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**TESTIMONY OF
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SUBCOMMITTEE ON FISHERIES, WILDLIFE, AND WATER
OF THE
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
UNITED STATES SENATE**

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INTRODUCTION

Good afternoon Mr. Chairman and members of the Subcommittee. I am Chuck Fox, Assistant Administrator for Water at the U.S. Environmental Protection Agency (EPA). I look forward to talking with you this afternoon about the Nation's clean water program and, more specifically, about our efforts to identify polluted waters around the country and restore their health.

Over the past several years, EPA has worked closely with other federal agencies and States to coordinate programs designed to protect natural resources and water quality. For example, EPA and USDA led the effort to develop the *Clean Water Action Plan* announced by President Clinton just over two years ago. We continue to work together to oversee implementation of the *Action Plan* and to coordinate key projects, such as our work to improve management of excess nutrients in waste from animal feeding operations.

I am pleased that the President has proposed to substantially expand FY 2001 funding for grants to States for water pollution control. The President's Budget proposes increased funding of \$45 million for grants to States to identify and address the remaining polluted waters around the country. This funding, when matched by States will result in an increase of \$75 million annually for development of "Total Maximum Daily Loads" or "TMDLs." As my testimony will explain, TMDLs are critical to attaining our water quality goals.

The FY 2001 budget also includes an additional \$50 million in funding for grants to States to implement projects to reduce pollution from diffuse or "nonpoint sources," bringing the total value of these grants to \$250 million, a 150% increase in 3 years.

An additional \$50 million for grants to support efforts to restore water quality in the existing "areas of concern" in the Great Lakes is also proposed in the budget.

Finally, the President's recent proposal to provide an increase of \$1.3 billion in FY 2001 for diverse USDA conservation programs provides an opportunity to further strengthen coordination between USDA and EPA to protect natural resources and water quality.

This new funding for clean water programs, when approved by the Congress, will provide States and others with significantly enhanced resources to clean-up water pollution problems around the country.

In my testimony today, I want to describe the work EPA is doing to carry the clean water program forward in this new century, giving special attention to our recent

proposals to strengthen regulations guiding our efforts to identify and restore polluted waters under the Clean Water Act.

CLEAN WATER FOR THE FUTURE -- THE *CLEAN WATER ACTION PLAN*

Twenty-eight years ago, the Potomac River was too dirty to swim in, Lake Erie was dying, and the Cuyahoga River was so polluted it burst into flames. Many rivers and beaches were little more than open sewers.

Enactment of the Clean Water Act dramatically improved the health of rivers, lakes and coastal waters. It stopped billions of pounds of pollution from fouling the water and doubled the number of waterways safe for fishing and swimming. Today, many rivers, lakes, and coasts are thriving centers of healthy communities.

Despite this tremendous progress in reducing water pollution, almost 40 percent of the Nation's waters assessed by States still do not meet water quality goals. The States report that pollution from factories and sewage treatment plants has been reduced but remains a concern in many areas. Soil erosion and wetland losses impair or threaten the health of many aquatic systems. Pollution from a wide range of sources (e.g. storm water from city streets, agricultural lands, forestry operations, and others) degrade water resources. Fish in many waters contain unacceptable levels of mercury and other toxic contaminants. Beaches are too often closed due to poor water quality.

Several years ago, after taking a hard look at the serious water pollution problems around the country, the Administration concluded that current implementation

of the existing programs was not fully addressing serious water pollution threats to public health, living resources, and the Nation's waters.

In response to this concern, President Clinton and Vice President Gore announced, in February of 1998, an interagency effort to enhance existing clean water programs and speed the restoration of the Nation's waterways. The *Clean Water Action Plan* was the product of a cooperative effort by USDA, EPA, the Department of the Interior, the National Oceanic and Atmospheric Administration, the Army Corps of Engineers and others. It describes over 100 actions -- based on existing statutory authority -- that these agencies and others will undertake to strengthen efforts to restore and protect water resources.

The *Action Plan* is built around four key tools to achieve clean water goals.

- ▶ **A Watershed Approach** -- The *Action Plan* envisions an improved collaborative effort by federal, State, Tribal, and local governments, the public, and the private sector to restore and sustain the health of the over 2,000 watersheds in the country. The watershed approach provides a framework for water quality management and is a key to setting priorities and taking action to clean up rivers, lakes, and coastal waters.
- ▶ **Strong Federal and State Standards** -- The *Action Plan* describes how federal, State, and Tribal agencies may revise standards where needed and make programs more effective. Strong standards are key to protecting public health, preventing polluted runoff, and ensuring accountability.
- ▶ **Natural Resource Stewardship** -- Much of the land in the Nation's watersheds is crop land, pasture, rangeland, or forests, and much of the water that ends up in rivers, lakes, and coastal waters falls on these lands first. Clean water depends on the conservation and stewardship of these natural resources. This *Action Plan* encourages federal natural resource agencies, including the Department of Agriculture, to support State and local watershed restoration and protection.

- ▶ **Informed Citizens and Officials** -- Clear, accurate, and timely information is the foundation of a sound water quality program. Informed citizens and officials make better decisions about their watersheds. The *Action Plan* encourages federal agencies to improve the information available to the public, governments, and others about the health of their watersheds and the safety of their beaches, drinking water, and fish.

USDA, EPA and others are making good progress in implementing the over 100 specific actions described in the *Clean Water Action Plan*. Congress has provided vital support to this work by appropriating critical funding, including doubling EPA's State grants for reducing nonpoint pollution to about \$200 million.

A key accomplishment promoted by the *Action Plan* is completion of State assessments of watershed health and initiation of over 300 Watershed Restoration Action Strategies to restore polluted waters on a watershed basis. These Action Strategies are a tremendous tool for drawing together the diverse authorities and resources of local, State, and federal agencies to restore watershed health.

Other accomplishments include a new BEACH Action Plan, a response plan for pollution threats to coastal waters, new regulations to control discharges of stormwater, new efforts to support establishment of riparian buffers, and a contaminated sediment strategy. We are also supporting efforts to protect water quality and wetlands on a watershed basis through "watershed assistance grants" and the five State grant program.

The *Clean Water Action Plan* is a sound blueprint that brings the Nation's clean water programs into the new century. I ask, Mr. Chairman, that a copy of the first

annual report of progress in implementing the *Clean Water Action Plan* be included as part of my testimony in the hearing record.

RESTORING AMERICA'S POLLUTED WATERS

The clean water programs that EPA and the States implement -- ranging from financing assistance for sewage treatment facilities, to permits for dischargers, to technical assistance to control pollution from nonpoint sources -- are all intended to reduce water pollution.

For many years after passage of the 1972 Clean Water Act, pollution problems were so common that any reduction in pollutants made a contribution to improving the health of waters. Today, however, some of the most obvious water pollution problems have been addressed. To restore the health of those waters that remain polluted, we need to complement existing programs with a more focused effort to identify *specific* polluted waters and define the *specific* measures needed to restore them to health.

The authors of the 1972 Clean Water Act envisioned a time when this more focused approach to restoring the remaining polluted waters would be needed and they created the TMDL program in section 303(d) of the Act.

In my testimony today, I want to discuss the existing TMDL program, the story that it tells about the health of our waters, and the regulatory revisions that EPA is proposing in order to strengthen the existing program.

The Total Maximum Daily Load (TMDL) Program Background

The TMDL program, as it exists today, has two key phases -- identification of polluted waters and restoration of the health of these waters.

In the *identification* phase of the program, the States, with EPA oversight and approval, usually develop lists of polluted waterbodies -- waters that do not attain the water quality standards adopted by that State -- every two years. States consult with the public in developing lists, rank waters on their lists based on the severity of the pollution, and set schedules for the development of TMDLs for each water body over an 8 -13 year period.

The second part of the program is the development of the actual "TMDL," which is, in effect, a State's plan to restore the uses of the water that the State has determined to be appropriate (e.g. swimming). It includes a quantitative assessment of water quality problems and the pollutant sources that contribute to these problems. A TMDL for an impaired water defines the amount of a pollutant that can be introduced into a waterbody so that the waterbody will achieve the water quality standards adopted by that State and allocates reductions in the pollutant or pollutants among the sources in a watershed. Therefore, a TMDL is in effect a "pollution budget" for an impaired waterbody. As such, it provides a guide to taking on-the-ground actions needed to restore a waterbody.

A TMDL can focus on a small segment of a waterbody or on a group of waters in a larger watershed. Where many polluted waters are clustered together, some States have chosen to develop a more comprehensive, watershed approach to the problem --

such as a Watershed Restoration Action Strategy as described in the *Clean Water Action Plan*.

States develop the lists of polluted waters and the specific TMDLs, both of which must be approved by EPA. If EPA disapproves a State list or TMDL, the Clean Water Act requires EPA to establish the list or TMDL for the State.

Program Status

The TMDL program was designed to provide a safety net, catching water bodies that were not protected or restored by the implementation of the range of general, broadly applicable, pollution control programs authorized in the Clean Water Act.

Until the early 1990's, however, EPA and States gave top priority to implementing these general clean water programs and gave lower priority to the more focused restoration authorities of the TMDL program. As a result, relatively few TMDLs were developed and many State lists were limited to a few waters and were not submitted in a timely manner.

Several years ago, citizen organizations began bringing legal actions against EPA seeking the listing of waters and development of TMDLs. To date, 17 of these cases have been resolved with agreement for State actions to identify impaired waters and establish TMDLs. Where States fail to act, EPA will step in and identify the polluted waters or establish the TMDLs.

In 1996, EPA determined that there was a need for a comprehensive evaluation of the TMDL program. The Agency convened a committee under the Federal Advisory

Committee Act (FACA) to make recommendations for improving program implementation, including needed changes to the TMDL regulations and guidance.

The TMDL FACA committee was composed of 20 individuals with diverse backgrounds, including agriculture, forestry, environmental advocacy, industry, and State, local, and Tribal governments. Two representatives of the USDA served as ex-officio members of the FACA.

In July of 1998, the committee submitted to EPA its final report containing more than 100 consensus recommendations, a subset of which would require regulatory changes. Although the TMDL FACA committee did not meet agreement on all issues, the recommendations guided EPA in the development of the revisions to the TMDL regulations proposed in August of last year.

EPA already has taken a number of other significant steps to improve State progress in listing polluted waters and developing TMDLs. For example, in August 1997, EPA issued two policy memoranda providing guidance for State lists and requesting that States work to improve the pace of establishing TMDLs. In particular, EPA asked that States develop 8-13 year schedules for developing TMDLs for all listed waterbodies, beginning with the lists due April 1, 1998.

States have made very good progress developing lists of polluted waters. All States submitted 1998 lists and EPA has approved all but one of these lists. In a few cases, EPA added waters to a State list. These lists, and maps of each State's polluted waters, are available over the Internet at www.owow/tmdls.epa.gov.

In addition, the number of TMDLs developed by States and approved by EPA has been steadily increasing over the past several years. Between 1972 (when Congress passed section 303(d) as part of the Clean Water Act) and 1999, States and EPA established approximately 1000 TMDLs.

Since October 1999, States have established, and EPA has approved, over 600 TMDLs for a variety of pollutants, including sediments and nutrients which are predominately caused by polluted runoff. Across the country, over 2000 TMDLs are now under development.

What Do the 1998 Polluted Waters Lists Tell Us?

The 1998 State lists of polluted waters tell us that the overwhelming majority of Americans -- 218 million -- live within 10 miles of a polluted waterbody. Over 20,000 waterbodies across the country are identified as not meeting water quality standards. These waterbodies include over 300,000 river and shore miles and 5 million lake acres. The size of these impaired waterbodies range from short sections of headwater streams to long sections of major rivers like the Mississippi and the Colorado.

Direct pollution discharges from sewage treatment plants and factories are the sole cause of pollution in about 10 percent of polluted waters. Another 47 percent are impaired by a combination of point source discharges and polluted runoff. The remainder are impaired by polluted runoff from diffuse or nonpoint sources. Some of the impairments are the result of ongoing discharges while others stem from historic or "legacy" problems resulting from past activities.

The pollutants most frequently identified as causing water quality impairment include sediments, excess nutrients, and harmful microorganisms. Metals, including toxics, also contribute to these impairments.

On average, there are about two pollutants identified for each of the impaired waters. This means that as many as 40,000 TMDLs may need to be done, although watershed approaches can be used to address many of these individual segments at the same time and in a coordinated manner for greater efficiency.

To better illustrate the story that the 1998 polluted waters lists tell, I have several maps and graphs -- including a national map depicting the percent of impaired waters by watershed, and a bar graph indicating the leading reasons that waters do not meet their clean water goals -- that I would like to enter into the record.

Proposed Regulatory Revisions

On August 23, 1999 President Clinton announced proposed revisions to the existing TMDL program regulations that will significantly strengthen the Nation's ability to achieve clean water goals and provide States, Territories, and authorized Tribes clearer direction for identifying and restoring polluted waters. In addition, EPA proposed changes to the Clean Water Act discharge permit program and the water quality standards program that complement the proposed TMDL regulatory revisions.

These regulatory revisions are mid-course changes to the existing program based on current data and first-hand, on-the-ground knowledge regarding the status of

the Nation's waters. Moreover, the insights we gained from the Advisory Committee process provided guidance on constructive changes to the program.

I want to briefly describe several of the key changes we have proposed to the TMDL program.

- ▶ **Schedules for TMDLs** -- The proposed rule calls for States to develop schedules for establishing TMDLs within a 15 year timeframe, two years beyond the current 13 year schedule. By proposing this 15 year period, EPA is recognizing that some States need to develop many TMDLs and that it takes time to develop a useful and effective TMDL. In addition, the regulation does not set a time period for implementing the TMDL and attaining water quality standards, thereby giving States discretion to develop appropriate schedules for implementation.
- ▶ **Priorities for TMDLs** -- The proposed regulations also give States considerable flexibility in setting priorities for the development of TMDLs over the 15 year period. While the proposed regulations would require States to prioritize their listed waters, the only specific priority setting requirements in the proposed rule are that States assign a high priority to polluted waters designated as a public drinking water supply where the pollutant of concern causes a violation of a drinking water standard, and to waters where pollutants threaten species listed as endangered or threatened under the Endangered Species Act.
- ▶ **Allocating Needed Pollution Reductions for Polluted Waters** -- The proposed regulations make clear that TMDLs include an allocation of the needed pollutant reductions among sources of pollution, but give States freedom to allocate needed pollution load reductions among sources in whatever manner they deem appropriate, provided that the sum of the allocations will result in the water attaining State water quality standards.

Defining "Reasonable Assurance" -- EPA's current guidance asks that there be a "reasonable assurance" that a source actually will attain its pollution reduction allocation. Without such assurance, the TMDL may not result in attainment of the State-adopted water quality standard.

The proposed regulations more explicitly define "reasonable assurance." In effect, "reasonable assurance" means a high degree of confidence that allocations in the TMDL will be implemented. For point sources, reasonable assurance would mean that Clean Water Act permits will be consistent with any applicable pollution reduction allocation contained in the TMDL.

For diffuse or “nonpoint” sources, where no permit is required, “reasonable assurance” would mean that nonpoint source controls are specific to the pollutant causing the impairment, implemented according to an expeditious schedule, and supported by reliable delivery mechanisms and adequate funding. Some examples include regulations or local ordinances, performance bonds, memoranda of understanding, contracts or similar agreements. Voluntary and incentive-based actions may also be acceptable measures of reasonable assurance and are encouraged. It is important to note that a State decision to allocate load reductions to nonpoint sources does not bring that operator into a permit or regulatory program.

- ▶ **TMDL Implementation Plans** -- The proposed regulations call for organizing TMDL related information concerning needed pollution reductions, allocation of pollution reduction effort among sources, and “reasonable assurances” in a single document called an implementation plan.

States will have the responsibility for developing the plans, but will work closely with a range of stakeholders at the local, waterbody level. States could develop implementation plans for clusters of listed waters on a watershed scale, as long as the scale of the implementation plan is consistent with the geographic scale at which the TMDL is established.

- ▶ **Permit Program Revisions** -- In cases where a State developed a TMDL that is disapproved by EPA, the Clean Water Act requires EPA to establish the TMDL. In such cases, the proposed regulations would allow EPA to use the authority that States now have to designate certain sources, such as large Animal Feeding Operations and large fish farms, as needing Clean Water Act permits. EPA would use this authority only where a permit is needed to assure implementation of measures called for in a TMDL established by EPA.

The new regulations also would provide EPA the authority to object to and, if necessary, reissue expired permits issued by States for discharges to polluted waterbodies where reissuance is necessary to move toward meeting water quality standards while a TMDL is being established or to ensure that a completed TMDL is adequately implemented.

- ▶ **Silviculture Activities** -- The proposed regulation provides States with discretionary authority to require that discharges of stormwater from forest activities such as road building and harvesting have a Clean Water Act permit, but only where the discharge contributes to the nonattainment of a State-adopted water quality standard or is a “significant contributor” of pollutants to waters.

Although silviculture activities are not the most significant source of water pollution nationwide, they can cause serious pollution problems in some areas. In the preliminary data for the forthcoming 1998 305(b) report, thirty-two States identified forestry as a source of water quality problems for 20,000 miles of rivers and streams and 220,000 acres of lakes. Other States identified serious problems from pollutants, such as sediment and nutrients, that can result from forestry and other activities, but did not identify source categories.

This regulatory revision is narrowly tailored to allow the State permitting authority the option of requiring an individual silviculture discharger to address a significant water pollution problem through the use of a permit when other tools (e.g. financial assistance, voluntary measures) are unavailable, are not being implemented, or have proven ineffective.

EPA recognizes that many States have strong and effective voluntary programs for reducing water pollution from silviculture operations, and expects that most States will continue to rely on these programs both to protect the quality of waters that are now clean and to restore the quality of waters identified as polluted.

Where EPA uses its backstop authority and establishes a TMDL for a State, and allocates pollution reductions to forestry sources, the Agency will rely on voluntary, incentive and financing approaches for implementing these load allocations where they are proven effective. Only in cases where no other option offers a "reasonable assurance" of implementation would EPA consider using the proposed regulatory authority to require a discharge of stormwater from a forestry operation to have a Clean Water Act permit. EPA expects to use this authority as a last resort.

- ▶ **New Discharges to Polluted Waters** – The proposed regulations outline a new approach to achieving progress toward attainment of water quality standards in polluted waterbodies after listing and pending establishment of a TMDL. Because the new regulation would allow up to 15 years for States to develop TMDLs, there is a significant risk that conditions will decline in many waters before the TMDL is developed.

Existing regulations allow new dischargers to polluted waters, as long as the discharge "does not cause or contribute to the violation of water quality standards." This means the dischargers either will not discharge pollutants causing the water to be impaired, or if they intend to discharge such pollutants, their permit must include effluent limitations that "derive from and comply with" water quality standards (e.g, the pollutant concentration level in the newly

permitted effluent does not exceed the allowed concentration level of the pollutant in the receiving water).

EPA is proposing to strengthen this requirement by requiring that, where a State (or EPA where it issues the permits) allows large new or significantly expanded discharges to these waters, discharge permits must result in "reasonable further progress" toward water quality goals. Where possible, permits are to include an offset from another pollution source of one-and-a-half times the proposed new or expanded discharge. At a minimum, the permit is to do no further harm to the receiving water. This provision would help to assure that pollutants that bioaccumulate or are controlled based on mass loading, rather than concentration, do not make already polluted waters worse.

CONCLUSION

Most Americans are rightly proud of the tremendous progress the country has made over the past 25 years in improving the quality of our rivers, lakes, and coastal waters. The days of rivers bursting into flame and lakes dying are behind us.

This accomplishment resulted from a team effort -- Congress lead the way in passing the Clean Water Act and other federal laws, and federal agencies like EPA and the Department of Agriculture did their part. But much of the real, on-the-ground work has been done by the States, cities, small towns, and individual stewards of the land, like farmers, ranchers, and woodland managers.

The 1972 Clean Water Act set the ambitious -- some thought impossible -- national goal of "fishable and swimmable" waters for all Americans. At the turn of the new millennium, we are finally within striking distance of that goal. We need to maintain our traditional programs to protect clean waters. But today, we are able to list and put on a map each of the 20,000 polluted waters in the country. And, we have a process in

place -- the TMDL program -- to define the specific steps needed to restore the health of these polluted waters and to meet our clean water goals within the foreseeable future.

It is critical that we, as a Nation, rededicate ourselves to attaining the Clean Water Act goals that have inspired us for the past 25 years. The TMDL regulations we have proposed draw on the core authorities of the Clean Water Act and refine and strengthen the existing program for identifying and restoring polluted waters. They provide a map that will support us in our effort to fulfill the original promise of the Clean Water Act.

Some who have commented on the proposed regulations have suggested that we are asking the country to take too great a step toward cleaner water and that we should set aside these proposals. I respectfully and strongly disagree.

We began this effort over three years ago by forming a Federal Advisory Committee including a wide range of interested parties. We used the report of this Advisory Committee, and input from States and others, to develop a proposed regulation. We extended the comment period on the proposed rules to January 20 of 2000 and actively sought public comments and input from all interested parties for 150 days. We held a series of public meetings around the country on this proposal to respond to questions and listen to alternatives.

A key theme of many of the comments we heard in developing the rule is the need to increase financial resources for States to manage this effort and to assist pollution sources in implementing needed controls. We recognize this need. We have

increased funding for key State grant programs in recent years. Congress approved the Administration's requests to add \$100 million to State grants for the nonpoint pollution control program in FYs 1999 and 2000. Most importantly, for FY 2001, the President has proposed a major increase to EPA grants to States targeted specifically for development of TMDLs. This funding, when matched by States, will provide \$75 million for this important work. This is complemented by the proposed \$1.3 billion increase in conservation programs at USDA. We heard the call for increased resources and we responded.

Mr. Chairman, some observers will tell you that these new regulations are more of the old, top-down, command-and-control, one-size-fits-all approach to environmental protection. In fact, the regulations are guided by a vision of a dramatically new approach to clean water programs.

This new approach focuses attention on pollution sources in proven problem areas, rather than all sources. It is managed by the States, rather than EPA. It is designed to attain the water quality goals that the States have set and to use measures that are tailored to fit each specific waterbody, rather than a nationally applicable requirement. And it identifies needed pollution reductions based on input from the grassroots, waterbody level, rather than relying on a single, national, regulatory answer. In sum, we think we are on the right track to restoring the Nation's polluted waters.

Over the next several months, we will work with other federal agencies, States, and other interested parties to develop a final regulation to help the Nation better achieve the goal of restoring polluted waters.

Thank you, Mr. Chairman and members of the Subcommittee for this opportunity to testify on EPA's efforts, in cooperation with States and other federal agencies such as the Department of Agriculture, to restore the Nation's polluted waters.

I will be happy to answer any questions.

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