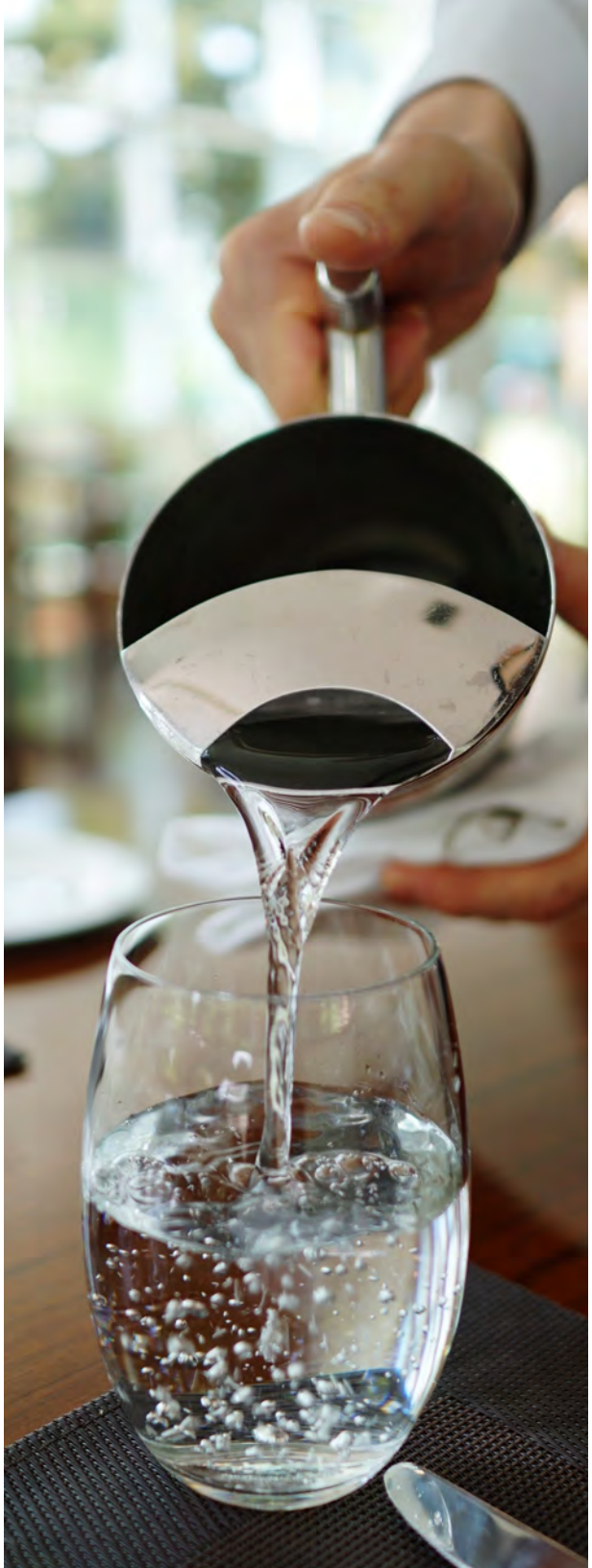
City of Champlin

2023

Drinking Water Report



Making Safe Drinking Water

Your drinking water comes from a groundwater source: Six wells, ranging from 291 to 700 feet deep, draw water from Mt. Simon, Tunnel City-Mt. Simon, and Tunnel City-Wonewoc aquifers.

The City of Champlin works hard to provide safe and reliable drinking water that meets federal and state water quality requirements. This report provides information on your drinking water and how to protect our precious water resources.

Contact David Stifter, Utility Superintendent, at 1-763-923-7190 or dstifter@ci.champlin.mn.us if you have questions about Champlin's drinking water. You can also ask for information on how you can participate in decisions that may affect water quality.

The U.S. Environmental Protection Agency sets safe drinking water standards. These standards limit the amounts of specific contaminants allowed in drinking water, ensuring that tap water is safe to drink for most people. The U.S. Food and Drug Administration regulates the amount of specific contaminants in bottled water. Bottled water must provide the same public health protection as public tap water.

Drinking water, including bottled water, may contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. The Environmental Protection Agency's Safe Drinking Water Hotline, 1-800-426-4791, can provide more information about contaminants and potential health effects.

Champlin Monitoring Results

This report contains our monitoring results from January 1 to December 31, 2023. We work with the Minnesota Department of Health to test drinking water for more than 100 contaminants. It is not unusual to detect contaminants in small amounts. No water supply is ever completely free of contaminants. Drinking water standards protect Minnesotans from substances that may be harmful to their health.

Learn more by visiting the Minnesota Department of Health's webpage "Basics of Monitoring and Testing of Drinking Water in Minnesota": https://www.health.state.mn.us/communities/environment/water/factsheet/sampling.html

How to Read the Water Quality

The tables on the following pages will show the contaminants we found last year or when we sampled them most recently. They also show the levels of those contaminants and the Environmental Protection Agency's limits. Substances that we tested for but did not find are not included in the tables.

We sample for some contaminants less than once yearly because levels stay the same. If we found any contaminants the last time we sampled for them, we included them in the tables below with the detection date.

We may have done additional monitoring for contaminants not included in the Safe Drinking Water Act. To request a copy of these results, call the Minnesota Department of Health at 1-651-201-4700 between 8:00 a.m. and 4:30 p.m., Monday through Friday.

Explaining Special Situations for the Highest Result and Average

Some contaminants are monitored regularly throughout the year, and rolling (or moving) annual averages are used to manage compliance. Because of this averaging, there are times when the Range of Detected Test Results for the calendar year is lower than the Highest Average or Highest Single Test Result because it occurred in the previous calendar year.

Definitions

AL (Action Level): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

EPA: Environmental Protection Agency

MCL (Maximum contaminant level): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLG (Maximum contaminant level goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

MRDL (Maximum residual disinfectant level): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG (Maximum residual disinfectant level goal): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

N/A (Not applicable): Does not apply.

pCi/l (picocuries per liter): A measure of radioactivity.

ppt (parts per trillion): One part per trillion is like one drop in one trillion drops of water, or about one drop in an Olympic sized swimming pool. ppt is the same as nanograms per liter (ng/l).

ppb (parts per billion): One part per billion in water is like one drop in one billion drops of water, or about one drop in a swimming pool. ppb is the same as micrograms per liter (µg/l).

ppm (parts per million): One part per million is like one drop in one million drops of water, or about one cup in a swimming pool. ppm is the same as milligrams per liter (mg/l).

PWSID: Public water system identification.

LEAD AND COPPER – Tested at customer taps.

Contaminant (Date, if sampled in previous year)	EPA's Ideal Goal (MCLG)	EPA's Action Level	90% of Results Were Less Than	Number of Homes with High Levels	Violation	Typical Sources
Lead (07/21/22)	0 ppb	90% of homes less than 15 ppb	0.76 ppb	0 out of 30	NO	Corrosion of household plumbing.
Copper (07/21/22)	0 ppm	90% of homes less than 1.3 ppm	0.92 ppm	1 out of 30	NO	Corrosion of household plumbing.

INORGANIC & ORGANIC CONTAMINANTS – Tested in drinking water.

Contaminant (Date, if sampled in previous year)	EPA's Ideal Goal (MCLG)	EPA's Limit (MCL)	Highest Average or Highest Single Test Result	Range of Detected Test Results	Violation	Typical Sources
Nitrate	10 ppm	10.4 ppm	0.15 ppm	0.00 - 0.15 ppm	NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Barium (09/16/19)	2 ppm	2 ppm	0.03 ppm	N/A	NO	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposit.
Gross Alpha	0 pCi/l	15.4 pCi/l	3.2 pCi/l	0.0 - 6.3 pCi/l	NO	Erosion of natural deposits.
Combined Radium	0 pCi/l	5.4 pCi/l	2.6 pCi/l	1.1 - 3.8 pCi/l	NO	Erosion of natural deposits.

*In addition to testing for contaminants regulated under the Safe Drinking Water Act, we monitor unregulated contaminants that do not have legal limits. In the past year, your water was tested as part of the Fifth Unregulated Contaminant Monitoring Rule (**https://www.epa.gov/dwucmr/fifth-unregulated-contaminant-monitoring-rule**). The Unregulated Contaminant Monitoring Rule 5 (UCMR 5) data finder can search and summarize available UCMR5 results (**https://www.epa.gov/dwucmr/fifth-unregulated-contaminant-monitoring-rule-data-finder**).

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CONTAMINANTS RELATED TO DISINFECTION – Tested in drinking water.

Substance (Date, if sampled in previous year)	EPA's Ideal Goal (MCLG or MRDLG)	EPA's Limit (MCL or MRDL)	Highest Average or Highest Single Test Result	Range of Detected Test Results	Violation	Typical Sources
Total Trihalomethanes (TTHMs)	N/A	80 ppb	14.5 ppb	11.20 - 14.50 ppb	NO	By-product of drinking water disinfection.
Total Haloacetic Acids (HAA)	N/A	60 ppb	1.3 ppb	1.00 - 1.30 ppb	NO	By-product of drinking water disinfection.
Total Chlorine	4.0 ppm	4.0 ppm	0.44 ppm	0.13 - 0.78 ppm	NO	Water additive used to control microbes.

***Total HAA refers to HAA5**

OTHER SUBSTANCES – Tested in drinking water.

Substance (Date, if sampled in previous year)	EPA's Ideal Goal (MCLG)	EPA's Limit (MCL)	Highest Average or Highest Single Test Result	Range of Detected Test Results	Violation	Typical Sources
Fluoride	4.0 ppm	4.0 ppm	0.65 ppm	0.58 - 0.78 ppm	NO	Erosion of natural deposits; Water additive to promote strong teeth.

Potential Health Effects and Corrective Actions (If Applicable)

Fluoride: If your drinking water fluoride levels are below the optimal concentration range of 0.5 to 0.9 ppm, talk with a dentist about how you can protect teeth from decay and cavities. For more information, visit MDH Drinking Water Fluoridation (www.health.state.mn.us/communities/environment/water/com/fluoride.html). Fluoride is nature's cavity fighter, with small amounts naturally present in many drinking water sources. There is an overwhelming weight of credible, peer-reviewed, scientific evidence that fluoridation reduces tooth decay and cavities in children and adults, even when fluoride is available from other sources, such as toothpaste and mouth rinses. Since studies show that optimal fluoride levels in drinking water benefit public health, municipal community water systems adjust the level of fluoride in the water to an optimal concentration between 0.5 to 0.9 parts per million (ppm) to protect your teeth. Fluoride levels below 2.0 ppm will not increase the risk of a cosmetic condition known as enamel fluorosis.

Learn More About Your Drinking Water

Drinking Water Sources

Groundwater provides 75% of Minnesota's drinking water and is located in aquifers underground. Surface water provides 25% of Minnesota's drinking water and is found in lakes, rivers, and streams above ground.

Contaminants can get into drinking water sources from the natural environment and people's daily activities. There are five main types of contaminants in drinking water sources:

- **Microbial contaminants,** such as viruses, bacteria, and parasites. Sources include sewage treatment plants, septic systems, agricultural livestock operations, pets, and wildlife.
- **Inorganic contaminants** include salts and metals from natural sources (e.g. rock and soil), oil and gas production, mining and farming operations, urban stormwater runoff, and wastewater discharges.
- **Pesticides and herbicides** are chemicals used to reduce or kill unwanted plants and pests. Sources include agriculture, urban stormwater runoff, and commercial and residential properties.
- **Organic chemical contaminants** include synthetic and volatile organic compounds. Sources include industrial processes and petroleum production, gas stations, urban stormwater runoff, and septic systems.
- **Radioactive contaminants** such as radium, thorium, and uranium isotopes come from natural sources (e.g. radon gas from soils and rock), mining operations, and oil and gas production.

The Minnesota Department of Health provides information about your drinking water source(s) in a source water assessment, including:

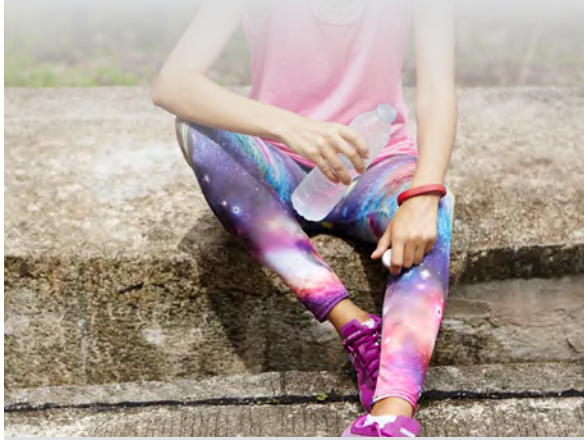
- How Champlin is protecting your drinking water source(s);
- Nearby threats to your drinking water sources;
- How easily water and pollution can move from the surface of the land into drinking water sources, based on natural geology and the way wells are constructed.

Find Source Water Assessments at:

- Call 651-201-4700 between 8:00 a.m. and 4:30p.m., Monday through Friday
- https://www.health.state.mn.us/communities/environment/water/swp/swa.html

Some People Are More Vulnerable to Contaminants in Drinking Water

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. The developing fetus and, therefore, pregnant women may also be more vulnerable to contaminants in drinking water. These people or their caregivers should seek advice about drinking water from their healthcare providers. EPA/Centers for Disease Control (CDC) guidelines to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.



Lead in Drinking Water

You may be in contact with lead through paint, water, dust, soil, food, hobbies, or your job. Coming in contact with lead can cause serious health problems for everyone. There is no safe level of lead. Babies, children under six years, and pregnant women are at the highest risk.

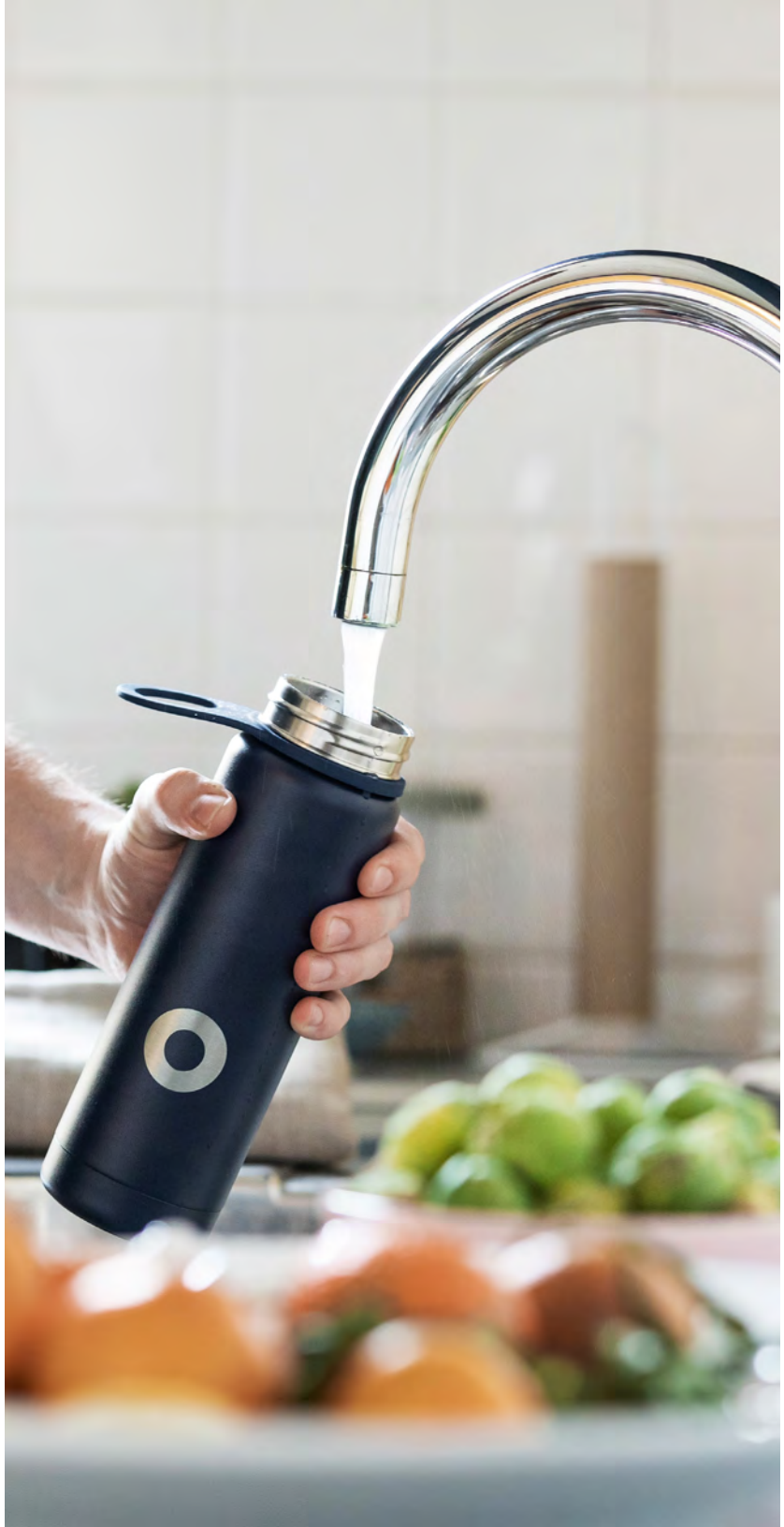
Lead is rarely in a drinking water source but can get in your drinking water as it passes through lead service lines and your household plumbing system. Champlin is responsible for providing high-quality drinking water, but it cannot control the plumbing materials used in private buildings.

Below are tips on how to protect yourself from lead in drinking water, aiming to raise awareness and provide guidance on minimizing lead exposure.

1. **Let the water run** for 30-60 seconds before using it for drinking or cooking if the water has not been on in over six hours. You may need to let the water run longer if you have a lead service line. A service line is the underground pipe that brings water from the main pipe under the street to your home.
   - You can find out if you have a lead service line by contacting your public water system, or you can check by following the steps at: https://www.mprnews.org/story/2016/06/24/npr-find-lead-pipes-in-your-home
   - The only way to know if lead has been reduced by letting it run is to check with a test. If letting the water run does not reduce lead, consider other options to reduce your exposure.
2. **Use cold water** for drinking, making food, and preparing baby formula. Hot water releases more lead from pipes than cold water.
3. **Test your water.** In most cases, letting the water run and using cold water for drinking and cooking should keep lead levels low in your drinking water. If you are still concerned about lead, arrange with a laboratory to test your tap water. Testing your water is essential if young children or pregnant women drink your tap water.
   - Contact a Minnesota Department of Health accredited laboratory to get a sample container and instructions on how to submit a sample: "Environmental Laboratory Accreditation Program" (https://eldo.web.health.state.mn.us/public/accreditedlabs/labsearch.seam)
4. **Treat your water** if a test shows your water has high levels of lead after you let the water run.
   - Read about water treatment units: "Point-of-Use Water Treatment Units for Lead Reduction" (https://www.health.state.mn.us/communities/environment/water/factsheet/poulead.html)

Learn more:

- Visit "Lead in Drinking Water" (https://www.health.state.mn.us/communities/environment/water/contaminants/lead.html)
- Visit "Basic Information about Lead in Drinking Water" (http://www.epa.gov/safewater/lead)
- Call the EPA Safe Drinking Water Hotline at 1-800-4791.
- To learn how to reduce contact with lead from sources other than your drinking water, visit "Common Sources" (https://www.health.state.mn.us/communities/environment/lead/fs/common.html).



Help Protect Our Most Precious Resource - Water

The Value of Water

Water is a precious resource, yet we often take it for granted. Throughout history, civilizations have risen and fallen based on access to a plentiful, safe water supply, and that's still the case today. Water is vital to healthy people and healthy communities.

Water is also vital to our economy. We need water for manufacturing, agriculture, energy production, and more. One-fifth of the U.S. economy would come to a stop without a reliable and clean source of water. Systems are in place to provide you with safe drinking water. The state of Minnesota and local water systems work to protect drinking water sources. For example, we might work to seal an unused well to prevent groundwater contamination. We treat water to remove harmful contaminants. We also do extensive testing to ensure the safety of drinking water.

If we detect a problem, we take corrective action and notify the public. Water from a public water system like yours is tested more thoroughly and regulated more closely than water from any other source, including bottled water.

Conservation

Conservation is essential, even in a land of 10,000 lakes. For example, groundwater is being used faster in parts of the metropolitan area than it can be replaced. Some agricultural regions in Minnesota are vulnerable to drought, which can affect crop yields and municipal water supplies.

We must use our water wisely. Below are some tips to help you and your family conserve water and save:

- Fix running toilets—they can waste hundreds of gallons of water.
- Turn off the tap while shaving or brushing your teeth.
- Shower. Bathing uses more water.
- Only run full loads of laundry, and set the washing machine to the correct water level.
- Only run the dishwasher when it's full.
- Use water-efficient appliances (look for the WaterSense label).
- Use water-friendly landscaping, such as native plants.
- When you do water your yard, water slowly, deeply, and less frequently. Water early in the morning and close to the ground.

Learn More:

- Minnesota Pollution Control Agency's Conserving Water (https://www.pca.state.mn.us/)
- U.S. Environmental Protection Agency's WaterSense (https://www.epa.gov/watersense)

Reduce Backflow at Cross Connections

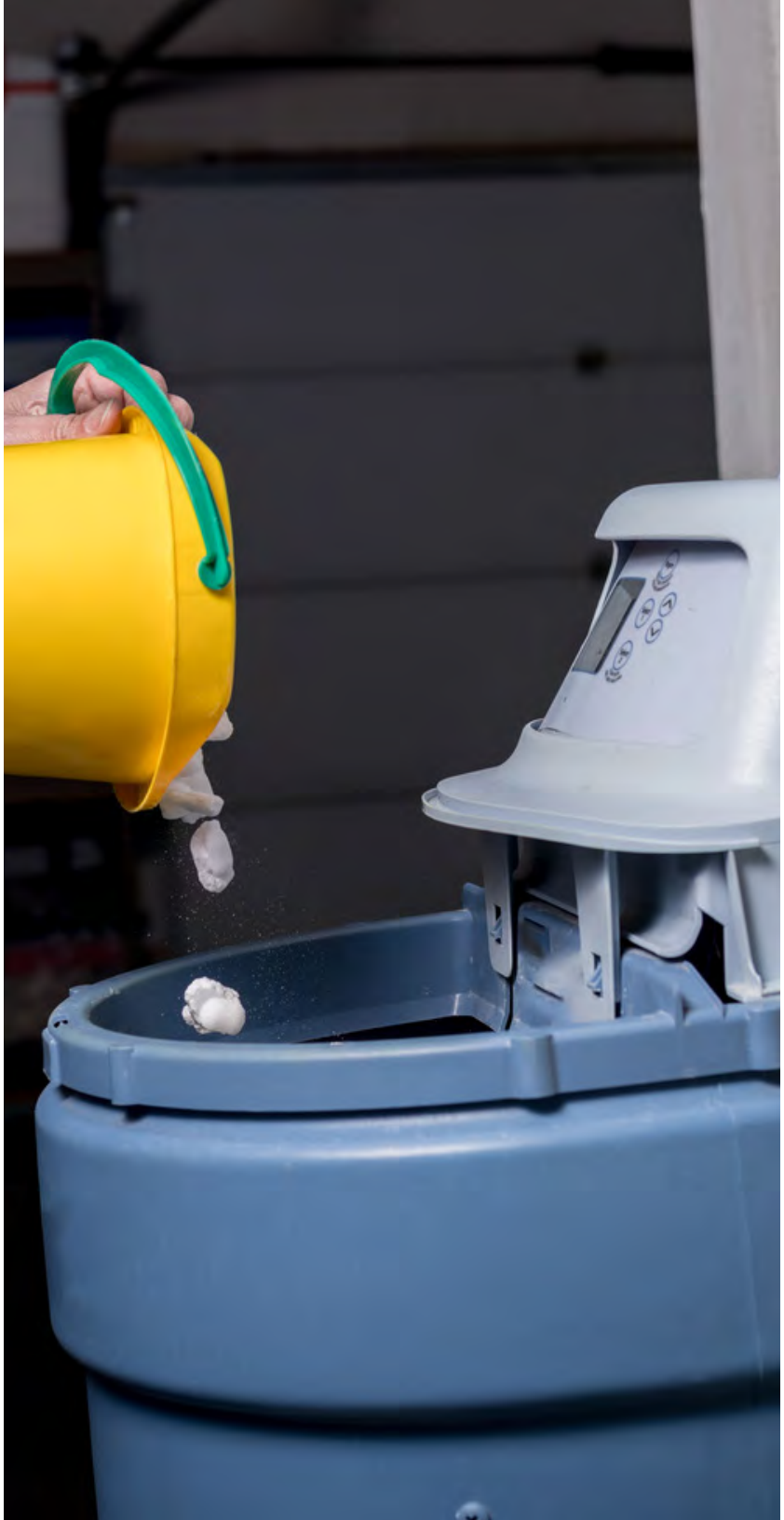
Bacteria and chemicals can enter the drinking water supply from polluted water sources in a process called backflow. Due to water pressure differences, backflow occurs at connection points between drinking water and non-drinking water supplies (cross connections).

For example, if a person sprays an herbicide with a garden hose, the herbicide could enter the home's plumbing and then the drinking water supply if the water pressure in the hose is greater than the water pressure in the home's pipes.

Property owners can help prevent backflow. Pay attention to cross connections, such as garden hoses.

The Minnesota Department of Health and American Water Works Association recommend the following:

- Do not submerge hoses in buckets, pools, tubs, or sinks.
- Keep the end of hoses clear of possible contaminants.
- Do not use spray attachments without a backflow prevention device. Attach these devices to threaded faucets. Such devices are inexpensive and available at hardware stores.
- Use a licensed plumber to install backflow prevention devices.
- Maintain air gaps between hose outlets and liquids. An air gap is a vertical space between the water outlet and the flood level of a fixture (e.g. the space between a wall-mounted faucet and the sink rim). It must be at least twice the diameter of the water supply outlet, and at least one inch.
- Commercial property owners should develop a plan for flushing or cleaning water systems to minimize the risk of drawing contaminants into uncontaminated areas.



Home Water Treatment

The Pros and Cons of Home Water Softening

When considering whether to use a water softener, contact your public water system to find out if you have hard water. Many systems treat for hardness, making water softeners unnecessary. Water softeners are a water treatment device that removes water hardness (dissolved calcium and magnesium). They must be installed and maintained properly to be safe and effective.

Learn more:
https://www.health.state.mn.us/communities/environment/water/factsheet/softening.html

The benefits of soft water include:

- Increased efficiency for soaps and detergents.
- Reduction in mineral staining on fixtures and in pipes.
- A potential increase in the lifespan of water heaters.

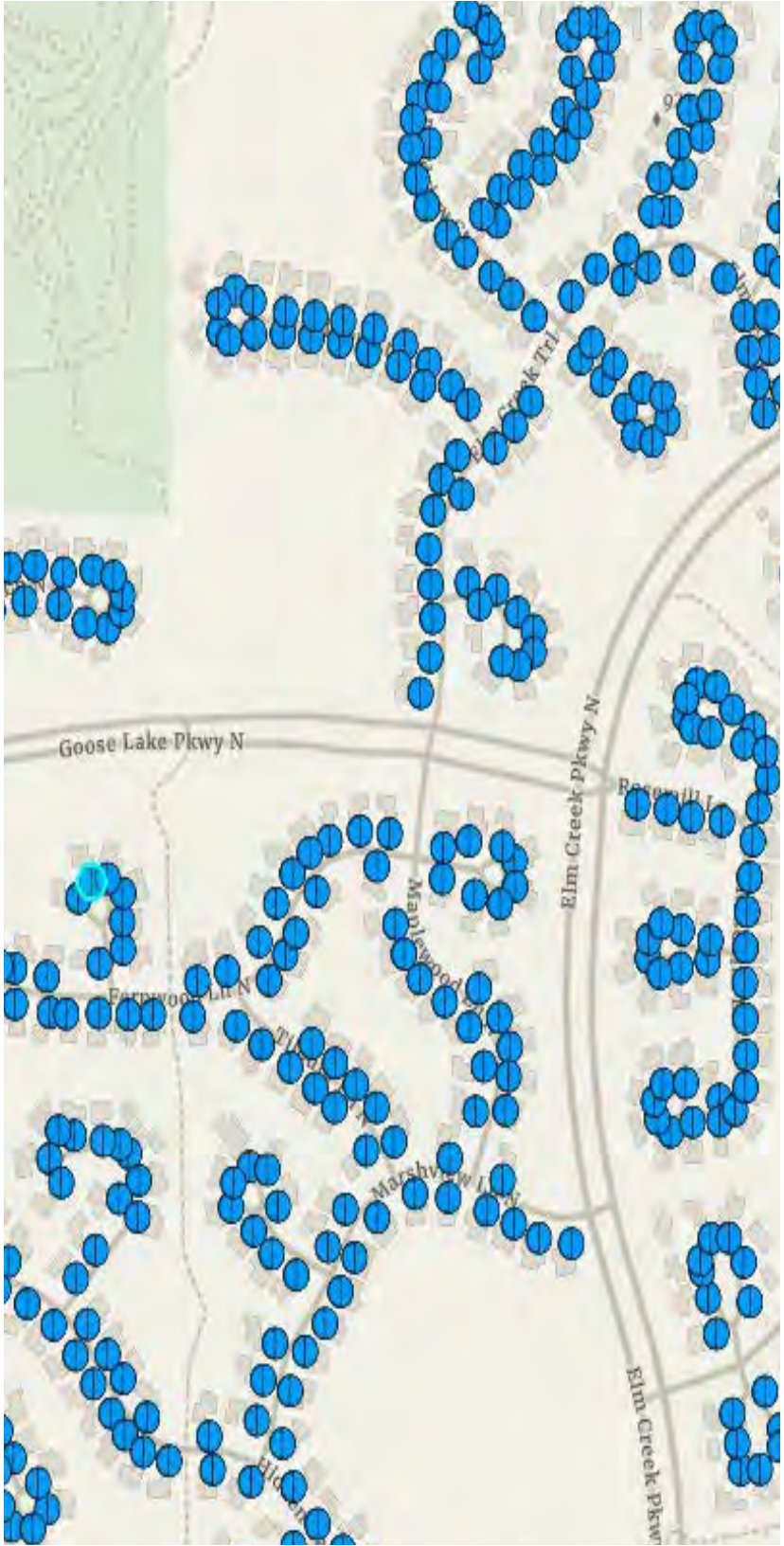
The drawbacks of soft water include:

- Operation and maintenance costs.
- More sodium. People on low-sodium diets should consult a doctor if they plan to regularly consume softened water.
- The production of salt brine as a byproduct. This can have negative effects at wastewater treatment plants and on ecosystems. Reduce the amount of salt brine used or install a salt-free system.

Water systems have ongoing infrastructure, operations, and maintenance costs in supplying safe drinking water, and many are implementing additional efforts to help ensure health equity and manageable water bills. Here's a few tips:

- Turn the faucet off while brushing teeth.
- Shower instead of bathing to reduce water use.
- Fix running toilets by replacing flapper valves.
- Run full loads of laundry and use a minimal water use setting.
- Our water system partners with others to help consumers with limited resources make payments to their water bills.

LEARN MORE:
https://www.ci.champlin.mn.us/219/Utilities-Department



Service Line Material Inventory

Public water supplies must submit service line inventories to the Minnesota Department of Health by October 16, 2024. The City of Champlin has completed an inventory of all service line materials, which consists of the pipes connecting the water main to your home. This process verified that all services are non-lead. The MN Department of Health Lead Inventory Tracking Tool can be viewed at https://maps.umn.edu/LSL/.