

Your Water Utility and
YOU
From Source to Tap



MWUA
Maine Water Utilities Association
Organized 1925

Where Does My Drinking Water Come From?

More than half of all Mainers are served by public water systems. The others get their water from private wells.

Maine has more than 1,900 public water systems including large community systems and small community water systems providing over 30 billion gallons of safe drinking water each year. Public water systems come in all shapes and sizes and so do the sources of water these systems draw water from. Public water system sources of water come from either beneath the ground as groundwater wells or from surface waters such as lakes, rivers, streams, and reservoirs.



Protecting Drinking Water

Drinking water sources are vulnerable to contamination whether it be from harmful chemicals or biological organisms such as bacteria and viruses. Contamination often comes from activities on the land

near the source of water.

Public water systems work on a daily basis to prevent contamination from reaching their source, including limiting the activities and access around their sources and educating landowners about how they can limit their impact on the source. Although most public water systems provide treatment to their water before it reaches your tap, preventing contamination goes a long way to keep costs down and prevent potentially harmful

contaminants from entering the water supply in the first place.

Some things you can do to help prevent pollution of all water sources:

- ◆ Maintain your septic system. Have it pumped every 3 years
- ◆ Use & dispose of chemicals properly
- ◆ Put trash in its proper place, in your trashcan
- ◆ Clean up after your pets
- ◆ Maintain your vehicle and inspect it regularly for leaks
- ◆ Support land conservation and preservation near your water sources



How Do I Know My Water is Safe To Drink?

If your drinking water is supplied by a public water system, you can be assured that the water you receive is regularly monitored and tested to ensure that it meets federal and state drinking water standards and is safe to drink. In Maine, the Maine Center for Disease Control and Prevention's Drinking Water Program enforces state and federal drinking water regulations. These regulations require all public water systems to meet safety standards for drinking water quality. In fact, water systems test for over 86 contaminants on a regular schedule. These contaminants include disease causing organisms like bacteria and viruses as well as chemicals like arsenic, lead, nitrates, uranium, and other chemicals that can make you sick.



Consumer Confidence Reports

Each year, all community public water systems are required to prepare and provide their customers with an annual report on the quality of their drinking water. This is called a Consumer Confidence Report (CCR). The CCR provides information on your local drinking water quality, including the water's source and any contaminants found in the water. If there are any problems identified, your public water system will describe any potential health effects, and actions taken to correct the problem.



Unusual Taste, Odors, and Colors

Changes in taste, odor, and/or color in your drinking water are often the result of a water main break or flushing within the system. Other causes could be from issues related to your internal plumbing – hot water heaters, filters, softeners, etc. If the problem persists, you should contact your water utility.



How Is My Water Treated?

How your water is treated generally depends on where it comes from. Drinking water from lakes, rivers, and streams typically requires treatment in the form of filtration and disinfection. Filtration clarifies water and enhances the effectiveness of disinfection. Disinfection is used to destroy or inactivate disease-causing microorganisms, such as bacteria and viruses. Maine water systems disinfect with chlorine, chloramines, ozone, and ultraviolet (UV) light.

Treatment of groundwater sources differs because groundwater is often exposed to contaminants underground such as arsenic, uranium, radon, nitrates, and nitrites and less often to microorganisms like bacteria and viruses.

Chemicals may be added to further enhance the water to meet a specific objective. Examples include fluoridation which aids in preventing tooth decay. Some systems treat to control corrosion of lead and copper in piping and faucet fixtures found in a homeowners' plumbing.



Public water systems in Maine treat and regularly monitor their water to ensure that the water delivered to your home or business complies with all state and federal drinking water standards. For more information about the treatment used by your water system, give them a call.

Who Takes Care of My Water System?

Licensed water operators oversee the day to day operations of public water systems. They have a responsibility to ensure the water system is providing safe water to all its customers. Licensed operators must have



a combination of education and experience and pass an exam to become a licensed water operator. They must then continue their education in order to stay licensed.



Parts of Your Water System

Tanks

After treatment, water may be stored in tanks. Tanks are used to supplement supplies when demand is high during events like a fire suppression, warm weather, system maintenance or to maintain water pressure within the system.



Some tanks are underground but most are above ground and are commonly seen when you drive by them.

Pipes & Valves



Water is delivered to homes and businesses by a network of pipes. The pipes vary in size and material to deliver fresh water at a good pressure. Water flow is directed by valves within those pipes. If a pipe breaks

or is in need of maintenance, the valves are operated to keep as many services as possible flowing with safe water while the maintenance is being done. Valves are an important feature of water systems.

Hydrants

Fire hydrants are attached to underground water pipes within the distribution system. Hydrants are used by the fire department for fighting fires. They are also used to routinely flush the water lines to improve water quality. Hydrants must be regularly maintained to prevent freezing, ensure they are operational, and safeguarded from unauthorized use.



Water System Maintenance & Upkeep

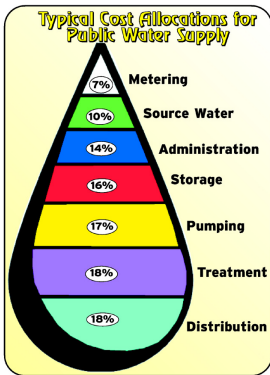
The parts that make up a public water system require continued maintenance, replacement, and upgrades to keep the water system running smoothly and able to provide clean, safe drinking water. Many of the underground pipes that deliver the water are old, some even more than 100 years old. Water systems are continually working to upgrade the components of their water systems to meet current drinking water standards and to prevent water main breaks before they happen.



Why Do I Have to Pay for My Water?

Producing and providing every customer with safe drinking water delivered to their home is an effort shared by many at your local water system.

The costs of drinking water can be broken down into the following: Based on data from the Maine Public Utilities Commission, the average cost of tap water is slightly more than a half-cent for each gallon of water delivered. One dollar gets you more than 150 gallons! Consider that a typical 20



ounce bottle of spring water might cost about \$1.29 at your local store – that's about \$8.25 per gallon, and doesn't include home delivery. Electric utilities say "Flip a switch and we're there." Your local water supplier could respond in kind: "Turn on your faucet and we're there." While you could run to the river and dip in a bucket, the water your public system supplies is safe, tested, disinfected, delivered under pressure, and ready for use in your home.

How Can I Conserve Water?

Inside Your Home:

- ◆ Turn off the water when shaving or brushing teeth
- ◆ Use low flow shower heads & take shorter showers
- ◆ Fix leaky faucets & toilets
- ◆ Purchase water efficient appliances
- ◆ Keep a pitcher of water in the refrigerator instead of running the faucet to get cold water

Outside Your Home:

- ◆ Use a rain barrel to collect roof runoff to water lawns & gardens and water only when necessary
- ◆ Plant trees and shrubs that require less water



A rain barrel



Protecting Your Home From Cross Connections



Photo Source: Florida Department of Environmental Protection

A cross connection is a physical connection between a source of clean, drinkable water and a source that is unsafe, potentially unsafe, or undesirable to drink.

Water normally flows under pressure through your plumbing system and out your tap. It flows in reverse during a backflow situation. When a cross connection exists, it is possible for an unwanted substance or contaminant to backflow into the drinking water system, which can cause people to get sick or even die.

What You Can Do to Prevent Cross Connections:

- ◆ Check any hoses and be diligent about not submersing a hose in a tank, pool, bucket, or other container.
- ◆ Check any waste lines from water softeners or water treatment systems and make sure that if the line goes into a septic or sewer line, it is not directly connected.
- ◆ Check to make sure that anything you hook up to your water supply, such as your pressure washer or lawn and garden chemical applicator, has the appropriate backflow prevention device. If you don't know, ask a plumbing professional.
- ◆ Install backflow-prevention devices. A hose bib vacuum breaker, available at hardware stores, screws directly onto your outside hose spigot and can prevent contamination of your home plumbing system.
- ◆ Contact your local plumbing inspector or your water utility if you have questions or for more information.

What if I Have a Private Well?

If your drinking water comes from your own private well, it should be tested regularly to make sure it is safe to drink. Maine CDC recommends that a private well be tested every year for bacteria, nitrate, and nitrite and every 3-5 years for arsenic, radon, uranium, lead, and fluoride. For more information about private wells, contact the Maine Center for Disease Control and Prevention at 866-292-3474 or visit <http://wellwater.maine.gov>





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What if I Have More Questions?


If you have more questions or want more information about the water supplied to you by your local water utility, give them a call.



Water Utility Name:

Phone Number:

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