

**Testimony of**

**Christopher M. Westhoff**

**President**

**National Association of Clean Water Agencies (NACWA)**

**Assistant City Attorney**

**Public Works General Counsel**

**For the City of Los Angeles**

**On behalf of the**

**National Association of Clean Water Agencies (NACWA)**

**October 18, 2007**

**House Committee on Transportation and Infrastructure**



## **Introduction**

Good morning, Chairman Oberstar and Members of the Committee. My name is Christopher Westhoff and I am an Assistant City Attorney – and public works general counsel for the City of Los Angeles. I am testifying today as President of the National Association of Clean Water Agencies (NACWA). NACWA is the only organization dedicated solely to representing the interests of the Nation's public wastewater treatment agencies. Our members are dedicated environmental stewards who work to carry out the goals of the Clean Water Act and who treat and reclaim more than 18 billion gallons of wastewater each day.

I am pleased to be here today as we celebrate the 35<sup>th</sup> anniversary of the Clean Water Act and want to thank you for holding this important hearing as we face some serious challenges moving into the 21<sup>st</sup> century. This testimony will focus on the water/wastewater infrastructure funding crisis and the need to transition to a more adaptive watershed approach that can meet the complex resource intensive challenges of the future. The recommendations discussed in this testimony are drawn from a key NACWA report being released today titled, *Recommendations for a Viable and Vital 21<sup>st</sup> Century Clean Water Policy*.

## **Success of the Clean Water Act**

In the 35 years since the passage of the Clean Water Act, our nation has made tremendous progress in addressing water pollution problems. The federal-state-local partnership, exemplified by the Act's construction grants program, led to the most advanced system of regional wastewater treatment systems in the world. Since that time, the Act's focus has been on addressing the point sources of pollution that, at the time, constituted the most immediate concern for the improvement of water quality. Communities now enjoy the environmental and economic benefits of cleaner water, such as thriving waterfront communities in Cleveland and Chicago, restored fisheries in Lake Erie and the Potomac River, and increased revenues from real estate investment, recreation and tourism in many coastal communities, including Los Angeles.

Today, however, we find ourselves at an historic juncture for the nation's clean water future with 100 million more people expected to live in the country over the next 30 years and the massive industrial expansion expected to meet these needs. There is additional need to monitor and assess the contributions of millions of diffuse sources of pollution, including sediments, agricultural sources, construction sites, urban and suburban nutrient runoff, and air emissions. These increasingly complex and diverse sources of pollution have slowed the incremental rate of improvement to water quality significantly even in the face of considerable reductions from point source discharges. In other words, as resources continue to be used to curtail end-of-pipe discharges, there is no longer a significant decrease in pollutants going into impaired waterways.

The costs associated with this investment in clean and safe water have also risen while the federal contribution to these clean water improvements has dwindled. The federal-state-local partnership that was so successful during the early days of the Clean Water Act has eroded to the point that municipalities now shoulder over 95 percent of the costs associated with providing clean water. Federal assistance simply has not kept pace with the financial needs of clean water, declining more than 70 percent since 1980. The nation now faces a funding gap of \$300 - \$500 billion over the next 20 years between the current levels of spending for wastewater infrastructure and the total funding needs, according to the U.S. Environmental Protection Agency (EPA),<sup>1</sup> the Congressional Budget Office,<sup>2</sup> and the Water Infrastructure Network (WIN).<sup>3</sup>

In the 1990's alone, Los Angeles spent over \$1.6 billion on the upgrade of the Hyperion Wastewater Treatment Plant to full secondary treatment. This was only ONE plant, and only a small portion of this expenditure was funded through the Federal Clean Water Grant

---

<sup>1</sup> U.S. Environmental Protection Agency, *The Clean Water and Drinking Water Infrastructure Gap Analysis* (2002) <http://www.epa.gov/safewater/gapreport.pdf>.

<sup>2</sup> Congressional Budget Office, *Future Investment in Drinking Water and Wastewater Infrastructure* (November 2002); <http://www.cbo.gov/ftpdoc.cfm?index=3983&type=0&sequence=0>

<sup>3</sup> Water Infrastructure Network, *Clean and Safe Water for the 21<sup>st</sup> Century* (2000); <http://www.win-water.org/reports/winreport2000.pdf>.

Program. In this decade, Los Angeles will spend more than \$4 billion dollars to address the physical needs of its aging 6,500 mile long wastewater collection system and other wastewater infrastructure. To meet this aggressive expenditure program, rates have already been raised 7% per year for each of the past five years, and in 2008, our infrastructure team will ask our City Council for a nearly 9% rate increase for each of the succeeding five years.

It has become increasingly apparent to NACWA's clean water agency members that there is a growing disconnect between current Clean Water Act programs and what is needed to achieve the original goals of the Act. A new approach to doing business in the 21<sup>st</sup> century and a return to a sustainable federal-state-local partnership to bridge the funding gap is desperately needed. NACWA appreciates the Chairman and the Committee's leadership in passing H.R. 720, the *Water Quality Financing Act of 2007*, through the House. Increased funding for the State Revolving Fund is an important first step, but NACWA believes that without a long-term clean water trust fund, clean water agencies will be hard pressed to carry out their important mandate to protect the environment and public health in a sustainable manner. As they continue to improve treatment processes and upgrade infrastructure to do the work necessary to protect and restore the nation's waters, short and long-term changes are needed to align current environmental laws into a comprehensive, holistic watershed approach.

### **The Watershed Approach**

As the nation has largely addressed water quality impairment through point source control, there is now a growing need to turn our attention to non-point source threats that are much more diverse and demand a more complex solution. These challenges include nutrient over-enrichment, urban runoff, and groundwater/surface water interactions in a more holistic way. This approach to water resource quality management should again bring together federal, state, and local efforts in a meaningful partnership to address the highest priority problems, looking at all sources of pollution within hydrologically defined geographic areas.

This type of watershed approach is not an entirely new idea. It was originally envisioned in Section 208 of the Clean Water Act. This section of the bill called for regional water quality management planning that would become the watershed approach. Each state was required to identify areas, regardless of political boundaries, where there were significant water quality control problems. They were then asked to designate a single organization to formulate a management plan for the area even when located in more than one state. The bill also provided for cooperation with the U.S. Department of Agriculture (USDA) to address sources of non-point-source pollution, but funding dried up in 1982. States completed these watershed management plans; unfortunately, many were not used and are now outdated.

The watershed approach has again gained traction in light of the clean water funding shortfall as a way to prioritize needs and ensure the greatest return on available investment. As early as 1992, NACWA (then known as the Association of Metropolitan Sewerage Agencies) took the lead in developing a comprehensive watershed management act that recognized the need for flexible, creative approaches to controlling pollution. Although the Comprehensive Watershed Management Act of 1993 was never introduced in Congress, it did work to spur interest in the concept. There have been several attempts made by EPA and others since then to move toward a watershed-based approach grounded in sound science, characterized by robust stakeholder involvement, and focused on environmental results.

In March 2007, NACWA formed a Strategic Watershed Task Force, made up of leaders of the Nation's clean water agencies, to investigate how a watershed approach may still prove to be the solution to emerging water quality issues. Task Force members are clean water professionals with years of experience to draw upon both in the regulatory and legal arenas governing watershed management. They have used their experience to define the opportunities provided through a watershed approach, examine existing and potential obstacles for achieving a watershed approach, and have outlined the changes needed to make it succeed.

## **Water Is Water**

Adopting a watershed approach would allow the nation's clean water agencies and their partners to broaden water quality improvements while streamlining the use of public resources in the arenas with the greatest need. It allows communities to combine the issues of water quality, quantity and habitat together when forming an integrated water resources management plan. As a result, coordination between water related programs is dramatically improved. The divisions between traditional regulatory categories are dissolved, and communities have the needed flexibility to make management decisions based on achieving the maximum environmental benefit. This would facilitate market-based incentives such as water quality trading programs to help stakeholders find optimal solutions to emerging water quality issues.

Water quality trading, which allows sources to find the least cost alternative to achieving clean water, can be an important tool for restoring impaired watersheds efficiently and cost effectively. The programs operate by allowing point sources in one area of the defined watershed to meet their regulatory requirements through the reduction of pollution from a separate point or nonpoint source elsewhere in the watershed. This market-based approach to improving the quality of the environment is a proven approach. Air emissions trading programs date back to the Acid Rain program and the lead-in-gasoline phase-down programs implemented under the Clean Air Act. These and other programs have clearly demonstrated that market-based approaches can dramatically and quickly reduce emissions at substantially lower costs. This is critically important for communities nationwide that are struggling to meet the rising costs of clean water.

There is already evidence that water quality trading programs work. For example, in the Tualatin River watershed in Oregon, a trading program conducted in conjunction with a TMDL by Clean Water Services in Hillsboro has reduced thermal loads to the Tualatin watershed by planting over 34 miles of shaded buffers along the river. These nonpoint

source projects that were implemented to create the thermal credits have provided ancillary environmental benefits, such as flood control and wildlife habitat in recreational areas. It has also helped by allowing another wastewater treatment facility to discharge ammonia at a slightly higher rate. Significant cost-effective environmental benefits were achieved within the watershed through a science-based prioritization of needs.

Watershed-based programs like this allow communities around the country to focus on solutions that provide the largest environmental impact at the lowest cost while keeping the overarching goals of protecting human health and restoring the integrity of the nation's waters in mind. This ensures the most effective use of taxpayer dollars, ratepayer dollars, and other public funding.

### **Achieving Sustainability**

The world around us has changed significantly since 1972, from swelling and shifting populations to the emergence of new pollutants that have the power to change the course of nature. The watershed approach will help foster new and innovative solutions to these emerging water quality problems. NACWA encourages the Committee to seek these innovative approaches, with the appropriate funding, to reduce nutrient and nonpoint sources of pollution, improve methods for water reuse, monitoring and data analysis, reduce sanitary sewer and combined sewer overflows, address new water resource management issues presented by climate change, and develop more effective methods for treating wastewater. These include "green technology," conservation easements, stream buffers and wetlands.

Integrated strategies to managing drinking water, wastewater and stormwater issues such as water reuse, water conservation, and energy efficiency through a meaningful watershed management approach are critical to achieving sustainability. Green technologies too are becoming increasingly accessible and commonplace. They can provide multiple environmental benefits while again streamlining the use of limited funding in a cost-effective



sustainable way. EPA has also recognized these benefits and is encouraging the use of green infrastructure<sup>4</sup> as a way to maintain the physical, chemical, and biological integrity of waterways. Additional flexibility in the implementation of water quality requirements is needed however to allow for and acknowledge these types of situations.

## **Policy Recommendations**

Many changes must occur within current water quality management practices before a true watershed approach can be implemented. NACWA's Strategic Watershed Task Force has developed several short-term and long-term recommendations to better facilitate a move toward a watershed approach as the basis of America's water policy in the 21<sup>st</sup> century. In the short term, NACWA recommends these actions:

1. Reinvigorate the watershed-based planning process as outlined in Section 208 of the Clean Water Act;
2. Pursue new, more aggressive measures and funding to address needed controls on agricultural nonpoint sources;
3. Promote adaptive implementation of water quality improvement measures based on valid science;
4. Better utilize market-based approaches;
5. Break down regulatory silos within EPA's organizational structure;
6. Use a more appropriate and science-based sequence for establishing TMDLs;
7. Prioritize current actions and planning according to watershed needs.

In the long-term, the need to align current laws and regulations with a watershed approach will require visionary leadership and cooperation at all levels of government. Currently, municipalities considering the move to a watershed approach face regulatory and legislative "silos" that hamper cooperation. Different pieces of legislation that include the Clean Water Act, Safe Drinking Water Act and Endangered Species Act do not currently allow for the

---

<sup>4</sup> Linda Boornazian and Mark Pollins, *Memorandum on Use of Green Infrastructure in NPDES Permits and Enforcement*, EPA Water Permits Division and Water Enforcement Division, August 15, 2007

prioritization of watershed needs that can result in the greatest overall benefits. Also, the separation of EPA's Office of Enforcement and Compliance Assurance (OECA) from program offices such as the Office of Water often results in the targeting of violations that have little or no environmental impact – creating an adversarial relationship with those EPA regulates. The very nature of watersheds creates political issues as they often extend beyond traditional jurisdictional boundaries. Any long-term changes will require all stakeholders to cooperate and give up some amount of control to achieve a watershed approach. NACWA recommends the following actions to be taken in the long-term:

1. Establish a new water quality framework with a 21<sup>st</sup> century Watershed Act;
2. Reorganize EPA to reflect this new watershed framework; and
3. Conduct monitoring and research to show progress made via a watershed approach.

## **Conclusions**

All of the tools I have been discussing represent a major programmatic shift that is necessary to make further progress in cleaning up America's waters. As we celebrate the 35<sup>th</sup> anniversary of the Clean Water Act, it is again time to expand our focus: from an almost exclusively point source orientation to one that examines all sources of pollution; from relying largely on technology-based standards to a net environmental benefit approach; and, from a focus on process to a focus on environmental outcomes. We have made tremendous progress in cleaning up our waters over the past three and a half decades – an achievement that is even more remarkable in view of substantial increases in our population. As a Nation, we can be proud of how far we have come. These successes should strengthen our resolve to complete the hard work ahead and recommit to the nation's water quality via a holistic watershed approach.

NACWA believes that the time has come for such a recommitment in the form of a watershed-based approach. Even a truly holistic watershed approach, however, does not detract from the massive clean water funding gap facing the Nation's clean water agencies

and communities. Again, we must move forward to address this issue today through a sustainable, long-term federal, state and local financial partnership via a clean water trust fund. Absent such action, the funding gap will widen and many of the water quality gains achieved during the past 35 years will be lost. NACWA looks forward to working with this committee to ensure sustainable water quality progress for future generations of Americans. Thank you and I look forward to your questions.