



Cayuga Lake Watershed Intermunicipal Organization

Intermunicipal cooperation to protect the watershed

ATTN: Water Assessment and Implementation Section
NYSDEC, Bureau of Water Assessment and Management
625 Broadway, 4th Floor
Albany, NY 12233-3502

Public Comment on the Draft 2020-2022 List

February 8, 2022

To Whom it May Concern,

The Cayuga Lake Watershed Intermunicipal Organization (CWIO) submitted a letter regarding the draft 303(d) list on January 18, 2022, in which we requested the data supporting the proposed changes and an extension to allow time to review the data. We appreciate that New York State Department of Environmental Conservation (DEC) provided both the data and an extension.

CWIO represents municipalities within the Cayuga Lake watershed. We recognize the enormous and irreplaceable ecological, economic, and social value of Cayuga Lake, its tributaries, and its wetlands. The purpose of the intermunicipal organization is to bring the watershed municipalities together to work collectively and collaboratively on monitoring, protecting, and restoring the health of the watershed. We accomplish this through on-the-ground projects, development and application of local laws, and collaboration with local and state agencies.

Just as DEC implements requirements of the U.S. Environmental Protection Agency's Clean Water Act (CWA) to protect our natural resources, municipal governments implement state policies via home rule. We are partners in protecting these resources. In that spirit, and to improve our joint efforts toward protecting the waters of the state, we invite DEC to participate in CWIO meetings. We believe that improved communication between DEC and our local municipal leaders would provide your agency with access to a wealth of local knowledge regarding the nature of our resources and the challenges we face. Significant shifts in policy, such as the updated CALM criteria used to assess impaired waters, would then be placed in context. The proposed 2020-2022 list of impaired waterbodies has raised great confusion and concern. Members of CWIO and others across the watershed understand the staffing challenges at DEC. However, time invested in discussion of proposed changes may reduce time required to respond to comments.

As the implementers of state policy, we provide comments on the draft 303(d) list below.

We have questions about the representativeness of the data used to make these important use determinations. We, and others, attempted to respond to the Data Solicitation for 2020/2022 Integrated Report (with deadline of 9/27/21), but were unable to meet the new criteria. We encourage DEC to reconsider changes it made to Quality Assurance Project Plan (QAPP) and Data

Usability Analysis Report (DUAR) requirements in 2018. These changes effectively restricted eligible data so much that what data remains are inadequate to make meaningful assessments of water quality. In particular, we are concerned about the exclusion of data collected by trained volunteers. The CWA specifically provides citizens a role in protecting water resources; this exclusion in DEC's data collection appears to conflict with the goals of the CWA.

We have concerns about the wholesale delisting of silt/sediment as an impairment from a fiscal viewpoint. As you know, grant funding is the basis of many municipal projects on the landscape. We do not wish to support an unfounded listing, however, erosion and sediment deposition are real issues in many areas. These forces threaten infrastructure and habitat alike, and they are predicted to become more severe in our changing climate. We encourage DEC to continue to prioritize funding efforts to address erosion regardless of the final decision on delisting silt/sediment as an impairment statewide.

Comments

Changes proposed for waters in the Cayuga Lake watershed are:

Waterbody	Segment ID	County	Pollutants	Action
Lower Fall Creek	0705-1036	Tompkins	Iron, pH	New Listing
Upper Cayuga Inlet (Six Mile Creek)	0705-0059	Tompkins	pH	New Listing
Cayuga Lake, Southern end	0705-0040	Tompkins	Silt/Sediment	Delisting

DEC's Process per the Clean Water Plans webpage (paraphrased):

All waterbodies in New York are classified for their best uses. [Water quality standards](#) protect these uses. DEC's lake and river monitoring programs assess waterbodies on a [5-year cycle](#) to evaluate whether they are meeting water quality standards and supporting designated best uses. For waterbodies that are not meeting their best use, a Clean Water Plan is required to identify restoration activities.

Data and information collected through DEC's monitoring programs are used to develop the state's Clean Water workplan that is submitted to EPA. To ensure waterbodies are on list based on sound data so as to not waste/make best use of limited resources, we are therefore submitting comments.

Comments on silt/sediment delisting

1. NYS DEC is proposing delisting silt/sediment impairments statewide due to "Flaws in original analysis."

QUESTION: Do the cited "flaws" reflect the way samples were collected (timing, averaging periods, etc.), analytical methodologies, lack of correlation to biological availability, or a more general inability to differentiate between natural and anthropogenic sources (pollution vs. pollutants)? The references in DEC's Consolidated Assessment and Listing Methodology (CALM, May 2021) do not provide insights into these important regulatory and resource management issues. DEC's explanation regarding the flaw in the analysis and how waterbodies experiencing negative impacts from unnatural excess sediment should address that issue moving forward.

2. Specifically, the silt/sediment delisting impacts the southern end of Cayuga Lake and is relevant to the draft Total Maximum Daily Load for Total Phosphorus for Cayuga Lake (dTMDL). A major finding of the [Cayuga Lake Modeling Project](#) completed in support of the development of the TMDL was that phosphorus and sediment issues cannot be separated in the southern end of Cayuga Lake.

QUESTION: Please clarify how DEC will address the sediment-related phosphorus loading to Cayuga Lake in the absence of a listed sediment impairment or Nine Element Plan recognizing the role of sediment.

3. A review of the CALM and Technical and Operational Guidance Series (TOGS) reveals that there is no water quality standard for silt/sediment.

QUESTION: What criteria was used to support the original impairment designation? Does DEC plan to develop a silt/sediment water quality standard? If not, how does DEC plan to address water quality impairments related to excess sedimentation?

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4. Sediment is well documented to carry large loads of phosphorus into Cayuga Lake (Community Science Institute database, CLM Study, for example). Sediment and turbidity issues were documented by the Tompkins County Health Department as a factor in closing the Stewart Park swimming beach in 1964. There is no question that excessive sediment loading impairs the best use of local water bodies. Furthermore, sediment loadings can be decreased through reasonable best management practices.

COMMENT: CWIO requests that DEC maintain the listing of the southern end of Cayuga Lake for a sediment impairment.

Comments on pH listing for Lower Fall Creek and Upper Cayuga Inlet (Six Mile Creek)

5. Two of the data points in violation of the water quality standard for both Lower Fall Creek and Six Mile Creek were collected on the same dates in 2011 and 2012. This coincidence is suspect.

QUESTION: Please verify calibration for the equipment or controls used on those two sampling days (9/1/11 and 8/8/12) at 07-sxml-0.7 and 07-fall-1.2.

6. The Lower Fall Creek monitoring location at Ithaca Falls could experience elevated pH measurements because of the turbulence in the water, whereas upstream at Forest Home and downstream at Cayuga St, the pH measurements do not violate the water quality standard.

QUESTION: Please address how waterfall turbulence is impacting the pH at that particular location (07-fall-1.2).

7. According to the waterbody inventory/priority waterbodies list (WI/PWL), the waterbody segment, Upper Cayuga Inlet and minor tributaries, starts at headwaters and ends where Cascadilla Creek enters Cayuga Inlet. This segment also includes Six Mile Creek from the outlet upstream to Van Atta's dam. The Plain St monitoring site (07-sxml-0.7) is three-quarters of a mile from Cayuga Inlet.

QUESTION: Why is Six Mile Creek classified as part of the Cayuga Inlet? The inclusion of Six Mile Creek and the alleged water quality standard violation could have unintended consequences if a TMDL is developed for Upper Cayuga Inlet.

8. The Community Science Institute (CSI) has years of pH data from Six Mile Creek and Fall Creek, which do not support the water quality standard violations presented in the draft 303(d) list. These data are readily accessible and searchable at: <http://www.database.communityscience.org/queries>. These data were collected under a DEC QAPP during the time period of the alleged water quality standard violations.

QUESTION: Please review the CSI data at Plain St for Six Mile Creek (attached) and provide feedback on the apparent difference in pH measurements between the CSI data (with 76 data points) and DEC's.

9. The data used for the Six Mile Creek pH listings are 10 or more years old. Using the process described in the CALM, it would have made sense for DEC to list the waterbody or investigate these readings when they occurred. Listing Six Mile Creek at this time and without recent data may not be representative of current conditions.

QUESTION: Please explain listing pH as an impairment based on old data when newer data (from CSI) does not support an ongoing water quality violation or even an alarming trend.

10. EPA considers pH 9 to be high “if pH exceeds 9 for prolonged periods or with high frequency.” (<https://www.epa.gov/caddis-vol2/caddis-volume-2-sources-stressors-responses-ph#high>)

QUESTION: Why does DEC use pH 8.5 as the water quality standard when EPA uses pH 9?

Comments on iron listing for Lower Fall Creek

11. All data points with water quality standard violations (>300 ug/L) are downstream (at Cayuga St and Forest Home) of Cornell University's drinking water intake. The designated use of Fall Creek downstream of the intake as “source of water supply” is not appropriate. A TMDL developed for this section of stream (downstream of the water intake) based on drinking water standard would be a misappropriation of resources.

QUESTION: Will DEC change the best use classification downstream of the Cornell drinking water intake on Fall Creek?

12. All 36 iron listings are new for 2022.

QUESTION: Will DEC provide targeted outreach to the stakeholders in those watersheds to address how a future TMDL would address iron as a pollutant? Examples of iron TMDLs in other states are related to landfills.

13. We acknowledge that the iron listing for Fall Creek meets the requirements of the CALM process for listing. However, listing a waterbody as impaired triggers significant responses from state and local governments. Making these kinds of decisions on four data points, collected a decade apart, and at different locations two miles apart, does not seem reasonable. We request that decisions regarding this proposed listing be deferred pending additional data collection.

QUESTION: How can DEC justify making management decisions without first collecting more representative data?

QUESTION: Please show NYS DEC is meeting the minimum monitoring requirements to legitimately update the 303(d) list.

Comments on representative data

14. We have questions about the representativeness of the data used to make these important use determinations. The changes made to Quality Assurance Project Plan (QAPP) and Data Usability Analysis Report (DUAR) requirements in 2018 effectively restricted eligible data so much that what data remains are inadequate to make meaningful assessments of water quality. We are concerned about the exclusion of data collected by trained volunteers. The CWA specifically provides citizens a role in protecting water resources; this exclusion in DEC's data collection appears to conflict with the goals of the CWA.

COMMENT: Please reconsider these changes that are in conflict with the spirit of the Clean Water Act. Please allow volunteer collected data to be used in making determinations about

waterbodies and their best use attainment. Please allow the use of data collected by volunteers through the Community Science Institute.

Concluding Statement

We are aware that this year is the 50th Anniversary of the Clean Water Act. It appears that DEC is working hard to bring the 303(d) list up to date to be consistent with its own policies. We appreciate that effort. However, in doing so, 248 waterbodies have been added in 2022. DEC lists 15 out of 1,075 waterbodies as vision priorities. Most of these projects will be multi-year. At that rate, it will take decades to address the *current* list. Given the staff constraints of DEC and similar staff and funding constraints of local governments, we reiterate our request that DEC provide staff to work more closely with CWIO to better prioritize waterbodies in need of TMDL-level efforts. We further request that those decisions be based on recently collected or long-term trending data.

Respectfully and on behalf of the Cayuga Lake Watershed Intermunicipal Organization

Elizabeth G. Thomas

Chair, Cayuga Lake Watershed Intermunicipal Organization (CWIO)
c/o Town of Ithaca
215 N. Tioga Street
Ithaca, NY 14850
607-279-0675
cwioChair@gmail.com