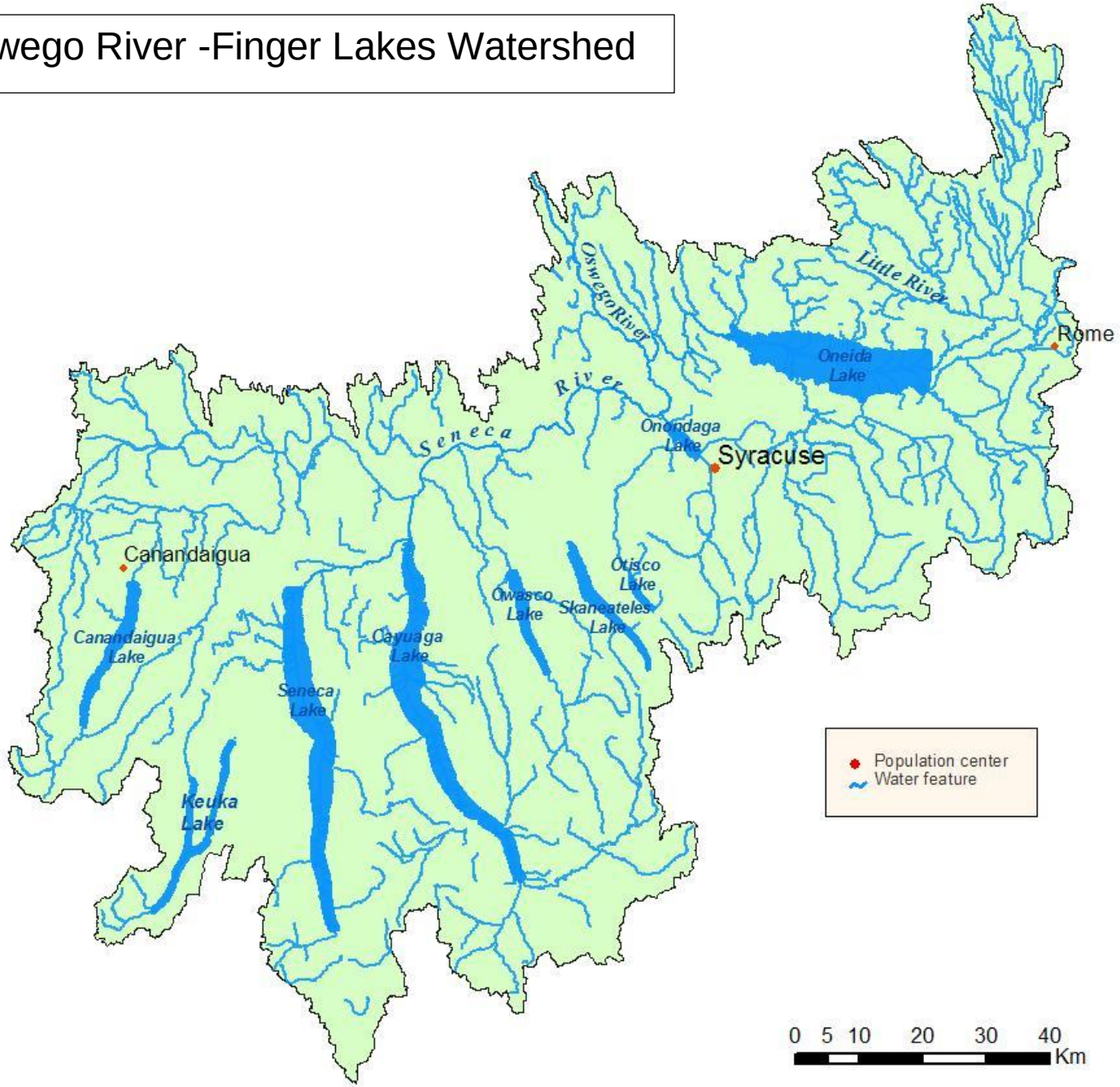
Oswego River -Finger Lakes Watershed



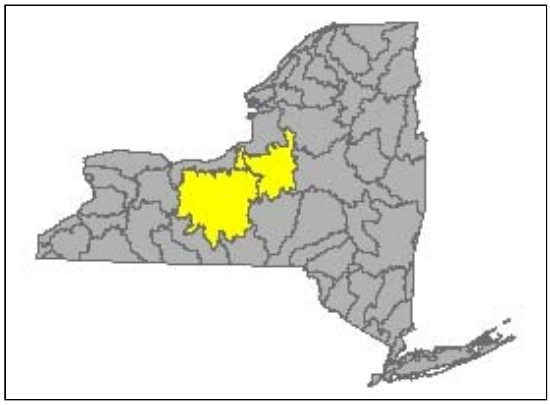
NEW YORK STATE
DEPARTMENT OF
ENVIRONMENTAL CONSERVATION

Oswego River/Finger Lakes Watershed

A brief overview of this watershed and its water quality is presented below. For more detailed information, published NYSDEC reports are also available.

Facts about this Watershed

The Oswego River/Finger Lakes Watershed is one of the largest in New York State and includes the drainages of the Oswego, Oneida, Seneca and Clyde Rivers. Its headwaters originate in the southwestern Adirondack Mountains in the east and along the northern edge of the Appalachian Plateau and flow across the central lowlands before emptying into Lake Ontario. The watershed includes most of the New York Finger Lakes; in fact, lakes make up about 6% of the total surface area of the watershed.



Click to view a detailed map of the watershed

Location: Central New York State

- All of Seneca County,
- Most of Onondaga, Cayuga, Tompkins, Schuyler, Yates and Ontario Counties,
- Much of Oswego, Oneida, Madison and Wayne Counties, and
- Smaller parts of Lewis, Cortland, Chemung, Steuben and Livingston Counties.

Size: 5,070 square miles of land area entirely within New York State.

Rivers and Streams: 8,896 miles of freshwater rivers and streams. Major tributary watersheds to the Oswego River and Finger Lakes include:

- Oneida River (2,330 river miles)
- Clyde River (1,630 miles)
- Cayuga Lake Tributaries (1,500 miles)
- Seneca Lake Tributaries (1,240 miles)

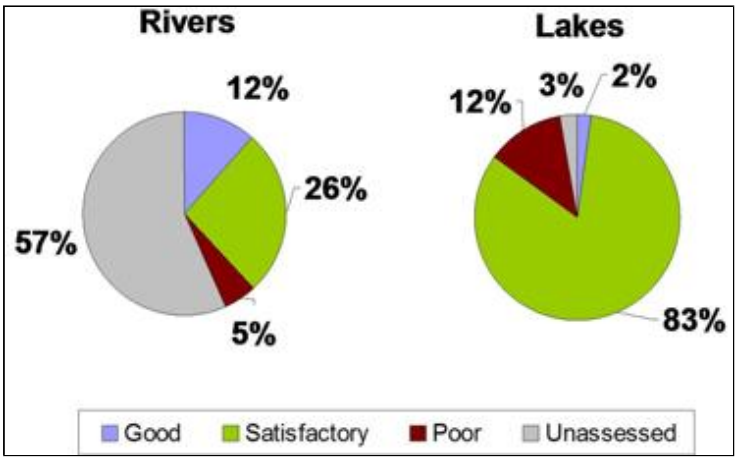
Lakes, Ponds and Reservoirs: 76 significant freshwater lakes, ponds, and reservoirs (189,722 acres), including:

- Oneida Lake (51,091 acres)
- Cayuga Lake (42,812 acres)
- Seneca Lake (42,646 acres)
- Keuka Lake (11,712 acres)
- Canandaigua Lake (10,605 acres)

How is the Water?

Water Quality in The Oswego River/Finger Lakes Watershed

In the Oswego River/Finger Lakes Watershed, about 43% of river/stream miles, and 97% of lake, pond and reservoir acres have been assessed (see Assessment Report).



Good water quality: *Fully supports designated activities and uses.*
Satisfactory: *Fully supports designated activities, but with minor impacts.*
Poor (Impaired): *does not support designated activities and uses.*
Unassessed: *Insufficient data available.*

Water quality in the Oswego River/Finger Lakes Watershed is generally satisfactory to good. There are primarily two major water quality issues in the watershed. The first of these is the impact of past industrial activity such as municipal discharges, urban runoff and other sources on Onondaga Lake. Extensive remediation and water quality improvements over many years and continuing today are addressing these issues. The second concern is the protection of the water resources provided by the Finger Lakes from various point and nonpoint sources of pollution. Though these impacts are less severe, they constitute a more widespread threat to water quality in the watershed.

Major water quality concerns in the watershed are:

- Legacy Industrial Discharges in Syracuse/Onondaga Lake area currently being remediated
- Municipal Wastewater and Combined Sewer Overflows in Syracuse and other urban areas
- Agricultural and Other Nonpoint Sources of nutrients and various other pollutants
- Protection of Finger Lakes Resources, including drinking water and recreational uses

About Water Quality in New York State

Each waterbody in NYS has been assigned a classification, which reflects the designated "best uses" of the waterbody. These best uses typically include the ability to support fish and aquatic wildlife, recreational uses (fishing, boating) and, for some waters, public bathing, drinking water use or shellfishing. Water quality is considered to be good if the waters support their best uses. NYSDEC routinely monitors and assesses water quality throughout the state and publishes detailed reports of these findings. For more information on these monitoring and assessment programs, see Water Quality Monitoring, Assessment and Planning.

Water Chemistry Sampling

What You Can Do!

Each of us lives in a watershed. On our Watershed Stewardship page are some tips on actions that you and your friends can take to help your watershed.

Water Information for Public Officials and Municipal Employees

On this page you will find information on: announcements, meetings, hearings, training schedules, applications, regulations, permits, guidance, and more.

Published Water Quality Monitoring and Assessment Reports

- Waterbody Inventory/Priority Waterbodies List - Assessment Report of overall water quality.
- Bioassessment Reports - Biological Reports of specific rivers and streams.
- Other Reports - Miscellaneous reports on the waters and water quality issues in the watershed.

Biological Kick Sampling

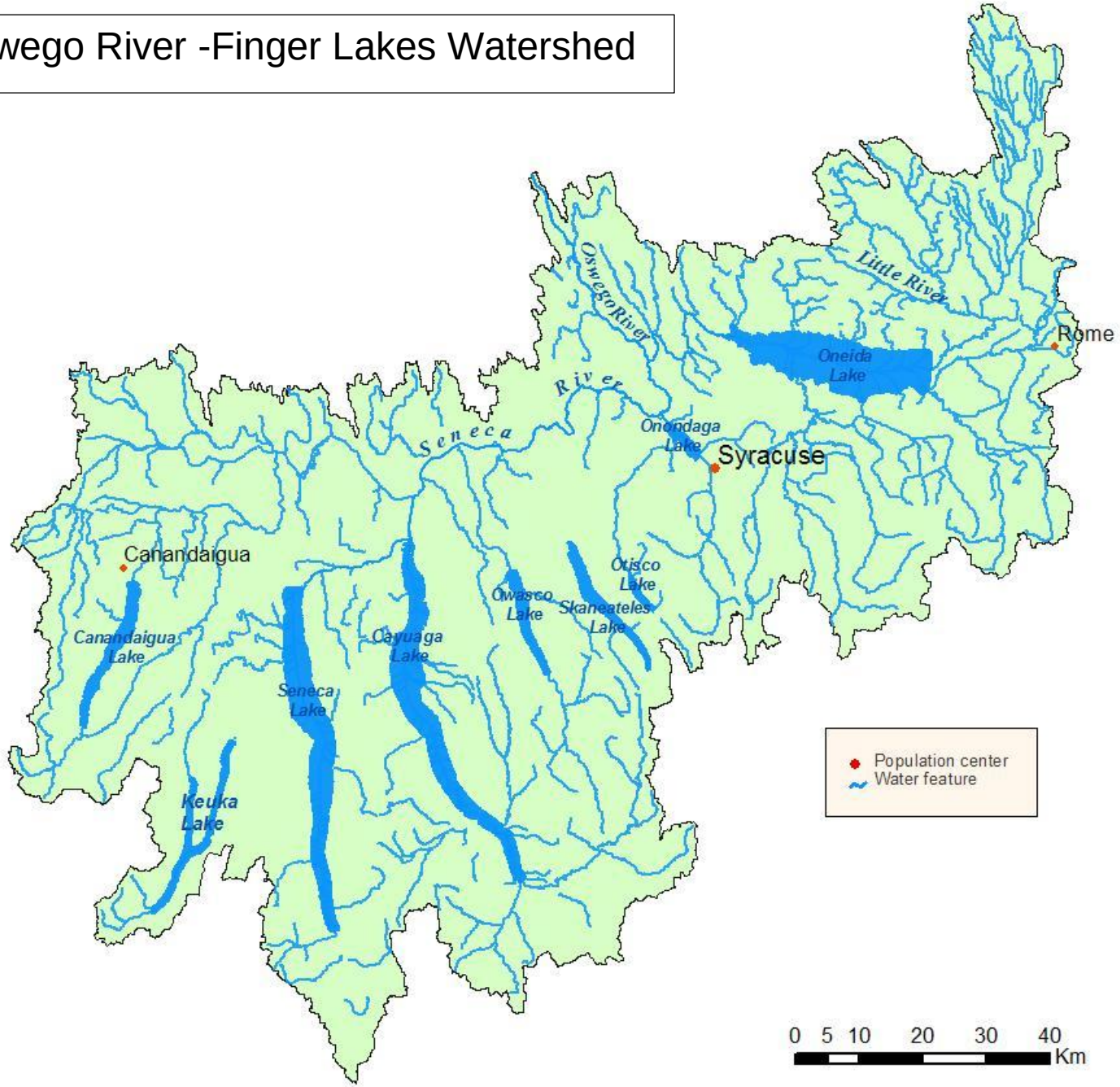
More about Oswego River/Finger Lakes Watershed:

Oswego River / Finger Lakes Watershed Reports - NYSDEC reports for the Oswego River/Finger Lakes Watershed.

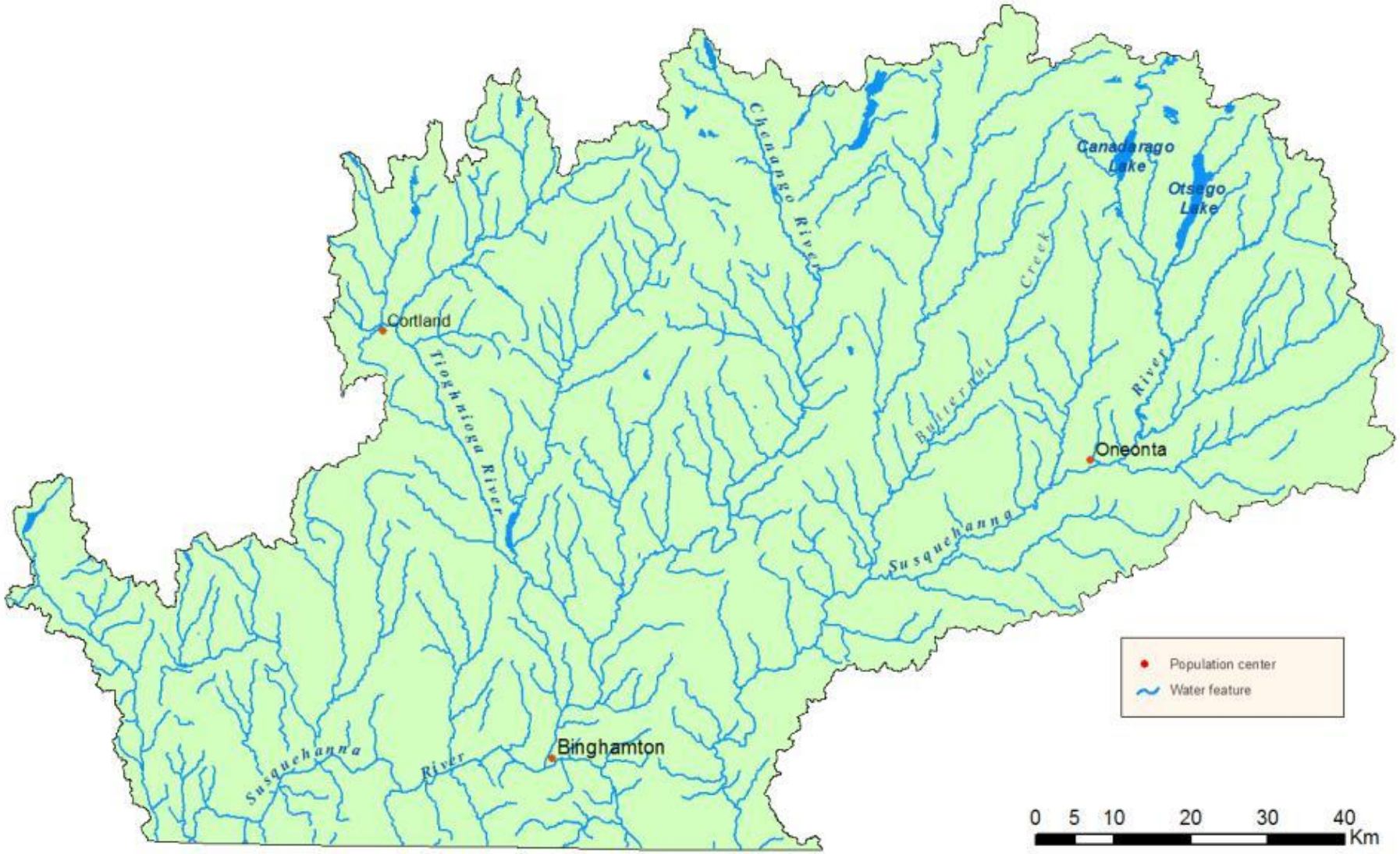
Oswego River/Finger Lakes Watershed Map - Detailed map of the Oswego River/Finger Lakes Watershed

Water Quality Study of The Finger Lakes - The results of a water quality study of the Finger Lakes, performed by the NYSDEC over several years.

Oswego River -Finger Lakes Watershed



Susquehanna River Watershed



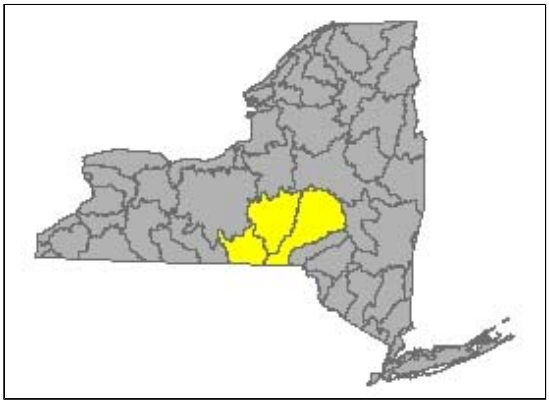
NEW YORK STATE
DEPARTMENT OF
ENVIRONMENTAL CONSERVATION

Susquehanna River Watershed

A brief overview of this watershed and its water quality is presented below. For more detailed information about the Susquehanna River Watershed, published NYSDEC reports are also available. General information about watersheds is available at the "We All Live in a Watershed" webpage.

Facts about this Watershed

The Susquehanna River Basin is the second largest - next to the Ohio River Basin - east of the Mississippi River. The 444 miles of the Susquehanna drain 27,500 square miles covering large parts of New York, Pennsylvania and Maryland before emptying into the Chesapeake Bay. Two separate Susquehanna River Basin watersheds drain portions of south-central New York State: The Upper Susquehanna Watershed (discussed here) and the Chemung River Watershed (addressed separately).



Click to view a detailed map of this watershed

Location: Southern Tier of New York State

- Most of Broome, Chenango, Cortland, Otsego and Tioga Counties,
- Portions of northern Delaware, southern Madison and eastern Chemung Counties, and
- Small parts of Schuyler, Tompkins, Onondaga, Oneida, Herkimer and Schoharie Counties.

Size: 4,520 square miles of land area within New York State, excluding the Chemung River Watershed.

Rivers and Streams: 8,185 miles of freshwater rivers and streams. Major tributary watersheds to the 148 miles of the Susquehanna River in New York State include:

- Chenango River (2,796 river/stream miles)
- Tioughnioga River (1,293 miles, within the Chenango River Watershed)
- Unadilla River (935 miles)
- Owego Creek (766 miles)

Lakes, Ponds and Reservoirs: 130 significant freshwater lakes, ponds, and reservoirs (16,521 acres), including:

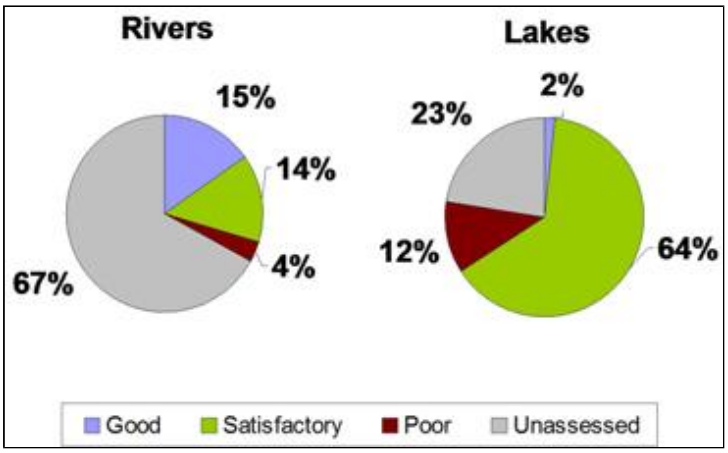
- Otsego Lake (4,083 lake/reservoir acres)
- Canadarago Lake (1,882 acres)
- Whitney Point Lake/Reservoir (1,235 acres)

How is the Water?

Water Quality in The Susquehanna River Watershed

In the Susquehanna Watershed, about 33% of river/stream miles, and 77% of lake, pond and reservoir acres have been assessed (see Assessment Report).

Water quality in the Susquehanna River Watershed is generally satisfactory. The most widespread impacts are the result of agricultural and other nonpoint sources which contribute nutrients and sediment to the waters. Municipal wastewater discharges (including combined sewer overflows) are concerns in and around the Binghamton-Johnson City area. Inadequate wastewater treatment in some rural areas by means of on-site septic or smaller community systems has also been cited as contributing to water quality issues. Impacts from flooding are also a concern in this flood -prone area.



Good water quality: *Fully supports designated activities and uses.*
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Poor (Impaired): *does not support designated activities and uses.*
Unassessed: *Insufficient data available.*

Major water quality concerns in the watershed are:

- Agricultural and Other Nonpoint Sources of nutrients and various other pollutants
- Municipal Wastewater and Combined Sewer Overflow Impacts in Binghamton-Johnson City area
- On-site Septic and Rural Community Wastewater Treatment in unsewered areas
- Flooding Impacts in the flood-prone Southern Tier of New York

About Water Quality in New York State

Each waterbody in NYS has been assigned a classification, which reflects the designated "best uses" of the waterbody. These best uses typically include the ability to support fish and aquatic wildlife, recreational uses (fishing, boating) and, for some waters, public bathing, drinking water use or shellfishing. Water quality is considered to be good if the waters support their best uses. NYSDEC routinely monitors and assesses water quality throughout the state and publishes detailed reports of these findings. For more information on these monitoring and assessment programs, see Water Quality Monitoring, Assessment and Planning.

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Biological Kick Sampling

More about Susquehanna River Watershed:

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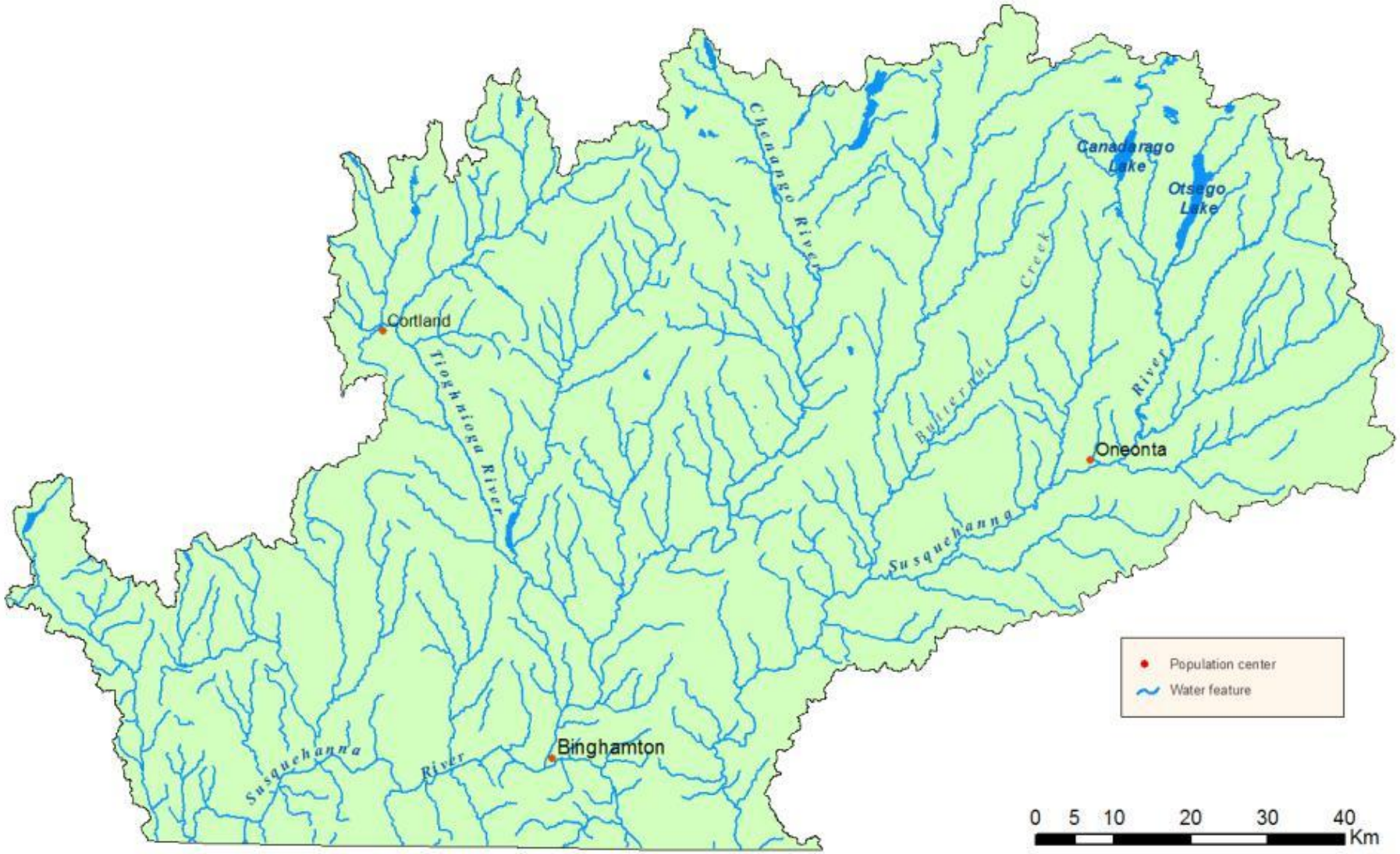
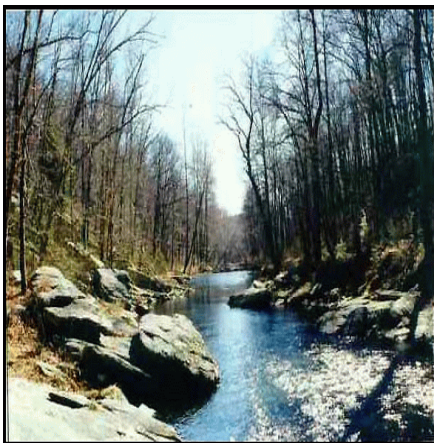
Susquehanna River Watershed Map - Detailed map of the Susquehanna River Watershed

Susquehanna River Watershed



We All Live In a Watershed

New York State Department of Environmental Conservation 2009



What is a Watershed?

A watershed is the land that water flows across or under on its way to a river, lake, stream or bay. Water travels over farm fields, forests, suburban lawns and city streets, or it seeps into the soil and travels as groundwater. Watersheds are separated from each other by high points, such as hills or slopes.

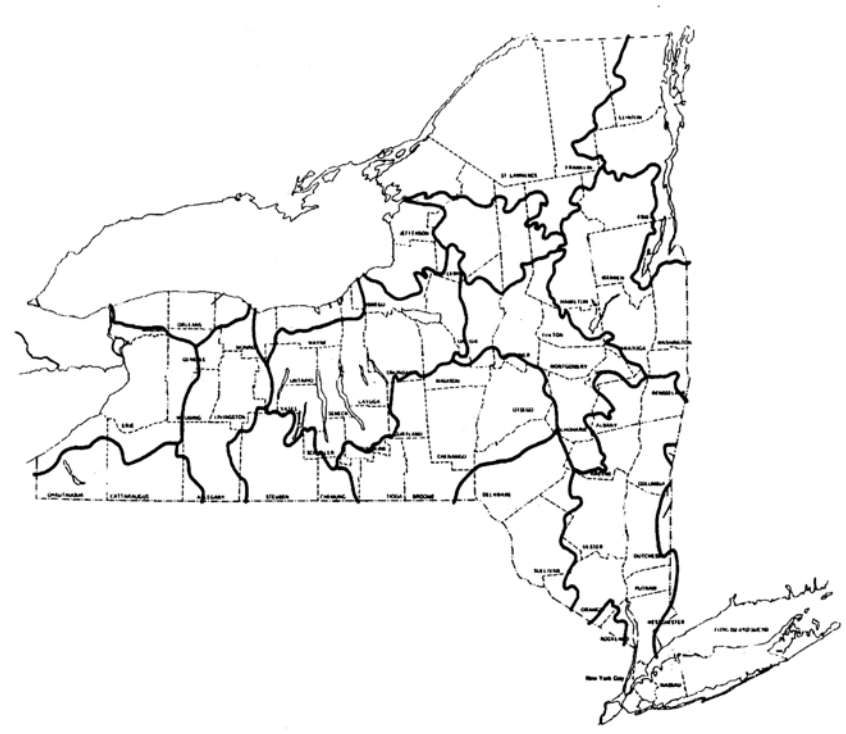
To picture a watershed, think of a small brook that flows into a river. The river then flows into a lake. All the land that surrounds the brook, river and lake are in one watershed, because all the water in the area flows into the lake. In addition, the lake and its watershed may be a part of a larger river's watershed. Water in the larger rivers eventually makes its way to the ocean.

What is your Watershed Address?

Everyone lives in a watershed. The water in your backyard drains over or under the ground to a small creek or pond and is a part of its watershed. Where does the rain in your backyard end up? The answer to this question is your watershed address, the drainage basin where you live.

What is a Drainage Basin?

A drainage basin is a larger watershed containing the watersheds of several other smaller rivers and streams. New York State has 17 major basins. Can you identify the basin you live in on this New York State map?



Watershed Problems

People affect the environment's health when they pollute a watershed. Pollutants are materials that can harm plants, animals or humans. These materials may be discharged directly into a waterbody or washed off the land and into waterbodies. Some can also seep into the soil and groundwater.

Examples of pollutants include soil from construction sites, waste from septic systems, fertilizers, pesticides and chemicals such as mercury, lead and arsenic. Road salt, soil and animal waste can also pollute if washed into a waterbody. Sources of pollution include atmospheric deposition (acid rain), runoff from paved roads and driveways, lawns, eroding streambanks, oil spills, landfills, industries, and farm fields. Depending on the type and level of pollution, the waterbody may become unsuitable for fishing, swimming, or even for aquatic animals to survive in.

A watershed may also be harmed when people change how and where water flows, for example, by paving large parking lots or changing the direction of a stream. Problems such as flooding or lower groundwater levels can result.

Protect New York's Watersheds

Everyone lives in a watershed. It could be large or small. What you do at your house affects everyone downstream and around you.

- Get involved. Little things can all add up. Get together with friends and adopt a section of waterway. Plan a picnic with friends and clean up the banks of a nearby waterway, bike route or highway.

- Sweep sidewalks and driveways rather than hosing them off. Hosing hard surfaces wastes water and moves the debris into the storm drains. There it can collect and clog the drain. Instead, collect and compost yard waste.

- Don't waste water. Wash your car on the lawn, or better yet, use a commercial car wash. Most commercial car washes recycle or pre-treat their waste water, thereby reducing it's affect on the environment.

- Don't flush unused drugs and cosmetics down the drain. These pollutants find their way out into the environment and can damage our watershed and everything living in it. Instead, dispose of these items, along with fats, grease, diapers and personal hygiene products in the garbage can.

To Learn More about Watersheds

DEC has information on New York's 17 major watersheds (or "basins"). Visit us on the web at: http://www.dec.ny.gov/lands/60135.html

NEW YORK STATE
DEPARTMENT OF
ENVIRONMENTAL CONSERVATION

Watershed Stewardship

What is a watershed? A watershed is an area of land that drains into a body of water, such as a river, lake, reservoir, estuary, sea or ocean. The watershed includes the network of rivers, streams and lakes that convey the water, as well as the land from which water runs off. Watersheds are separated from adjacent watersheds by high points such as mountains, hills and ridges. For general information about watersheds, visit the We All Live in a Watershed webpage.

Pollutants are materials that can harm plants, animals or humans. These materials may flow directly into a pond or stream or be washed off the land. Some can also seep into the soil and contaminate groundwater. Depending on the type and level of pollution, the waters of a watershed may become unsuitable for fishing, swimming, or even for aquatic animals to survive. What you do at your house affects everyone downstream and around you. We all need to work together to preserve and protect our watersheds.

Take Action

What can you do to help preserve and protect your watershed and environment?

Get involved. Become aware. Little things add up.

- Get together with friends and local government to adopt a section of waterway. Plan a picnic and clean up the banks of a nearby waterway, bike route or highway. Picnic and camp responsibly. Leave nature as you found it for others to enjoy. To reduce litter, trash and garbage, bring your picnic treats and supplies in reusable containers. Take your reusable containers and trash out with you when you leave.
- Conserve water every day. Turn off the water while brushing teeth and washing dishes. Take shorter showers. Fix any leaks. Clean drinking water is a valuable and limited resource.
- Sweep sidewalks and driveways rather than hosing them off. Hosing hard surfaces wastes water and moves the debris into the storm drains. There it collects and can clog the drain. Instead, collect and compost yard waste and leave the grass clippings on the lawn to decay.
- Don't waste water. Wash your car on the lawn, or better yet, use a commercial car wash. Most commercial car washes recycle or pre-treat their waste water, thereby reducing its effect on the environment.
- Don't flush unused drugs and cosmetics down the drain. These pollutants find their way out into the environment and can damage our watershed and everything living in it. Instead, dispose of these items, along with fats, grease, diapers and personal hygiene products in the garbage can.
- Fight mud! Help control soil erosion. Sediment & fine soil particles can suffocate fish and destroy their habitat. Cover bare areas of soil with mulch, or plant grass and ground cover to keep the rain from washing the soil into storm drains, ditches, streams and lakes.

Investigate

Everyone lives in a watershed. It might be large or small. All watersheds are part of the bigger environment. What you do at your house affects everyone downstream and around you. You can set a good example for your family, friends and neighbors. Simple actions you take make big differences.

Find out about your watershed.

- Where is my watershed in New York State?
  - What is special or unique about it?
  - Is there a pond, lake or stream near where I live?
- How healthy is the water and the nearby environment?
- Are there problems or issues in my watershed that I should be aware of?
- How can I help preserve and protect my watershed from pollution?
- Is there a local organization that gets involved with protecting my environment?

View a map of New York State's 17 major watersheds.

Help Prevent Pollution

Remember the 3 R's - Reduce, Reuse, Recycle.

- Recycle motor oil and automotive fluids: don't pour it in a storm drain or on the field next door. Return it to the place of purchase or other locations where the product is sold.
- Dispose of hazardous materials such as paints, solvents, varnishes, fertilizers and electronics during Hazardous Waste Collection Days.
- Reduce the use of fertilizers & pesticides.
- Recycle yard wastes: compost yard waste and use it in the garden and on the lawn.
- Recycle paper, plastic, metal and glass whenever possible.
- Reduce air pollution: walk or ride a bike for short trips, car pool when possible and plan trip chains for appointments and errands.
- Reduce litter: Put trash in containers and properly dispose of it.