THE WATERSHED PROTECTION APPROACH

FRAMEWORK DOCUMENT

October 1991

U.S. Environmental Protection Agency
Office of Wetlands, Oceans and Watersheds
401 M St., SW
Washington, D.C. 20460

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

OFFICE OF WATER

OCT 28 1991

MEMORANDUM

SUBJECT: Final Watershed Protection Framework Document

FROM: Robert H. Wayland III, Director
Office of Wetlands, Oceans and Watersheds

Michael B. Cook, Director
Office of Wastewater Enforcement and Compliance

for James R. Elder, Director
Office of Ground Water and Drinking Water

Tudor T. Davies, Director
Office of Science and Technology

TO: Regional Water Management Division Directors
Regional Environmental Services Division Directors
Assistant Regional Administrator
for Policy and Management, Region VII

We are pleased to share with you the enclosed final Watershed Protection Framework document. This final version differs only slightly from the draft version which we forwarded to you in June for your comment. Your response to the draft was very positive and this version merely adds a "preface" and information concerning drinking and ground water programs that was not included in the previous draft. We are issuing this document jointly in recognition that watershed protection will require control of both point and nonpoint sources and consideration of surface water as well as drinking and ground water.

We have now received the Initial Regional Plans from all of you and are in the process of preparing a synopsis of the projects that we can share with you and your "champions."

The initial plans clearly demonstrated that you and your States have experience and expertise in this approach. Our effort will focus on providing assistance to you and promoting the approach to broader groups of stakeholders.

We look forward to working with you in promoting your projects and developing the comprehensive Regional Framework documents due in September 1992. Please let us know how we can serve or assist you.

Enclosure

Preface to the Watershed Protection Approach

At its core, the watershed protection approach (WPA) begins with a focus on the condition of and threat to a watershed, rather than on any specific pollutants or sources as the starting point. A project manager, or "champion", for the watershed would enlist the participation of staff across the water programs, as well as other stakeholders, in developing an assessment of the watershed and an action plan to address impairments or threats. This approach provides an appropriate and effective way to address threats to human health and aquatic ecosystems in a holistic and integrated manner.

While the WPA is not a new program in itself, it provides an opportunity for the Regions to work with States, local governments, citizen groups, and other Federal agencies to develop watershed-specific action plans that address both traditional and non-traditional sources of pollution. Further, the action plans for watershed protection projects (WPPs) will help focus available resources, and aid in the development of technical and programmatic tools to successfully carry out the projects.

Many Regions and States have been using this approach and have developed action plans for selected watersheds. For the short term, it will be valuable to implement these plans in the next two years to gain experience in demonstrating and evaluating the value of this approach. For the long term, the Region will develop, by October 1992, Comprehensive Regional Frameworks to guide their long-term activities. The development of Region-wide, risk-based assessments of each Region's watersheds would provide an appropriate basis for future targeting. This assessment can be conducted by making systematic use of available information on water quality and the living resources dependent on waters and threats to these resources.

Starting in FY93, the Regions will use their framework documents to target high priority watersheds. As part of their long-term goals, EPA and the Regions will work toward permanent institutional changes that will enable and empower States and other agencies to operate their programs in a manner that will achieve the WPA goals.

WATERSHED PROTECTION FRAMEWORK

1. THE WATERSHED PROTECTION APPROACH (WPA)

A. The water program has made great progress over the past two decades in identifying and controlling water pollution.

B. While current efforts have been successful, they have concentrated on point sources and the chemical integrity of the Nation's waters. The current program approach has:

i. created "gaps" which have failed to address overall ecological and habitat health;

ii. in many cases, not considered the cumulative effects of different types of pollution from different sources of pollution; and

iii. not taken advantage of opportunities to involve local decision-makers and other responsible parties in cooperative efforts to improve the ecological health of specific waterbodies.

C. Water protection programs evolve as our technical understanding of the environment changes and as our social values and political institutions change. The WPA is intended to be a vehicle to promote incremental improvements in the way we approach the task of protecting watersheds.

2. GOALS OF THE WPA

A. The goal of the WPA is to reorient EPA and other Federal agency, State, and local programs to address watershed protection in a holistic manner. Specific goals are to encourage State and local governments to target watersheds based on overall human health and ecological risk; to encourage the development of site-specific watershed protection measures based on a holistic, integrated approach to address both traditional and non-traditional sources; to establish processes in which all decision-makers at all levels of government, different agencies, and other stakeholders come together to implement solutions; and to establish effective programs to measure success and continuous improvements.

B. The WPA is comprehensive in scope and seeks to change incrementally the approach to watershed protection within all levels of government.

i. EPA has responsibilities to promote coordination with the family of Federal agencies, develop technical to serve as a point of coordination at the EPA Region

level, and, where necessary, provide examples of integrated, holistic watershed protection.

ii. The States and Indian Tribes have responsibilities for State- and reservation-wide planning and targeting, managing water quality programs, integrating State agencies, and supporting local levels of government. The State-wide level is also a critical level for integrating information and coordinating the activities of many State, Federal, and other agencies.

iii. Local governments (e.g., counties, municipalities, area planning agencies) and other organizations (e.g., Conservation Districts, Lake Associations, business-related groups, public interest groups) in many cases are the decision-makers responsible for actions that affect the environmental quality of watersheds.

C. The watershed approach is an integrated and holistic strategy for watershed protection. As such, the WPA provides a framework that:

i. empowers Federal, State, Indian Tribes, and local agencies to implement watershed-specific plans that prevent, reduce or abate environmental degradation and risks to ecological systems and public health from all stressors and from all sources in the watershed;

ii. encourages consideration of the cumulative chemical, physical, and biological effects throughout the watershed;

iii. enhances coordination among all interested parties, including State, local, Federal agencies, Indian Tribes, and, most importantly, the public; and

iv. enables States and EPA to assess progress and successfully develop and improve tools and programmatic methodologies.

3. **RELATIONSHIP OF THE WPA TO OTHER WATER PROGRAMS**

Several current water programs incorporate risk-based geographic targeting to some degree, including the Nonpoint Source Program, the Comprehensive State Ground Water Protection Programs (which incorporate Wellhead Protection, Sole Source Aquifer Protection Programs), the National Estuary Program, the Clean Lakes Program, and Advanced Identification or Special Area Management Plans in the Wetlands Program. Regions are also undertaking geographically targeted, multi-media enforcement initiatives. In the near term, the

Watershed Protection Approach would not change the degree to which existing programs are carried out or are targeted.

The WPA is not intended to <u>replace</u> existing targeting programs, but rather to <u>integrate</u> and build on these targeting efforts on a watershed basis. Under the Watershed Protection Approach, we would look to make several of these targeted efforts coincide in the same watershed and thereby strengthen and broaden our efforts. The approach will encourage stakeholders to view all targeting efforts in a holistic fashion, in the context of the specific watershed. A designated "champion" for each watershed project will work to tie the programs together. Figure 1 illustrates the relationship of the WPA to other water programs.

Finally, there are important traditional tools (permitting, standard setting, etc.) which are generally applied uniformly nationwide and which are responsible for much of the progress realized thus far in preventing or controlling pollution. Continued, or enhanced, use of these traditional tools is a vital building block for better efforts - within targeted watersheds and more broadly.

4. IMPLEMENTATION OF THE WPA

A. Implementation of the WPA will be through a two-pronged approach:

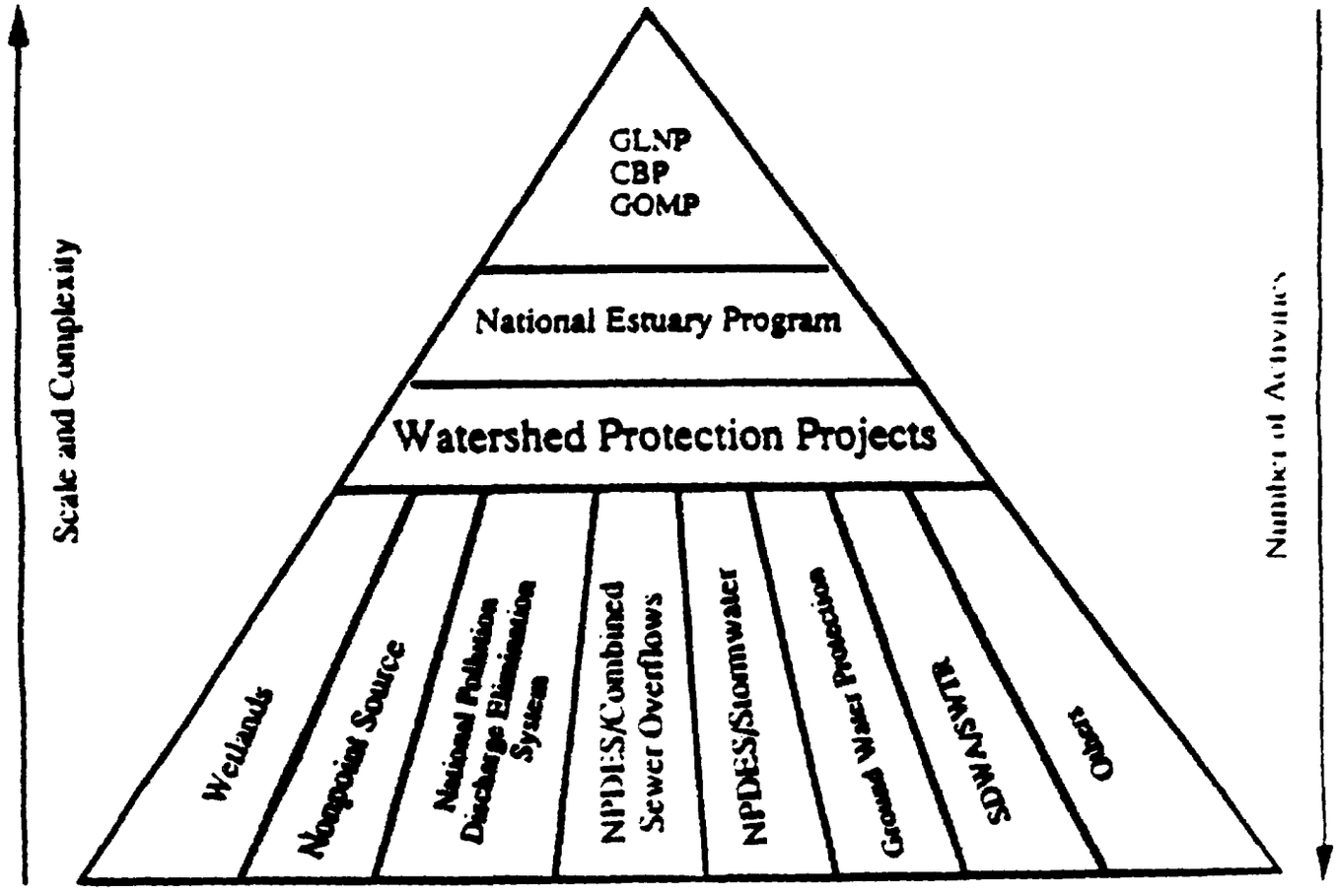
i. <u>Regional watershed projects</u> (short-term goal) - Projects will be initiated by the Regions and managed by EPA. Projects will be selected through risk-based targeting and involve integrated, holistic watershed protection solutions (see Appendices A and D for a definition of a Watershed Protection Project and examples of Regional watershed projects). The purpose of the Regional projects is to develop methods and tools, develop credible case studies, and lead by example. The key ingredient in these projects is the designation of a "champion" for the selected watersheds who will actively involve, with management support, the broad scope of Water Management Division staff and programs in the formation and execution of action plans to protect or enhance the watershed.

ii. <u>Institutional changes</u> (long-term goal) - EPA HQ and Regions will undertake specific activities to encourage States and other agencies to move toward integrated, focused, holistic water quality programs. This is a mid- to long-term proposition, and includes:

a. enhancing Statewide assessment and geographic targeting programs;

FIGURE 1

Relationship of the Watershed Protection Approach to Other Water Programs



b. bringing all relevant Federal and State agencies' focus to bear on addressing targeted watersheds in an integrated manner;

c. involving local governments and the public in developing comprehensive watershed protection measures; and

d. involving Federal, State, Indian Tribal, and local agencies and the public in developing appropriate educational programs.

B. Scope of Watershed Protection Projects - Appendix A provides a definition of a watershed protection project (WPP). Figure 2 illustrates the scope of WPPs. All WPPs should be broad in terms of the scope of the environmental issues examined. Projects that may be appropriate to initiate under the WPA include projects that focus on traditional pollution sources such as industrial facilities and POTWs and on pollution prevention and controlling pollution from dispersed, non-traditional sources (e.g., urban and rural nonpoint source discharge of nutrients and toxics, stormwater, CSO dischargers, habitat destruction). These sources constitute, in aggregate, a significant threat to water quality and the integrity of the ecosystems in our watersheds.

The scope and complexity of WPPs will be determined by the Regions and States on a case-by-case basis and should reflect available resources, technical feasibility, and public support. WPPs should focus on geographical areas where existing resources and activities can be integrated and brought together to demonstrate success within a reasonable period of time. While WPPs will vary in size and scope, most projects will not address the entire geographic reach of very large watersheds, estuaries or aquifers.

C. Results measurement - Each aspect of the WPA must have measurable endpoints. Tracking results will be a priority in implementing the WPA. Examples of measures that will be tracked as part of WPA include measurable water quality improvements, and measurable program institutional changes.

D. For FY92, the WPA will be implemented by existing base resources and by applying portions of any FY92 increases.

E. EPA HQ will provide flexibility in certain existing programs to support implementing the WPA (see Appendix E).

Figure 2: Scope of Watershed Protection Projects

Selection Level

	National	Regional	State	Local
Multi-Media Multi-program	Great Lakes Coastal America	Appalachicola National Estuarine Sanctuary, FL	Maine Lakes Assessment	Batterkill, VT Watershed Plan
Mixed	National Estuary Program	Merrimack River, NH	Pacific Northwest Rivers Study Projected Areas OR, ID, WA, MN	Lackawanna River, PA Mgt. Plan Southern CA Wildlife Plan
Single-media Single-program	Lake Champlain Water Quality Plan	Canaan Valley, WV Rainwater Basin Advance Identification	319 Program Delaware State Wetlands Cons. Plan Section 604(b) Section 106	Pilgrim Creek Watershed Mgt. Plan, CA West Eugene, OR Local Wetlands Mgt. Plan

5. **EPA HQ AND REGIONAL COMMITMENTS**

A. Headquarters Commitments include:

i. Developing technical tools for geographic targeting and watershed protection (e.g., models, NPS-oriented criteria, monitoring methods, BMP effectiveness data, geographic targeting methods);

ii. Harmonizing the priority setting and targeting criteria of currently operating base programs;

iii. Providing flexibility to grant resources for watershed protection projects;

iv. Supporting coordination and technical transfer pathways between the Regions; and

v. Setting up necessary workshops, visiting project sites, and evaluating progress.

B. Regional Commitments include:

i. Ultimate responsibility for the management of watershed projects and other related activities (e.g., project identification, staff dedication);

ii. Preparation of descriptions of planned activities and resources devoted to projects; and

iii. Reporting on measurable indicators of progress.

6. **SCHEDULE FOR IMPLEMENTATION**

A. By August, 1991, Initial Framework and Projects will be submitted to EPA HQ. These Initial Regional Plans will, at a minimum, include: (See Appendix B for a more detailed description.)

i. A description of Regional watershed projects the Region anticipates working on in FY 92 and FY 93.

ii. Initial thoughts on a Comprehensive Regional Framework

B. By September, 1992, Regional offices will submit a Comprehensive Regional Framework for Action. The Comprehensive Regional Framework should explain how the Regional offices will work to encourage Federal, state, and local agencies to implement program changes to achieve the goals. It should include: (See Appendix C for a more detailed description.)

i. An update of ongoing watershed projects;

ii. A description of the Region-wide watershed assessment and geographic targeting capability that should be completed by September 1992;

iii. A strategy for institutional changes including measurable results, milestones, and regular progress reports; and

iv. A plan for transferring lessons learned from the Regional watershed projects and program initiatives within the Region.

C. In FY 1993 national workshops on integrated watershed protection will be conducted.

D. In FY 1995 national progress to date will be assessed.

Strengthened State Nonpoint Source Programs

A. Background

Under §319 of the Clean Water Act (CWA), States are required to develop EPA-approved nonpoint source assessments and management programs to address nonpoint source impairments to the Nation's waters. Approved State programs are eligible to receive EPA grants and State revolving loan funds for nonpoint source program implementation. From FY 1990 through FY 1993, States received a total of $193 million in §319 grants to implement approved nonpoint source programs.

States currently employ a mix of voluntary and enforceable approaches to implement their nonpoint source programs. States are not currently required under §319 to have enforceable policies to implement the programs. In addition, EPA does not have independent authority to establish nonpoint source controls where a State has failed to develop an approvable program; nor does EPA have authority to assure that States develop and implement nonpoint source programs.

B. Recommended Elements of Strengthened State Nonpoint Source Programs

Proposed revisions to §319 would fundamentally strengthen the basic structure of nonpoint source program. In States that do not implement a State-wide watershed management program, proposed revisions to §319 recommend the following:

- Within two years of enactment of CWA reauthorization, States should specifically identify those waterbodies and their watersheds that are impaired or threatened by nonpoint sources, and identify other special waters, such as Outstanding National Resource Waters and drinking water supplies.

- States should expand their existing nonpoint source programs to implement best available management measures for categories of nonpoint sources causing or contributing to water quality impairments or threatened impairments in impaired, threatened, and special protection areas listed by the State.

- States should have an initial period of two and one half years from the date of enactment to develop and submit their revised nonpoint source management programs to EPA for review and approval.

- States should then be allowed two consecutive five year periods; the first five year period is for implementation of nonpoint source controls, the second for implementation of additional nonpoint source controls where necessary to attain and maintain water quality standards in all waters.

- States should be required to include enforcement authorities to assure implementation of their nonpoint source programs. Flexibility should be provided to rely initially on voluntary approaches, however, the enforceable authority should be in place from the

outset.

- To promote State adoption of these strengthened nonpoint source programs, Congress should provide both incentives and disincentives including:

  - increased Federal funding of State nonpoint source programs,
  - authority for EPA to withhold §319 grants from States that do not adopt approvable, upgraded nonpoint source programs, or do not implement them.
  - target other Federal funds for nonpoint source control to be expended in States that adopt approvable, upgraded nonpoint source programs.

- States should be specific about the role of Federal facilities as part of the regulated community and enforcement provisions should apply.

- As a backup to State enforcement of State management programs, EPA should also be authorized to take enforcement action. Such action should take place after: 1) EPA has provided notice to responsible parties of their responsibility to implement program requirements; 2) EPA has also informed the State; 3) the responsible parties have not implemented applicable requirements after receiving EPA's notice; and 4) the State has not taken timely and appropriate enforcement action.

- EPA should be authorized to establish enforceable minimum nonpoint source controls where a State fails to develop an approvable program.

Where States undertake a State-wide watershed protection program as described in the Administration's proposal for watershed management (i.e., developing a comprehensive inventory of the State's watersheds and establishing strong, enforceable programs to expeditiously achieve environmental objectives), such State programs should include:

  - a process for developing local, tailored nonpoint source management measures for significant pollutants.
  - demonstrate that nonpoint source controls, in combination with point source controls, would achieve and maintain environmental objectives within fifteen years of enactment,
  - ensure that all source controls, including those for nonpoint sources, are backed by necessary implementation mechanisms and enforcement authorities.

Watershed Management Approach
Important Milestones

- Enactment: Clean Water Act amendments are enacted by Congress, including recommended provisions for Watershed Management Approach.

- Two and a half years after enactment: States wishing to substitute their State watershed program for their revised §319 non-point source program, must submit their programs to EPA for approval. There is no deadline for State programs, if a State does not wish to make such a substitution.

- Six months after EPA receives a State program submission: EPA approves or disapproves State program submission, after conferring with other Federal agencies.

- Six months after EPA disapproves an initial State program submission: States must submit a revised State program for EPA review. If disapproved a second time, States must revise their §319 non-point source program as required by an amended §319.

- Each year following State program approval: States must submit a summary status report.

- Every five years following State program approval: States must submit a revised State program.

- Ten years after enactment: States must have approved and adopted watershed management plans for all priority watersheds.

- Fifteen years after enactment: State environmental objectives must be met.

- At any time: EPA may revoke incentives as it deems appropriate, if a State has not met requirements

State Watershed Programs

A. Background:

Substantial reductions have been achieved through the control of point source pollution. Although these still present an environmental threat in some areas, many other types of activities which cause impairment are not adequately addressed CWA programs. Existing water pollution control programs can serve as a foundation for a watershed management approach. Such an approach provides for: (1) recognizing that all watersheds encompass interconnected systems of resources, (2) identifying priorities and tailoring solutions to specific problems, (3) building partnerships between various governmental and private efforts within watersheds, and (4) building local commitment to solutions. A State-based program would provide for an inventory of watersheds, assuring a more consistent, risk-based approach to selecting priority watersheds, would respect the key role played by States and would allow for a program authorizing State approval of individual management plans for each watershed.

B. Recommended Elements of State Watershed Programs

The CWA should require EPA approved State watershed programs. It should also make clear that nothing in such a provision would alter existing State and local responsibilities. States should work with representatives from all levels of government during all steps of program development. There will be no deadline for submitting state programs to EPA; however, if a State wishes to substitute its watershed program for its revised §319 non-point source (NPS) pollution control program and permit the application of tailored, innovative, or alternative NPS management practices, state watershed programs should be submitted no later than two and a half years after enactment.

State watershed programs would include the following elements:

1. <u>State-wide Environmental Objectives and Schedule</u>: The environmental objectives must include water quality standards for each watershed and other quantitative environmental goals. States should devise schedules that provide for a relatively constant level of effort with the ultimate goal that these environmental objectives will be met not later than 15 years after enactment. The schedule should provide for early development of individual watershed plans; plans for priority watersheds must be approved and adopted within 10 years of enactment. Detailed plans should not be required for all watersheds within a State.

2. <u>Watershed Boundaries and Criteria for Selecting Priority Watersheds</u>: Watershed boundaries should be based on the USGS hydrologic cataloging system and should take ground water features into account. The scale of watersheds should be determined by each State in cooperation with adjacent States. Criteria for selecting priority watersheds should include environmental criteria, such as the presence of impaired waters, especially those impacted by NPS, the need to protect sensitive or important habitats, and the degree of human health or ecosystem risk; and programmatic factors, such as workload.

3. Watershed Management Entities: For watersheds requiring intensive management over time, States should be encouraged to designate new or existing entities to serve as watershed management teams. These entities should include an array of interested parties and may include entities administering the National Estuary Programs.

4. Process for Appropriate and Effective Non-Point Source Management Practices: This process should be implementable in accordance with the State schedule for progressively achieving environmental objectives and should include one of the following or combination thereof: (1) best available management practices no less stringent than established in the Administrator's guidance issued under CWA §319 that will apply to significant categories and subcategories of NPS pollution; (2) mechanisms for tailoring identified best management practices to site specific conditions, provided that they are no less stringent than the Administrator's guidance issued under §319; or methodologies by which the State or watershed management teams can explain that less stringent management practices can be established for NPS that will meet State and watershed-level environmental objectives.

5. Wetlands: States should develop a process for identifying major causes of wetland loss and degradation and for developing and implementing appropriate strategies and policies for achieving no overall net loss of wetlands and an increase in the quality and quantity of wetlands.

6. Incentives: State watershed programs should include minimum requirements for watershed management planning, implementation, monitoring, and reporting which must be met in order to qualify for incentives.

7. State Roles: Watershed management plans should be approved by the State (in coordination with adjacent States, as appropriate). States should oversee watershed planning and implementation efforts. States should involve the public to the maximum extent practicable; the public should be able to review and comment on the State watershed program prior to the program's submittal to EPA. A State must also demonstrate its legal authorities to implement and enforce its watershed program. These should be no less stringent than those found in the CWA and other Federal laws.

8. Federal, State, Tribal Involvement: The State program should include for each watershed a process for involving Federal agencies with a local interest or natural resources trust responsibilities in the watershed and States and Indian Tribes whose land area encompasses a portion of the watershed.

Watershed Management Plans

A. Background

Successful management of specific watersheds is critically dependent upon locally-based efforts. Experience has shown that people are most likely to care about the water near which they live and depend upon. State-designated watershed management entities will: build on this local commitment; coordinate private sector, regulatory, and voluntary programs; and comprehensively address cumulative impacts by developing and implementing solutions appropriate to the particular watershed.

B. Recommendations

Amendments to the CWA should direct those watershed management entities or State agencies that have been designated to carry out watershed-level management activities under an approved State watershed program to undertake the following activities:

1. Stakeholder Involvement, Decision-Making, and Conflict Resolution: Provide for the participation of all affected or interested parties and establish a protocol for making decisions and resolving conflicts among members of the watershed management entity.

2. Local Environmental Objectives and Environmental Indicators: Establish local environmental objectives that further the goals of the CWA and are consistent with all applicable statutes and regulations. Identify environmental indicators that will be used to monitor and report on the attainment of these objectives.

3. Watershed Ecosystem: Analyze the causes and sources of point source and NPS pollution. Inventory, if appropriate, wetlands and other valuable aquatic habitats. Describe major causes of loss and degradation.

4. Implementation Actions: Identify specific implementation actions that will attain and maintain water quality standards and other environmental objectives.

5. Watershed Management Plans (WMP): A WMP sets a schedule, specifies who will oversee its implementation and the persons responsible for implementing specific actions under the plan, and identifies existing and potential sources of funding. These plans should be revised as necessary. Watershed management entities implement the plans, evaluate progress, provide reports to the State, and should develop monitoring programs. The CWA should require that all watershed management entities receiving funding carry out some level of monitoring and assessment of risks to public health and the environment. Watershed management entities will also notify all parties of their roles and responsibilities for implementing the their plans.

6. Enforcement: Develop new or apply existing enforceable policies and mechanisms. Take enforcement actions as necessary. For the purposes of WMPs

Federal facilities should be treated as other facilities are treated.

Federal Role in Watershed Management

A. Background

In this watershed approach, States and watershed management entities would draw upon the resources, skills, and authorities of all participants, including Federal agencies, to carry out their respective responsibilities within the watershed planning and management context. The challenge for Federal agencies is four-fold: first, to participate; second, to provide incentives for watershed management; third, to stream-line operations wherever possible; and, fourth, to provide adequate oversight of Federal expenditures.

B. Recommendations

1. Guidance: EPA should issue guidance to States for the design of their watershed programs. This guidance would describe in detail how to meet the minimum requirements of the CWA.

2. Approval: The CWA should require States to submit their watershed programs to EPA. EPA would then approve or disapprove the program within 180 days of receipt, after conferring with other Federal agencies. Incentives would not be available to States until their program is approved. In the case of disapproval, a State should have six months to amend its program and resubmit it for approval. If disapproved a second time, a State would be required to revise its NPS program as required by an amended §319.

3. Review: Success a State watershed program should be measured in terms of: (1) environmental conditions; (2) programmatic changes; and (3) changes in exposures and risks to public health and living resources. Each year following program approval, States should submit a summary status report. Federal agencies should allow States to use this report to satisfy other reporting requirements under the CWA and other Federal programs. Every five years following program approval, States should submit a revised state program, which EPA may disapprove if: (1) the program does not meet the purposes of the watershed management provisions; (2) the State is not meeting the milestones specified in the program schedule; or (3) the State is not making reasonable progress toward meeting its environmental objectives. Any disapproval of a State program must be in writing and specify modifications. EPA may withdraw financial support or rescind incentives if WMPs are not being developed or implemented.

4. Revocation of Incentives: If at any time EPA finds that (1) a State program does not meet the requirements of the watershed management provision; (2) an approved State program schedule is not being met; or (3) the proposed practices or measures in WMPs are not adequate to attain environmental objectives, then EPA should notify the State of modifications that are necessary in order to continue to receive incentives. The Administrator may revoke incentives as he/she deems appropriate if EPA determines that the State has not met requirements.

5. Intergovernmental Coordination: The CWA should provide for a committee, including representatives from all levels of government, to coordinate and support watershed activities. Although not recommended as a statutory amendment, Federal agencies should participate in watershed-level management, promote watershed management, and implement their programs in accordance with WMPs. Where there is no approved watershed programs. Federal agencies should use a watershed approach in implementing their programs.

6. Enforcement: Enforcement responsibilities under the CWA will be applicable within a watershed program through the individual authorities provided under other CWA sections.

Watershed Protection Incentives

A. Funding

1. Eligibility: Clarify that eligible activities under CWA sections 104(b)(3), 106(h), 314(b), 320(g), and SRF include diagnosis, planning, stakeholder involvement, and follow-up monitoring, in addition to iterative cycles of implementing actions, assessing results and implementing revised actions.

2. Pass Through: Allow pass through of 106 grants to watershed management entities and encourage States to prioritize SRF funding for projects within approved watershed management plans.

3. Planning: Include specific funding authorization for watershed management planning.

4. Nonpoint Sources: Reserve significant percentage of any future 319(h) increases to support implementation of nonpoint source management measures under State-approved watershed management plans.

B. Nonpoint Source Controls

1. Alternative Nonpoint Source Requirements: Instead of being required to submit state-wide 319, as amended, plans providing for application of uniform best available management measures to both existing sources in impaired and threatened watersheds and new sources in all watersheds, States with approved watershed management programs would have the option to:

- establish management practices only for significant categories and subcategories of existing nonpoint source pollution identified in comprehensive watershed inventory and for all new nonpoint sources state-wide, or

- establish mechanisms for developing site specific management practices tailored to reflect local soil and climatic conditions, or

- establish methodologies for allowing less stringent management practices for nonpoint sources where compliance with State and watershed-level objectives can be demonstrated.

2. Alternative Nonpoint Source Implementation Schedules: Implementation schedules under 319, as amended, would not apply to nonpoint sources in States with approved watershed management programs; rather, approved States would be required to include milestones for implementing nonpoint source controls in the State's overall 15 year watershed program for progressively achieving watershed environmental objectives.

3. Eligibility Deadlines: States are eligible for alternative nonpoint source incentives only if they submit watershed program within two and one half years (30 months) after enactment.

4. Nonpoint Source Incentive Revocation: If EPA revoked the nonpoint source incentive, a State would be required to submit a revised nonpoint source program in accordance with 319, as amended, no later than one year after final notice of revocation.

C. NPDES Permits

1. Administrative Extensions: Allow one time 5 year extension of NPDES permit terms beyond current expiration date to allow States to sequence watersheds. However, facilities would still be required to submit timely permit applications and States would retain authority to immediately reissue permit if permit application indicates impairment of water quality.

2. 10 Year Permit Terms: Allow 10 year permits for point sources where receiving water quality standards are being met at time of permit issuance and watershed plan provides for maintenance of water quality standards.

3. 5 Year Water Quality Compliance Deadline Extension: Issue permits which defer compliance with water quality standards for up to 5 years where 1) approved watershed management plan, 2) the plan specifies enforceable nonpoint source pollutant load reductions that in combination with point source controls assure compliance with water quality standards in 15 years, and 3) the point source does not have a history of significant noncompliance.

4. Permit Fee Offset for Matching Funds: The dollar amount of permit fees collected under mandatory CWA permit fee system may be used to offset matching funds requirement for 106 grants.

D. Water Quality Triennial Reviews

1. Extension of Triennial Reviews: The current 3 year period for triennial reviews may be extended to 5 years in States with approved watershed management programs

E. Federal Consistency

1. Expanded Federal Agency Consistency: Expand section 401 certification authority to apply to new federal facility and activity requirements (not otherwise provided for under sections 301, 302, 303, 306, and 307) where 1) approved water management plan, 2) federal agency was provided opportunity to participate in planning process, and 3) federal agency did not object to new requirement.

PROPOSAL FOR DEVELOPING A WATERSHED STRATEGY:
REGIONAL WATER DIVISION DIRECTORS' COMMENTS

On October 14, 1993, Michael B. Cook, Director of OWEC, sent a memorandum to the Regional Water Division Directors requesting comment on a proposal for developing an OWEC watershed strategy. The proposal identified some key issues that must be considered as the point source programs move toward a watershed-based approach.

Four Regions (3,4,6,10) provided comments on these issues. Responses ranged from general comments on the overall proposal to detailed comments on the specific issues. A summary of the key issues outlined in the proposal, Regional comments, and conclusions drawn from the Regional comments follow.

SUMMARY OF ISSUES

Following is a summary of the key issues raised in the proposal for developing a watershed strategy.

Overall Approach

- Option 1: focus on <u>priority watersheds</u> and define base level program for other watersheds

- Option 2: develop a plan to address <u>every watershed</u> by scheduling activities throughout five year management cycles

Changed Measures of Success

- Focus on Fiscal Year 1995 program commitments initially

- Begin to emphasize longer-term measures associated with environmental improvement (water quality in watersheds)

State/Regional Watershed Strategies

- Provide flexibility and incentives for States to shift their programs to a watershed approach

- Select States and watersheds for initial efforts and over the long-term work toward an overall approach by each State

Changes in the Permit Program

- Synchronize permits by watershed

- Focus more attention on minors, stormwater, CSOs, sludge, pollution prevention in watersheds where they cause significant problems

- Look for opportunities to use general permits (e.g., de minimis discharges)

- Focus efforts on particularly severe problems in all watersheds as a baseline

- Develop feedback loop with enforcement to see if enforceable permits are being written for watersheds of concern

Changes in the Enforcement Program

- Provide flexibility in use of inspection resources

- Place more emphasis on multi-media inspections

- Conduct enforcement activities in early stages of watershed planning to begin addressing violations in priority watersheds as they are identified, not just after a plan is developed

- Consider violations such as non-filers, problems from minor dischargers, wet weather overflows, discharges from sanitary sewers, and dry weather overflows

- Investigate watersheds with high compliance rates and remaining water quality problems to determine the source of the problems

Uses of Data Systems

- Use the Permit Compliance System (PCS) to identify priorities within watersheds (especially toxics); track minors discharging to priority waterbodies; and map major and minor discharges in priority watersheds.

- Improve EPA, State, and public access to data

- Invest in data integration to develop better linkages to existing data

State Revolving Fund

- Work with the Administration to develop a dedicated funding source for watershed planning

- Work with States to give increased consideration to projects under approved watershed management or Section 319 plans

REGIONAL COMMENTS

Four EPA Regions provided comments on the proposal for a watershed strategy as summarized below.

Overall Approach

- The Regions generally supported Option 2, addressing all watersheds, as a goal for an overall approach. One Region noted that all States may not be able to take this approach and recommended giving States flexibility to choose the best approach for their State. Another Region noted that both options should be pursued simultaneously.

- Offer incentives for State development of modeling, monitoring, TMDLs by watershed (components of Option 2). One example is including TMDL development as a grant condition.

- Consider using non-authorized States as testing grounds.

Changed Measures of Success

- New measures of success could include measuring loading reductions for pollutants of concern in a watershed and measuring use attainment (number of stream miles in full attainment) on stream reaches below major dischargers and significant minors.

- One Region noted that loading reductions may not be considered meaningful measures of success if they cannot be linked to water quality.

State/Regional Watershed Strategies

- Define the scope of the watershed strategy (point sources only, point and nonpoint sources) and benchmark from existing State and Regional experiences.

- Address incentives for and impediments to implementing a watershed protection approach resulting from EPA/State organizational structures.

- Possible incentives include 10 year permits, trading, and the flexibility to "rearrange" resources to implement a watershed approach. This flexibility must extend beyond the permits program.

- Impediments include a lack of some Regional upper management support for the watershed protection approach and States that are unwilling to change the way they do business without new regulations requiring such changes.

- Re-orient monitoring and modeling activities on watershed basis.

- Establish a good educational program and demonstration projects to show States the benefits of the watershed protection approach.

- Provide analysis of financial, administrative, and environmental benefits of a watershed protection approach.

Changes in the Permit Program

- One Region commented that the NPDES program is "the engine that will pull the watershed train." If one considers only the NPDES perspective, however, efforts to move toward a watershed approach will not be fully effective. OWEC and OWOW efforts to implement a watershed protection approach must be coordinated.

- One Region stated its agreement with the recommendations in the proposal.

- An alternative to synchronizing permits by watersheds proposed by one Region is developing TMDLs on a watershed basis and issuing corresponding permits over a year or several years. This approach gives flexibility in timing of permit issuance when there are a large number of facilities with problems other than those addressed by the basin TMDL.

- One Region commented that because of time required for up-front work, true watershed permitting would not occur until at least three years or as many as five years after development of a watershed protection approach.

- One Region noted that it would be difficult to re-open permits in off-basin years to include any new statutory requirements.

- "Yardsticks" are needed for measuring success in converting a permits program to a watershed approach.

- Pollutant trading guidance is needed.

- One Region questioned the proposal to expand the use of general permits in watersheds with severe water quality problems since general permits are usually used to satisfy administrative and legal needs rather than dealing with a specific water quality problem.

Changes in the Enforcement Program

- Current enforcement guidance is inconsistent with the watershed approach and should be abandoned if a watershed approach is adopted.

- Adequate enforcement actions must be undertaken in a watershed as a watershed study is getting underway. The results of enforcement actions could impact load allocations and other decisions in the watershed. Enforcement actions should be included in any comprehensive action plan and coordinated with the basin study. One Region commented that timely and appropriate enforcement activities are being addressed as they are identified for majors, but they need to occur for minors.

- Without further explanation, one Region commented that multimedia inspections are not very important to the watershed approach. Another Region stated that directing enforcement resources toward failing septic tanks (an example given in the proposal) would be ineffective and nonproductive.

- One Region stated that directing resources toward watersheds with high compliance rates would be inefficient since there are watersheds with both low compliance rates and water quality problems. The Region recommended tracking average compliance rates by watershed.

Use of Data Systems

- Two Regions agreed that incorporating data for minors in PCS should be a priority, but recognized the need for additional resources to do so.

- One Region recommended that a "hydrological smart system" be developed to cross-reference all water computer systems by river reach and stated that permits and enforcement need to make use of GIS, WBS, and STORET.

- One Region commented that there should be a focus on data quality.

State Revolving Fund

- One Region expressed support for the proposal to give priority to using SRF funds in areas identified in 319 NPS management programs.

CONCLUSIONS

Several conclusions may be drawn from the Regional comments. These conclusions represent issues where there appeared to be some level of agreement among the Regions commenting on the proposal. Also, in many cases, Regions may have agreed with the recommendations in the proposal and, therefore, chose not to comment.

(1) Option 2 (develop a plan to address every watershed by scheduling activities during five year management cycles) should be a goal for an overall watershed protection approach. There were a number of ideas and suggested methods for reaching this goal.

(2) The NPDES program is a key player in any watershed protection approach, but efforts and contributions of other programs (OWOW) must be considered and integrated into any strategy.

(3) Regions generally agree with the proposal to develop new measures of success such as loading reductions and attainment of water quality standards.

(4) There are a number of impediments to implementation of a watershed protection approach that must be addressed. Some of these impediments are due to EPA and State agency structures.

(5) One of the major incentives for implementing a watershed protection approach is the flexibility to reassign resources.

(6) There is a need to define the benefits (environmental and administrative) of implementing a watershed protection approach.

(7) There are a number of impediments to synchronizing permits and keeping them synchronized. In some cases, permit synchronization may not be necessary or desirable.

(8) Enforcement activities must be an integral part of any watershed plan and address minors as well as majors.

(9) Minors data should be included in the Permit Compliance System (PCS).

(10) Better use must be made of STORET, WBS, and GIS applications. Water quality data sets should be linked together.

WPA - MSD Opportunities

Advanced Treatment (AT) Reviews

Reviews were originally conducted to assure that investments in AT for certain construction grant projects would result in measurable improvement in water quality. Similar technical reviews could be utilized to measure water quality improvement resulting from implementation of watershed strategies.

Wet Weather Monitoring Protocol

Development work initiated in FY-93 to establish a baseline wet weather monitoring protocol to measure the progress of the storm water and CSO control programs. Similar analysis might be developed for watershed protection purposes.

Pollutant Matrix

Attempts to illustrate, in a matrix format, the cost ($/pound) for removing a variety of pollutants (e.g., SS, BOD, N, P, metals, coliform bacteria, etc.) by POTWs, CSO controls, Urban Storm Water management controls, and non-point source controls. A total of 44 technologies were included.

Municipal storm water management plans

Provide guidance on the integration of municipal storm water management plans with watershed protection strategies. Material could be incorporated into future municipal workshops.

Guidance in the following areas:

- Targeting Municipal wastewater pollution prevention (MWPP) efforts on priority watersheds.
- case study materials from the Rouge River demonstration project on how different programs coordinated and benefitted from a watershed approach
- public/private partnerships to promote stakeholder involvement in a watershed protection approach
- outreach programs (SCORE) to provide training and promote stakeholder involvement

WPA - COMPLIANCE AND ENFORCEMENT OPPORTUNITIES

STARS:

- Relax STARS commitments for inspections to allow more flexibility in targeting inspection resources to highest priority watersheds

Minor Permits:

- Provide increased focus on minor permittees in targeted watersheds (especially facilities with compliance problems), decreased focus on majors with good compliance records inside or outside watersheds

Sector Strategies:

- Expand use of sector strategies (i.e., mining) where appropriate

Penalties:

- Earmark enforcement penalties to support watershed assessment, planning, or restoration activities

Inspections:

- Decrease number of inspections in low priority watersheds
- During inspections in targetted watersheds, educate dischargers about watershed planning efforts and upstream/downstream problems and solutions

Unpermitted Discharges:

- Develop strategy for identifying unpermitted discharges in high priority watersheds

WPA - NPDES PERMIT OPPORTUNITIES

Monitoring:

- Request upstream/downstream monitoring and assessment as part of NPDES application

- Include monitoring requirements in permit to assist in assessing watershed conditions and sources, setting TMDLS, and evaluating standards

- Establish group monitoring plans for multiple dischargers to same watershed to support integrated monitoring approaches and potentially reduced individual monitoring requirements

Stormwater:

- Concentrate review of stormwater plans on facilities in targeted watershed areas

- Target high risk watersheds for early implementation of more rigorous stormwater permits

TMDLs/WLAs/LAs:

- Write permits that explicitly are based on "shared" load allocations with nonpoint sources (i.e., compliance with permit limits will not assure attainment of water quality standards unless specified nonpoint source improvements are also made)

- Ensure that TMDLs/WLAs/LAs are developed to support permit issuance for pollutants of concern in impaired, threatened, or targeted waters

Synchronization:

- Administratively extend or write interim permits within watersheds to get all permits on same planning and issuance timetable

Trading:

- Provide for trading between point and nonpoint sources within watershed (stream reach?)

Oversight:

- Revise STARS commitments and emphasis on majors to provide targeting flexibility and encourage/measure progress toward implementing watershed approach

- Revise permit output expectations to allow transition to WPA