

Remarks by Christopher Jones, Director, Ohio EPA
Ohio River Basin Consortium for Research and Education
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Introduction

I am very excited to have the opportunity to open this scientific symposium on the Ohio River. Congratulations to Ohio University and the Ohio River Basin Consortium for Research and Education for bringing together so many relevant presentations over the course of the next two days.

As you know, many people have a deep emotional attachment to the Ohio River. In fact, I'm sure many of you are here today because your feelings about the River led you to your present careers. For those of us who are regulators, scientists, engineers, or environmental professionals of other disciplines, our feeling for the River might be *why* we pursue its improvement, but the science is *how* we do so. That makes the work of the Consortium critically important, so I want to thank its members for your efforts.

ORSANCO – the Ohio River Basin Sanitation Commission – has been at the forefront of efforts to study and protect the Ohio River since 1948. It is the forum through which the States that border the River work cooperatively toward our shared objective of a cleaner, healthier river on behalf of the nearly 25 million people who live in the basin. ORSANCO, too, deserves our thanks and recognition.

The importance of our collective efforts to protect the Ohio River cannot be overstated:

- The Ohio River stretches 981 miles and flows through or borders six states;
- It supplies drinking water for 3 million people;
- It supplies water to 49 power plants that together provide more than 6% of the nation's electricity;

- and the Ohio River carries more than 230 million tons of cargo each year.

All of those factors mean that the Ohio River is a vital part of the regional economy. Protecting the River and its tributaries is a quality-of-life endeavor on many different levels.

Point Source Controls

As you know, our nation's environmental consciousness was raised in the late 1960s and early 1970s by the realization that many of our major rivers had been badly degraded by more or less unrestrained industrial use and poorly treated sewage. With the passage of the Clean Water Act, efforts to bring these point sources under control were engaged.

Ohio is making good progress in restoring our major rivers. Currently, more than 6 out of 10 miles of our largest rivers (62%) support good to exceptional aquatic communities.

Much of this progress is attributable to our regulatory programs to control industrial and municipal discharges:

- Ohio EPA regulates more than 117 industries and municipalities discharging directly to the Ohio River.
- In addition, Ohio EPA regulates more than 2,000 dischargers in the Ohio River Basin. Ohio EPA issues permits to control discharges and regulates the construction of new wastewater treatment facilities.
- Ohio EPA monitors and tracks compliance with these permits and takes appropriate action to bring dischargers into compliance. Ohio EPA finalized 36 formal enforcement actions in the Basin in 2003.
- Among them is a Consent Decree with the Cincinnati Metropolitan Sewer District to initiate massive improvements in its sewer system to control separate sanitary

overflows (SSOs) and combined sewer overflows (CSOs). The cost of these improvements will exceed \$1.5 billion.

- Ohio EPA is working with other municipalities in the Basin to eliminate these kinds of discharges. ORSANCO and its other member states are also working to control the discharge of untreated sewage to the Ohio River from municipalities located in other states.

Nonpoint Source Programs

Because of the success of point source control regulatory programs, much of the remaining impairment in rivers statewide is attributable to nonpoint sources – urban runoff, erosion, agricultural runoff, construction site discharges and the like.

We know this because Ohio has a nationally recognized bio-monitoring program that takes an in-depth look at the conditions of our rivers and streams and analyzes the causes of degradation. Each year, Ohio EPA conducts biosurveys in 10-15 different study areas with a total of 300-400 sampling sites. In addition to analyzing water chemistry – which is where many states focus their programs – we study the physical condition of the stream (bank erosion, culverting, sedimentation) and the biological life it supports.

This program, now about 25 years old, has greatly facilitated the preparation of the Total Maximum Daily Load studies (TMDLs) required by the Clean Water Act.

- In fact, Ohio has performed 65% of all the TMDLs completed so far in U.S. EPA's six-state Region 5.
- Ohio has completed TMDLs for 26 watersheds statewide, 20 of these TMDLs are in the Ohio River Basin.

- We are currently working to complete 49 additional TMDLs in the Ohio River Basin.
- Ohio EPA, in coordination with other Ohio River states and ORSANCO, is in the process of completing several TMDLs for impaired segments of the Ohio River. TMDLs on the mainstem will address PCBs, dioxin and bacteria.

Nutrient Reduction

One of the things the TMDLs are telling us is that excess nutrients remain a problem in many areas, though the sources of the problem vary. Discharges from crop fertilizers and animal manure are the culprit in some cases. Leaking home septic systems are at fault in others. Overuse of lawn chemicals is a factor. Sewage treatment plants may need to do more to control nutrient discharges.

The benefit of a TMDL study is that it allows us to customize solutions to the specific source of the problem on a watershed-by-watershed basis. Ohio EPA has imposed nutrient reduction requirements in several permits in the Basin based on watershed studies and TMDL recommendations. AT the same time, we are using Section 319 grants and the Water Resource Restoration Sponsorship Program (WRRSP) to control nutrients from nonpoint sources in impaired streams and watersheds.

- The Water Resource Restoration Sponsorship Program is another Ohio innovation in which communities that are borrowing money from our low interest loan program to improve their wastewater treatment plants can get an additional interest rate reduction in return for doing a conservation project that improves water quality.

Ohio EPA and other state agencies are working with ORSANCO to control the discharge of nutrients to the Ohio River. The goal is to reduce the nutrient loads by 30% in order to control the anoxic zone problem in the Gulf of Mexico.

We are beginning to work with other organizations to promote innovative approaches to control nutrients and other pollutants in the Ohio River Basin. Trading is an example of an approach that can achieve a cost-effective way to accomplish pollutants reduction and to leverage point source discharges to reduce discharge of pollutants from nonpoint sources.

Data Collection and Management

No one knows better than a room full of scientists that data is the heart of efforts to study and improve our watersheds. In addition to Ohio's bio-monitoring program, we have a new tool for data collection.

The Credible Data Bill was signed by the Governor last year. It allows volunteers to collect and submit water quality data, following requirements governing the collection and use of surface water quality monitoring data. The bill also requires other state agencies to submit all water quality data in their possession to Ohio EPA annually, at a minimum. Ohio EPA is currently developing rules to implement this program; we expect draft rules to be completed by October 2004.

The bill also requires Ohio EPA to establish a computerized database of credible data for easy retrieval. We will accomplish this by February 2005 with the update of our new system for data management based on STORET, the U.S. EPA system for handling water quality data. The new system is planned to replace multiple databases currently in use.

Conclusion

So you can see that we have been very busy – in Ohio and jointly with ORSANCO – with efforts to protect and improve the Ohio River. Throughout the course of the symposium, you'll hear about many other efforts directed toward the same end. That is a very encouraging sign. It means that there are many hearts and minds concentrated on the river that forms our border, fills our glasses, helps light our homes, drives our economy, supports our recreational pursuits and satisfies the attraction we've inherited from the ancestors who first explored its banks.