

Water shortage preparedness

Overview

A water shortage is a loss of water, lasting minutes, days or longer and can affect a single property, a building, a community, or an entire region.

Water shortages happen for a variety of reasons and vary in duration. Common short-term, localized water shortages include planned utility repairs and maintenance or unexpected utility repairs to fix pipe breaks. Other reasons could include drought conditions or pipe damage due to extreme temperature fluctuations.

We all have a role to play

Water management is a shared responsibility among water license holders, such as governments, regional districts and water suppliers. This responsibility requires them to support and promote water management and water use efficiency, preservation and protection through response plans, water-sharing agreements and other initiatives. In areas where shortages exist, voluntary or mandatory water restrictions enabling water conservation are issued in the interest of public safety.

Individuals and households also have a responsibility to use water wisely. Staying up-to-date on restrictions and measures in your community, following directives and being prepared to meet your needs during short-term and long-term water shortages is an important responsibility.

Water shortages happen for a variety of reasons and vary in duration. Always follow the directions from your water supplier and utility provider for your area.

Before a shortage

Water is an essential service. Stop a water shortage from becoming an emergency by preparing and conserving every day to ensure you have water for drinking, cooking, hygiene and fire prevention.

Be Prepared tips:

- Know your risks. Many parts of Alberta are prone to drought conditions, which can affect water availability and quality. These conditions cause short and long-term health conditions and increase the risk to other hazards

like wildfires and extreme heat. Knowing your risks empowers you to take actions that reduce the impacts water shortages can have on you and your loved ones.

- Financially prepare by setting aside money each month to go towards an emergency savings account.
- Get informed. Download apps like [WeatherCAN](#), [Alberta Rivers: Data and advisories](#) and other [alerting apps](#). Sign up for notifications and communications from your bulk water station/truck fill, water supplier, utility provider and local/provincial governments as information helps you make informed and timely decisions.
- Start a conversation. Use past/current events to engage with community members about water shortages.
- Build connections before a shortage occurs so it is easier to ask for help and offer help when it's needed. A buddy system is great for wellness checks.
- Build an emergency kit and gather supplies to last a minimum of 72 hours. Prioritize supplies that meet the unique needs of your household. Supplies to consider:
 - Bottled water for drinking, cooking and hygiene (4 litres per person per day – gather more for pregnant women, those with illnesses and pets)
 - Non-perishable food that doesn't need water
 - First aid kit
 - Fire extinguisher
 - Hand sanitizer and disinfectant cleaners
 - Recyclable plates and utensils
 - Bucket for non-potable water* to flush toilets

**Non-potable water is water that is not suitable for drinking or cooking. Some examples of non-potable water sources include outdoor pools/hot tubs, water features/fishponds, etc.*

- Make a plan. Consider including:
 - Different plans to account for variable needs such as a water shortage in the winter vs. summer.
 - Build a contact list that includes your water service provider, emergency plumbers and emergency services. Check [211 Alberta](#) for information, resources and supports available in your area.
 - Document supports and services offered in your area; include how to access them if needed. Create an [Alberta.ca Account](#) to get online access to government services and programs.
 - Make an emergency cookbook with [recipes](#) that don't require water.

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- Plan low energy activities like cards, puzzles and board games to reduce water drinking.
- Draw a map to identify the location of the main water shut-off valve on your property. List individual fixtures and appliances that have independent water valves and include instructions on how to turn them off and on*. Include household members so everyone knows how to turn off the water.

*Refer to "[Emergency water shut-off](#)" for more information.

Storing water for emergencies

Prepare for shortages by storing a supply of water to meet the needs of your household.

- Choose your container: If possible, use FDA/Health Canada regulated food-grade water storage containers. If food-grade is not an option, use a durable, unbreakable container with a tight-fitting lid and narrow opening for pouring.
- Prepare your container:
 1. Wash with soap and rinse well.
 2. Fill container with a solution of 4 cups water to 1-teaspoon chlorine bleach (5%-9% sodium hypochlorite).
 3. Close the lid tightly and shake the mixture well.
 4. Wait 30 seconds and then pour the solution out.
 5. Air dry before filling.
 6. Pour clean water into the containers and seal.
- Store your water: Label containers with "drinking water" and add the date it was stored along with the refresh date (every 6 months). Store in a cool location away from direct sunlight and chemicals (10°C to 20 °C).
- Use your water: If your container doesn't pour, use a clean scooper each time you remove water. Do not use your hands to scoop water or touch the insides of the container. Seal the lid tightly after every use.

General guidance for water is 4 litres of water per person per day for 3 days; however, shortages can last longer. Store as much water as your storage space allows.

Practice water conservation

Building water reduction habits into daily routines will help you navigate shortages more easily, reduce your environmental footprint and decrease your utility costs.

Indoor tips:

- Turn off water while soaping hands, brushing teeth, etc.
- Use water efficient fixtures in your kitchen, bath and laundry. When fixtures and appliances need replacing, look for efficient options.
- Use less water when showering (5 minutes or less).

- Avoid running the water while washing dishes. Partly fill the sink and add small amounts of water as needed.
- Instead of pouring water down the drain, repurpose it for things like watering plants.
- Check for toilet leaks by adding a few drops of food colouring into the tank. If you have a leak, the colour will appear in the bowl within 30 minutes.
- Check for water leaks by taking a water meter reading. Record the number on the meter and wait 30 minutes without using any water. Take a second reading and compare it to the first reading. If the meter reading changed, you have a leak somewhere.
- Run appliances, such as dishwashers and washing machines, only when the load is full.
- Defrost food overnight in the refrigerator instead of in water.
- If you like cold water for drinking, keep water in the fridge instead of letting the water run to your preferred temperature.

Outdoor tips:

- Water when it's coolest (early morning or late evening).
- Use watering systems that deliver water effectively, like laying drip hoses instead of aboveground sprinklers.
- Capture water in rain barrel(s) for outdoor watering.
- Use a broom instead of water for cleaning.
- Direct downspout runoff into landscaped areas. Make sure the water isn't directed at your foundation.
- Plant drought-tolerant ground covers, shrubs and trees and visit [FireSmart](#) for at-home fire risk reduction tips.

During a shortage

When shortages occur, they affect each of us differently. Not only are they a major inconvenience, but they can threaten our health and wellbeing when access to safe drinking water and basic sanitation needs like hygiene and flushing toilets are impacted.

Be Prepared tips:

- If you receive notice of a scheduled water shortage and you don't have supplies gathered, go to your local store as soon as possible to get what you need.
- Stay informed by monitoring your trusted communication channels and information sources.
- Start a conversation with community members by discussing local updates on water restrictions.
- Build resilient communities by sharing water shortage tips and learning about the actions others are taking to meet their needs. In addition, check in on those who may need extra help.

Stay up-to-date on restrictions for your area. The instructions will be specific to your situation.

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Emergency water shut-off

If your water supplier or utility provider directs you to turn off the main water supply to your property, follow these steps:

1. Locate the main water valve inside your property. It is usually located in the basement or cellar, close to where the main water line enters your property and on the same water line as the water meter*.
2. Turn the handle on the shut-off valve so that it's perpendicular to the water line (across the water line, not in line). If the shut-off valve has a knob, turn the knob clockwise (to the right) until you can't turn it anymore.
3. Once the valve is off, turn all the water taps on to release remaining water pressure.
4. After releasing the pressure, flush all toilets to empty the tanks.

**A water meter is a device that measures the volume of water used. As your household uses water, the numbers on the meter will change to reflect your water usage.*

Know your risk. Toilet paper absorbs water and can cause back-ups. Reduce the risk of damage when water is off by putting used toilet paper in a waste bag.

Water restrictions

A water supplier or utility provider may issue a localized water restriction on non-essential water use. Restrictions will vary on the situation, but could include lawn watering, washing vehicles and closing public swimming pools and outdoor spray parks.

Indoor tips:

- Limit showers to one quick shower per day (if needed); avoid baths, except for small children who only need a few inches of water.
- Don't run appliances such as dishwashers and washing machines; use recyclable plates and cutlery instead. Wear non-soiled clothing more than once before washing (e.g. casual, business and outdoor wear).
- Use non-potable water for flushing toilets (i.e. fill a bucket with water and pour directly into the toilet bowl).
- If a boil water advisory* is in place, follow the directions to make your water safer. If preferred, use bottled water.

**A boil water advisory indicates that a drinking water supply may be contaminated with harmful microorganisms and that drinking the tap water can make you sick. Boiling tap water destroys the harmful microorganisms.*

Outdoor tips:

- Use captured water from rain barrel(s) for outdoor watering and don't water unless permitted; follow the watering schedule if applicable.
- Don't wash vehicles at home, use a cleaning product to clean the windows and head/tail lights only for safety.

Always follow all water restrictions issued for your area. Water will be restored as soon as possible, but restoration depends on the cause of the shortage.

Making non-potable water safer

Always defer to your water supplier and utility provider for water quality updates and best practices as they have the most up-to-date information on the current situation.

For both [instructions and supplies needed to make your water safer](#), please refer to <https://myhealth.alberta.ca/Alberta/Pages/Using-disinfectants-to-make-drinking-water-safe-when-you-cant-boil-it.aspx>.

After a shortage

If you've turned off your main water shut-off valve, the following steps can help you restore your home's water supply:

1. Turn on all hot and cold water taps. This releases trapped air in the water supply lines.
2. Turn the main water shut-off valve on. Turn the handle so that it is in line with the main water line or turn the knob counter clockwise (to the left) until you can't turn it anymore.
3. Turn off the hot water taps and let the cold water taps run for at least five minutes. Look for clear, cold water to indicate you have flushed bad water out of the pipes.
4. After five minutes if the water isn't running clear and cold, turn off the water taps and wait a couple of hours.
5. After a couple hours, test the water using the cold water tap in your bathtub or shower. If it's not running clear and cold, turn off the water tap and call your water supplier or utility provider for next steps.

Reduce the risk of damaging appliances by not operating them until the cold water runs clear and cold. Discard ice produced by your refrigerator.

For more information



Visit alberta.ca/BePrepared or scan the QR code for the Be Prepared program.

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