



Annual Report 2002

Illinois

Renee Cipriano Director Illinois Environmental Protection Agency

Constance H. Humphrey
Director of Intergovernmental Affairs/
Office Manager
The Association Group

Phillip C. Morgan Director Danville Sanitary District

Indiana

Joseph H. Harrison, Sr. Bowers, Harrison, Kent & Miller

Lori F. Kaplan Commissioner Indiana Department of Environmental Management

Vasiliki Keramida, Ph.D. President & CEO Keramida Environmental, Inc.

Kentucky

Stephen L. Henry, M.D. Lieutenant Governor Commonwealth of Kentucky

John L. Huber President & CEO Louisville Water Company

Hank List Secretary Kentucky Natural Resources & Environmental Protection Cabinet

Officers

Chairman: Amy Wright
Vice-Chairman: Ronald R. Potesta
Secretary/Treasurer: John L. Huber
Executive Director & Chief Engineer: Alan H. Vicory, Jr.

New York

Douglas E. Conroe Director of Operations Chautauqua Institution

Erin M. Crotty
Commissioner
New York Department of
Environmental Conservation

T. Lee Servatius**

Ohio

Christopher Jones
Director
Ohio Environmental Protection Agency

Richard Miller

Amy Wright
Director, Environmental Management
The Dayton Power & Light Company

Pennsylvania

Melvin É. Hook R&D Engineering, P.C.

William M. Kudaroski

Kathleen McGinty
Acting Secretary
Pennsylvania Department of
Environmental Protection

Virginia

Leroy Pfeiffer Virginia State Water Control Board

Carol C. Wampler Virginia State Water Control Board

West Virginia

Stephanie Timmermeyer West Virginia Division of Environmental Protection

David M. Flannery Jackson & Kelly, PLLC

Ronald R. Potesta President Potesta & Associates

Federal

Robin Corathers Executive Director Mill Creek Restoration Project

*as of 12/31/02
**appointed to the commission in 2002

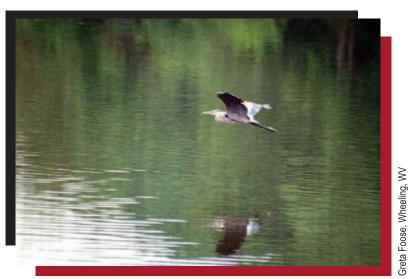
Members of the Commission

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 approval of the Congress of the United States. The Commissioners of ORSANCO respectfully submit the following report of activities for 2002 to:

The Honorable Rod R. Blagojevich, Governor of Illinois
The Honorable Frank O'Bannon, Governor of Indiana
The Honorable Paul E. Patton, 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 E. Wise, Jr., Governor of West Virginia

and

The Honorable George Walker Bush President of the United States



The Ohio River is habitat to diverse wildlife, including the great blue heron.



A barge floats down the Ohio River past Wellsburg, West Virginia.

Marge Juresko, Steubenville, OH

The Ohio: New Horizons Ahead



Amy Wright

October 18, 2002 represented a milestone anniversary in the effort to improve the quality of the Nation's waters: the 30th anniversary of the Federal Clean Water Act. Passage of that Act was a serious commitment to Clean Water by the U.S. Congress on behalf of the American people. Since that time, significant progress has been made across the country towards improving the quality of our estuaries, lakes, and rivers.

The Ohio River Valley Water Sanitation Commission- ORSANCO- began its efforts to restore water quality in the Ohio River and its tributaries in 1948. On June 30 of that year, the Governors of the states of Illinois, Indiana, Kentucky, New York, Ohio, Pennsylvania, Virginia and West Virginia signed a Compact that pledged the states to work together to eliminate pollution of the shared waters of the Ohio River Basin.

Much of the Commission's focus over its first 53 years has been on the Ohio River itself. Dramatic progress has been made. In 1948, less than one percent of the sewage and industrial wastes discharged to the Ohio received any form of treatment. Today, adequate treatment is provided to virtually all such discharges. In 1948, portions of the river were nearly devoid of aquatic life. Today, bass tournaments are held all along the Ohio.

In 2002, the Commission recognized that the remaining obstacles to fully realizing the objectives of the Ohio River Valley Water Sanitation Compact are not concentrated in direct discharges to the rivers, but are dispersed throughout the surrounding watershed. The Commission developed and adopted a Watershed Initiative that reaffirmed the applicability of the Compact to the entire Ohio River watershed. The initiative also sets forth specific activities to expand ORSANCO's understanding of and response to watershed issues.

Message from the Chair

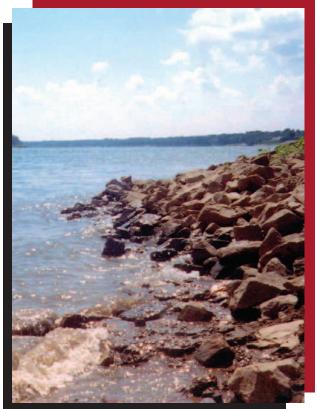
The Commission also recognized that the effects of pollutants in the Ohio River do not end at the mouth of the river, but can extend into the Mississippi River and beyond. In February, the Commission met with the Mississippi River/Gulf of Mexico Watershed Nutrient Task Force to discuss that group's Action Plan for reducing the zone of hypoxia in the Gulf of Mexico. The Plan calls for reductions in nutrient discharges throughout the Mississippi watershed. Since the Ohio River contributes over one third of the water that reaches the Gulf via the Mississippi River, actions within the Ohio watershed will be instrumental in this effort.

All of ORSANCO's successes in water quality improvements to the Ohio River have been achieved through cooperative actions with the member states, federal agencies, local communities, industries and citizens. As the Commission expands its activities into the Ohio watershed, a network of cooperation will need to include hundreds of local groups already hard at work to improve their rivers and streams.

We look forward to meeting new partners, seeking new challenges, and achieving new successes.

A drink of water to your health!

Amy H. Wright Commissioner, Ohio

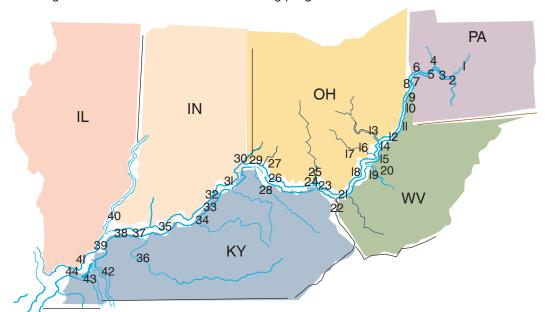


The Ohio River's rocky shore at Newburgh, Indiana.

nber Turner, Newburgh, IN

ORSANCO's Monitoring Network

The Compact states have delegated water quality monitoring activities in the Ohio River and lower reaches of some tributaries to ORSANCO for improved efficiency and consistency. This map shows testing locations for ORSANCO's monitoring programs.





2002 Biennial Water Quality Assessment for the Ohio River

ORSANCO's Biennial Assessment of Ohio River Water Quality Conditions was published and distributed in July 2002. The report assesses, based on ORSANCO's water quality monitoring programs, whether the Ohio River meets water quality requirements for four designated uses: habitat for warm water aquatic life; public water supply; contact recreation; and fish consumption. In the Biennial Assessment, ORSANCO classifies the river as fully supporting, partially supporting or not supporting each of these uses. For the period from 2000 to 2001, the Ohio River was classified as follows:

- Contact recreation: 40 miles classified as partially supporting; 137 miles classified as not supporting; 804 miles were not assessed for this use.
- Aquatic life: 974 miles classified as fully supporting; 7 miles classified as partially supporting.
- Public water supply: 970 miles classified as fully supporting; 11 miles classified as partially supporting.
- Fish consumption: 981 miles (entire length) classified as partially supporting.

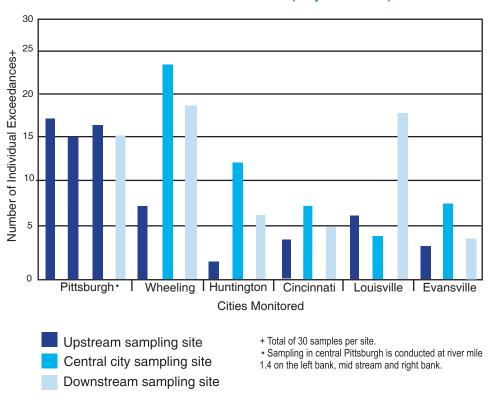
The State of the River

Bacteria Monitoring

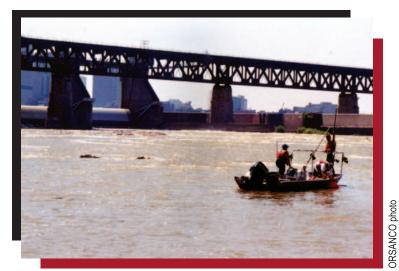
ORSANCO monitors six urban areas along the Ohio River five times monthly, from May through October, for the presence of fecal coliform and *E. coli* bacteria. This information is provided to local health departments and the public, and is available via ORSANCO's Ohio River EMPACT web site

(www.orsanco.org/empact). Sampling locations near the cities were selected based on the likelihood of elevated bacteria levels. Health departments use this bacteria data to issue public advisories concerning potential risks to people who engage in recreational activities on the Ohio River.

2002 Individual Fecal Coliform Criterion Exceedances Contact Recreation Season (May – October)



Protecting Recreational Use



Electrofishing on the Ohio River near Louisville, Kentucky.



ORSANCO intern Stacey Durr holds a smallmouth bass.

Fish & Macroinvertebrate Population

According to the Ohio River Valley Water Sanitation Compact, waterways in the Ohio River Basin should be "capable of maintaining fish and other aquatic life." To evaluate compliance with the Compact, ORSANCO conducts fish and maroinvertebrate population studies to determine the various species supported by the Ohio River.

In 2002, ORSANCO's biological monitoring efforts focused on developing a strategy to accurately assess fish populations in a given reach of the Ohio River. This strategy will help ORSANCO improve future biological monitoring efforts and will allow for more efficient sampling. Sampling efforts in 2002 focused on the upper third of the Ohio River, from Pittsburgh to Huntington. Over the next few years, ORSANCO will test this sampling design on the lower reaches of the river.

In an effort to adopt a watershed approach to water quality protection, ORSANCO initiated testing of the Ohio River Index of Biotic Integrity (IBI) to determine its applicability to tributaries. In 2002, electrofishing samples were collected along the entire length of the Kanawha River in West Virginia. Data collected will be compared to Ohio River fish community information to determine the efficiency of the IBI and the extent of its usefulness on the Kanawha. If successful, the Ohio River IBI may become a fish community assessment tool for large rivers in West Virginia.

The development of a macroinvertebrate index, similar to the IBI used for fish, continued in 2002. Samples were taken near outfalls in order to measure how the macroinvertebrate community responds to water quality changes, and how well the index measures this response.

Currently, ORSANCO uses Hester-Dendy multiplate samplers to collect macroinverte-brate samples, whereas in the past, the rock-basket method was used. In 2002, ORSANCO duplicated a study that was conducted on the Ohio River in the early 1970s utilizing rock-basket samplers to compare macroinvertebrate community information collected today with results from the past. The resulting data, which is still being gathered, will show changes that have occurred as water quality has improved.

Protecting Aquatic Life

Dissolved Oxygen Monitoring

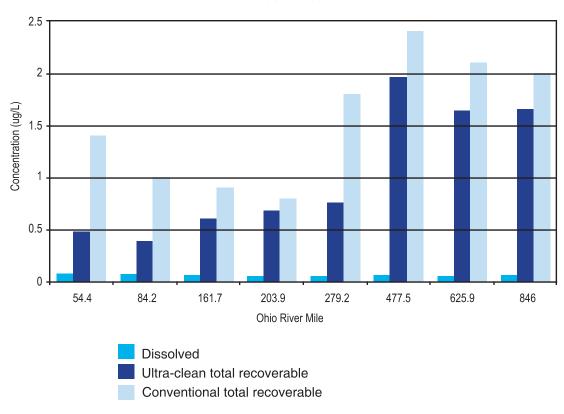
Sufficient levels of dissolved oxygen (DO) must be maintained in order to support healthy aquatic communities in the waterways of the Ohio River Basin. From May through October each year, ORSANCO receives DO data from electronic monitors at 13 navigational dams operated by the U.S. Army Corps of Engineers or hydropower plants. ORSANCO receives the data on a real-time basis, providing the opportunity to notify the Corps and hydropower operators when DO is low so that immediate steps can be taken to mitigate problems. ORSANCO also works with hydropower operators to ensure compliance with provisions of their Federal Regulatory Commission licenses, established to manage loss of oxygenation.

Clean Metals Sampling

ORSANCO is currently transitioning to ultra-clean metals sampling techniques to minimize or eliminate contamination of samples by metallic sampling equipment. Dissolved and total recoverable metals samples are being collected side by side in order 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.

During 2003 and into the future, ORSANCO plans to expand the Clean Metals Sampling Program to include all of the Bimonthly Manual Sampling Program sites on the Ohio River main stem.

Average Lead Concentrations in the Ohio River 1998 – 2002



This chart shows a comparison of total recoverable lead data collected using two different sampling techniques: conventional sampling versus the ultra-clean sampling technique. The lower concentrations observed using the ultra-clean technique suggest that samples may be contaminated when collected using conventional methods.

Spill Notification & Organics Detection System

Protecting Ohio River drinking water utilities from spills, threats to security and other water quality hazards is one of ORSANCO's highest priorities. ORSANCO works with state and federal agencies to insure adequate notification for all spills to the Ohio River, and provides monitoring services to determine the location and severity of spills that impact water quality. In 2002, 331 spills into the Ohio River and 23 tributaries were reported to ORSANCO. None of these spills required field response by ORSANCO staff. Water utilities received adequate notification and took precautionary measures necessary to keep public drinking water supplies safe.

In conjunction with 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, which has been operational since 1978, provides daily analyses of river water for the presence of certain organic compounds. If unusual levels are detected, downstream water utilities are notified and efforts are undertaken to determine the source.

Spills Reported to ORSANCO in 2002

Total Spills	331
Spill Source	
Directly to river	192
Sewer	20
Land	16
Unknown	103
Spill Material	
Petroleum-based	264
Hazardous materials	20
Other	47



ORSANCO staff launches AMI on the Ohio River.

Advanced Measurement Initiative

In 1999, ORSANCO received a grant from U.S. EPA to develop a water quality monitoring buoy for the Ohio River. The device, the first of its kind to be deployed on the Ohio, was developed in conjunction with U.S. EPA's Advanced Measurement Initiative (AMI). Prior to the construction of this in-stream monitoring device, ORSANCO's monitoring efforts were restricted by access to the river. With the AMI, water quality data can be collected at any location.

This year, the AMI buoy was deployed near Cincinnati, Ohio to monitor ambient water quality conditions and transmit real-time data. This information will assist ORSANCO in protecting water intakes from spills or unreported discharges of pollutants. The buoy currently is in the test phase, monitoring a number of parameters. ORSANCO is working with U.S. EPA's Briedenbach Research Center in Cincinnati to develop the range of parameters that will be monitored and plans for expanding this program.

Protecting Drinking Water

Allegheny/Monongahela Early Warning Detection System

ORSANCO's role in early warning detection systems is well established through the Organics Detection System. In 2002, ORSANCO and the Pennsylvania Department of Environmental Protection entered into an agreement to provide assistance with the development of early warning detection sites on the Allegheny and Monongahela rivers. Funded through U.S. EPA's source water protection program, the project will establish water quality monitoring stations at water utilities and will support the development of an on-line, coordinated mechanism for data sharing, archival and analysis. Water quality monitoring and detection technologies deployed through this effort will be based on a suitability and susceptibility analysis, evaluating each utility's location, capabilities, water quality problems and water quality threats to intakes.

Algae & Nutrient Monitoring

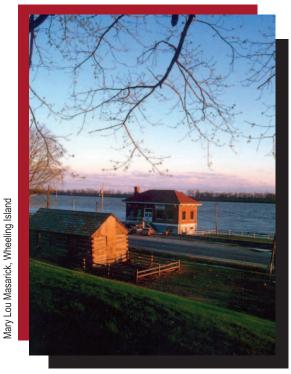
Excessive discharges of nutrients have contributed to nuisance algal blooms in many waters of the United States. Such blooms threaten aquatic life and compromise drinking water quality. The U.S. EPA has directed states to adopt numerical water quality criteria for nutrients by 2004 to protect against the effects of algal blooms.

While algal blooms have not harmed aquatic life in the Ohio, drinking water utilities have reported increased algal activity, potentially resulting in taste and odor problems. ORSANCO works with utility personnel to collect samples that are analyzed for nutrients and algae. Data from this program will be an important resource for developing water quality criteria that protect against impacts of algal blooms on drinking water and aquatic life.

In 2002, ORSANCO developed a Nutrient Criteria Plan, which outlines the process and deadlines for developing nutrient criteria, for the Ohio River. Development of the criteria is scheduled for completion in 2005-2006.

Possible Allegheny/Monongahela Early Warning Detection System Sampling Sites





Old lock and dam site at Newburgh, Indiana.

Pollution Control Standards

The Ohio River Valley Water Sanitation Compact authorizes the Commission to establish Pollution Control Standards for discharges to the Ohio River. In order to assure that the Standards are adequate and up to date, the Commission conducts a formal review every three years. A review was initiated in March, 2002 with the announcement of an open comment period. ORSANCO held workshops at four locations along the river in April and May. The Commission takes into consideration the comments received when revising its Pollution Control Standards. It is anticipated that the proposed revisions will be presented at public workshops and a hearing in 2003.

Nonpoint Source Initiatives

While the Commission's Pollution Control Standards address point source discharges to the Ohio River, other approaches are necessary to solve pollution problems attributed to nonpoint sources. Those sources, which include runoff from city streets and rural fields, are best addressed on a watershed basis. In 2002, ORSANCO initiated two projects to deal with nonpoint sources.

The first effort, a study and associated report entitled *Assessment of Overland Runoff Nonpoint Source Pollution*, is scheduled to be published in early 2003. This study involves utilizing ORSANCO water quality data and hydrologic information to assess the impacts of nonpoint sources to tributary streams and the Ohio River itself.

The second effort is a cooperative project to assess the effectiveness of nonpoint source controls, specifically control of the pesticide atrazine in the Big Walnut Creek watershed in central Ohio. It is a unique collaboration involving state and federal natural resource and agricultural agencies, universities, and local water supply utilities. Funding is provided through a cooperative agreement with U.S. EPA. Results of the project will be valuable in the management of similar nonpoint source problems elsewhere in the Ohio River Watershed and throughout the United States.

ORSANCO Initiatives

Watershed Pollutant Reduction Program & Total Maximum Daily Load Analyses

Many pollution problems in the Ohio River Watershed are caused by the combined effects of numerous point and nonpoint 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 causes and develop solutions for such problems. ORSANCO established the Watershed Pollutant Reduction Program in 1995 to provide the means to address interstate issues. The program combines existing data with targeted monitoring activities to identify sources of specific pollutants, determine the extent of contamination, and develop pollution reduction strategies.

Public comments, gathered at a series of workshops, provided an initial list of pollutants to be investigated. Dioxins and polychlorinated biphenyls (PCBs) are among the first pollutants addressed. These contaminants have been found in fish tissues at levels warranting state-issued advisories against consuming certain fish species.

The information developed through the Watershed Pollutant Reduction Program provides valuable input into the total maximum daily load (TMDL) development process. A TMDL is the maximum amount of a pollutant that can be incorporated by a body of water without causing impairment or exceeding state water quality standards. The Federal Clean Water Act requires TMDLs for all waters in which beneficial uses are impaired.

In 2002, the emphases of ORSANCO's Watershed Pollutant Reduction Program were:

- Monitoring to support the completion of a PCB TMDL for the portion of the Ohio River that borders West Virginia
- Collection of data for the middle and lower portions of the Ohio River in order to complete a river-wide assessment for dioxins and PCBs
- Elicit public input regarding the future direction of the Ohio River Watershed Pollutant Reduction Program. ORSANCO held four public workshops in 2002.



ORSANCO environmental specialist Sam Dinkins conducts high-volume water sampling on Pennsylvania's Beaver River.

In 2000, a dioxin TMDL was completed for the Ohio River from Racine Locks & Dam to the West Virginia/Kentucky border. A PCB TMDL was completed in September 2002 for the portion of the Ohio River bordering West Virginia. Data to support this TMDL were collected through extensive monitoring of PCB levels in air, fish, water and sediments. The TMDL analysis found that load reductions are needed for the Ohio River to meet water quality standards, with the greatest reductions at the upstream TMDL boundary. Load reductions also were established for the five major tributaries within the TMDL segment (Muskingum, Little Kanawha, Hocking, Kanawha and Guyandotte rivers). Follow-up work will be needed to identify PCB sources and develop reduction strategies.

Wet Weather Studies

Pollution from urban areas significantly impacts the quality of waterways in the Ohio River Basin. Urban pollution sources include storm water, runoff and combined sewer over lows (CSOs). Combined sewer systems carry both wastewater and storm water. 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 is conducting wet weather impact studies in three major urban areas: Cincinnati, Ohio; Louisville, Kentucky; and the Upper Ohio River/Wheeling, West Virginia area. 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 concluded in 2002. The purpose of this study was to develop a modeling tool to evaluate urban wet weather water 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 over ows (SSOs) account for 75% of the bacteria load in the Cincinnati area. Modeling results indicate that in Cincinnati, the Ohio River exceeds ORSANCO's contact recreation criterion approximately 15% of the time along the center channel in a typical year, and more frequently along its banks. The study also showed that even with 100% control of CSOs and SSOs, the contact recreation criterion sometimes would be exceeded.

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, ORSANCO worked with local communities and private consultants to collect more than 15,000 water quality data points. Data will be used to model fecal coliform and *E. coli* concentrations following rain events. The final report is scheduled for completion by spring 2003.

A third dry weather survey was completed in the Wheeling area in August 2002, but weather conditions were not conducive for a final wet weather survey. Results to date show that wet 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 2003, pending the completion of the final wet weather survey.

Wet Weather Study Partners

Cincinnati

Metropolitan Sewer District of Greater Cincinnati Sanitation District #1 of Northern Kentucky Cincinnati Water Works U.S. EPA

Louisville

Louisville & Jefferson County Metropolitan Sewer District Louisville Water Company The City of Louisville, Kentucky The City of Jeffersonville, Indiana The City of Clarksville, Indiana The City of New Albany, Indiana U.S. EPA

Upper Ohio River/Wheeling Area

Wheeling Water Pollution Control Department
Eastern Ohio Regional Wastewater Authority
The City of Benwood, West Virginia
The City of Follansbee, West Virginia
The City of McMechen, West Virginia
The City of Moundsville, West Virginia
The City of New Martinsville, West Virginia
The City of Wellsburg, West Virginia
The City of Wellsburg, West Virginia
The Village of Powhatan Point, Ohio
The City of Steubenville, Ohio
West Virginia Division of Environmental Protection
Ohio EPA
U.S. EPA Region III, Wheeling Office

ORSANCO Initiatives

Friends of the Ohio

Friends of the Ohio, ORSANCO's membership-based initiative to inspire commitment to preserving the Ohio River's beauty, enjoyed success during 2002 with increased membership and new corporate sponsors.

The debut of Life Below the Waterline, a 2,200-gallon traveling aguarium that displays Ohio River fish at community festivals, was a significant achievement for Friends of the Ohio. The aguarium's tour began in Evansville, Indiana, with a reception and three-day exhibit that drew a record number of visitors to the Evansville waterfront. In 2002, Life Below the Waterline also visited venues in Indiana, Kentucky, Ohio and West Virginia.

Friends of the Ohio is currently developing an Ohio River-based educational program featuring a riverboat classroom. The L&L Nippert Charitable Foundation, based in Cincinnati, Ohio, has provided seed funding for the project. Friends of the Ohio hopes to kick off a pilot program in Cincinnati, Ohio, during spring 2004.



Life Below the Waterline visits Moundsville, West Virginia.

River Sweep

River Sweep is a one-day riverbank cleanup for the Ohio River and several tributaries. River Sweep was first held in 1989 to promote litter prevention and encourage citizen participation in water quality protection. June 15, 2002, was one of the most successful River Sweep events ever. More than 22,000 volunteers fanned out over 3,000 miles of shoreline to pick up trash and debris.



A River Sweep volunteer in Cincinnati, Ohio.

In conjunction with the cleanup, ORSANCO holds an annual poster

contest for children in grades kindergarten through 12. The 2002 winner was Elaina Cantanese, an 8th grade student at Calvary Christian School in Independence, Kentucky. The River Sweep T-shirt design winner was Zane Madden, a 5th grade student at St. Francis Xavier School in Moundsville, West Virginia.

2002 River Sweep & Friends of the Ohio Corporate Sponsors

	•
AK Steel	Casino Aztar
ALCOA	Danville Sanitary District
Allegheny Energy	Dayton Power & Light
American Electric Power	Dominion Foundation
AEP- River Transportation	Dow Corning
ARCH Chemicals, Inc.	DuPont
Ashland Chemical	Duquesne Light
Ashland, Inc.	ExxonMobil
ATOFINA	Fifth Third Bank
BASF	Gallatin Steel
Bayer	GE Plastics
Bernard McDonough	Hanson Aggregates
Foundation	Kentucky River Authority

Louisville & Jefferson Coun
MSD
Louisville Gas & Electric
Louisville Water Company
Marathon Ashland
Petroleum LLC
Massac County Soil &
Water Conservation
District
Malcolm Pirnie
Mead Johnson Nutritional
Neville Chemical

Koppers Industries

Procter & Gamble Joseph E. Seagram & Sons. Inc. Speedway Newport Aquarium Toyota Motor Manufacturing North America, Inc.

NOVA Chemicals

Tri-State River Products Vectren Corporation, Inc. Whirlpool

River Sweep Sponsor

River Sweep and Friends of the Ohio Sponsor

Friends of the Ohio Sponsor



ORSANCO/Ohio River Users Program

The ORSANCO/Ohio River Users Program was established in 1993 as a cooperative effort among ORSANCO and Ohio River industries, utilities and municipalities. The program funds scientific studies to improve the basis for management decisions about the Ohio River.

In 2002, the Commission approved funding for a study to re-evaluate the technical basis for existing Ohio River thermal criteria. Ohio River Users expects the thermal criteria study to be completed by the end of 2003.

RiverWatchers

The RiverWatchers volunteer monitoring program celebrated 10 years of success in 2002. Since its inception in 1992, the RiverWatchers program has grown to include 32 school, scout and citizen groups from six states in the Ohio River Basin. Four schools joined RiverWatchers in 2002.

ORSANCO supplies groups with chemical test kits and basic water quality information, then each group conducts experiments five times per year on the Ohio River and tributary waters. Via an on-line database, RiverWatchers compare test data, including dissolved oxygen, fecal coliform, nitrates, pH, turbidity and water temperature change.

2002-2003 RiverWatchers Groups

Indiana

Boy Scout Troop Evansville Day School Lawrenceburg High School Mater Dei High School Reitz Memorial High School Switzerland High School

Kentucky

Bishop Brossart High School Boyd County Career & Technical Education Center Carroll County High School Daviess County High School Girl Scout Troop Hancock County Middle School Interested Citizen North Middle School River Ridge Intermediate Wheatley Elementary Worthington Intermed. School

Ohio

Chesapeake Middle School Clark Montessori School Clifton Elementary Elizabethtown Elementary Marietta High School Monroe Elementary School New Richmond High School

Pennsylvania

Fairless Intermediate School Perry Traditional Academy

Virginia

Committee for the Improvement of Dickenson County

West Virginia

Magnolia High School St. Francis Xavier High School St. Marys High School Wahama High School Warwood Middle School (2 groups) Wellsburg Middle School



Students make fish-print T-shirts at the Clean Water Day celebration.

Celebrating 30 Years of Clean Water

Friday, October 18, 2002, marked the 30th anniversary of the Federal Water Pollution Control Act, also known as the Clean Water Act. In celebration of this milestone, ORSANCO partnered with Sierra Club to sponsor National Water Monitoring Day at Serpentine Wall on the Cincinnati, Ohio riverfront. The day included water-related educational exhibits and hands-on activities for children from the Cincinnati metropolitan area. More than 600 students as well as 20 businesses and organizations participated. Students learned about the importance of clean water and how they can get involved in water quality protection. America's Clean Water Foundation honored ORSANCO for participating in National Water Monitoring Day celebrations.

Engaging the Community

Regulatory Agencies of ORSANCO Member States

ILLINOIS

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

INDIANA

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

KENTUCKY

Natural Resources & Environmental Protection Cabinet Division of Water 14 Reilly Road 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
Division of Water Resources
1201 Greenbrier Street
Charleston, WV 25311

ORSANCO Staff*

David R. Bailey
Manager of Human Resources & Administrative Programs

Donna M. Beatsch
Data Processing Specialist

Samuel A. Dinkins Environmental Specialist

Tracey A. Edmonds
Administrative Assistant

Erich B. Emery Senior Biologist

Mindy K. Garrison Environmental Specialist

> Joseph T. Gilligan Comptroller

Diane F. Haddad Communications Coordinator

Jason P. Heath
Manager of Water Quality Monitoring & Assessment
Programs

T. Eben Hobbins
Environmental Specialist

Barbara A. Horton Technical Programs Secretary

Jeanne J. Ison Manager of Public Information Programs

> Kimberly A. Mays Environmental Engineer

Nathan G. Mertz Information Systems Specialist

Jennifer Monroe
Public Information Programs Secretary

Erin Overholt
Public Information/Education Specialist

Jay D. Patel Data Systems Administrator

Crystal G. Richardson Environmental Specialist

Jerry G. Schulte

Manager of Biological & Emergency Response Programs

Paul D. Spires, Sr. Maintenance

Gary Suskauer Environmental Specialist

Peter A. Tennant, P.E. Deputy Executive Director

Jeffrey A. Thomas Biologist

Alan H. Vicory, Jr., P.E., DEE Executive Director & Chief Engineer

Carrie E. Wessendarp Environmental Specialist

Matthew S. Wooten Biologist

Gregory Youngstrom Environmental Specialist

Lila X. Ziolkowski Environmental Chemist

Years of Service

Two ORSANCO staff members were recognized in January 2002 for their years of service:

Donna Beatsch, 30 years

Jerry Schulte, 15 years

*as of 12/31/02

Administration

Ohio River Valley Water Sanitation Commission Combined Balance Sheet * All Fund Types and Account Groups June 30, 2002

			Fiduciary			
	Governm	ental Fund Types	Fund Type	Account Groups		Total
	General	Special	Pension	General	General	(Memorandum
	Fund	Revenue Funds	Trust Fund	Fixed Assets	Long-Term Debt	Only)
Assets		Tiovorido i diido	1140114114	<u> </u>	<u> </u>	
Cash	\$279,141	\$893,649	\$ 27,946	\$	\$	\$ 1,200,736
Restricted investments			1,623,117			1,623,117
Accounts receivable:						
Due from the federal government		522,227				522,227
Due from state and local governments		28,000				28,000
Other receivables	1,456		6,535			7,991
Due from other funds	455,119		71,000			526,119
Prepaid expenditures	20,454					20,454
Property and equipment				1,954,497		1,954,479
Amount to be provided for retirement						
of long-term debt in future years					\$910,366	910,366
	\$756,170	\$1,443,876	\$ 1,728,598	<u>\$ 1,954,479</u>	\$910,366	\$ 6,793,489
Liabilities						
Accounts payable	\$ 89,669	\$220,885	\$	\$	\$	\$ 310,554
Accrued expenses:						
Annual Leave	52,022					52,022
Due to other funds	71,000	455,119				526,119
General long-term debt					910,366	910,366
	212,691	676,004	-	-	910,366	1,799,061
Fund Equity				4 05 4 470		4 05 4 450
Investment in general fixed assets				1,954,479		1,954,479
Fund balances:						
Reserved for prepaid expenditures 20,454						20,454
Reserved for employee retirement bene	tits		1,728,598			1,728,598
Unreserved:						
Designated for specific fund purpose	s 523,025					523,025
Undesignated		767,872	1 700 500	4.054.450		767,872
Total fund equity	543,479	767,872	1,728,598	1,954,479		4,994,428
	\$756,170	<u>\$1,433,876</u>	\$ 1,728,598	\$ 1,954,479	_\$910,366	\$6,793,489
1 04-4		, ,		,,	72.2,300	, -,,

Financial Statement

^{*} The complete audit report is available for examination at ORSANCO's office.

Combined Statement of Revenues, Expenditures, and Changes in Fund Balances All Governmental Fund Types Year Ended June 30, 2002

	Governmen	Governmental Fund Types		
	General Fund	Special Revenue Funds	(Memorandum Only)	
Revenues				
Federal, state and local grants	\$	\$1,775,230	\$1,775,230	
State assistance	1,211,400		1,211,400	
Contributions		714,608	714,608	
Other	<u>156,294</u>		156,294	
	1,367,694	2,489,838	3,857,532	
Expenditures				
Programs:	050 504	225 224		
Water Pollution Control and Abatement	953,704	925,204	1,878,908	
EMPACT	637	3,632	4,269	
Pilot Integration Program	250	1,808	2,058	
Life Below the Waterline	84,866	004 700	84,866	
Watershed Pollutant Reduction Phase IV	27,848	691,732	719,580	
Wet Weather Study of the Hannibal Pool Genalert AMI	43	07.040	43	
	15,466	87,640	103,106	
Cincinnati Area Wet Weather Impacts Study	129,714	110.461	129,714	
Louisville Area Wet Weather Impacts Study	1,555	118,461 150,434	120,016	
Ohio River Sweep Biological Trend Assessment	224	150,454	150,434 224	
ORSANCO/Ohio River Users Program	13,864		13,864	
PA Study	5,000		5,000	
Friends of the Ohio	28,270	38,750	67,020	
Great Lakes/Baltic Seas Partnership	6,822	4,522	11,344	
Great Lakes/Baltic Seas Partnership,	0,022	1,022	11,011	
Kaliningrad, Oblast Participation	248		248	
Site Specific Criteria	17,710		17,710	
River Watcher	331		331	
Capital Outlay	100,223		100,223	
Other	25,796		25,796	
	1,412,511	2,022,183	3,434,754	
Excess of revenues over expenditures	(44,877)	467,655	422,778	
Fund equity, beginning of year	<u>588,356</u>	300,217	888,573	
Fund equity, end of year	\$ 543,479	\$ 767,872	<u>\$1,311,351</u>	



5735 Kellogg Avenue Cincinnati, OH 45228 5l3-23l-77l9 www.orsanco.org