

Fact Sheet on the New York 2018 Impaired Waters List March 2022

Section 303(d) of the Clean Water Act requires states, territories and authorized tribes to develop lists of impaired waters. Impaired waters are waters that are too polluted or otherwise degraded to meet water quality standards. The Clean Water Act requires these jurisdictions to establish priority rankings for waters on the lists and to develop total maximum daily loads for impaired waters. A total maximum daily load, or TMDL, is a calculation of the maximum amount of a pollutant that a waterbody can receive and still safely meet water quality standards.¹

The Environmental Protection Agency (EPA) has approved the New York 2018 list of impaired waters requiring a TMDL with respect to 835 waterbody/pollutant combinations. EPA has disapproved the New York 2018 list with respect to 22 waterbody/pollutant combinations because EPA has determined that these waterbody/pollutant combinations meet 303(d) listing requirements and is adding these 22 waterbody/pollutant combinations to the New York 2018 303(d) list. The New York 2018 list of impaired waters presents information on impaired waters, pollutants causing the impairment and pollutant sources. EPA will continue to build partnerships throughout the state to ensure that impaired waters receive proper attention and is looking forward to working with New York's water quality program to address environmental justice and account for climate change impacts.

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 to EPA every two years. States adopt specific water quality standards that 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 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 by pollutants. A waterbody is considered impaired if it does not meet water quality standards. The requirement to prepare the impaired waters list is found in section 303(d) of the Clean Water Act, and the list is often called the 303(d) list.

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. TMDLs include reductions for pollutant sources impacting the waterbody that, when achieved, will result in the attainment of water quality standards in the waterbody.

In certain cases, an impaired water may not appear on a state's 303(d) list. If a TMDL has already been developed for the water, another required control measure is expected to result in the attainment of water quality standards within a reasonable amount of time, or the impairment is the result of pollution not caused by a pollutant (e.g., hydrologic or habitat alteration), then the water may not be included.

Water quality monitoring data and other information must be considered by states in assessment and reporting efforts. Monitoring may be carried out by national, state, local and tribal authorities, universities, dischargers, volunteers, and others. It can include measurements of physical and chemical parameters (temperature, dissolved oxygen, suspended sediment, nutrients, metals, oils, and/or pesticides, for

¹ <https://www.epa.gov/tmdl/overview-total-maximum-daily-loads-tmdls>

example), examinations of stream flow, water color, condition of stream banks and lake shores, observations of communities of aquatic wildlife, and sampling of fish tissue or sediment. Landuse data, predictive models and land surveys may also be used.

Summary of 2018 Findings

The New York 303(d) list includes 835 instances where a pollutant is causing a designated use impairment. The indicators/causes of impairments are:

- Fecal Coliform (157)
- Phosphorus (141)
- PCBs (97)
- Low D.O. (75)
- Acid/Base (pH) (57)
- Dioxin (41)
- Unknown (biol impacts) (38)
- Mirex (36)
- Oxygen Demand (35)
- Silt/Sediment (26)
- Garbage & Refuse (23)
- Nitrogen (22)
- PCBs, other toxics (22)
- Chlordane (14)
- Mercury (6)
- Turbidity (5)
- Nutrients (phosphorus) (4)
- Oils & Floating Sub. (4)
- Ammonia (2)
- Ammonia (NH₃) (5)
- Nutrients (2)
- Org.Chlor.Pest/HCB (2)
- PAHs (2)
- Cadmium (1)
- Copper (1)
- Cyanide (1)
- DDT (1)
- Dieldrin (1)
- Nitrogen (NH₃, NO₂) (1)
- Oil/Grease (1)
- Pathogens (3)
- Pesticides (1)
- Phosphorous (3)
- Priority Organics (1)
- Salinity (1)
- Thermal Changes (1)
- Unknown (1)
- Unknown (biol impacts) (1)

Some pollutant sources include, but are not limited to:

- urban/stormwater runoff
- contaminated sediment
- atmospheric deposition
- onsite wastewater treatment systems
- agriculture
- combined sewer overflows
- unknown

The New York 2018 303(d) list also reflects waterbody/pollutant combinations that no longer require listing. Removal of a waterbody/pollutant combination from the 303(d) list, called delisting, may indicate that the water is restored, a TMDL was developed, the water is receiving management attention that is expected to result in the attainment of water quality standards, or other factors (including errors). New York appropriately delisted 14 waterbody/pollutant combinations from the 2016 New York 303(d) list, including:

- 4 waterbody/pollutant combinations where water quality standards are now met, based on new water quality data, including:
 - 1 waterbody/pollutant combination for cyanide
 - 1 waterbody/pollutant combination for acid/base (pH)
 - 1 waterbody/pollutant combination for PCB
 - 1 waterbody/pollutant combination for pathogens

- 7 waterbody/pollutant combinations covered under a TMDL that was developed prior to the approval of the 2018 303(d) list.
- 3 waterbody/pollutant combinations where the original basis for listing was incorrect.

EPA is disapproving the New York 2018 303(d) list because EPA has determined that New York did not include twenty-two (22) waterbody/pollutant combinations on the 2018 303(d) list that meet 303(d) listing requirements, including:

- 17 waterbody/pollutant combinations that New York improperly delisted because data and information indicate that an applicable water quality standard is not met, including:
 - 4 waterbody/pollutant combinations where the applicable water quality criterion for odors is not met
 - 9 waterbody/pollutant combinations where data and/or information indicate that the applicable water quality criterion/criteria for floatables is/are not met.
 - 2 waterbody/pollutant combinations where the applicable water quality criterion for dissolved oxygen is not met
 - 1 waterbody/pollutant combination that New York improperly delisted where data and/or information indicate the presence of harmful algal blooms (HABs), which in turn, indicates that an applicable water quality standard is not met.
 - 1 waterbody/pollutant combination for an assessment unit under 6.4 acres that New York improperly delisted from the New York 2016 303(d) list where data and/or information indicate that the applicable water quality criterion for dissolved oxygen is not met.
- 5 waterbody/pollutant combinations that New York did not include on the State's 2016 or 2018 303(d) lists, including:
 - 1 waterbody/pollutant combination that New York did not include on the 2018 303(d) list (that EPA listed on the New York 2014 303(d) list) where data and/or information indicate that the applicable narrative water quality criterion for nutrients is not met.
 - 3 waterbody/pollutant combinations where data and information indicate the presence of HABs, which in turn, indicates that an applicable water quality standard is not met. New York did not demonstrate that no pollutant is causing the impairment of this water, did not include this waterbody/pollutant combination on the 2018 303(d) list and inappropriately categorized this waterbody/pollutant combination.
 - 1 waterbody/pollutant combination where data and/or information indicate the presence of HABs, which in turn, indicates that an applicable water quality standard is not met. New York did not include this waterbody/pollutant combination on the 303(d) list or in any other category.

EPA has further action pending with regards to one hundred and fifty-six (156) waterbody/pollutant combinations, including:

- 5 waterbody/pollutant combinations where designated for shellfishing that are not certified for (or are otherwise closed to) shellfishing
- 72 waterbody/pollutant combinations where the state is claiming that no pollutant(s) causes or contributes to the impairment
 - 69 waterbody/pollutant combinations impairment is due to algal/weed growth
 - 1 waterbody/pollutant combination where the impairment is due to aquatic vegetation

- 1 waterbody/pollutant combinations where the impairment is due to aquatic weeds
- 1 waterbody/pollutant combinations where the impairment is due to odors
- 65 waterbody/pollutant combinations that New York delisted after it resegmented these waters, incorporating them into another assessment unit, and the new assessment unit is not included on the New York 2018 303(d) list
 - 64 waterbody/pollutant combinations where the cause/pollutant is pH
 - 1 waterbody/pollutant combination where the cause/pollutant is chlordane
- Fourteen (14) waterbody/pollutant combinations that are classified as Class I or Class SD waters where EPA will work with the State to assess data and/or information to determine whether the applicable standards, with respect to pathogens, are met.

How the Water Quality Sampling and Reporting Process Works

New York State Department of Environmental Conservation (NYSDEC) has identified 17 major hydrologically defined basins and has 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 screens waters to identify toxic impacts, investigate habitat, and analyze macroinvertebrate community condition. NYSDEC uses information gathered during this year to determine where to commit resources during the second, and more 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 the end of September of odd-numbered years. For example, the deadline for the 2018 303(d)/305(b) assessment cycle was Wednesday, September 27, 2017.

More information on data requirements and NYSDEC's process for conducting assessments is described in the CALM (https://www.dec.ny.gov/docs/water_pdf/calmmay2021.pdf). If you have questions or would like to speak directly with a NYSDEC representative, call (518) 402-8179 or email 4pwlinfo@gw.dec.state.ny.us.

Opportunity for formal public comment on the draft 303(d) list is also provided by New York. 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 typically accepted during a four to six week period. You can subscribe to the bulletin by emailing enb@gw.dec.state.ny.us and request that you be added to the listserv.

The EPA Contact for the New York 303(d) List

If you have questions or concerns, contact Dr. Daniel Gurdak by phone at (212) 637-3634 or by email at Gurdak.Daniel@epa.gov.