Supporting Documentation for Review and Partial Approval/Partial Disapproval of New York State's 2016 303(d) List

Pursuant to Section 303(d) of the Clean Water Act (CWA), New York State (the State or New York or NYSDEC) submitted its "New York State 2016 Section 303(d) List of Impaired Waters Requiring a TMDL" (the 2016 303(d) list) to the U.S. Environmental Protection Agency (EPA) for approval or disapproval. The State also submitted to EPA documents entitled "2016 DELISTED Waters (NOT Included on the 2016 Section 303(d) List)" (2016 Delisted Waters) and "Response to Comments on The 2016 NYS 303(d) List of Impaired Waters Requiring a TMDL" (Response to Comments). The State did not submit to EPA an Integrated Report that includes and categorizes all assessed waters to satisfy the reporting requirements of both Sections 303(d) and 305(b) of the CWA. EPA has reviewed New York's 2016 303(d) list and supporting documentation. New York's 2016 303(d) list and supporting documentation is referred to below collectively as the "submission."

EPA reviewed the submission based upon whether the State has developed its list in compliance with Section 303(d) of the CWA and EPA's implementing regulations. This included whether the State reasonably considered existing and readily available water quality-related data and information, and reasonably identified waters required to be listed. For the reasons set forth below, EPA is partially approving and partially disapproving New York's 2016 303(d) list. Specifically, EPA is approving New York's 2016 303(d) list with respect to the 792 waterbody/pollutant combinations New York included on its list as requiring a total maximum daily load (TMDL). EPA is disapproving New York's 2016 303(d) list because EPA has determined that it does not include seventy-one (71) waterbody/pollutant combinations that meet 303(d) listing requirements. These 71 waterbody/pollutant combinations comprise: (1) thirty-eight waterbody/pollutant combinations in Integrated Report Category 4b (i.e., impaired waters where a TMDL is not necessary because other required controls will result in attainment of water quality standards within a reasonable period of time) without adequate justification; (2) one waterbody/pollutant combination delisted from the 2014 303(d) list and moved to Integrated Report Category 4b without adequate justification; (3) four waterbody/pollutant combinations delisted from the 2014 303(d) list without data or information that indicate that New York's water quality standard for dissolved oxygen is met; (4) twenty-six waterbody/pollutant combinations delisted from the 2014 303(d) list without data or information that indicate that New York's narrative nutrients standard is met; and (5) two waterbody/pollutant combinations not included on the 2016 303(d) list where data or information indicate that New York's water quality standard for dissolved oxygen is not met.

Identification of Water Quality Limited Segments for Inclusion on the 303(d) List

Section 303(d)(1) of the CWA directs states to identify those waters within their jurisdiction for which effluent limitations required by Section 301(b)(1)(A) and (B) are not stringent enough to implement any applicable water quality standards, and to establish a priority ranking for those waters, taking into account the severity of the pollution and the uses to be made of those waters.

The Section 303(d) listing requirement applies to waters impaired by point and/or nonpoint sources, pursuant to EPA's long-standing interpretation of Section 303(d).

EPA regulations do not require states to list waters where the following controls are adequate to implement applicable standards: (1) technology-based effluent limitations required by the CWA; (2) more stringent effluent limitations required by state or local authority; and (3) other pollution control requirements required by state, local or federal authority. See, 40 CFR 130.7(b)(1).

Consideration of Existing and Readily Available Water Quality-Related Data and Information

In developing 303(d) lists, states are required to assemble and evaluate all existing and readily available water quality-related data and information including, at a minimum, consideration of existing and readily available data and information about the following categories of waters: (1) waters identified as partially meeting or not meeting designated uses, or as threatened, in the state's most recent CWA Section 305(b) report; (2) waters for which dilution calculations or predictive modeling indicate nonattainment of applicable standards; (3) waters for which water quality problems have been reported by governmental agencies, members of the public or academic institutions; and (4) waters identified as impaired or threatened in any Section 319 nonpoint assessment submitted to EPA. See, 40 CFR 130.7(b)(5). In addition to these minimum categories, states are required to consider any other data and information that is existing and readily available. EPA's guidance describes categories of water quality-related data and information that may be existing and readily available. See, Guidance for Water Quality-Based Decisions: The TMDL Process, EPA Office of Water, 1991, EPA 440-4-91-001, Appendix C (EPA's 1991 Guidance). While states are required to evaluate all existing and readily available water quality-related data and information, states may decide to rely or not rely on particular data or information in determining whether to list particular waters.

In addition to assembling and evaluating all existing and readily available water quality-related data and information, EPA regulations, at 40 CFR 130.7(b)(6), require states to submit documentation in support of determinations to list or not list its waters. This documentation must be submitted together with the list and must include, at a minimum: (1) a description of the methodology used to develop the list; (2) a description of the data and information used to identify waters; (3) documentation to support decisions not to use particular data and information, as well as documentation to support decisions to list or not list waters; and (4) any other reasonable information requested by EPA, including good cause for not including a water or waters on the list.

Consistent with EPA's guidance, Guidelines for Preparation of the Comprehensive State Water Quality Assessments (305(b) Reports) and Electronic Updates - EPA841-B-97-002A and EPA841-B-97-002B, 1997, and Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d), 305(b), and 314 of the Clean Water Act, July 29, 2005 ("EPA's 2006 Integrated Report Guidance"), the New York State Department of

Environmental Conservation (NYSDEC) developed a Consolidated Assessment and Listing Methodology (CALM) to integrate the monitoring and assessment activities under Sections 305(b) and 303(d). The NYSDEC's CALM describes the process for evaluating and consolidating monitoring data and information. The CALM contains three sub-parts: Monitoring Strategy, Assessment Methodology and Listing Methodology. The Listing Methodology describes the process for developing the 303(d) list from evaluation and assessment of data gathered through the Monitoring Strategy and the Assessment Methodology. The State's CALM is updated periodically, generally in concert with the federal biennial assessment and listing cycle. EPA does not have approval authority with respect to the State's CALM.

The foundation for the State's listing process (both 305(b) and 303(d)) is the State's Water Inventory/Priority Waterbodies List (WI/PWL), which is based on the results of the State's monitoring and assessment methodologies. Waters listed on the 303(d) list are drawn directly from the WI/PWL. The WI/PWL is a comprehensive inventory of waterbodies throughout the State, including those waters known or suspected to have designated water uses with some degree of impairment or which are threatened by potential impairment. Designated use impairments are determined by evaluation of all available information on the waterbodies, including: use restriction orders (drinking water restrictions, bathing beach closures, fish consumption and shellfishing advisories); comparison of data from the NYSDEC ambient monitoring network, other agencies and local or public/citizen monitoring programs with parameter-specific water quality standards; the use of surrogate indicators; and qualitative perception and observational information (stream habitat assessments, recreation use or fishery resource surveys and citizen complaints).

The WI/PWL categorizes waters according to the severity of the problem (precluded, impaired, stressed, threatened, no known impact/impairment or unassessed waters) and the level of documentation of the problem (known, suspected, possible). Based upon WI/PWL categorization, the State determines which category described in EPA's Integrated Report Guidance the water is to be placed. Waterbody segments listed as "precluded" or "impaired" due to pollutants are listed under Section 303(d), or Category 5, as described in EPA's 2006 Integrated Report Guidance. The State's list identifies the pollutants causing the impairment for each listed segment.

Public input for the WI/PWL is provided through the Water Management Advisory Committee, the Statewide Nonpoint Source Committee, county water quality coordinating committees, citizen's advisory committees for Remedial Action Plans and Lake Management Plans and other interest groups. The WI/WPL also includes input from a public outreach program conducted by local county and soil and water conservation districts working in conjunction with the State. The State solicited data indicating impairment of waters in the June 3, 2015 Environmental News Bulletin (ENB). The State requested that all data submissions be received by September 30, 2015 to allow the State sufficient time for the review and consideration of all data and information.

NYSDEC organizes the 303(d) list in separate sections, allowing NYSDEC to manage its 303(d) list to meet its different programmatic needs. The following describes the structure and nomenclature of NYSDEC's 303(d) list:

Part 1: Individual Waterbody Segments with Impairments Requiring TMDL Development

Part 2: Multiple/Categorical Waterbody Segments with Impairments Requiring TMDL Development

- Part 2a: Waterbody Segments Impaired by Atmospheric Deposition/Acid Rain
- Part 2b: Waterbody Segments Impaired by Fish Consumption Advisories
- Part 2c: Waterbody Segments Impaired by Shellfishing Restrictions

Part 3: Waterbodies for which TMDLs are/may be Deferred

- Part 3a: Waterbodies Requiring Verification of Impairment
- Part 3b: Waterbodies Requiring Verification of Cause/Pollutant/Source
- Part 3c: Waterbodies Awaiting Development/Evaluation of Other Restoration Efforts

Appendix A: Smaller Lakes Impaired by Atmospheric Deposition (Acid Rain)

Appendix B: Listed Waterbodies Not Meeting Dissolved Oxygen Standards

The 2016 303(d) list is comprised of 792 waterbody/pollutant combinations as designated by NYSDEC:

- Part 1 includes 219 waterbody/pollutant combinations;
- Part 2a includes 54 waterbody/pollutant combinations;
- Part 2b includes 209 waterbody/pollutant combinations;
- Part 2c includes 32 waterbody/pollutant combinations;
- Part 3a includes 37 waterbody/pollutant combinations;
- Part 3b includes 73 waterbody/pollutant combinations;
- Part 3c includes 59 waterbody/pollutant combinations;
- Appendix A includes 70 waterbody/pollutant combinations; and
- Appendix B includes 39 waterbody/pollutant combinations.

EPA has reviewed the State's submission, as well as its description of the data and information considered, its methodology for classifying waters, and the WI/PWL. EPA has also compared the waterbody/pollutant combinations on New York's 2014 303(d) list and the impaired/delisted waterbody/pollutant combinations not included on the 2014 303(d) list with the waterbody/pollutant combinations on New York's 2016 303(d) list.

EPA investigated interstate waters to ensure assessment and listing consistency between New York and other border states. Differences in listing of interstate waters were noted in Vermont, Connecticut, New Jersey, Massachusetts, and Pennsylvania. Because states have different waterbody classifications and water quality standards, and because data may not be available for an entire waterbody, these differences are not inconsistent with regulatory requirements under 40

CFR 130.7. None of the states that border New York submitted comments on New York State's draft 2014 303(d) list.

EPA acknowledges that New York relisted on its 2016 303(d) list 16 "CSO-impaired NYC waters" that were delisted in previous listing cycles to Integrated Report Category 4b, in response to comments received from Pace/Riverkeeper regarding the exclusion of these waters on New York's Draft 2016 303(d) list. See, Response to Comments. New York pointed out that for these waterbody/pollutant delistings where the impairment was due to pathogens or low dissolved oxygen, the specific required control measure cited was the 2005 New York City Combined Sewer Overflow (CSO) Order on Consent which includes a requirement for New York City to develop Long Term Control Plans (LTCPs) consistent with EPA's 1994 CSO Control Policy. EPA notes that CSOs are not the only source of the pollutant of concern in these waters and that New York City is using the demonstration approach in its LCTPs. Where permittees are using the "demonstration approach" in their LTCPs, EPA highlights the following provisions in EPA's 1994 CSO Control Policy (59 FR 18693):

> "A permittee may demonstrate that a selected control program, though not meeting the criteria specified in II.C.4.a. above is adequate to meet the water quality-based requirements of the CWA. To be a successful demonstration, the permittee should demonstrate each of the following:
> i. The planned control program is adequate to meet WQS and protect designated uses, *unless WQS or uses cannot be met as a result of natural background conditions or pollution sources other than CSOs*; (emphasis added)
> ii. *The CSO discharges remaining after implementation of the planned control program will not preclude the attainment of WQS or the receiving waters' designated uses or contribute to their impairment. Where WQS and designated uses are not met in part because of natural background conditions or pollution sources other than CSOs, a total maximum daily load, including a wasteload allocation and a load allocation, or other means should be used to apportion pollutant loads*; (emphasis added)
> iii. The planned control program will provide the maximum pollution reduction benefits reasonably attainable; and
> iv. The planned control program is designed to allow cost effective expansion or cost effective retrofitting if additional controls are subsequently determined to be necessary to meet WQS or designated uses."

New York, in its Response to Comments, states its intent that, upon NYSDEC approval of LTCPs, the waterbodies covered by the LTCP will be delisted and assigned to Integrated Reporting Category 4b as waters where other required control measures are in place to address the impairment. With respect to the future delisting of waterbody/pollutant combinations to Integrated Report Category 4b, EPA notes that NYSDEC will need to provide adequate documentation to support delisting the waterbody/pollutant combinations to this category, including a description of the other sources of the pollutant of concern to the waterbody and the controls on all sources that will result in attainment of water quality standards in the waterbody. See below section "Delisted Waterbody/Pollutant Combinations" for a more detailed explanation of what is needed to adequately support delisting a waterbody/pollutant combination to Integrated Report Category 4b.

With respect to the 792 waterbody/pollutant combinations New York included on its 2016 303(d) list, the State properly assembled and evaluated all existing and readily available data and information, including data and information relating to the categories of waters specified in 40 CFR 130.7(b)(5), and identified these waterbody/pollutant combinations on its 2016 303(d) list.

With respect to the 71 waterbody/pollutant combinations that meet 303(d) listing requirements that are not included on New York's 2016 303(d) list, EPA has concluded that New York has not properly assembled and evaluated all existing and readily available data and information, and included these waters on its list. Explanations for this conclusion are included within the sections of this document entitled "Delisted Waterbody/Pollutant Combinations," "Impaired Waters Not Included on the 303(d) List because Development of a TMDL Is Not Necessary," and "Waterbody/Pollutant Combinations Not Included on the 303(d) List Because the Applicable Water Quality Standard is Attained."

Delisted Waterbody/Pollutant Combinations

New York delisted 92 waterbody/pollutant combinations from the 2014 303(d) list. EPA regulations, at 40 CFR 130.7(b)(6), require states to submit, together with their list, documentation in support of determinations not to list waters. Pursuant to 40 CFR 130.7(b)(6)(iv), when requested by EPA, a state "must demonstrate good cause for not including a water or waters on the list." EPA, throughout its review of New York's 2016 303(d) list, requested from New York, a demonstration of good cause for not including waterbody/pollutant combinations previously included on its 303(d) list. Consistent with 40 CFR 130.7(b), good cause, as described in EPA's Integrated Report Guidance[1], may be based on the following:

- The assessment and interpretation of more recent or more accurate data in the record demonstrate that the applicable water quality standard(s) is met;
- The results of more sophisticated water quality modeling demonstrate that the applicable water quality standard(s) is met;
- Flaws in the original analysis of data and information led to the segment being incorrectly listed;
- A demonstration, pursuant to 40 CFR 130.7(b)(1)(ii), that there are effluent limitations required by state or local authorities that are more stringent than technology-based effluent limitations, required by the CWA, and that these more stringent effluent limitations will result in the attainment of water quality standards for the pollutant causing the impairment;
- A demonstration, pursuant to 40 CFR 130.7(b)(1)(iii), that there are other pollution control requirements required by state, local, or federal authority that will result in attainment of water quality standards for a specific pollutant(s) within a reasonable amount of time (i.e., Integrated Report Category 4b);

[1] *Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d), 305(b) and 314 of the Clean Water Act, July 29, 2005 (2006 IRG).*

- Documentation that the state included on a previous section 303(d) list, an impaired segment that was not required to be listed by EPA regulations, e.g., segments where there is no pollutant associated with the impairment (i.e., Integrated Report Category 4c);
- Approval or establishment by EPA of a TMDL since the last 303(d) list;
- A state inappropriately listed a segment that is within Indian country, as defined in 18 U.S.C. section 1151; or
- Other relevant information that supports the decision not to include the segment on the 303(d) list.

1. The State has appropriately 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:

Sand Pond (0801-0055) for Acid/Base (pH)
Pepperbox Pond, Spring Ponds, Tied Lake (0801-0076) for Acid/Base (pH)
Minor Lakes Trib to Three Mile Cr Wshed (0801-0453) for Acid/Base (pH)
Sunday Lake, Sunday Creek Reservoir (0801-0195) for Acid/Base (pH)
Minor Lakes Trib to Moshier Creek (0801-0039) for Acid/Base (pH)
Shallow Pond, Raven Lake (0801-0107) for Acid/Base (pH)
Lyons Lake (0801-0109) for Acid/Base (pH)
Slim Pond (0801-0125) for Acid/Base (pH)
Evergreen Lake (0801-0110) for Acid/Base (pH)
Peaked Mtn. Lake, Hidden Lake (0801-0111) for Acid/Base (pH)
Ginger Pond, Soda Pond (0801-0126) for Acid/Base (pH)
Dismal Pond (0801-0065) for Acid/Base (pH)
Minor Lakes Trib to Red Horse Creek (0801-0068) for Acid/Base (pH)
Minor Lakes Trib to Shingle Shanty Brook (0801-0149) for Acid/Base (pH)
Terror Lake (0801-0018) for Acid/Base (pH)
Minor Lakes Trib to Twitchell Creek (0801-0077) for Acid/Base (pH)
Evies Pond, Long Lake, Fish Pond (0801-0323) for Acid/Base (pH)
Trout Pond, Bill's Pond (0801-0127) for Acid/Base (pH)
Panther, Fifth Creek, Lennon Ponds (0801-0075) for Acid/Base (pH)
Independence Lake (0801-0327) for Acid/Base (pH)
Little Diamond Pond (0801-0153) for Acid/Base (pH)
Minor Lakes Trib to Upper Otter Creek (0801-0041) for Acid/Base (pH)
Minor Lakes Trib to Upper Pine Creek (0801-0072) for Acid/Base (pH)
Minor Lakes Trib to Big Moose Lake, NW (0801-0050) for Acid/Base (pH)
Otter Pond (0801-0016) for Acid/Base (pH)
Lower, Upper Sister Lakes (0801-0004) for Acid/Base (pH)
Minor Lakes Trib to Big Moose Lake, SE (0801-0033) for Acid/Base (pH)

Eagles Nest Lake (0801-0011) for Acid/Base (pH)
Stink Lake, Balsam Lake (0801-0034) for Acid/Base (pH)
Horn Lake, Mountain Lake (0801-0052) for Acid/Base (pH)
Minor Lakes Trib to Indian River (0801-0010) for Acid/Base (pH)
Minor Lakes Trib to Benedict Creek (0801-0029) for Acid/Base (pH)
Falls Pond (0801-0399) for Acid/Base (pH)
Little Woodhull Lake, Lily Lake (0801-0135) for Acid/Base (pH)
Bloodsucker Pond (0801-0135) for Acid/Base (pH)
Burp Lake, Black Creek Lake (0801-0139) for Acid/Base (pH)
Little Salmon Lk. (0801-0140) for Acid/Base (pH)
Duck Pond, Benz Pond (0902-0021) for Acid/Base (pH)
Rock Pond (0903-0003) for Acid/Base (pH)
Halfmoon Pond (0903-0032) for Acid/Base (pH)
Gregg Lk, Green, Twin, Loon Hollow Pds (0905-0035) for Acid/Base (pH)
Muskrat Pond (0905-0061) for Acid/Base (pH)
Bear Pond, Diana Pond (0905-0061) for Acid/Base (pH)
Lower, Middle, Upper South Pond (0905-0012) for Acid/Base (pH)
Desert, Jakes, Buck, Hog Ponds (0905-0038) for Acid/Base (pH)
Crystal Lake (0905-0030) for Acid/Base (pH)
Minor Lake Trib to Upper Oswegatchie for Acid/Base (pH)
Minor Lakes Trib to Indian River/Lake (1104-0008) for Acid/Base (pH)
Minor Lakes Trib to Cedar River (1104-0003) for Acid/Base (pH)
Round Pond (1104-0300) for Acid/Base (pH)
Big Alderbed Pd, Blind Mans Vly (1201-0002) for Acid/Base (pH)

EPA notes that Bear Lake (0202-0008) (previously 0201-0003) and Palmer Lake (1302-0103) are included on New York's 2016 303(d) list as impaired for phosphorus. A TMDL for phosphorus for Bear Lake (0201-0003) was approved on May 5, 2015, and a TMDL for phosphorus for Palmer lake (1302-0103) was approved on July 17, 2015. EPA believes NYSDEC included these waterbody/pollutant combinations on its 2016 303(d) list in error and expects NYSDEC to delist these waterbody/pollutant combinations in the 2018 303(d) listing cycle due to approval or establishment by EPA of a TMDL (Integrated Report Category 4a).

EPA also notes that Lake Carmel (1302-0089) and Engleville Pond (1202-0009) are included on New York's 2016 303(d) list as impaired for phosphorus. A TMDL for phosphorus for Lake Carmel (1302-0089) was approved on September 20, 2016, and a TMDL for phosphorus for Engleville Pond (1202-0009) was approved on September 28, 2016. These TMDLs were approved after January 13, 2016, the date NYSDEC provided notice of availability of its draft 2016 303(d) list. EPA expects NYSDEC to delist these waterbody/pollutant combinations in the 2018 303(d) listing cycle due to approval or establishment by EPA of a TMDL (Integrated Report Category 4a).

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

7 waterbody/pollutant combinations have been delisted due to reassessment indicating water quality standard attainment:

Great Valley Cr, Middle, and minor tribs (0201-0012) for Aquatic Toxicity
Tunungwant (Tuna) Creek and tribs (0201-0002) for Aquatic Toxicity
Olean Creek, Upper, and tribs (0201-0050) for Aquatic Toxicity
Genessee River, Lower, Main Stem (0401-0001) for Phosphorus
Genessee River, Lower, Main Stem (0401-0001 for Silt/Sediment
Genessee River, Middle, Main Stem (0401-0003) for Oxygen Demand
Genessee River, Middle, Main Stem (0401-0003) for Phosphorus

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.

1 waterbody/pollutant combination has been delisted and placed into Integrated Report Category 4c:

Lower Cassadaga Lake (0202-0003) for Nutrients (Phosphorus)

D. Original basis for listing was incorrect.

2 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:

Unamed Trib to Honeoye Cr, and tribs (0402-0081) for Nutrients
Bradner Creek and tribs (0404-0020) for Phosphorus

2. The State has delisted 31 waterbody/pollutant combinations which EPA has determined are inappropriate for delisting because the state has not demonstrated good cause pursuant to 40 CFR 130.7(b)(6)(iv).

A. Other pollution control requirements will result in water quality standards attainment within a reasonable amount of time (Integrated Report Category 4b).

1 waterbody/pollutant combination has been delisted and moved to Integrated Report Category 4b:

Glen Cove Creek (1702-0146) for Silt/Sediment

New York delisted this waterbody/pollutant combination "due to a management strategy has been developed as part of a superfund site remediation plan." See, 2016 Delisted Waters. New York, however, did not submit to EPA any documentation to support this delisting. As mentioned, EPA regulations, at 40 CFR 130.7(b)(6), require states to submit, together with their list, documentation in support of determinations not to list waters. Pursuant to 40 CFR 130.7(b)(6)(iv), when requested by EPA, a state must demonstrate good cause for not including, in the current submission, waterbody/pollutant combinations previously included on its 303(d) list. Consistent with 40 CFR 130.7(b), good cause may be based on a demonstration, pursuant to 40 CFR 130.7(b)(1)(iii), that other pollution control requirements required by state, local, or federal authority will result in attainment of water quality standards for a specific pollutant(s) within a reasonable amount of time (i.e., Integrated Report Category 4b).

EPA's 2004, 2006 and 2008 Integrated Report Guidance (IRG)[2] provide additional clarity and flexibility with respect to the use of Integrated Report Category 4b and describe what is needed from states to demonstrate that using this category is appropriate, as well as what is needed to adequately support not including a waterbody/pollutant combination(s) on the 303(d) list. In particular, EPA expects states to provide adequate documentation that the required control mechanism(s) will address all pollutant sources and establish a clear link between the control mechanisms and water quality standards (See, 2004 IRG).

In its 2006 IRG and 2008 IRG, EPA stated its expectation that the documentation submitted with the 303(d) list to support the State's determination not to list a waterbody/pollutant combination and instead, include it in Integrated Report Category 4b (4b Demonstration), include the following six elements:

1. Identification of segment and statement of problem causing the impairment;
2. Description of pollution controls and how they will achieve water quality standards;
3. An estimate or projection of the time when WQS will be met;
4. Schedule for implementing pollution controls;
5. Monitoring plan to track effectiveness of pollution controls; and
6. Commitment to revise pollution controls, as necessary.

EPA's 2008 IRG includes an explanation for how best to address these six elements. In particular, in order to demonstrate that other pollution control measures will result in attainment of water quality standards in the waterbody, EPA expects states to describe the point, nonpoint, and background sources of the pollutant causing the impairment, including the magnitude and locations of the sources. Once the sources are identified,

[2] *Guidance for 2004 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d), 305(b) and 314 of the Clean Water Act, July 21, 2003 (2004 IRG); Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d), 305(b) and 314 of the Clean Water Act, July 29, 2005 (2006 IRG); and Information Concerning 2008 Clean Water Sections 303(d), 305(b) and 314 Integrated Reporting and Listing Decisions, October 12, 2006 (2008 IRG).*

along with their magnitude and location, EPA expects states to identify the loading capacity of the segment to achieve water quality standards or describe why it is not relevant to ensure that the controls are adequate to achieve water quality standards in the waterbody. Further, EPA expects states to identify the controls that will achieve the water quality standard and the basis for its conclusion that the controls will result in attainment of water quality standards. Demonstrations should also contain documentation supporting the analysis, the basis for any assumptions, the strengths and weaknesses in the analytical process and results from any water quality modeling or data analysis.

To support this delisting, New York indicated that "a management strategy has been developed as part of a superfund site remediation plan." New York did not submit to EPA any documentation on this strategy or any other documentation to support delisting this waterbody/pollutant combination to Integrated Report Category 4b. Without this documentation New York did not demonstrate, pursuant to 40 CFR 130.7(b)(1)(iii), that other pollution control requirements required by state, local, or federal authority will result in attainment of water quality standards within a reasonable amount of time.

EPA notes that there is no new data or information that indicate that the applicable water quality standard is being attained. Because New York has not demonstrated, pursuant to 40 CFR 130.7(b)(1)(iii), that other pollution control requirements required by state, local, or federal authority will result in attainment of water quality standards within a reasonable amount of time, EPA is partially disapproving New York's 2016 303(d) list. Pursuant to Section 303(d)(2) of the CWA and 40 CFR 130.7(d)(2), EPA will propose to add this waterbody/pollutant combination to New York's 2016 303(d) list and seek public comment on this proposed addition. If, during the public comment period, New York provides additional documentation to support delisting this waterbody/pollutant combination to Integrated Report Category 4b, EPA will evaluate that documentation and determine whether it adequately supports delisting the waterbody/pollutant combination from the 303(d) list.

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

   4 waterbody/pollutant combinations have been delisted due to reassessment indicating water quality standard attainment:

   Laurel Pond (1701-0128) for Dissolved Oxygen
   Fort Pond (1701-0122) for Dissolved Oxygen
   Cuba Lake (0201-0016) for Dissolved Oxygen
   Upper Cassadaga Lake (0202-0001) for Dissolved Oxygen

New York delisted these waterbody/pollutant combinations because "NYSDEC has completed an evaluation and has determined – based on the health of the aquatic (fishery)

community, the long history of low D.O., the lack of other sources, or other evidence – the low D.O. in the waterbody is naturally occurring and any impacts do not rise to the level of impairment of uses." See, Response to Comments. New York, however, did not provide water quality data to EPA that indicate that the applicable dissolved oxygen (D.O.) criteria are met in these waters. Low dissolved oxygen is a condition that typically occurs in stratified lakes during the summer. New York acknowledges this and does not contend that the dissolved oxygen standard is attained, but rather, that non-attainment of the standard is due to natural conditions.

Section 303(d)(1)(A) of CWA requires states to identify those waters within its boundaries for which the effluent limitations required by section 301(b)(1)(A) and section 301(b)(1)(B) are not stringent enough to implement *"any* water quality standard applicable to such waters" (emphasis added). EPA regulations, at 40 CFR 130.7(b)(3), explain that, "For the purposes of listing waters under § 130.7(b), the term "water quality standard applicable to such waters" and "applicable water quality standards" refer to those water quality standards established under section 303 of the Act, including numeric criteria, narrative criteria, waterbody uses, and antidegradation requirements." If data indicate that an applicable numeric criterion is not met, that waterbody/pollutant combination must be listed despite data indicating that the applicable use is met.

With respect to making 303(d) listing decisions when naturally occurring pollutants are present in a waterbody, New York's water quality standards are the basis for determining whether a waterbody is impaired. New York's water quality standards do not contain a provision allowing its dissolved oxygen criteria to be equal to the natural background level of dissolved oxygen if it is determined that the natural background level is less stringent than the otherwise applicable dissolved oxygen criteria. Because New York's water quality standards do not contain such a provision, New York cannot assess a water as meeting the applicable dissolved oxygen criteria where the excursion of the dissolved oxygen criteria has been determined to be caused by natural conditions. Until New York includes such a provision within its water quality standards, where water quality data indicate that the applicable dissolved oxygen criteria are not met, the waterbody must be listed on the 303(d) list as impaired for dissolved oxygen.

New York has not demonstrated good cause for delisting these waterbody/pollutant combinations from the 2014 303(d) list. EPA, therefore, is partially disapproving New York's 2016 303(d) list because it does not include these waterbody/pollutant combinations. Pursuant to Section 303(d)(2) of the CWA and 40 CFR 130.7(d)(2), EPA will propose to add these waterbody/pollutant combinations to New York's 2016 303(d) list and seek public comment on these proposed additions.

C. Waterbody/pollutant combinations redundant with other waterbody/pollutant combinations on the 2016 303(d) list.

26 Waterbody/pollutant combinations have been delisted due to redundancy with other waterbody/pollutant combinations

Beeman Creek and tribs (0102-0030) for Oxygen Demand
Murder Creek, Lower, and tribs (0102-0031) for Oxygen Demand
Bowen Brook and tribs (0102-0036) for Oxygen Demand
Scajaquada Creek, Lower, and tribs (0101-0023) for Oxygen Demand
Scajaquada Creek, Middle, and tribs (0101-0033) for Oxygen Demand
Scajaquada Creek, Upper, and tribs (0101-0034) for Oxygen Demand
Mill Creek and tribs (0302-0025) for Oxygen Demand
Shipbuilders Creek and tribs (0302-0026) for Oxygen Demand
Minor Tribs to Irondequoit Bay (0302-0038) for Oxygen Demand
Honeoye Lake (0402-0032) for Oxygen Demand
Conesus Lake (0402-0004) for Oxygen Demand
Great Brook and minor tribs (0704-0034) for Oxygen Demand
Wood Cr/Champlain Canal and tribs (1005-0036) for Oxygen Demand
Tribs to Lake Lonely (1101-0001) for Oxygen Demand
Ballou, Nail Creeks (1201-0203) for Oxygen Demand
Saw Mill River (1301-0007) for Oxygen Demand
Saw Mill River, Middle, and tribs (1301-0100) for Oxygen Demand
Millers Pond (1702-0013) for Oxygen Demand
Mattituck or Marratooka Pond (1701-0129) for Oxygen Demand
Tidal Tribs to West Moriches Bay (1701-0312) for Oxygen Demand

New York delisted the above 20 waterbody/pollutant combinations "due to redundancy with listings for the specific oxygen demanding substance." See, 2016 Delisted Waters. These waterbodies were listed on the 2014 303(d) list for "Oxygen Demand" to account for the lack of attainment of the applicable dissolved oxygen standard. These 20 waterbodies were also separately listed on the 2014 303(d) list for "Phosphorus" or "Nitrogen" to account for the lack of attainment of the applicable narrative nutrients standard.

Quantuck Bay (1701-0042) for Nitrogen
Moriches Bay, East (1701-0305) for Nitrogen
Moriches Bay, West (1701-0038) for Nitrogen
Great South Bay, East (1701-0039) for Nitrogen
Great South Bay, Middle (1701-0040) for Nitrogen
Great South Bay, West (1701-0173) for Nitrogen

The above six waterbody/pollutant combinations were listed on New York's 2014 303(d) list for Nitrogen to account for the lack of attainment of the narrative nutrients standard. These waterbodies were not listed on New York's 2014 303(d) list as impaired for dissolved oxygen (Oxygen Demand). New York, in its 2016 303(d) list, changed the above 6 waterbody/pollutant combinations from listed as impaired for the narrative

nutrients standard as “Nitrogen,” to impaired for the dissolved oxygen standard as “Nitrogen/Low D.O.” This change resulted in New York’s adding these waterbodies as impaired for dissolved oxygen, and delisting these waterbodies as impaired for the narrative nutrients standard for nitrogen.

New York, in its 2016 303(d) list, acknowledges that these 26 waterbodies are impaired for dissolved oxygen and delists these waterbodies as impaired for the narrative nutrients standard. New York accounts for the dissolved oxygen impairment in the 2016 303(d) list by listing these waters for “Low D.O.” along with the nutrient causing the dissolved oxygen impairment (“Phosphorus/Low D.O.” or “Nitrogen/Low D.O.”). New York did not provide any data indicating that the narrative nutrients standard in these waterbodies is met. In order for New York to delist these waterbodies for the narrative nutrients standard, New York must provide data to support that this standard is met.

New York believes it is redundant for these waterbodies to be listed for both dissolved oxygen, to account for the dissolved oxygen impairment, and phosphorus or nitrogen, to account for the narrative nutrients standard. New York’s dissolved oxygen standard is an applicable water quality standard for each of these waterbodies. New York’s narrative criterion for nutrients is also an applicable water quality standard for each of these waterbodies. These are separate applicable criteria for these waterbodies and where both are not met, both have to be listed, separately. EPA notes that algal conditions that impair waters for their best use may occur in the absence of low dissolved oxygen. Likewise, low dissolved oxygen can occur in the absence of any noticeable algal conditions.

Section 303(d)(1)(A) of CWA requires states to identify those waters within its boundaries for which effluent limitations are not stringent enough to implement *"any* water quality standard applicable to such waters" (emphasis added). EPA regulations, at 40 CFR 130.7(b)(3), explain that, "For the purposes of listing waters under § 130.7(b), the term "water quality standard applicable to such waters" and "applicable water quality standards" refer to those water quality standards established under section 303 of the Act, including numeric criteria, narrative criteria, waterbody uses, and antidegradation requirements." A water with applicable dissolved oxygen criteria must be listed where data and information indicate that the dissolved oxygen criteria are not met. If the same water has an applicable narrative criterion for nutrients, that water must also be listed for nutrients where data and information indicate that the narrative criterion is not met, as the dissolved oxygen and narrative nutrients criteria are separate applicable water quality standards.

Section 303(d)(1)(C) of the CWA requires states to establish for the waterbody/pollutant combinations on the 303(d) list, a total maximum daily load (TMDL) for pollutants suitable for calculation. A water listed as impaired for dissolved oxygen is often addressed through a TMDL for nitrogen or phosphorus if it is determined that nutrient(s) are causing the impairment. When present in excessive amounts, these nutrients may

cause excessive growth of phytoplankton and other algae that, by their decay and respiration, consume the dissolved oxygen resulting in a water quality impairment for dissolved oxygen. When nutrients are the cause of a dissolved oxygen impairment and the waterbody is also not meeting its applicable nutrients standard, a TMDL can and should be developed to address both impairments. The fact that one TMDL may address both impairments does not relieve a state of its obligation to list the water as impaired by both criteria where data and information indicate that both criteria are not being met, as the listing requirement applies individually to each applicable criterion.

On its 2016 303(d) list, New York lists waterbodies impaired for dissolved oxygen as "Oxygen Demand" if the specific cause for the dissolved oxygen impairment has not been identified. New York lists waters impaired for dissolved oxygen where the specific oxygen demanding cause has been identified as "Phosphorus/Low D.O." or "Nitrogen/Low D.O." New York indicates that future waters impaired for dissolved oxygen will be listed for the specific oxygen demanding cause if that cause has been identified. EPA believes this listing approach for waterbodies impaired for dissolved oxygen is sound. EPA notes however, that low dissolved oxygen can be caused by a number of factors other than nutrients. Examples include discharges of carbonaceous substances, sediment oxygen demand, and restricted circulation. EPA is not in agreement with combining listings which results in delisting one impairment (or waterbody/pollutant combination) where data indicates that a waterbody is impaired for both individually applicable standards.

As such, redundancy in listing is not good cause for delisting these waterbodies as impaired for the narrative nutrients standard from the 2014 303(d). EPA, therefore, is partially disapproving New York's 2016 303(d) list because it does not include these waterbodies as impaired for the narrative nutrients standard. Pursuant to Section 303(d)(2) of the CWA and 40 CFR 130.7(d)(2), EPA will propose to add these waterbodies back onto the list for either phosphorus or nitrogen, as appropriate, based on how New York previously identified them on its 2014 303(d) list. EPA will propose to add them to New York's 2016 303(d) list and seek public comment on these proposed additions.

Impaired Waters Not Included on the 303(d) List because Development of a TMDL Is Not Necessary

1. 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 (Integrated Report Category 4b waters).

A. Newly assessed waterbody/pollutant combinations included in Integrated Report Category 4b.

NYSDEC did not submit an Integrated Report along with its 2016 303(d) list. EPA, therefore, was unable to determine whether newly assessed waterbody/pollutant combinations were included in Integrated Report Category 4b.

B. Waterbody/pollutant combinations delisted from New York's 303(d) list to Integrated Report Category 4b in previous listing cycles.

As mentioned, EPA regulations, at 40 CFR 130.7(b)(6), require states to submit, together with their list, documentation in support of determinations not to list waters. Pursuant to 40 CFR 130.7(b)(6)(iv), when requested by EPA, a state must demonstrate good cause for not including, in the current submission, waterbody/pollutant combinations previously included on its 303(d) list. Consistent with 40 CFR 130.7(b)(6)(iv), good cause may be based on a demonstration, pursuant to 40 CFR 130.7(b)(1)(iii), that other pollution control requirements required by state, local, or federal authority will result in attainment of water quality standards for a specific pollutant(s) within a reasonable amount of time (i.e., Integrated Report Category 4b).

To ensure that all 38 waterbody/pollutant combinations currently in Integrated Report Category 4b[3] were and continue to be supported by an adequate 4b Demonstration, EPA reassessed whether there is sufficient documentation to demonstrate that other pollution control requirements required by state, local, or federal authority will result in attainment of water quality standards within a reasonable amount of time. EPA conducted this reassessment for the following waterbody/pollutant combinations:

Bergen Basin (1701-0009) for Floatables
Bergen Basin (1701-0009) for D.O./Oxygen Demand
Bergen Basin (1701-0009) for Nitrogen
Bronx River, Lower (1702-0006) for Floatables
Bronx River, Middle, and tribs (1702-0106) for Floatables
Coney Island Creek (1701-0008) for Floatables
East River, Lower (1702-0011) for Floatables
East River, Upper (1702-0010) for Floatables
East River, Upper (1702-0032) for Floatables
Eastchester Bay (1702-0007) for Pathogens
Flushing Creek/Bay (1702-0005) for Floatables
Gowanus Canal (1701-0011) for Floatables
Gowanus Canal (1701-0011) for Odors

[3] New York did not submit to EPA an Integrated Report nor a list of impaired waters not included on its 2016 303(d) list along with its 2016 303(d) list. EPA, therefore, consulted New York's document, *Impaired/Delisted Waters NOT Included on the 2014 Section 303(d) List,* September 2014, to determine the waterbody/pollutant combinations currently in Integrated Report Category 4b. This document includes a statement that it includes "a comprehensive inventory of all waters of the state that do not fully support uses and that are considered impaired."

Harlem River (1702-0004) for Floatables
Hendrix Creek (1701-0006) for Floatables
Hendrix Creek (1701-0006) for Odors
Hendrix Creek (1701-0006) for D.O./Oxygen Demand
Hendrix Creek (1701-0006) for Nitrogen
Hutchinson River, Lower, and tribs (1702-0003) for Floatables
Hutchinson River, Lower, and tribs (1702-0003) for Odors
Jamaica Bay, Eastern, and tribs (1701-0005) for Floatables
Jamaica Bay, Eastern, and tribs (1701-0005) for D.O./Oxygen Demand
Jamaica Bay, Eastern, and tribs (1701-0005) for Nitrogen
Mill Basin and tidal tribs (1701-0178) for Floatables
Minor Tribs to Croton Falls Reservoir (1302-0001) D.O./Oxygen Demand
Minor Tribs to Croton Falls Reservoir (1302-0001) for Phosphorus
Muscoot River, Lower, and minor tribs (1302-0049) for Ammonia
Muscoot River, Lower, and minor tribs (1302-0049) for D.O./Oxygen Demand
New Rochelle Harbor (1702-0259) for Floatables
Newtown Creek and tidal tribs (1702-0002) for Floatables
Paerdegat Basin (1701-0363) for Floatables
Paerdegat Basin (1701-0363) for Odors
Park Creek and tribs (0601-0031) for Pathogens
Peach Lake (1302-0004) for Pathogens
Shellbank Basin (1701-0001) for Nitrogen
Spring Creek and tribs (1701-0361) for Floatables
Thurston Basin (1701-0152) for Floatables
Westchester Creek (1702-0012) for Floatables

In its reassessment, EPA evaluated whether New York addressed the six elements of a 4b Demonstration discussed in EPA's 2006 IRG and 2008 IRG. Mentioned previously, these elements include:

1. Identification of segment and statement of problem causing the impairment;
2. Description of pollution controls and how they will achieve water quality standards;
3. An estimate or projection of the time when WQS will be met;
4. Schedule for implementing pollution controls;
5. Monitoring plan to track effectiveness of pollution controls; and
6. Commitment to revise pollution controls, as necessary.

In its evaluation, EPA particularly looked for whether New York: (1) described the point, nonpoint, and background sources of the pollutant causing the impairment, including the magnitude and locations of the sources; (2) identified the loading capacity of the segment to achieve water quality standards or described why it is not relevant to ensure that the controls are adequate to achieve water quality standards in the waterbody; (3) identified the controls on all sources that will achieve the water quality standard; and (4) described the basis for its conclusion that the controls will result in attainment of water quality

standards. Because several of these waterbody/pollutant combinations were delisted to Integrated Report Category 4b prior to the 2016 listing cycle, EPA also specifically evaluated whether New York included a method to track the effectiveness of the controls and a commitment to revise controls where the controls are not effective.

As a result of its reassessment, EPA concluded that New York's 4b Demonstrations do not include adequate documentation, consistent with 40 CFR 130.7(b)(6), to support not listing these waterbody/pollutant combinations on New York's 303(d) list. New York's documentation does not address many of the six elements and/or the four items mentioned above. New York did not provide a source evaluation, including point, nonpoint and background sources of the pollutant causing the impairment, nor the magnitude and locations of the sources. Without a source evaluation, it is difficult to demonstrate that controls on one source would result in attainment of water quality standards in the waterbody. New York also failed to identify the load capacity or describe why it is not relevant to ensure that controls are adequate to achieve water quality standards in the waterbody. EPA further concluded that New York did not adequately identify the controls on all sources that will result in the attainment of water quality standards in the waterbody nor provide an adequate basis for that conclusion. A method for tracking the effectiveness of the controls and a commitment to revise controls that are not effective were either inadequate or missing in many instances as well.

EPA indicated to New York that its 4b Demonstrations are not adequate to support not including these waterbody/pollutant combinations on its 303(d) list and asked New York to provide sufficient documentation to support continuing to include these waterbody/pollutant combinations in Integrated Report Category 4b. New York did not provide that support. Because New York did not submit to EPA adequate documentation to support not including these waterbody/pollutant combinations on its 303(d) list, EPA has concluded that New York has not demonstrated, pursuant to 40 CFR 130.7(b)(1)(iii), that other pollution control requirements required by state, local, or federal authority will result in attainment of water quality standards within a reasonable amount of time, and therefore, has not demonstrated good cause, pursuant to 40 CFR 130.7(b)(6)(iv), for not including these waterbody/pollutant combinations on its 303(d) list.

EPA is not aware of any new data or information, and New York has not provided any new data or information, that indicate that the applicable water quality standard is being attained in these waters. Because New York has not demonstrated, pursuant to 40 CFR 130.7(b)(1)(iii), that other pollution control requirements required by state, local, or federal authority will result in attainment of water quality standards within a reasonable amount of time, EPA is partially disapproving New York's 2016 303(d) list. Pursuant to Section 303(d)(2) of the CWA and 40 CFR 130.7(d)(2), EPA will propose to add these waterbody/pollutant combinations to New York's 2016 303(d) list and seek public comment on these proposed additions. If, during the public comment period, New York provides documentation to support continuing to include one or more of these

waterbody/pollutant combinations in Integrated Report Category 4b, EPA will evaluate whether that documentation is adequate to support not including a waterbody/pollutant combination(s) on the 303(d) list.

2. A TMDL is not appropriate because the waters are impaired by "pollution" and not by a "pollutant" (Integrated Report Category 4c).

A. Newly assessed waterbody/pollutant combinations included in Integrated Report Category 4c.

NYSDEC did not submit an Integrated Report along with its 2016 303(d) list. EPA, therefore, was unable to determine whether newly assessed waterbody/pollutant combinations were included in Integrated Report Category 4c.

Waterbody/Pollutant Combinations Not Included on the 303(d) List Because the Applicable Water Quality Standard is Attained

As stated previously, EPA regulations, at 40 CFR 130.7(b)(6), require states to submit, together with its list, documentation in support of determinations not to list waters. Pursuant to 40 CFR 130.7(b)(6)(iv), when requested by EPA, a state must demonstrate good cause for not including, in the current submission, waterbody/pollutant combinations previously included on its 303(d) list. Three (3) waterbody/pollutant combinations were previously included on New York's 303(d) list and were delisted to Integrated Report Category 4b in the 2012 listing cycle as impaired but a TMDL is not necessary because other pollutant control requirements will result in water quality standards attainment within a reasonable amount of time. During this listing cycle, New York determined, based on the assessment and interpretation of more recent data, that water quality standards are being met and presumably removed these waterbody/pollutant combinations from Integrated Report Category 4b. Because New York did not submit to EPA an Integrated Report, EPA is not certain which Integrated Report Category these waterbody/pollutant combinations were assigned.

1.New York has demonstrated good cause for not including the following waterbody/pollutant combination on its 2016 303(d) list. In response to EPA's request to provide data to support its determination that the applicable water quality standard is met, New York provided adequate and sufficient data indicating that the applicable dissolved oxygen criteria are being met.

Gowanus Canal (1701-0011) for D.O./Oxygen Demand

2. New York has not demonstrated good cause for not including the following waterbody/pollutant combinations on its 2016 303(d) list. In response to EPA's request to provide data to support its determination that the applicable water quality standard is met, New York provided data indicating that the applicable dissolved oxygen criteria are not being met.

Bronx River, Lower (1702-0006) for D.O./Oxygen Demand

Shellbank Basin (1701-0001) for D.O./Oxygen Demand

Because data do not support New York's determination that the applicable water quality standard is met, New York has not demonstrated good cause for not including these waterbody/pollutant combinations on its 2016 303(d) list. EPA, therefore, is partially disapproving New York's 2016 303(d) list. Pursuant to Section 303(d)(2) of the CWA and 40 CFR 130.7(d)(2), EPA will propose to add these waterbody/pollutant combinations to New York's 2016 303(d) list and seek public comment on these proposed additions.

Priority Ranking

EPA regulations codify Section 303(d)(1)(A) of the CWA, which requires states to establish a priority ranking for listed waters. EPA regulations, at 40 CFR 130.7(b)(4), require states to prioritize waters on their Section 303(d) lists for TMDL development, and to identify those waterbody segments targeted for TMDL development in the next two years. In prioritizing and targeting waters, states must take into account the severity of the pollution and the uses of the waters. See, Section 303(d)(1)(A) of the CWA. States may consider other factors relevant to prioritizing waters for TMDL development, including immediate programmatic needs, vulnerability of particular waters as aquatic habitats, recreation, economic and aesthetic importance of particular waters, degree of public interest and support and state or national policies and priorities. See, 57 *Federal Register* 33040, 33045 (July 24, 1992) and EPA's 1991 Guidance.

The State has identified the below six waterbody/pollutant combinations for "TMDL/restoration strategy scheduled for development in 2016" and 14 waterbody/pollutant combinations for "TMDL/restoration strategy scheduled for development…..over longer term, through 2022." See, 2016 303(d) list. In discussions subsequent to New York's submission of its 2016 303(d) list, New York clarified that the below six waterbody/pollutant combinations were targeted, pursuant to 40 CFR 130.7(b)(4), for TMDL/restoration strategy development through 2017. Although New York did not make this change to its 2016 303(d) list, EPA includes this clarification here. These two sets of waters are considered high priority for TMDL/restoration strategy development, while the remaining waters on the 303(d) list have been ranked as medium or low priority for TMDL/restoration strategy development.

Six Waterbody/Pollutant Combinations Identified for TMDL/Restoration Strategy Development through 2017:

Honeoye Lake (0402-0032) for Phosphorus/Low D.O.
Conesus Lake (0402-0004) for Phosphorus/Low D.O.
Engleville Pond (1202-0009) for Phosphorus
Lake Carmel (1302-0006) for Phosphorus
Tidal Tribs to West Moriches Bay (1701-0312) for Nitrogen/Low D.O.
East Copperas Pond (1003-0004) for pH

EPA notes that Lake Carmel (1302-0089) and Engleville Pond (1202-0009) are included on New York's 2016 303(d) list as impaired for phosphorus, however, a TMDL for phosphorus for Lake Carmel (1302-0089) was approved on September 20, 2016, and a TMDL for phosphorus for Engleville Pond (1202-0009) was approved on September 28, 2016. These TMDLs were approved after January 13, 2016, the date NYSDEC provided notice of availability of its draft 2016 303(d) list. EPA expects NYSDEC to delist these waterbody/pollutant combinations in the 2018 303(d) listing cycle due to approval or establishment by EPA of a TMDL (Integrated Report Category 4a).

14 Waterbody/Pollutant Combinations Identified for TMDL/Restoration Strategy Development through 2022:

Owasco Inlet, Upper and tribs (0706-0014) for Nutrients
Cayuga Lake, Southern End (0705-0040) for Phosphorus
Steele Creek tribs (1201-0197) for Phosphorus
Ballou, Nail Creeks (1201-0203) for Phosphorus/Low D.O.
Great South Bay, East (1701-0039) for Nitrogen/Low D.O.
Great South Bay, Middle (1701-0040) for Nitrogen/Low D.O.
Great South Bay, West (1701-0173) for Nitrogen/Low D.O.
Lake Ronkonkoma (1701-0020) for Pathogens
Lake Ronkonkoma (1701-0020) for Phosphorus
Hempstead Bay, Broad Channel (1701-0032) for Nitrogen
Nicoll Bay (1701-0375) for Pathogens
Great Cove (1701-0376) for Pathogens
Owasco Lake (0706-0009) for Unknown
Oak Orchard Creek (0301-0014) for Phosphorus

According to NYSDEC's Listing Methodology, the identification of high priority waters is based on factors such as the current understanding of the water quality problem and sources, the availability of the necessary data to develop a TMDL and the value (i.e., presumed effectiveness) of a TMDL toward addressing the problem, and other factors. To provide a more general sense of these factors and their impact on priorities, and the timing of TMDL development, the waters on the 303(d) list are segregated into sub-parts, as described on page 4 of this document. These sub-parts allow for clarification of widely differing conditions, limitations and other circumstances that affect the scheduling and development of TMDLs or other strategies.

Consistent with EPA's Vision for the 303(d) program[4], EPA notes that while a TMDL will remain the most dominant program analytic and informational tool to address impairments, EPA recognizes that other tools or alternative strategies may be more immediately beneficial or practicable to achieve water quality standards under certain circumstances. Should New York proceed to address an impairment through an alternative restoration strategy that does not meet the threshold for delisting to Integrated Report Category 4b, that waterbody/pollutant

[4] *A Long-Term Vision for Assessment, Restoration, and Protection under the Clean Water Act Section 303(d) Program,* December 5, 2013.

combination must remain on the 303(d) list until water quality standards are attained. If water quality standards are not fully attained through the alternative approach, development of the TMDL would be necessary. Because TMDLs are indeed the right tool to use to address impairments in many circumstances and for clear compliance with 40 CFR 130.7(b)(4) (the requirement that states identify waterbody/pollutant combinations targeted for TMDL development in the next two years), EPA expects New York, in its future 303(d) lists, to identify the specific waterbody/pollutant combinations targeted for TMDL development within two years. EPA also welcomes the identification of any specific waterbody/pollutant combinations targeted for alternative restoration strategies.

EPA has reviewed the State's priority ranking of listed waters for TMDL/restoration strategy development and concludes that the State properly took into account the severity of pollution and the uses to be made of the waters. EPA also concludes that the 4 waterbody/pollutant combinations selected by New York State for TMDL/restoration strategy development through 2017 (recognizing that a TMDL has already been approved for Lake Carmel (1302-0089) and Engleville Pond (1202-0009)), and the 14 waterbody/pollutant combinations selected for TMDL/restoration strategy development through 2022 are appropriate waters to target for near and longer-term TMDL/restoration strategy development. EPA notes that some of these waterbodies are also impaired for the applicable narrative nutrients standard. As mentioned, when nutrients are the cause of a dissolved oxygen impairment and the waterbody is also not meeting its applicable nutrients standard, a TMDL can and should be developed to address both impairments.

Public Participation

The NYSDEC public participation process for developing its 2016 303(d) list included public solicitation of data, requests for comment on the methods document and requests for comments on the draft 303(d) list. NYSDEC announced the availability of its Draft 303(d) list in the State's January 13, 2016 Environmental Notice Bulletin (ENB) and provided a public comment period, which ended on March 4, 2016. Following the conclusion of the comment period, the State provided copies of all comments and responses received during the data solicitation and public comment periods to EPA. Based upon its review of the State's Response to Comments, EPA concludes that NYSDEC adequately addressed the issues raised in the comments received on the 2016 303(d) list, with the exception of comments regarding the waterbody/pollutant combinations delisted or taken off Integrated Report Category 4b with respect to New York's water quality standard for dissolved oxygen or narrative nutrients standard.