



THE COURSE OF CHANGE



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The Ohio River Valley Water Sanitation Commission (ORSANCO) is an interstate water pollution control agency created in 1948 by the State of Illinois, the State of Indiana, the Commonwealth of Kentucky, the State of New York, the State of Ohio, the Commonwealth of Pennsylvania, the Commonwealth of Virginia, and the State of West Virginia with the approval of Congress of the United States. The Commissioners of ORSANCO respectfully submit the following report of activities for 2003 to:

The Honorable Rod R. Blagojevich
Governor of Illinois

The Honorable Joseph E. Kernan
Governor of Indiana

The Honorable Ernie Fletcher
Governor of Kentucky

The Honorable George E. Pataki
Governor of New York

The Honorable Robert Taft
Governor of Ohio

The Honorable Edward G. Rendell
Governor of Pennsylvania

The Honorable Mark R. Warner
Governor of Virginia

The Honorable Robert Wise, Jr.
Governor of West Virginia

&

The Honorable George Walker Bush
President of the United States

Photo by Charles Bryant, Meldahl Dam, Chilo, OH



CHAIRMAN'S MESSAGE

THE COURSE OF CHANGE

The magnificent Ohio River is a beautiful and priceless treasure that can be enjoyed by all. As it sweeps its way from the headwaters at the confluence of the Monongahela and Allegheny Rivers to the point where it meets the mighty Mississippi, millions in the Ohio River watershed delight in its greatness and enjoy its multiple uses. Many who live and work on the River have observed the transformations that occurred as the river responded to changes in the basin, watching the River's water quality continually improve.

Once degraded by indiscriminate discharges of untreated waste, the Ohio is now a vibrant river thriving with sport fish such as bass, sauger and crappie. Much of its improvement can be attributed to the work of the Ohio River Valley Water Sanitation Commission (ORSANCO). For 55 years, this interstate agency has implemented efficient and effective water pollution abatement programs. The achievements have been remarkable, but the task is far from complete. New challenges constantly surface requiring ORSANCO to adjust and adapt programs to the ever-changing needs of the river and its users. This year, in an ongoing effort to protect the river from the influence of municipal and industrial wastewater dischargers, the Commission has adopted a revision of its Pollution Control Standards. To reduce the nutrient contribution of the Ohio River to the hypoxia present in the Gulf of Mexico, ORSANCO is working to develop a nutrient reduction action plan for the Ohio River Sub Basin of the Mississippi River watershed.

To remain connected to those who use the river, the Commission continues to expand its outreach programs. More than 500,000 people visited Life Below the Waterline, ORSANCO's mobile aquarium during Tall Stacks, a steamboat, music and arts festival in Cincinnati, where they learned how the fish community could serve as an indicator of water quality.

ORSANCO has continued to chart a course of innovative change by forging collective partnerships with federal, state, interstate and local organizations. To assess the water quality impacts of agricultural best management practices in the Big Walnut Creek in Central Ohio, ORSANCO entered into a cooperative agreement with the US EPA. This study will provide recommendations for evaluating and improving the efficiency of future non-point source pollution abatement programs. Additionally, the Commission is working with a coalition of local citizens in Kentucky, Virginia and West Virginia to implement the Compact in the Big Sandy River Basin.

In times of economic decline, public agencies charged with improving the water quality face an important challenge of broadening and maintaining their quality of work with less financial resources. These agencies continue to provide the same level of service without sacrificing the basics. Similarly, despite changes to ORSANCO's financial resources, the organization has continued to produce critically important information while expanding our focus, without sacrificing necessary components of existing programs.



Photo by Joann Watts, 31st Street Proctorville Cable Bridge, Proctorville, KY

The close working relationship with the states is the cornerstone of the Commission and ORSANCO has continued to build innovative partnerships with organizations that can help extend the mission. With these partnerships, both ORSANCO and its staff are recognized as leaders in water pollution control. During 2003, Alan Vicory, Jr., Executive Director, was elected President of the Association of State and Interstate Water Pollution Control Administrators (ASIWPCA). This is not only a great honor for Mr. Vicory but for the Commission.



Ron Potesta
Commission Chairman

Pollution Control Standards

Since 1951, ORSANCO has maintained the Pollution Control Standards for discharges to the Ohio River. These Standards indicate specific uses for the water, set water criteria to protect those uses and create treatment requirements to meet the established criteria. Implementation of the Commission's Standards is executed by the states through the National Pollutant Discharge Elimination System permits program. ORSANCO reviews draft permits for the Ohio River discharges to assure that the standards are incorporated.

The Commission consults regularly with state and federal agency personnel; its advisory committees and representatives from industry; academia; environmental groups; and the general public to provide an opportunity for the constituents to comment on proposed changes to the Standards. In 2003, ORSANCO presented the proposed changes at Evansville, IN; and Marietta and Cincinnati, OH.

The most recent review concluded in 2003 and resulted in the following changes: new criteria for arsenic, requirement for outlet markers and new requirement for mixing zones.

Nonpoint Source Initiatives

The Pollution Control Standards address point source discharges to the Ohio River; however, different methods are needed to address the pollution problems attributed to nonpoint sources. ORSANCO has entered into cooperative agreement with EPA and sub-contractor Malcolm-Pirnie to evaluate the effectiveness of watershed-scale nonpoint source pollution abatement programs by studying the Big Walnut Creek in Ohio.

The selection of the Upper Big Walnut Creek watershed for this project was based on its land use. The watershed encompasses nearly 121,600 acres with an estimated 72,000 agricultural cropland acres draining into the Hoover Reservoir. The long-term water quality monitoring program of the reservoir by the City of Columbus has detected elevated levels of the agricultural herbicide, atrazine, but control programs have been implemented. The knowledge gained by conducting this project will provide recommendations for evaluating and improving the effectiveness of future nonpoint source pollution abatement programs in the Big Walnut Creek watershed and other management practice systems across the nation.

To investigate the nonpoint source abatement programs in this watershed, staff will model field-scale pesticide runoff loss and its correlation with downstream water quality monitoring data both before and after implementation of environmental restoration. It will be a two-phase project in which Phase I will determine the effectiveness of the environmental restoration activities currently performed in the project watershed. The second phase will build upon the calibrated modeling efforts in Phase I to identify optimal site-specific solutions.

Big Sandy River Basin Coalition

In April 2003, a coalition of citizens from Kentucky, West Virginia and Virginia approached ORSANCO in the interest of forming a similar multi-state basin commission to explore options to address Big Sandy water quality.

Since the Big Sandy River is a part of the Ohio River Basin, it is covered under the Ohio River Valley Water Sanitation Commission Compact. The Coalition was introduced to ORSANCO at the October 2003 Commission meeting. ORSANCO has agreed to work with the Coalition to implement the Compact in the Big Sandy River Basin and hopes this will provide a blueprint for working with other interstate watershed groups.



ORSANCO'S Monitoring Network

The effectiveness of efforts by ORSANCO and its member states to control water pollution in the Ohio River and its tributaries can be measured through monitoring water quality conditions. Rather than conducting individual monitoring efforts on the Ohio, the states have found it more efficient to delegate this responsibility to ORSANCO, which in turn conducts a number of different monitoring programs in order to be responsive to changing conditions and to fulfill the information needs of the member states. These programs include bacteria monitoring, organics detection system, bimonthly and clean metals sampling.

Compact states have delegated water quality monitoring activities to ORSANCO for improved efficiency and consistency. This map shows testing locations for ORSANCO's monitoring programs.



ORSANCO's Monitoring Programs

- ▲ Dissolved Oxygen
- ★ Bacteria
- Bimonthly
- Dissolved Metals
- ⊕ Organics Detection System

- | | |
|---------------------------------|---------------------------------------|
| 1. Pittsburgh (Allegheny) ● ⊕ | 23. Greenup ▲ ● ■ |
| 2. Pittsburgh (Monongahela) ● ⊕ | 24. Portsmouth ⊕ |
| 3. Pittsburgh (Ohio) ⊕ ★ | 25. Lucasville (Scioto) ● |
| 4. Beaver Falls ● | 26. Meldahl ▲ ● ■ |
| 5. Montgomery ▲ | 27. Newtown (L. Miami) ● |
| 6. Midland ⊕ | 28. Covington (Licking) ● |
| 7. Weirton ⊕ | 29. Cincinnati/Anderson Ferry ● ★ ■ ⊕ |
| 8. New Cumberland ● ■ | 30. Cleves (G. Miami) ● |
| 9. Wheeling ★ ⊕ | 31. Markland ● ▲ ■ |
| 10. Pike Island ● ■ | 32. McAlpine ▲ |
| 11. Hannibal ▲ ● ■ | 33. Louisville ● ★ ⊕ ⊕ ■ |
| 12. Willow Island ● ■ | 34. West Point ● ■ |
| 13. Marietta (Muskingum) ● | 35. Cannelton ▲ ● ■ |
| 14. Parkersburg ⊕ | 36. Sebree (Green) ● |
| 15. Belleville ▲ ● ■ | 37. Newburgh ▲ ● ■ |
| 16. Racine ▲ | 38. Evansville ★ ⊕ |
| 17. Kyger ▲ | 39. J.T. Myers ■ ▲ ● |
| 18. R.C. Byrd ● ■ | 40. Mt. Vernon (Wabash) ● |
| 19. Winfield (Kanawha) ● | 41. Smithland ● ▲ ■ |
| 20. St. Albans (Kanawha) ⊕ | 42. Pickneyville (Cumberland) ● |
| 21. Huntington ★ ⊕ | 43. Paducah (Tennessee) ● |
| 22. Louisa (Big Sandy) ● | 44. Paducah ● ⊕ ■ |

Watershed Pollution Reduction Program & Total Maximum Daily Load

In a watershed of over 200,000 square miles, a pollutant in the Ohio River may originate from a number of different sources. Water quality degradation in one state may be caused by sources in several other states and it is often beyond the means of a state to identify the causes and develop solutions for such problems. In 1995, ORSANCO established the Ohio River Watershed Pollutant Reduction Program to provide the means to address interstate occurrence of specific pollutants. The program combines existing data with targeted monitoring activities to identify the sources of these pollutants and to develop control strategies.

An initial list of pollutants to be investigated through the Watershed Pollution Reduction Program was developed based on public comments provided at a series of workshops. The information developed through the Watershed Pollutant Reduction Program provides valuable input into the total maximum daily load (TMDL) development process. A total maximum daily load (TMDL) is the maximum amount of a specific pollutant that can be assimilated by a water body without causing impairment or an exceedance of state water quality standards. The Federal Clean Water Act requires TMDLs for all waters in which beneficial uses are impaired. Having been found in fish tissues at levels warranting state-issued advisories against consuming certain fish species, dioxins and polychlorinated biphenyls (PCBs) are among the first pollutants to be addressed.

Dioxin and PCB monitoring efforts are being conducted to support the development of river-wide TMDLs for both pollutants and will be completed in 2004. In 2003, specific activities conducted to address dioxins and PCBs included:

- Intensive sediment sampling at 27 hot spot locations identified through the initial longitudinal surveys
- High-volume water sampling at 10 Ohio River locations and eight tributaries
- Ambient air sampling at 12 middle and lower site locations

Most of the Watershed Pollutant Reduction Program efforts have been concentrated on PCBs and dioxins. However, with the initial screening to determine the extent and severity of contamination of these pollutants near completion, the program is focusing on pathogens, which are another river-wide contaminant.

Mobile Water Quality Lab

In 2003, ORSANCO extended its bacteria monitoring capabilities with the addition of the Mobile Water Quality Laboratory. The mobile laboratory facilitates the completion of bacteria surveys at any point along the Ohio River, including remote areas of the River. Bacteria samples must be delivered to the lab within six hours of their collection and therefore bacteria data was only collected near urban areas due to the short hold-time.

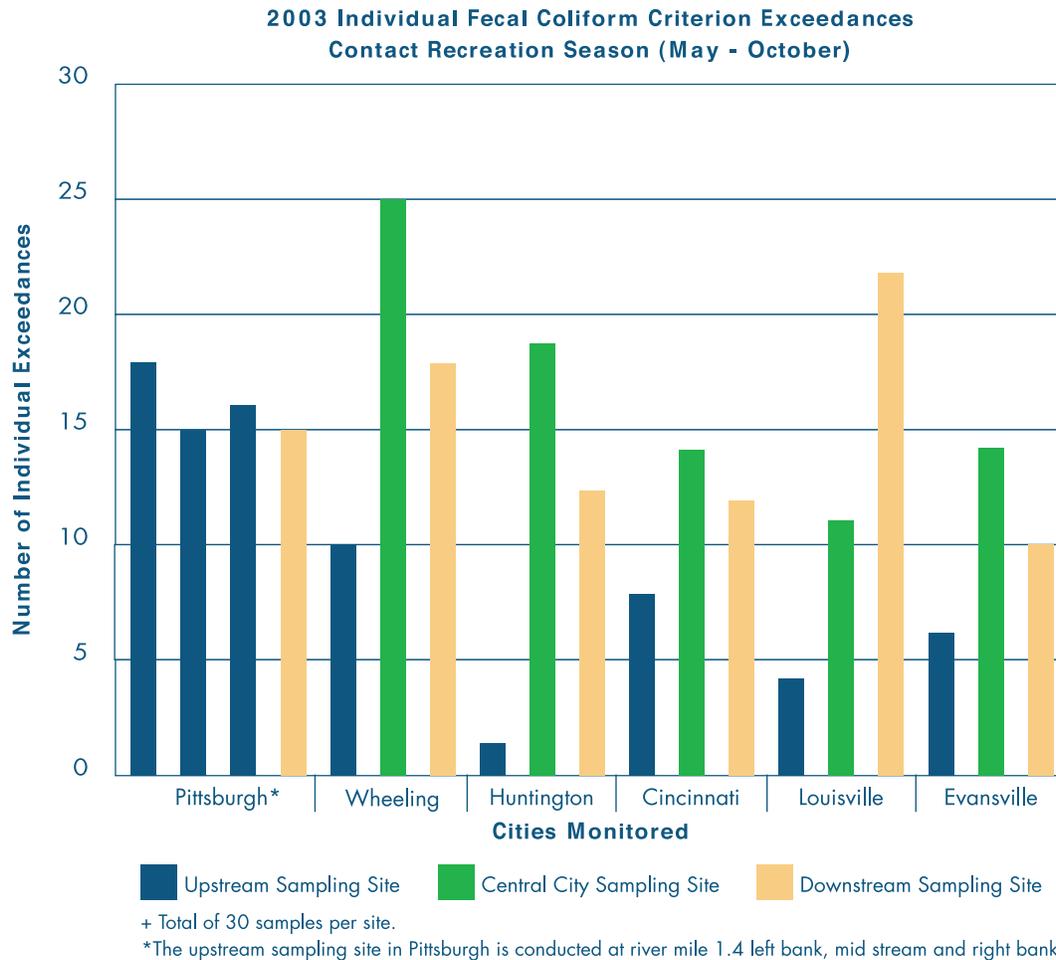
Two major bacteria monitoring surveys were completed in 2003, which covered two-thirds of the Ohio River. The first involved intensive sampling of 280 river miles from Pittsburgh, PA to R.C. Byrd Lock and Dam upstream of Huntington, WV in Apple Grove, WV. The next survey covered 350 river miles where samples were collected from Apple Grove, WV to West Point, KY, which is just downstream of Louisville.



ORSANCO Environmental Specialist Eben Hobbins

Bacteria Monitoring

ORSANCO monitors six urban areas along the Ohio River five times monthly from May through October for the presence of fecal coliform and *E. Coli* bacteria. This information is supplied to local health departments and is available via ORSANCO's Ohio River EMPACT web site (www.orsanco.org/empact). Sampling locations near cities were selected based on the likelihood of elevated bacteria levels.



Algae & Nutrient Monitoring

Excessive discharges of nutrients have led to nuisance blooms of algae in many waters of the United States. Such blooms threaten fish and other aquatic life as well as drinking water quality. Another related concern is depressed oxygen levels in the northern Gulf of Mexico, which have been attributed to high nutrient levels in the Mississippi River. The Ohio River contributes approximately 30% of the total nutrients in the Mississippi River. In response to these concerns, US EPA has directed states to adopt water quality criteria for nutrients.

While algae blooms have not occurred on a widespread basis in the Ohio River, drinking water utilities have reported increased algal activity, which can result in taste and odor problems. In response, ORSANCO has worked with utilities to develop and carry out a program whereby utility personnel collect samples that are analyzed for nutrients and algae. Data from this program will be used to develop numeric nutrient criteria by 2006, which will protect drinking water and aquatic life while reducing the impact of nutrients, a nonpoint source pollutant.

Spill Notification & Organics Detection System

Protection of Ohio River drinking water utilities from spills and other threats to water quality is one of ORSANCO's highest priorities. Together with state and federal agencies, ORSANCO works to insure adequate notification for all spills to Ohio River and provides monitoring services to determine the location and severity of spills that impact the Ohio River water quality. In 2003, 225 spills were reported to ORSANCO.

In addition to the spills notification program, ORSANCO operates an Organics Detection System (ODS) in cooperation with 15 water utilities and industries along the Ohio River and its tributaries. The ODS provides daily analysis of river water for the presence of certain organic compounds. If unusual levels are detected, downstream intakes are notified and efforts are initiated to determine the sources. Created in 1978, the ODS has detected numerous spills and releases of organics to the Ohio River.

Three Spills

In February 2003, ORSANCO responded to reports from the ODS operators at three stations. This is the first time in the history of the ODS that three detection reports were received in the same day.

ORSANCO emergency response staff alerted all downstream water utilities to these detections. Time-of-arrival models predicted the arrival time and estimated the concentration of the material at the downstream intakes. Due to this coordination, no Ohio River drinking water utility suffered any major problems associated with this material.

The first report came from Louisville, KY where two detections of tetrachloroethylene were observed over a seven-hour period. Downstream utilities were notified but the compound was not observed at the next downstream ODS site, Evansville, IN, 190 miles downstream.

Next, Evansville Water reported the detection of propylene oxide and observed this compound over a 48-hour period. Downstream utilities were notified of its presence, but it was not observed by the ODS site at Paducah, KY, 144 miles downstream.

The third detection came from the upper Ohio River, at Weirton, WV. A combination of chemicals including benzene, toluene and styrene was observed and reported by both Weirton Water and Wheeling Water, approximately 20 miles downstream. Of primary concern during this spill was the benzene as it was observed in concentration in the river exceeding US EPA's maximum contaminant level for finished drinking water of 5 ug/l. Due to the detection of this chemical by the ODS, utility operators were able to employ enhanced treatment technologies to keep the drinking water safe.



First detected in Weirton, WV and last reported in Louisville, KY, the plume was tracked for 17 days and over 500 river miles, but origin of this material remains unknown.

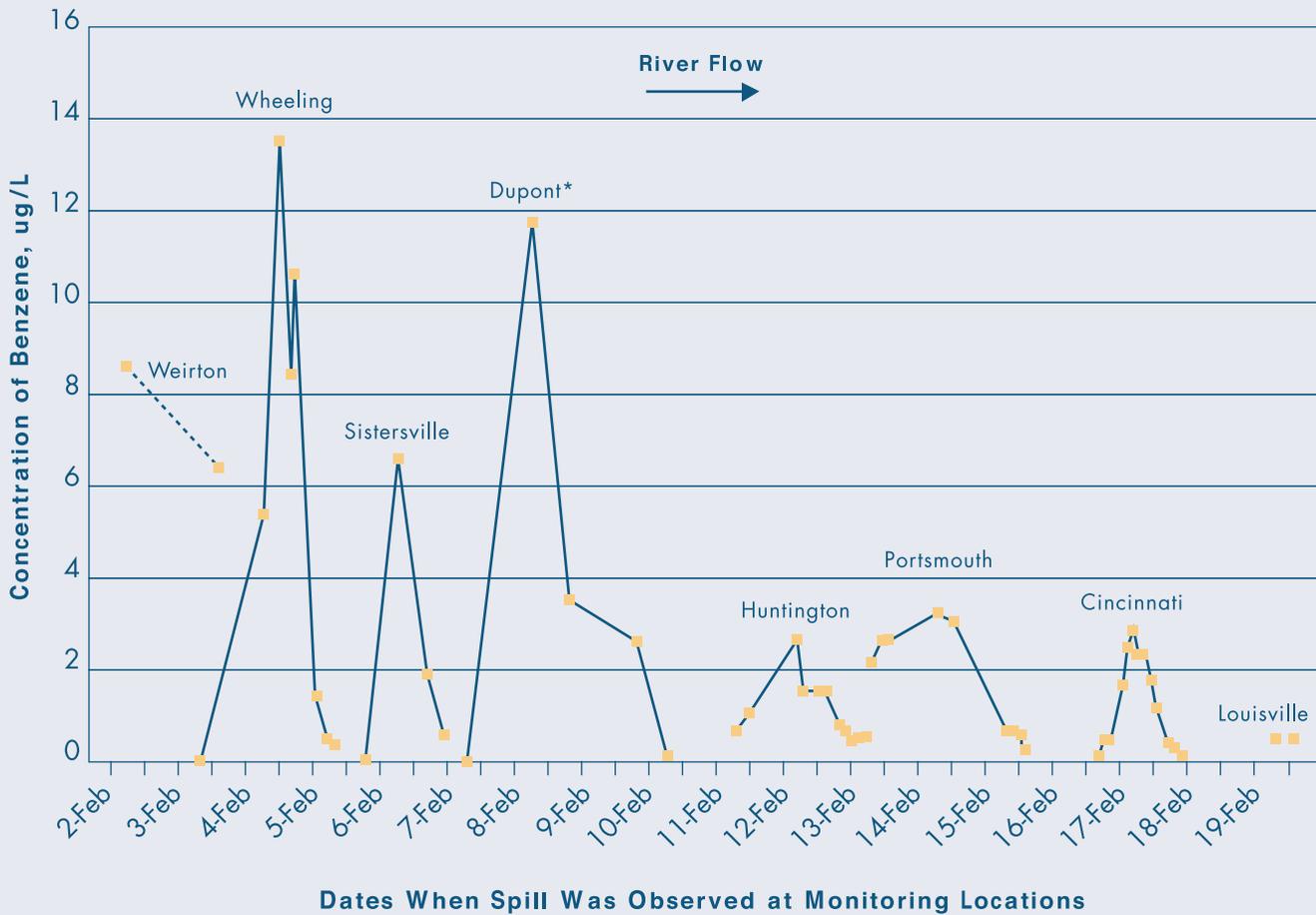
The graph on page 10 represents the date, location, concentration, and duration of the benzene plume at each of the ODS sites.

*Photo by Ronnie Dailey,
Gallego Power Station, New Albany, IN*



Pittsburgh, PA

**Benzene Spill Tracking by Organics Detection System and Drinking Water Utilities
February 2 - 19, 2003**



Allegheny/Monongahela Early Warning Detection System

In 2002, the Pennsylvania Department of Environmental Protection requested ORSANCO's assistance in the development of an early warning detection and water quality-monitoring system on the Allegheny and Monongahela rivers in Pennsylvania.

The Allegheny/Monongahela Early Warning Detection system combines the use of on-line water quality monitoring instruments with Internet technology to provide state of the art water quality monitoring and early warning detection for the protection of drinking water for suppliers and consumers. Data from this system is displayed on a web site so water utilities can monitor water quality conditions upstream of their intakes. If significant detections occur, the utilities have developed communication systems to convey such information for their protection.

There are 11 utilities currently participating in the system, monitoring a total of nine different water quality parameters. These parameters include: organics, total organic carbon, oil in water, pH, temperature, dissolved oxygen, conductivity, turbidity and chlorophyll.

Fish & Macroinvertebrate Population

In 2003, ORSANCO's biological monitoring efforts continued the focus initiated in 2002 of developing a strategy to accurately assess fish populations in given reaches of the Ohio River, as well as for the river as a whole. This strategy will help ORSANCO improve future biological monitoring efforts and will allow for more efficient sampling. Sampling efforts conducted using night electrofishing methods were evenly divided on the upper, middle, and lower reaches of the Ohio River.

Additional electrofishing was conducted on three tributaries in 2003. In order to further examine the application of the Ohio River Fish Index (ORFI_n) to large tributaries of the Ohio River, an initiative started in 2002, electrofishing sampling was conducted on the Kentucky and Licking rivers. Several sites along the Monongahela River also were surveyed in order to develop background data in preparation for a potential overflow of acid mine drainage from several abandoned mines in the Monongahela River Basin.

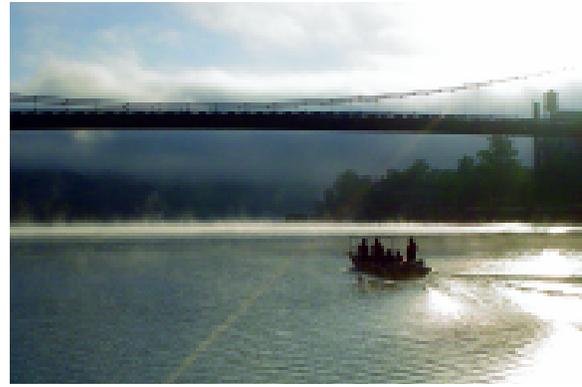


In addition to night electrofishing, ORSANCO conducts lock chamber studies to evaluate fish communities. Lock chamber surveys, conducted in the chambers at dams where boats lock through, provide a link to historical data, as this was a method commonly used to assess fish communities in the past. The only main-stem lock chamber sampled by an ORSANCO led initiative in 2003 was conducted at Montgomery Lock and Dam. Several others were scheduled, but cancelled due to high water. Additional lock chambers studies were employed on the Monongahela River to provide another form of baseline data in preparation for potential acid mine-related events described previously. In cooperation with Pennsylvania Fish and Boat Commission and West Virginia Department of Natural Resources, fish population surveys were conducted at two lock chambers along the Monongahela River within West Virginia as well as three lock chambers on the Ohio River bordering their state.

In order to facilitate the development of the macroinvertebrate program, field collections in 2003 were less intense. Priority was placed on data analysis in order to continue the development of the Ohio River macroinvertebrate index. However, samples were collected from the Pennsylvania portion of the

Monongahela River in order to establish baseline macroinvertebrate community conditions. This data was collected in preparation for the potential acid mine-pool overflow mentioned above.

Additionally, several analyses have been completed on data collected from a study that duplicated collection methods utilized in the late 1960's and early 1970's. The results from these analyses showed increases in species diversity, pollution sensitive species and draft index scores. These findings indicate a marked improvement in the macroinvertebrate community since the passage of the Clean Water Act in 1972.



Wet Weather Studies

Pollution from urban areas significantly impacts the quality of waterways in the Ohio River Basin. Urban pollution sources include stormwater, runoff and combined sewer overflows (CSOs). Combined sewer systems carry both wastewater and stormwater. During heavy rainfall or snowmelt, the systems can become overloaded, causing wastewater to bypass sewage treatment and discharge into nearby waterways.

ORSANCO has taken a lead role in determining the water quality impacts of urban wet weather pollution on the Ohio River and has conducted wet weather impact studies in three major urban areas: Louisville, KY; the Upper Ohio River near Wheeling, WV; and Cincinnati, OH. Results indicate that the most serious urban impact is elevated levels of bacteria, making portions of the river unsuitable for contact recreation immediately after rainfall.

The Cincinnati Wet Weather study, which began in 1995 and concluded in 2002, was designed to develop a modeling tool to evaluate urban wet weather quality impacts in large rivers and the benefits of various abatement options. The study identified bacteria as the main pollutant of concern and determined that CSOs and sanitary sewer overflows (SSOs) account for 75% of the bacteria load in the Cincinnati area.

Water quality data for the Louisville Wet Weather Study were collected during three dry weather periods, five wet weather events and two dye surveys. Throughout the course of this study, which began in 1997, ORSANCO worked with local communities and private consultants to collect more than 15,000 water quality data points. Data were used to model fecal coliform and *E. Coli* concentrations following rain events. The final report is scheduled for completion by spring 2004. The Louisville study also identified bacteria as the main pollutant of concern, with bacteria levels in exceedance of contact recreation criterion at times during the dry weather. Evaluation of the data indicated that tributaries account for 90% of the fecal coliform load and 84% of the *E. Coli* loading the Louisville area.

The first survey of the Wheeling area began in 1998 and a final report for the second year of study was completed in Spring 2003. Despite a very wet year, the third and final scheduled wet weather survey was not conducted due to the antecedent dry period requirement. Results to date show that weather sources of pollution have a much greater impact on tributaries than on the Ohio River in the Wheeling area. The Upper Ohio River study is expected to conclude in 2004.

Clean Metals Sampling

ORSANCO has transitioned to ultra-clean metals sampling techniques to minimize or eliminate field contamination of samples. The ultra-clean sample techniques allow for analysis of both dissolved metals and total recoverable metals to identify relationships between the results. Results to date confirm that most metals in the Ohio River are in the particulate form (associated with sediments) rather than in the dissolved form (in the water column and available to aquatic life). Both dissolved and total recoverable metals are at levels below ORSANCO's criteria.

ORSANCO collects clean metals samples, from all 17 of the bimonthly manual sampling sites on the Ohio River main stem. In 2004, ORSANCO will collect samples with USGS at two Ohio River sites in order to compare data results from two collection methods. The USGS collects depth-integrated samples from five points across, whereas ORSANCO collects a single sample from a few feet below the surface.

PUBLIC INFORMATION PROGRAMS

River Sweep

River Sweep is a one-day riverbank cleanup for the Ohio River and several tributaries. Due to the high water levels throughout the Ohio River Valley during the summer months, the River Sweep had to be postponed twice in most areas. Even though the event was not held on the same day throughout the river valley, more than 19,000 volunteers removed trash and debris throughout the summer. ORSANCO's one-day riverbank cleanup extends more than 3,000 miles and is held in six states from Pennsylvania to Illinois.

Each year, ORSANCO conducts a poster contest in conjunction with River Sweep, inviting students throughout the basin in grades Kindergarten to 12 to submit original artwork to be used as promotional materials for the annual event. This year's grand prize winner was Katie Keller, a fourth grade student at Immaculate Heart of Mary in Hebron, KY. She will receive a \$1000 US Savings Bond.



2003 River Sweep Corporate Sponsors

AK Steel

American Electric Power

AEP-River Transportation

ARCH Chemical

Ashland, Inc.

ATO FINA

BFI

BASF

Dayton Power and Light

Dominion Foundation

Dow Corning

DuPont

Duquense Light

Exxon

Fidelity Investments

Ford Power Train Operations

Fifth Third Bank

Gallatin Steel

GE Plastics

Toyota Motor Manufacturing

North America, Inc.

Kentucky River Authority

Koppers Industries

LaFarge North America

Louisville and Jefferson

County MSD

Louisville Gas and Electric

Louisville Water Company

Marathon Ashland Petroleum

Massac County Soil and Water

Mead Johnson Nutritionals

Neville Chemical

Nova Chemical

Procter and Gamble

Rivertown Breakdown

Touchstone Energy

Tri-State River Products

Friends of the Ohio



ORSANCO's Friends of The Ohio, a membership-based education and outreach program, continues to expand with new individual and corporate memberships. Friends of the Ohio helps support our Life Below the Waterline and other educational projects.

Life Below the Waterline

During 2003, ORSANCO's 2,200-gallon mobile aquarium, Life Below the Waterline, visited nine locations in the Ohio River Basin, displaying Ohio River fish for educational events and festivals. Approximately 600,000 people visited the aquarium this year with an estimated 60,000 schoolchildren viewing the aquarium during a visit in Cincinnati, OH at Tall Stacks, a music, arts and heritage festival celebrating the Ohio River. ORSANCO uses the fish, captured by electroshocking, to showcase the diversity of aquatic life in the river and explain how the diversity can be used as an indicator for water quality.



The display locations for 2003 are listed below:

- April 21-24 - Earth Day Festival at YMCA Camp Carson in Princeton, IN
- May 17 - Boy Scout Outdoor Action Expo at Coney Island in Cincinnati, OH
- June 13-15 - Evansville ECO Tour in Evansville, IN
- September 19-21 - Heritage Festival in Princeton, IN
- September 22-24 - Ft. Massac State Park in Metropolis, IL
- September 26-27 - Paducah BBQ Festival in Paducah, KY
- September 30-October 2 - Dearborn County Waterfest in Lawrenceburg, IN
- October 15-19 - Tall Stacks in Cincinnati, OH

RiverWatchers



The RiverWatchers volunteer monitoring program has grown over the years since its inception in 1992. The program now includes 26 groups in the Ohio River Basin representing six states, with both student and adult participants. During the 2003-2004 school year, three new schools joined the program. With the addition of these school groups, the RiverWatchers program now collects water samples from the Great Miami River as well as the Licking River.

This year, RiverWatchers teachers were given additional equipment including sampling bottles, cleaning equipment, new pH buffer, an updated field guide, and Whirl-Paks to ensure samples collected for the *E. Coli* test are sterile.

Thanks to a recommendation by Gary Fields, a RiverWatchers teacher from Mason, WV, the RiverWatchers program was deemed an "exemplary program" by a state evaluation team visiting Wahama High School where Mr. Fields teaches Advanced Biology.

PENNSYLVANIA: Fairless Intermediate School, Perry Traditional Academy

WEST VIRGINIA: Warwood Middle School, St. Francis Xavier School, Magnolia HS, Wahama HS

OHIO: Marietta HS, Chesapeake Middle School, Franklin Junior HS, New Richmond HS, Clark Montessori School, Cincinnati State Technical and Community College, Elizabethtown Elementary

KENTUCKY: Boyd County Technical School, Worthington Intermediate School, Raceland-Worthington HS, River Ridge Intermediate School, Bishop Brossart HS, Hancock Middle School, Daviess County HS, North Middle School Boy Scout Troop

INDIANA: Lawrenceburg HS, Switzerland County HS, Reitz Memorial HS, Mater Dei HS

FINANCIAL REPORT

Balance Sheet – All Fund Types and Account Groups June 30, 2003

	Governmental Fund Types		Fiduciary Fund Type	Account Groups		Total (Memorandum Only)
	General	Special Revenue	Pension Trust	General Fixed Assets	General Lon-Term Debt	
Assets and Other Debits:						
Cash and equivalents	\$ -	736,154	-	-	-	736,154
Restricted investments	-	-	1,719,889	-	-	1,719,889
Receivables:						
Due from Federal government	-	1,817,499	-	-	-	1,817,499
Due from State and Local governments	33,575	28,000	-	-	-	61,575
Other	-	-	6,194	-	-	6,194
Interfund	582,436	-	78,193	-	-	660,629
Prepaid expenditures	74,434	-	-	-	-	74,434
Property and equipment	-	-	-	2,581,948	-	2,581,948
Amount to be provided for retirement of long-term debt in future years	-	-	-	-	862,305	862,305
Total assets and other debits	\$ 690,445	2,581,653	1,804,276	2,581,948	862,305	8,520,627

	Governmental Fund Types		Fiduciary Fund Type	Account Groups		Total (Memorandum Only)
	General	Special Revenue	Pension Trust	General Fixed Assets	General Lon-Term Debt	
Liabilities, Equity, and Other Credits						
Liabilities:						
Accounts payable	\$ 4,531	437,163	-	-	-	441,694
Accrued expenses	93,503	737,021	-	-	-	830,524
Accrued annual leave	64,463	-	-	-	-	64,463
Interfund payable	78,193	582,436	-	-	-	660,629
General long-term debt	-	-	-	-	862,305	862,305
Total liabilities	240,690	1,756,620	-	-	862,305	2,859,615
Fund equity and other credits:						
Investment in general fixed assets	-	-	-	2,581,948	-	2,581,948
Reserved for prepaid expenditures	74,434	-	-	-	-	74,434
Reserved for employee retirement purposes	-	-	1,804,276	-	-	1,804,276
Unreserved:						
Designated for sepcific fund purposes	375,321	-	-	-	-	375,321
Undesignated	-	825,033	-	-	-	825,033
Total fund equity and other credits	449,755	825,033	1,804,276	2,581,948	-	5,661,012
Total liabilities, fund equity and other credits	\$ 690,445	2,581,653	1,804,276	2,581,948	862,305	8,520,627

*Statement of Revenues, Expenditures, and Changes in Fund Balances
All Governmental Fund Types
Year Ended June, 30 2003*

	General	Special Revenue	Total (Memorandum Only)
Revenues:			
Intergovernmental:			
Federal, State, and Local grants	\$ -	3,342,114	3,342,114
State assistance	1,261,100	-	1,261,100
Contributions	-	168,928	168,928
Other	30,681	-	30,681
Total revenues	<u>1,291,781</u>	<u>3,511,042</u>	<u>4,802,823</u>
Expenditures:			
Current:			
Water Pollution Control and Abatement	855,286	1,157,995	2,013,281
Thermal Criteria	6,530	-	6,530
Pennsylvania ODS	-	229,432	229,432
Wet Weather Study of the Hannibal Pool	329	-	329
Genalert AMI	4,099	10,704	14,803
Ohio River Sweep	-	127,543	127,543
Life Below the Waterline	53,508	-	53,508
River Watcher Educational Boat	11,914	-	11,914
Friends of the Ohio	21,900	-	21,900
PA Study	665	-	665
Steam Gauge Transfer	-	99,641	99,641
Cincinnati Wet Weather Impacts Study	12,233	-	12,223
Louisville Wet Weather Impacts Study	48,776	50,584	99,630
Watershed Scale NPS	3,179	76,288	79,467
ORSANCO/Ohio River Users	6,817	-	6,817
Biological Trend Assessment	137	-	137
Watershed Pollution Reduction	23,184	1,249,881	1,273,065
Other	59,623	-	59,623
Debt service:			
Principal	48,061	-	48,061
Interest	65,053	-	65,053
Capital outlay	164,212	451,544	615,756
Total expenditures	<u>1,385,505</u>	<u>3,453,881</u>	<u>4,839,386</u>
Excess of revenues over expenses	(93,724)	57,161	(36,563)
Fund balance, beginning of year	<u>543,479</u>	<u>767,872</u>	<u>1,311,351</u>
Fund balance, end of year	<u>\$ 449,755</u>	<u>825,033</u>	<u>1,274,788</u>

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Andrea Brofft

Communications Coordinator

Stacey Cochran

Environmental Specialist

Sam Dinkins

Environmental Specialist

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Joe Gilligan

Comptroller

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Jeanne Ison

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Jeff Thomas

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Alan Vicory

Executive Director

Carrie Wessendarp

Environmental Specialist

Matt Wooten

Aquatic Biologist

Greg Youngstrom

Environmental Specialist I

Lila Ziolkowski

Environmental Chemist

Years of Service

Kim Mays was honored by the Commission for 5 years of continued service.

In Memory

The Commission family lost two members during 2003. In July, William Kudaroski, Commissioner representing the Commonwealth of Pennsylvania, died unexpectedly at a Washington, PA Hospital. He was a member of the Commission for more than 11 years, serving as chairman from 1997-1998.

In December, Barbara Horton, technical programs secretary for the Commission, died at a Cincinnati Hospital. She was employed by the Commission for more than 18 years.

Both will be deeply missed.

STATE AGENCIES

Illinois

Environmental Protection Agency
Division of Water Pollution Control
1021 North Grand Avenue
Springfield, IL 62702

Indiana

Department of Environmental Management
Office of Water Management
PO Box 6015
Indianapolis, IN 46206-6015

Kentucky

KY Environmental and Public Protection Cabinet
500 Mero Street 5th Floor, CPT
Frankfort, KY 40601

New York

Department of Environmental Conservation
Division of Water
625 Broadway
Albany, NY 12233-3500

Ohio

Environmental Protection Agency
Division of Water Pollution Control
122 South Front Street
Columbus, OH 43216-1049

Pennsylvania

Department of Environmental Protection
Bureau of Water Quality Management
400 Market Street
Harrisburg, PA 17105

Virginia

Department of Environmental Quality
PO Box 10009
Richmond, VA 23240-0009

West Virginia

Department of Environmental Protection
1356 Hansford Street
Charleston, WV 25301

Photo by Al Harding, Jr., Riverfront Park, Henderson, KY





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