

Tompkins County
Water Resources Council

2009 ANNUAL REPORT



Frank P. Proto, Chairman
Roxy Johnston, First Vice Chair
R. Barry Goodrich, Second Vice Chair

Tompkins County Planning Department
121 East Court Street
Ithaca, New York 14850
607-274-5560

<http://www.tompkins-co.org/planning/committees.html>

2009 Membership Roster

Appointed WRC Members

Terms that expired end of 2009:

At-Large	Mary Shelley
At-Large	Frank Proto
Municipal Government	Ed Bugliosi (Town of Dryden)
Tompkins County Planning Dept.	Joan Jurkowich
Watershed Organizations	Barry Goodrich
Business & Industry	Rick Manning
Environment	Linda Wagenet

Terms that will expire end of 2010:

Municipal Government	Bud Shattuck (Town of Lansing)
Recreation	Dan Karig
At-Large	Darby Kiley
Economic Development	(vacant)
Water Purveyor	Roxy Johnston
Soil & Water Conservation District	Craig Schutt

Terms that will expire end of 2011:

County Health	Liz Cameron
County Legislature	Will Burbank
Agriculture	Gregg McConnell
At-Large	Elaine Quaroni
At-Large	Donna Eschenbrenner
Municipal Government	Cindy Schulte (Town of Newfield)
Environmental Management Council	Roger Yonkin/Jim McGarry
Cornell Cooperative Extension	Sharon Anderson

Ex-Officio Members

USDA Natural Resources Conservation Service	Patrick Barry
US Geological Survey	Todd Miller

Associate Members

John Andersson
Dooley Kiefer
Jose Lozano
John Mawdsley
Steve Penningroth
Susan Riha
Marjory Rinaldo-Lee
Nick Schipanski
Cathy Valentino

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, and is 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, and 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.

The WRC also serves as the County’s water quality coordinating committee, responsible for the development of the Tompkins County Water Quality Strategy (WQS), which is intended to help prioritize local water resources issues and concerns and identify strategies to address these concerns. Council and committee goals are drawn directly from the strategies of the WQS.

WRC membership consists of 21 voting members, who are appointed by the County Legislature to represent various water-related interests, and six non-voting members from relevant Federal and State agencies. We also welcome associate members, who have committee-level voting rights.

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COUNCIL MEETINGS AND COLLABORATION

Water Resources Council meetings frequently include presentations by guests. The following presentations occurred in 2009.

Retiree Environmental Stewardship Program -- *Linda Wagenet*

Phosphorus Loading and Related Impacts in Southern Cayuga Lake –
Dave Matthews, Ph.D., Senior Research Scientist, Upstate Freshwater Institute

Nature vs. Nurture: Comparisons of Natural and Mitigation Wetlands -- *Nick Schipanski*

Marcellus Shale – *Bill Kappel, USGS*

Geohydrology and Water Quality of the Valley-Fill Aquifer System in the Upper Sixmile Creek and West Branch Owego Creek Valleys in the Town of Caroline -- *Todd Miller, USGS*

The Cornell College of Veterinary Medicine Waste Management Facility
-- *Paul Jennette, Biosafety Engineer – CCVM Biosafety Program*

Water Management Requirements Under the Great Lakes and Susquehanna River Basin
Compacts — *Don Zelazny, DEC Great Lakes Program Coordinator and Kenneth Lynch, DEC
Region 7 Director & DEC Lead Representative, Susquehanna River Basin Commission*

The Tompkins County LiDar Study – *Jon Negley, Soil & Water Conservation District*

The DEC Draft Supplemental Generic Environmental Impact Statement on Gas Drilling
– *Bill Kappel, United States Geological Survey*

The Scientific Literature, Models of P-eutrophication, and Lake Source Cooling
– *John Confer, canoeist, fisherman, environmentalist and retired Director of Environmental Studies
at Ithaca College*

Minutes from the monthly meetings of the WRC are posted on the Tompkins County Planning
Department website at: <http://www.tompkins-co.org/planning/committees.html>.

To foster coordination and collaboration in the management of local water resources, WRC members serve as liaisons between the WRC and other groups, including the Finger Lakes-Lake Ontario Watershed Protection Alliance, Cayuga Lake Watershed Intermunicipal Organization and its Technical Advisory Committee, the Upper Susquehanna Coalition, the Stormwater Coalition of Tompkins County, Tompkins County Agriculture and Farmland Protection Board, and Tompkins County Environmental Management Council. Informal relationships also exist between the WRC and other organizations and agencies such as volunteer stream monitoring groups, the Cayuga Lake Watershed Network, and the Town of Caroline Watersheds Committee.

COMMITTEE ACTIVITIES

Aquifer Committee

Members: John Andersson, Liz Cameron, Donna Eschenbrenner, Todd Miller (Chair), Lyle Raymond, Marjory Rinaldo-Lee

In 2009, the Aquifer Committee of the Tompkins County Water Resources Council (WRC) had compiled an inventory of sources of groundwater data that is currently being collected in Tompkins County. The purpose of the inventory is to provide water managers with information on organizations gathering data and the types of groundwater information collected in Tompkins County in 2009. The summary includes selected federal, state, county government agencies and the Environmental Compliance and Sustainability Office at Cornell University that collect groundwater data. Not included are geotechnical consultants, drillers, and students who may be conducting work, research, or writing papers on groundwater issues. The agencies listed in the tables were contacted by members of the Aquifer Committee and queried about their groundwater collection efforts. The contacts listed in the tables provided data on their groundwater collection programs and graciously offered to assist anyone interested in learning more about their programs. Below is a table summarizing the data that were collected. For a copy of all the data, contact Todd Miller (email: tsmiller@usgs.gov, phone 607-266-0217, ext. 3011).

Summary of sources of groundwater data collected in Tompkins County, 2009																	
Source	Water Quality			Geohydrologic Data					Purpose of Data Collection				Format of Data Availability				
	Chem-ical	Phys-ical	Biological ¹	Water levels	Drilling records	Aquifer Character-istics ²	Water use ³	GW/SW inter-action	Other ⁴	Contamin-ation sites	Drinking water wells	Aquifer studies	Other ⁵	On-line	Pub-lished report	Hard copy files	Elec-tronic
U.S. Geological Survey Ithaca Water Science Center	X	X	X	X	X	X	X	X	X			X	X	X	X	X	X
Tompkins County Health Department	X	X	X		X		X	X		X	X				X	X	X
Public Works Highway Division				X	X				X				X			X	
Solid Waste Management Div.	X	X		X	X	X			X							X	
New York State Dept. of Environmental Conservation																	
Water Division	X	X	X	X	X	X	X		X		X		X	X	X	X	X
Environmental Remediation Div.	X	X		X	X				X							X	
Solid and Hazardous Waste Div.	X	X		X	X				X							X	
Cornell University Environmental Compliance Office	X	X		X	X	X			X				X			X	
New York State Department of Transportation Geotechnical Services				X	X	X			X			X				X	

Footnotes- ¹Includes pathogens and ecological constituents, ²type (unconfined, confined, bedrock, unconsolidated, etc.), thickness, permeability, flow direction, ³types and amounts, ⁴includes numerical ground-water models, ⁵includes research, student theses

Cayuga Lake Recreation

Members: Dan Karig (Chair), Dooley Kiefer, Rick Manning, Elaine Quaroni, Mary Shelley

During 2009 the accomplishments of the Recreation Committee include: tree planting in the “Wegman slough”, installation of a speed limit sign at the white lighthouse on the Cayuga Lake inlet, and further design of a paddlers dock at the Farmers Market.

Almost 75 Bald Cypress saplings were planted in the spring of 2009 by Andy Hillman (City Forester), a group of BOCES students, and WRC Rec Committee members. The trees were planted along the bank of the slough between Wegmans and Nates

Floral Estates. Almost all these trees have survived.

After consultation with personnel of the NYS Canal Corporation, it was decided to limit 5mph speed limit signage in the Inlet to a single large sign at the end of the entrance jetty, in front of the lighthouse. It was suggested that additional signs be placed on the channel marker buoys that would be emplaced if and when the Inlet channel is dredged.

More detailed plans for a paddlers dock at the south end of the Farmers Market were drawn up. Consultation with the City Board of Public Works and Engineering Department has begun. It is anticipated that the project will be ready for funding in early 2010.

Education

Members: Elaine Quaroni (Chair) and all committee chairs

In conjunction with Cornell University, the WRC had a display at the Water Week Celebration providing information about WRC and the strategic Monitoring Plan for the Southern Basin of Cayuga Lake.

There has been a series of guest viewpoints about the health of the Cayuga Lake watershed and the challenges and opportunities related to it which has been appearing in the Ithaca Journal since August, 2009. Contributing authors are members of the Monitoring Plan Partnership.

The Education Committee provided WRC members with a list of commonly used acronyms (see page 8) and organizations that influence water resources in Tompkins County.



Executive

Members: Frank Proto (Chair), Roxy Johnston (First Vice Chair), Barry Goodrich (Second Vice Chair), Cindy Schulte, Bud Shattuck

The Executive Committee was authorized by the full council to wrap up details of two communications to the NYS Department of Environmental Conservation. The first item was drafted by the MS4 *ad hoc* committee and provided comments to DEC concerning the draft renewal of the SPDES General Permit for Municipal Separate Storm Sewer Systems. The second was drafted by the Gas Drilling *ad hoc* committee and provided comments to DEC on the draft

Supplemental Generic Environmental Impact Statement on gas drilling.

The Executive Committee also held several meetings to discuss probable impacts of the County budget on administrative services provided by the Planning Department. Points from these committee meetings were also discussed at WRC meetings. Although administrative services remain unchanged, the best ideas will be incorporated in WRC policy.

Gas Drilling *ad hoc*

Members: Ed Bugliosi, Liz Cameron (Chair), Joan Jurkowich, Steve Penningroth, Marjory Rinaldo-Lee, Cindy Schulte, Linda Wagenet

The Gas Drilling Committee of the Tompkins County Water Resources Council was actively involved in the review of the *Draft Supplemental Generic Environmental Impact Statement (dSGEIS) on the Oil, Gas, and Solution Mining Regulatory Program* prepared by the NYS Department of Environmental Conservation to address horizontal drilling in the Marcellus Shale. The Committee prepared a letter requesting that the 30-day comment period be extended, submitted extensive comments on the dSGEIS, provided testimony at the public hearing held at the State Theatre, and drafted an information sheet to provide information to residents near gas wells on how and what to test in their drinking water supply well.

The comment letter to DEC is available on our website at <http://www.tompkins-co.org/planning/committees/WRC/index.htm>.

Grants

Members: Liz Cameron, Ed Bugliosi, Roxy Johnston, Darby Kiley, Craig Schutt (Chair), Linda Wagenet

The Grants Committee meets as necessary to consider water quality-related grant opportunities. One of the primary duties of the committee is to identify water quality funding opportunities for which the WRC and other entities within the county are eligible and then assist those entities with the application process. Such assistance varies from helping to write the grant applications to providing support for submission of the applications (via support letters or other appropriate means).

The major duty of the Grants Committee is to develop and propose to the WRC a plan and budget for the county's annual FL-LOWPA (Finger Lakes –

Lake Ontario Watershed Protection Alliance) appropriation from the state (2009-2010 appropriation will be \$46,000, a dramatic cut to FL-LOWPA funding from previous years). Once the committee meets and drafts a plan for the use of these funds, the WRC votes on that proposal. Many times the Grants committee develops a FL-LOWPA Special Projects proposal.

Funds (\$4,500) were applied for through the NYS DEC Water Quality Improvement Program, Round 10, specifically for support of the WRC in 2009. The application was completed and submitted by Tompkins County SWCD. At this time there has been no announcement of awards of funding from DEC.

Other grant opportunities and collaborations will be explored when they become available. Some of these may come from federal funding through the newly announced Great Lakes Initiative.

WRC/CU Monitoring Plan

WRC Members: Sharon Anderson, John Anderson, Roxy Johnston (Chair), Joan Jurkovich, Dan Karig, Dooley Kiefer, Darby Kiley, Jose Lozano, Jim McGarry, Steve Penningroth, Marjory Rinaldo-Lee, Craig Schutt, Linda Wagenet

The WRC/CU Monitoring Plan Committee consisted of the WRC members listed above and more than a

score of other partners. The committee kicked off a series of articles in the Ithaca Journal about water topics in August. The articles appear every 6-8 weeks under the heading 'Cayuga 2.0'. Topics have included the Monitoring Plan, Floating Classroom, Intermunicipal Organization, Wetlands, Swimming, Pharmaceuticals and others. The series will run through most of 2010 and is part of an initial effort to raise residents' level of awareness about water topics.

Cornell University worked with the Partnership to prepare professional posters (shown below) about the Water Resources Council, the Partnership and the Monitoring Plan. The posters have been used at Earth Day, Water Week, FL-LOWPA's Fall Conference and the Finger Lakes Institute's 5th Annual Research Conference.

We continue to hear presentations from researchers that broaden our perspective. John Halfman from the Finger Lakes Institute talked about increasing phosphorus levels in the deep waters of Cayuga and Seneca Lakes. John Confer from Ithaca College spoke about the excellent generic relationship between total phosphorus and trophic state. He also spoke about how the relationship could not be used as a metric in shallow, frequently flushed waters such as the southern end of Cayuga Lake. Jose Lozano pressed the group to refine our statistical



approaches and in response, we have asked the EPA for some preliminary guidance based on the Lake Source Cooling and IAWWTF monitoring and analytical approaches, as well as how we can begin to define acceptable data within the framework of the Partnership's Monitoring Plan.

Cornell Cooperative Extension of Tompkins County, along with the Cayuga Lake Watershed Network continue to post datasets and reports to e-commons. As this on-line resource for scientific information grows, its availability will be highlighted to the public through outreach opportunities.

The Lake Source Cooling permit was not changed in 2009; sampling was completed as designed with extra resources going to the deployment and gradual rehabilitation of the Remote Underwater Sampling Station (RUSS) unit. Outside funding was secured by Cornell researchers to cover this expense.

Partnership Members did apply for other funding including FL-LOWPA Special Projects and EPA CARE funding. Nelson Hairston was successful in his bid for a Hatch Grant through the USDA. This work will elucidate causes for turbidity in the southern basin of the lake by characterizing the suspended particles with a particular emphasis on how these particles impact populations of *Daphnia*, an important food web member with a critical role in creating clear lake water conditions. Background work started in 2009, sampling will begin in 2010. This project furthers the special studies outlined in the Monitoring Plan.

Moving the Monitoring Plan out of its draft status was not completed in 2009. A goals statement was worked on and comments were received from EPA Region 2 technical staff. Support for this on-going effort may be provided by the City of Ithaca Water Treatment Plant in 2010 as part of its involvement in the watershed. Also not achieved was the goal of providing a report to the Tompkins County Legislature that summarized monitoring efforts under the umbrella of the Partnership. The group's request for statistical guidance from the EPA is part of our effort to achieve this goal. Advancing the Monitoring Plan and providing a coordinated report will be top priorities for the Partnership in 2010.

Nominating/Membership

Members: Dan Karig, Dooley Kiefer, Craig Schutt (Chair), Linda Wagenet, Roger Yonkin

The committee worked to fill these vacancies in 2009: three (3) Municipal seats, Environment,



Watershed Organization, two (2) At-Large, Business and Industry, Tompkins County Planning Department, Economic Development, Environmental Management Council Liaison, and US Natural Resources Conservation Service (ex-officio).

Applications for membership to the WRC were plentiful but with that there were questions on individuals' qualifications for appropriate seats. The following is the recommendations presented to the full WRC and in turn to Tompkins County Legislature's Planning, Development and Environmental Quality Committee, and then presented to the Legislature for consideration and approval.

Municipal seats (3)

Ed Bugliosi – reappointed

Cindy Schulte – reappointed (recommendation of Tompkins County Council of Governments)

Lynn Leopold – new appointee

Environment – Marjory Rinaldo-Lee – new appointee (formerly associate)

Watershed Organization – Barry Goodrich – reappointed

Business/Industry – Rick Manning – reappointed

EMC Liaison – James McGarry – new appointee

At-Large seats (2)

Frank Proto – reappointed

Mary Shelley – reappointed

Economic Development – No Action on the recommendation of the Committee. Seat remains vacant as it has for the past five years.

NRCS (ex-officio) – Patrick Barry

The following applicants were recommended for *Associate Membership*. All but one of these individuals were new applicants for various seats.

Steve Penningroth – reappointment
Ken Zeserson
Lisa-Wright Matthews
Judith Abrams

The Committee also secured a slate of officers for 2010 and placed that slate into nomination to the full council.

Water Quality Strategy Update

Members: John Andersson, Joan Jurkowich (Chair), Dooley Kiefer, Cindy Schulte, Craig Schutt

The Water Resources Council adopted an updated Water Quality Strategy (WQS) on April 20th. The WQS describes the importance of water resources in Tompkins County, identifies the key partners working on water resources in the county, and includes a work program. The major change to the WQS is in the work program, which is now a three-year proposal rather than a two-year proposal. Earlier versions of the WQS only identified work activities to be undertaken by the Water Resources Council and its committees. The WQS now includes activities that will, or should, be undertaken by other agencies as well, in order to provide the big picture view of the approach to water quality planning and management to be followed.

Development and updates of a County Water Quality Strategy are strongly recommended by DEC and the New York State Soil & Water Conservation Committee. The WQS can be used by local, State, and Federal government agencies to help understand and determine water resources management priorities. Revisions to the Water Quality Strategy were drafted by the committee, discussed in full council meetings, and subjected to a public comment period. The updated WQS was adopted by unanimous vote of the Water Resources Council.

Wetlands Committee

Members: Barry Goodrich, Dooley Kiefer, Darby Kiley (chair), John Mawdsley, Nick Schipanski, Craig Schutt

After the 2008 completion of the report, "Wetland Protections in Tompkins County: Existing Status, Gaps, and Future Needs," the Wetlands Committee has been working on a draft sample wetlands ordinance. The sample was compiled from several other enacted ordinances for towns in New York State. The committee will complete the draft in 2010 and distribute it to municipalities.

You're Invited!

We welcome visitors! Residents of Tompkins County are invited to attend meetings of the WRC and apply for WRC membership. Membership in the WRC is a great opportunity for citizens to provide input into the decisions that are made about our local environment. 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). Meetings that conflict with federal holidays are rescheduled (feel free to phone the Secretary at 274-5560 about dates, or check our website). The WRC typically does not meet in August.

2010 meeting dates:

January 25	July 19
February 22	September 20
March 15	October 18
April 19	November 15
May 17	December 20
June 21	

For more information about the WRC or how to apply for WRC membership, please contact the Tompkins County Planning Department at 274-5560, planning@tompkins-co.org, or 121 East Court Street, Ithaca, NY.

LIST OF ACONYMS

BACI	Before After Control Impact
CCE	Cornell Cooperative Extension of Tompkins County
CHWWTF	Cayuga Heights Waste Water Treatment Facility
DEC	New York Department of Environmental Conservation
EMC	Tompkins County Environmental Management Council
EPA	United States Environmental Protection Agency
FLI	Finger Lakes Institute
FL-LOWPA	Finger Lakes-Lake Ontario Watershed Protection Alliance
IAWWTF	Ithaca Area Waste Water Treatment Facility
IO	Cayuga Lake Watershed Intermunicipal Organization
LSC	Lake Source Cooling
NETWORK	Cayuga Lake Watershed Network
NYS	New York State
NRCS	Natural Resources Conservation Service
NYSDOH	New York State Department of Health
PRISM	Partnership for Regional Invasive Species Management
RPP	Restoration and Protection Plan (prepared by Network)
RUSS	Remote Underwater Sampling Station
SEQR	State Environmental Quality Review
SMP	Strategic Monitoring Plan (for the southern basin of Cayuga Lake)
SPDES	State Pollutant Discharge Elimination System
SWAR	Source Water Assessment Report
S(W)CTC	Storm Water Coalition of Tompkins County
SWCD	Soil and Water Conservation District
SWG	Storm Water Group
TCAD	Tompkins County Area Development
TCHD	Tompkins County Health Department of Health
TCL	Tompkins County Legislature
TCPD	Tompkins County Planning Department
(TC)SWCD	Tompkins County Soil and Water Conservation District
TMDL	Total Maximum Daily Load
UFI	Upstate Freshwater Institute
USC	Upper Susquehanna Coalition
USDA	United States Department of Agriculture
USGS	United States Geological Survey
WQS	Water Quality Strategy
WRC	Tompkins County Water Resources Council