

WATER SOURCES

Lake County Fact Sheet #HYG2410

Sandra Bryan, Master Gardener Volunteer

WATER SOURCES

“What water sources may I use to water my edibles and vegetables?” is a common question heard in the UF/IFAS Lake County Extension Plant Clinic, and like all things in life, this question can be challenging to answer. Here is a brief synopsis of water sources and how best to use them.

There are six common types of water sources available to the homeowner: 1) rainwater, 2) potable water, 3) reclaimed water, 4) filtered water, 5) softened water, and 6) well water.

Gray water and black water are not suitable for irrigation of residential landscapes or edible crops without extensive treatment and filtration.

RAINWATER: Nature provides us with ample water for almost all of our gardening needs, but it can be inconsistent and unpredictable. One solution is to devise a rainwater catchment system, in its simplest form, a rain barrel. Water from rain barrels is unsuitable for irrigating vegetables or edible plants but fine for ornamentals. Water from rain captured from rooftops may contain dust, pollen, and animal waste. Open catchment rain barrels may develop a pathogenic growth or slime over time in standing water. A simple filtration system or boiling the water before use may result in a usable water source.

POTABLE WATER: Potable water is safe for watering vegetables and ornamentals. Chlorine and fluorides are present but in insufficient quantities to harm plants and humans.

RECLAIMED WATER: Reclaimed water is safe for watering vegetable gardens, providing it meets strict quality standards set by the Florida Department of Environmental Protection. Additional caveats for reclaimed water include only irrigating vegetables and fruits that will be cooked, peeled, skinned, or thermally processed before eating. Do not spray reclaimed water directly onto edible crops that will be eaten raw. Avoid connecting reclaimed water to potable water or well systems.

FILTERED WATER: Additional in-home filters remove harmful chemicals like chlorine and chloramines from tap water by passing the water through activated carbon. Some filters cleanse the water by adding chemicals. Consider the type of filter and how it removes contaminants. Some filters, like reverse osmosis, can remove too many minerals, potentially requiring additional nutrient supplementation for your plants.

WATER SOFTENER: You should not water edibles and ornamentals with water drawn through a water-softening system. Water softening systems use sodium chloride, which can create a build-up of sodium in the soil, inhibiting root growth and creating a nutrient imbalance that can stress and kill plants. If you need a water-softening system, look for a salt-less system.

WELL WATER: Well water is generally safe for watering edibles and ornamentals, but you should have the water tested first to ensure it doesn't contain harmful chemicals or contaminants such as bacteria or excessive minerals. Test the water yearly for bacteria and every five years for nitrates.

<https://sfyl.ifas.ufl.edu/lake/>

Some plumbers can install a system of valves to your water supply system should you need to switch from one source to another to meet your household and gardening requirements. You may recoup the initial cost of the valve system by its convenience and reduced dependence on a costly city water source.

Always wash edibles and vegetables regardless of the water source used to irrigate them.

To have your water tested:

1. Pick up a water test kit from any local library and
 - a. The water test kit has a sanitized vial for water collection,
 - b. Keep the sample cool at all times, and
 - c. Drop the sample off to the testing facility on the same day.
2. Deliver the sample to the Lake County Environmental Public Health Department at 320 West Main Street, Tavares, FL: 32778, ph 352-253-6130.
 - a. Monday – Thursday 8 am-1230pm.
 - b. Costs:
 - Bacteria \$20.00
 - Lead \$30.00
 - Nitrates \$30.00

For more information, review the following publications:

TITLE	PUB NO.	LOCATION
Household Drinking Water Testing for Public and Private Water Supplies	SS712	Edis.ifas.ufl.edu
Reclaimed Water Use in the Landscape: Frequently Asked Questions about Reclaimed Water	SL339	Edis.ifas.ufl.edu
Gray Water Use in Florida	AE453	Edis.ifas.ufl.edu
Reclaimed Water in Your Florida-Friendly Edible Landscape	ENH1364	Edis.ifas.ufl.edu
Watering the Vegetable Garden		Gardeningsolutions.ifas.ufl.edu

<https://sfyl.ifas.ufl.edu/lake/>