



**NYS DEC**

**Division of Water**

# **New York State Water Quality 2000**



**October 2000**

**Submitted Pursuant to  
Section 305(b)  
of the  
Federal Clean Water Act  
Amendments of 1977 (PL 95-217)**

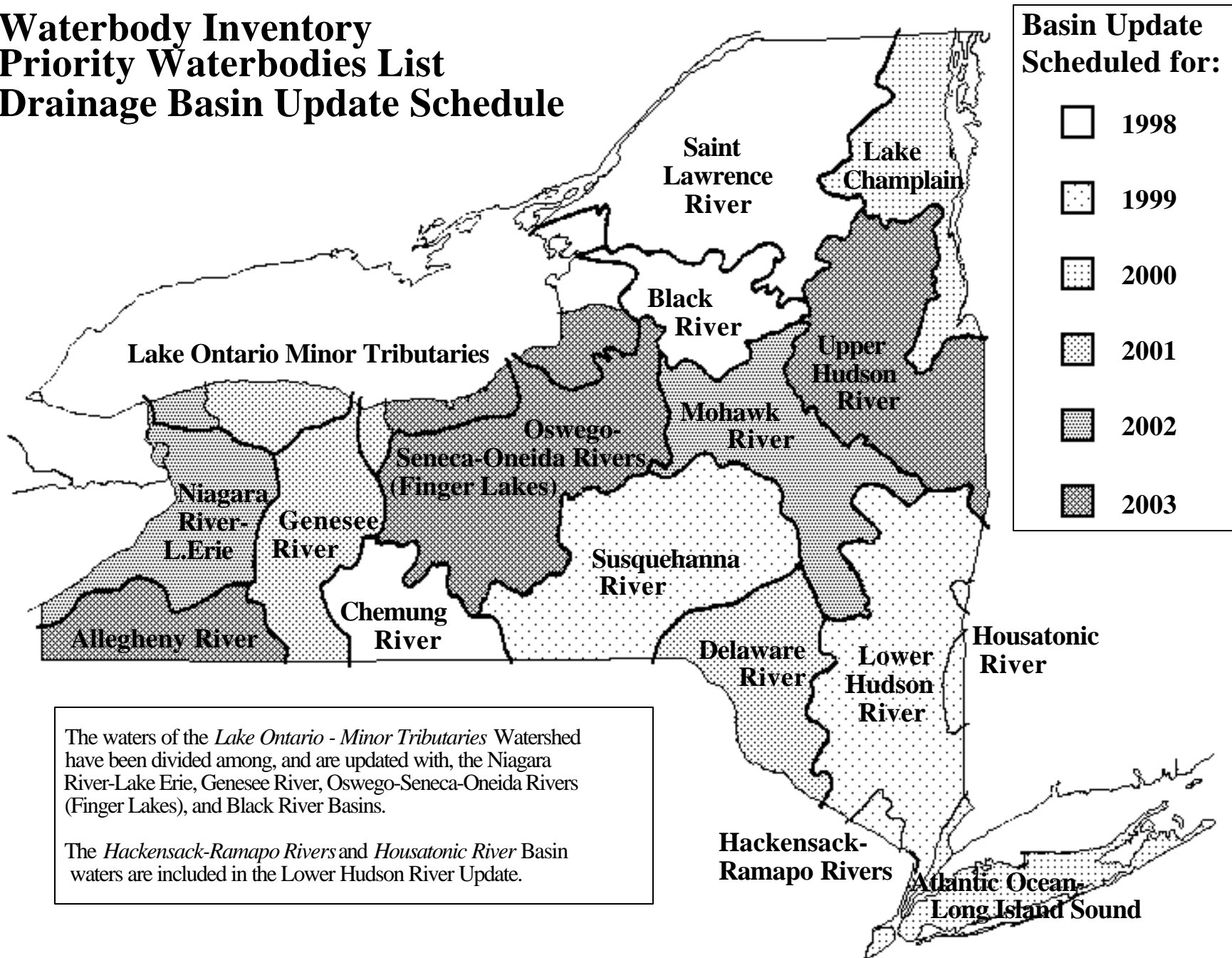
**New York State Department of Environmental Conservation**

**George E. Pataki, Governor**

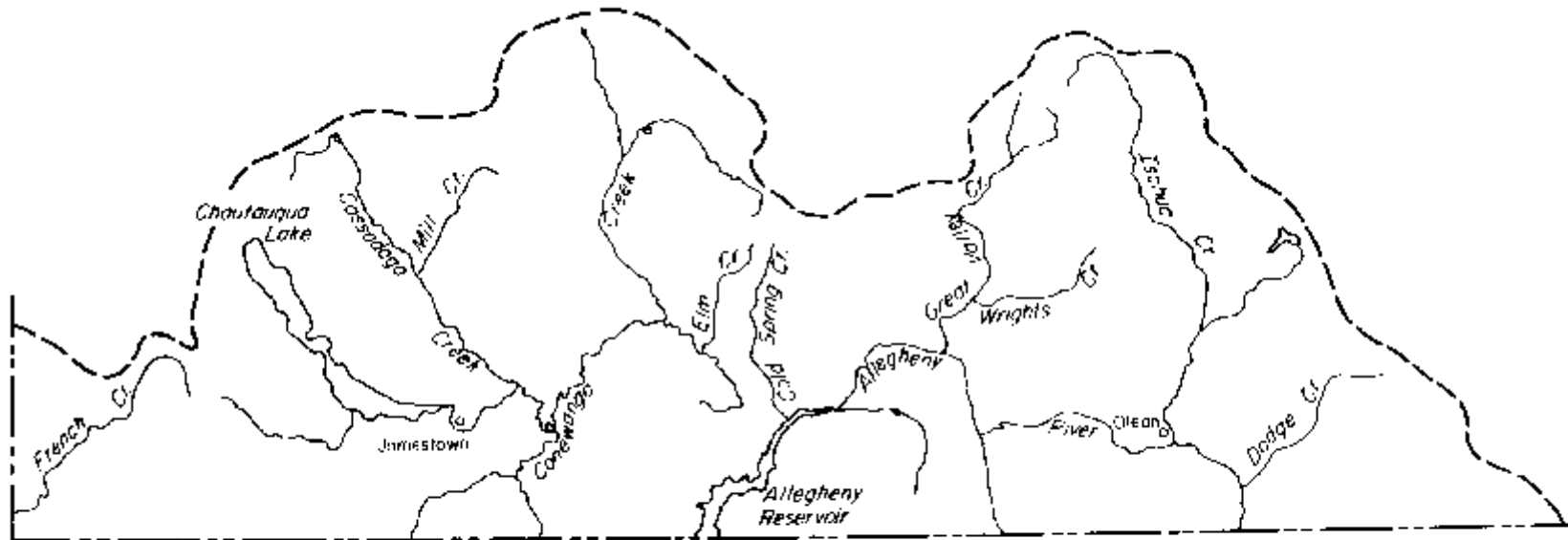
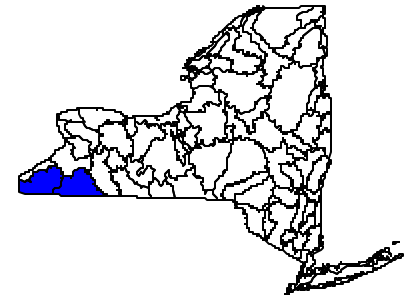
**John P. Cahill, Commissioner**

Figure 3

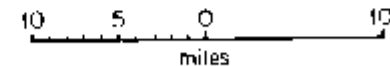
# Waterbody Inventory Priority Waterbodies List Drainage Basin Update Schedule



# Allegheny River Drainage Basin Map



Allegheny River  
Drainage Basin



# The Allegheny River Basin

## Background

The Allegheny River Basin in New York State comprises a portion of the headwaters of the larger Ohio River Basin. A total of approximately 1,900 square miles of the basin lie within New York State, populated by about 170,000 people. It consists of most of Cattaraugus and Chautauqua Counties and a small portion of Allegheny County. The geology of the area is mainly a highly dissected plateau of deep, flat-bottomed valleys. The nature of the area varies from the rugged, heavily wooded Allegheny Hills along the Pennsylvania border to the flatter lands in the north and west. The basin is primarily rural-agricultural with several population centers and industries located along the major waterways. Other primary activities include silviculture, oil and gas production, and recreation. Steady progress has been made toward cleaning up the waters of the Allegheny River Basin. Most notable have been some of the industrial and municipal sewage treatment plant abatement efforts.

## Water Quality Issues and Concerns

This basin has relatively good water quality, with some exceptions. A significant nonpoint source of pollution is created by abandoned and active oil and gas wells. Oil and brine from the oil fields occasionally drain into streams, causing water quality problems. Tunungwant Creek has impaired fishing and fish survival due to oil pollution from both oilfields and a refinery.

### *Heavy Metals*

In the 1996 NYS DEC Priority Waterbodies List (PWL), the Chadakoin River is considered stressed for fish propagation by metals from an unknown source(s). An intensive site at South Dow Street was sampled in 1989-1990 as part of the Rotating Intensive Basin Study (RIBS) program with various metals found to be parameters of concern in the water column and bottom sediment. Macroinvertebrate tissue analysis showed copper and PCB above background levels and the macroinvertebrate community was moderately impaired. Fish tissue results from 1989 and prior revealed elevated levels of PCB in various species taken near the Dow Street RIBS site. These results and the historical use of the Chadakoin and the area near it for disposal of industrial waste prompted a desktop evaluation of the river, including its current status and recommended strategy.<sup>3</sup> Further macroinvertebrate work in 1994 and sampling during the 1995-1996 RIBS cycle have also been conducted.

### *Cuba Lake*

At Cuba Lake, funds from the Aquatic Vegetation Control and Lake Management Program (AVCLMP) have been used to carry out many different water quality projects. The Allegheny County Soil and Water Conservation District (SWCD), the Cuba Lake District, USDA Natural Resources Conservation Service (NRCS) and other cooperating agencies have undertaken a model watershed management and planning program in the lake's 16,000 acre watershed. A detailed state-of-the-art soil survey was established for the watershed to be input into a new GIS system along with other information such as land use. Using AVCLMP funds through the USDA's cost-sharing program, the SWCD has constructed a manure handling facility on a thousand-cow dairy farm identified as contributing pollutants to the watershed. Property has also been purchased for the construction of a sediment control basin adjacent to a stream known to contribute sediments

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<sup>3</sup> Leece, Cynthia. Chadakoin River: Status and Recommended Strategy. NYS DEC Division of Water Technical Report. Albany, NY. March 1994.

to Cuba Lake. Investigation has been done into installing a trunkline to take effluent from individual septic systems in wet, inadequate soils around the lake to a miniature treatment plant. Additional work has been done in the areas of education, planning and water quality monitoring. A mobile automated monitoring unit has been purchased, and an inventory and evaluation of nonpoint sources of pollution in the watershed have been undertaken. A set of management perspectives is being developed for a plan to be distributed to five townships, two counties, Cuba Lake District, the Seneca Nation of Indians, Cuba Lake cottage associations and other interested parties in the Cuba Lake watershed.

### *Other Issues*

Five lakes in the basin (Bear Lake, Findley Lake, and Upper, Middle and Lower Cassadaga Lakes) have impaired uses (bathing and fishing) caused by the increase of algae and weed growth due to nutrients. The primary sources of the nutrients are agriculture and on-site septic systems. In addition, two other lakes are stressed from nutrients and pathogens from nonpoint sources (mainly agriculture and on-site systems). About twenty river segments have uses (mostly fishing-related) which are considered stressed or threatened by silt and other pollutants from agriculture, streambank erosion and resource extraction.

### **More Information**

A summary listing of waterbodies included on the NYS-DEC Priority Waterbodies List is included as Table A.2. A list of waterbodies that may have been previously listed on the WI/PWL but have since been determined to need verification of possible water quality impairment is also included. More complete information about the water quality problems and issues in the basin can be found in the most recent (1996) series of Priority Waterbodies List Drainage Basin Reports.<sup>4</sup>

Water quality monitoring and assessment results from the NYS DEC Division of Water ambient surface water monitoring activities are summarized in the continuing series of Rotating Intensive Basin Studies (RIBS) Drainage Basin Reports. The most recent RIBS Report for the Allegheny River Drainage Basin outlines results from monitoring conducted in 1995-96.<sup>5</sup>

***The next RIBS monitoring effort in the basin is scheduled for 2001-2002, with water quality assessment to be conducted in 2003.***

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<sup>4</sup> NYS DEC, 1996. The 1996 Priority Waterbodies List for the Allegheny River Basin. NYS DEC Division of Water Technical Report. Albany, NY. September 1996.

<sup>5</sup> J.A. Myers, R.L. Gabriel and B. Andrews. The Allegheny River Basin RIBS Report, 1995-96. DEC Division of Water Technical Report. Albany, NY. February 1999.

## Allegheny River Basin

## Priority Waterbodies List (Water Quality Impacted/Threatened Segments)

Table A.2

Segment Name	Segment ID	County	Segment Type	Segment Size	Stream Class	Primary Use Affected	Problem Severity	Dcmt	Primary Pollutant/Cause	Primary Source
DRAINAGE BASIN: Allegheny River										
SubBasin: Allegheny River Main Stem										
Case Lake	0201-0020	Cattaraugus	Lake	80.0 Acres	C(T)	Aquatic Life	Impaired	Known	Nutrients	Agriculture
Cold Spring Creek	0201-0014	Cattaraugus	River	20.0 Miles	C(T),C	Aquatic Life	Stressed	Susp	Silt/sediment	Agriculture
Cuba Lake	0201-0016	Allegheny	Lake	454.0 Acres	B	Public Bathing	Impaired	Susp	Pathogens	Failing On-Site Syst
Haskell Creek	0201-0009	Cattaraugus	River	5.0 Miles	C(T),C	Aquatic Life	Stressed	Susp	Thermal Changes	Agriculture
Little Valley Crk	0201-0013	Cattaraugus	River	10.0 Miles	C(T),C	Aquatic Life	Stressed	Susp	Thermal Changes	Agriculture
Olean Creek	0201-0017	Cattaraugus	River	7.5 Miles	A	Water Supply	Stressed	Susp	Priority Organics	Resource Extraction
DRAINAGE BASIN: Allegheny River										
SubBasin: Conewango Creek										
Cassadaga Creek	0202-0012	Chautauqua	River	30.0 Miles	C	Aquatic Life	Stressed	Susp	Silt/sediment	Streambank Erosion
Chadakoin River	0202-0018	Chautauqua	River	10.0 Miles	C	Aquatic Life	Stressed	Susp	Metals	Unknown Source
Chautauqua Lake	0202-0020	Chautauqua	Lake	13400.0 Acres	A	Public Bathing	Impaired	Known	Nutrients	Agriculture
Conewango Ck&trib	0202-0017	Cattaraugus	River	15.0 Miles	C(T),C	Aquatic Life	Stressed	Susp	Oxygen Demand	Agriculture
Findley Lake	0202-0004	Chautauqua	Lake	311.0 Acres	B	Aquatic Life	Impaired	Susp	Nutrients	Agriculture
French Creek	0202-0015	Chautauqua	River	50.0 Miles	C,C(T)	Aquatic Life	Stressed	Susp	Silt/sediment	Agriculture
Lower Cassadaga L	0202-0003	Chautauqua	Lake	83.0 Acres	B	Public Bathing	Impaired	Susp	Nutrients	Agriculture
Upper Cassadaga L	0202-0001	Chautauqua	Lake	102.0 Acres	B	Public Bathing	Impaired	Susp	Nutrients	Agriculture

# CUBA LAKE

0201-0016

## Location Information

Updated: 06/25/96

**Basin:** Allegheny River (02)                      **Resolution Potential:** Medium  
**Sub-Basin:** Allegheny R. Main Stem (01)  
**Seg Type:** Lake                                      **Stream Class:** B  
**Reg/County:** 9 / Allegany ( 2)                      **7Q10 Flow:** N/A  
**USGS Quad:** RAWSON (L-07-3)  
**Seg Size:** 454.0 Acres  
**Description:** Entire Lake

## Problem Information

(\* indicates the PRIMARY Use Impairment/Pollutant/Source)

Use Impairment(s)	Severity	Documentation
Bathing *		Impaired                      Some
Fishing	Threatened	Some
Boating	Stressed	Some

### Type of Pollutant(s)

Pathogens *	Nutrients	Silt (Sediment)
Oxygen Demand		

### Source(s) of Pollutant(s)

On-site Systems *	Agriculture	Streambank Erosion
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## Resolvability

Issue Needs Study and Management Plan

## Further Details

Use Impairment - There are about 300 residences around the lake (some are year round). The cottages take drinking water from the lake but there were no petitions to upgrade this to Class A. There is no public swimming facility on the lake but one is needed. Beach was closed several years ago. Failing septic systems are impairing use of the lake.

There is no significant fishery in the 7 tributaries leading into the lake. The tribs are mostly intermittent and some of the riparian vegetation has been removed. Extensive studies of the lake have been undertaken by the Allegany County Soil and Water Conservation District. As a result, some of the manure landspreading activities by dairy farms have been relocated outside the watershed. Also, sedimentation basins are planned for Rawson Creek (main tribs) and Monger Creek.

Mechanical weed harvesting is done. There are floating solids in the water.