2010 ANNUAL REPORT

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To The President and Governors

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 2010 to:

The Honorable Pat Quinn,
Governor of Illinois

The Honorable Mitchell E. Daniels, Jr.,
Governor of Indiana

The Honorable Steven L. Beshear,
Governor of Kentucky

The Honorable David A. Paterson,
Governor of New York

The Honorable Ted Strickland,
Governor of Ohio

The Honorable Edward G. Rendell,
Governor of Pennsylvania

The Honorable Robert F. McDonnell,
Governor of Virginia

The Honorable Earl Ray Tomblin,
Governor of West Virginia

and

The Honorable Barack Obama,
President of the United States

*As of December 31, 2010

Chairman's Message

Beautiful Ohio, where the golden grain
Dwarf the lovely flowers in the summer rain.
Cities rising high, silhouette the sky.
Freedom is supreme in this majestic land;
Mighty factories seem to hum in tune, so grand.
Beautiful Ohio, thy wonders are in view,
Land where my dreams all come true!

Chorus from Beautiful Ohio

Beautiful Ohio was one of my grade school music teacher's favorite tunes. She often shared songs and poems about the Ohio Valley and its mighty river. Interestingly, a quick internet search yields hundreds of sites extolling the river's virtues. Its beauty beckons anyone who crests a hill and catches a glimpse of the river holding its course through the steep rolling landscape. The river's soothing contrast to the flat adjoining farmlands of its lower reaches can hold a gaze beyond the normal glance. It is a valley rich in culture, abundant in resources, and brimming with opportunities for fishing excursions or boating adventures on the meandering river.

The Ohio River Valley Water Sanitation Commission (ORSANCO) has been helping preserve the water resources of the valley for over 60 years. Although no official song or poem has been written about ORSANCO's accomplishments, the stories of people's lives on and along the Ohio River pay tribute to the work going on each day at the Commission. One such story is that of Mimi Hughes, who this year swam the entire 981-mile length of the Ohio River. Ms. Hughes, a teacher trying to bring awareness to the issues of women and education in the world, churned through the river at a pace of 20 miles per day. While she recalled a 10-mile section where the water quality gave her cause for concern, she found that beyond that brief encounter "the water cleared for the second ten miles of the day and became more and more clear each day."

In 2010, ORSANCO advanced its legacy of stewardship in the Ohio River Valley by creating a new standing committee on Water Resources. While water quantity and flow issues are woven throughout its Pollution Control Standards, ORSANCO is working to expand its services to the states through a more holistic approach to interstate water management. Thus, the critical need to integrate water quality and quantity is finally coming to fruition.

On a personal note, being a native Cincinnatian and having the honor of serving as the Greater Cincinnati Water Works Chief Engineer, I have had the best of both worlds, deriving pleasure from the Ohio's recreation and scenic beauty, while building a career in public water supply based on the continuous,

The millions of citizens who depend on the Ohio River as their drinking water source share a common mantra: protect this resource from contaminants that can be harmful to human health.

reliable flow the river affords. The millions of citizens who depend on the Ohio River as their drinking water source share a common mantra: protect this resource from contaminants that can be harmful to human health.

As the organization embarks on its 63rd year of service, ORSANCO will continue to meet the Compact's pledge of faithful cooperation in the control of pollution by providing a forum for collaborative action and developing the technical information to support sound decision making.

Paul E Tomes

Chairman Paul Tomes presents the past chairman's flags to outgoing Chairman Jeff Eger

2010 Highlights: Charting the Course

The Ohio River has many uses, each vitally important to the citizens of the Ohio River Valley. It serves as a main artery for transportation, a source of drinking water and energy supply, a home for fish and wildlife. Making sure the river is safe for water supply, aquatic life, and recreation are all important to quality of life. However, the focus now, more than ever, is protecting the river as a source of drinking water, and ensuring that the water resources of the entire Ohio River Valley are managed properly. In 2010, the Commission initiated major upgrades to its Organics Detection System to more fully protect the Ohio River as a source of drinking water.

As the human population grows and increasing demands are placed on water resources to supply the needs of communities, industries and agriculture, water quality and water quantity have become inextricably linked. ORSANCO has taken a leadership role by forming a new standing committee to guide the development of a water resources program and recommend appropriate actions regarding management and policy issues. The Ohio River Basin Water Resources Association (ORBWRA) has agreed to consolidate with ORSANCO as the Water Resources Committee. This merger promotes a unified and coordinated approach that will bring water quality and quantity management together under one organization, providing more efficient, cost-effective delivery of services to the states.

The Commission held its June meeting in Virginia to gain an in-depth understanding of the Chesapeake Bay Program and its relevance to ORSANCO's efforts to reduce the presence of nutrients in the streams of the Ohio River Basin. The Chesapeake Bay Program is recognized as the most advanced nutrient reduction program in the country and hailed as a potential model for other large watersheds.

The 197th Commission meeting was held at Irvington, Virginia

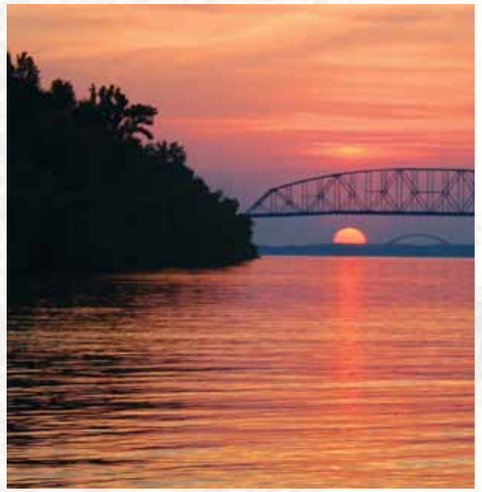
POLLUTION CONTROL STANDARDS REVISIONS

ORSANCO maintains Pollution Control Standards that must be met by all discharges to the Ohio River. The Standards are reviewed every three years to assure that they reflect current science. In 2010, the Commission conducted an expedited review, which was restricted to four issues: design flow for human health criteria; criteria for total dissolved solids; criteria for selenium; and availability of a process to consider variances to mixing zone requirements. After considering all comments received in the review, the Commission adopted revisions regarding design river flow and the consideration of requests for variances to the mixing zones requirements; changes were also made to assure that all variance requests are carefully considered. Action on total dissolved solids and selenium was deferred. The Commission will conduct a regular review of its Standards in 2011 in which all of its provisions will be subject to review and comment.

ASSESSMENT OF OHIO RIVER WATER QUALITY CONDITIONS: 2005 – 2009

In 2010, the Commission completed an assessment of water quality conditions from 2005 through 2009. ORSANCO studies the water quality and biology of the Ohio River to determine its suitability for certain uses, including public water supply, contact recreation, support of aquatic life, and fish consumption. These uses are classified as fully supporting (good water quality), partially supporting (fair water quality; impairments are indicated), and not supporting (poor water quality).

Based on this assessment, the entire river fully supports public water supply. Biological measures of fish community health indicated that the river fully supports aquatic life. However, some areas showed possible impairment due to violations of criteria for iron, temperature, and dissolved oxygen. Two-thirds of the river was impaired for contact recreation due to the presence of bacteria, and the entire river was impaired for fish consumption due to polychlorinated biphenyls (PCBs) and dioxin. ORSANCO is also working to determine whether mercury in fish tissue and river water also impairs fish for consumption.



Water Resources

Water resources are all the sources of water that are useful to humans. Uses of water include agricultural, industrial, household, recreational and environmental activities. Fresh water is a renewable resource, yet the world's supply of clean, fresh water is steadily decreasing, and as the population continues to grow, so too does the demand for water. The maximum rate that water is potentially available for human use and management is often considered the best measure of the total water resources of a given region. In the Ohio River Valley, water resources include the Ohio River and its tributaries, as well as lakes, reservoirs and groundwater.

PROTECTING OUR DRINKING WATER

Over five million people rely on the Ohio River as their source of drinking water, and there is no greater need than protecting this resource for that purpose. In addition to human health and safety issues, preventing contamination at the source can be considerably less expensive than removal through treatment.

SOURCE WATER PROTECTION

ORSANCO's Source Water Protection Program is a cooperative effort among the states of Pennsylvania, Ohio, West Virginia, Kentucky, Indiana, and Illinois, which border the river. The purposes of the program are: 1) to facilitate interstate communication and coordination regarding Ohio River source water protection programs; 2) to bring together water users to enhance their understanding and appreciation of the Ohio River as a natural resource and as a nationally significant industrial and municipal corridor; 3) to understand that even small releases or discharges to the Ohio River can have significant impacts on water quality, the drinking water treatment process, and drinking water quality; and 4) to provide the opportunity for municipal and industrial water users and dischargers to meet with Ohio River drinking water utility managers.

EMERGENCY RESPONSE PROGRAM

The Ohio River is one of the most heavily industrialized rivers in the country, with a great potential for spills, accidental releases, system failures, and other incidents to compromise water quality. Pollutants that enter the Ohio River flow downstream, potentially reaching the Mississippi River and, ultimately, the Gulf of Mexico.

ORSANCO's Emergency Response Program is dedicated to protecting drinking water utilities by communicating spill reports and information. When these events happen, the Commission is alerted in several ways: incident reports submitted by the responsible party; reports of unusual water quality conditions from the public, municipal, or industrial interests; reports of detections from the Commission's Organics Detection System; and reports from drinking water utilities of unusual odors, conditions or abrupt changes in treatment needs.

Crop spraying near Newburgh Lock and Dam on the lower river

Depending on the location, composition, toxicity, and treatability of the material, ORSANCO's Emergency Response Program first notifies drinking water utility personnel. At the request of one of its member states, ORSANCO may also assist in locating or tracking the progress of a contaminant plume, recommend sampling locations and frequencies, and assist in analyzing and interpreting data. This information helps water utilities prepare for the arrival of a spill. During 2010, the Commission reviewed approximately 650 spill reports from counties along the Ohio River; however, no drinking water intakes were affected by reported spill events.

ORGANICS DETECTION SYSTEM AND ODS RENOVATION

The Organics Detection System (ODS) is a unique partnership among ORSANCO, drinking water utilities, and industries along the Ohio River and major tributaries. The ODS was developed in 1977 to protect drinking water utilities from contamination from organic chemicals. This system has been responsible for detecting, identifying and tracking numerous chemical spills and releases. The Commission recently initiated a complete upgrade and overhaul that will bring the ODS up to current technological and analytical standards.

The renovation of the Commission's ODS began in earnest in 2010 through congressionally authorized funding administered by the U.S. Environmental Protection Agency (US EPA). All ODS sites are now linked via internet, creating a unique river-wide communications network that allows direct access to all ODS instrumentation. Data can now be downloaded remotely in seconds rather than hours, with near real-time system-wide access to equipment.

The next phase will substantially increase the system's analytical and surveillance capabilities through the purchase and installation of new equipment at all ODS sites. A web interface, coupled with automated data transfer, will provide rapid notification when suspected contaminants are detected. In addition, seven priority pollutants will be added to ORSANCO's current routine monitoring list. Websites are also being created to support public education efforts and provide Ohio River utilities with near real-time monitoring and detection information.

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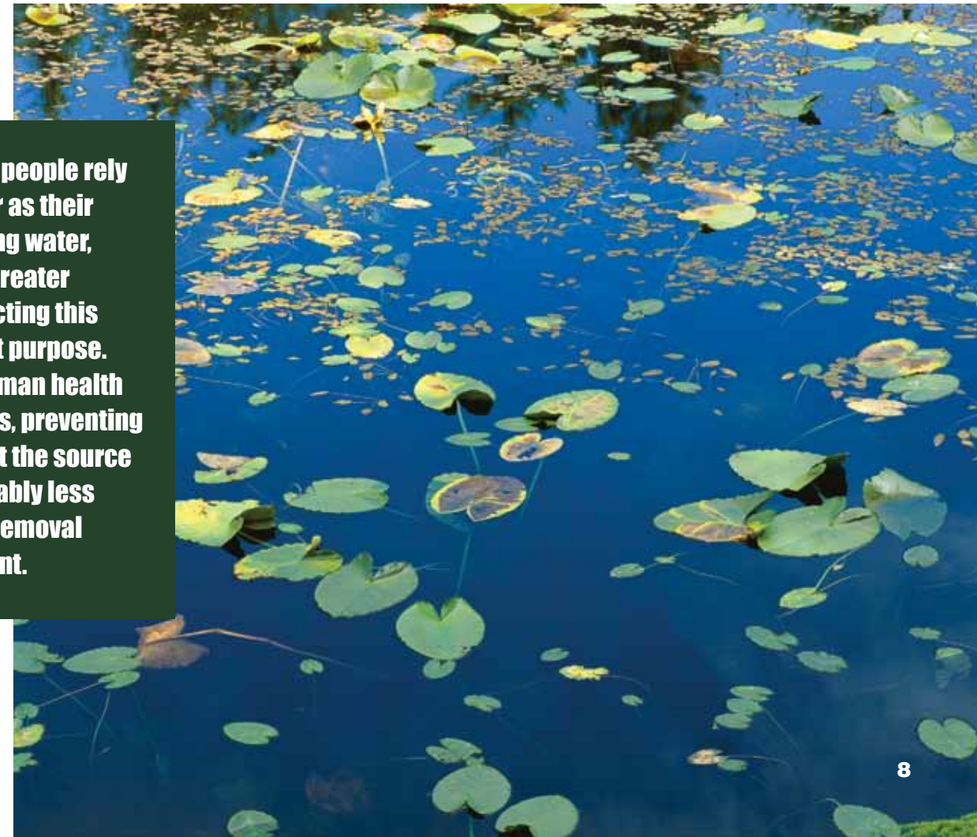


PROTECTING RECREATIONAL USE

The Commission is involved in several initiatives to assess and manage the Ohio River for recreational use. In 2010, activities included monitoring bacteria and participating in a cooperative project regarding recreation management.

CONTACT RECREATION BACTERIA MONITORING

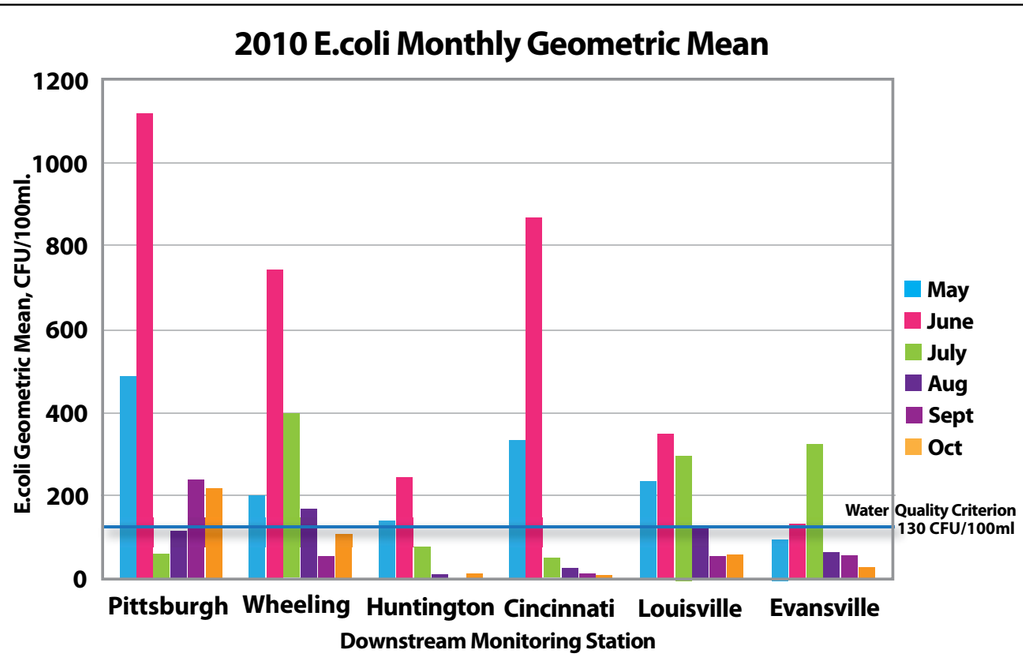
During the recreation season (May-October), ORSANCO monitors bacteria levels in six urban areas with combined sewer systems on the Ohio River. Bacteria, including *E. coli* and fecal coliform, indicate the presence of fecal contamination that can cause people to become ill after swimming, jet-skiing, or other activities in which they come in contact with the river.

As shown in the graph below, there were fewer violations during the dry summer months of 2010; however, all six urban areas were unsuitable for contact recreation for some period of the season, especially in May and June when there was frequent rainfall.

Bacteria sampling near Cincinnati

CINCINNATI RECREATION MANAGEMENT

The Cincinnati Metropolitan Sewer District is developing a tool to predict whether Ohio River conditions are suitable for contact recreation. This model, based on predicted rainfall and river flows, will be used to inform the public several days in advance if the river is considered suitable for swimming and other contact recreation activities. ORSANCO and Sanitation District No. 1 of Northern Kentucky are conducting sampling to provide the water quality data necessary to complete this project.



PROTECTING AQUATIC LIFE

The Commission's biological monitoring programs allow scientists to measure and interpret the overall health of the Ohio River's aquatic community. ORSANCO uses a two-pronged approach of fixed monitoring locations and pool-specific surveys. The Commission also analyzes certain fish species for the presence of selected contaminants.

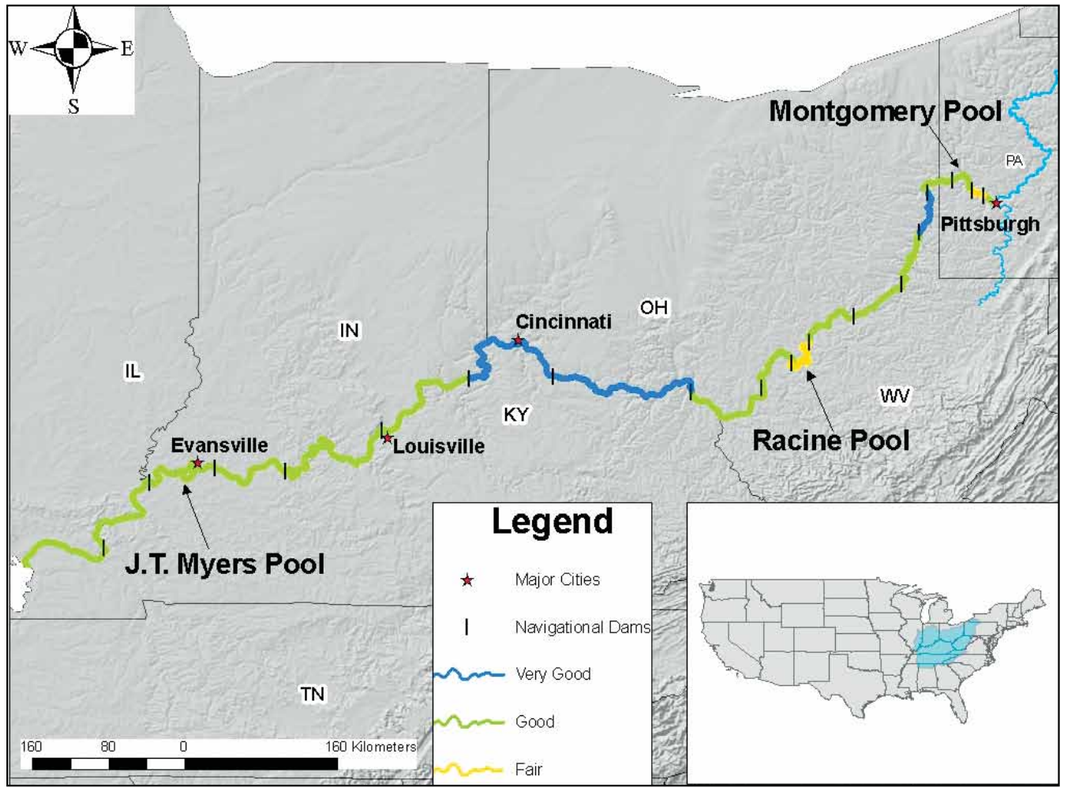
POOL ASSESSMENTS

In 2004, ORSANCO developed a long-term monitoring and assessment strategy that divides the Ohio River into 19 different "pools," sampling fish populations from 15 random sites in each. Typically, four pools are assessed each year, for a complete river-wide survey every five years. In 2010, Montgomery, Racine, and JT Myers pools were assessed. These surveys began the second round of ORSANCO's five-year rotation, allowing the Commission to compare multiple assessments of the same pools.

The results of all pool surveys since 2004 can be seen on the map. In the past year, ORSANCO developed a more accurate method to determine overall pool condition. Previously, two pools, Dashields and

American eel collected below Cannelton Locks and Dam

Montgomery, were found to be in "poor" biological condition. Using the new continuous scoring method, no pools, including the three assessed in 2010, were assessed as "poor" condition. Of the pools sampled in 2010, Montgomery and Racine were both assessed as "fair," while J.T. Myers was assessed as "good." When



Electrofishing crews observed silver carp on the lower Ohio River

compared to past surveys, Montgomery scored slightly better, while scores for both Racine and J.T. Myers decreased slightly. These differences are likely associated with annual variation and not with decreased water quality conditions, as no water quality parameters measured by ORSANCO reflected similar changes.

FISH TISSUE CONTAMINANTS

Because people consume fish from the Ohio River, ORSANCO examines fish tissue for the presence of certain contaminants that may be harmful when eaten by humans on a regular basis. Yearly results are sent to the states bordering the river. Currently, each state issues its own consumption advisories, which recommend limits on the type and amount of fish that can be safely eaten. In 2010, ORSANCO's Ohio River Fish Consumption Advisory workgroup developed a protocol for fish consumption advisories that will, when implemented by the states, provide more consistent information for people who consume Ohio River fish. At least one state has already adopted the protocol into its advisories for 2011, with other states to follow soon.

GREAT RIVERS STUDY

Since 2004, the Commission has participated in one of the most comprehensive scientific surveys ever conducted on the great rivers of the central United States. The US EPA's Environmental Monitoring and Assessment Program (EMAP) Great Rivers Ecosystems (GRE) study will provide information on the health of the Missouri, Mississippi, and Ohio rivers. ORSANCO has been instrumental in developing and implementing the GRE study. The 2010 pool surveys were recently added, making them the last to be intensively sampled as part of the program. The Commission will now focus on assessing the data and developing a final study report.

NEW AND NOTEWORTHY

To obtain a representative sample of the fish community, ORSANCO uses electrofishing to collect and record fish in different areas of the river. During the 2010 field season, electrofishing crews collected three American eels below Cannelton Locks and Dam. American eels live in freshwater but must migrate to the sea for spawning. While eels have been collected in past lock chamber surveys, 2010 marks the first time ORSANCO has encountered this species during electrofishing surveys. In addition, silver carp were identified in the J.T. Myers pool, where none had been caught in the previous survey at that location. Often referred to as flying carp, they are an invasive species that competes with native fish and presents a hazard to boaters.

ONGOING MONITORING PROGRAMS

Several of ORSANCO's ongoing monitoring programs also provide information crucial to understanding the health of aquatic life in the river.

Dissolved Oxygen and Temperature Monitoring

Because fish and other aquatic life depend on dissolved oxygen (DO) in water, ORSANCO monitors DO conditions in the Ohio River. From May through October, the Commission receives data from electronic monitors at ten navigational dams and hydropower plants. Hot, dry conditions throughout the Ohio River Valley in the summer of 2010 caused low-flow conditions, resulting in several violations of DO and temperature criteria. However, there were fewer violations compared to past low-flow years, indicating improved water quality.

Clean Metals Sampling Program

Using "clean techniques," water samples are collected bimonthly at 17 Ohio River locations and analyzed for 18 metals concentrations in both *total recoverable* and *dissolved* form. ORSANCO adopted dissolved metals criteria in 2000, because the dissolved portion of metal contaminants is more toxic and more easily taken up by organisms, and because total recoverable metals data sometimes indicated aquatic life impairment that was inconsistent with the findings of fish population studies.

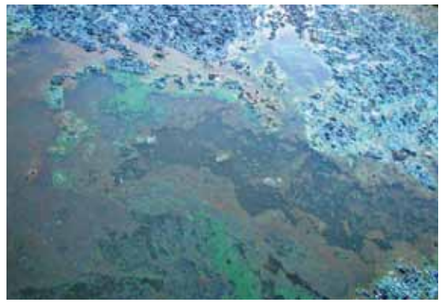
Results for 2010 indicate that no aquatic life criteria violations occurred for any of the dissolved metals. However, concentrations of total recoverable mercury and iron in several locations exceeded the most stringent criteria.

ALGAE AND NUTRIENTS

Nutrients have been identified as the third most common impairment to U.S. waters. Excess nutrients can affect all the designated uses of the Ohio River: they can cause algae-related taste and odor problems for drinking water utilities, contribute to low dissolved oxygen levels that can have a negative impact on the biological community, and produce toxins that can cause illness in people who come in contact with the water.

ALGAE

In August and September 2010, algae blooms were reported in both the upper and lower Ohio River. Drinking water utilities reported taste and odor issues and filter clogging problems, which adds to the cost of treating water. Algae problems have been reported throughout the Ohio River Basin, including the state of Ohio, where three lakes were closed to recreation due to toxic algae.



Algae on the Wabash River shoreline

NUTRIENT CRITERIA

In order to limit the problems associated with algae blooms on a national scale, US EPA has asked states to develop numeric nutrient criteria for lakes, rivers, and streams. ORSANCO is developing these criteria for the Ohio River. To support this effort, samples are collected twice per month at seven water utilities covering the upper, middle, and lower reaches of the river, and tested for both algae and nutrients. Data from other ORSANCO programs are also used in this project, including biological data and water chemistry. Draft criteria should be complete in 2011.

GULF OF MEXICO HYPOXIA

ORSANCO continued its efforts to address the role of the Ohio River Basin in the Gulf of Mexico hypoxia zone. Nutrients from the Mississippi River watershed (including the Ohio River) flowing into the Gulf contribute to the growth of algae. When these algae decay, they deplete the water of oxygen to levels that cannot fully support marine life. ORSANCO coordinates the Ohio River Sub Basin Committee of the Gulf Hypoxia Task Force. This Committee allows agricultural, conservation, and environmental agencies to collaborate in nutrient abatement efforts. In 2010, both Indiana and Kentucky joined the Task Force through the direct efforts of the Sub Basin Committee.

POTW NUTRIENT REDUCTION AND EFFICIENCY WORKSHOP

To support the goals of the Gulf of Mexico Task Force, ORSANCO and the US EPA co-sponsored the second Publically Owned Treatment Works (POTW) Nutrient Reduction and Efficiency Workshop. This three-day workshop was held in Evansville, Indiana and drew over one hundred wastewater treatment plant personnel from Illinois, Indiana, and Kentucky. The purpose of this workshop was to provide technology tools to the professionals who can best put them to use. Also attending were representatives of the Lower Mississippi River Sub Basin Committee, who were interested in applying this program in their basin.

NUTRIENT TRADING

ORSANCO is collaborating with the Electric Power Research Institute to develop a nutrient trading program for the Ohio River Basin. This program will produce water quality credits for nitrogen and phosphorus aimed at protecting watersheds at lower overall costs. It may also benefit receiving water bodies as far away as the Gulf of Mexico. This will be a first-of-its-kind interstate trading project in terms of scope and magnitude, and represents a comprehensive approach to designing and developing credit markets for nitrogen and phosphorus.

LOWER WABASH RIVER NUTRIENTS AND CONTINUOUS MONITORING PROJECT

Under a grant from The American Recovery and Reinvestment Act through the Indiana Department of Environmental Management, ORSANCO is engaged in a study of the nutrient output from the Wabash River. The study has two objectives: 1) to estimate the total annual load of total nitrogen and total phosphorous exiting the Wabash River; and 2) to determine the Wabash River's contribution to, and causes of, low dissolved oxygen in the Smithland Pool of the Ohio River.

Installing a remote telemetry unit on the Wabash River

Nutrients have been identified as the third most common impairment to U.S. waters. Excess nutrients can affect all the designated uses of the Ohio River.

RESEARCH AND SPECIAL PROGRAMS

OHIO RIVER WATERSHED POLLUTANT REDUCTION PROGRAM

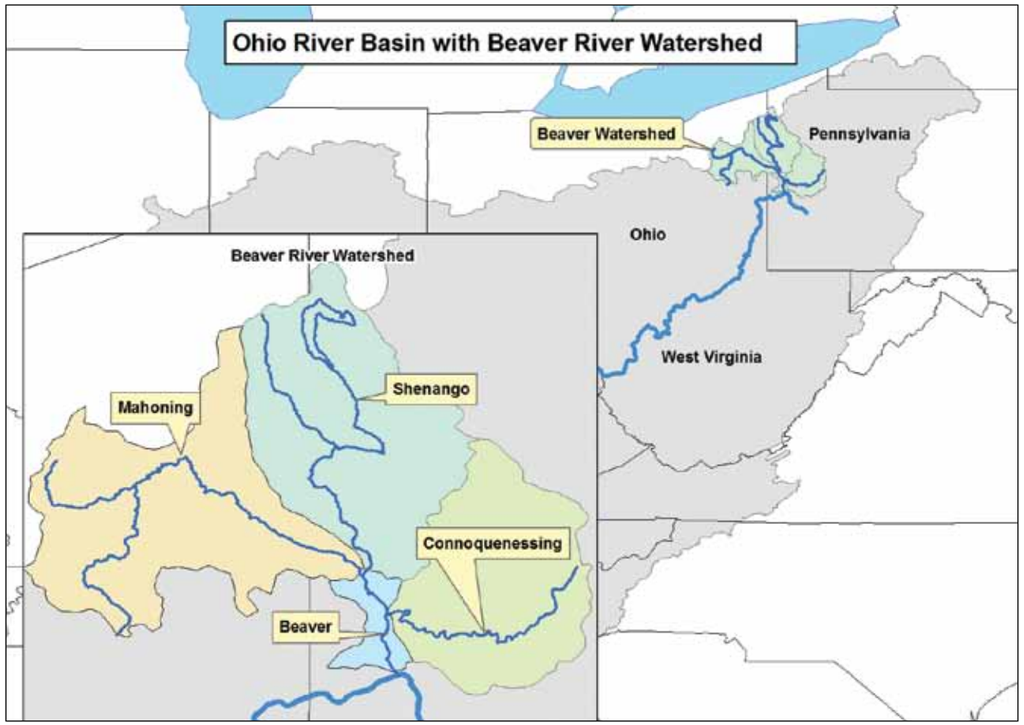
ORSANCO's Watershed Pollutant Reduction Program has been ongoing since 1995. This program was designed to characterize the extent and severity of certain pollutants in the Ohio River and develop integrated, interstate strategies to control them. Total maximum daily load analyses have been a major component of this program. Accomplishments for 2010 include completing an investigation of PCB sources in the Beaver River Basin, and a cooperative project with the US Geological Survey (USGS) to evaluate the application of microbial source tracking technologies for the Ohio River.

Beaver River Watershed PCB Investigation

The Ohio River is impaired by elevated levels of PCBs found in fish tissue and water samples. Due to the immense size of the Ohio River Basin, however, it is difficult to identify specific PCB sources. The Commission has taken a targeted approach by focusing source investigations on a sub-basin scale. The Beaver River Basin was selected for its high levels of PCBs, its manageable size, and because it is an interstate watershed. While some significant sources have been found, more unaccountable sources need to be identified. ORSANCO will provide the states with a full report for follow-up action.

Microbial Source Tracking Project

ORSANCO's water quality monitoring has shown that bacteria levels can be elevated for much of the Ohio River. Bacterial contamination, however, can come from a variety of sources, both human and animal, and understanding the nature of these sources is critical to developing effective control strategies. In an effort to better characterize bacteria sources, ORSANCO partnered with the USGS Ohio Water Science Center and The Ohio State University Research Foundation to evaluate the benefit of using genetic markers to characterize sources of fecal contamination in a complex system like the Ohio River. Over 100 samples from the Ohio River and selected tributaries were analyzed for *E. coli* and three different genetic markers. This study resulted in improved techniques for microbial source tracking methods, and confirmed that the specific markers tested in the study were suitable for human fecal source tracking. These findings should prove useful in future studies to characterize the significance of human versus non-human bacteria sources to the Ohio River.



METHYL MERCURY COOPERATIVE STUDY

In 2010, ORSANCO began a study with USGS to investigate the relationship between mercury concentrations in the water and in fish tissue, and to evaluate whether its monitoring stations adequately represent mercury levels in the river. Methyl mercury is a concern due to its accumulation in fish tissue and the potential human health effects from eating fish. Fish were collected from 12 locations on the Ohio River and analyzed for mercury concentrations in muscle tissue. Mercury concentrations in the water were analyzed for the six preceding years (at the same locations) to characterize the lifetime exposure by the fish. Study results will be reported in 2011.

ORSANCO and USGS employees collect water for methyl mercury analysis

EMERGING CONTAMINANTS

Emerging contaminants are a broad group of chemicals found in thousands of every-day consumer products, including medications, soaps, lotions, and cosmetics. There are concerns these compounds have the potential to harm humans and aquatic life when released in the environment, yet little is known about the levels of emerging contaminants in our waterways. In the past few years, widespread attention has been paid to this issue on a national scale. ORSANCO was proactive in implementing a program to monitor their presence in the Ohio River.

The Commission, in partnership with US EPA, sampled 22 locations in the Ohio River. Each sample was analyzed for a suite of compounds, including 121 pharmaceutical and personal care products, 27 hormones and sterols, and 13 perfluorinated compounds.

Emerging contaminants were detected at all sites sampled, although concentrations varied widely. Pharmaceuticals were the most commonly detected compounds, while sterols were most often found at the highest concentrations. These findings provide an initial picture of the presence of emerging contaminants in the Ohio River. Substantial additional research, however, is necessary to determine the environmental significance of these findings.

PUBLIC INFORMATION AND OUTREACH

In addition to its monitoring and assessment programs, ORSANCO provides the public with educational materials and opportunities for hands-on involvement in water quality stewardship. In 2010, ORSANCO was presented with the Earth Day Environmental Award in Government from the Greater Cincinnati Earth Coalition for demonstrating outstanding dedication to caring for the environment in the Greater Cincinnati area.

The mobile aquarium in Madison, Indiana

LIFE BELOW THE WATERLINE

Life Below the Waterline is a 2,200 gallon mobile aquarium used to demonstrate the abundant and diverse aquatic life of the Ohio River and its relationship to water quality. The aquarium showcases local fish at venues throughout the Ohio River Valley. 2010 was one of the busiest years for the aquarium since it began in 2002. The aquarium appeared in Pittsburgh, PA; Cincinnati, OH; Louisville, Owensboro, and Paducah, KY; and Madison and Mt. Vernon, IN. It is estimated that more than one million people viewed the aquarium in its first eight years.

RIVER SWEEP

Since 1989, thousands of volunteers have dedicated the third Saturday in June to cleaning the shorelines of the Ohio River and its tributaries of trash and debris. The River Sweep encompasses more than 3,000 miles of riverbank from Pittsburgh, PA to Cairo, IL and other areas of the Ohio River Basin. In 2010, despite stormy weather, more than 19,000 people participated in the event. Collected materials, such as tires, plastics, appliances, and other items, are recycled when possible or placed in approved landfills.

Prior to the Sweep, ORSANCO conducts a poster and T-shirt contest for students in kindergarten through 12th grade living within the Ohio River Basin. In 2010, the grand prize and T-shirt winners were both from West Virginia. Mickey Ratliff, Kenna, WV, was the grand prize winner and Aubrey Parson, McMechen, WV, was the T-shirt winner. Both girls were honored by Gov. Joe Manchin in a ceremony at the State Capitol in Charleston in March.

WV Governor Joe Manchin and Sweep Coordinator Jeanne Ison honor grand prize winner Mickey Ratliff.

RIVER SWEEP CORPORATE SPONSORS

Duke Energy
Toyota
AEP River Operations
AK Steel
American Commercial Lines
American Water
ArcelorMittal USA
Arch Chemicals
Babst, Calland, Clements and Zomnir, P.C.
Cargill
CSX
Dayton Power and Light
Dominion Foundations
Dow Corning Foundation
DuPont Washington Works
Duquesne Light Company
E.ON U.S.
FirstEnergy
Gallatin Steel
Illinois SCALE Grant
Kentucky American Water
Kentucky River Authority
Koppers
LaFarge
Louisville and Jefferson County MSD
Louisville Water Company
Massac County SWCD
Mead Johnson Nutrition
Neville Chemical Company
PPG Industries Foundation
Rumpke
SABIC Innovative Plastics
Sanitation District No. 1 of Northern Kentucky
Talisman Energy USA
West Virginia American Water

RIVERWATCHERS

Since 1992, ORSANCO has promoted science education and stewardship through RiverWatchers, its volunteer water quality monitoring program. In 2010, the program included 18 groups that performed chemical analyses on either the Ohio River or a tributary. All data are submitted online and posted on ORSANCO's website.

RiverWatchers includes groups in six states within the Ohio River watershed:

INDIANA:
Ivy Tech Community College, Mater Dei High School, Switzerland County High School

KENTUCKY:
Daviess County High School, Raceland High School, Worthington Elementary

NEW YORK:
Cassadaga Valley Middle/High School, Clymer Central School

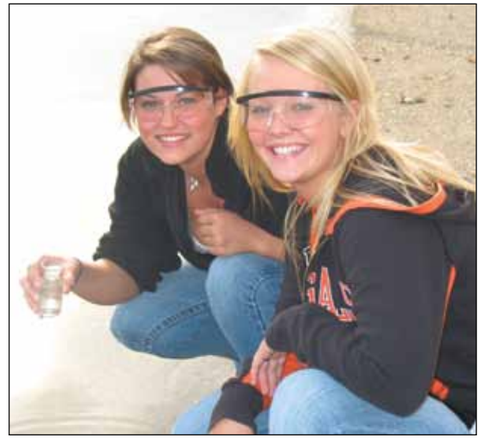
OHIO:
Cincinnati State College, Fairland High School, Kings Junior High, New Richmond High School, Private Citizen (Cincinnati, OH)

PENNSYLVANIA:
Warren County Conservation District, Woodland Hills School District

WEST VIRGINIA:
Leon Elementary, Saint Francis Xavier School, Wahama High School

FOUNDATION FOR OHIO RIVER EDUCATION (FORE)

The Foundation for Ohio River Education (formerly known as the ORSANCO Educational Foundation) was formed in 2003 as a nonprofit organization to design, manage, and raise funds for educational programs in the Ohio River Basin. In 2004, FORE purchased the PA Denny, a historic paddle wheeler, to function as a floating science classroom. The PA Denny River Education Center served thousands of students throughout the Ohio River Basin for five years. However, due to extensive wear and costly repairs, the difficult decision was made to sell the PA Denny River Education Center. The boat was purchased by a river enthusiast who is interested in preserving the 80 year-old vessel. FORE will continue delivering award-winning river education programs and is working with local riverboat companies to develop a new floating classroom program for 2011. FORE is also expanding its land-based activities to include more classroom programs and professional development opportunities for teachers.



Switzerland County High School RiverWatchers

COMMITTEES

ORSANCO employs a cooperative approach to improving water quality, working with both public and private Ohio River Basin stakeholders. The Commission seeks input from a network of committees representing various water-related interests.

WATER RESOURCES COMMITTEE

Chartered in 2010, the Water Resources Committee will guide the development of a water resources program and recommend appropriate action regarding water resources management and policy issues. Committee membership is open to all Ohio Basin states, and will include representatives from federal agencies such as the US Army Corps of Engineers and the US Geological Survey.

WATER USERS ADVISORY COMMITTEE

The oldest advisory committee, this group comprises drinking water utilities along the Ohio River and its tributaries. The committee discusses water quality issues and provides input on ways to improve the river as a source of drinking water. It also recognizes exemplary water treatment operators through ORSANCO's Registry of Distinguished Operators.

PUBLICALLY OWNED TREATMENT WORKS (POTW) ADVISORY COMMITTEE

ORSANCO's POTW Advisory Committee encompasses municipal wastewater treatment utilities along the Ohio River. It seeks to improve the operation of POTWs through technology transfer, and provides input on wastewater treatment issues. Members also recognize exemplary wastewater treatment operators through the Registry of Distinguished Operators.

POWER INDUSTRY ADVISORY COMMITTEE

Throughout its history, ORSANCO has worked with numerous industry advisory committees to find cooperative approaches to improving water quality. As the largest water user on the Ohio River, the power industry has a great reliance on water, and has been the most active industry committee in recent years.

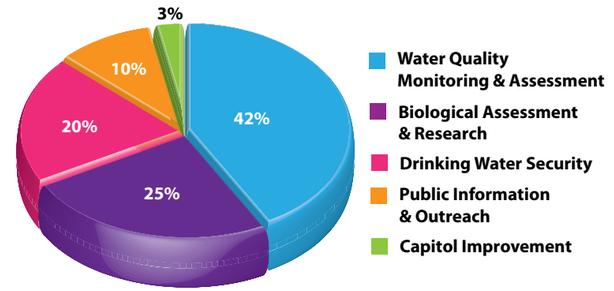
PUBLIC INTEREST ADVISORY COMMITTEE (PIACO)

PIACO members represent various river-based recreational and entertainment interests. With the perspective of those who are on the river, this committee provides valuable insight on Commission programs, including communicating issues to the public.

FINANCIAL OVERVIEW

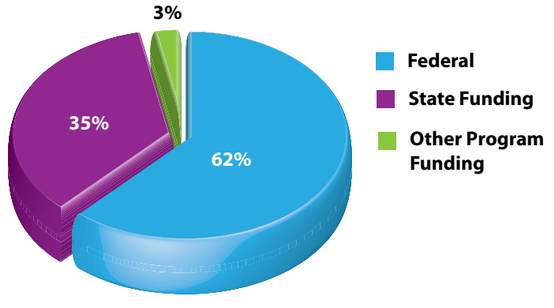
Expenditures by Major Program Area

Water Quality Monitoring & Assessment	$1,652,217
Biological Assessment & Research	$969,357
Drinking Water Security	$795,303
Public Information & Outreach	$389,660
Capitol Improvement	$99,556
TOTAL	**$3,906,093**



Revenues by Major Source

Federal	$2,366,352
State Funding*	$1,363,500
Other Program Funding	$125,555
TOTAL	**$3,855,407**



*FY 10 Shares by State:

Illinois	$ 67,200
Indiana	$262,600
Kentucky	$299,200
New York	$ 13,800
Ohio	$354,100
Pennsylvania	$177,000
Virginia	$ 48,500
West Virginia	$141,100

Detailed financial information can be found in the June 30, 2010 audited financial statements.

ORSANCO STAFF

Alan H. Vicory, Jr., P.E., BCEE, Executive Director & Chief Engineer
Peter Tennant, P.E., BCEE, Deputy Executive Director
Tracey Edmonds, Administrative Assistant

TECHNICAL PROGRAMS

Jason Heath, P.E., BCEE, Manager of Monitoring, Assessment & Standards Programs
Steve Braun, Environmental Specialist
Stacey Cochran, Environmental Specialist
Eben Hobbins, Environmental Specialist
Greg Youngstrom, Environmental Specialist

BIOLOGICAL & RESEARCH PROGRAMS

Jeff Thomas, Manager of Biological Programs
Ryan Argo, Aquatic Biologist
Rob Tewes, Aquatic Biologist

CONTRACTUAL BIOLOGICAL RESEARCH

John Spaeth, Aquatic Biologist

SOURCE WATER PROTECTION & EMERGENCY RESPONSE

Jerry Schulte, Manager of Source Water Protection & Emergency Response
Travis Luncan, Environmental Chemist
Lila Xepoleas Ziolkowski, Analytical and Environmental Chemist

WATER RESOURCES

Sam Dinkins, Projects Coordinator, Research, ORSANCO/Ohio River Users, Water Resources

PUBLIC INFORMATION PROGRAMS

Jeanne Ison, Manager of Public Information/ Education Programs
Melissa Mann, Public Information/Education Specialist
Alexandra Stevenson, Publications (Part-time)

ADMINISTRATIVE PROGRAMS & HUMAN RESOURCES

David Bailey, Director of Administration and Human Resources
Donna Beatsch, Data Processing Specialist (Part-time)
Joe Gilligan, Comptroller
Lisa Cochran, Administrative Assistant (Part-time)
John Klear, Data Systems Administrator
Matt Glazer, Maintenance (Part-time)

RECOGNIZING YEARS OF SERVICE - 2010

Jeanne Ison	25 years
David Bailey	10 years
Jeff Thomas	10 years

MEMBERS OF THE COMMISSION*

Chairman: Paul Tomes
Vice-Chairman: Charles Duritsa
Secretary/Treasurer: Kenneth Komoroski
Executive Director and Chief Engineer: Alan H. Vicory, Jr.

ILLINOIS

Douglas Scott , Director, Illinois Environmental Protection Agency
Toby Frevert
Phillip C. Morgan

INDIANA

Thomas Easterly, Commissioner, Indiana Department of Environmental Management
Joseph H. Harrison, Sr., Bowers Harrison, LLP
Vasiliki Keramida, Ph.D., President and Chief Executive Officer, Keramida Environmental, Inc.

KENTUCKY

Leonard Peters, Secretary, Kentucky Energy and Environment Cabinet
Daniel Mongiardo, Lieutenant Governor
Jeff Eger, General Manager, Sanitation District No. 1

NEW YORK

Joe Martens, Acting Commissioner, New York Department of Environmental Conservation
Douglas E. Conroe, Director of Operations, Chautauqua Institution
T. Lee Servatius

OHIO

Chris Korleski, Director, Ohio Environmental Protection Agency
Paul Tomes

PENNSYLVANIA

John Hanger, Secretary, Pennsylvania Department of Environmental Protection
Greg Phillips, District Manager/CEO, Westmoreland Conservation District
Charles Duritsa

VIRGINIA

David Paylor, Director, Virginia Department of Environmental Quality
David Johnson, Director, Department of Conservation and Recreation
Robert H. Wayland III, Virginia Water Control Board

WEST VIRGINIA

Randy C. Huffman, Cabinet Secretary, Department of Environmental Protection
David Flannery, Jackson Kelly, PLLC
Ronald R. Potesta, President, Potesta and Associates

FEDERAL

Stuart F. Bruny
Kenneth Komoroski, Partner, Kirkpatrick & Lockhart Preston Gates Ellis LLP, Pittsburgh, PA

*As of December 31, 2010

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