

US EPA ARCHIVE DOCUMENT

Ed Carney, Fall River Lake, Greenwood County, KS



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 four Interstate Commissions in their 1998 Section 305(b) reports.

Section 305(b) of the CWA requires that the states biennially assess their water quality for attainment of the fishable and swimmable goals of the Act and report the results to EPA. The states, participating tribes, and other jurisdictions measure attainment of the CWA goals by determining how well their waters support their designated beneficial uses. EPA encourages states, tribes, and other jurisdictions to assess waterbodies for

support of the following individual beneficial uses:



Aquatic Life Support

The waterbody provides suitable habitat for protection and propagation of desirable fish, shellfish, and other aquatic organisms.



Fish Consumption

The waterbody supports fish free from contamination that could pose a human health risk to consumers.



Shellfish Harvesting

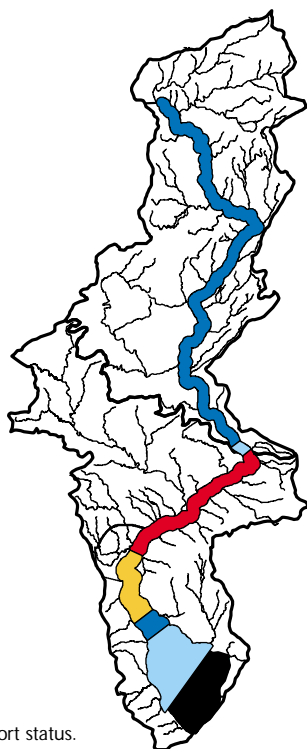
The waterbody supports a population of shellfish free from toxicants and pathogens that could pose a human health risk to consumers.



Primary Contact Recreation – Swimming

People can swim in the waterbody without risk of adverse human health effects (such as catching waterborne diseases from raw sewage contamination).

Delaware River Basin Commission



— Fully Supporting
 — Threatened
 — Partially Supporting
 — Not Supporting
 — Not Assessed
 — Basin Boundaries
 (USGS 6-Digit Hydrologic Unit)

This map depicts aquatic life use support status.

All of the riverine waters and over 17% 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. Poor water quality impairs shellfishing in over 14% of estuarine assessed 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 uses received less support during the current reporting period than the previous one. Most of the decreases occurred in the tidal freshwater areas and in Delaware Estuary. Bacterial levels in the tidal freshwater areas were higher, and oxygen levels in both areas were reduced.

Programs to Restore Water Quality

The Delaware River Basin Commission and the states have carried out an aggressive program for many years to reduce point sources of oxygen-demanding materials and other pollutants and will continue to do so. As part of an ongoing effort, DRBC is developing a new model to evaluate the impacts of point and nonpoint pollutants on dissolved oxygen levels.

The Commission has completed Phase 1 of the Estuary Toxics Management Program, which is an interstate cooperative effort to develop water quality criteria, as well as policies and procedures, that

For a copy of the Delaware River Basin Commission 1998 305(b) report, contact:

Robert Kausch
 Delaware River Basin Commission
 P.O. Box 7360
 West Trenton, NJ 08628-0360
 (609) 883-9500, ext. 252
 e-mail: bklausch@drbc.state.nj.us

Also available on DRBC's website at <http://www.state.nj.us/drbc>

Surface Water Quality

The Delaware River Basin covers portions of Delaware, New Jersey, New York, and Pennsylvania. For purposes of the 305(b) report, the Delaware River Basin Commission (DRBC) has jurisdiction over the Delaware River system, which consists of a 206-mile freshwater segment, an 85-mile tidal reach, and the 782-square-mile 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.

will set wasteload allocations and effluent limits for point sources of volatile organics and chronic toxicity. Phase 2 of this program involves the development of wasteload allocations, nonpoint source load allocations, and TMDLs for PCBs, metals, and chlorinated pesticides.

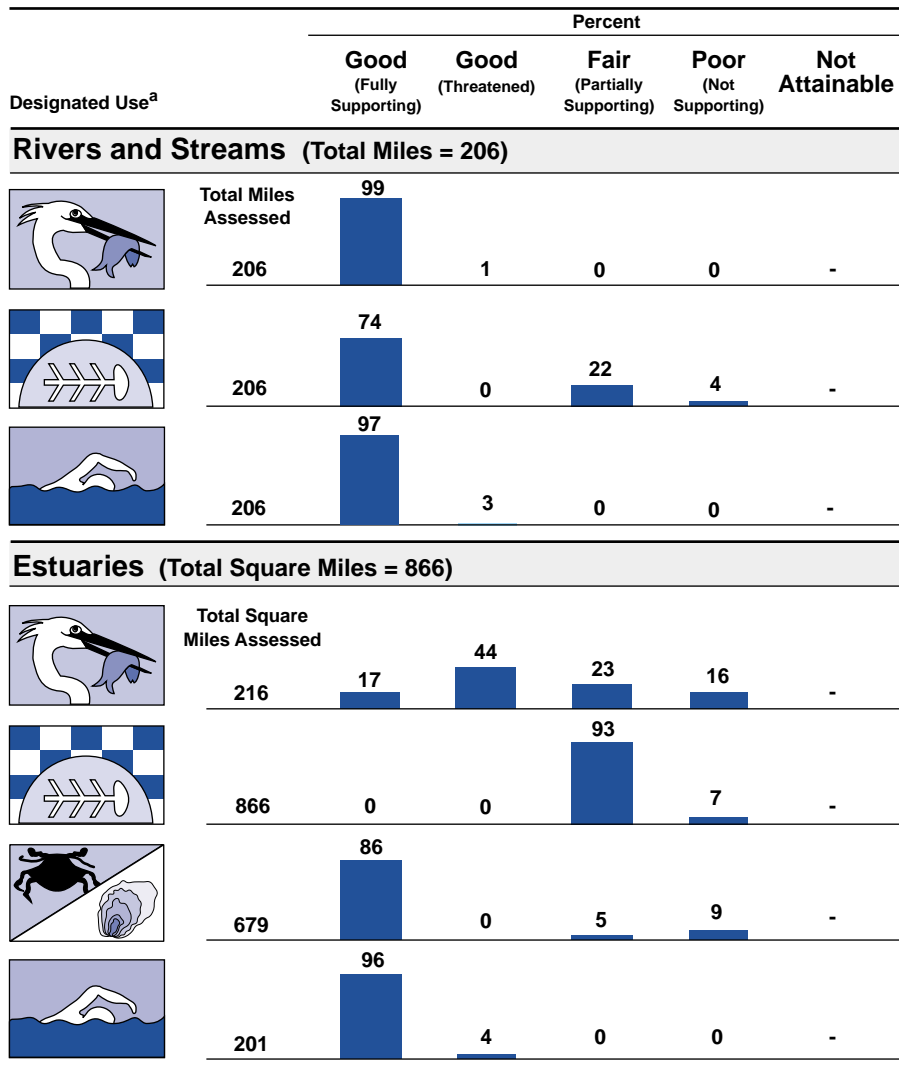
Special Protection Waters regulations protect the upper reaches of the nontidal river from the effects of future population growth and land development through a comprehensive watershed management approach.

Programs to Assess Water Quality

DRBC 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. 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.

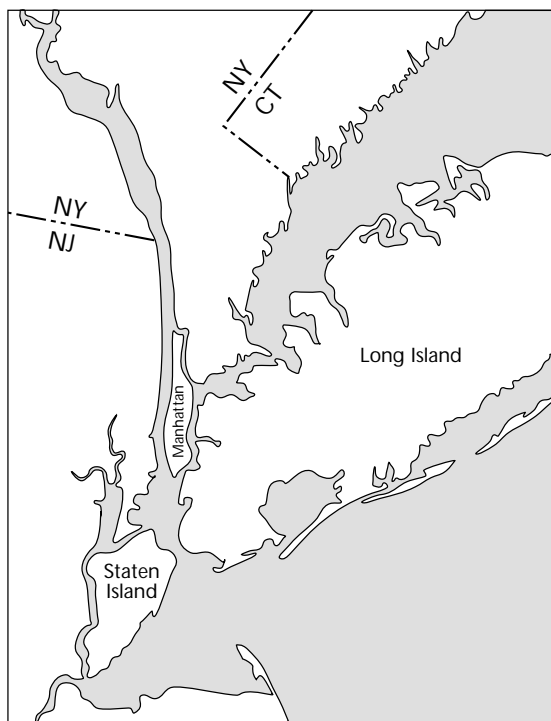
The Commission has begun the preliminary steps to develop a biological monitoring program for the 198-mile long nontidal Delaware River. The purpose of the biological monitoring program is to provide data on various biological communities in order to determine the general condition of the biota and to better understand the interactions between water quality and the biota.

Individual Use Support in the Delaware River



^a 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 1998 305(b) report, contact:

Peter L. Sattler or Howard Golub
Interstate Sanitation Commission
311 West 43rd Street
New York, NY 10036
(212) 582-0380

Surface Water Quality

Established in 1936 by the Tri-State Compact, which was approved by its member states and the U.S. Congress, the Interstate Sanitation Commission (ISC) is a tri-state environmental agency formed by the states of New York, New Jersey, 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, Long Island Sound and its embayments, 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 July 1, 1986, thousands of acres of shellfish beds have been opened on a year-round basis. During the 1996 and 1997 bathing seasons, monitored public bathing beaches in the Interstate Sanitation District were closed for a total of 879 days due to elevated levels of coliform bacteria, urban runoff, combined sewer overflows, and/or wash-ups of debris. 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 as well as seasonal closures for several finfish species (i.e., flounder, fluke, blackfish, striped bass, and porgy) were promulgated by the states of New York, New Jersey, and Connecticut.

Topics of concern to the Commission include compliance with ISC Water Quality Regulations, toxic contamination of sediments, pollution from combined sewer overflows, maintaining and expanding shellfish harvest waters, operation and maintenance of infrastructure, plant capacity to handle additional waste flows from major development projects, and the need for development of treatment plant process modifications for control of nitrogenous constituents in effluent discharges.

Ground Water Quality

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

Programs to Restore Water Quality

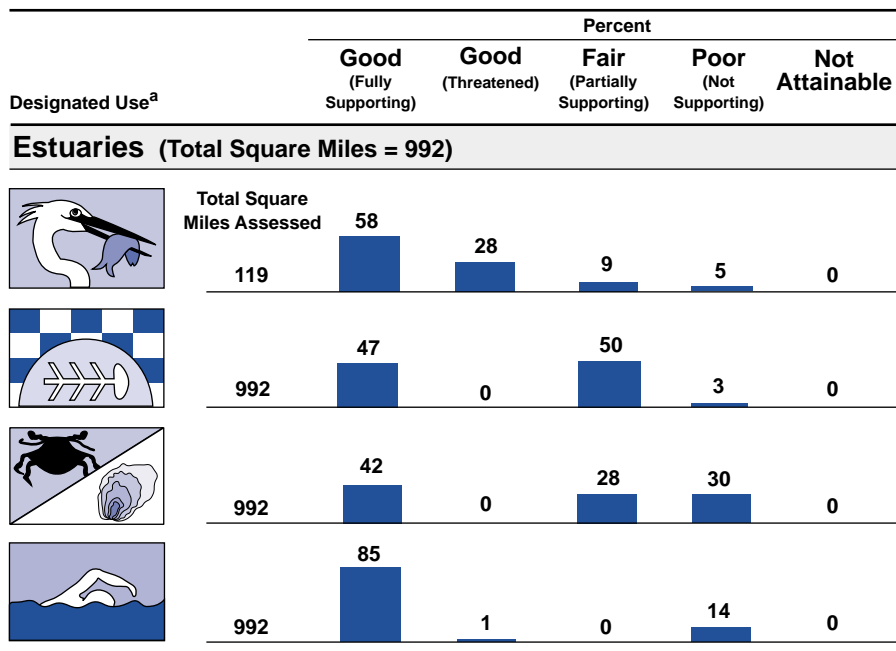
Through an enforcement program to promote water pollution control and to enhance the quality of the District's surface waters, the ISC continues as an active party in addressing the cause of those conditions that have resulted in continuing contravention of ISC's dissolved oxygen goals. Through its Management Committee and work group activities on the Harbor Estuary Program (HEP) and Long Island Sound Study (LISS), the Commission continues as an active participant in the ongoing effort to identify and address the sources of the problems.

At the request of a coalition of public action groups, ISC participated in discussions with New York City regarding the wastewater flows to the North River WPCP, which is located on the Hudson River. The Commission provided technical expertise on acceptable methods of flow monitoring and recordkeeping.

Programs to Assess Water Quality

The Commission continued its summer surveys by monitoring dissolved oxygen levels in Western Long Island Sound and its embayments. Monitoring of Western Long Island Sound was increased, with five new stations in Little Neck and

Individual Use Support in Interstate Sanitation Commission



– Not reported in a quantifiable format or unknown.

^a 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.

Manhasset Bays. Microbiological water quality surveys were conducted under worst-case conditions (ebbing high tides associated with a minimum of 0.25 inches of rain) to determine fecal and total coliform bacteria concentrations over the shellfish beds of western Raritan Bay off the coast of Staten Island, New York, and in Little Neck Bay located in Western Long Island Sound to check compliance with the U.S. Food and Drug Administration's National Shellfish Sanitation Program.

Ohio River Valley Water Sanitation Commission (ORSANCO)



— Basin Boundaries
(USGS 6-Digit Hydrologic Unit)

For a copy of the ORSANCO 1998 305(b) report, contact:

Jason Heath
ORSANCO
5735 Kellogg Avenue
Cincinnati, OH 45228-1112
(513) 231-7719
e-mail: jheath@orsanco.org

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 water quality monitoring and assessment of the Ohio River mainstem,

emergency response pollution control standards, and public information/education. The mainstem runs 981 miles from Pittsburgh, Pennsylvania, to Cairo, Illinois.

The most common problems in the Ohio River are PCB and chlor-dane 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 six monitoring stations downstream of major urban areas with a large number of combined sewer overflows (CSOs).

ORSANCO used both biological and chemical data to determine aquatic life use support. Assessments of impairment were due to violations of chronic criteria for copper and lead. There was also one location where biological data indicated poor habitat conditions on the mainstem Ohio River near Louisville, Kentucky.

Public water supply use of the Ohio River is impaired by dioxin between Racine and the Big Sandy River and by atrazine downstream of the McAlpine Rock and dam. Atrazine levels prompted water utilities to provide nonroutine treatment.

Ground Water Quality

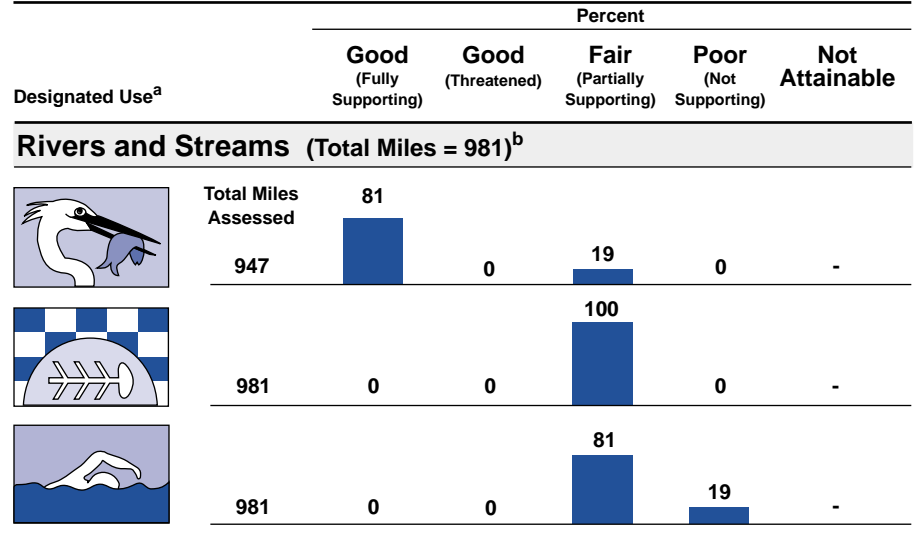
ORSANCO does not have jurisdiction over ground water in the Ohio River Basin.

Programs to Restore Water Quality

In 1992, an interagency work-group 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 quality. 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, chlor-dane, atrazine, copper, lead, nitrogen, and phosphorus. 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



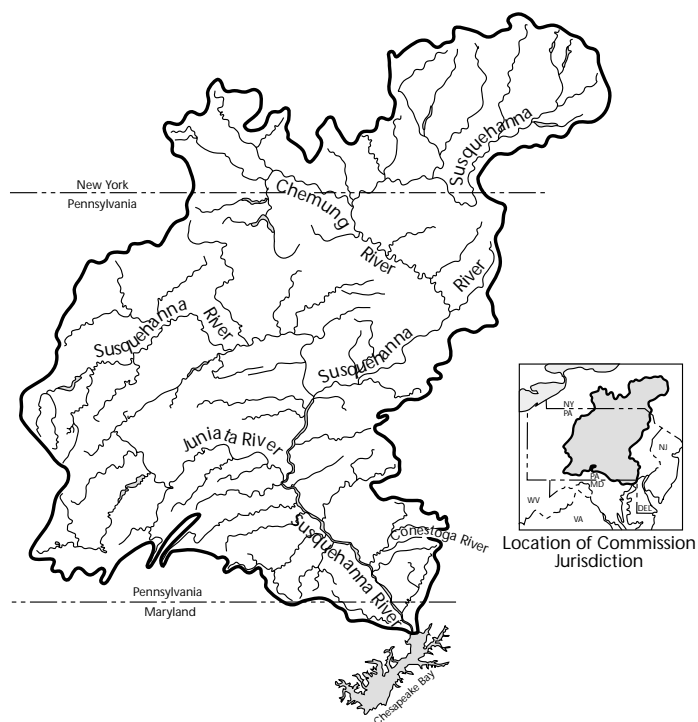
- Not reported in a quantifiable format or unknown.

^a 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 a number of 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 population surveys. ORSANCO uses the Modified Index of Well Being (MIWB) to assess fish community characteristics, such as total biomass and species diversity. ORSANCO is in the process of developing a more suitable index for evaluating fish (and macroinvertebrate) communities.

Susquehanna River Basin Commission



— Basin Boundaries
(USGS 6-Digit Hydrologic Unit)

For a copy of the Susquehanna River Basin Commission 1998 305(b) report, contact:

Robert E. Edwards
Susquehanna River Basin
Commission
Water Quality and Monitoring
Programs
1721 North Front Street
Harrisburg, PA 17102-2391
(717) 238-0423
email: redwards@srbc.net

Surface Water Quality

The Susquehanna River drains 27,510 square miles from parts of New York, Pennsylvania, and Maryland and delivers over half of the freshwater entering the Chesapeake Bay. For this 305(b) cycle, the Susquehanna River Basin Commission (SRBC) surveyed 3,520 miles of the 31,193 miles of rivers and streams in the Susquehanna River Basin. Seventy-two percent of the surveyed river miles fully support designated uses, 23% partially support designated uses, and 5% do not support one or more designated

uses. Major causes of stream impairment are nutrient enrichment and habitat alteration from agricultural runoff. Other causes of significant stream impairment in the basin include metals, pH, total dissolved solids, and habitat alteration from coal mining activities.

Observed trends in nutrients and sediment water quality in the Susquehanna River at three main-stem stations and three stations at the mouth of major tributaries provide evidence of both improvement or no change in stream quality.

The SRBC did not conduct any lake water quality assessments for this 305(b) cycle. However, a 2-year project funded by EPA and the state of Pennsylvania during past reporting cycles provided an inventory of Pennsylvania lakes that can be used in developing a lake assessment program.

Ground Water Quality

The commission obtains ground water quality information through ground water withdrawal permits, investigations, cooperative studies, and surveys pertaining to existing ground water quality or future ground water quality in the basin. Studies have shown that human-induced problems are generally localized and confined to a small number of wells. Many of the ground water quality problems in the basin are related to naturally dissolved constituents (such as iron, sulfate, and dissolved solids). The SRBC is concerned about ground water contamination from agricultural activities and septic systems, and notes that limited attention is given to the fact that point sources can be sources of ground water

recharge and potential contamination.







Programs to Restore Water Quality

The SRBC's role is to provide a regional perspective for coordinating local, state, and federal water quality management efforts and promote compliance with established standards. The commission's point source control program objective is to encourage continued upgrading and development of needed public and private waste treatment facilities. SRBC reviews proposed discharge permits and provides comments to permitting agencies on matters within SRBC jurisdiction. The goal of the non-point source program is to increase control of stormwater runoff and nonpoint source pollution through the fulfillment of the objectives of the Chesapeake Bay Program.

Programs to Assess Water Quality

The SRBC's monitoring program developed out of its responsibilities and jurisdiction in interstate and regional issues. To support the goals of the Chesapeake Bay Program, the SRBC monitors nitrogen, phosphorus, and sediment in the main-stem Susquehanna River and its major tributaries. The SRBC also established an interstate water quality network to assess compliance with state water quality standards for streams that cross state lines. Finally, regional water quality and biological conditions in the basin are addressed through six subbasin surveys.

Individual Use Support in the Susquehanna River Basin

Designated Use ^a	Percent				
	Good (Fully Supporting)	Good (Threatened)	Fair (Partially Supporting)	Poor (Not Supporting)	Not Attainable
Rivers and Streams (Total Miles = 31,193)^b					
	Total Miles Assessed 3,520	72	-	23	5
	-	-	-	-	-
	-	-	-	-	-
Lakes (Total Acres = 79,687)					
	Total Acres Assessed	-	-	-	-
	-	-	-	-	-
	-	-	-	-	-

- Not reported in a quantifiable format or unknown.

^a A subset of SRBC's designated uses appear in this figure. Refer to the Commission's 305(b) report for a full description of the Commission's uses.

^b Includes nonperennial streams that dry up and do not flow all year.