



# 2021 Annual Report

Tompkins County Water Resources Council

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<http://tompkinscounty.ny.gov/committees/wrc>

# Introduction to the Water Resources Council

The Tompkins County Water Resources Council (WRC) advises the Tompkins County Legislature on matters related to water resources management and planning. The Council is also charged with identifying problems, proposing priorities, and promoting the coordination of activities in the management and protection of the County's water resources.

The WRC provides a public forum for local communities and stakeholder groups to address and discuss their concerns regarding water resources. It is the intent of the group to coordinate the water resources-related efforts of local governments, public and private institutions, and agencies and organizations throughout Tompkins County.

## Frequently Asked Questions

The public is welcome to attend WRC meetings, which take place the third Monday of the month at 4:15pm with the exception of federal holidays. Tompkins County residents are invited to apply to become voting members.

WRC membership consists of 21 voting members appointed by the Tompkins County Legislature. These members represent various water-related interests and serve on a number of standing and special committees. There are also seats for non-voting ex-officio and associate members.

## 2021 Members List

### Chair

Cynthia Brock, Municipal Government

### 1st and 2nd Vice Chairs

Frank Proto, At-Large

Liz Cameron, TC Environmental Health

### Voting Members

Sharon Anderson, CCETC

A. Fay Benson, Agriculture

Amanda Champion, Co. Government

Barry Goodrich, Watershed Organization

Michelle Henry, EMC Representative

Marina Howarth, At-Large

Kristen Hychka, Municipal Government

Emelia "Mia" Jumbo, At-Large

Darby Kiley, TCDPS

Lynn Leopold, Municipal Government

Jon Negley, TCSWCD

Brian Rahm, Environment

Stephanie Redmond, At-Large

Steve Riddle, Water Purveyor

Chuck Tauck, Business & Industry

Elizabeth Thomas, Recreation

Linda Wagenet, At-Large

### Associate Members

Chris Bordlemay Padilla

Roxanna Johnston

Cedric Mason

Niamh O'Leary

Steve Penningroth

Elaine Quaroni

Joanne Trutko

Tom Vawter

Cover photo: Kristen Hychka

## Executive Committee

**Members:** Cynthia Brock (chair), Elizabeth Cameron (second vice chair), Barry Goodrich, Kristen Hychka, Frank Proto (first vice chair)

The WRC Executive Committee acts on behalf of the WRC to advocate and advise when a timely response is needed, and deadlines for comment do not fall conveniently within the WRC's normal meeting schedule. These activities typically involve letters of advocacy or support to organizations as well as County, State, and Federal authorities.

In 2021, the WRC Executive Committee wrote several letters.

In March, a letter was provided to the Park Foundation in support of Community Science Institute's (CSI) application for funding for "Monitoring Cayuga Lake HABs in 2021." These funds would support CSI's administrative costs for training and coordinating volunteers, as well as sampling and testing blooms and tracking cyanobacteria populations from around the lake – all essential functions of the HABs monitoring program.

In June, the WRC provided comments to the NYS Department of Environmental Conservation Division of Water on the draft Total Maximum Daily Load for Phosphorus in Cayuga Lake. The WRC outlined its many years of dialogue, scientific research, and public outreach regarding the southern end of Cayuga Lake. The WRC created a Monitoring Partnership in 2006 that includes researchers and stakeholders beyond Tompkins County to improve understanding of the health of Cayuga Lake, natural processes, potential issues, monitoring needs, and best management practices.

Ultimately, the WRC submitted the following final statement to the DEC:

"There is a general lack of evidence supporting the listing of the southern end of Cayuga Lake as impaired by phosphorus, and more pointedly, a wealth of evidence not supporting the listing. TC WRC presents the following **issues to be addressed** regarding the listing:

- Please provide the data used initially to list the southern end Cayuga Lake as impaired by phosphorus, including the sample locations and dates so that it can be independently determined that the listing meets the Consolidated Assessment and Listing Methodology (CALM) requirements.
- Please provide information supporting the validity and application of the TP [total phosphorus] guidance value on the southern end condition, including that the TP was truly indicative of excessive amounts of algae.
- Please do not conflate the 2002 listing with HAB events in recent years unless DEC can refute the following: Based on data collected, analyzed, and reported under their direct supervision, TP levels have not continued to rise, TP levels are not correlated to Chl-a, and TP levels are not correlated to HABs.



## Executive Committee

- Please comment on why DEC has not reviewed the data collected in 2013 for the Cayuga Lake Modeling Project and submitted a delisting request to EPA based on those findings.
- We request DEC reconsider the appropriateness of using a TMDL as a mechanism for protection of Cayuga Lake. We suggest DEC apply the scientific findings from the CLM project and the models to a Nine Element (9E) approach. The 303(d) list also requires development of a TMDL, or alternative watershed management plan, for sediment. We strongly encourage DEC to pivot to the 9E approach in addressing sediment. We also suggest DEC support development of Watershed Rules and Regulations as a way to specifically protect Cayuga Lake as a drinking water source.
- The WRC has repeatedly provided comments on the merits of the listing of Cayuga Lake for a phosphorus impairment. Over the years, the scientific backing for delisting has only increased, yet DEC dismisses or disregards these comments. Relevant comments from past years are included in this packet and highlighted as still relevant and still unaddressed. We request DEC delay releasing a TMDL until thoughtful and appropriate feedback on these comments is provided and is in sync with the published results on the water quality science of the lake. Based on the science, DEC should consider abandoning the TMDL process for phosphorus in Cayuga Lake.”

In July, a letter of support was provided for the Town of Lansing’s Consolidated Funding Application to the NYS DEC’s Water Quality Improvement Project Program to fund the Salmon Creek stream realignment project. This project would help to reduce sediment going into Cayuga Lake, as well as work to provide streambank stabilization and protect the roadway from storm damage.

In September, the WRC provided a letter of concern to New York State Electric and Gas regarding their planned public auction of the Bell Station property, expressing support for conservation of the property by NYS DEC. “The Bell Station property includes a large portion of the Nut Ridge Unique Natural Area – a designation by the Tompkins County Environmental Management Council – on the western half of the parcel. The entire property covers over 470 acres with 3,400 feet of Cayuga Lake shoreline and more than a dozen permanent and intermittent streams. Surface water is the drinking water source of over half of Tompkins County residents and is vulnerable to contamination from point and non-point pollution sources. Protecting those streams and the forested land that buffer them is critically important to protecting the water quality and ecology of the streams and Cayuga Lake, as noted in the [Tompkins County Water Quality Strategy.](#)”

## 2021 Presentations

The following presentations were given to the Water Resources Council in 2021:

- Feb. 22 – **Three Years of Harmful Algal Bloom Monitoring on Cayuga Lake**  
– Nathaniel Launer, Community Science Institute
- March 15 – **TC Soil & Water Conservation District 2021 Work Plan and 2020 Accomplishments** – Jonathan Negley, County staff and WRC member
- April 19 – **TC Harmful Algal Bloom Strategy**  
– Darby Kiley, County staff and WRC member
- May 17 – **Comments re: Draft Total Daily Maximum Load for Cayuga Lake**  
– Roxanna Johnston, City of Ithaca staff and WRC member
- Sept. 20 – **Update: Waters of the U.S. Definition and Drinking Water Source Protection Program for Ithaca**  
– Darby Kiley, County staff and WRC member
- Nov. 15 – **2021 Harmful Algal Bloom Season on Cayuga Lake**  
– Nathaniel Launer, Community Science Institute, and **Rapid On-site Screening of Suspicious Algal Blooms** – Ruth Richardson, Cornell University
- Dec. 20 – **Long-term Groundwater Monitoring of TC Aquifer Systems**  
– Water Withdrawals Committee of Water Resources Council

## 2021 Resolutions

In 2021, the Water Resources Council passed the following resolution:

**Resolution 2021-01:** Approving and endorsing the Tompkins County Harmful Algal Blooms Strategy

## Nominating & Membership Committee

**Members:** Linda Wagenet (chair), Chris Bordlemay Padilla, Emelia "Mia" Jumbo, Jon Negley

The committee reviewed applications for voting and associate membership and interviewed candidates. Committee chair Linda Wagenet , on behalf of the committee, presented recommendations to the full Water Resources Council. The Council approved applications for the associate seats, and applications recommended for voting seats were submitted to the Tompkins County Planning, Energy, and Environmental Quality legislative committee and the Tompkins County Legislature for consideration and approval. Linda also presented the 2022 slate of officers for nomination to the full WRC.

## Water Quality Strategy Committee

**Members:** Cynthia Brock, Darby Kiley, Liz Thomas

The Water Quality Strategy Committee was charged with updating the Tompkins County Water Quality Strategy: 2019-2021, which was adopted in November 2019.

In April, the committee set up an online form for members to comment on existing sections and actions and propose new actions. Comments were incorporated into the document as sections were updated with the latest information. At meetings in September and October, the WRC discussed actions to include. Those actions were ranked by members and are presented in rank order in the document. An executive summary was added so that the 11 actions are at the beginning of the document. The introduction includes the updates and accomplishments on action items from the 2019-2021 Water Quality Strategy.

The 2022-2024 Water Quality Strategy was approved on Nov. 15, 2021, and shared with the Planning, Energy, and Environmental Quality Committee later that month.

## Watershed Rules & Regulations Committee

**Members:** Roxanna Johnston (chair), Chris Bordlemay Padilla, Cynthia Brock, Liz Cameron, Jon Negley, Brian Rahm, Steve Riddle, Liz Thomas

The Watershed Rules and Regulations (WRR) Committee includes representatives from the Tompkins County Health Department and the three surface water public drinking water utilities: Bolton Point, Cornell University, and the City of Ithaca. All three utilities are participating in NYS DEC's Drinking Water Source Protection Program (DWSP2). The DWSP2 plans will replace the Source Water Assessment Plans (SWAP) developed in the early 2000s. SWAPs were developed by the State (top-down process) and were very generalized characterizations of drinking water source waters. The DWSP2 plans will be developed by a broad-based stakeholder group (bottom-up process), be much more detailed, include implementation plans, and create an oversight committee to develop the implementation plans. DWSP2 plans are non-regulatory. Success relies on the dedicated engagement of stakeholders and broad-based support for protection measures. The committee is meeting to provide a place to share information as the utilities move through DWSP2.

Moreover, the utilities are interested in updating existing WRRs (Cornell University and the City of Ithaca) and exploring development of WRRs (Bolton Point). Developing WRRs for Bolton Point will be challenging because the source water is Cayuga Lake. Watershed impacts are not all relevant to the Bolton Point utility. Another consideration, and reason to work collaboratively on WRRs, is that both the Cornell University and City of Ithaca source waters are wholly contained in the watershed area relevant to Bolton Point. This effort has been paused while we wait to hear the State Board of Health's response to the recently updated Owasco Lake WRRs.

## Water Withdrawals Committee

**Members:** Stephanie Redmond (chair), Liz Cameron, *Bill Kappel, John Mawdsley*

The Water Withdrawals Committee drafted a groundwater monitoring proposal and assessed the ability for large water purveyors in Tompkins County to meet the needs of residents during drought conditions. Two main goals of the committee are to establish a system to track current water usage and develop mechanisms for estimating water demand in the future.

# Cayuga Lake Monitoring Partnership Committee

**Members:** Roxanna Johnston (chair), Michelle Henry, Marina Howarth, Darby Kiley, Jon Negley, Steve Penningroth, Elaine Quaroni, Stephanie Redmond, Tom Vawter, Linda Wagenet

In 2021, the Monitoring Partnership submitted extensive comments on the Draft Total Maximum Daily Load for Phosphorus in Cayuga Lake (dTMDL). The comment document reiterated findings from the NYS DEC supervised Cayuga Lake Modeling Project, which determined the lake is not impaired by phosphorus. Other items of concern were the basic lack of organization of the document, the lack of specificity in numerous areas, and the lack of consideration of stream sediment impacts. The comment letter asked for a Nine Element Plan as a more appropriate management approach for Cayuga Lake's needs. It also asked for significantly more detail regarding options for phosphorus reductions, as was promised by the 2018 HABs Action Plan for Cayuga Lake. NYS DEC has not responded to the public comments as of March 3, 2022.

This committee also provided feedback regarding NYS DEC's Data Solicitation for the 305(b) and 303(d) lists. The feedback expressed concern that new data requirements exclude nearly all independent monitoring groups, researchers, and agencies, leaving DEC very little information on which to base management decisions. The feedback also expressed concern about the lack of transparency regarding updates to water body Fact Sheets and lack of specificity of the 305(b) list. DEC did not respond prior to the close of the public comment period, and thus comments could not be submitted.

In addition, the Monitoring Partnership received updates on Cornell University's Earth Source Heating project and provided a monthly venue for local watershed organizations and resource managers to exchange information about their work and upcoming events.





## Harmful Algal Blooms Committee

**Members:** Darby Kiley (chair), Sharon Anderson, Annie Bastoni, Liz Cameron, Amanda Champion, Marina Howarth, Roxanna Johnston, *Hilary Lambert*, *Nate Launer*, Cedric Mason, Jon Negley, Steve Penningroth, Brian Rahm, Stephanie Redmond, *Marcus Riehl*, Liz Thomas

The Harmful Algal Blooms (HABs) Committee continued to develop the actions and text for the Tompkins County HABs Strategy. A draft was approved for release for public comment in April. This included a presentation to the Planning, Energy, and Environmental Quality (PEEQ) Committee of the County Legislature. The committee reviewed the comments and presented a final plan that was approved by the WRC and presented at PEEQ in June.

The strategy includes 20 actions in four topic areas: agriculture, ditch management, stream buffers and wetlands, and collaboration. The actions that identify the WRC as the lead were included in the 2022-2024 Water Quality Strategy update and will be implemented by existing and newly established committees.

## Education/Outreach Committee

**Members:** Lynn Leopold (chair), Michelle Henry, Brian Rahm, Joanne Trutko

The [Clean Boating guide to Cayuga Lake](#), developed in 2020, was distributed to multiple outlets in Tompkins County during the 2021 boating season. As a reminder, this resource includes a detailed map of the lake; boating amenities around the lake that can help boaters dispose of waste; find fuel and launch sites; information on best management practices for boaters that will protect lake water quality; and a basic guide to invasive species that threaten the lake and how to identify and report them.



## Municipal Training Committee

**Members:** Kristen Hychka (chair), Annie Bastoni, Darby Kiley, Holly Payne, Stephanie Redmond, Liz Thomas

### **Banks Road Site Visit**

The Municipal Training Committee organized and hosted a Stream and Floodplain Restoration Site Visit at the Six Mile Creek restoration site at Banks Road in the Town of Caroline on Oct. 19.

In 2011, the stream washed out a portion of Banks Road during back-to-back rainfall events of Hurricane Irene and Tropical Storm Lee. In response, this project focused on realigning and dissipating energy in stream, reconnecting the stream to the floodplain, and regrading and planing the banks and floodplain.

Jon Negley of the Tompkins County Soil and Water Conservation District and Barry Goodrich from the WRC and the Town of Caroline Watershed Committee were presenters, and they shared their experiences implementing this multi-pronged project and many of their lessons learned.

The training followed up on our Riparian Management for Municipalities workshop. It was intended for anyone in the county interested in implementation of these types of projects, including, but not limited to, elected officials, planning board members, department of public works staff, highway crews, and watershed committee members. We hoped to spark conversations in the county between people doing and hoping to do stream, riparian, and floodplain projects so we can learn from each other and help protect water quality and important infrastructure in our county.

The committee lined up the speakers, invited and handled registration of the attendees, and created relevant handouts describing the site including site plans, aerial photos, and overview sheets.

Seventeen people attended representing eight municipalities in the county — the towns of Caroline, Danby, Dryden, Lansing, Newfield, and Ulysses and the villages of Dryden and Groton. The feedback was generally very positive. We heard from five participants in a post-event survey. They liked that the training was on-site, with the implementers, that we shared the site plans, and that the project has been around for a few years and several big storms. The biggest concerns they had were about site access for people with mobility issues and suggested video recording the training. The other concern was about being able

## Municipal Training Committee



Photo credit: Kristen Hychka

to hear within the field and suggested splitting the group into smaller groups (~10 people). The committee would like to see the following future trainings: bridge abutment construction/repair/replacement; further restoration or related projects; a talk by Jon Negley and others from Soil & Water on erosion prevention in the miles of backyard creeks of many county homeowners; how to facilitate a well-run public planning/zoning meeting and how to handle a person intent on diverting/disrupting the proceeding; and erosion and sediment control practices in agriculture.