



**Tompkins County**  
**DEPARTMENT OF PLANNING AND SUSTAINABILITY**

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Submitted via email to: [waterlog@dec.ny.gov](mailto:waterlog@dec.ny.gov)

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New York State Department of Environmental Conservation  
Division of Water  
Bureau of Water Resource Management  
625 Broadway, 4<sup>th</sup> Floor  
Albany, NY 12233-3508

Re: Draft Total Maximum Daily Load for Phosphorus in Cayuga Lake

Dear Bureau of Water Resource Management:

Thank you for the opportunity to provide comments on the draft Total Maximum Daily Load (TMDL) for Phosphorus in Cayuga Lake. Cayuga Lake is a treasured resource in Tompkins County and protecting the ecological, economic, and recreational functions of Cayuga Lake is a guiding policy of the County's Comprehensive Plan.

We approached our comments on the draft TMDL with an eye on how the document could be improved to help us implement the recommended actions with our local watershed partners and stakeholders. We also focused on the potential impacts of the TMDL on local wastewater treatment facilities and possible unintended consequences regarding land use, sprawl, and environmental impacts from development activity in the watershed.

### **Implementation Plan**

We are concerned that the draft TMDL implementation plan does not provide a clear strategy for how to achieve the identified targets for water quality in Cayuga Lake. We recommend that the implementation plan be reorganized and rewritten to make it simpler for the largely non-technical Cayuga Lake watershed community to implement the TMDL and help achieve its important goals.

1. **Which are the priority watersheds?** The Cayuga Lake watershed includes over 30 sub-basins. It would be helpful if the TMDL could point the watershed community to the priority watersheds in which to focus limited staff resources and funds. Where should we utilize our resources immediately to most positively influence water quality in the lake?
  - a. Specifically, Tables 16-20<sup>1</sup> in Section 7.2 (pages 56-64) should be summarized to allow the local watershed community to clearly identify the priority watersheds<sup>2</sup>, current land

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<sup>1</sup> Note on table and figure references: Throughout the draft TMDL, the text refers to tables and figures by the wrong numbers. In our comments, we reference the table/figure number that corresponds to the table/figure label, not the text reference.

<sup>2</sup> Table 16 (pages 56-57) combines multiple sub-basins, sometimes across the lake in different counties, making it difficult to prioritize based on the total phosphorus pounds per year per acre.

uses (residential, agricultural, etc.), and associated phosphorus loads that would most effectively improve Cayuga Lake's water quality.

2. **What are the recommended best management practices (BMPs)?** The document format makes it difficult to understand how to proceed with BMP selection and cost estimates. Clear guidance is needed from the professionals at the DEC to help the local watershed community make targeted and wise investments.
  - a. Tables 21 and 22 (pages 65-66) include BMPs that are not aligned with the "Priority BMPs" (pages 66-69) from the Cayuga Lake Harmful Algal Blooms (HABs) Action Plan. For example, cover crops are ranked last in Table 21 but are the first BMP in the HABs Action Plan list.
  - b. Sections 7.3-7.5 include additional BMPs that are not the same as the ones mentioned in letter "a" above. For example, Section 7.4.5 references the New York State nutrient runoff law (for lawn fertilizer) but does not link that to any BMPs either previously mentioned or with specifics in that section.
  - c. Section 7.3 states that Appendix G includes "a description of the recommended agricultural BMPs," but the BMPs in the document do not match the BMPs in Appendix G. Table 21 lists 22 BMPs, Appendix G lists 18, and nine BMPs overlap with similar titles.
  - d. The TMDL should clearly state which BMPs are recommended and in what situations they should be used. For example, the TMDL includes a 15% total phosphorus reduction target for forested lands but does not specify if that reduction should be tied to timber harvesting, natural runoff, or both. Section 7.8.2 addresses forestry conservation practices and lists the voluntary [DEC BMP Field Guide](#). Would this voluntary compliance be sufficient to reduce total phosphorus by 15%?
3. **How will implementation of the TMDL be funded?** Appendix G includes a list of existing programs and competitive funding opportunities, which to date have not proved adequate to meet already identified watershed needs.
  - a. The details of Appendix G should be expanded to include recommendations to New York State and stakeholders on the creation of new funding sources to achieve these important goals.
  - b. It would also be helpful to include a detailed description of federal funding and other grant sources that will be newly available to the watershed community with the adoption of this TMDL for Cayuga Lake.
4. **Who is best suited to implement the various BMPs?** It is unrealistic to expect much progress to be made voluntarily without assistance from state and federal agencies.
  - a. For example, the agricultural sector would need more assistance for BMP implementation. The county Soil and Water Conservation Districts are well-suited to implement BMPs as they are already working side by side with farmers to address these issues. However, they are underfunded, as well as understaffed, and need to be provided with a noncompetitive source of funding or state/federal assistance to support a broader BMP implementation program.
5. **How will water quality be monitored to show if the reduction targets are being met?** Having a clear description of who will be doing the monitoring, what they will be measuring, how they will conduct the monitoring, and when they will be reporting those results will help drive action in the watershed and provide a basis for decision-making.
  - a. The monitoring plan presented in Section 7.7.2 (pages 76-77) is a very generic description of existing monitoring programs. The development of a more detailed

monitoring plan, with at least the level of detail of the locally developed 2008 *Monitoring Plan: Southern Basin of Cayuga Lake*, would be helpful to ensure adequate data collection.

- b. The TMDL should include a robust monitoring plan and funding mechanism for collecting and analyzing water quality before/after installation of BMPs.
6. **How will the Cayuga Lake watershed community have access to the model?** DEC should share the models with the appropriate local agencies in each county (including the Tompkins County Department of Planning and Sustainability) to enable local watershed partners to track changes in the watershed and make informed decisions about implementation actions.
7. **When will the TMDL be reviewed to determine if monitoring shows changes in water quality?** The TMDL should specify when DEC will report on monitoring results and how the results will be communicated to the watershed community. The TMDL should specify the timeline to reassess whether targets have been met.
8. **What happens if TMDL targets are not met?** The TMDL should clearly identify the federal, state, or local regulations or mandates that will be implemented for nonpoint sources if the TMDL is not successful.

## **Wastewater Treatment Facilities (WWTF)**

The draft TMDL, as written, may have unintended impacts on future land development within the watershed. We are concerned that the TMDL could limit growth for WWTF or make expansion cost-prohibitive. This may result in future development being directed into rural areas with no access to municipal sewer systems, thus increasing sprawl and its associated environmental impacts.

This type of development is contrary to New York's own policy, as stated in the State Smart Growth Public Infrastructure and Policy Act (ECL Article 6 (§§6-0101 – 6-0111), which establishes “a fiscally prudent state policy of maximizing the social, economic and environmental benefits from public infrastructure development through minimizing unnecessary costs of sprawl development.” This potential unintentional promotion of sprawl would also be contrary to local community plans, including the [Tompkins County Comprehensive Plan](#).

1. The TMDL should spell out the impacts to current permits and future operations of WWTF, as well as the costs to operators and customers to implement the TMDL's recommendations. For example, in Tompkins County, new development in villages may be severely limited if the TMDL requires cost-prohibitive upgrades to the county's four smaller WWTF (Cayuga Heights, Dryden, Freeville, and Trumansburg).
2. The TMDL should clearly identify where future development would be limited based on the WWTF capacity. For example, the draft TMDL states<sup>3</sup> that the Cayuga Heights WWTF total phosphorus load exceeds the permit limit but that corrective actions have been taken. However, the data referenced were from 2013. While the draft TMDL acknowledges improvements have been made at the facility, it does not clarify the impact of those improvements. The TMDL should be updated to include the actual current total phosphorus load because it is impossible to determine from the information provided if the WWTF is close to the load limit or if there is capacity to expand.
3. The TMDL should provide a cost-benefit analysis of reducing phosphorus from point versus nonpoint sources. The value of point source WWTF to nodal development and reduced sprawl given the small contribution of phosphorus to the lake should be balanced with the nonpoint contributions of phosphorus in the lake. Specifically, the Freeville WWTF only contributes 0.3%

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<sup>3</sup> Table 10 on page 43

of the total phosphorus to the lake, but it is the only contributor in Tompkins County identified for a phosphorus load reduction.

We appreciate your consideration of our comments, and we request that DEC hold public information sessions with the watershed community when the revised draft of the TMDL is released.

Sincerely,

A handwritten signature in black ink, appearing to read "Katherine Borgella". The signature is fluid and cursive, with the first name being more prominent.

Katherine Borgella, AICP  
Commissioner of Planning and Sustainability