

PRIVATE WATER WELL USE DURING DROUGHT CONDITIONS GUIDANCE

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 Tomkins County are low this year due to a very dry winter, spring and summer. If weather trends persist we anticipate an increase in the number of private wells that will run dry this year. This guidance has been prepared to help people cope with the situation.

Do I have a Problem?

If you hear your pump going on more frequently than normal or experience water outages, or if air bubbles come out of your faucet, you well may be having trouble keeping up with your demand for water. If you have a well in this situation, a thermal protection control device should be considered to avoid damaging your well pump and help control the flow of water into your pressure tank.

Where is My Well?

Where is it? How deep is it? These are some basic questions. If you do not know the answers, call a registered well driller (*see Certified Well Driller list*). The well driller who installed your well may also be a useful source of information. The DEC has well logs available for all wells drilled starting in 2000.

Why Conserve Water?

Cutting back on water use by refraining from outdoor use or doing laundry and limiting toilet flushing and bathing can significantly reduce your demand for water. Timing water use to spread out your water demand over the entire day may also help. See the attached tips for reducing water demands and lessening water demand.

How Do I Increase My Available Water?

A NYSDEC registered plumber or well driller can inspect your well and may be able to lower the pump. This may increase the useable storage in the well and increase the extent of the aquifer from which the well can get water if the well is already deep. Deepening your well is another possibility.

Increasing the amount of water storage through the installation of an atmospheric storage tank and/or transfer pump by a registered plumber or well driller may help. Water in storage will be available for use as needed, for longer periods. This allows well water to flow into the well (recover) for a longer period of time before recharging the tank. *(Please reference the NYSDOH Individual Water Supply Wells Water Storage Fact Sheet #2 for details)*

What Happens if I Run Out of Water?

If the groundwater level drops below the bottom of your well you are out of water. Deepening your well or drilling a new well may be a solution. If that is not feasible, it may be possible to connect a tank to your home and have water delivered by a bulk water hauler (see *NYSDOH Certified Bulk Water Hauler list*), although this may require the installation of an atmospheric storage tank and transfer pump.

What About Safety?

Any time work is done on your well, or you add water storage, or change delivery, your system should be disinfected to kill any bacteria that may have entered the system during the work procedure. *(Shock disinfection of water supply systems)* Also private well owners should test their water annually for bacteria and other indicators, and whenever there is an evident change in quality contact our department for advice. *(The local NYS certified lab list can be found here)*

For smaller volumes of water, details of Emergency Disinfection of Drinking Water Supplies can be found here <https://www.epa.gov/ground-water-and-drinking-water/emergency-disinfection-drinking-water>

When Will Things Get Better?

This is largely governed by precipitation and is thus unpredictable. However, if conditions have not improved, relief can be expected normally around mid-October when evaporation and transpiration by plants declines.

Things to Remember

Do not fill your well from other water sources. The water will disperse into the aquifer. Your well is not a storage tank. *(Click for details)*

Ideas for optimizing your water consumption: <https://www3.epa.gov/watersense/pubs/res.html>

When in doubt, utilize local and state resources for information.