

Water Conservation Tips for Greenwich, CT

Jack Stoecker – President, Mianus River Watershed Council - June 1, 2012

There are lots of good reasons to use less water. It's most important when we are heading into a drought condition to avoid a drought emergency and associated water use restrictions. But there are several other reasons. First and foremost is saving money. Second, whenever you save money, it typically has an indirect benefit on the environment. Most of the cost of water and sewer bills is related to the energy costs to pump water to your home or business and if you are on public sewers the added cost of treating the wastewater. Unnecessary water use incurs additional energy costs to pump, treat the water, and then pump and treat the waste water at the Grass Island treatment plant. If you examine the "life cycle" cost of water, it requires electrical energy, chemicals, and water. In Greenwich, the source of drinking water is the Mianus River, a 30 square mile watershed that extends into Stamford, and Westchester County, NY. During a drought, the amount of water that flows in Mianus River depends on the amount of water that the water company releases from the reservoir, which in turn is related to the amount of water demand we create. Your conservation of water (minimizing unnecessary use and fixing leaks) during impending droughts is related to the survival of aquatic species that are co- and interdependent on each other as well as on us human through a complex network of pipes, engineering, decisions at Aquarion and most important, your personal decisions about water use.

The Mianus River is a trout management stream that relies on cold, clean, clear and plentiful amounts of water being released from the Bargh Reservoir based on water demand by the public. Here are few suggestions that you may want to consider to save money, energy, and chemicals and sustain aquatic habitat that supports aquatic species such as trout.

Turn off the Water - don't let it run when you're not using it. It's simple:

- in the shower while you shampoo your hair or soap, lather or shave - especially in the summer when you don't need the water flow to keep you warm
- at the sink while you are shaving
- at the kitchen sink when you are washing dishes, pots and pans

Reuse soapy water at the kitchen sink. Before you rinse soapy water down the sink, look around to see if you can reuse the soapy water for the first scrub of other dirty dishes, pots and pans, the stove, the counters etc. See how many times you can reuse the soapy water. If it stops sudsing then you've done your job.

Reuse your rinse waters. In the same way, reuse your rinse water as the first rinse (or soapy scrub) for other dishes, pots and pans. The idea is to avoid putting gently used rinse water down the drain if you can use it to wash something else. Industries use this technique and call it counter current rinsing. The dirtiest parts see the dirtiest (recycled) water first and the cleanest parts get the cleanest rinse waters. If you are thoughtful, sequential and creative you can minimize your water use.

Dishwashers. If you have a dishwasher, always fill it so you wash a full load before turning it on. Dishwashers minimize water use so completely filling it maximizes water conservation.

General Cleaning. Whenever possible avoid using water to clean hardscaping. Use a broom and if necessary a hose with a shutoff control.

Capture cold water when waiting for shower/sink water to get warm:

- at the kitchen sink, fill a pitcher with the cold water (coming out of the hot water) and use it for the dog's water bowl or for later use to water plants inside or outside.
- in the shower, fill a bucket with the cold water while waiting for the temperature change. If you have the muscle and balance, you can be a conservation hero and carry the water to where you need it to flush a toilet, water plants, etc.
- or if you want to be a water conservation superhero, wash and shower in the cold water instead of waiting for the water to warm up!

Consider a cold/hot water-recirculating unit. Installing a cold/hot water-recirculating unit that pumps hot water to the point of use and back to the cold water line until the temperature gets warm/hot. Hot water recirculation systems can be activated by the push of a button, by a thermostat, programmable timer or motion sensor. You will need to evaluate the convenience of "instant" hot water, the amount of water you will likely conserve versus the cost of the unit. Check plumbing codes to make sure the recirculating units are approved. For additional information go to: http://en.wikipedia.org/wiki/Circulator_pump#Use_with_domestic_hot_water

Consider automatic on/off faucets. If you are upgrading your plumbing, also consider sink faucets that automatically turn on and off based on heat and motion detectors like the ones you find in commercial buildings.

Install a rain barrel and use the water that runs off your roof for outdoor or indoor plants, washing the car etc. Rain barrels are available from hardware stores or can be ordered on line. Many websites and online videos explain how to install a rain barrel. For more information visit: <http://bit.ly/JCIMUz>

Fix all plumbing and toilet leaks. The leaks can add up to a lot of water.

Grass. Don't water the grass if it has rained an inch with the past week. If you can't remember, go to the following USGS web site to view the most recent rainfall records recorded at Comely Avenue at the Byram River. (<http://on.doi.gov/JCn1Dh>) Or even better, for technophiles, sign up for an alert from USGS whenever half an inch of rainfall occurs during a 24 hour period to keep up with rainfall events. (<http://on.doi.gov/JCmv8d>).

If you have a programmable irrigation system, make sure you can adjust it according to the need to water the landscape not simply based on a daily watering schedule. Infrequent soaking every 5 to 7 days after significant rainfall should be adequate and is better for the plants than daily watering.

Pools. Don't top off your pool if you can avoid it especially if rain is in the forecast. After significant rainfall, don't lower the pool level less than you need to in case there might be a long dry spell.

Here are several websites that provide more ideas on how to conserve water. Here are a few to consider:

EPA Releases WaterSense Revised Draft Specification for Weather-Based Irrigation Controllers - January 24, 2011

The U.S. Environmental Protection Agency (EPA) has released the WaterSense Revised Draft Specification for Weather-Based Irrigation Controllers. The revised draft addresses stakeholder comments on the initial draft released in November 2009.

With more than 13.5 million irrigation systems currently installed in the United States, replacing existing standard clock timer controllers with WaterSense labeled weather-based irrigation controllers could offer significant water savings for homeowners and organizations using irrigation systems. Weather-based controllers create or modify irrigation schedules based on the landscape needs and real-time weather data.

Comments on the revised draft specification are due March 21, 2011. Learn more and submit comments at <http://epa.gov/watersense/partners/controltech.html>.

Water Conservation Tips for Schools

Schools use a tremendous amount of water everyday, and require water for their heating and cooling systems, restrooms, drinking water faucets, locker rooms, cafeteria, laboratories, and outdoor playing fields and lawns. To reduce water use in the school, consider replacing old equipment such as dishwashers with [energy-saving devices](#). Repair water leaks and leaky toilets. Install water aerators and automatic shut-off devices on faucets. Use low-flow shower heads and timer shut-off devices to reduce water use during showers. Install toilet dams on older models.

See: http://www.epa.gov/region1/eco/drinkwater/water_conservation_schools.html

Water Conservation

More efficient water use begins with individuals, in the home and place of work. Heating and pumping water requires chemicals and energy. When we waste less water, we conserve fuel, and reduce the pollution generated by burning fuel and treating water with chemicals. Taking these and other steps, and encouraging others to do so, makes good economic as well as environmental sense. See: <http://www.epa.gov/p2/pubs/water.htm>

Water Conservation

Many communities in New England are wrestling with the challenge of supporting growth and its associated demand for safe drinking water and wastewater disposal, without depleting aquifers and reducing stream flows. As land development continues in New England, it is becoming increasingly difficult to balance these needs and some areas are experiencing water shortages, reduced stream flow and degraded water quality. See:

http://www.epa.gov/region1/eco/drinkwater/water_conservation.html

EPA Offers Tips to Save Water During Drought

Release Date: 12/15/1998 Contact Information: Ruth Podems (215) 814-5540

PHILADELPHIA - Environmental officials in Pennsylvania, New Jersey and Delaware issued a regionwide drought warning yesterday, urging area residents to curb water use by 10 to 15 percent. To help with this conservation effort, the U.S. Environmental Protection offers these water conservation tips.

"The average American uses a whopping 100 gallons of water per day, so making these few day-to-day sacrifices should not be a problem," said W. Michael McCabe, EPA Regional Administrator.

See:

<http://yosemite.epa.gov/opa/admpress.nsf/4258bec1914bf838525701c005e1fb9/9e9f6a2515c8ed15852570d60070f983!OpenDocument>

Connecticut - Guidance for Private Well Users

Some private wells run dry every summer, while others, which may be right next-door, flow without a problem even during a drought. Geographical or physical conditions of the soil or rock and well construction may cause these differences. Groundwater levels all across Connecticut are low this year due to a very dry winter and spring. If weather trends persist we anticipate an increase in the number of private wells that will run dry this summer. This guidance has been prepared to help people cope with the situation. See: <http://www.drought.state.ct.us/well.htm>