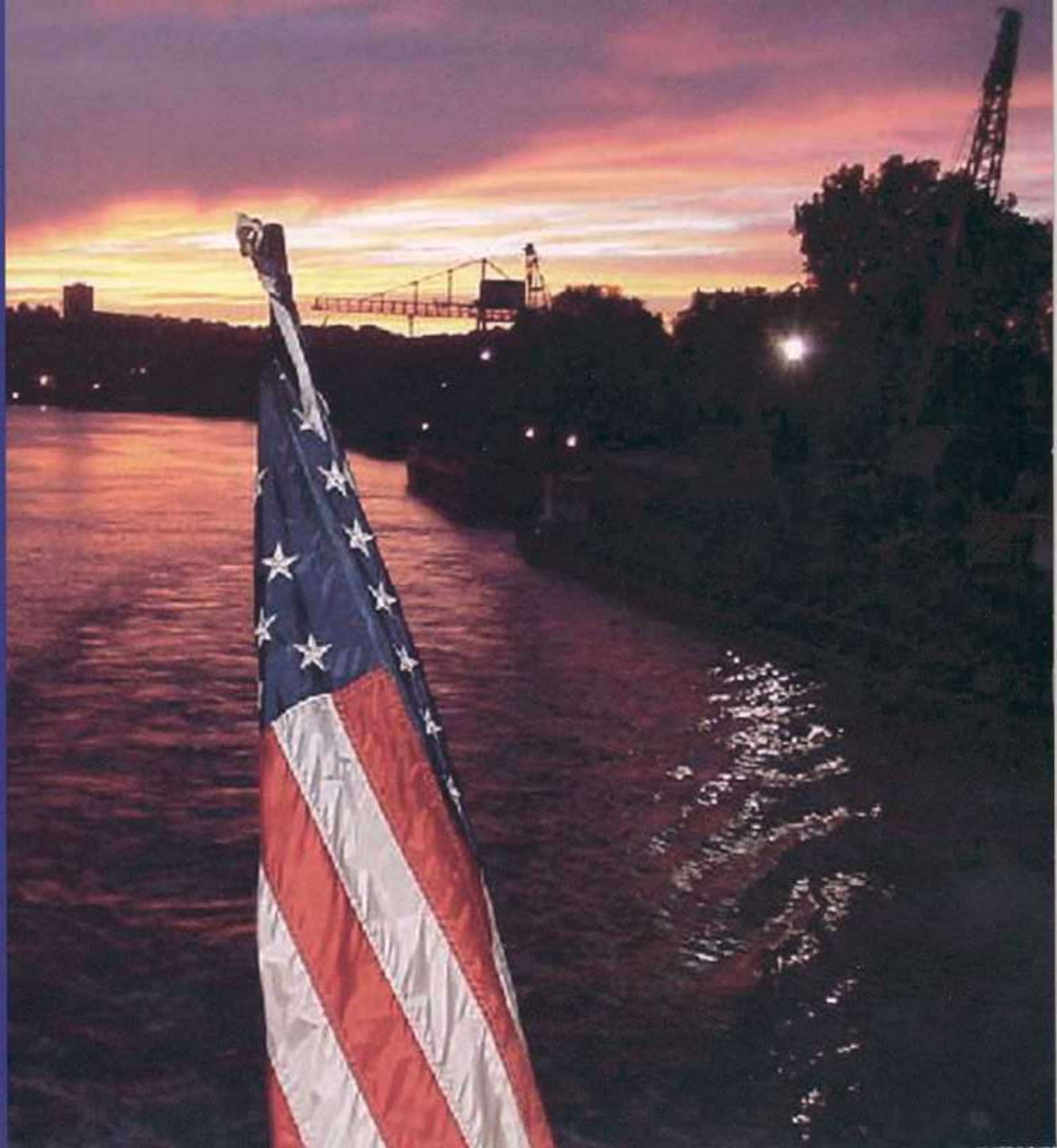


The Ohio River Valley:

Vital Resource,
Vibrant Rivers

Annual Report 2001



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*as of 12/31/01

On the cover: On the Ohio River near Cincinnati, OH
Photo by Commissioner Thomas Erlandson of New York

Many photos in this report were submitted by amateur
photographers during the 2001 Friends of the Ohio
photography contest.

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 2001 to:

The Honorable George H. Ryan, Governor of Illinois
The Honorable Frank O'Bannon, Governor of Indiana
The Honorable Paul E. Patton, Governor of Kentucky
The Honorable George Pataki, Governor of New York
The Honorable Robert Taft, Governor of Ohio
The Honorable Mark Schweiker, Governor of Pennsylvania
The Honorable James S. Gilmore III, Governor of Virginia
The Honorable Robert E. Wise, Jr., Governor of West Virginia

&

The Honorable George Walker Bush, President of the United States



Toronto, OH
Photo by John E. Rebres

Anno Domini 2001: A memorable year in history. A year of hope, progress, accomplishment, tragedy, reflection, transition, new beginnings. A year that started normally and ended with a milestone so memorable that every mature American will remember his or her location and what he or she was doing on the morning of September 11. A year of thoughtful introspection. At the beginning thoughts about recession, and at the end thoughts about the meaning of life and the value of relationships. A year unlike others that traversed the whole spectrum of emotions and transactions. A year where ORSANCO analyzed and reaffirmed its role in addition to forging new relationships in service to the community and the environment.

Articles throughout this Annual Report will highlight the role that ORSANCO has served in stewardship to the Ohio River Basin. Needed scientific data has continued to be documented and new studies have commenced. A TMDL for dioxin has been completed to assist West Virginia and to establish a method for future TMDL development. Discussions are nearing closure concerning uniform impairment listings for all of the states that comprise the river's main stem. The early warning Organics Detection System has been serviced, upgraded and now is being enhanced through the Advanced Monitoring Initiative, thanks to a special U.S. EPA funded project. In fact, this system will be the topic of a discussion at an upcoming Mississippi River Conference for possible use there, and quite likely will become the model for lake and river-based drinking water utilities to utilize as part of their programs to safeguard water intakes...a timely project at a critical time in history. Public initiatives have mushroomed. Our web page now hosts more data and information than ever before. The River Sweep continues to be a major public event annually. The River Watchers Program is expanding throughout the basin. The Friends of the Ohio initiative is developing new programs that take the water quality protection message to Main Street at events and festivals everywhere. And there is so much more. Please take the time to go sit under a tree and read every word in this Annual Report. You will not be disappointed.

ORSANCO's success in 2001 has resulted from the hard work of its many committees and staff. Representatives from every state government within the basin, from water users groups, from academia and industry, from federal agencies, and from the general population, have all assembled many times at conference tables with staff to forge admirable accomplishments. ORSANCO staff has attended and offered presentations at national and international conferences on three continents in addition to assisting with river basin management planning in former Soviet block territory. The Commission merged its strategic plan and annual budget plan documents to develop an enhanced annual program plan. The U.S. EPA continues to provide major financial support to ORSANCO's Watershed Pollutant Reduction Program. Additionally, through an emerging partnership with the U.S. Army Corps of Engineers, ORSANCO's expertise will be applied toward the development of a critical Biocriteria Study. Special thanks are in order to Senators Bayh, Byrd, DeWine, Lugar, McConnell, Voinovich and Representatives Hostettler, Mollahan and Northrup, whose legislative support has been instrumental in moving these important initiatives forward.





The Delta Queen on the Ohio River
ORSANCO Staff Photo

Yes, ORSANCO's success story has many chapters. So much has become routine, and that is good for the environment. But 2001 was not just a routine year. It was a year of special accomplishments--some of which I have noted above and others that you will note elsewhere in this report--and a year that likely witnessed a major turning point for the organization. The management of point source discharges was acknowledged to reach the desired pollution control point such that energies now can be redirected to non-point source and biocriteria/nutrient issues. This will result in new initiatives off of the Ohio River's main stem, up the tributaries, and throughout the entirety of the basin. This is not going to result in broad, sweeping changes overnight. That is not ORSANCO's method. ORSANCO forges partnerships amongst the states to jointly address issues, thus assuring a smooth journey and a successful outcome. But the stage was set in 2001 and the agenda will start to develop in 2002.

Many programs bore fruit in 2001, resulting in the eight states and U.S. EPA Regions 3, 4 & 5, plus headquarters all coming to the Commission table in Philadelphia in the fall. In the winter of 2002, most will meet again in St. Louis and will be joined by Mississippi Basin and Gulf of Mexico Nutrient Task Force representatives. Then afterward, the year's work hopefully will be summed up in Buffalo in the spring and an initial course will be established for the upcoming budget year.

I am delighted to be at the ship's helm during this exciting time. To be able to navigate through the end of 2001 and the start of 2002 is an honor for which I thank the Commission for bestowing upon me. The crew is sea worthy and the sea is surmountable. This Annual Report chronicles 2001 and evidences hope and optimism for 2002. All that we now need to do is to stay the course.

I thank you for taking your valuable time to read this report. I hope that you will want to share it with others. I am proud to be associated with ORSANCO and trust that you will share in that pride as we all come to the table to benefit the future.

Douglas E. Conroe
Douglas E. Conroe

Ohio River Watershed Pollutant Reduction Program & Total Maximum Daily Load (TMDL) Analyses

A pollutant in the Ohio River may originate from a number of different sources in a watershed of over 200,000 square miles. In 1995, ORSANCO initiated the Ohio River Watershed Pollutant Reduction Program in order to investigate specific pollutants on an interstate watershed basis. 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 this program was developed based on public comments provided at a series of workshops.

A total maximum daily load (TMDL) is the maximum amount of a specific pollutant that can be incorporated 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. Because TMDLs are required for specific pollutants, the information developed through ORSANCO's Watershed Pollutant Reduction Program provides valuable input to their development. U.S. EPA is requiring states to develop certain TMDLs for the Ohio River; ORSANCO provides technical input to the federal agency's efforts.

The TMDLs that are currently being developed for the Ohio River are for Dioxin and Polychlorinated Biphenyls (PCBs). Both contaminants have been found in fish tissue at levels that warrant the issuance of advisories against consumption of certain fish species. In order to determine the sources of these contaminants, ORSANCO has utilized new methodologies to monitor their presence in the atmosphere and in water at extremely low concentrations.

The emphasis of these programs in 2001 was two-fold: conduct follow-up monitoring to support the implementation of the Dioxin TMDL that was completed in 2000; and collect sufficient data to complete a TMDL for PCBs for the portion of the Ohio River that borders West Virginia.

The Dioxin TMDL for the Ohio River from Racine Lock & Dam to the Big Sandy River indicated that Dioxin levels must be reduced from the Kanawha River and the upper Ohio River in order to meet water quality standards. In 2001, extensive sampling for Dioxin was conducted, including fish tissue, sediment, ambient air, and low concentration water sampling. Results should help to better identify sources of this contaminant.

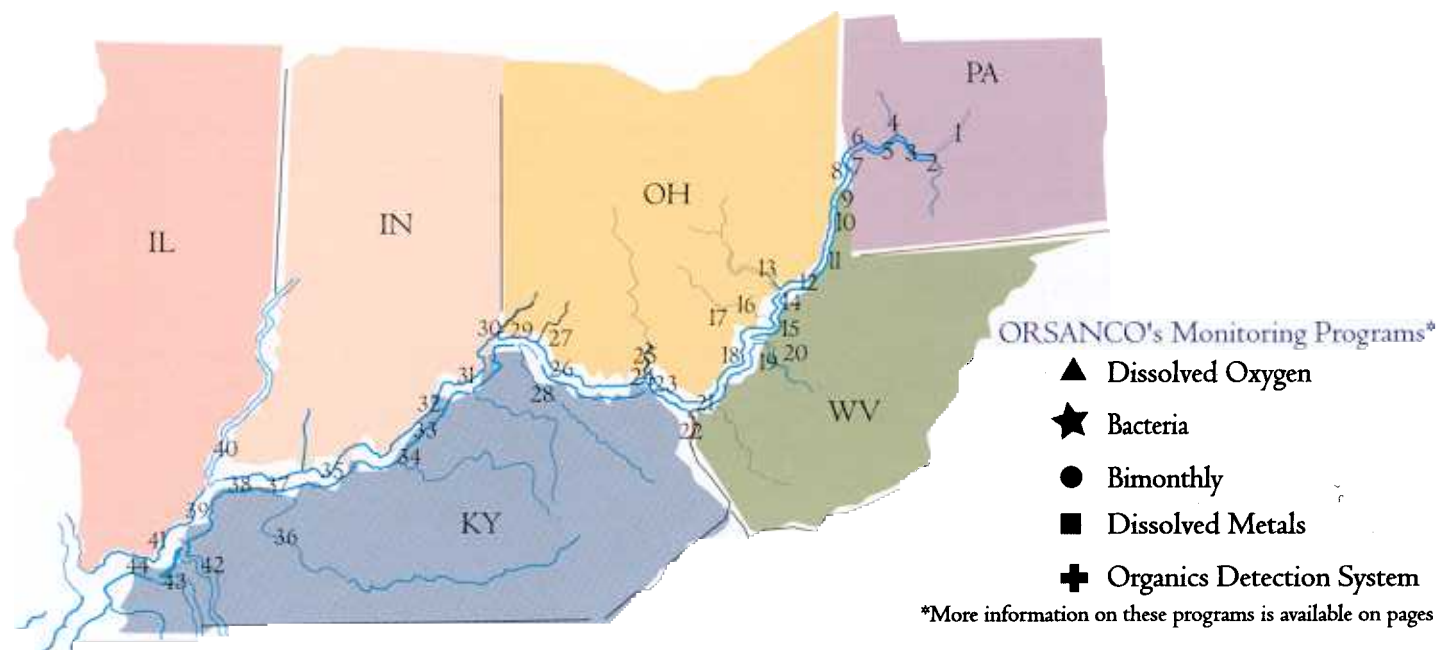
In 2002, a TMDL for PCBs must be completed for the West Virginia/Ohio portion of the river. Sampling similar to that for Dioxin was carried out in 2001, and results will be analyzed and reported to U.S. EPA.



Robinson's Bluffs End, Rockport, IN
Photo by Cara Matthews

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.



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

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 and drinking water quality. In response, U.S. EPA has directed states to adopt water quality criteria for nutrients by 2004. One specific concern is depressed oxygen levels in the northern Gulf of Mexico, which have been attributed to high nutrient levels in the Mississippi River. As a major tributary to the Mississippi, the Ohio River is a possible contributor to this problem.

While algae blooms have not harmed aquatic life in the Ohio, 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 should allow the development of water quality criteria that protect against impacts on drinking water and aquatic life.

Bimonthly Sampling

ORSANCO's year-round bimonthly sampling program was established in 1975 to provide basic water quality information and to demonstrate water quality trends. Sampling took place throughout 2001 at 31 locations: 17 on the Ohio River and 14 on tributaries to the Ohio. Data from the year-round bimonthly sampling program are published semiannually in ORSANCO's Quality Monitor.

Dissolved Metals Sampling

For many years ORSANCO monitoring has produced conflicting information regarding support of aquatic life in the Ohio River. While results of fish and macroinvertebrate studies indicated healthy populations, concentrations of metals indicated impairment. It was believed that metals were primarily in the particulate form (associated with sediment, i.e., total recoverable metals) rather than in the dissolved form (in the water column and available to aquatic life), and were therefore less toxic to aquatic life.

ORSANCO now samples for dissolved metals using innovative, ultra-clean techniques, reducing the chances that metals from sampling equipment will contaminate samples. ORSANCO collects dissolved and total recoverable metals samples side-by-side. This allows for the development of a database of dissolved metals constituents and levels in the Ohio River, and will help to identify relationships between dissolved and total recoverable metals. Results to date confirm the belief that most of the metals present in the river are in the particulate form.



Big Grave Creek, WV
Photo by Eric Anderson



Green River, KY
Photo by Jean Ham



Wabash Trails, Vincennes, IN
Photo by Elizabeth Deimel



Lusk Creek Canyon,
Pope County, IL
Photo by Helen Baker

Spill Notification and 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. Along with state and federal agencies, ORSANCO works to assure that adequate notification takes place for all spills to the Ohio River, and provides monitoring to determine the location and severity of spills that impact Ohio River water quality.

In 2001, 338 spills were reported to ORSANCO. Because utilities received adequate notification, none of these incidents interfered with their ability to provide a continuous supply of safe drinking water to the public.

In December, a barge accident near Louisville, Kentucky released an estimated 124,000 gallons of gasoline into the Ohio River. This spill required an ORSANCO response team to assess the levels of gasoline in the water. Because the gasoline was contained within a barge canal at McAlpine Lock & Dam, the spill dissipated due to evaporation. After numerous hours of stopped traffic on the Ohio, the lock and dam reopened with no impacts to drinking water or aquatic life. Air monitoring of gasoline fumes continued for approximately one week following the incident.

In addition to the Spills Notification program, ORSANCO operates an Organics Detection System (ODS) in cooperation with 14 water utilities and industries along the Ohio. The ODS provides daily analyses of river water for the presence of certain organic compounds. If unusual levels are detected, downstream water intakes are notified and efforts are undertaken to determine the source. ORSANCO's ODS has been operational since 1978.

The ODS revealed two contamination incidents in 2001: Benzene was detected at Cincinnati, Louisville and Evansville, and an unknown compound was detected at Weirton and Wheeling. The ODS allowed the characterization of these contaminant plumes and provided an opportunity for affected utilities to adjust treatment methods or close their intakes to avoid contamination.

In 2001, a new ODS location was established at the Louisville Water Company's Byron E. Payne Water Treatment Plant in Prospect, Kentucky. Other improvements to the ODS include the installation of automated systems at three stations that immediately notify operators when organic pollutants are detected.

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) program. Prior to the construction of this in-stream monitoring device, ORSANCO's monitoring efforts were restricted by access to the river. With the AMI, monitoring data now 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 with better 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 collaboratively with U.S. EPA's Briedenbach Research Center in Cincinnati to develop the range of parameters that will be monitored and future plans for expanding this program.



Gasoline sheen at Louisville, KY
ORSANCO Staff Photo



Louisville, KY
ORSANCO Staff Photo



ODS operator
ORSANCO Staff Photo



AMI
ORSANCO Staff Photo

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 to the public, and is immediately available via ORSANCO's Ohio River EMPACT web site (www.orsanco.org/empact). Health departments use this bacteria data to issue public advisories concerning potential risks to people who engage in recreational activities on the Ohio River.

Sampling locations near the cities were selected based on the likelihood of elevated bacteria levels due. In 2001, the number of locations was expanded to four sampling sites near Pittsburgh and three sampling sites near each of the other cities.



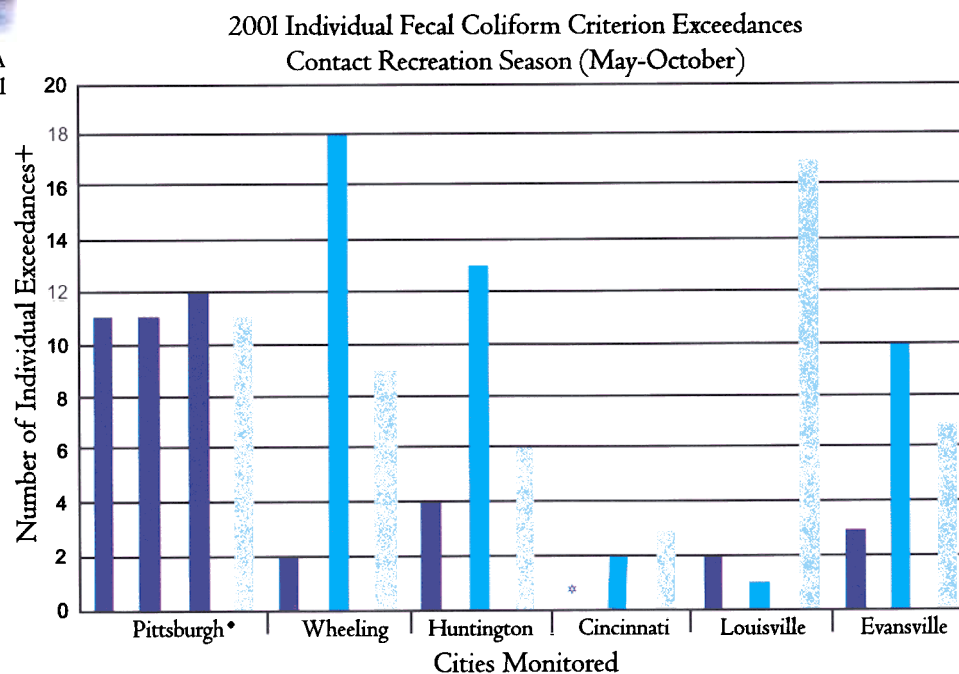
Neville Island, PA
Photo by Kathy Schadel



Hockingport, OH
Photo by Terri Soulsby



Mustapha Island, OH
Photo by Dorothy Stout



*The Monthly Fecal Coliform Criterion was not exceeded at Cincinnati river mile 462.6.

+ Total of 30 samples per site.

*Sampling in central Pittsburgh is conducted at river mile 1.4 on the left bank, mid stream and right bank.

Wet Weather Studies

Pollution from urban areas significantly impacts the quality of waterways in the Ohio River Basin. Sources of pollution include storm water, nonpoint sources and combined sewer overflows (CSOs).

Combined sewer systems carry both wastewater and storm water. During heavy rainfall, the systems can become overloaded, resulting in a situation where wastewater bypasses sewage treatment processes and discharges into nearby waterways through CSOs.

ORSANCO has taken the lead role in determining the water quality impacts of urban wet weather pollution sources on the Ohio River. Results from studies in three urban areas indicate that the most serious impact is elevated bacteria levels, making portions of the river unsuitable for contact recreation immediately after rainfall.

Cincinnati

During 2001, a multi-year wet weather study of the Cincinnati/Northern Kentucky region was completed. This study will conclude with the development of a model for evaluating alternative strategies to control wet weather pollution sources. The study was supported by: Metropolitan Sewer District of Greater Cincinnati; Sanitation District No. 1 of Northern Kentucky; and Cincinnati Water Works. Support for the study was also provided by U.S. EPA due to the significance of this work as a demonstration project for urban wet weather problems on large rivers.



CSOs
ORSANCO Staff Photos



CSOs on the Ohio River
ORSANCO Staff Photos



Louisville

Two wet weather surveys were conducted at Louisville in 2001, bringing data collection for the project to its conclusion. The study will conclude with the development of a water quality impacts model. A final report on the project will be completed in Fall 2002.

Sampling for the Louisville Wet Weather Study was conducted by ORSANCO on the Ohio River, while local communities and private consultants provided sampling for tributaries, CSOs and wastewater treatment plant influents. The Louisville/Jefferson County Wet Weather Study is carried out with the cooperation of: Louisville and Jefferson County Metropolitan Sewer District; Louisville Water Company; the City of Louisville, Kentucky; the cities of Jeffersonville, Clarksville, and New Albany, Indiana; and U.S. EPA.

Hannibal Pool (Wheeling Area)

During 2001, two wet and two dry weather surveys were conducted in the Hannibal Pool, near Wheeling, West Virginia. This study focuses on bacteria from CSOs and metals from acid mine drainage. Sampling for the project is conducted by ORSANCO on the Ohio River, and by local communities on tributaries.

Overall, results of this study show wet weather sources of pollution have a much greater impact on tributaries than on the Ohio River.

Participants in the Hannibal Pool Wet Weather Study include: Wheeling Water Pollution Control Department; Eastern Ohio Regional Wastewater Authority; the cities of Benwood, Follansbee, McMechen, Moundsville, New Martinsville, and Wellsburg, West Virginia; the Village of Powhatan Point and the City of Steubenville, Ohio; the West Virginia Division of Environmental Protection; Ohio EPA; and U.S. EPA Region III, Wheeling office.

Fish & Macroinvertebrate Population Studies

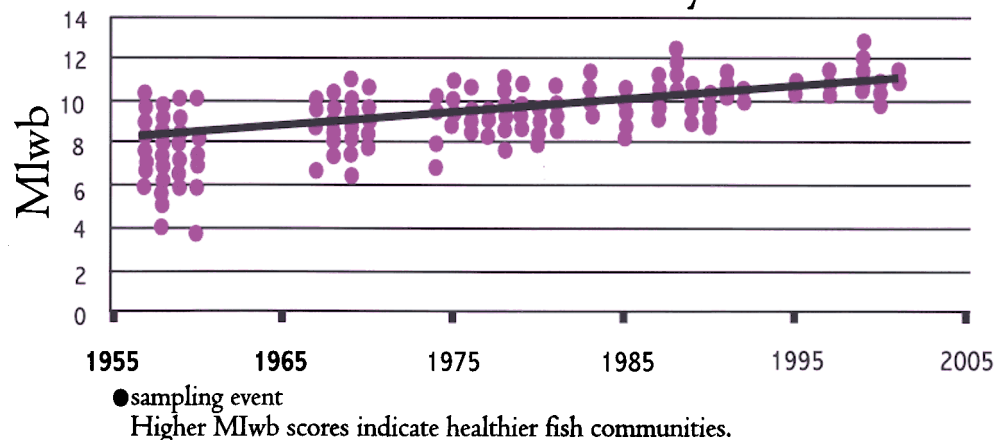
Fish are important indicators of river health, providing direct evidence of water quality conditions. ORSANCO completed an Ohio River Fish Index (ORFin) that combines 13 fish community measurements into one index. During 2001, the ORFin was tested, as was a newly created habitat index.

Additionally, ORSANCO is working to establish biological criteria (biocriteria) to provide a numerical reference of the ecological conditions of the Ohio River, providing information on improvements to the biological community as the water quality of the Ohio continues to improve over time.

In 2001, ORSANCO evaluated Ohio River biological communities at 137 sites in 19 of the 20 Ohio River pools, as well as the open water area below Lock 53, utilizing electrofishing techniques. Over 33,000 individuals and 78 species were collected. Surveys also were conducted in lockchambers at eight dams. The Modified Index of Well-Being (MIwb), an indicator of biological health, was used to compare 2001 data to historical lockchamber data. Higher MIwb scores indicate healthier fish communities. The comparison demonstrates a steady increase in MIwb scores since 1957, indicating improving Ohio River water quality over time.

In addition to ORSANCO's work to develop fish population indices, the development of a macroinvertebrate index also progressed in 2001. Sampling activities focused on identifying locations appropriate for testing the index. It is expected that an Ohio River Macroinvertebrate Index will be completed in early 2002.

MIwb Scores for Lockchamber Surveys



Aquatic life surveys
ORSANCO Staff Photos



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 (the Corps) or hydropower plants. ORSANCO receives the data on a real-time basis and thus is able 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.

ORSANCO/Ohio River Users Program

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

A study titled "Trend Analysis of Ohio River Fish" was completed this year. This research marked one of the first efforts to combine long-term environmental data sets to identify cause and effect relationships between water quality conditions and fish populations. The study documents improvements to the fish community that have taken place over the past 45 years.

"Comparison of State/Federal Water Quality Regulations Affecting the Towing Industry on the Ohio River" was also completed. This research reviewed and compiled state and federal water quality regulations and procedures that impact the towing industry, and identified opportunities for enhanced regulatory coordination.

Studies Completed through the ORSANCO/Ohio River Users Program

"Evaluation and Recommendation of Water Quality Models for the Ohio River"

"Guidelines for Determining In Stream Water Quality Conditions"

"Guidelines for Delineating Mixing Zones for Ohio River Discharges: Part I, Calculation of Mixing and Review of State Policies"

Friends of the Ohio

ORSANCO's Friends of the Ohio, a membership-based education and outreach program, saw an increase in individual and corporate memberships during 2001.

The first Friends of the Ohio Photography Contest was held during 2001. The grand prizewinner, Josh Byler of Pittsburgh, Pennsylvania, received photography equipment valued at over \$900. The contest was co-sponsored by Eastman Kodak, who provided one-time-use cameras to participants. A 12-month calendar for 2002 was created using winning photographs.

This year ORSANCO's Friends of the Ohio program displayed a 4,000-gallon aquarium at the Kentucky State Fair in Louisville to demonstrate the diversity of Ohio River aquatic life. This exhibit reached nearly one million visitors and provided an excellent educational opportunity for thousands of Louisville-area school children.

In December 2001, the Friends of the Ohio Program received a \$500,000 grant from the L&L Nippert Foundation. This funding will support the development of a riverboat-based classroom.

River Sweep

River Sweep, a program to remove litter and debris from the banks of waterways in the Ohio River Basin, took place on Saturday, June 16, 2001. The program was implemented in 1989 in order to encourage citizen participation in water quality protection. River Sweep depends upon the hard work and dedication of volunteer coordinators, clean-up volunteers in 72 counties, and the financial support of corporate sponsors.

This year, nearly 22,000 participants helped to recover nearly 9,000 tons of trash and debris from the banks of the Ohio, Monongahela, Beaver, Kentucky, and Wabash rivers and numerous smaller tributaries in six states. During the event, more than 6,000 tires were collected and recycled in Pittsburgh alone.

Each year, ORSANCO conducts an annual poster contest in conjunction with River Sweep, inviting students from throughout the basin to submit original artwork in order to help promote the event. The winning poster adorns brochures and posters announcing the event. Cruz Gellner, a fourth grade student from Moundsville, West Virginia won this year's poster contest, receiving a \$1,000 U.S. Savings Bond. Jesika Griffin, a third grade student from Evansville, Indiana won the T-shirt design category, and received a \$100 savings bond for her work.

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Ashland Chemical
BASF
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Chiquita Brands, International
Cincinnati Water Works
Cinergy*
Danville Sanitary District

-Friends of the Ohio sponsor
*River Sweep sponsor
*sponsor both River Sweep & Friends of the Ohio

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Operation Community Pride
Procter & Gamble
Joseph E. Seagram & Sons, Inc.
Toyota Motor Manufacturing North America, Inc.
Tri-State River Products
Vetren Corporation



River Sweep volunteer
ORSANCO Staff Photo

RiverWatchers

RiverWatchers was established in 1992 to promote the protection of water quality throughout the Ohio River Basin. Currently, 32 groups participate in this volunteer monitoring program.

Starting in 2001, RiverWatchers groups can enter their water quality data into an on-line database and view data reported by other groups. This valuable tool not only allows information to be shared among RiverWatchers participants, but also allows comparisons to be made among participating communities, and facilitates discussions about water quality throughout the Ohio River Basin.

Although the majority of participants study water quality parameters on the Ohio River, a significant number of RiverWatchers groups focus on tributaries, including the Allegheny, Whitewater, and Muskingum rivers. This provides a snapshot of local water quality in various parts of the Ohio River Basin that can be analyzed and compared using the on-line database.



RiverWatchers Training
ORSANCO Staff Photo



Hockingport, OH
Photo by Terri Soulsby

Ohio River EMPACT

The Environmental Monitoring for Public Access and Community Tracking (EMPACT) program was designed by U.S. EPA to better enable communities around the country to access, collect and manage environmental information relevant to their regions. ORSANCO hosts an Ohio River EMPACT site (www.orsanco.org/empact) in order to provide residents of the basin with timely water quality information that is easy to use and understand. Information available on the web site includes: weather conditions and bacteria data (May-October) from select cities; boating and river recreation safety tips; and fish consumption advisory information.

During 2001, bacteria data available on the Ohio River EMPACT web site was expanded from three cities (Pittsburgh, Cincinnati and Louisville) to six cities, including Wheeling, Huntington and Evansville. The web site was redesigned to allow for faster data updates and better access to information.

Ohio River Valley Water Sanitation Commission
Combined Balance Sheet *
All Fund Types and Account Groups
June 30, 2001

	<u>Governmental Fund Types</u>		<u>Fiduciary Fund Type</u>	<u>Account Groups</u>		<u>Total (Memorandum Only)</u>
	<u>General Fund</u>	<u>Special Revenue Funds</u>	<u>Pension Trust Fund</u>	<u>General Fixed Assets</u>	<u>General Long-Term Debt</u>	
Asset:						
Cash	\$383,021	\$247,420	\$ 95,751	\$		\$ 726,192
Restricted investments			1,679,735			1,679,735
Accounts receivable:						
Due from the Federal government		609,013				609,013
Due from state and local governments		28,000				28,000
Other receivables	1,619		9,425			11,044
Due from other funds	327,429		65,000			392,429
Prepaid expenditures	18,733					18,733
Property and equipment				1,826,015		1,826,015
Amount to be provided for retirement of long-term debt in future years						
	<u>\$730,802</u>	<u>\$884,433</u>	<u>\$ 1,849,911</u>	<u>\$ 1,826,015</u>	<u>\$955,217</u>	<u>\$ 6,246,378</u>
Liabilities						
Accounts payable	\$ 48,253	\$241,787	\$	\$	\$	\$ 290,040
Accrued expenses:						
Annual Leave	44,193					44,193
Due to other funds	65,000	327,429				392,429
General long-term debt					955,217	955,217
	<u>157,446</u>	<u>569,216</u>			<u>955,217</u>	<u>1,681,879</u>
Fund Equity						
Investment in general fixed assets				1,826,015		1,826,015
Fund balances:						
Reserved for prepaid expenditures	18,733					18,733
Reserved for employee retirement benefits			1,849,911			1,849,911
Unreserved:						
Designated for specific fund purposes	554,623					544,623
Undesignated		315,217				315,217
Total fund equity	<u>573,356</u>	<u>315,217</u>	<u>1,849,911</u>	<u>1,826,015</u>		<u>4,564,499</u>
	<u>\$730,802</u>	<u>\$884,433</u>	<u>\$ 1,849,911</u>	<u>\$ 1,826,015</u>	<u>\$955,217</u>	<u>\$6,246,378</u>

* Audit report is pending approval by the Commission in February 2002.
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, 2001

	<u>Governmental Fund Types</u>		<u>Total</u>
	<u>General</u>	<u>Special</u>	<u>(Memorandum</u>
	<u>Fund</u>	<u>Revenue Funds</u>	<u>Only)</u>
Revenues			
Federal, State and Local grants	\$	\$1,914,210	\$1,914,210
State assistance	1,217,157		1,217,157
Contributions		216,811	216,811
Other	<u>72,305</u>	<u></u>	<u>72,305</u>
	1,289,462	2,131,021	3,420,483
Expenditures			
Programs:			
Water Pollution Control and Abatement	894,996	795,782	1,690,778
EMPACT		121,239	121,239
Pilot Integration Program		12,266	12,266
Wet Weather Study of the Hannibal Pool	3,461	19,586	23,047
Genalert AMI	1,488	8,428	9,916
Cincinnati Area Wet Weather Impacts Study	137,027		137,027
Louisville Area Wet Weather Impacts Study		305,709	305,709
Biological MIS		837	837
Ohio River Sweep		156,297	156,297
Biological Trend Assessment	8,527		8,527
ORSANCO/Ohio River Users Program		3,382	3,382
Biocriteria Development II	9,561	50,000	59,561
Watershed Pollutant Reduction Phase IV	25,114	509,233	534,347
Nutrients	10,880		10,880
Developing Biological Criteria for the Ohio River	274		274
Great Lakes/Baltic Seas Partnership	11,784	41,106	52,890
Great Lakes/Baltic Seas Partnership, Kaliningrad, Oblast Participation	1,588	30,361	
Site Specific Criteria	8,402		
SWAP on Interstate Waters	2,088	10,339	
Source Water Monitoring System	101		
Capital Outlay	<u>123,318</u>	<u></u>	<u></u>
	1,238,609	2,064,565	3,303,174
Excess of revenues over expenditures	50,853	66,456	117,309
Fund equity, beginning of year	<u>522,503</u>	<u>248,761</u>	<u>771,264</u>
Fund equity, end of year	<u>\$ 573,356</u>	<u>\$ 315,217</u>	<u>\$ 888,573</u>

ORSANCO STAFF*

DAVID R. BAILEY
MANAGER OF HUMAN RESOURCES &
ADMINISTRATIVE PROGRAMS

RHONDA L. BARNES-KLOTH
COMMUNICATIONS COORDINATOR

DONNA M. BEATSCH
DATA PROCESSING SPECIALIST

ANNETTE S. CRANEY
ENVIRONMENTAL SPECIALIST

SAMUEL A. DINKINS
ENVIRONMENTAL SPECIALIST

TRACEY A. EDMONDS
PUBLIC INFORMATION PROGRAMS SECRETARY

ERICH B. EMERY
SENIOR BIOLOGIST

CONSTANCE R. GABBARD
ADMINISTRATIVE ASSISTANT

MINDY K. GARRISON
ENVIRONMENTAL SPECIALIST

JOSEPH T. GILLIGAN
COMPTROLLER

CHARLES GOULD
CHEMIST

JASON P. HEATH
WATER QUALITY MONITORING &
ASSESSMENT PROGRAMS MANAGER

T. EBEN HOBBS
ENVIRONMENTAL SPECIALIST

BARBARA A. HORTON
TECHNICAL PROGRAMS SECRETARY

JEANNE J. ISON
PUBLIC INFORMATION PROGRAMS MANAGER

KIMBERLY A. MAYES
ENVIRONMENTAL ENGINEER

NATHAN G. MERTZ
INFORMATION SYSTEMS SPECIALIST

CARRIE E. MORANO
ENVIRONMENTAL SPECIALIST

JAY D. PATEL
DATA SYSTEMS ADMINISTRATOR

CRYSTAL G. RICHARDSON
ENVIRONMENTAL SPECIALIST

JERRY G. SCHULTE
BIOLOGICAL & EMERGENCY RESPONSE
PROGRAMS MANAGER

PAUL D. SPIRES, SR.
MAINTENANCE

PETER A. TENNANT, PE.
DEPUTY EXECUTIVE DIRECTOR

JEFFREY A. THOMAS
BIOLOGIST

ELIZABETH M. THORNTON
PUBLIC INFORMATION/EDUCATION SPECIALIST

ALAN H. VICORY, JR., PE, DEE
EXECUTIVE DIRECTOR & CHIEF ENGINEER

CINDY J. RAFFERTY WILLIAMS
GRAPHIC DESIGNER

MATTHEW S. WOOTEN
BIOLOGIST

NEW COMMISSIONERS

THE FOLLOWING INDIVIDUALS WERE
APPOINTED TO THE COMMISSION IN 2001:

RENEE CIPRIANO,
ILLINOIS ENVIRONMENTAL
PROTECTION AGENCY

ERIN CROTTY,
NEW YORK DEPARTMENT OF
ENVIRONMENTAL CONSERVATION

DAVID HESS,
PENNSYLVANIA DEPARTMENT OF
ENVIRONMENTAL PROTECTION

MICHAEL CALLAGHAN,
WEST VIRGINIA DIVISION OF
ENVIRONMENTAL PROTECTION

YEARS OF SERVICE

THE FOLLOWING ORSANCO STAFF MEMBERS
WERE RECOGNIZED IN JANUARY 2001 FOR

THEIR YEARS OF SERVICE:
PETER A. TENNANT 25 YEARS
JOSEPH T. GILLIGAN 10 YEARS
TRACEY A. EDMONDS 5 YEARS



5735 Kellogg Avenue
Cincinnati, OH 45228
513-231-7719

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REGULATORY AGENCIES OF THE 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

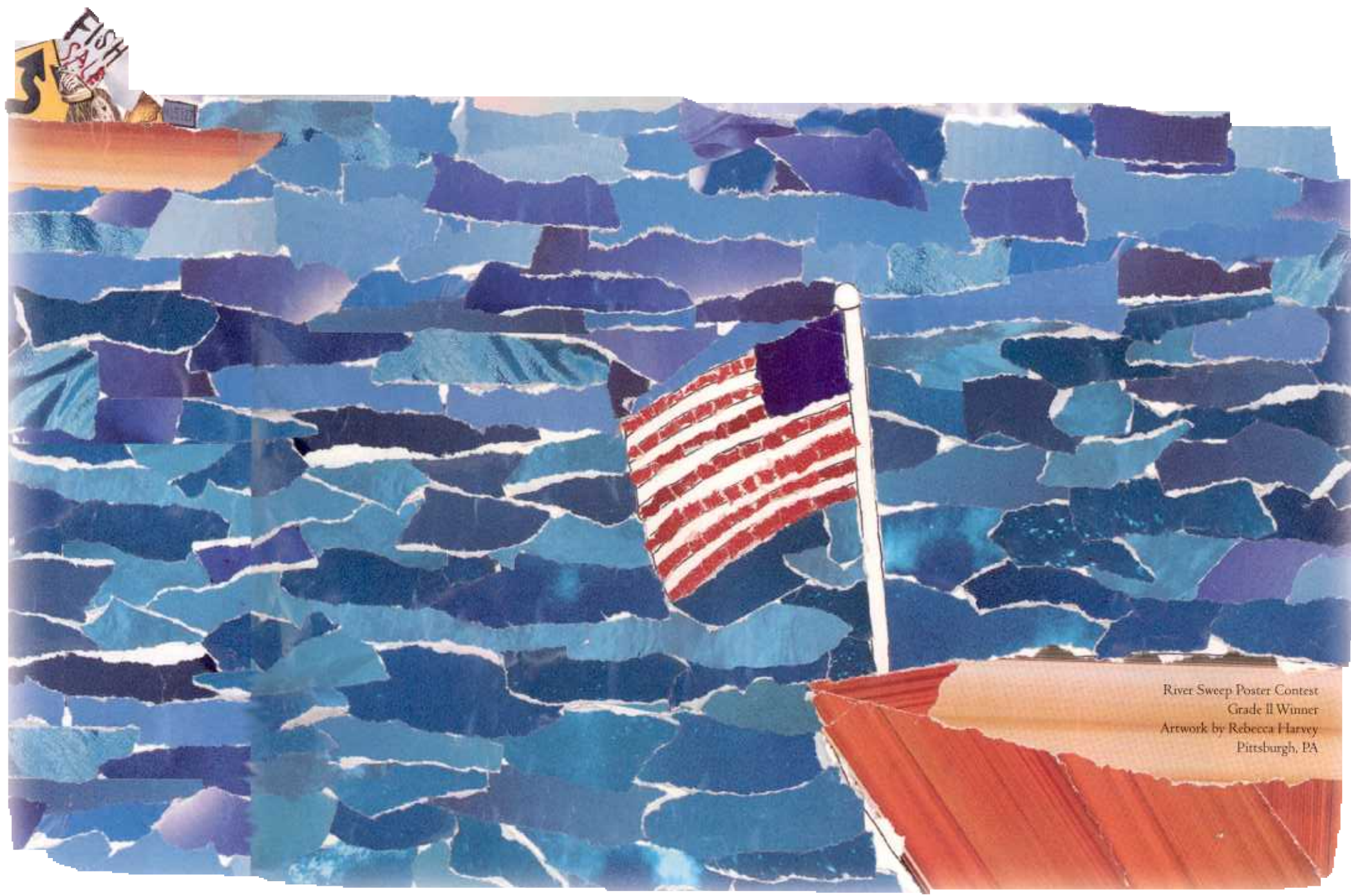
OHIO
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF WATER POLLUTION CONTROL
122 SOUTH FRONT STREET
COLUMBUS, OH 43216-1049

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
DIVISION OF ENVIRONMENTAL PROTECTION
OFFICE OF WATER RESOURCES
1201 GREENBRIER STREET
CHARLESTON, WV 25311

*AS OF 12/31/01



River Sweep Poster Contest
Grade II Winner
Artwork by Rebecca Harvey
Pittsburgh, PA