist ME Permit Coord.	(617) 565-4886 (617) 565-3519	(617) 565-4940
1	Lead Coordinator - NH	D. Luciano	Env. Engineer	(617) 565-9130	(617) 565-4940
1	Lead Coordinator - RI	Joanne Sulak	319 Coordinator	(617) 565-3523	(617) 565-4940
1	Lead Coordinator - VT	L. Stepphacher	Lake Champlain Coordinator	(617) 565-4874	(617) 565-4940
2	Regional Watershed Coordinator	Rick Balla	Water Quality Management Section	(212) 264-5671	
2	NPDES Watershed Lead	Pat Durack	Chief, Water Permits and Compliance Section	(212) 264-9894	
3	Regional Watershed Protection Leads	Joe Piotrowski Rich Pepino	Chief, Water Quality Management Branch Chief, Environmental Assessment Branch	(215) 597-9077 (215) 597-1181	
3	NPDES Watershed Lead	Vicki Binetti	Chief, Permits Enforcement Branch	(215) 597-6511	
3	NPDES Watershed Contact - DE	Leo Essentier		(215) 597-0547	
3	NPDES Watershed Contact - DC	Kevin Magerr		(215) 597-1651	
3	NPDES Watershed Contact - MD	Ann Carckuff		(215) 597-9406	
3	NPDES Watershed Lead - PA	Kristine Matzko Elaine Harbold		(215) 597-7938 (215) 597-0547	
3	NPDES Watershed Contact - VA	Francisco Cruz		(215) 597-8813	
3	NPDES Watershed Contact - WV	Richard Paiste		(215) 597-6539	
4	Regional Watershed Coordinator	Meredith Anderson	Wetlands, Oceans, and Watershed Branch	(404) 347-2126 ext 6581	
4	NPDES Watershed Lead	Jim Patrick	Chief, Permits Section	(404) 347-3012	

Region	Role	Name	Title	Telephone	Fax
5	Regional Watershed Coordinator	Doug Ehorn	Chief, Wetlands and Watershed Coordinator	(312) 886-0243	
5	NPDES Watershed Lead	Steve Jann	Permits Section	(312) 886-2446	
6	Regional Watershed Coordinator	Luci English		(214) 655-8022	(214) 655-6490
6	NPDES Watershed Lead	Stephen Bainter		(214) 655-7537	(214) 655-6490
7	Regional Watershed Coordinator	Donna Sefton	Water Management Division	(913) 551-7500	(913) 551-7765
7	Nonpoint Source Watershed Lead	Julie Elfving	Planning and Evaluation Section	(913) 551-7475	(913) 551-7765
7	Monitoring and Water Quality Watershed Lead	John Houlihan	Planning and Evaluation Section Chief	(913) 551-7432	(913) 551-7765
7	NPDES Watershed Lead	Don Toensing	Permits and Compliance Section Chief	(913) 551-7446	(913) 551-7765
7	Wetlands Watershed Lead	Diane Hershberger	Environmental Review, Chief	(913) 551-7573	(913) 551-7765
8	Regional Watershed Coordinator	Karen Hamilton	Water Quality Branch	(303) 293-1576	
9	Regional Watershed Coordinator	Dave Smith	Watershed Protection Coordinator	(415) 744-2019	(415) 744-1078
9	Nonpoint Source Watershed Lead	Jovita Parajillo	NPS Coordinator	(415) 744-2011	(415) 744-1078
9	Monitoring and Water Quality Lead	Phil Woods	Water Quality Standards Coordinator	(415) 744-1997	(415) 744-1078
9	NPDES Watershed Lead	Terry Oda	Chief, Permits Section	(415) 744-1923	(415) 744-1873
9	Wetlands Watershed Lead	Steve Pardieck	Chief, Watershed Protection Branch	(415) 744-1953	(415) 744-1078
10	Watershed Manager	Ron Lee		(206) 553-4013	
10	NPDES Watershed Coordinator	Paula VanHaagen		(206) 553-6977	

State	Role	Name	Title	Telephone	Fax
AK	NPDES Watershed Contact	Doug Redburn	Department of Environmental Conservation	(907) 465-5303	
AR	NPDES Watershed Contact	Earl Smith		(501) 682-3979	(501) 682-3991
AZ	NPDES Watershed Contact	Brian Munson	Director, Water Quality Division, ADEQ	(602) 207-2305	(602) 207-4528
CA	NPDES Watershed Contact	Jeff Barnicol/ Jesse Diaz	Division of Water Quality, State Water Resources Control Board	(916) 657-0939 (916) 657-0756	(916) 657-2388
CT	NPDES Watershed Contact	Ed Parker	Director, Bureau of Water Management	(203) 566-7132	(203) 566-8650
HI	NPDES Watershed Contact	Dr. June Harrigan	Chief, Environmental Planning Office, HDOH	(808) 586-4338	(808) 586-4370
IA	NPDES Watershed Contact	Darrell MacAllister	Bureau of Surface and Ground Water, Chief	(551) 281-8869	(515) 281-8895
ID	NPDES Watershed Contact	Larry Koenig	Division of Environmental Quality	(208) 334-0407	
IL	NPDES Watershed Contact	Tom McSwiggin			
IN	NPDES Watershed Contact	Catherine Hess  Steve Rousch			
KS	NPDES Watershed Contact	Karl Mueldeker	Bureau of Water, Chief	(913) 296-5502	(913) 296-5509
LA	NPDES Watershed Contact	Emelise Cormier		(504) 765-0511	(504) 765-0635
MA	NPDES Watershed Contact	Paul Hogan	Permits/Water Quality Specialist	(508) 792-7470	(508) 839-3469
ME	NPDES Watershed Contact	Mickey Kuhns	Director, Bureau of Water Quality Control, Director of Lic. Enfor. Field Services	(207) 287-7814	(207) 287-7826
MI	NPDES Watershed Contact	Bill McCracken			
MN	NPDES Watershed Contact	Laurie Martinson			
MO	NPDES Watershed Contact	John Mandras	Water Planning Section, Chief	(314) 751-7428	(314) 751-9396
NE	NPDES Watershed Contact	Steve Walker	Surface Water Quality Section	(402) 471-4227	(402) 471-2909
NH	NPDES Watershed Contact	Ray Carter	Administrator	(603) 271-3503	(603) 271-3456



State	Role	Name	Title	Telephone	Fax
NJ	NPDES Watershed Contact	Narinder Ahuja	Assistant Director, Division of Water Quality	(609) 292-0407	
NM	NPDES Watershed Contact	Susan Hill		(505) 827-2792	(505) 827-0160
NV	NPDES Watershed Contact	Wendell McCurry	Bureau of Water Quality, NDEP	(702) 687-5883	(702) 885-0868
NY	NPDES Watershed Contact	Albert Bromberg	Chief, Water Quality Evaluation Section	(518) 457-4352	
OH	NPDES Watershed Contact	Paul Novak			
OK	NPDES Watershed Contact	Sylvia Ritsky		(405) 231-2691	(405) 231-2691
OR	NPDES Watershed Contact	Andy Schaedel	Department of Environmental Quality	(503) 229-6121	
RI	NPDES Watershed Contact	A. Liberti	Supervisor Sanitary Engineer	(401) 277-6519	(401) 521-4230
TX	NPDES Watershed Contact	Wendy Gordon		(512) 463-8448	(512) 475-2454
VT	NPDES Watershed Contact	B. Kooiker	Chief, Discharge Permit Section	(802) 241-3822	(802) 244-5141
WA	NPDES Watershed Contact	Dan Wrye	Department of Ecology	(206) 407-6459	
WI	NPDES Watershed Contact	Sue Hoppe			

## **Table of State Progress and Highlights**

### **Appendix B**

Region	State	Completion		Highlights/Progress of State Assessments
		SA	RAP	
1	CT	9-1-94	9-1-94	Watershed implementation is in the developing stages. Letter to State from WMDD to open formal watershed dialogue was signed on June 10, 1994. State experience with Long Island Sound provides an entree to the watershed approach.
1	MA	9-1-94	9-1-94	The State initially pursued a watershed approach because of metals issues and out of a desire to coordinate water withdrawal permits. State established an Office of Watershed Management about one year ago. State has established a three year basin cycle: year one for data collection; year two for data review and TMDLs; and year three for permit issuance. Region and State are setting permit cycles so permits will be basin aligned in 1999.
1	ME	9-1-94	9-1-94	Extensive progress by the State and Region to delineate basins within the State and plot locations of all major point sources using GIS. Planning cycles have been established for each basin and for all major NPDES permits.
1	NH	9-1-94	9-1-94	State agrees in principal with the Watershed Approach. A state watershed coordinator is expected to be designated in the near future. Permits are expected to be on a cyclic watershed basis in 4-5 years. EPA and the State have prepared and submitted a multi-purpose demonstration grant proposal to Jon Cannon on April 12, 1994. The Region is hoping for a favorable response.
1	RI	9-1-94	9-1-94	Watershed implementation is in the developing stages. Letter to State from WMDD to open formal watershed dialogue was signed on June 10, 1994. State experience with the Narragansett Bay, the Blackstone River Geographic Initiative, and the Potucset River TMDL initiative provide an entree to the watershed approach.
1	VT	9-1-94	9-1-94	Watershed implementation is in the developing stages. Letter to State from WMDD to open formal watershed dialogue was signed on June 10, 1994. State experience with Lake Champlain Study provides an entree to the watershed approach.
2	NJ	9-1-94	9-1-94	The Region has been working with New Jersey overall the last six months in a strategic planning process. New Jersey is developing an overall watershed strategy which is expected to include a five year basin strategy. The State has identified basins and is developing implementation rules. The Region expects to be able to complete the State Assessment and Regional Action plan by September 1, 1994 based on its current knowledge of the State's efforts. The State Assessment is viewed as an internal exercise and as a critique of the State's strategic plan. The Regional Action Plan is likely to foster additional analysis and evaluate the elements that are missing or not fully developed, such as data coordination, measures of success and public participation.

Region	State	Completion		Highlights/Progress of State Assessments
		SA	RAP	
2	NY	9-1-94	9-1-94	The Region has been working with New York over the last two years on a strategic plan. The "FY 94/FY 94-95 Strategic Plan for New York State" was completed in December 1993. This document is an update of the September 30, 1992 version of the Strategic Plan for New York. The overall intent of the Strategic Plan is "to focus resources in targeted areas with definite actions/results to be achieved". The Plan focuses on three elements: maintaining a credible base program; watershed-based targeting; and enhancing management of contaminated sediments and dredged material. The process focused on identifying major/significant issues on a statewide basis and was not intended to comprehensively identify all problems. The Plan includes lists of State targeted waters and other selected waterbodies in matrices and shows use impairments, agents of impairments, sources of pollutants, and the primary control programs for each of the waterbodies. The Plan also includes the base program strategies and special initiatives that are designed to address the problems in the specific waterbodies. The Region expects to be able to complete the State Assessment and Regional Action plan by September 1, 1994 based on its current knowledge of the State's efforts. The State Assessment is viewed as an internal exercise and as a critique of the State's strategic plan. The Regional Action Plan is likely to foster additional analysis and evaluate the elements that are missing or not fully developed, such as data coordination, measures of success and public participation.
2	PR	9-30-94	9-30-94	The Region met with the Puerto Rico Environmental Quality Board on June 29, 1994 and received an agreement to address watersheds in FY 95. Puerto Rico has no written watershed strategy at this time, but the Region expects to complete the assessment and Regional Action Plan by September 30, 1994. The Region has begun to look at permitting priorities and to consider permitting strategies that may gain some program efficiencies. The Region is also working on getting Puerto Rico to consistently provide water quality certifications.
2	VI	Not Planned	Not Planned	The Region believes that an assessment and Regional Action Plan are not needed for the Virgin Islands for several reasons: limited geographic area, few point sources, no discernible watersheds; and concern about VI's base program.
3	DC	FY 95	FY 95	The Region has formed a state assessment team for the District of Columbia. No further action has been taken.
3	DE	9-1-94	9-1-94	A preliminary assessment and first cut at an EPA Action Plan have been prepared for Delaware, and have been forwarded to the State for their review. Region 3 will meet with the state in July 1994.
3	MD	FY 95	FY 95	The Region has formed a state assessment team for Maryland. No further action has been taken. Maryland is currently developing and implementing tributary strategies for its basins that drain to the Chesapeake Bay. These strategies cover the majority of the State.
3	PA	FY 95	FY 95	The Region has formed a state assessment team for Pennsylvania. The Commonwealth attempted to implement a watershed-based modeling and permitting approach in the late 1980s and early 1990s. The approach met some resistance from Pennsylvania's regional offices and was difficult to keep on schedule. Pennsylvania is now attempting to implement a simpler watershed permitting approach. Because of the current action in Pennsylvania, Region 3 views it as a priority state for developing an assessment and action plan.

Region	State	Completion		Highlights/Progress of State Assessments
		SA	RAP	
3	VA	FY 95	FY 95	The Region has formed a state assessment team for Virginia. The Region is delaying action in Virginia until transitions in State government are complete. Region 3 views coordination of the point source and nonpoint source programs, which are managed in two separate agencies, as particularly challenging. Also, Virginia has identified 9 major river basins for the point source program (based on basin plans begun in 1972) and 461 basins for the nonpoint source program; however, there has been some coordination between the programs on some watersheds and in developing the State 303(d) list which was referenced to the nonpoint source watersheds.
3	WV	FY 95	FY 95	The Region has formed a state assessment team for West Virginia. The State is enthusiastic about the basin management approach and would benefit from assistance in developing a detailed understanding of the approach and constructing a framework document. A particular challenge is that the key programs are split between West Virginia's natural resource and water resource agencies.
4	AL	9-1-94	9-1-94	AL is interested in WPA, but wants to take it slow. The State prefers to start with a geographical targeting approach and over the next five years move incrementally closer to a basin management approach.
4	FL	9-1-94	9-1-94	FL is the only non-authorized Region IV State. Eighteen months ago the Region initiated discussions on the WPA with FL, but the State was not interested. FL now expresses some interest in pursuing the WPA, however, may want to wait until the State receives authorization for the NPDES program.
4	GA	9-1-94	9-1-94	GA is actively engaged in the development of a State-wide watershed framework document. A potential lawsuit for failure to develop TMDLs for impaired waters is viewed as an incentive for the State to pursue the basin management approach.
4	KY	9-1-94	9-1-94	KY has expressed interest in the WPA, but has taken no action to date.
4	MS	9-1-94	9-1-94	MS is interested in the WPA. The State received 104(b)(3) money for a pilot watershed project.
4	NC	9-1-94	9-1-94	NC is fully implementing a comprehensive basin management approach. The State has completed the Neuse and Lumber basin cycles and has started the Cape Fear basin.
4	SC	9-1-94	9-1-94	SC is fully implementing a basin management approach. The State has completed the Savannah Basin cycle.
4	TN	9-1-94	9-1-94	TN indicates interest in the WPA, but has taken no action to date.
5	IL	1ST QTR FY 95	2ND QTR FY 95	IL is currently interested in targeting problem areas. The State is not interested in a basin management approach at this time. However, the monitoring program is based on a basin cycle and the State public notices their water quality management plan for basins.
5	IN	1ST QTR FY 95	2ND QTR FY 95	IN three years ago divided the State into five regions which are roughly aligned with the hydrological geographic basins. The State established a five year sequence to assess each basin and to coordinate permit issuance. The State is currently working in the Grand Calumet area. The State process is not going as fast as they originally planned, but is expected to get on track as a result of the recent fee legislation and new staff.
5	MI	1ST QTR FY 95	2ND QTR FY 95	MI is implementing the basin management approach in the point source program for Major and "significant" Minor dischargers. MI has criteria to distinguish significant minors.
5	MN	1ST QTR FY 95	2ND QTR FY 95	MN is interested in the WPA. The State is developing a WPA Strategy. The State grant program is based on basin planning.

Region	State	Completion		Highlights/Progress of State Assessments
		SA	RAP	
5	OH	1ST QTR FY 95	2ND QTR FY 95	OH initiated a limited basin planning process for point sources in 1990. The State program consists of a five year cycle for monitoring and WLA development. The State is actively pursuing WPA on a broader scale.
5	WI	1ST QTR FY 95	2ND QTR FY 95	WI is developing a strategy, but it is not as comprehensive as the State permitting program desires. The strategy focuses on conducting monitoring on a basin cycle, but does not coordinate this effort with permit issuance.
6	AR	9-1-94	9-1-94	AR has indicated that it is not pursuing a State-wide watershed approach at this time. It does, however, have two watershed projects underway, including a joint study with OK on the Illinois River and another effort on the Buffalo River.
6	LA	9-1-94	9-1-94	LA's primary environmental agency, the LA Department of Environmental Quality, has not yet responded to the State assessment questionnaire. There is an ongoing effort in the State to promote public education about the Watershed Approach.
6	NM	9-1-94	9-1-94	NM has a Water Quality Commission, which consists of representatives from eight State agencies and three at large members from the general public. The State is trying to improve its relationship with Indian Tribes. To date, the State has targeted two watersheds for its efforts: the Galinas watershed and the San Francisco and Gila watershed. In the Galinas, nonpoint source activities are the primary focus. In the San Francisco and Gila, abandoned and inactive hard rock mines are the main concern.
6	OK	9-1-94	9-1-94	OK has taken preliminary steps towards the development of a comprehensive State-wide watershed approach, but has not yet responded to the State-by-State assessment questionnaire.
6	TX	9-1-94	9-1-94	TX has begun a basin planning initiative which includes a set of pilot basins for FY-96 and a 10 year plan to address all basins in the State. TX is in the process of redefining its basins in order to implement this initiative. The State has a GIS project which will overlay ground water aquifers with watersheds. River authorities in the State serve as an avenue for funding projects. One such authority is engaged in a monitoring project. Another has prepared a series of television commercials which suggest, "you dump it, you drink it."
7	IA	9-1-94	9-30-94	Iowa submitted its FY 95 workplan which did not contain any goals or objectives addressing the watershed protection approach.
7	KS	9-1-94	9-30-94	Kansas has reported that it is doing something on watersheds, but the Region has not seen anything yet.
7	MO	9-1-94	9-30-94	Missouri is considering a targeted watershed approach where resources are focused only on high priority watersheds in the State.
7	NE	9-1-94	9-30-94	Nebraska is in the early implementation phase of a State-wide BMA. Nebraska has 13 delineated basins which are coordinated around a five year cycle. First round of basin plans were due by 4/94. Complete permit synchronization in all river basins is expected by 2005. Permits are synchronized under the BMA through the issuance of 1 to 4 year permits to some dischargers. Public outreach activities include distribution of written basin plans, public meetings targeted according to basin cycle, water festivals, and stakeholder focus groups.
8	CO	9-1-94	9-1-94	CO has two active watershed groups consisting of several different stakeholders that are working to address problems in the Upper Arkansas River and Clear Creek watersheds. The State has prepared a working paper that outlines a state-wide watershed approach and is expected to adopt this approach formally in the near future.

Region	State	Completion		Highlights/Progress of State Assessments
		SA	RAP	
8	MT	9-1-94	9-1-94	MT has developed a TMDL for the Clark Fork Basin for nutrients, but is planning to impose limits on point sources only. The State is putting all NPDES permittees affected by the Clark Fork TMDL on the same permitting cycle. The point sources are expected to resist additional controls because nonpoint sources are not being controlled in a compulsory fashion.
8	ND	9-1-94	9-1-94	ND is working with MN to develop a TMDL for the Red River of the North, an interstate and international watershed. ND NPDES permits on the Red River are being set to expire at the same time as the MN permits across the river.
8	SD	9-1-94	9-1-94	SD has been slow in contributing to the State assessment process because of sensitive agricultural issues.
8	UT	9-1-94	9-1-94	The Region believes that UT has demonstrated a commitment and is making good progress toward developing a state-wide watershed approach. UT plans to develop a framework document with grant assistance from EPA HQ. The State sees little value in aligning the permit expiration dates within basins and prefers to reopen permits when necessary.
8	WY	9-1-94	9-1-94	There is an effort going on in Crow Creek, which passes through the City of Cheyenne. The WY Department of Environmental Quality, WY Game and Fish, and the Cheyenne Board of Public Utilities are gathering baseline data on the stream in an effort to delineate problems and decide whether a classification upgrade is feasible. USGS is also heavily involved upstream at Warren Air Force Base. All data is to be collected by the end of 1994, when it will be decided if the stream classification will be upgraded and what controls will be put in place. A part of this effort will be a pilot GIS study.
9	AZ	9-1-94	9-1-94	Strong State management support and leadership for watershed approach. Strong monitoring network and GIS capability. Good coordination in use of federal grants and State resources to target funds.
9	CA	9-1-94	9-1-94	Growing interest in watershed approach among State and regional boards. Some excellent pilot projects underway. Over 100 locally-led watershed projects. Monitoring program capacity extremely limited; inadequate data and analytical capacity for most watersheds. Permits backlog substantial.
9	HI	9-1-94	9-1-94	Inadequate staff to focus on watershed approach at this time. Draft strategy for a watershed protection approach, but only focusing on two priority areas now.
9	NV	9-1-94	9-1-94	Already implementing well sequenced standards to permits process in many watersheds. Able to use federal resources for watershed assessment and planning due to full permit program funding by fees.
10	AK	FY 95	FY 95	Watershed implementation in the State of Alaska presents a special challenge because of the magnitude of the State's geography, the complexity of water quality problems, and a lack of exposure of the State government to details of the basin management approach. The Region expects to conduct training on basin management, complete a State assessment, and develop a Regional action plan with Alaska in fiscal year 1995.

Region	State	Completion		Highlights/Progress of State Assessments
		SA	RAP	
10	ID	9-1-94	9-1-94	<p>Region 10 completed the assessment for Idaho and developed an action plan in April 1994. The assessment and action plan will be submitted to EPA by September 1, 1994. The Region's experience in Idaho is that the assessment and action plans take considerable effort. The primary <del>issues was</del> <del>was</del> putting together the Regional and <del>people</del> <del>with</del> the necessary information and putting that <del>information</del> into the assessment and action plan. Idaho plans to have a framework document completed in October 1994 and begin their first basin cycle in approximately 18 months. Region 10 is encouraging Idaho to use basin plans to meet or exceed the requirements for TMDL development and §305(b) reporting.</p>
10	OR	9-1-94	9-1-94	<p>Oregon is at the beginning stages of developing a State-wide basin management approach. The State has committed to developing a framework document in summer 1994, but the Region expects that this may not be enough time to complete the document. The Region expects to complete its assessment and action plan by September 1, 1994.</p>
10	WA	FY 95	FY 95	<p>Washington has adopted a State-wide basin management approach for permitting and is in its first year of implementation. Each regional office in the State has delineated and prioritized basins and is developing groups of permits around common TMDLs. The Region identifies inclusion of nonpoint sources in the basin approach and increased levels of public participation as potential areas for improvement in the Washington process.</p>



## **Table of Issues and Needs**

### **Appendix C**

Issue	Total #	Regions									
		1	2	3	4	5	6	7	8	9	10
Coordinated/Consistent Leadership at EPA Headquarters	6	X		X		X	X		X		X
Flexibility in implementing the Watershed Protection Approach	5	X	X	X		X				X	
Multiple agencies or Regional Offices within States	3			X				X		X	
Lack of Statutory authority to implement WPA	2				X		X				
Coordinated Grants and Reporting Process	2			X							X
Strong regulatory program is essential to adopt Watershed approach; sufficient resources are needed to improve weaker State programs	1		X								
Lack of interest among some State managers	1			X							
Allow authority to issue permits up to 10 years	1				X						
Implementing the Watershed Approach may take more time until experience is gained and the benefits are realized	1				X						
Concern with the future of the WPA if implementation does not result in any short term measurable environmental improvement?	1					X					
Uncertain of the role of NPDES Program in Regions watershed approach; little value in integrating NPDES Program where basins have only a few point sources, and where point sources are not the problem	1								X		
Lack of authority to control Non-point sources of pollution									X		
Lack of adequate monitoring activities and reliable data is an obstacle to implementation of watershed efforts	1									X	
TMDL development may slow down the permitting process; permits have been written without the benefit of TMDLs for a long time	1									X	
Allow States to develop initial load reduction targets with whatever ambient and loadings data is available; revisit targets as management controls are implemented and evaluated	1										X

Needs	Total #	Regions									
		1	2	3	4	5	6	7	8	9	10
Additional Resources and Contract Support	9	X		X	X	X	X	X	X	X	X
Data Management/Integration	8		X	X	X	X	X	X	X	X	
HQ Guidance/Training	6	X	X	X	X	X				X	
Refinements to accountability Systems (STARS and OWECAS)	5		X	X	X		X				X
Coordination with OECA	3				X		X	X			
Permit Streamlining: easier permit modifications; allow the incorporation of watershed schedules in permits; flexibility in applying whole effluent limits/requirements without chemical specific limits	1	X									
HQ should develop environmental indicators	1		X								
Flexibility to assign resources to controlling minor NPDES facilities where those facilities are primary sources of pollution	1			X							
Revise permit applications to include information on watershed	1						X				
Targeting loading reduction goals would be a big step towards measurement of environmental impacts	1							X			

**Action Items for NPDES Watershed Strategy Implementation**

**Appendix D**

#	Action Items	Description	Number of Votes	Region										
				1	2	3	4	5	6	7	8	9	10	
1	Regulatory/Policy Support for the Strategy	Evaluate impediments to implementation of the NPDES Watershed Strategy as a result of the existing regulatory and policy framework. Consider changes that will foster implementation.	6	X	X			X		X	X			X
2	Data Integration (PCS, STORET, TRIS, NEEDS, etc.), Industrial Facilities Discharge Database, Coordinate PCS Work group	Evaluate all current data bases to determine how they should be used (i.e., data integration) or updated to better support a watershed approach to NPDES permitting. Work with OECA to evaluate and make changes to PCS that better support the Strategy.	5			X		X	X		X	X		
3	Coordination with OW Offices and OECA	Communicate with OWOW, OST, OGWDW, and OECA on NPDES watershed activities to gain their needed cooperation and support.	5	X		X			X				X	X
4	Conduct Regional Workshops	Conduct a one to one and a half day train-the-trainer workshop for each Region in order to facilitate Regional watershed protection training for their individual States.	4			X	X					X	X	
5	Oversight: Revise STARS and OWECAS Criteria to support Watershed Implementation	Establish revised measures that demonstrate progress by Regions and States to implement the NPDES Watershed strategy and integrate the NPDES Program and the Watershed Protection Approach.	4		X			X	X	X				
6	Watershed Matrix Management	Provide leadership and coordination to achieve the objectives of the NPDES Watershed Strategy and the Permits Division's Watershed Mission Statement.	4	X		X			X					X
7	Develop Policy on Ambient Monitoring	Develop a policy which identifies how the NPDES program will support ambient monitoring efforts and clarifies relevant legal authorities.	3							X	X	X		
8	Develop National Policy to Coordinate NPDES Permit Development with TMDL Prioritization	Develop a policy which describes how the NPDES program will support the development and implementation of phased TMDLs.	3					X		X		X		
9	Review Regional Internal Strategies	Establish a Team to review and evaluate the strategies established by the Regions to coordinate related functions in the Region such as ground water, drinking water, standards, monitoring, TMDLs, permitting and enforcement.	2										X	X
10	Develop Alternative Permitting Mechanisms	Develop guidance and policy (including possible regulation changes) to expand the use of alternative permit mechanisms (e.g., general permits) to support implementation of the NPDES Watershed Strategy.	2					X		X				
11	Reconsider Classification and Priorities for Major/Minor Designation	Evaluate and revise the existing major/minor classification to address environmental impacts and watershed protection criteria.	2		X	X								

#	Action Items	Description	Number of Votes	REGION											
				1	2	3	4	5	6	7	8	9	10		
12	Guidance for Group Monitoring Under NPDES Scenario (Ambient Monitoring Coordination)	Develop guidance which describes how the NPDES program can support efforts to coordinate monitoring efforts among groups of discharges.	2		X		X								
13	Describe Watersheds in Form 2A	Use the Form 2A rulemaking to communicate the objectives of the NPDES Watershed Strategy and indicate how the forms support these objectives.	2				X		X						
14	Describe Watersheds in Form 2C	Use the Form 2C rulemaking to communicate the objectives of the NPDES Watershed Strategy and indicate how the forms support these objectives.	2				X		X						
15	Outside Outreach Activities and Publicize Watershed Successes	Identify opportunities to communicate the mission, objectives and implementation progress of the NPDES Watershed Strategy and obtain feedback from stakeholders and other interested parties. Develop communication strategy for the Strategy.	1	X											
16	Regional Mid-Year Reviews Lead	Conduct visits to all ten Regions in June and July, 1994. The primary objective of the reviews is to evaluate progress in implementing the NPDES Watershed Strategy. The visits will result in individual reports for each Region and a national report.	1	X											
17	Coordinate with RMES to Implement Flexible Funding Recommendations to Support WPA	Identify a Permits Division staff member to participate on the RMES grant work group (106 and 319 grant programs) to ensure grant flexibility issues such as application and reporting requirements are addressed.	1												X
18	Identify Ways to Use or Change the Public Participation Process	Review the current NPDES public participation process to identify possible improvements which will better support NPDES Watershed Strategy implementation.	1				X								
19	Modify the NPDES Permit Application Process to Support NPDES Watershed Strategy Implementation	Review and revise, as necessary, the NPDES permit application process to provide the necessary information to support permit development and issuance on a watershed basis.	1		X										
20	Develop FY 95 Matrix Work Plan	Prepare a work plan (and revise as necessary) for NPDES Watershed which includes individual activities, FTE allocations, time frames, and assignments.	0												
21	Administer WPA 104(b)(3) Grants	Review and approve Regional grant projects based on the established watershed criteria; track project milestones to ensure compliance with the agreement.	0												
22	Review Regional State Assessments and Regional Action Plans to Support States	Establish a Team to review, evaluate and comment on assessments of State NPDES programs and the Regions' FY 95 plans to assist States in moving to watershed based approach for the NPDES Program.	0												

#	Action Items	Description	Number of Votes	Region																
				1	2	3	4	5	6	7	8	9	10							
23	National NPDES/WPA Meeting	Plan for and coordinate an integrated national meeting with the NPDES and other key programs including water quality standards, TMDL, water quality specialists, compliance and enforcement, and other key NPDES elements.	0																	
24	Identify and follow through on NPR Priorities for Permits Division	Review the 48 recommendations of the National Performance Review process related to NPDES permits and determine which have relevance to implementation of the NPDES Watershed Strategy; develop a strategy for addressing relevant recommendations.	0																	
25	Develop Train the Trainer Material	Prepare training materials for a one and a half day workshop which will provide information to Regional and State personnel on the concepts behind the Basin Management Approach and the six NPDES Watershed Strategy components.	0																	
26	Work with OECA to Change the Definition of SNC to Support Watershed Implementation and Surface Water Priorities	Work with OECA to Identify Significant Non-Compliance (SNC) criteria which reflect watershed protection needs and revise the SNC definition accordingly.	0																	