

TOMPKINS COUNTY WATER RESOURCES COUNCIL

2017 ANNUAL REPORT

121 E. Court Street, Ithaca, NY 14850; 607-274-5560; www.tompkinscounty.ny.gov/committees/wrc

FAQ

Residents of Tompkins County are invited to attend WRC meetings and apply for membership.

To receive agendas and meeting minutes, contact the County Planning and Sustainability Department by phone at (607) 274-5560 or via email at planning@tompkins-co.org.

Past agendas and meeting minutes can be found on the Water Resources Council website.

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.

INTRODUCTION TO THE WRC



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 water resources concerns. 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 the County.

YOU'RE INVITED!

Tompkins County residents are invited to attend meetings of the Water Resources Council and apply for WRC membership. The Water Resources Council meets the third Monday of each month from 4:15 to 6:00 PM at the Transit Center, 737 Willow Avenue, Ithaca. For more information, contact the Tompkins County Planning and Sustainability Department at planning@tompkins-co.org or 607-274-5560.



2017 WRC PRESENTATIONS

- February 27, 2017 Cayuga Lake Modeling Project: Findings and Management Implications – Liz Moran, President, Ecologic, LLC, and A Deep-water Well in Inlet Valley – Todd Miller and Dan Karig
- March 20, 2017 Natural Infrastructure Program Scott Doyle, Tompkins County Planning and Sustainability Department
- April 17, 2017 SPDES Permit Annual Report Angel Hinickle, Resource Conservation Specialist, Tompkins County Soil & Water Conservation District (TCSWCD) and Projects of the TCSWCD – Angel Hinickle and Mike Hall
 - July 17, 2017 Cayuga Lake Watershed Restoration and Protection Plan and Hydrilla Treatment Update Hilary Lambert, Cayuga Lake Watershed Network
- October 16, 2017 Hydrilla Treatment Update Hilary Lambert, Cayuga Lake
 Watershed Network
- November 20, 2017 Expanding Efforts to Mitigate Nutrient Runoff Andy Zepp, Finger Lakes Land Trust
- December 18, 2017 Finger Lakes Water Hub Overview Scott Cook and Anthony Prestigiacomo, NYSDEC

2017 MEMBERS LIST

Chair

Darby Kiley, Municipal Government

Members

Sharon Anderson, Cooperative Extension

John Andersson, At-Large

A. Fay Benson, Agriculture

Chris Bordlemay, Water Purveyor

Cynthia Brock, Recreation

Ed Bugliosi, US Geological Survey

Liz Cameron, County Division of Environmental Health, 2nd Vice Chair

Brad DeFrees, Associate

George Fowler, Associate

William George, Municipal Government

Barry Goodrich, Watershed Organization

Michelle Henry, EMC Representative

Kristen Hychka, Associate

Roxanna Johnston, Associate

Emelia "Mia" Jumbo, At-Large

Joan Jurkowich, County Planning and Sustainability Department

Dooley Kiefer, County Government

Lynn Leopold, Municipal Government

Jose Lozano, Associate

Darren MacDougall, Associate

John Mawdsley, Associate

Todd Miller, Associate

Jon Negley,

Soil and Water Conservation District

Steve Penningroth, Associate

Frank Proto, At-Large, 1st Vice Chair

Elaine Quaroni, At-Large

Marjory Rinaldo-Lee, Environment

Michael Thorne, At-Large

Joanne Trutko, Associate

Tom Vawter, Associate

Linda Wagenet, Associate

EXECUTIVE COMMITTEE



Members: Darby Kiley (Chair), John Andersson, Liz Cameron, Barry Goodrich, Frank Proto

The Executive Committee met in October 2017 to finalize a letter to Governor Cuomo on the topic of harmful algal blooms (HABs) and the impending draft Total Maximum Daily Load (TMDL) for Cayuga Lake. The WRC became aware that outside sources were pressuring the administration to rush the TMDL regulations. The WRC requested that the State "let science be your guide in addressing" any water quality issues, especially those triggered by the increase of HABs in the Finger Lakes.

GRANTS COMMITTEE

Members: Jon Negley (Chair), Fay Benson, Brad DeFrees, Jose Lozano, Frank Proto

The main task of WRC Grants Committee, as identified by the Water Quality Strategy, is to identify and seek grant funding for projects related to water quality that are identified and recommended for action by a committee or the whole WRC. In fulfilling this goal the Grants Committee met in May 2017 to update a 'Grants Opportunity List' that was created by the committee in 2016. This list included opportunities locally, statewide, and federally. This list is now published on the Water Resources Council website.

In addition, the Committee recommended the 2017-2018 State Fiscal Year FLLOWPA (Finger Lakes Lake Ontario Watershed Protection Alliance) budget for the upcoming contract years administered by the Tompkins County Soil and Water Conservation District.

The Grants Committee received no requests from other committees for water quality related projects they were planning/working on that needed funding. We hope that the committees will continue to engage with the Committee in 2018 to suggest project ideas for funding.

EMERGING CONTAMINANTS

Members: George Fowler (Chair), Jose Lozano, Steve Penningroth, Marjory Rinaldo-Lee

Task 1: Data Collection

What information does the Emerging Contaminants Committee need in order to provide the WRC with useful recommendations for protecting Tompkins County's water resources from emerging contaminants (i.e. the data gap)?

To that end, what are the five priority questions the committee would like to have answered?

- 1. What information already exists regarding emerging contaminants monitoring and management in Tompkins's County? (The data from the USGS-CU-IC-IAWWTF may be a good start. Management is as mentioned above.)
- 2. What information and management strategies are other communities around the country and world employing to protect the environment from emerging contaminants?
- 3. What are the notable transport mechanisms by which emerging contaminants enter our system and what is their fate?
- 4. What potential water quality problems do emerging contaminants pose to Tompkins County?
- 5. Not Asked Yet: How can such information gathering and management strategies be funded?

Work Task #	Work Task and Deliverable Description							
1A	Executive summary of findings (USGS-CU-IC-IAWWTF)							
1B	ID and contact potentially interested elected officials							
1C	Strategies to improve (Silt and WW treatment)							

Schedule

Work Task	2017		2018				2019			
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1A										
1B										
1C										

EMERGING CONTAMINANTS

Task 2: Management and Recommendation Strategies

How can we close the data gap? (collect data on specific contaminants in order to be in a position to design effective management strategies)

What management strategies can we undertake? (e.g. in terms of education, and laws and regulations)

What about mitigation strategies? (e.g. reduce runoff, improve wastewater treatment and collection programs, and make information accessible to the public)

Work Task #	Work Task and Deliverable Description
2A	Executive summary of findings (USGS-CU-IC-IAWWTF), including plastics
2B	Recruit CCE & Floating Classroom. Work with WRC and CLWN to distribute findings
2C	Undertake projects with Sara Davis and Todd Walter

Schedule

Work Task	2017		2018				2019			
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
2A										
2B										
2C										

2018 MEETING DATES

January 22

February 26

March 19

April 16

May 21

June 18

July 16

September 17

October 15

November 19

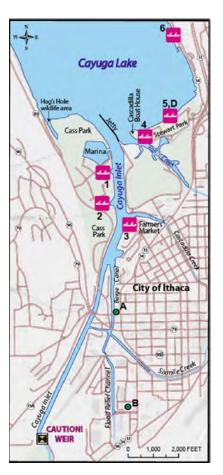
December 17

EDUCATION AND OUTREACH

Members: Lynn Leopold (Chair), Cynthia Brock, Bill George, Michelle Henry, Mia Jumbo, Todd Miller, Michael Thorne, Joanne Trutko, Tom Vawter

PADDLING SOUTHERN CAYUGA LAKE AND CAYUGA INLET





We updated and printed the Paddling brochure, which we distributed around the south end of the lake at various paddling and launch sites. We also put brochures at a few retail outlets that sell paddling equipment. The brochure details information on paddling safety, rental/sales outlets for paddling equipment, watching for invasive species, and basic information about keeping the lake clean.

Our other main project involved updating and completely revising the Clean Boating brochure, formerly known as the It's the Law brochure.

We have taken out the navigation information, as that can be better provided by the Coast Guard Auxiliary, and are now working on a detailed map that will contain important and useful information for boaters, such as fueling and pump-out sites, restrooms and other amenities, points of interest, bathymetric data, and basic boating maintenance and operational guidelines that will help protect Cayuga Lake's water quality. This is a large undertaking and we hope to have a finished product in time for the start of boating season this spring/summer.

SOIL HEALTH

Members: Fay Benson (Chair), Barry Goodrich, Mia Jumbo, Dooley Kiefer, Jon Negley

This group was asked to create the "Soil Health Committee," a new subcommittee of the Tompkins County Water Resource Committee (WRC). At our first meeting we explored how soil health is connected to water quality and how the committee could work through the WRC to support the county's effort to protect its water.

To better understand how healthy soil benefits the entire ecosystem the following "Five Concurrent Soil Functions" as defined by USDA's Natural Resource Conservation Service show that all five either directly or indirectly impact water quality:

- Soils act like sponges, soaking up rainwater and limiting runoff. Soils also impact ground-water recharge and flood-control potentials in urban areas.
- 2. Soils act like faucets, storing and releasing water and air for plants and animals to use.
- 3. Soils act like supermarkets, providing valuable nutrients and air and water to plants and animals. Soils also store carbon and prevent its loss into the atmosphere.
- 4. Soils act like strainers or filters, filtering and purifying water and air that flow through them.
- 5. Soils buffer, degrade, immobilize, detoxify, and trap pollutants, such as oil, pesticides, herbicides, and heavy metals, and keep them from entering ground-water supplies. Soils also store nutrients for future use by plants and animals above ground and by microbes within the soils.

To help identify goals of this committee we were instructed to use the 2016-2018 "Tompkins County Water Quality Strategy" to frame our work. Six goals were established:

Goal A: Protect and enhance surface water quality.

- General or Countywide Issues
 - * Discuss soil erosion issues and how it ties into potential issues for Cayuga Lake
 - * Review regulations on current pesticide use on golf courses, residential, agriculture, and municipal lands
 - *Learn about runoff and possible ways to educate the public

- Urban and City Soils
 - * Calculate soil covered by infrastructure to prevent water percolation as percentage of total
- · Rural and Agricultural
 - * Learn more about nutrient composition of soil for agriculture purposes in order to educate others (meet with Cornell expert)

Goal B: Protect and enhance groundwater quality and quantity.

- General or Countywide Issues
- Urban and City Soils
 - * Start a conversation about soil health in regards to land use and future developments (How does development affect top soil and are current regulations effective?)
- Rural and Agricultural
 *Develop a flyer for farmers on preparing for the Cayuga Lake TMDL.

Goal C: Protect and restore riparian corridors.

- General or Countywide Issues
- Urban and City Soils:
- · Rural and Agricultural

Goal D: Protect and restore wetlands.

- General or Countywide Issues
- Urban and City Soils
- · Rural and Agricultural

Goal E: Participate in the creation and implementation of relevant watershed plans and initiatives that impact Tompkins County.

- General or Countywide Issues
 - * Start a conversation about soil pollutants and/or naturally occurring toxins and metals
- Urban and City Soils
- · Rural and Agricultural

Goal F: Educate municipal officials, the public, professionals, agency staff and the media about water quality concerns and protective policies and practices.

- General or Countywide Issues
 - * Discuss soil health and ways to protect and preserve soil health for the future
- Urban and City Soils
- Rural and Agricultural

UPDATE: CAYUGA LAKE MONITORING PARTNERSHIP

The Monitoring Partnership (MP) was formed to create a monitoring plan for the southern end of Cayuga Lake instead of using Cornell's Lake Source Cooling (LSC) permit as a surrogate for those needs. A plan was developed in 2008 but not endorsed by the DEC. In the spring of 2013, DEC approved a revised permit for the LSC facility that included a one-time \$2.1 million monitoring and modeling effort to lay the groundwork for a total maximum daily load (TMDL) regulation. That revised permit included many of the components of the 2008 MP monitoring plan.



MP and DEC representatives have met regularly since 2013 to discuss lake science, monitoring details, and public participation as Cornell implemented the new permit work. Conditions of the 2013 permit were met in December of 2016 when the final report was submitted to DEC. This included a watershed model, a lake model, a variety of monitoring data, and an outfall re-design study.

The MP continued to meet with the DEC and the newly formed Finger Lakes Hub (HUB) as the TMDL was drafted. The TMDL was not released in 2017 and is still under review at the DEC as of this writing.

The MP also circled back to its original goal of developing a monitoring plan. Since 2014, there has been no large-scale monitoring effort on the lake. There is concern that without new, coordinated monitoring, we will lose the ability to track water quality trends or determine whether or not the TMDL is having an impact. DEC received funding to add Cayuga and other lakes back into the CSLAP program. The Cayuga Lake Watershed Network, Community Science Institute, and

2017 CLMP MEMBERS FROM THE WRC

Roxanna Johnston (Chair)

Ed Bugliosi

Emelia "Mia" Jumbo

Joan Jurkowich

Dooley Kiefer

Darby Kiley

Jose Lozano

Darren MacDougall

John Mawdsley

Steve Penningroth

Elaine Quaroni

Linda Wagenet

Floating Classroom worked with the DEC to assist in the CSLAP effort and to bolster those efforts with additional monitoring. Two location were monitored in Cayuga Lake in 2017, five will be monitored in 2018. A volunteer harmful algae bloom (HAB) monitoring project was also piloted in 2017. HABs appeared in locations and numbers not seen before. New York State created the above mentioned HUB to help address HABs. The MP is an active stakeholder in these monitoring and water quality initiatives.

REPORT: Nominating/Membership Committee

Members: Marjory Rinaldo-Lee (Chair), Chris Bordlemay, Jon Negley, and Linda Wagenet

The committee recommends prospective members to the Water Resources Council (WRC) to fill vacancies on the Council, which is composed of 21 voting members, non-voting ex officio members from relevant Federal or State agencies, and associate members with committee-level voting rights. Members are chosen with the following criteria in mind: credentials, skills, experience, background, diversity, location and length of residence in Tompkins County, and other watershed-related activities.

The Nominating Committee reviewed applications for 7 of the 8 voting seats on the WRC expiring in 2017. (The County Legislature voting seat was not included in our consideration.) Two of these seats are agency appointments (Environmental Health and Cooperative Extension), and the people currently holding them re-applied for these positions and were recommended by the Nominating Committee for reappointment. Two of the people in other voting seats also re-applied, and we recommended that they also remain in those seats. Three people who were not current voting members applied for the remaining open voting seats, and the Committee recommended that these three people fill those seats. The recommendations for filling the voting seats went to the Council for approval then to the Tompkins County Planning, Development, and Environmental Quality Committee and the Tompkins County Legislature for consideration and approval.

The Committee also reviewed applications for Associate membership and recommended three of the candidates to the WRC.

The Nominating Committee also solicited nominations for the positions of Chair and Vice Chairs of the Council for 2018 and presented a slate for consideration to the Council.

REPORT: Workshop to Protect Water Resources Committee

Members: Kristen Hychka (Chair), Marjory Rinaldo-Lee, Michelle Henry, Sharon Anderson, Joan Jurkowich

This Committee was established to work on one of the Priority Action Items from the 2015-2018 Water Quality Strategy: **Develop a workshop for municipal officials on the importance of local actions to protect stream corridors, wetlands, and aquifer recharge areas**.

Step one was to identify which topic would most help protect water quality and would be of interest to local municipal officials. The Committee began by brainstorming a list of potential topics and then presented that list at a meeting of the Tompkins County Council of Governments, where support was shown for the entire list. The Committee worked to shorten the list, ending up with two topics: road ditching and stream corridor protection. Road ditching was chosen for the first training session.

Committee members reached out to potential trainers, including Rebecca Schneider, representatives of the Cornell Local Roads Program, and Angel Hinickle from the Tompkins County Soil and Water Conservation District. Members also met with the Tompkins County Stormwater Coalition to identify specific issues to be addressed during the training.

The Committee continues its work in 2018, planning to hold the workshop in or around April.

WATER AND SEWER STUDY SCOPING COMMITTEE

Members: John Andersson (Chair), Elizabeth Cameron, Michelle Henry, and Frank Proto

The Tompkins County Department of Planning and Sustainability is interested in updating the 2010 "Countywide Inter-Municipal Water and Sewer Feasibility Study for Tompkins County" and asked the WRC to suggest topics by April 4 that could be addressed in the update. The WRC created the W&S Study Scoping Committee to respond.

The scope of the 2010 Study included an inventory and technical examination of the municipal water and wastewater facilities around the County; evaluated the capacity of existing systems to support future growth; and identified limitations to system expansion.

The Committee's recommendations are:

- Keep the format and information (with updates of course) of the Infrastructure and Limitations beginning on pages 25; the Available Capacity of Systems on pg 32; report on any changes in the Focus Areas, pg 36.
- Incorporate any studies done since 2010 by the County or municipalities, for instance the Aquifer Studies.
- Add Yellow Barn Water Company to the inventory of systems to study because it is now a Town of Dryden system.
- Dig deeper when analyzing the excess capacity and availability of back-up capacity, especially considering the recent drought, when neighboring systems were all affected.
- Consider discussing the "aging infrastructure." Are there critical components of systems that need attention in some time span, say 5 or 10 years?
- Consider providing some analysis of the rural areas outside the municipal systems to help guide municipalities or developers when they consider siting projects.
- Consider providing suggestions or recommendations for protection of the identified aquifers and recharge areas.

Unfortunately, funding for the study could not be found by the end of 2017.

Because the Committee's work was completed by April, additional goals were discussed:

- Investigate how municipalities consider the capacity of water and sewer systems when reviewing development projects.
- Assist municipal water systems with developing Emergency Plans.

However, the Committee felt we did not have the expertise to provide assistance in these areas, and some of the information in the Emergency Plans is confidential and thus not available to the public.