

# Ontario County Soil & Water Conservation District

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**Fall  
2016**

## Projects and Programs

Ontario County Soil and Water Conservation District's partnerships with cooperating agencies, municipalities, organizations and private citizens are instrumental in accomplishing the many projects and programs that improve environmental and economic conditions in Ontario County.

This issue will feature a few current and ongoing efforts in which Ontario County SWCD is engaged with local and area partners.



**Honeoye Lake Watershed Projects**  
NYSDEC WQIP Round 11 Grant Project  
NYS DEC WQIP Round 12 Inlet Restoration Project  
**Staff Recognition**  
Bowie 1100 Hydroseeder Purchased  
32<sup>nd</sup> Annual Conservation Field Days at 4-H Camp Bristol Hills  
Managing Your Well During A Drought  
Water Conservation In Your Home  
Staff Directory  
Our Sponsors

Photographs of Conservation Field Days may also be found on our Facebook page.  
[www.facebook.com/Ontario-County-NY-Soil-and-Water-Conservation-District](http://www.facebook.com/Ontario-County-NY-Soil-and-Water-Conservation-District)

### NYSDEC WQIP Round 11 Grant Project

The focus of the Honeoye Lake Watershed Management Plan-based projects is to implement Best Management Practices (BMP's) to reduce external sources of nutrients and sediments reaching Honeoye Lake. Ontario County SOIL and Water Conservation District and Honeoye Lake Watershed Task Force have received a NYS DEC Water Quality Improvement Program (WQIP) Round 11 Grant for over \$170,000 including local match funding to address stream bank erosion in public road right of ways, build several detention basins and vernal pools in the Honeoye Lake Watershed.

**A Vernal Pool Workshop** held at Cumming Nature Center featured presentations by Jim Curatolo of The Wetland Trust and Maura Sullivan, Finger Lakes Community College. A vernal pool installation was completed by staff of the Upper Susquehanna Coalition to demonstrate construction of these small wetland features.

Vernal pools, also called ephemeral pools, are temporary pools of water that provide habitat for distinctive plants and animals. The pools are a type of wetland, usually without fish, that allows safe development of amphibian and insect species unable to withstand competition or predation by fish. Upland areas around a vernal pool are critical to the survival of some species. Many amphibians that breed only in vernal pools spend most of their lives in the uplands within a few hundred feet of the pool. Eggs are laid in the vernal pool, then juveniles leave the pool two or three months later, returning the following spring to breed.

Most vernal pools are dry for at least part of the year, and fill with winter rains or snow melt. Some pools may remain at least partially filled with water over the course of a year or more, but all vernal pools dry up periodically.

Many more vernal pools enriched Finger Lakes landscapes in prior decades, but were drained for agricultural or development reasons. Opportunities to view wildlife are among reasons that private homeowners might wish to create or restore a vernal pool on their property. Flood mitigation, groundwater infiltration, water storage and habitat enrichment for many species of plants and animals are additional benefits of the installations.

Volunteers and FLCC Conservation Department students assisted in construction of the vernal pools and in Forestry Best Management Practices, planting appropriate native species.



*Photograph: Megan Webster: Creating a vernal pool*

**Watch for an Announcement  
Spring 2017  
Forestry Workshop  
Installation of Forestry BMPs at  
Muller Field Station**



*Erosion from an abandoned logging road.*

## NYS DEC WQIP Round 12 Inlet Restoration Project

This project includes four elements that work together to allow inlet stream flows during storms to spread out, slow down and drop sediment and nutrient loadings before reaching the lake. Ontario County Soil and Water Conservation District received the grant award for \$300,000 with \$100,000 local match to fund the implementation of this project, which began in late August and was completed in late September.



Project Area before installation began.

The Inlet restoration project will restore a more natural stream design to the area south of the Honeoye Lake. The project will also improve wildlife habitat and provide water quality benefits by reducing phosphorous and other nutrients.

The site is owned by the NYS DEC and is designated as the Honeoye Lake Wildlife Management Area. The existing land use is public and consists of open space and meadow. Over many decades, the existing Honeoye Lake Inlet has been straightened and channelized for agricultural purposes.

In addition, several straight, narrow ditches were established which act as direct conduits for sediment into the inlet. As a result, sediment from the surrounding hills cannot settle out and reaches the inlet and lake at alarming rates.

The Ontario County Soil & Water Conservation District, NYS DEC, The Nature Conservancy, Honeoye Lake Watershed Task Force and the US Fish and Wildlife Service are partnering to disconnect the existing straightened channel and create a new sinuous channel that will re-connect the historic flood plain and allow sediment to filter out of the water prior to reaching Honeoye Lake.



Photograph: Megan Webster: Project area work.

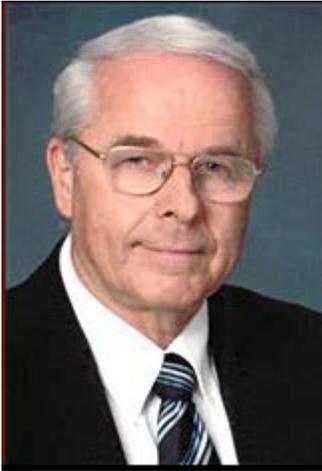
The channel was constructed to US FWS Service engineering specifications and ditch plugs installed at many of the large ditches entering the inlet area. The existing outlet channel continued to function until the entire project was completed; then it was abandoned and water directed into the new sinuous channel.

All work was completed using a tracked excavator and tracked bulldozer. Spoils from the newly created channel was used for ditch plugs and/or spread adjacent to the area and seeded and mulched immediately.

**NYSDEC WQIP Round 13 Proposed Mill Creek Streambank Stabilization Project:** Ontario County SWCD submitted a WQIP Round 13 Grant proposal in late July. This project would stabilize 450 linear feet of severely eroding streambank along Mill Creek in the Town of Richmond. The goal of the project is to minimize sediment and associated nutrients entering the stream and assist channel realignment and reconnection of the floodplain to aid flood control for the local area. Grant awards should be announced by the end of 2016.

**Text credits: Terry Gronwall, HLWTF and Edith Davey OCSWCD**

## Staff Recognized



Canandaigua Lake Watershed Inspector, George Barden has been selected for inclusion in the most recent edition of *Marquis Who's Who* for his excellence in the field of water quality.

He has been an employee for the Ontario County Soil and Water Conservation District for 25 years, holds the Certified Professional Erosion Sediment Control certification and has been the recipient of numerous service awards from the NYS Conservation

District Employees Association, the Canandaigua Lake Watershed Task Force and Watershed Council.

Barden was a member of a delegation of water professionals chosen as Citizen Ambassadors with the People to People Exchange Program; visiting Russia for 10 days to discuss water quality issues with his counterparts in that country.

Barden is an instructor for the New York State Onsite Training Network and is recognized as an authority in the North East on the design, siting and inspection of onsite wastewater treatment systems.

## Bowie 1100 Hydroseeder Purchased



The Ontario County Soil & Water Conservation District received funding from the NYS DEC Water Quality Improvement Program Round 11 to purchase a new Bowie 1100 Hydroseeder and seeding materials to stabilize disturbed right of ways, road banks and other highly erodible areas throughout Ontario County.

The new unit features a 49 horse power John Deere diesel motor, 65 gallon flush tank and 100 feet of seeding hose on an electronic reel.

The District has been working cooperatively with the Ontario County Department of Public Works to use the machine throughout Ontario County. Additional seeding will take place through October and begin again early next season.

## 32<sup>nd</sup> Annual Conservation Field Days

Since 1984, 6<sup>th</sup> grade students in Ontario County have been enjoying Conservation Field Days in the fall. Ontario County SWCD and Cornell Cooperative Extension of Ontario County have cooperated in staging the Field Days during that time.

Over the years, venues and educational stations have changed. The original Field Days were held on the campus of the (then) Community College of the Finger Lakes. 4-H Camp Bristol Hills has hosted Field Days for more than a decade since.

The goal of the Field Days program has remained constant: to offer interactive, hands-on environmental education experiences in an outdoor setting that allows students to learn information not usually available elsewhere.

Volunteer experts for the 2016 event included staff from Finger Lakes Community College, NYS Department of Environmental Conservation, Finger Lakes Institute, Canandaigua Lake Watershed Association, Ganondagan Historic Site, 4-H Camp Bristol Hills, Cornell Cooperative Extension Master Gardeners, SWCD and private citizens. Sue Bennett provided First Aid coverage and taught a popular station giving students information about First Aid for choking victims.



Dick Onze: The Buzz About Bees



Pam Tichenor and Dana Kincaid: Run for Recycling



Guides from Ganondagan Historic Site  
Native Americans the First Recyclers



Tad Gerace: OC SWCD  
Wild about Birds





Lindsey Weykman, Ontario Co. Dairy Princess  
Milk, the Better Choice



Vaughn Buchholz, CCE Master Gardener  
Mastodons



Russell Welser, CCE  
Nigerian Dwarf Goats



Ron Schroder, DEC ret.  
Wildlife Detectives



Jeanne Totman, CCE Master Gardener  
Arachnomaina



Art Kirsh, Senior Wildlife Biologist, DEC  
Oh! Deer!

**Other Presenters:**

Sue Bennett: First Aid  
Bob Gleason: How Many Bears in the Forest?  
Alyssa Johnson and Steve Connelly: Pond Life  
Nadia Harvieux: Invasive Species  
Beth Altemus: Macroinvertebrate Mayhem  
Jim Hooper: Geocaching  
Edith Davey: Finger Lakes Fossils  
Thanks also to Nancy Anderson and Joe Torres, CCE  
for their assistance in staging this successful event.



## Managing Your Well During a Drought

One indication of how unusually dry the summer of 2016 has been is the number of calls and inquiries at the Ontario County SWCD about home water supply wells.

Home water wells tap groundwater aquifers that cannot easily be seen or monitored. The invisible nature of groundwater leads to an unwelcome reality for residents relying on wells that their water supply could dry up without much warning.

Groundwater levels naturally fluctuate throughout the year, with levels in March and April usually the highest due to snow melt infiltration and spring rains that recharge aquifers. Both of those sources were in short supply in 2016.

Levels typically begin to decline in May as the growing season begins and trees and other plants take up groundwater. September and October usually have the lowest groundwater levels of the year. In late fall, if rains occur before the ground freezes, recharge again occurs. Groundwater levels during winter months are generally stable or may decline slightly until snow melt and spring rains begin the cycle again.

Most problems with wells tend to occur in late summer or early fall when the static groundwater level is the lowest: at near or below the pump level. Shallow, (particularly old, hand-dug) wells are often the first to dry up during drought. Although deeper wells may be slower to suffer from drought conditions, they may also take longer to recover after a drought has occurred.

Symptoms of a dry well include:

- excessive air in the water
- pump runs for a long time before shutting off
- less water production than formerly
- water pressure is very low
- extended time to build up pressure
- neighbors may also have problems with their wells.

That said; it is important to be sure there isn't just a problem with a hole in a pipe or a defective valve. An inspection by a qualified well driller is a good investment before deciding to deepen a well or drill another.

Other causes of reduced well yield may be identified by qualified persons. Plugging of the flow pathways leading to the well can occur because of fine sediments (silt and clay) being drawn into the system. A build-up of encrusted scale may be the result of chemical precipitation from the surrounding rock. Fouling from colonies of bacteria may also block flows.

Well rehabilitation can be cost-effective. It usually involves application of a chemical and agitation to force the chemical out into the aquifer and remove blockages. Well water rehabilitation is a job for a contractor with experience in solving well problems and has the right equipment, as the pump will probably have to be pulled from the well.

Well rehabilitation only works if there is enough water in the aquifer. Natural drought, excessive creation of impervious surfaces that prevent infiltration and increased demand on an aquifer because of adjacent development may all have implications to aquifer recharge. Changes in land use may change recharge patterns.

Water storage systems with timers activating a pump at specified intervals around the clock may relieve stress on a low-producing well and still provide ample water to a residence.

**WATER CONSERVATION** in and around your home is the most rational, reliable means of coping with drought.

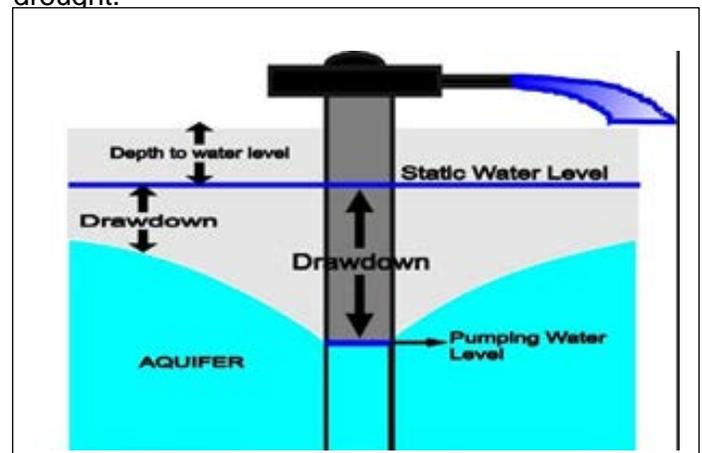


Illustration of aquifer, static water level, drawdown to pump, "cone of depression" created by drawdown....Bison Water Systems



# WATER CONSERVATION IN YOUR HOME

Water conservation is a priority when supplies are stressed. Keeping water usage under control protects your water supply.

## INSIDE

**Keep drinking water cool** in the refrigerator instead of running the faucet until the water cools.

**Compost food waste.** Disposals use lots of water and load the septic tank with solids.

**Run the dishwasher and clothes washer only when full.** If your well or wastewater system is stressed, use a laundromat instead.

**When hand-washing dishes,** fill one sink or pan with wash water and the other with rinse water. Rinsing (or worse, washing and rinsing) dishes under running water results in much higher usage.

**Don't** use running water to thaw food.

**Turn off the tap** when you brush your teeth, shave or wash your face and save 2-4 gallons per minute.

**Take shorter showers!** Set a timer or take a military-style shower, turning off the flow to apply soap and then turning it on to rinse. Multi-head or waterfall showers can use as much as 10 gallons per minute.

**Check** for leaking toilets. Put food coloring in the tank, wait for 30 minutes without flushing and check for color in the toilet bowl.

**Don't use the toilet to flush tissues,** spiders, insects and other waste-basket articles.

**Never flush baby wipes or similar products.** (Even if the label says "flushable", they do not dissolve in septic tanks and cause clogging in sewers.)

**Close a bathtub drain** before you fill the tub, then fill to about 1/3 full.

**Low-flow fixtures** use much less water than older versions. Installing a faucet-head aerator will also reduce the flow rate.

## OUTSIDE

**Water the plants on your deck early** in the morning to minimize evaporation. Mulch (1" deep) cools roots and conserves soil moisture.

**Washing your car** by spraying it clean can use 100 gallons of water. Washing by hand and using the hose to rinse uses about 15 gallons. If your well is stressed, use a commercial car wash. These facilities recycle water.

**Let lawn grass grow taller.** It uses less water, encourages deeper root growth and holds soil moisture better than a closely trimmed lawn. Cornell recommends cutting lawn grass to no less than 4" tall at any time regardless of drought conditions.

**If the lawn grass becomes dormant, don't panic.** Most grass is adapted to seasonal changes and will be green again when dry conditions change.

**Sweep debris from the deck or driveway** instead of washing it away with a garden hose.

### Average Domestic Water Use USA

Fixture/Appliance	Use/person/day
Toilet	18.5
Clothes washer	15.0
Shower	11.6
Faucets	10.9
Leaks	9.5
Other	1.6
Bath	1.2
Dishwasher	1.0
<b>Total</b>	<b>69.3</b>

*1999 American Water Works Association  
Research Foundation*

**(Note: this assumes use of low-flow toilets and other low-flow fixtures)**

## Ontario County SWCD Staff Directory

### Senior District Manager:

Patrick J. Emerick – CPESC, CPSWQ, CMS4S  
Administration  
Soil Erosion Control  
Streambank Stabilization  
Water Resources Council

### District Clerk/Treasurer/Secretary

Elaine Borgeest  
Fish Stocking Program

### Senior Conservation Technician

Megan Webster  
Ag Environmental Management  
Drainage & Farm Assistance

### Conservation Educator

Edith Davey  
Education & Training Programs  
Website & Newsletter

### Water Resources Technician

Tucker Kautz- CCA  
Ag Environmental Management  
Drainage & Farm Assistance

### Conservation District Technician

Tad Gerace  
Onsite Wastewater Systems  
Tree and Shrub Sale

### Canandaigua Lake Watershed Inspector

George Barden - CPESC  
Onsite Wastewater Systems

Jamie Noga

Administrative Assistant

Farmers interested in completing an AEM assessment are encouraged to **call Tucker Kautz at Ontario County SWCD 585-396-1450 ext 24.**

The Tier 1 assessment form may be found on our website: [www.ontswcd.com](http://www.ontswcd.com) or obtained at the SWCD office.



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