Preparing for a Total Water Outage

We often don't realize how frequently we use water until it's gone. There are many reasons why water outages can occur.
Sometimes they are responses to contamination from agricultural runoff or sewer flooding. Other times, water shut-offs are for repairing leaks in the infrastructure. Once water service returns, the changes in pressure often stir up the sediment sitting in pipes, leaving citizens without potable water for even longer.
Having a well isn't foolproof either, as they can be contaminated or run dry.

Don't be left unprepared for a total water outage. Establish a backup plan.

Will It Happen to Me?

According to a comprehensive 2018 study from Utah State University:

"North America's water infrastructure is in decline. The signs of distress surface daily as water mains break creating floods and service disruptions. The loss of service is more than an inconvenience, causing significant social and economic disruptions."

The same study found that overall water main breaks increased by 27% between 2012 and 2018. Water outages will only become more prevalent as our water systems continue to degrade.

While no one can be certain if they'll be affected by a water outage, it's prudent to have a plan in place.
You don't want to be left scrambling to figure out how to bathe, clean, and drink.
Bottled water is one of the first items stores sell out of during an outage event, so don't assume you can deal with it later.
With a simple plan in place, you can rest easily knowing your water access is secure.

How Can I Prepare for an Outage?

There are various ways you can stock up on water to get through an outage.
A general rule is to store at least 1 gallon of water per person per day.
Any water you store should be kept in a cool, dry place to minimize the potential for algae growth.

Although bottled water is safe for short-term storage, the chemicals in plastic leach into the water over time. For long-term storage, containers designed for water storage or marked as “food safe” offer safer alternatives.

You can also purchase a water bladder that converts your bathtub into clean water storage. This won’t save you in an unexpected emergency, but if your water shut-off is scheduled, you can fill your tub beforehand for an ample supply of clean water.

Another sizable supply is inside your home water heater, which often holds between 30-60 gallons of water. While many sources claim this water is safe to drink, others recommend disinfecting in case of bacteria growth.

Rainwater collection systems, storebought and homemade, offer a clever way to tap into your local rainfall.
However, these are susceptible to environmental contaminants and tend to accumulate animal feces over time. For these reasons, these methods should be paired with an additional filtration and purification system.

Water cisterns can offer hundreds of gallons of storage but require regular upkeep for the water to stay clean and drinkable. Purification tablets should be used on a regular schedule following manufacturer instructions.

Lessons Learned from Outage Experiences

When outages happen, it’s often with little advanced notice. It can be challenging to predict how long they will last and how much water you need.
In addition, each water storage method is susceptible to unique contaminants that require different treatments.
The level of treatment may also depend on your intended use of the water, whether it’s drinking, washing, or simply flushing your toilet.

Which Treatment for Which Contaminant?

Most forms of water storage have the potential to grow bacteria and algae.
If bacteria is the only concern, boiling, chemical treatment, distillation, or a reverse-osmosis water filter can make your water safe for all uses.

Algae water is also hazardous and requires multiple treatments before it’s drinkable. Any filter can remove large algae particles, but a high-quality carbon filter or reverse osmosis system is needed to remove the natural toxins certain algae produce.

Chemical contamination is trickier. Distillation is known to remove most contaminants, but certain chemicals that vaporize at lower temperatures than water are unaffected. If you don't know the exact chemical polluting your water or don't have a distillation system, you shouldn't attempt to use contaminated water for any purpose besides flushing your toilet.

Atmospheric Water Generators (AWG): A Sustainable Solution

There is another solution to water outages that provides a steady supply of clean, drinkable water. Atmospheric Water Generators, or AWGs, are an innovative collection and purification system that creates clean water out of thin air.

The humidity in the air around us is a vast untapped water source.
Water in the atmosphere is naturally recycled and replenished every nine days, creating a reliable and sustainable source.

By integrating multi-layer air and water purification and continuous UV disinfection, they even eliminate contaminants smaller than 2.5 microns.

As a result, AWGs produce water that exceeds the EPA and WHO's drinking standards. Depending on the model, [REMOVED FOR PRIVACY]'s AWGs produce anywhere from 500-10,000+ liters of drinkable water per day.

At that rate, they make a viable backup, alternative, or replacement for your current water supply. They also offer built-in storage or integration with your existing water containment system. Because the entire unit fits within a sturdy box, you can install it on any flat, supportive surface.

AWGs only need an electric connection, so they don't require well drilling or heavy construction.

The filtration and purification process protects you from PFAS, algae blooms, runoff, and other contaminants.
AWGs are separate from any public water supply, so you'll have a reliable source during total outages.

Don't wait for an emergency. Prepare today!