### Fact Sheet on New York State's 2014 Impaired Waters List

EPA partially approved and partially disapproved New York's 2014 List of Impaired Waters Requiring a Total Maximum Daily Load. New York's 2014 list presents important information on impaired waters, pollutants causing impairment and pollutant sources. The list is important because it helps focus the state's attention on impaired waters.

EPA approved New York's decision to list waterbody segments and associated pollutants and the State's priority ranking for these waters and pollutants with one exception. EPA disapproved the State's decision not to list Jones Inlet/Jones Bay for nitrogen because readily available data indicate exceedances of New York State's narrative water quality standard for nutrients. EPA will continue to build partnerships throughout the state to ensure that impaired waters receive proper attention.

#### How States Report on the Quality of their Waters

The Clean Water Act requires states to assess the quality of their water bodies and to report their findings every two years to EPA. States adopt specific water quality standards which serve as the foundation for water quality management. Water quality standards identify the designated uses for each body of water (such as swimming, drinking, shellfish harvesting, etc.) and set scientific criteria to protect those uses. During the assessment process, states compare the collected data to the established water quality standards.

In addition to reporting on the overall quality of all waters, the Clean Water Act directs states to identify and list specific water bodies where water quality is impaired or threatened by pollutants. This requirement is found under section 303(d) of the Clean Water Act, and the list of impaired waters is often referred to as the "303(d) list." The 303(d) list includes waters that are:

Impaired – A body of water that does not meet water quality standards even after pollution controls have been put in place.

Threatened – A body of water that is expected to be impaired within two years.

Each impairment reflected on the 303(d) list requires a calculation of the maximum amount of the impairing pollutant that a water body can receive and still meet water quality standards. This calculation is called the total maximum daily load (TMDL). TMDLs include reductions for pollution sources affecting the water body which, when achieved, will result in the attainment of water quality standards in the impaired water body.

In certain cases, impaired or threatened waters may not appear on a state's 303(d) list. If a TMDL has already been devised for the water, another required control measure is expected to result in the attainment of water quality standards in a reasonable amount of

time, or the impairment or threat is the result of *pollution* (not a specific pollutant that can be addressed via TMDL), then the water may not be included.

New York has provided a supplementary list of impaired waters that it did not include on the 303(d) list to help determine where and how impairments are being addressed and where pollution, not a pollutant, is causing impairment.

Water quality monitoring data and other information must be considered by states in assessment and reporting efforts. Monitoring is carried out by national, state, local, and tribal authorities; universities; dischargers; volunteers; and others. Monitoring can include measurements of physical and chemical parameters (temperature, dissolved oxygen, suspended sediment, nutrients, metals, oils, and pesticides, for example); examinations of streamflow, water color, condition of stream banks and lake shores; observations of communities of aquatic wildlife; and sampling of fish tissue or sediment. Land use data, predictive models and land surveys may also be used.

#### **Summary of 2014 Findings**

New York's 303(d) list notes 839 instances where a pollutant is causing a designated use impairment.

The most common pollutants causing impairment include the following:

- 1. 21% of impairments are attributed to pH (acidity or alkalinity) from atmospheric deposition or acid rain.
- 2. 19% of impairments are attributed to persistent organic compounds such as PCBs and PAHs found in contaminated sediments.
- 3. 18% of impairments are attributed to nutrients such as nitrogen and phosphorus. Phosphorus makes up the majority of nutrient impairments in New York State and is most often contributed to waters by agricultural sources or urban and stormwater runoff.
- 4. 12% of impairments are due to pathogens. The most common source of pathogen impairments is runoff, but onsite wastewater treatment such as septic systems and cesspools are also a major contributor.
- 5. 11% of impairments are due to low dissolved oxygen levels

Common pollutant sources include the following:

- urban/stormwater runoff (240 impairments)
- contaminated sediment (211 impairments)
- atmospheric deposition (including acid rain) (175 impairments)
- municipal sources (94 impairments)
- combined sewer overflows (57 impairments)

The 303(d) list also identifies which water bodies no longer require listing. Removal of a water body from the 303(d) list, called delisting, may indicate that the water is restored (water quality standards are attained); that the water is receiving management attention

that is expected to result in the attainment of water quality standards; or, for various reasons, that the original basis of listing is no longer applicable.

Eight waters were delisted:

Four waters due to the completion of TMDLs in the last two years:

Java Lake (0104-0004) for Phosphorus Chautauqua Lake, South (0202-0020) for Phosphorus Chautauqua Lake, North (0202-0072) for Phosphorus Basic Creek Reservoir (1309-0001) for Phosphorus

Four waterbody/pollutant combinations due to water quality standard attainment/use restoration:

Keuka Lake (0705-0003) for DDT Saint James Pond (1702-0049) for Chlordane/DDT Cayuga Lake, Southern End (0705-0040) for Pathogens Mattituck or Marratooka Pond (1701-0129) for Metals

EPA disapproved New York's decision to exclude Jones Beach/Jones Inlet on its 2014 303(d) List. EPA evaluated existing and readily available data and information and concluded that the applicable narrative water quality standard for nutrients is not being attained in Jones Inlet/Jones Bay. Based on this evaluation, EPA has determined that Jones Inlet/Jones Bay should be included on the State's 303(d) list of impaired waters.

Pursuant to this partial disapproval, EPA will open a public comment period to receive comments concerning the Agency's decision to add Jones Inlet/Jones Bay to the State's 303(d) list. After examining comments received from the public, EPA will make any appropriate revisions to its decision and provide New York with a final action on the listing of Jones Inlet/Jones Bay on New York's 2014 303(d) list.

#### **Evaluation of Management Efforts**

EPA's National Water Program has prioritized protecting and restoring America's watersheds, and the 303(d) list is a useful tool for measuring progress in this effort. By comparing recent 303(d) lists to those developed in past years, managers can gain a sense of whether – and how quickly – impaired waters are being restored. EPA uses states' 2002 303(d) lists as a baseline against which managers track impairment removal and water quality improvement. Examination of New York's recent 303(d) lists reveals that, over the last ten years, 28 formerly impaired waters now meet applicable water quality standards. In addition, many other waters, while not fully restored, are improving in quality. Water quality improvement in restored waters can often be traced to watershed management efforts undertaken by EPA, states, and local stakeholders.

## **How the Water Quality Sampling and Reporting Process Works:**

New York State Department of Environmental Conservation (NYSDEC) officials have identified 17 major hydrologically defined basins and have established a rotating approach to water quality sampling under the "rotating integrated basin studies" program. Rather than sampling all waters every year, NYSDEC assesses water quality in each basin once every five years. Results from past sampling and assessment efforts can be found in New York's "Waterbody Inventory/Priority Waterbodies Lists" (WI/PWLs) at <a href="http://www.dec.ny.gov/chemical/36730.html">http://www.dec.ny.gov/chemical/36730.html</a>.

In the first year of the water quality sampling process, NYSDEC staff screen waters to identify toxic impacts, investigate habitat, and analyze macroinvertebrate community condition. Officials use information gathered during this year to determine where to commit resources during the second, intensive sampling year. In the second year, NYSDEC may sample water chemistry, sediment and invertebrate tissue chemistry, perform toxicity testing, evaluate the fish community, and do further work to assess macroinvertebrate community health. Data from the two years of field sampling are analyzed against New York's water quality standards using methods described in New York's Consolidated Assessment and Listing Methodology, available at <a href="http://www.dec.ny.gov/chemical/31296.html">http://www.dec.ny.gov/chemical/31296.html</a>. These assessments inform New York's WI/PWL documents, 305(b) report, and 303(d) list.

#### **How to Get Involved**

Recognizing that stakeholders throughout New York collect valuable water quality data, NYSDEC has established a process that allows groups and individuals to submit information for use in the state's assessment work.

To participate in the WI/PWL update process, it is best to work through the state network of County Water Quality Coordinating Committees. For more information, contact either your DEC Regional Office (<a href="http://www.dec.ny.gov/about/50230.html">http://www.dec.ny.gov/about/50230.html</a>) or the Division of Water in Albany (see contact information below).

To submit data for consideration during future 303(d) assessment cycles, submissions (data, photographs, etc.) must be sent to NYSDEC by September 30 of odd-numbered years. For example, the deadline for the 2014 303(d)/305(b) assessment cycle was Friday, September 30, 2013. When it is submitted as part of the 303(d) or 305(b) process, stakeholder information is considered as soon as it is received. Parties submitting information should include NYSDEC's WI/PWL worksheet (http://www.dec.ny.gov/docs/water\_pdf/pwlwrksht.pdf) and send materials to:

NYS DEC – Division of Water Bureau of Watershed Assessment and Management 625 Broadway, 4th Floor Albany, NY 12233-3502

Alternatively, information can be sent via e-mail to <u>4pwlinfo@gw.dec.state.ny.us</u>. If you have questions or would like to speak directly with a NYSDEC representative, call 518-402-8179.

Opportunity for formal public comment on the draft 303(d) list is also provided by New York State. This is typically announced in early January of even-numbered years via New York's Environmental Notice Bulletin (<a href="http://www.dec.ny.gov/enb/enb.html">http://www.dec.ny.gov/enb/enb.html</a>) and comments are accepted for a six-week period. You can subscribe to the bulletin by emailing <a href="mailto:enb@gw.dec.state.ny.us">enb@gw.dec.state.ny.us</a> and requesting that you be added to the listserv.

# EPA Contacts for NY's 303(d) List:

If you have questions or concerns, contact EPA's New York water quality assessment and 303(d) list expert, Dana Flint (212-637-3635).