

US EPA ARCHIVE DOCUMENT

Part II

Individual Section 305(b) Report Summaries and Recommendations



River of Words 1998 Grand Prize Winner (Art, Grades 7-9)
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State and Tribal Recommendations

In their 1998 Section 305(b) reports, 33 states, tribes, territories, and interstate commissions made recommendations for improving water quality management programs to achieve goals of the Clean Water Act. This discussion summarizes the key recommendations made by these groups and is not intended to serve as a complete inventory or prioritization of these recommendations. While many of the recommendations coincide with current EPA program concerns and priorities, inclusion in this discussion does not imply EPA or Administration endorsement. The most commonly stated recommendations generally addressed the following environmental and programmatic concerns:

- Nonpoint source abatement and watershed protection initiatives
- Toxics contamination
- Ground water pollution and management
- Monitoring and data management
- Financial and resource needs
- Improved outreach.

This chapter briefly summarizes state concerns and recommendations on each of these topics.

Nonpoint Source Abatement and Watershed Protection Initiatives

Most states expressed a common concern for better management of nonpoint sources (NPS) of pollution. Both urban and rural runoff carrying a wide range of pollutants and stressors, such as nutrients, sediment, litter, bacteria, pesticides, fertilizers, metals, and oils, were mentioned.

Examples of Nonpoint Source Concerns

Many states provided examples of their nonpoint source concerns.

- The **District of Columbia** suspects that nonpoint sources are responsible for the high levels of toxic pollutants in river bed sediments.
- **Vermont** comments that wastes generated from large farming operations are equivalent to wastes generated by a small- to medium-sized city.
- **Utah** and **Idaho** report that eutrophication largely due to nonpoint sources is seriously degrading water quality in many of their major reservoirs.

The most frequently reported recommendations address several major concerns:

- *Nonpoint source abatement and watershed protection initiatives*
- *Toxics contamination*
- *Ground water pollution and management*
- *Monitoring and data management*
- *Financial and resource needs*
- *Improved outreach*

Recommendations
often cited by the
states, tribes, and
territories concern
NPS pollution.

■ **Rhode Island** believes that a majority of impaired waterbodies on their 303(d) list are degraded due to NPS pollution.

■ Concentrations of the herbicide atrazine are a growing concern in **Nebraska** and are also noted by the **Ohio River Valley Commission**.

Recommended Measures for Nonpoint Source Reduction

Many states report ongoing or recommended measures to reduce nonpoint sources.

■ **Georgia** and **North Dakota** contend that the most effective approaches and measures are likely to be improved watershed management policies, vegetated buffer requirements, and perhaps limitations on pesticide and fertilizer usage.

■ **North Dakota's** stormwater and NPS programs have coordinated efforts to assist small communities within watershed projects to prevent pollutants from entering runoff.

State and Federal Responsibilities

Many states forwarded recommendations addressing federal/state NPS abatement roles and responsibilities.

■ **Nebraska's** 305(b) report recommends that the federal government not mandate control of NPS pollution through regulatory programs. Instead, EPA should support the

state as it addresses nonpoint source problems through its NPS management program and its watershed-based approach.

■ **New Mexico** states that federal mandates should be developed only after adequate time has been provided to states to fully determine the efficacy of their NPS control programs. They note that the specific nature of nonpoint source problems can vary widely among states.

■ **New Mexico** also notes that the requirement of a nonfederal match of 40% for all Clean Water Act Section 319 grant awards is discouraging federal agencies, who own a third of the land in the state, from instituting appropriate NPS management projects.

■ **North Dakota** notes that it would be beneficial if state funds, administered through grants to priority NPS pollution watersheds, could be made available.

Adopting a Watershed Approach

Many states link NPS monitoring and abatement to adoption of a watershed management approach. Several states report having ongoing initiatives or plans for watershed management approaches as opposed to individual waterbody approaches.

■ The **District of Columbia** is using a watershed approach for the Anacostia River restoration as well as nutrient reduction in the Potomac River. They recommend additional federal funding to support such initiatives.

■ **Arkansas** hopes to establish land use zoning and watershed management plans at local levels to facilitate the development/protection of state surface and ground water resources.

■ **South Carolina** reports that their Watershed Water Quality Management Program has allowed them to better utilize water quality monitoring resources as well as resources for developing permit limits.

■ **Utah** is developing a geographically focused effort on major watershed management units in the state.

■ **Michigan** reports that some feasibility studies conducted on market-based pollutant trading have shown that it has potential application in watersheds requiring nutrient loading reductions. They anticipate that such trading could provide financial incentives for combined sources (industrial, agricultural, and municipal) and optimize water quality improvement costs, where applicable.

Toxics Contamination

Many reports discuss problems in identification, cleanup, and prevention of various metals and toxic organic pollutants in rivers and lakes, fish tissue, and sediments. They noted point and nonpoint sources of toxics are both widespread. Atmospheric deposition is suspected in increasing levels of mercury in fish in **Arkansas**, **Indiana**, and **Missouri**. In some cases, sources are attributed to

ongoing pollution and, in others, as in the case of PCBs and chlordane, to chemicals that continue to persist in the environment long after their use has been banned.

Identification and Assessment

States reported a number of concerns regarding identification and assessment of toxics.

■ **Arkansas** recommends that the detection limits for persistent and carcinogenic organics and highly bioaccumulative compounds be improved.

■ **Georgia** noted that even low levels of metals are a problem because fish are highly sensitive to metals.

■ The **Ohio River Valley Commission** reports that states were not in agreement regarding whether chronic aquatic life criteria violations for total recoverable metals were indicative of conditions toxic to aquatic life.

■ A number of reports mention a lack of data and information on sediment contamination. To address this need, **Nebraska** has begun work on establishing a database for sediment contamination.

■ **Nebraska** also recommends continued EPA Region 7 support for the Regional Ambient Fish Tissue Monitoring Program and the development of ambient water quality criteria documents for chemicals such as atrazine, alachlor, and mirex.

States would like additional regulatory and voluntary means for restoring and protecting ground water and better multidisciplinary and cross-agency participation and cooperation.

Ground Water Pollution and Management

Many states discussed issues and activities relating to ground water pollution and management. Two recurring themes were the need for additional regulatory and voluntary means for restoring and protecting ground water and better multidisciplinary and cross-agency participation and cooperation.

Additional Measures to Protect Ground Water

■ **Arkansas** reports that point and nonpoint ground water contamination sources not regulated under existing programs need to be ranked according to impact potential. They also suggest the need to promulgate water quality standards that would better reflect existing water quality in different aquifers and regions of the state (as in the ecoregion approach for surface waters).

■ **Delaware**, which relies heavily on ground water sources for domestic water needs, reports various contaminants of concern including iron, nitrates, salt water intrusion, and synthetic organic compounds from various sources such as agriculture or leaking underground storage tanks.

■ **Utah** has continuing concerns regarding cleanup of ground water contaminated by historical disposal practices and spills. In response, the state initiated monitoring studies and integrated database development and mapping efforts.

Government Coordination

Several reports mention a general lack of coordination among the many government and nongovernment bodies responsible for various areas of ground water protection.

■ **Utah's** report notes problems with timely and effective remedial actions and emergency response due to differences in federal and state administrative programs for handling ground water contamination. For example, the pollutant concentrations that require response often vary between state and federal programs.

■ **New Mexico** proposes that ground water protection should remain a state and local concern, with federal support of state/local programs and initiatives. Several states recommend improved hardware and software standards to aid in database development and data exchange.

■ **Missouri** notes that a complete ground water protection program should include a ground water monitoring network and educational programs for transporters of hazardous waste, those involved in applying farm chemicals, and the general public.

Monitoring and Data Management

Improved Monitoring

A common recommendation is the need for better monitoring for specific concerns (e.g., biological integrity, water chemistry, fish

tissue, stream flow, sediment contamination, estuarine waters, and ground water) as well as better coordination of monitoring programs.

■ **Rhode Island** reports significant gaps in currently available monitoring data and estimates that some 25% of lake acres and 46% of river miles are unassessed and that streamflow gaging stations are limited.

■ **New Mexico** suggests that bio-monitoring tests using warm water species (e.g., fathead minnow) are likely to be inadequate in protecting cold water ecosystems and recommends greater effort in developing methods using cold water species.

■ **Connecticut** recognizes that a probabilistic monitoring design will be necessary to assess low-order streams in the state.

Expanded Electronics Capabilities

Several states (e.g., **South Carolina** and **Rhode Island**) mention the need to expand and improve their computer and electronics capabilities to make data processing and management more efficient.

■ **North Dakota** and **Utah** note that the cross-agency compatibility of ground water databases could be improved.

■ **New Mexico** suggests that federal agencies take on the role of information management and dissemination in areas of interest to all states (such as sampling and

monitoring technology, containment and remediation technology, risk assessment, and standards development), rather than states spending limited resources on collecting similar information.

Financial and Resource Needs

Many states expressed the need for additional funding as a result of increasing programmatic demands. Some have adopted measures to maximize resource use by addressing issues on a priority basis. However, others reported that they will be unable to meet even basic needs or priority concerns without additional assistance. For example, **Utah** notes that new sources of funding must be found to maintain basic water pollution control program functions such as monitoring, inspections, and community assistance.

The states cited multiple environmental and programmatic needs requiring additional resources; some of the most frequently cited were enhancing NPS management programs, better monitoring, improved database management, construction and maintenance of treatment facilities, and cleanup of contaminated resources.

State Issues Requiring Assistance

■ The **District of Columbia**, **Rhode Island**, and **Vermont** reported problems with combined sewer overflows. The **District of Columbia** states that federal assistance is essential to manage this

Better monitoring is needed as well as better coordination of monitoring programs.

Improved public outreach and education is needed, particularly concerning NPS pollution management, wastewater operation and maintenance, and general water quality and resource management.

problem and additional funds are required if any new controls are to be instituted.

■ **Pennsylvania's** report states that current and projected state and federal funding for abatement and cleanup of abandoned mine drainage is only a small fraction of the amount required.

■ **New York** notes staffing and budget shortages have hampered their monitoring efforts, especially with regard to ground water analytical services.

State Recommendations for Financing

A number of states made requests for additional funding of specific programs.

■ **Rhode Island, South Carolina, and the District of Columbia** recommend an increase in State Revolving Fund monies to address wastewater and drinking water infrastructure needs.

■ The **District of Columbia** and **Utah** report burdens due to substantial decreases in Section 106 funds.

■ **North Dakota** suggests use of state funds, in the form of grants, for priority NPS watersheds.

States also made recommendations regarding changes in funding allocations.

■ At least two states (the **District of Columbia** and **New Mexico**) noted that required state matches for federal funds are sometimes burdensome.

■ **New Mexico** recommends that Congress provide sufficient dedicated funds to tribes so they can develop and implement effective water quality management programs.

Other suggestions include providing additional general fund appropriations, authorizing increased discharge fees, full funding of Section 1429 of the Safe Drinking Water Act amendments, use of federal highway funds to include stormwater treatment structures, and increased financial assistance to state Underground Injection Control programs.

Improved Outreach

Several reports included recommendations for improved public outreach and education. The most commonly mentioned contexts for outreach were NPS pollution management, wastewater operation and maintenance assistance, and general water quality and resource management.

Pollution Prevention and BMPs

A number of states mentioned a need for greater emphasis on pollution prevention and best management practices for NPS pollution management. This includes educating the public on issues, sources of NPS pollution, and management measures in areas such as livestock operations, zoning and land use, riparian vegetation, and road maintenance. Mechanisms used or recommended include workshops,

seminars, public forums, and guidance documents.

■ **Rhode Island, Nevada, Georgia, North Dakota, Vermont, and Utah** mentioned the need for continued emphasis, direction, and assistance in this area.

■ **Vermont** has developed a small grant program called “Vermont Better Backroads” to reduce runoff from local roads.

■ **New Mexico** notes that a primary cause of NPDES violations nationwide as well as in New Mexico is the absence of effective operation and maintenance programs to enhance the skills and competence of wastewater treatment plant operators.

Involving the Public

A general theme in some reports was a need for improved outreach for pollution prevention (e.g., water use and conservation), citizen water quality monitoring efforts, wetlands protection, and a combination of voluntary and regulatory efforts to improve the quality of surface and ground water resources.

Special Concerns/Recommendations

States made recommendations regarding specific regional or local environmental concerns not mentioned above. For example, **Missouri, Oklahoma, Idaho, Pennsylvania, the Susquehanna River Basin Commission, West Virginia, and California** expressed concerns

with continuing impacts of abandoned mine drainage. Ongoing problems with managing the zebra mussel, an exotic species, are reported in **Pennsylvania and Vermont**. Other issues mentioned include impacts due to channelization, ongoing wetlands protection and restoration issues, impacts of silviculture on water quality, coastal habitat restoration, lake management, and water quality impacts from increased recreational use and development.

Salton Sea

Several tribes in southern California, as well as the state, mentioned a need for better monitoring and regional cooperation in response to avian botulism and other indicators of fish and wildlife impacts in and around the Salton Sea. These tribes also recommend improving general surface and ground water monitoring and developing beneficial uses for their waters along with associated criteria to assess use support.

Conclusions

Many state concerns have root causes in resource constraints, lack of existing data or information, or lack of coordination among multiple bodies responsible for the same issue areas. The states and other governing entities recommended that Congress address financial/resource problems so that, at a minimum, basic and priority activities can be implemented. The importance of public involvement is emphasized, especially for dealing

Regional concerns include abandoned mine drainage, zebra mussel management, and restoring the Salton Sea.

with complex problems such as NPS pollution, where control options are difficult or expensive. Flexibility in developing programs tailored to individual conditions and needs is recommended especially for issues that can vary widely among regions, such as ground water and NPS pollution

management. Critical areas requiring improved monitoring and data development, such as toxics and stream flow, are identified. The reports also suggest the need for proper coordination and data integration among different programs to enhance efficiency and help optimize use of scarce resources.



Christine, Grade 1, OH

Amazon Slough Watershed

All summer long they come—
with or without dogs,
in loose, slow-moving bunches or alone,
hiking the steep, narrow path past the blackberries,
past the stream that is little more than a trickle now
in the hot depths of summer.

In the winter the stream swells—a vein, a pulsing artery of water
for deer that trip down from the forest's edge,
for raccoons that hide by daylight beneath our deck.
Chickadees, nuthatches, pine siskins
fly in and out of low brambly willows that line the banks.

The stream dips beneath the surface,
through pipes, culverts, under streets
and out again, into the wan winter sun,
a quarter of a mile away where it joins the slough,
brown floodwaters mingling.

Past ash and cottonwood,
in and out of cattails, willows,
past the place where each year
a family of ducks return
faithful to the stream,
and the huge blue heron is sometimes seen.

Moving toward the river,
where geese honk overhead,
and finally to its end
in the marshy reservoir,
the tiny stream which began
across our street
has traveled eighteen long miles
and now mingles with other waters,
glistening in the sun.

River of Words 1999 Grand Prize Winner (Poetry, Grades 3-6)
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