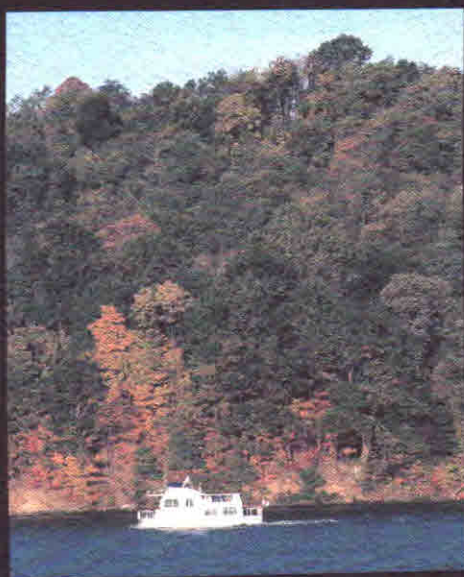


OHIO RIVER VALLEY WATER SANITATION COMMISSION



1989



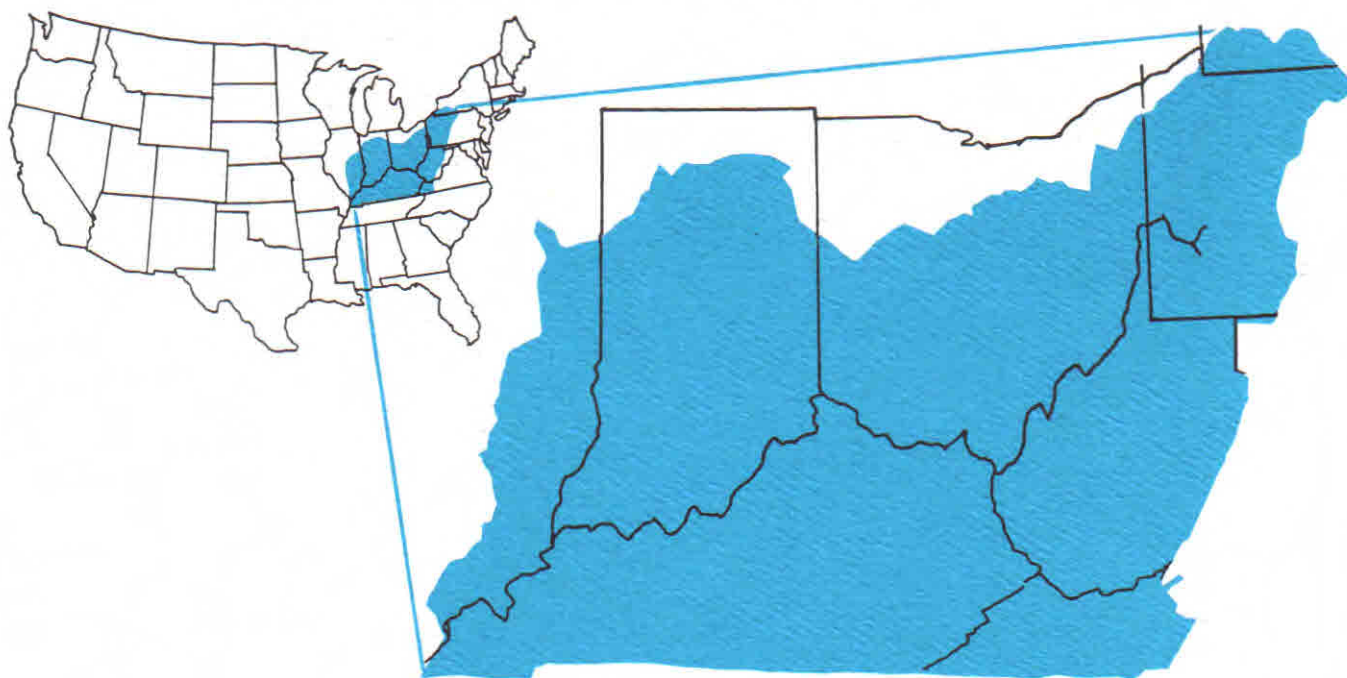
OHIO RIVER
VALLEY WATER
SANITATION
COMMISSION



TO:

THE HONORABLE JAMES R. THOMPSON, *Governor of Illinois*
THE HONORABLE EVAN BAYH, *Governor of Indiana*
THE HONORABLE WALLACE G. WILKINSON, *Governor of Kentucky*
THE HONORABLE MARIO M. CUOMO, *Governor of New York*
THE HONORABLE RICHARD F. CELESTE, *Governor of Ohio*
THE HONORABLE ROBERT P. CASEY, *Governor of Pennsylvania*
THE HONORABLE L. DOUGLAS WILDER, *Governor of Virginia*
THE HONORABLE W. GASTON CAPERTON III, *Governor of West Virginia*
AND
THE HONORABLE GEORGE H. W. BUSH, *President of the United States*

Ohio River Valley Water Sanitation Compact District



The Commissioners of the Ohio River Valley Water Sanitation Commission (ORSANCO) — an interstate compact water pollution control commission created jointly in 1948 by the State of Illinois, the State of Indiana, the Commonwealth of Kentucky, the State of New York, the State of Ohio, the Commonwealth of Pennsylvania, the Commonwealth of Virginia, and the State of West Virginia, with the approval of the Congress of the United States — respectfully submit the following report of the Commission's activities in 1989.

MEMBERS OF THE COMMISSION

ILLINOIS

Richard S. Engelbrecht, *Ph.D., Professor of Environmental Engineering, University of Illinois*
Bernard P. Killian, *Director, Illinois Environmental Protection Agency*

INDIANA

Joseph H. Harrison, *Attorney, Bowers, Harrison, Kent & Miller*
Albert R. Kendrick, Jr., *Purchasing, Production Planning & Environmental Affairs Manager, InnoPak Corporation*
Kathy Prosser, *Commissioner, Department of Environmental Management*

KENTUCKY

Carl H. Bradley, *Secretary, Natural Resources & Environmental Protection Cabinet*
Gordon R. Garner, *Executive Director, Louisville & Jefferson County Metropolitan Sewer District*
Ted R. Richardson, *President, Cardinal Laboratories*

NEW YORK

Douglas M. Anderson, *Director of Finance, City of Jamestown*
Thomas C. Jorling, *Commissioner, Department of Environmental Conservation*
Thomas A. Storch, *Ph.D., Director, Environmental Resources Center, SUNY-Fredonia*

OHIO

Lloyd N. Clausing, *Senior Engineer, Martin Marietta Energy Systems, Inc.*
Pasquale V. Scarpino, *Ph.D., Professor of Environmental Engineering, University of Cincinnati*
Richard L. Shank, *Ph.D., Director, Ohio Environmental Protection Agency*

PENNSYLVANIA

Arthur A. Davis, *Secretary, Department of Environmental Resources*
Melvin E. Hook, *Manager, Fox Chapel Authority*
Gerald C. Smith, *President, Pennsylvania-American Water Company*

VIRGINIA

Patrick L. Standing, *State Water Control Board*
W. Bidgood Wall, Jr., *State Water Control Board*
Robert C. Wininger, *State Water Control Board*

WEST VIRGINIA

Edgar N. Henry
George W. Lilley, Jr., *Ed.D., Acting Administrator, Department of Health*
Ronald R. Potesta, *President, Terradon Corporation*

UNITED STATES

Valdas V. Adamkus, *Regional Administrator, U.S. Environmental Protection Agency, Region V*
Jean M. Barren
Kathleen E. Burgoon, *Senior Instructor of Geography, Miami University*

OFFICERS

Pasquale V. Scarpino, *Ph.D., Chairman*
Gordon R. Garner, *Vice Chairman*
Albert R. Kendrick, Jr., *Secretary*
Richard L. Herd, Jr., *Treasurer*
Alan H. Vicory, Jr., *Executive Director and Chief Engineer*

LEGAL COUNSEL

Thomas D. Heekin, *Taft, Stettinius & Hollister*

MOVING INTO THE 1990's

DR. PASQUALE SCARPINO
Chairman



The Ohio River constitutes that beautiful broad gateway for commerce, industry, and people that stretches into the heart of America. It reaches for almost 1000 miles from the confluence of the Allegheny and Monongahela Rivers at Pittsburgh, Pennsylvania, to the final discharge of its bountiful waters into the Mississippi River at Cairo, Illinois.

For 42 years the Ohio River Valley Water Sanitation Commission has served its eight signatory states by implementing efficient and effective water pollution abatement programs. From its beginnings, the Commission has worked to reduce and control sources of Ohio River Basin pollution. The achievements of ORSANCO over the past years have been remarkable, but significant challenges remain and new ones have surfaced. Although basic water quality problems, such as oxygen depletion and severe bacterial contamination, have been significantly controlled and fishing and recreational activities are at an all-time high, new challenges to the Ohio River ecosystem have arisen. These challenges range from the presence of toxic substances in the river and in fish tissue to the ever-present problem of spills and accidental discharges. The contamination of fish tissue by chemicals which have been banned from general use poses a paradox, and has forced several states to issue fish consumption advisories.

In order to address these challenges, the Commission, in 1989, established a permanent Strategic Planning Committee to focus on anticipating the Commission's emerging responsibilities and guide the timely identification of program directions. Constant general review of ORSANCO's policies and programs by Commissioners will provide us with the edge needed to give the citizens of the Basin the appropriate research studies and activities necessary for the needs of our time.

Relative to the Commission's strategic planning, one program area targeted for future emphasis is information concerning the overall ecological profile of the river. The critical need for this information hindered our efforts to evaluate the impacts of a major oil spill which occurred in January, 1988.

Also, improved coordinated efforts occurred in this last year between the state and federal agencies sharing responsibility for managing the river. As an example, the first interstate cooperative "Ohio River Sweep" shoreline litter cleanup was completed on a pilot basis in a limited area bordering Ohio and Kentucky. Many eager public volunteers joined with agency personnel in the cleanup effort. Their success has led to another "Sweep" being organized for 1990 that will involve selected sites along the entire length of the Ohio River. This public display of stewardship has brought visible improvement to the aesthetics of the river.

ORSANCO's Public Interest Advisory Committee (PIACO) underwent reorganization during 1989. The citizen members provide important public input and observations to the Commission concerning water pollution control problems in the Ohio Valley. It is vital that the Commissioners be provided with an independent public view of activities, such as can be provided by PIACO.

We continued to effect improvements to our ongoing quality monitoring programs which provide crucial data on which sound technical decisions rely. These monitoring programs support our responsibilities relative to the detection, reporting and response to spills and accidental discharges, as well as the development of updated uniform wastewater discharge requirements for the Ohio River.

The protection and management of the waters in the Ohio River Basin challenge the leadership of everyone responsible for clean streams. ORSANCO, for over 40 years, has accepted that responsibility and has provided leadership that will enable us to meet both old and new challenges. Our mission is clear. Our goals are attainable and are being constantly implemented by the members of the Commission, its staff, and the large number of dedicated men and women who serve on its standing and advisory committees. It is because of this dedication and cooperation that we are confident as we move into the 1990s, that our vision of a Ohio River Basin, free from the scourge of contaminants in its waters will someday be realized.

Pasquale V. Scarpino

ORSANCO
Chairman Dr.
Pasquale Scarpino
and Information
Specialist Jeanne
Ison accept the
"Take Pride In
America" award for
the State of Ohio
from Ohio Gov.
Richard F. Celeste.
The award was
presented to
ORSANCO for the
1989 Ohio River
Sweep.



WATER QUALITY MONITORING

State and federal water pollution control programs for the Ohio River Basin are coordinated in a regional way through ORSANCO to minimize duplication of effort, achieve consistency and realize cost savings. Monitoring water quality in the Ohio River and its major tributaries is one of the principal responsibilities delegated to the Commission by its member states. In 1989, the Commission completed another decade of monitoring activities that provides the foundation for water quality assessments as well as future direction of pollution control efforts.

Table 1 summarizes the specific monitoring activities carried out by the Commission in cooperation with various state and federal agencies, water utilities and industries. Programs such as Manual Sampling, Water Users Network and Fish Surveys have existed since the 1950's and continue to provide information concerning the changing water quality conditions in the Ohio River.

The Organics Detection System (ODS), inaugurated in 1978, serves a vital role in toxic substances control and spill response by providing daily information on levels of certain organic compounds in the Ohio River and 3 major tributaries. In 1989, the Commission continued its program for upgrading the ODS instrumentation to insure reliable equipment performance and data in future years. Plans were also completed to expand the system by one station in the upper Ohio River near the Pennsylvania-Ohio border. This new ODS station will be located at Shippingport, Pennsylvania and will enhance "early warning" of spills to downstream communities such as East Liverpool and Steubenville, Ohio and Weirton, West Virginia, who use the Ohio River as a drinking water source.

To insure that information gathered in all its monitoring programs is accurate and reliable, the Commission is continuously implementing a Quality Control-Quality Assurance Program. This program received special emphasis in 1989 with the publication of an updated Quality Assurance Manual which outlines the procedures and sets standards for sampling and analysis of river water and describes the many uses for the data collected. These uses include the characterization of river conditions, both chemical and biological, identification of problems and trends, and development of more effective pollution controls. Monitoring information provides the basis for reports to the Compact member states, the federal government and the general public on the condition of the Ohio River and its tributaries.



TABLE 1 ORSANCO Monitoring Programs

MONITORING PROGRAM	PARTICIPANTS	PARAMETER	NUMBER OF STATIONS	SAMPLING FREQUENCY
Manual Sampling	WV DNR Laboratory	Physical, Chemical, Minerals, Nutrients, Trace Metals	22 Ohio River 14 Tributary	Monthly
Bacterial Contaminants	Water, Wastewater Utilities	Fecal coliform E Coli	12 Ohio River 1 Tributary	Weekly, May-Oct.
Electronic Monitor Sampling	U.S. COE Hydropower Plants	Dissolved Oxygen Temperature	8 Ohio River	Weekly, May-Oct.
Water Users Network	Water Utilities Industries	Physical, Chemical, Minerals	9 Ohio River 3 Tributary	Daily or weekly
Organics Detection System	Water Utilities Industries	22 organic compounds	10 Ohio River 3 Tributary	Daily
Fish Population Survey	State Agencies Federal Agencies	Species, number, size, weight	Locks & Dams (12 each year)	Annual
Fish Contaminant Survey	State Agencies Federal Agencies	PCBs, metals, pesticides	13 Ohio River 3 Tributary	Annual
River Information	National Weather Service	River Flows and Velocity	23 Ohio River 13 Tributary	Daily

Paula Donaghy, ORSANCO field sampler, tests the river near Wheeling.



FISH POPULATION SURVEY

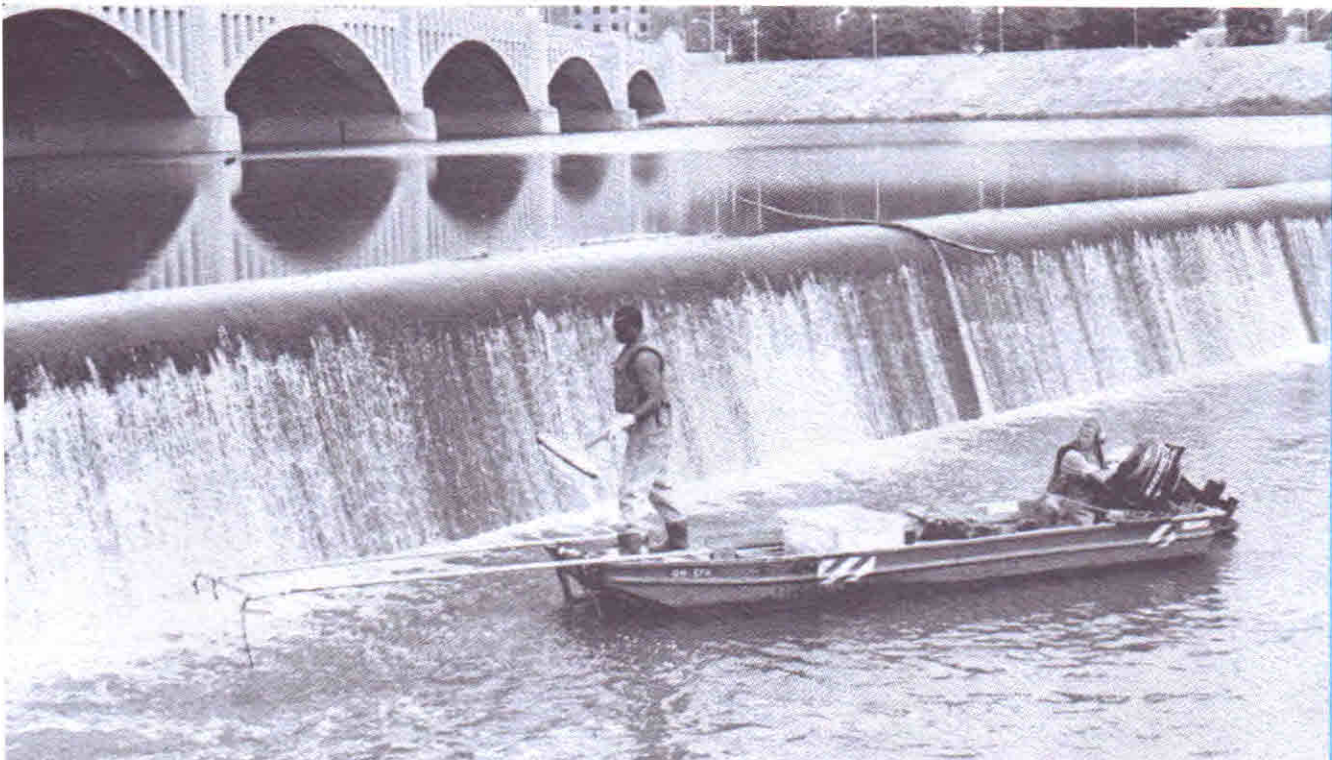
The Commission annually coordinates multi-agency fish population surveys to monitor the status of fish communities in the Ohio River and selected major tributaries. On average, 12 lock and dam sites are sampled in the fall of each year. Information gathered on the abundance, type, length, and weight of fish collected provides an indication of the health of the fish community, and thus a measure of water quality.

Approximately 70 different species of fish were collected during the 1989 survey. Over a third of these species were sport or commercial fish such as bass, panfish, walleye, sauger, drum, catfish, and buffalo. Two species collected which are of special interest are striped bass and hybrid striped bass (striped/white bass) which have been stocked in the Ohio River over the past several years for recreational purposes. In addition, these studies continue to monitor the return of paddlefish (spoonbill catfish) to the upper Ohio River.

Although fish are the most visible and prized form of aquatic life found in the Ohio River, they are only part of its complex biological community.

The ecological balance of the river depends upon numerous types of organisms, many of which are highly sensitive to changes in their environment. Planning for the assessment and monitoring of these other forms of life were initiated in 1989 with the drafting of a revised biological monitoring program for the Ohio River. Addressed in this program are: aquatic insects (macroinvertebrates), which are the primary food source for many fish species; shellfish (mussels and clams), which due to their low mobility and longevity, provide excellent information on water quality at a given location; and periphyton (green algae-type plants which grow on rocks and logs), which provide information on water quality, water clarity and the availability of plant food (nutrients) carried in the water.

The information gathered from this new program will provide further insight into the effects of water pollution control programs and the benefits derived by the biological community from improvements in water quality.



Ohio EPA demonstrates electro fishing to the Commission on the occasion of its September 1989 meeting in Columbus, Ohio.

FISH TISSUE CONTAMINANT SURVEY

Since 1975 the Commission has conducted chemical analyses on fish from the Ohio River and several tributaries to monitor levels of contaminants in tissue. The test results from these analyses are provided to the Ohio River states and reported to the public through press releases. These studies have shown the persistent presence of Polychlorinated Biphenyls (PCBs) and the pesticide chlordane in certain species at many locations throughout the river.

Fish tissue analyses conducted in 1989 showed significant levels of PCBs and chlordane in carp, channel catfish and flathead catfish. Of the 67 fish samples analyzed, 16 samples equaled or exceeded U.S. Food and Drug Administration guidelines for these two chemicals. Similar results were found for carp and channel catfish collected in 1987 and 1988 at a number of river locations. Contaminant levels in sauger and white crappie in 1989 were well below the guidelines. Levels of mercury, DDT, and other pesticides were also below regulatory guidelines in all samples tested.

States Issue Fish Advisories

In the summer of 1989, the states of Kentucky, Ohio, Pennsylvania, and West Virginia issued advisories against the consumption of certain fish species from the Ohio River, based on the Commission's data. While the issuance of consumption advisories is the responsibility of the individual states, they have recognized the need for consistency in advisories for an interstate river such as the Ohio. Beginning in 1988 and continuing through 1989, the Commission served as a forum for the coordinated development of uniform procedures relative to the advisory issuance process.

Tom Proch, Pennsylvania Department of Environmental Resources, and Staff member Jonathan McSayles categorize fish during survey.

To The Press.....

FRANKFORT, KY — Certain fish species caught in the Ohio River should not be eaten because of the potential health risk from polychlorinated biphenyls (PCBs) and/or chlordane, the state departments for Health Services, Environmental Protection and Fish and Wildlife Resources advised today...

PITTSBURGH, PA — State agencies responsible for monitoring streams and protecting public health today warned anglers not to eat bottom-feeding fish from portions of the Allegheny, Monongahela and Ohio Rivers because of chemical contamination...

COLUMBUS, OH — Ohio Department of Health Director Dr. Ronald L. Fletcher today issued an advisory against eating certain types of fish taken from specific areas along the Ohio River...

CHARLESTON, WV — West Virginia health and natural resources officials warned anglers not to eat channel catfish and carp caught in the Ohio River...

WATER QUALITY CONDITIONS

Water quality conditions in a river can be expressed in terms of support of designated uses. For each of the uses — water supply, aquatic life habitat, and water contact recreation — criteria have been established for various physical and chemical parameters which are measured through water quality monitoring activities. Three support categories are used in reporting conditions — full support, partial support, and non-support. Because the criteria for each use involve different parameters, it is possible for a specific portion of the river to fully support one use, partially support a second use, and not support a third. The Commission recently completed an assessment of Ohio River Water Quality Conditions for water years 1988 and 1989 (October 1987 through September 1989). Use support in the Ohio River for this period is shown in Figure 1. In Table 2, the parameters and pollution sources contributing to less than full support of designated uses are shown.

For the overall period, several events occurred which caused temporary deviations in use support. Two major spills early in 1988 forced closure of water supply intakes for several days. Drought conditions in the summer of 1988 resulted in elevated levels of sodium, which in several instances required the issuance of advisories by local health departments for persons on sodium-restricted diets.

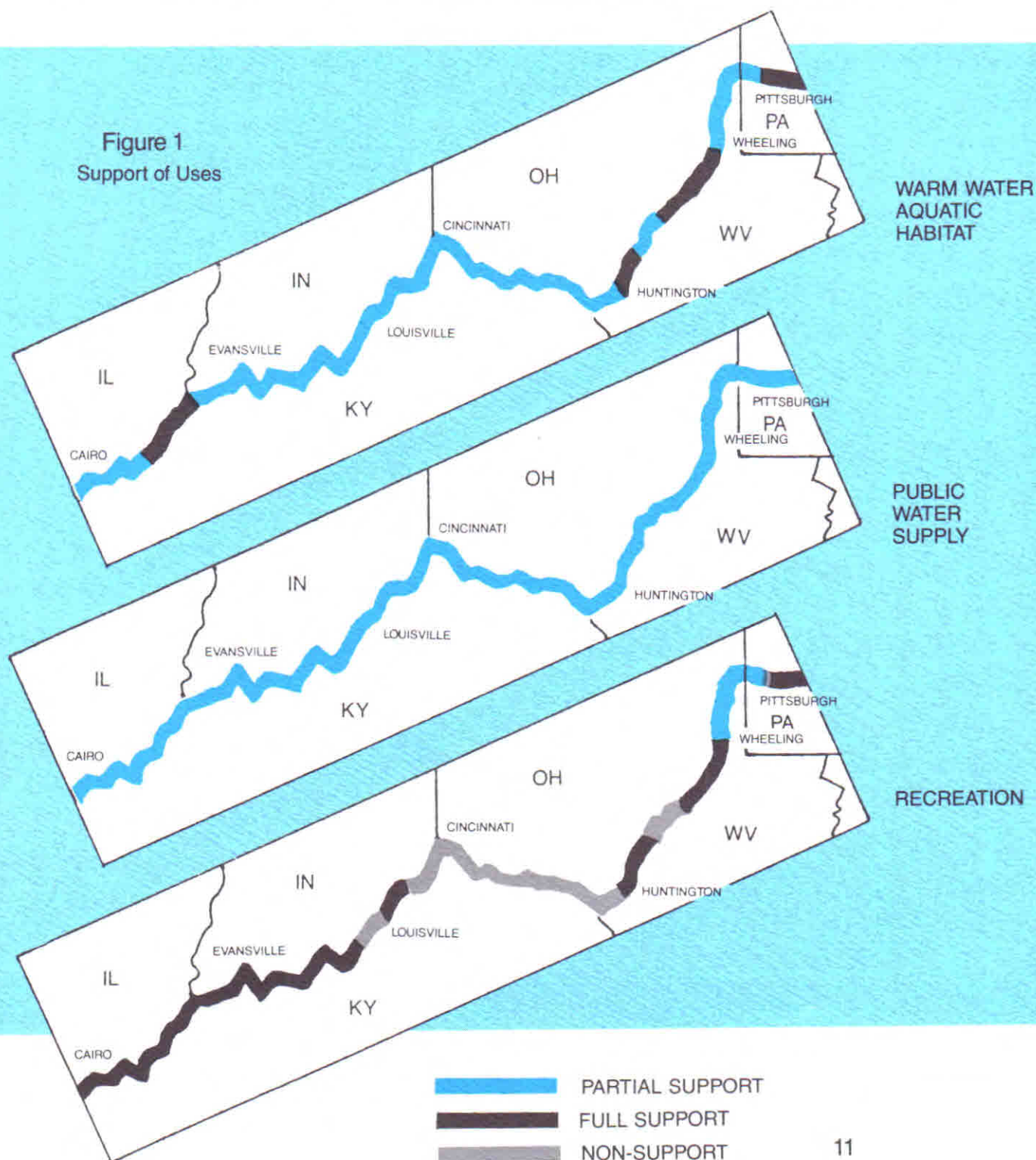
In 1989, frequent rainfall in the spring and early summer resulted in numerous overflows of sewage to the river. These overflows caused levels of bacteria to exceed criteria for water contact recreation.

All of these events — spills, drought, sewer overflows, in addition to the issuance of fish advisories, received considerable publicity. That publicity overshadowed the areas of improvement in overall river conditions. Dissolved oxygen levels, which were often a problem in the past, were well above minimum levels required for support of aquatic life throughout 1988. Phenolics, which were identified in the 1986-87 period as impairing use, did not impair use during the 1988-89 period. Cyanide, which was considered a major problem as recently as 1980, was detected in less than one-fourth of the samples analyzed. Despite the adverse events noted above, and the applications of even more rigorous criteria for water quality assessments, the Ohio River continued to substantially support its designated uses in the 1988-89 period.



TABLE 2 Parameters and Pollution Sources Contributing to Less Than Full Support of Ohio River Designated Uses*

Designated Use Impaired	Problem Pollutants	Causes
Warm Water Aquatic Habitat	Metals, Total Suspended Solids	Mine Drainage, Agriculture, Industrial/Municipal Discharges
Public Water Supply	Organic Chemicals, Chlorides	Spills, Industrial Discharges, Natural Effects
Recreation	Bacteria	Combined Sewer Overflows, Urban Runoff



*Source: Assessment of Water Quality Conditions 1988-1989

WATER QUALITY ASSESSMENT

TRENDS IN WATER QUALITY

One of the most frequently asked questions concerning Ohio River water quality conditions is, "Is the river getting better?" For years, a definitive answer to that question has not been possible. Water quality conditions are influenced by a number of factors, some natural and some man-made. Natural factors such as temperature and quantity of flow often have greater impacts than man-made factors. Statistical analysis allowing man-made influences to be separated from natural factors in assessing water quality trends has presented a difficult challenge.

The availability of 10 years of consistent and reliable data from the Commission's manual sampling program permitted an evaluation of trends to be performed in 1989. Through the application of newly-developed statistical methods, improvements in the river's water quality based on the presence of certain parameters were documented.

Of 15 parameters for which the analysis was conducted, eight showed significant improvement for the period of 1977 through 1987 at most locations while seven showed no significant trend. Parameters least affected by man-made activities, such as dissolved solids and hardness, showed little change. The parameters which showed the most improvement were those most associated with man-made factors. They include lead, zinc, copper, phenolics, ammonia nitrogen, and total phosphorus.

Results at selected locations for lead, phenolics, and ammonia nitrogen are shown in Figures 2, 3 and 4. Stream criteria are shown with the lead and phenolics results. This demonstrates that while the observed levels in the river have been decreasing, compliance with stream criteria has been affected by the adoption of more stringent stream criteria in 1987.



Figure 2 Trend of Phenolics Concentration*

South Heights, PA MP 15.2

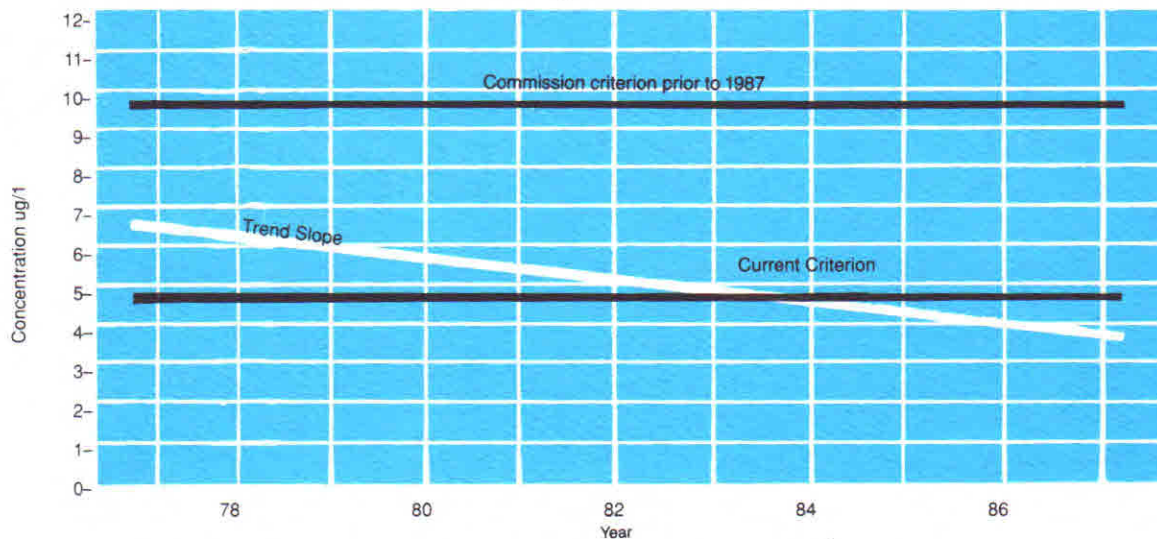


Figure 3 Trend of Ammonia Concentration*

Gallipolis L&D MP 279.2

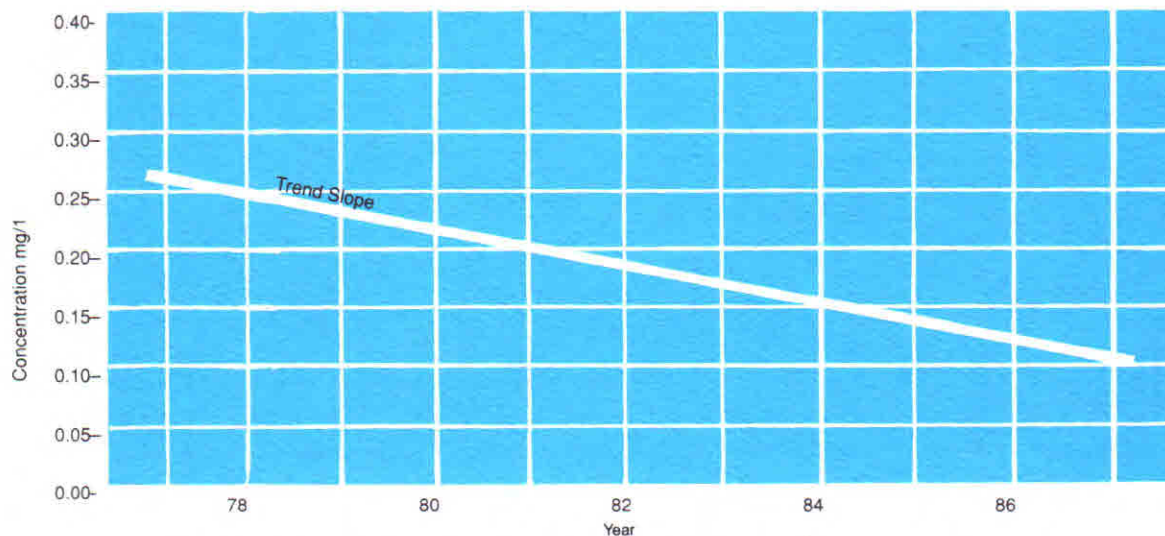
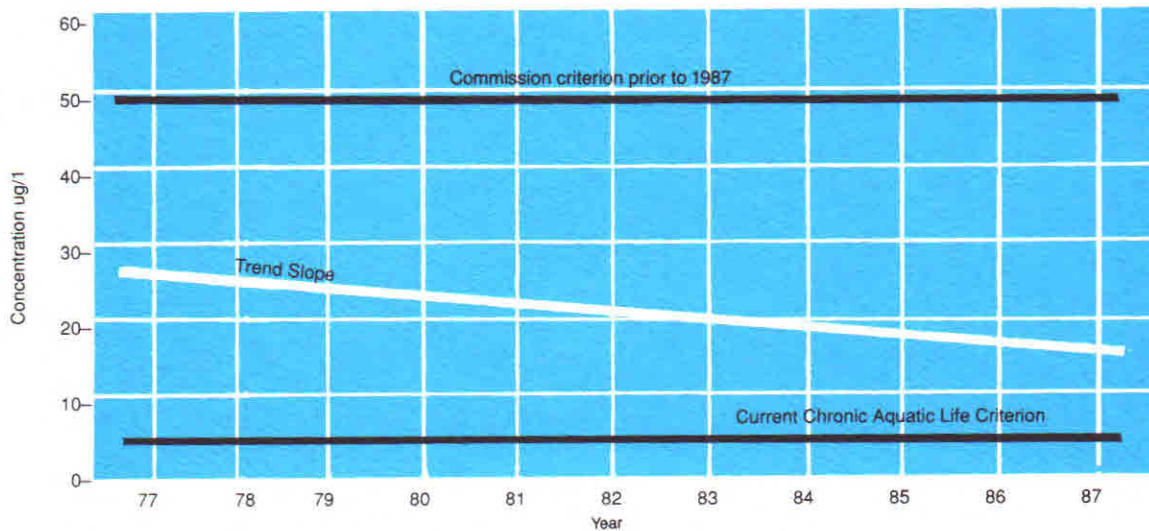


Figure 4 Trend of Lead Concentration*

West Point, KY MP 625.9



WATER QUALITY ASSESSMENT

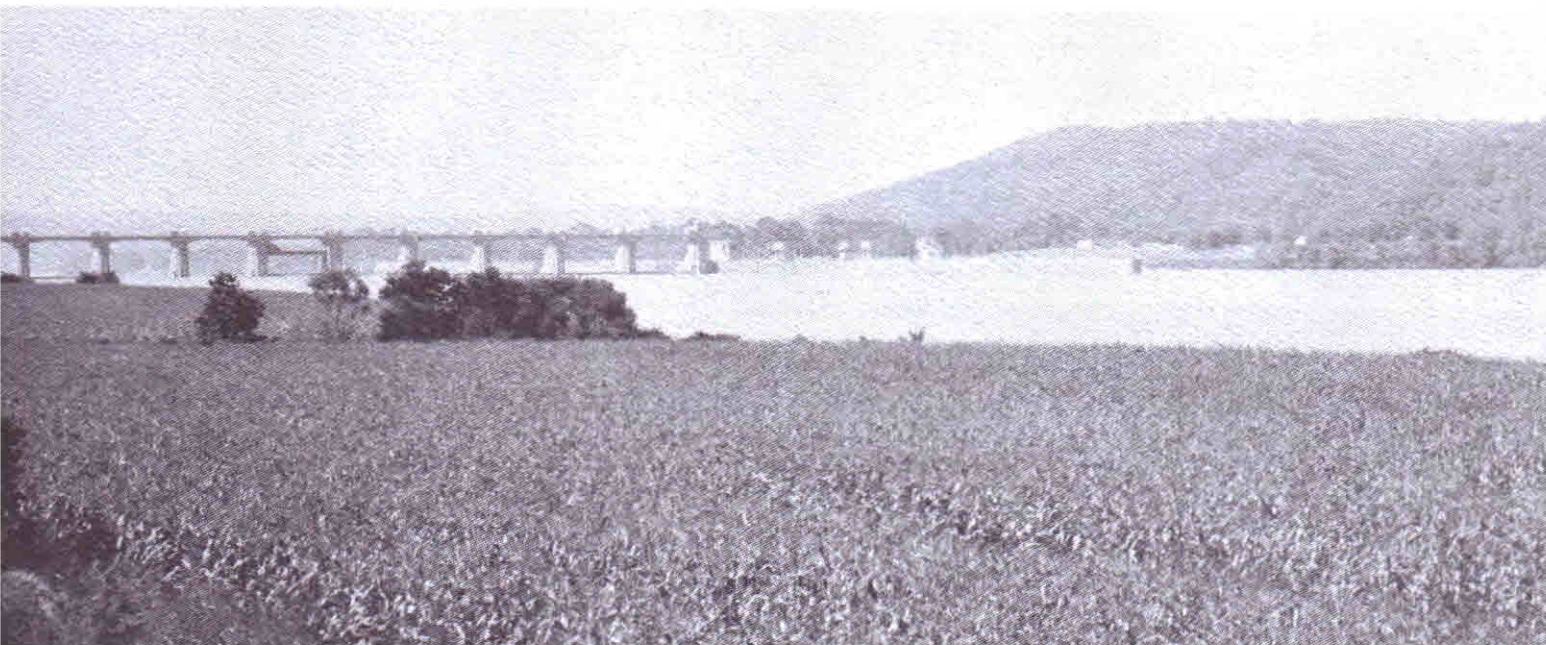
NONPOINT SOURCE POLLUTION

The term "nonpoint sources" refers to pollution sources other than direct discharges of sewage or industrial waste. Nonpoint sources include runoff from the land, contaminated ground water, precipitation (such as acid rain), and physical alteration of water bodies. As controls of pollution from sewage and industrial wastes have been achieved, the effects of nonpoint sources have become more obvious. Nonpoint sources are now recognized as one of the primary challenges to be addressed in achieving water quality goals.

In 1989, the Commission carried out an assessment of nonpoint source pollution impacts on the Ohio River. The assessment consisted of: an analysis of monitoring data to determine which parameters were affected by nonpoint sources; and a review of assessments completed by the compact states to identify the general locations of nonpoint sources.

The Commission assessment resulted in several conclusions regarding the impact of nonpoint sources. Use impairment in the Ohio River appears to be caused, in part, by nonpoint sources of arsenic, phenolics, lead, mercury, nickel, and zinc.

The most widespread nonpoint sources identified by the states were agriculture and resource extraction. Resource extraction, which includes coal mining and oil and gas drilling, was the predominant source in the upper 350 miles of the river. Agriculture was the predominant nonpoint source in the lower 350 miles. The middle portion of the river was affected by both agriculture and resource extraction.



Urban runoff was also identified as a nonpoint source affecting the Ohio River. Data analysis indicated contributions of bacteria and metals to the river from urban runoff. There is also some evidence that chlordane and PCBs found in Ohio River fish tissue are reaching the river by way of urban runoff.

The control of nonpoint source pollution will require an even greater degree of cooperative efforts among federal, state, and local agencies than was necessary for the control of point sources. The Commission, with its successful history of water pollution control through interstate and interagency cooperation, can and will contribute to the control of nonpoint source pollution in the Ohio River Basin.



Recommendations from the Commission's assessment include:

- *Establishment of goals for the reduction of nonpoint source pollution.*
- *Coordination of efforts among the states to achieve the goals established.*
- *Meeting with other interstate commissions which are implementing nonpoint source control programs to identify successful approaches.*
- *Modification of current monitoring efforts to better characterize nonpoint source impacts.*

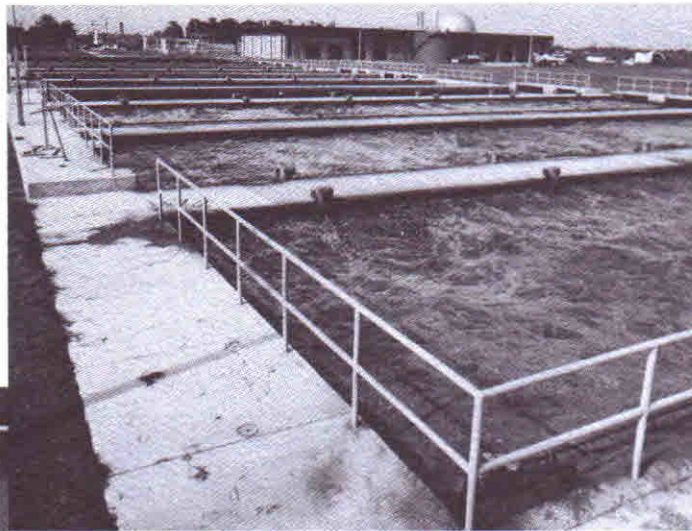
WASTEWATER TREATMENT

Since its inception, a major objective of the Commission has been to improve the level of treatment provided to wastewaters discharged to Ohio River Valley streams. Pursuant to the authorities provided in the Compact, the Commission maintains pollution control standards for dischargers to the Ohio River which are periodically updated.

In 1948, when the Commission was established, less than one percent of the municipal wastewater discharged to the Ohio River received any treatment at all. Today, over 99 percent of the wastewater discharged to the river receives secondary treatment, in compliance with ORSANCO's current pollution control standards.

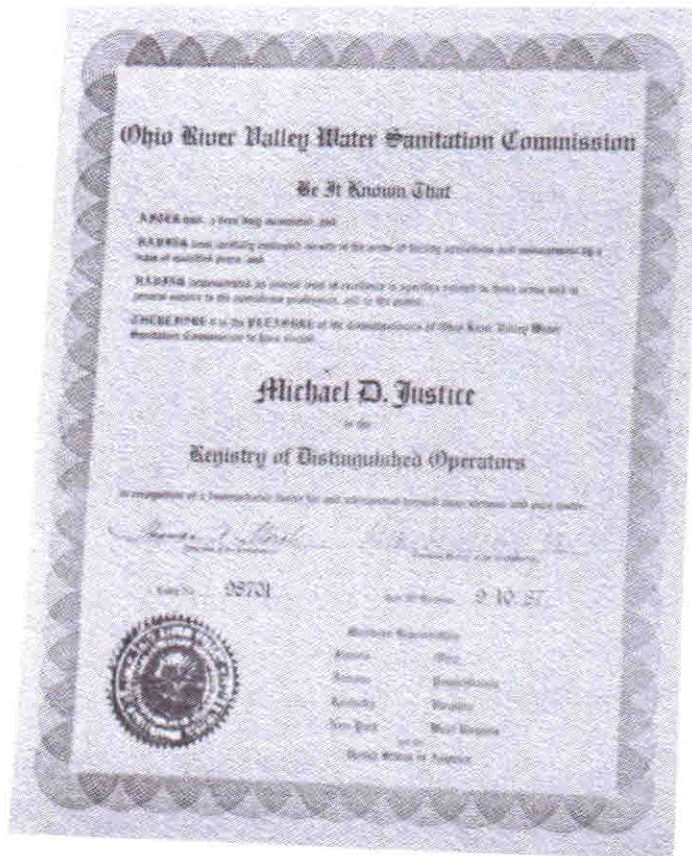
Since 1985, progress by those remaining smaller communities along the Ohio needing to construct secondary treatment plants has been particularly significant. At the beginning of 1985, 42 communities were discharging a total of 24 million gallons per day (MGD) of wastewater to the river after only primary or no treatment. By the end of 1989, the number had been reduced to 8, representing a combined flow of 2.7 MGD. This represents almost a 90 percent reduction in the volume of such discharges over the five year period.

With the construction of treatment plants along the Ohio near completion, the



Commission has broadened its concern to address their proper operation. Since 1985, certain industrial and municipal dischargers have been subject to special attention, including large volume (10 MGD or greater) discharges and those with histories of compliance problems. At each meeting of the Commission, state agency representatives report on the status of compliance of their particular discharges. While the large volume dischargers

continue to receive attention due to their potential water quality impacts, the dischargers subject to reporting due to compliance problems can change as compliance is achieved, or as new problems are identified. From 1985 to 1989, the number of discharges subject to the Commission's attention for compliance problems has been reduced by half.



REGISTRY OF DISTINGUISHED OPERATORS

In recognition of the important role of water and wastewater treatment plant operators in safeguarding the waters of the Ohio River Valley, the Commission maintains a "Registry of Distinguished Operators" to recognize the contributions of outstanding individuals in the field.

The Registry is available to operators throughout the Compact District. Nominees are selected from recommendations by regulatory agencies and professional organizations. Those nominated are then evaluated through either the Commission's Water Users Advisory Committee (water supply facilities) or Publicly Owned Treatment Works Advisory Committee (wastewater treatment facilities). A member of the appropriate advisory committee selects an evaluation team, which must include an operator with the highest certification available in the nominee's state, a utility administrator, and a professional engineer. The evaluation team visits the nominee at his or her facility, in order that both the nominee and the facility may be evaluated. On the basis of that evaluation, a recommendation is presented to the Commission.

The first member of the Registry was inducted in 1988. At the end of 1989, the following individuals had been elected to the Commission's Registry of Distinguished Operators:

Michael D. Justice, Springfield, Ohio Wastewater Treatment Facility
 Michael O. Burns, Western Pennsylvania Water Company, Pittsburgh, PA
 Joseph A. Dinkel, West View Water Authority, Pittsburgh, PA
 Phillip C. Morgan, Danville Sanitary District, Danville, IL
 Thomas W. Holbrook, West Virginia-American Water Co., Huntington, WV
 William Fleming, Fairmont Water Treatment Plant, Fairmont, WV
 Bruce McDaniel, Fairmont Wastewater Treatment Plant, Fairmont, WV

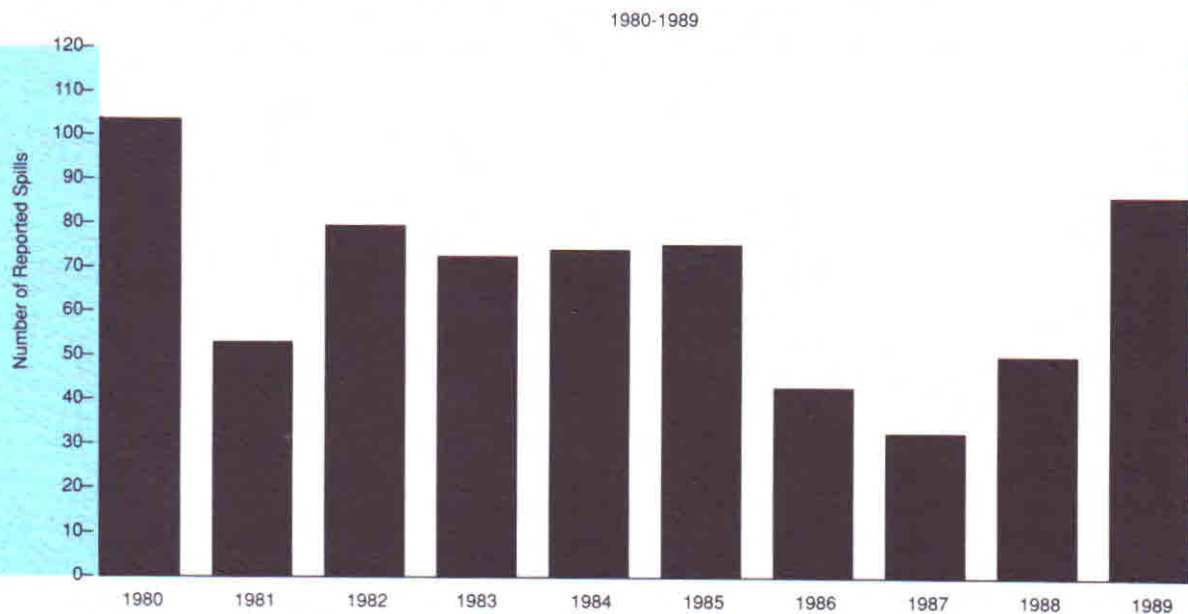
SPILL RESPONSE

Spills to the Ohio River and its tributaries present unique challenges to emergency response agencies because of potential interstate impacts, the number of water supply intakes, and the variety of commodities transported. Accidental releases can occur any time and anywhere and potentially involve a wide variety of substances. The Commission maintains communication capabilities such as a 24-hour telephone service, a fax network, and an electronic bulletin board to quickly send spill information to the appropriate state and federal agencies and downstream water utilities.

During 1989 there was a significant increase in spills reported to the Commission as shown in Table 3. The majority of these incidents involved oil or petroleum products with approximately one-third being oil sheen sightings of unknown origin. These sightings occurred primarily in the upper 500 miles of the Ohio River and dissipated rapidly with no apparent impact on water supplies or recreational activities. The increase in the number of reported spills over the last two years appears to reflect greater public and industry awareness of unusual conditions on the river.

Spill notification procedures have been established to insure early warning of releases of hazardous substances into the Ohio River and its tributaries and to facilitate coordination of response actions. In October, the Commission hosted a meeting of state and federal emergency response coordinators with jurisdiction on the Ohio River to review spill response procedures and discuss interagency issues arising from recent spill incidents. The meeting resulted in several improvements in communications systems and their utilization. In addition, an effort was initiated to take inventory of available resources for Ohio River spill response. That information will be added to the Commission's "Emergency Response Resource Manual."

TABLE 3 Number of Spills Reported to ORSANCO



OHIO RIVER SWEEP

OHIO RIVER
SWEEP

Let's keep it clean!



Ohio River water quality has been improving for many years. With that improvement comes national attention as a recreational resource along with a renaissance of economic development that has boomed on its shoreline. However, a river whose shoreline is cluttered with debris gives the impression that the water is dirty and polluted and detracts from the public enjoyment of the resource.

On Saturday, June 17, 1989, ORSANCO, in cooperation with the Ohio Department of Natural Resources and Kentucky Natural Resources and Environmental Protection Cabinet, sponsored the first Ohio River Sweep. The Sweep, a riverbank cleanup, extended from Cincinnati to Portsmouth in Ohio and from Constance to Ashland in Kentucky, approximately 150 miles. More than 1,000 volunteers participated, with thousands of pounds of trash recycled or properly disposed. Ashland Oil, Inc. and numerous local businesses provided support for the project. In 1990 the project will be expanded to include all six Ohio River states.

Volunteers work
along the Ohio
River to clean its banks.



THE YEAR IN REVIEW

Pasquale V. Scarpino of Ohio was elected Chairman and Gordon R. Garner of Kentucky was elected Vice Chairman of the Commission for the period July 1, 1989 to June 30, 1990. Albert R. Kendrick, Jr., of Indiana was elected Secretary. Richard L. Herd, Jr. of the Commission staff was elected Treasurer.

New appointments to the Commission included George W. Lilley, Jr., Acting Administrator, West Virginia Department of Health, and Kathy Prosser, Commissioner, Indiana Department of Environmental Management.

The Commission is made up of three representatives from each of the member states, who are appointed by their respective Governors and three representatives of the federal government, who are appointed by the President. Commissioners participate as a public service and receive only reimbursement for their expenses in performance of Commission-related duties.

In January 1989, a resolution was passed by the Commission to recognize the contributions of Mr. Leonard A. Weakley, who provided more than 50 years service as its legal counsel.

ADVISORY COMMITTEES

The Commission receives advice and counsel from a wide range of viewpoints through its advisory committees, each of which represents a particular river-based interest. The Water Users Advisory Committee consists of public and private utilities which use the Ohio River as a source of water supply. Industry advisory committees, such as those representing the chemical and power industries, bring together companies which use the river for industrial purposes. The Public Interest Advisory Committee (PIACO) is comprised of private citizens from the member states. The Publicly Owned Treatment Works (POTW) Advisory Committee represents wastewater treatment departments or districts in the Ohio Valley. All advisory committee members serve on a voluntary basis.



PUBLICATIONS

Publications are developed to provide information regarding the Commission's water pollution control programs. Charges for publications are levied to cover production and mailing costs. These charges are waived when requests are from government agencies or non-profit organizations. In 1989, the following publications were produced:

ORSANCO - 1988

Annual Report of activities during 1988 (22 pages, no charge)

QUALITY MONITORS

Quarterly publications of data summaries from the Manual Sampling Program, Water Users System and the Organics Detection System (January-March, April-June, July-September, October-December) (no charge)

EMERGENCY RESPONSE DIRECTORY

A compilation of instructions concerning the appropriate agencies to notify when a spill or accidental discharge occurs on the Ohio River or a tributary (8 pages, no charge)

THE ORSANCO OUTLOOK

A newsletter published periodically with general information on water quality conditions and the status of Commission programs (no charge)

QUALITY ASSURANCE MANUAL

Outlines the procedures and sets standards for sampling and analysis of river water (cost for reproduction)

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Chief Engineer*

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Information Specialist

JEANNE JAHNIGEN ISON

Administrative Assistant

MARILYN P. KAVANAUGH

Program Managers:

Administration

RICHARD L. HERD, JR.

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Water Quality Programs

PETER A. TENNANT

Senior Environmental Engineer

CHRISTIAN G. NORMAN

Environmental Engineer

JASON P. HEATH

Coordinator of Field Operations

JERRY G. SCHULTE

Environmental Chemist

JONATHAN MCSAYLES

Computer Operations Specialist

DONNA M. CARROLL

Secretaries

BARBARA A. HORTON

SANDRA L. JONES

The following financial information was extracted from the
Annual Audit Report of Hall & Associates
Certified Public Accountants
for the year ending June 30, 1989

STATEMENT OF ACCRUED REVENUES AND EXPENSES YEAR ENDING JUNE 30, 1989

Revenues:	
Signatory States	
State of Illinois	\$ 34,510
State of Indiana	128,710
Commonwealth of Kentucky	147,900
State of New York	7,180
State of Ohio	174,950
Commonwealth of Pennsylvania	96,200
Commonwealth of Virginia	24,920
State of West Virginia	<u>75,780</u>
Total — Signatory States	\$ 690,150
U.S. EPA: Water Pollution Control Grant	377,274
Pennsylvania 205(j) Contract	26,216
Other Revenues	<u>7,175</u>
Total Revenues	\$1,100,815
Expenses	(1,130,599)
Excess of Revenues Over Expenses	<u>\$ (29,784)</u>

STATEMENT OF RESOURCES AT JUNE 30, 1989

Cash	\$ 159,505
Deposits and Advances	1,096
Accounts Receivable	
U.S. EPA — Water Pollution Control Grant	\$ 62,098
Pennsylvania — 205(j) Contract	25,938
Total Accounts Receivable	<u>\$ 88,036</u>
Subtotal	\$ 248,637
Less:	
Accounts Payable	\$(103,218)
Compliance Account	(40,455)
Special Account	(97,865)
Resources Available — June 30, 1989	<u>\$ 7,099</u>
Resources Available — Beginning of Year	\$ 36,883
Excess of Revenue Over Expenses	<u>(29,784)</u>
Resources Available — End of Year	<u>\$ 7,099</u>

The following information was extracted from the
Annual Actuarial Report of Mercer-Meidinger-Hanson, Inc.
for the year ending September 30, 1989

STATEMENT OF RESOURCES AND ANNUAL DISBURSEMENTS EMPLOYEES' PENSION TRUST FUND

Pension Fund Value — October 1, 1988	\$ 971,881
Contributions in Accordance with Actuarial's Report	20,000
Fund Earnings and Change in Market Value	93,227
Disbursements for Year Ending September 30, 1989	<u>(54,833)</u>
Pension Trust Fund Value — September 30, 1989	<u>\$1,030,275</u>

**REGULATORY
AGENCIES
OF THE
SIGNATORY
STATES**

ILLINOIS

Division of Water Pollution Control
Environmental Protection Agency
2200 Churchill Road
Springfield, Illinois 62706

INDIANA

Department of Environmental Management
105 S. Meridian Street
Indianapolis, Indiana 46225

KENTUCKY

Division of Water
Natural Resources and Environmental
Protection Cabinet
18 Reilly Road
Frankfort, Kentucky 40601

NEW YORK

Division of Water
Department of Environmental Conservation
50 Wolf Road
Albany, New York 12233

OHIO

Division of Water Pollution Control
Environmental Protection Agency
Post Office Box 1049
Columbus, Ohio 43266-0149

PENNSYLVANIA

Bureau of Water Quality Management
Department of Environmental Resources
Post Office Box 2063
Harrisburg, Pennsylvania 17120

VIRGINIA

State Water Control Board
Post Office Box 11143
Richmond, Virginia 23230

WEST VIRGINIA

Division of Water Resources
Department of Natural Resources
1201 Greenbrier Street
Charleston, West Virginia 25311

OHIO RIVER VALLEY WATER SANITATION COMMISSION



OHIO RIVER VALLEY WATER SANITATION COMMISSION
49 East Fourth Street • Suite 815
Cincinnati, Ohio 45202 (513) 421-1151