

# **US EPA ARCHIVE DOCUMENT**



# **Interstate Commission Summaries**

Interstate Commissions provide a forum for joint administration of large waterbodies that flow through or border multiple States and other jurisdictions, such as the Ohio River and the Delaware River and Estuarine System. Each Commission has its own set of objectives and protocols, but the Commissions share a cooperative framework that embodies many of the principles advocated by EPA's watershed management approach. For example, Interstate Commissions can examine and address factors throughout the basin that contribute to water quality problems without facing obstacles imposed by political boundaries. The information presented here summarizes the data submitted by three Interstate Commissions in their 1996 Section 305(b) reports.



# **Delaware River Basin Commission**



Basin Boundaries (USGS 6-Digit Hydrologic Unit)

For a copy of the Delaware River Basin Commission 1996 305(b) report, contact:

### **Robert Kausch**

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### Surface Water Quality

The Delaware River Basin covers portions of Delaware, New Jersey, New York, and Pennsylvania. The Delaware River system consists of a 206-mile freshwater segment, an 85-mile tidal reach, and the Delaware Bay. Nearly 8 million people reside in the Basin, which is also the home of numerous industrial facilities and the port facilities of Philadelphia, Camden, and Wilmington.

All of the riverine waters and over 87% of the estuarine waters in the Basin have good water quality that fully supports aquatic life uses. Over 26% percent of the riverine waters do not fully support fish consumption. All riverine waters fully support swimming. In estuarine waters, poor water quality impairs shellfishing in over 14% of the surveyed waters. Low dissolved oxygen concentrations and toxic contaminants in sediment degrade portions of the lower tidal river and estuary. Toxic contaminants and metals impair a portion of the Delaware River. Shellfishing advisories affect 96 square miles of the Delaware Bay.

In general, water quality has improved since the 1994 305(b) assessment period. Tidal river oxygen levels were higher during the critical summer period, and the level of pH and fecal coliforms dropped slightly in some nontidal sections.

### Programs to Restore Water Quality

The Commission's Toxics Management Program is designed to identify the substances (and their sources) that impair fish consumption, aquatic life, and drinking water. Further, the relative contribution of point and nonpoint sources to the pollution loading in the tidal reach of the river is being addressed by a 3-year study of combined sewer overflows. The DRBC and the States have carried out an aggressive program for many years to reduce point soures of oxygen-demanding materials and other pollutants and will continue to do so. As part of an ongoing effort to provide more support for fish and aquatic life, the Commission is developing a new model to evaluate the impacts of point and nonpoint pollutants on dissolved oxygen levels. The **Commission's Special Protection** Waters regulations protect existing high water quality in the upper reaches of the nontidal river from the effects of future population growth and land development. A comprehensive watershed management approach to pollution control in this area will eliminate the occasional occurrence of elevated levels of pH, bacteria, contaminants, nutrients, and BOD.

# Programs to Assess Water Quality

The Commission conducts an intensive monitoring program along the entire length of the Delaware River and Estuary. At least a dozen parameters are sampled at most stations, located about 7 miles apart. The new Special Protection Waters regulations requires more comprehensive monitoring and modeling, such as biological monitoring and continuous water quality monitoring. The Combined Sewer Overflow Study and the Toxics Study have used specialized water sampling programs to acquire data for mathematical models. New management programs will very likely require customized monitoring programs.

### Individual Use Support in the Delaware River Basin





<sup>a</sup> A subset of the Delaware River Basin Commission's designated uses appear in this figure. Refer to the Commission's 305(b) report for a full description of the Commission's uses.

# Interstate Sanitation Commission



 Basin Boundaries (USGS 6-Digit Hydrologic Unit)

For a copy of the Interstate Sanitation Commission 1996 305(b) report, contact:

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# Surface Water Quality

Established in 1936 by Federal mandate, the Interstate Sanitation Commission (ISC) is a tristate environmental agency of the States of New Jersey, New York, and Connecticut. The Interstate Sanitation District encompasses approximately 797 square miles of estuarine waters in the Metropolitan Area shared by the States, including the Arthur Kill/ Kill Van Kull, Newark Bay, Lower Hudson River, Raritan Bay, Sandy Hook Bay, Upper and Lower New York Bays, western Long Island Sound, and the Atlantic Ocean.

Notwithstanding the significant environmental gains that have been

made in recent years, a tremendous amount of work remains to be done. In the past several years, due to a great degree to ISC's year-round disinfection requirement, which went into effect in 1986, thousands of acres of shellfish beds have been opened on a year-round basis and, during the last six bathing seasons, only a few beach closings occurred due to elevated levels of coliform bacteria or washups of debris. However, due to a combination of factors, including, but not limited to, habitat loss, hypoxia, and overfishing by commercial and recreational interests, bag limits and minimum size restrictions for several finfish species (i.e., black sea bass and porgy) were promulgated by the coastal States.

Topics of concern to the ISC include compliance with ISC regulations, toxic contamination in District waters, pollution from combined sewer overflows, closed shellfish waters, and wastewater treatment capacity to handle growing flows from major building projects.

### Ground Water Quality

The ISC's primary focus is on surface waters shared by the States of New Jersey, New York, and Connecticut.

### Programs to Restore Water Quality

The ISC actively participates in the Long Island Sound Study, the New York-New Jersey Harbor Estuary Program (HEP), the New York Bight Restoration Plan, and the Dredged Material Management Plan for the Port of New York and New Jersey. The ISC has representatives on the Management Committees and various workgroups for each program. During the 1994-1995 reporting period, approximately 2.5 BGD of treated sewage discharged in the Interstate Sanitation District received secondary treatment. Yet to be addressed are the untreated discharges from combined sewer overflows and storm sewers.

The Commission's water pollution abatement programs continue to provide assistance for the effective coordination of approaches to regional problems. ISC's long-standing goal of making more areas available for swimming and shellfishing remains a high priority. The Commission's programs include enforcement, minimization of the effects of combined sewers, participation in the National Estuary Program, compliance monitoring, pretreatment of industrial wastes, toxics contamination, land-based alternatives for sewage sludge disposal, ocean disposal of dredged material, and monitoring the ambient waters.

### Programs to Assess Water Quality

The ISC performs intensive ambient water quality surveys and samples effluents discharged by publicly owned and private wastewater treatment facilities and industrial facilities into District waterways. The ISC's effluent requirements are incorporated into the individual discharge permits issued by the participating States.

### Individual Use Support in Interstate Sanitation Commission Waters

		Percent				
Designated Use <sup>a</sup>		Good (Fully Supporting)	Good (Threatened)	Fair (Partially Supporting)	Poor (Not Supporting)	Poor (Not Attainable)
Estuaries (T	otal Square	Miles = 72	2)			
	Total Miles Assessed					
5)2("	-	-	-	-	-	-
		-	-	-	-	-
		-	-	-	-	

- Not reported in a quantifiable format or unknown.

<sup>a</sup> A subset of the Interstate Sanitation Commission's designated uses appear in this figure. Refer to the Commission's 305(b) report for a full description of the Commission's uses. Note: All waters under the jurisdiction of the Interstate Sanitation Commission are estuarine.

# Ohio River Valley Water Sanitation Commission (ORSANCO)



 Basin Boundaries (USGS 6-Digit Hydrologic Unit)

For a copy of the ORSANCO 1996 305(b) report, contact:

### Jason Heath

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### Surface Water Quality

The Ohio River Valley Water Sanitation Commission (ORSANCO) was established in 1948 by the signing of the Ohio River Valley Water Sanitation Compact by Illinois, Indiana, Kentucky, New York, Ohio, Pennsylvania, Virginia, and West Virginia. ORSANCO is an interstate agency with multiple responsibilities that include detecting interstate spills, developing waste treatment standards, and monitoring and assessing the Ohio River mainstem. The mainstem runs 981 miles from Pittsburgh, Pennsylvania, to Cairo, Illinois.

The most common problems in the Ohio River are PCB and chlordane contamination in fish and bacteria, pesticides, and metals in the water column. The States have issued fish consumption advisories along the entire length of the Ohio River based on ORSANCO data. ORSANCO also suspects that community combined sewer overflows along the entire length of the river elevate bacteria levels and impair swimming. ORSANCO detected bacteria contamination at all seven monitoring stations downstream of major urban areas with a large number of CSOs.

A majority of Ohio River manual sampling stations exhibited one to several violations of the chronic warm water aquatic life criterion for lead. Sporadic violations for ammonia, chromium, copper, zinc, and nickel for selected waters, in conjunction with lead violations, resulted in a moderately supporting aquatic life use classification for the Markland Pool.

Public water supply use of the Ohio River is impaired by 1,2dichloroethane near Paducah and by atrazine near Louisville and the mouth of the River at Grand Chain, Illinois. The extent of atrazine contamination is unknown because few sites are monitored for atrazine.

### **Ground Water Quality**

ORSANCO does not have jurisdiction over ground water in the Ohio River Basin.

### Programs to Restore Water Quality

In 1992, an interagency workgroup developed a CSO program for the Ohio River Basin with general recommendations to improve coordination of State CSO strategies. In 1993, ORSANCO added requirements for CSOs to the Pollution Control Standards for the Ohio River and the Commissioners adopted a strategy for monitoring CSO impacts on Ohio River guality. The Commission also established a Nonpoint Source Pollution Abatement Task Force composed of ORSANCO Commissioners, representatives from State NPS control agencies, and representatives from industries that generate NPS pollution.

In 1995, an Ohio River Watershed Pollutant Reduction Program was established to address, on a whole-watershed basis, pollutants causing or contributing to water quality impairments. These pollutants include dioxin, PCBs, chlordane, atrazine, copper, lead, nitrogen, and phosphorous. The objective of the program is to determine the extent of impairment, identify sources, quantify impacts, and recommend to the States abatement scenarios necessary to achieve water quality objectives. The program is being implemented following a phased approach without the establishment of new regulatory structures to implement controls that are environmentally meaningful, technically sound, and economically reasonable.

### Individual Use Support in the Ohio River Valley Basin



Not reported in a quantifiable format or unknown.

<sup>a</sup> A subset of ORSANCO's designated uses appear in this figure. Refer to the Commission's 305(b) report for a full description of the Commission's uses.

### Programs to Assess Water Quality

ORSANCO operates several monitoring programs on the Ohio River mainstem and several major tributaries, including fixed-station chemical sampling, daily sampling of volatile organic chemicals at water supply intakes, bacterial monitoring, fish tissue sampling, and fish community monitoring. ORSANCO uses the Modified Index of Well Being (MIwb) to assess fish community characteristics, such as total biomass and species diversity. ORSANCO is currently developing a numerical biological criteria.