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To:

Committee on
TRANSPORTATION AND INFRASTRUCTURE
SUBCOMMITTEE ON WATER RESOURCES & ENVIRONMENT

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I am honored to be given the opportunity to address you, Chairman Oberstar. This will likely be the only time that I can directly address Congress – the only entity capable of saving the Great Lakes. I will not waste my five minutes reciting statistics and overlooking the great progress we have made in restoring the Great Lakes. I also will not sugarcoat the many challenges that prevent us from averting the demise of our lakes.

The Great Lakes will only be protected and restored with strong federal and international leadership. I understand that you staffed the drafting of the Clean Water Act in 1972. I am certain that you are immensely proud of the many successes that our country has enjoyed as a direct result of that fine legislation.

In 1972 the country looked to Congress to clean up our waters and you delivered.

Unfortunately, there is much more to do and neither the institutions, nor the funding is in place to address the current challenges.

Once again, the country looks to Congress to clean up our waters and hopes that you can deliver.

Stated simply, nutrients are degrading our Great Lakes and I have no reason to believe that the degradation will abate in my lifetime.

Let me begin by stating that I am speaking as a citizen of the Great Lakes and one that is eminently familiar with the workings of the Clean Water Act and other supporting laws, rules, and regulations. I am also very familiar with the challenges and responsibilities of the regulated community.

I am also speaking as the Executive Director of the Alliance of Rouge Communities (ARC), a voluntary public watershed entity currently comprised of 40 municipal governments. The ARC has taken one of the dirtiest rivers in the Great Lakes Basin and changed it into a recreational resource. While we still have work to do, we are proud of what we have accomplished.

I have spent my entire professional career addressing Great Lakes issues. I participated in the first Earth Day at the University of Michigan and subsequently received degrees from U of M in Oceanography, Environmental Engineering, and Civil Engineering. I have prepared water-related sections for environmental impact statements for major utilities, including nuclear power plants located on the Great Lakes. While working for the regional planning agency, I prepared the first watershed plans for all of the major watersheds in Southeast Michigan. As the Assistant Director for Wastewater Operations at the Detroit Water and Sewerage Department, I was responsible for the operation, maintenance, and regulatory compliance of what was then the world's largest wastewater treatment plant. As a consultant, I have provided technical advice to a variety of dischargers ranging from automakers to small farmers. Through all of this, I have also supported environmental advocacy groups and served on the boards of several non-profits, including the Alliance for the Great Lakes and Oakland Plus.

I can say that without exception, all of these entities want the Great Lakes to be clean for years to come. They are all willing to do their part. They are the "A" students. They all recognize that more must be done, but they want the regulators to bring the resources to the fight before they are asked to do even more.

At this point in the evolution of the Clean Water Act, more real work is being done at the local levels of government than at the federal and state level. The communities are proud of their accomplishments and willing to take more responsibility, but they are also looking for more support from the federal government. When I say support, I mean money. But money is only part of the problem. We are also hoping that certain efficiencies can be put in place that facilitate our work and allows us to rely on federal agencies for technical support, including enforcement.

IS THERE REALLY A PROBLEM?

Yes, there really is a problem. I won't bore you with the documented evidence of excess nutrients, but suffice it to say they ultimately prevent a water body from being "fishable and swimmable." That is an issue even before we talk about the likelihood of toxics as a result of Blue-Green Algae, "Red Tides," and botulism cases.

Excess nutrients kill lakes.

I have provided you a copy of the Google view of Michigan. I ask you to look at Saginaw Bay, Lake St. Clair, and western Lake Erie. Clearly there is an algae problem. These are not tiny areas. Ninety percent of the water that flows over Niagara Falls passes through Lake St. Clair, yet the nutrient load is high enough to overwhelm the assimilative capacity of the lake.

Lake St. Clair may not seem important to people that are looking at the entire Great Lakes. Doug Martz deemed it the heart of the Great Lakes. I say that it may not be a Great Lake but it is a damn good one.

But the point I need to make to you is that Lake St. Clair is the "canary in the coal mine." You cannot ignore it and then expect progress to be made in other parts of the Great Lakes.

The satellite view only tells part of the story. The following picture is not of some eutrophic inland lake -it is Lake St. Clair. I have hundreds of similar pictures from small lakes, rivers, and, yes, the Great Lakes. All are eutrophying in front of our eyes. Clearly they are nutrient-loaded. Clearly the citizens are outraged. Clearly something isn't working.

Lake St. Clair – Not a Great Lake but a Damn Good One!

WHAT IS NOT WORKING?

TOO MANY COOKS ARE SPOILING THE SOUP

While some question the efficiency of the federal government, most agencies do a fair job of fulfilling congressional mandates. Unfortunately, the responsibility for managing the Great Lakes is spread throughout numerous state and federal agencies. Thus the U.S. Army Corps of Engineers (ACOE), the U.S. Environmental Protection Agency (EPA),, the Michigan Department of Environmental Quality (MDEQ), the U.S. Fish and Wildlife Service, the U.S. Geological Service (USGS), the National Oceanic and Atmospheric Administration, the Department of Agriculture, the International Joint Commission, and a plethora of Canadian agencies all have an opinion on how best to proceed. Unfortunately, the non-profit sector is not much better at speaking in one voice.

Overlapping authority is not the concern - *the real problem is that much of the nutrients entering our Great Lakes are unregulated*. This distribution of authority means these unregulated nutrients are everybody's problem and they are no-one's problem and the discussions drag on for decades.

From a practical point of view, permitting and enforcement of nutrients is not working. Nutrients discharged from pipes are regulated by one agency while the same nutrient that drains from a similar pipe with a different owner is unregulated. Some areas have no responsibility to monitor and reduce, while others are placed under strict mandates.

As it stands, *nutrients are insufficiently monitored, under-regulated and continuing to impair our Great Lakes*.

My Recommendation

Assign a primary responsibility of the major federal interests to individual agencies. Thus the EPA may be responsible for all water quality regulatory programs. The ACOE could be responsible for dredging and construction-related activities. Monitoring could be headed by the USGS. Habitat and wildlife could be managed by U.S. Fish and Wildlife. In each case, the actual work could be performed by other federal, state and local agencies. The ultimate responsibility would, however, remain with the primary authority.

For example, if all environmental regulatory programs were placed under the EPA, then it could delegate those responsibilities to the states that wish to accept the responsibilities. Similarly, the states could delegate their responsibilities to the most proactive counties. Thus give the "A" students the responsibility, the authority, and the incentive to manage the resource at the local level. Frankly, I believe that this is the only way to succeed. The higher level regulatory agencies should shift their focus to an audit/enforcement function. Those communities that choose not to be proactive can answer to the state or federal authorities.

THERE IS VIRTUALLY NO MONITORING

In most areas of the Great Lakes, *we are unable to determine the severity of nutrient pollution on the Great Lakes because there is so little data collected*. Monitoring is required to determine if we are maintaining "fishable and swimmable" waters. In the late 1970s, the EPA and the MDEQ both had active monitoring programs. Funding constraints have all but eliminated them. Thus the agencies are required to rely on self-monitoring data required under the NPDES permitting process, and data collected in a fairly haphazard manner. As a result of this lack of real information, problems can go unnoticed for decades.

Southeast Michigan has been lucky enough to assemble federal, state, and local funds to oversee some massive monitoring programs. The Rouge River comprehensive monitoring data goes back almost two decades. Macomb County has been monitoring for pathogens for decades. The St. Clair River and Lake St. Clair has had extensive monitoring over the past five years. The results of these programs are not surprising – *water quality standards are violated routinely across Southeast Michigan!* These communities remain proactive and will address these challenges.

What these communities have also learned is that sharing resources and relying on technology can substantially reduce the cost of data collection. Thus monitoring that was determined to be too costly for decades, has become affordable.

As the communities of Southeast Michigan continue to invest in monitoring and water quality improvements, they naturally ask what other Great Lakes communities are doing: Are they monitoring? Are they policing their dischargers? Can we expect progress?

At this point, monitoring is not required through regulation. There is no funding available to encourage monitoring. Communities are under tremendous financial pressure. If a community does collect data and reports it to the regulatory authorities, that community is likely to be required to implement a program to rectify high levels found. As a result, too many communities prefer to ignore the obvious.

<u>My Recommendation</u>

1) Provide funding for monitoring and, 2) Identify a single agency that is responsible for collecting, maintaining, and disseminating water quality data. The work itself could be delegated to other federal, state, or local agencies but responsibility should be retained at one agency. We all expect the National Weather Service to monitor the weather. Why do we rely on the EPA, USGS, ACOE, and a number of sub-agencies to collect data and then never share the data with the local units of governments?

A potential provider of this unified service could be the USGS. I would ask that Congress demand that the service provider, whoever it is, make all data collected publicly available in a very short amount of time. As it currently stands, state and federal governments take so long to process the data through their quality assurance process that the data is useless for most applications.

MUCH OF THE NUTRIENTS THAT ENTER OUR WATERWAYS SLIP THROUGH THE REGULATORY CRACKS

The nutrients that enter our lakes arrive via our rivers but many of those nutrients began on the store shelves. That, however, does not mean that these nutrients are not hurting our Great Lakes.

A couple of examples:

1. When you buy laundry detergent (within the Great Lakes Basin) the manufacturer is required to limit the phosphorus content. However, you can go down the aisle and buy automatic dishwasher soap, dishwashing brighteners, and trisodium phosphate (TSP) none of which have a similar limit. Some of these products are over 25% phosphorous by weight. This is a very large source of phosphorous. At the same time that wastewater treatment plant operators are being required to limit their phosphorous discharges, citizens are dumping large amounts of phosphorous into the wastewater influent. The operators have virtually no control over the content of the products that migrate to the wastewater treatment plants.
2. Fertilizers, by design, are nutrients. When they are applied properly, they encourage high yields and healthy lawns. When applied in excess, they run directly into the lakes. Local units of governments are being required to reduce their nutrient loading by the Phase II storm water permit system. These permit holders are not legally able to limit the content of the application rate of fertilizer because in Michigan, fertilizer is regulated by the Department of Agriculture.

My Recommendation

Legislation that limits phosphorous content in detergents must be revisited to include products that were overlooked or did not exist when we implemented the phosphorous ban in the late 1970s. Products with exceedingly high phosphorous content may remove the spots on your glasses, but for many, the price is too high.

Similarly, land application of fertilizers must be revisited. I am not advocating a ban. I state only that nutrients must be properly managed whether discharged from a pipe into a river or spread on a lawn or field. Those entities that cannot manage nutrients in a manner that prevents excess runoff should no longer be authorized to discharge this chemical. At the very least, local units of governments should be given the authority to enact a local ordinance that regulates application of fertilizers. The current system is not working and shows little promise of improving any time soon.

OUR GREAT LAKES DESERVE THE FUNDING REQUIRED TO RESTORE AND PROTECT THEM

Some great work has been done by the federal, state and local governments but it is not enough to reverse our current course. EPA's *Gap Analysis* documents the financial challenges that our deteriorating infrastructure will cause. As the financially strapped communities strive to keep the existing infrastructure operable, newer, more efficient technologies will not be instituted. Wastewater treatment plants remain a tremendous source of nutrients, but most older plants cannot afford to implement recent technologies capable of lowering the nutrient concentrations in their discharge. These improvements must be made – either through regulation or financial incentive.

Funding should not be limited to civil works projects, however. The monitoring, permitting, and enforcement programs established in the original Clean Water Act remain the backbone of the environmental protection. Currently, they are under-funded and ineffective. If we are going to make progress in reducing nutrients in our Great Lakes, these programs must be revitalized at both the state and federal levels.

I am fully aware that the environmental programs have changed over the 35 years since the original Clean Water Act, but not all of those changes have been good for our Great Lakes. I know that you are working with a number of groups trying to re-establish some of the critical programs that have been diminished by recent court rulings. As you move forward, I hope that you might consider the following recommendations.

My Recommendations

Consider re-instituting the construction grants program. It is costly, but necessary. Must we wait until we have major failures in some of our older, urban areas before we can agree that federal funding for public works is a good idea? It was a good idea in the original Clean Water Act. It remains a good idea.

Similarly, as Congress works through the budget process, please see that funding is available for monitoring, permitting, and enforcement. This is not the sexy part of environmental programs, but it is the most important. The EPA has taken on more initiatives over the past 35 years, but much of it has come at the expense of the core programs.

Nutrient loading will not be reduced if these core programs are not fully funded.

I thank you again for the opportunity to address you this afternoon. I began by stating that only Congress can reduce the nutrient loadings to our Great Lakes. I truly believe it.

Once again, the country looks to Congress to clean up our waters and we hope that you can deliver.

Visual Evidence of Nutrient Loadings

Source: Google Imagery