**Fact Sheet on New York State's 2016 Impaired Waters List**

EPA partially approved and partially disapproved New York's 2016 List of Impaired Waters Requiring a Total Maximum Daily Load. New York's 2016 list presents significant 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 list with respect to the 792 waterbody/pollutant combinations included on the list and the State's priority ranking for these waters and pollutants. However, EPA disapproved the list because EPA determined that it did not include 71 waterbody/pollutant combinations that meet listing requirements. 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 waterbodies 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 waterbodies 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 waterbody 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 waterbody which, when achieved, will result in the attainment of water quality standards in the impaired waterbody.

In certain cases, impaired or threatened waters may not appear on a state's 303(d) list. If a TMDL has already been developed for the water, other required control measures are 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 a TMDL), then the water may not be included.

New York has provided a supplementary list of impaired waters that it removed ("delisted") from its 2014 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 life; and sampling of fish tissue or sediment. Land use data, predictive models and land surveys may also be used.

**Summary of 2016 Findings**

New York's 303(d) list identifies 792 instances where a pollutant is causing an impairment in a waterbody.

The most common pollutants causing impairment include the following:

1. 16% of impairments are attributed to pH (acidity or alkalinity) from atmospheric deposition or acid rain.
2. 27% of impairments are attributed to persistent organic compounds such as PCBs and PAHs found in contaminated sediments.
3. 16% 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. 15% 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. 13% of impairments are due to low dissolved oxygen levels.

Common pollutant sources include the following:

- urban/stormwater runoff (171 impairments)
- contaminated sediment (217 impairments)
- atmospheric deposition (including acid rain) (126 impairments)
- municipal sources (99 impairments)
- combined sewer overflows (70 impairments)

New York has also identified waterbodies that no longer require listing. Removal of a waterbody from the 303(d) list, called delisting, may indicate that the water is restored (water quality standards are attained); 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. New York delisted ninety-two waterbody/pollutant combinations from its 2014 303(d) list.

New York delisted 61 waterbody/pollutant combinations based on one of the following reasons:

A. Approval or establishment by EPA of a TMDL since the last 303(d) list.

> 51 waterbody/pollutant combinations have been delisted due to completion of new TMDLs.

B. The State's assessment and interpretation of more recent or more accurate data demonstrate that the applicable water quality standard is met.

> Seven waterbody/pollutant combinations have been delisted due to reassessment indicating water quality standard attainment.

C. The State's assessment and interpretation of more recent or more accurate data demonstrate that the water is impaired but the water quality standard for which it was listed is met.

> One waterbody/pollutant combination has been delisted because the State has determined that is impaired by pollution, not by a pollutant requiring a TMDL.

D. The original basis for listing was incorrect.

> Two waterbody/pollutant combinations have been delisted due to incorrect, insufficient or inadequate data and/or information to determine the water quality status at the time of listing, therefore, the original basis for listing was incorrect.

New York delisted 30 waterbody/pollutant combinations which EPA has determined meet listing requirements. These are included in the discussion below.

EPA disapproved New York's omission of 71 waterbody/pollutant combinations from the list:

A. Waters impaired for dissolved oxygen that New York delisted without data or information indicating the dissolved oxygen criteria are met.

Four waterbody/pollutant combinations were delisted due to the State's reassessment of data indicating water quality standard attainment.

New York does not contend that the dissolved oxygen standard is attained in these waters, but rather, that non-attainment of the standard is due to natural conditions. However, New York's dissolved oxygen standards do not contain a provision allowing for low dissolved oxygen due to natural conditions.

B. New York delisted waters impaired for its narrative nutrients standard without data or information indicating that the standard is met.

Twenty waterbodies were previously listed for both "Oxygen Demand" to account for the impairment of the applicable dissolved oxygen standard and for "Phosphorus" or "Nitrogen" to account for the impairment of the applicable narrative nutrients standard. On the 2016 list, New York listed these waters as impaired for dissolved oxygen and delisted these waters as impaired for the narrative nutrients standard without data or information indicating that the narrative nutrients standard is met.

Six waterbodies were previously listed for Nitrogen to account for the impairment of the narrative nutrients standard. These waters were not previously listed as impaired for dissolved oxygen. On the 2016 list, New York changed the listings to "Nitrogen/low D.O." to account for the impairment of the dissolved oxygen standard and delisted these waters as impaired for the narrative nutrient standard without data indicating that the narrative nutrients standard is met.

C. Waterbody/pollutant combinations excluded from New York's 2016 303(d) List and included in Integrated Report Category 4b.

Category 4b, as defined in EPA's 2006 Integrated Report Guidance, is a waterbody/pollutant combination where a TMDL is not necessary because other required control measures are expected to result in the attainment of water quality standards within a reasonable amount of time.

EPA reassessed whether there is sufficient documentation to support not including 41 waterbody/pollutant combinations on New York's 303(d) list. EPA concluded that New York's 4b demonstrations do not include adequate documentation, consistent with EPA guidance, to support not listing these waterbody/pollutant combinations on New York's 303(d) list.

For two of the 41 waterbody/pollutant combinations, New York submitted data to demonstrate that dissolved oxygen standards are attained. However, the data showed that the standards are not attained.

New York submitted data on one additional waterbody/pollutant combination that was previously placed in Category 4b demonstrating that dissolved oxygen standards are attained.

Pursuant to the CWA and EPA regulations, EPA will propose to add the 71 waterbody/pollutant combinations to New York's 2016 303(d) list and seek public comment on these proposed additions.

EPA will open a public comment period to receive comments concerning our decision to add the 71 waterbody/pollutant combinations referenced above 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 the 71 waterbody/pollutant combinations on New York's 2016 Section 303(d) list.

For a detailed explanation of EPA's partial approval/partial disapproval, please refer to the 2016 303(d) Support Document.

**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 fourteen years, 28 formerly impaired waters now meet applicable water quality standards. An additional four waters have been restored since 2014, and 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. 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 http://www.dec.ny.gov/chemical/36730.html.

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 http://www.dec.ny.gov/chemical/31296.html. 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 (http://www.dec.ny.gov/about/50230.html) 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 2016 303(d)/305(b) assessment cycle was Friday, September 30, 2015. 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 4pwlinfo@gw.dec.state.ny.us. 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 (http://www.dec.ny.gov/enb/enb.html) and comments are accepted for a six-week period. You can subscribe to the bulletin by e-mailing enb@gw.dec.state.ny.us 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, Ms. Aimee Boucher (212-637-3837 or boucher.aimee@epa.gov).