

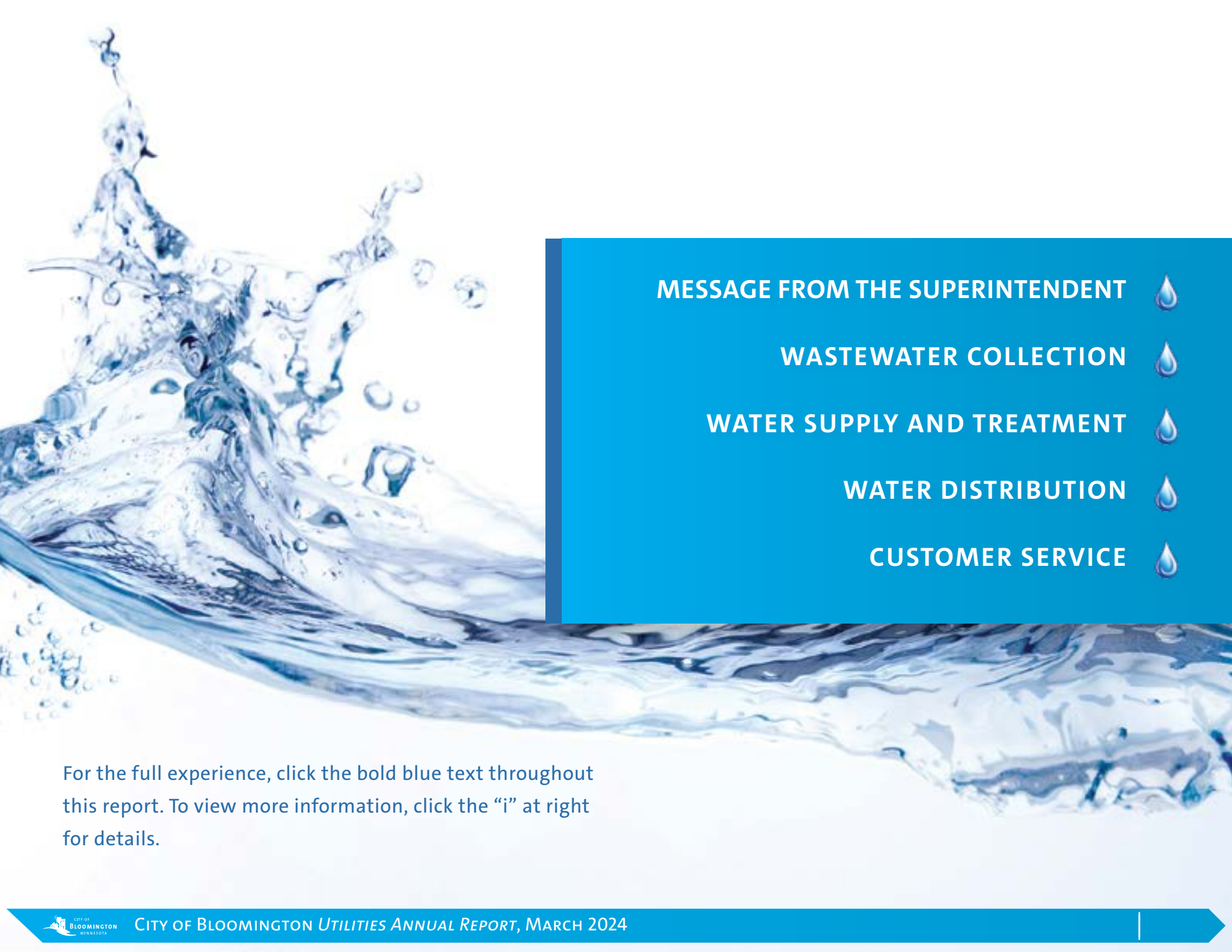


MOVING
BLOOMINGTON
Forward
creating our shared future



utilities annual report

for Bloomington,
Minnesota 2023
year end



MESSAGE FROM THE SUPERINTENDENT



WASTEWATER COLLECTION



WATER SUPPLY AND TREATMENT



WATER DISTRIBUTION



CUSTOMER SERVICE



For the full experience, click the bold blue text throughout this report. To view more information, click the “i” at right for details.





Index

UAR 1

UAR 2

UAR 3

UAR 4

UAR 5

By October 16, 2024 all U.S. water utilities must comply with requirements established by the Environmental Protection Agency (EPA) to reduce exposure to lead and copper from water pipes and plumbing under the Lead and Copper Rule Revisions.

The Utilities Division began work in 2023 to complete a survey of all water services, publicly and privately owned, identifying service line materials for all connections in the distribution system – particularly looking for lead, galvanized requiring replacement, or lead status unknown. This inventory will be communicated publicly once it's completed through the annual Consumer Confidence Report and other means as determined. The good news is that due to how Bloomington was developed and the City's standards in place at the time, it is expected that we will have very few if any lead or galvanized requiring replacement services in town.

Another important project began in 2023 as design and permitting work started on Well 7. Well 7 is to be constructed on the south side of Tarnhill Park just north of 98th Street and will replace Well 3 which has been out of service for a number of years. Construction is expected to begin in the late summer or fall of 2024 and continue into 2025.

The Utilities Division employed more than 50 people, with a budget of more than \$31 million.

2023 also saw the completion of an analysis of the Hampshire Lift Station to determine current performance and potential enhancements for renewal. This project is also being used as a template for evaluation of additional lift station performance and condition.

The Utilities Division continues to implement significant initiatives to provide reliable drinking water that meets all State and Federal drinking water standards as well as providing uninterrupted wastewater collection services. Utilities staff also continued pursuing technical education and license advancement further enhancing their knowledge and capabilities to expertly serve customers of Bloomington Utilities. Residents, businesses, and customers alike can trust that Bloomington's water and wastewater services are being delivered professionally and efficiently every day.

ALSO IN 2023

- The Utilities Division employed more than 50 people. Professionalism is a highly touted value within the Division. All operations staff are encouraged to continue to ascend their [STATE LICENSES](#).
- Utilities continued its [TOTAL ASSET MANAGEMENT](#) plan with the goal of institutionalizing the program to make the right investments at the right time to maximize asset performance in a sustainable manner.

The Administrative Section of Utilities is committed to providing a comprehensive water and wastewater utility services package at a rate that is less than the average cost of other cities providing a similar level of service. Each year, the Utilities Division is benchmarked in our

[ANNUAL RATE SURVEY](#) [WATER RATES](#) [WASTEWATER RATES](#)

against similar utilities. Rates are ultimately driven by the

[WATER AND WASTEWATER FUNDS' EXPENSES](#).

Index

UAR 1

UAR 2

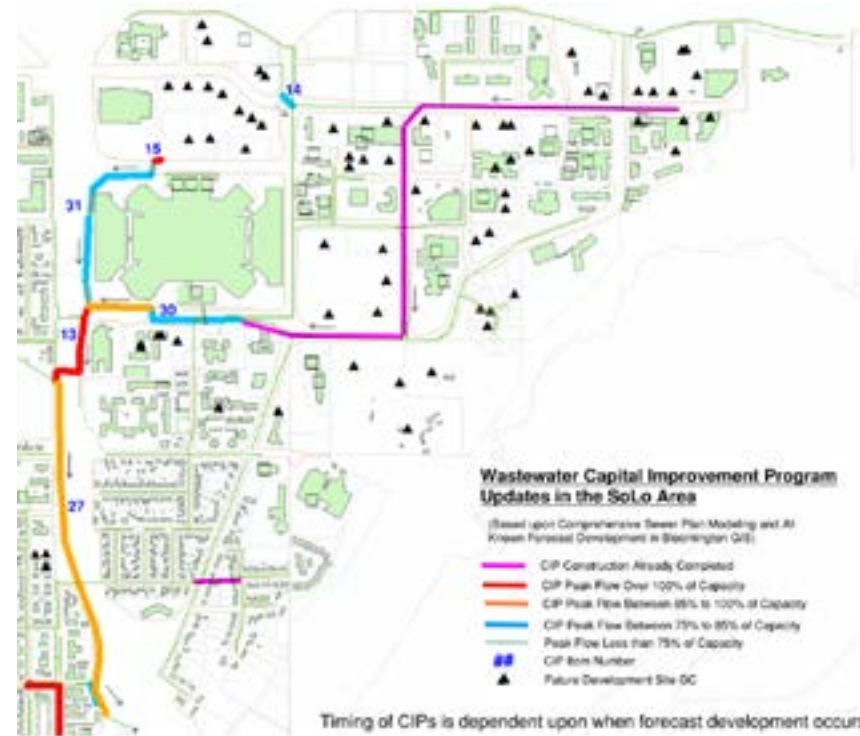
UAR 3

UAR 4

UAR 5

SOUTH LOOP DISTRICT WASTEWATER CIP UPDATE

The east end of Bloomington from Hwy 77 (Cedar Ave) to the Minnesota River is known as the South Loop District (a.k.a. SoLo). This area is one of the most dynamically changing development areas in the region. Some of the anticipated changes include: a proposed MOA Waterpark (along with some additional hotels and parking ramps in that area), the Skywater technology foundry expansion, the new small business center at the old fire station, the Sick Technologies campus expansion, additional retail spaces, several other hotels, and thousands of multifamily residential units. The development changes (of roughly 100 wastewater accounts in SoLo) make it necessary for City staff to revise the City's Comprehensive Plan wastewater computer model on a regular basis. This way the current Wastewater Capital Improvement Plan (CIP) items are evaluated for needed changes. Revised modeling indicated that some of the previously identified CIP items needed to be built sooner than originally anticipated, and that some additional work and larger pipes were also necessary. While several of the previously identified CIP items have recently been completed, new CIP items have been discovered due to more intense development projections. The map, *at right*, shows the updated general location for CIP items in the SoLo area. The funding source for the upcoming CIP items may need to come from a new City SAC (sewer availability charge) program, development funding, Utilities rate increases, or a combination of these sources. The timing for the needed wastewater system upgrades is dependent upon the dates that forecast development occurs.



Index

UAR 1

UAR 2

UAR 3

UAR 4

UAR 5

Almost **8 million** gallons of wastewater flow out of the City each day. The City's **26** pumping stations are used to move more than **2 million** gallons of that flow.

Wastewater Collection strives to provide the continuous conveyance of wastewater into the regional treatment system. One benchmark used to evaluate Utilities' performance is the number of **POSITIVE SEWER STOPPAGES** in 2023 – Our goal continues to be zero stoppages. The Division used routine operational and maintenance activities, such as **SEWER JETTING AND RODDING**, and **CLOSED CIRCUIT TELEVISION** to keep the sewage flowing in 2023.

WASTEWATER 101

The City of Bloomington’s wastewater flow is connected to one of the Metropolitan Council Environmental Services (MCES) wastewater treatment plants through an extensive network of sewer pipes.

Whenever someone takes a shower, flushes a toilet, or runs the washing machine, the resulting wastewater is carried through a pipe off the property into a municipal sanitary sewer pipe. That pipe, in turn, is connected to a regional sewer interceptor, and finally to the wastewater treatment plant. The regional interceptor system and all treatment plants are operated and maintained by MCES.

SENECA WASTEWATER TREATMENT PLANT

The Seneca Wastewater Treatment Plant is MCES’s third largest plant and is the fourth largest plant in Minnesota (after the Metro Plant, a facility in Duluth, and the Blue Lake Plant). Built in 1972 and located on the Minnesota River in Egan, the Seneca Plant treats an average of 21.9 million gallons of wastewater per day. A \$70 million expansion completed in 1992 increased the plant’s treatment capacity from 24 to 34 million gallons per day.

The Seneca Plant provides primary and secondary treatment to wastewater before discharging the resulting clean water to the Minnesota River. Dewatering and incineration are the methods used for disposal of the solids removed during wastewater treatment. The resulting incinerator ash is landfilled in Rosemount, Minnesota.

SENECA WASTEWATER TREATMENT PLANT INFORMATION

- Location: Egan, Minnesota
- Type: Advanced secondary with chlorination/de-chlorination
- Capacity: 34 million gallons per day
- Discharges to: Minnesota River
- Communities served: 8
- Population served: 250,000
- Interceptors to plant: 46 miles

WASTEWATER FLOW AND COST REDUCTIONS IN BLOOMINGTON

Since 1993 Bloomington’s annual wastewater flows have dropped by about 36%, or over 1.4 billion gallons per year. This drop saves the City of Bloomington almost \$5 million a year in reduced treatment costs paid to the Metropolitan Council Environmental Services (MCES). The flow reduction can be attributed to plumbing code changes requiring water efficient plumbing fixtures, customer conservation, and the concerted efforts by the City to reduce Inflow & Infiltration (I&I) of rainfall and ground water into the sanitary collection system. In order to free up existing capacity in MCES regional pipes and treatment plants, MCES has offered several I&I reduction grant programs to many of the 115 communities that make up their regional users. Since 2010, Bloomington Utilities has received over \$700,000 in reimbursement funds for participating in all five of the previous MCES I&I reduction grant programs that were offered.

In 2024, Bloomington was approved to participate in the sixth MCES I&I reduction program and may receive another \$146,000 for I&I reduction work that will be completed between 2024 and 2025. It’s estimated that the completed work will continue to reduce annual sewer flows.

Utilities staff and crews work hard to identify and eliminate known or possible sources of I&I from Bloomington’s wastewater collection system in conjunction with Pavement Management Program improvements, Time of Sale home inspections (to eliminate sump pumps discharging to sewer), through special pipe grouting projects, as well as through departmental initiatives such as replacing older, leaky manhole covers with self-sealing covers. These ongoing efforts have resulted in a decrease in the spikes in peak wastewater flows during heavy rain events, which is a strong indicator that I&I entering the sewers is being reduced. City staff will continue to implement needed upgrades as the system ages in an effort to keep flows and costs at appropriate levels.

Index

UAR 1

UAR 2

UAR 3

UAR 4

UAR 5

INDESTRUCTIBLE INVENTIONS

PFAs are short for per- and poly-fluoroalkyl substances. PFAs are artificial compounds created in 1938 by a 27-year-old chemist from DuPont. DuPont is best known for creating the nonstick agent in Teflon.

Virtually indestructible, these synthetic compounds are used in everything from fast-food wrappers to dental floss. Known colloquially as the “forever chemicals,” they are extremely valuable to those that produce makeup, stain-resistance items, paints/stains and, of course, water repellents and proofing. Human exposure to PFAs is widespread but variable by geography and occupation and over time, these chemicals have leaked into soil, water, and air. Since PFAs are hydrophobic and hydrophilic, they contain unique properties that help them resist water and attract to water all at the same time; meaning water does not reduce their potency and they use water to remain stable in the environment. Particularly alarming is that nearly all Americans have some amount of PFAs present in their bodies. The first evidence that PFAs were toxic to the body was submitted to the FDA by DuPont, in 1966, however it did not spur any new regulations or policies. So, what do we do?

We analyze water and develop criteria to reduce PFAs in the environment.

In March of 2023, the EPA proposed the first federal standards to limit PFAs in water and discovered technologies that would remove and/or reduce them. The City of Bloomington has tested the six deep wells used for producing drinking water and have discovered that the PFAS quantities detected were all less than the maximum contaminant levels and Hazard Index Level established by the EPA. The Tri-City Laboratory located at the water treatment plant continually analyzes water quality to ensure all state and federal drinking water standards are met.

PFAs created in the thirties are still haunting us today because of their value in the manufacturing of many very common items that we all use to this day. Let's hope that the next generation of chemists can discover safer alternatives for that burger wrap so I only have to worry about the fat content!



Index

UAR 1

UAR 2

UAR 3

UAR 4

UAR 5

Between October 9 and November 9, 2023,
22,000 tons of Agricultural Liming Material
were transported and spread over **5,152** acres of
farm fields.

Water Supply and Treatment strives to provide a sustainable supply of water that meets or exceeds all federal and state standards. A benchmark of this endeavor are the results reported in the federally mandated **WATER QUALITY REPORT**. In 2023, water usage fell short of the **PROJECTED DEMAND**.

WATER IS ESSENTIAL TO LIFE

As we all know, Water is Essential to Life and the Sam H Hobbs Water Plant Operators help provide this necessity to the residents of Bloomington. We all take it for granted when we open the faucet and potable water is provided at our fingertips for drinking, cooking, bathing, washing clothes, manufacturing, and the list goes on and on. I googled why water is essential to life and found an article online and wanted to share it with you.

WHY IS WATER ESSENTIAL TO LIFE?

Water is one of the fundamental things needed for organisms to survive. This is a fact that is taught to us very early on in life and sticks with us throughout our life. Doctors recommend drinking 8 cups of water a day in order to maintain a healthy lifestyle. Wars have been fought over who gets the rights to drink from the source of water. Clean water is one of the primary concerns of all countries. However, have you considered why it's so important? Why is this substance so vital to the survival of all life? It should first be noted that it is the liquid form of water that is essential for biochemical reactions by transporting vital nutrients from one place to another within a cell. Water, as a polar molecule, is considered the "universal solvent," in that everything dissolves in water to some degree, allowing nutrients to be integrated into water with relative ease. Water also helps to "bend enzymes." Enzymes are proteins that catalyze chemical reactions, which speed up the reaction; water helps these enzymes to function. One unique thing about water is that all three states of it (liquid, solid and gas) exist naturally in nature. This allows the water cycle to occur in nature which replenishes water around the world. Water has a wide range of temperature for its boiling point and freezing point that can be easily manipulated with salt and other minerals. Water has a very high specific heat, which means it takes a lot of energy to heat it up. This allows water to survive the intense heat variations that Earth has without evaporating at once and helps to moderate the temperature of the planet thanks to the oceans. The last unique feature about water is that when it turns into ice, it expands instead of contracts, like a normal solid. This lets ice float above the liquid form, which prevents it from displacing water and causing the ocean levels to rise and allows Arctic and Antarctic life to thrive.

In summary, we all need to do our part by protecting this natural resource. The EPA provides a few things we can do to protect drinking water sources:

1. Use and dispose of harmful materials properly.
2. Volunteer in your community.
 - Join in a beach, stream or wetland cleanup
 - Organize a Storm Drain Stenciling Project
 - Put up signs
 - Prepare a presentation about your watershed for a school or civic organization.
3. Participate in Source Water Protection at the community level
 - Identify community partners
 - Use your assessment to identify and prioritize needed actions
 - Work with your water utility



Index

UAR 1

UAR 2

UAR 3

UAR 4

UAR 5

BLOOMINGTON HYDRANT PAINTING PROGRAM

The City of Bloomington Utilities crews inspect all the hydrants in the city, checking them annually for proper operation. Within the city there are over 3,300 City-owned and 1,400 privately-owned fire hydrants ranging in age from the 1960s to today. City crews sandblast, prime, and paint over 350 hydrants per year on average. Painting hydrants is a time-consuming job but is a component of maintenance that is necessary to provide protection from corrosion to help ensure continual operations. Some of the older hydrants can have numerous layers of paint on them as some are approaching 70 years old. To get the best quality job each hydrant is sandblasted down to almost bare metal, primed, and then painted with a special marine coating that hardens very quickly and is far superior to most paints typically available. The City gets requests from time to time from property owners to paint the hydrants on their property and will address those as much as possible, however, hydrant maintenance and painting must also follow a defined program to ensure all hydrants receive the appropriate maintenance at the appropriate time. The City is currently painting from the west side and we are working to the east, except for Old Shakopee Road and American Boulevard hydrants (these hydrants were painted two years ago as a test of the new paint). Some hydrants may not be as aesthetically pleasing as others but are all incorporated into the maintenance program with the goal of having all hydrants in the city fully operational and available in the event of an emergency. Our crews had over 350 work orders that they completed on repairs that were found during our inspections last year ranging from hydrants hit by motor vehicles to ones that might have had stuck caps. Fire hydrant maintenance is one of the most important jobs that the City's Utilities crews do every year.



The water distribution system's **4,600** hydrants and **6,900** valves require constant vigilance.

Water Distribution strives to provide an uninterrupted flow of high quality potable water for both domestic and firefighting purposes. The largest potential disruption to service occurs as a result of main breaks.

There were 20 **MAIN BREAKS REPAIRED** in 2023.

The **10-YEAR AVERAGE** for main breaks is 25 per year.

Index

UAR 1

UAR 2

UAR 3

UAR 4

UAR 5



Index

UAR 1

UAR 2

UAR 3

UAR 4

UAR 5

COMING SOON: NEW WATER SUPPLY WELL

Utilities staff is working with a consultant team from Barr Engineering Co. and Bolton & Menk Inc. to develop a new water supply well, which will replace an existing well that has reached the end of its useful life. The new well will provide raw water capacity to the City's Water Treatment Plant to help serve present and future water needs of the community. Construction is anticipated to begin in 2024 and wrap up in the Summer of 2025.

For more information, please visit the project website at <https://letstalk.bloomingtonmn.gov/well7>.

ARE YOU PREPARED FOR A SEWER BACKUP?

Sewer backups happen. If you've ever experienced one, you know there's a lot of time, effort, and money spent to correct the damage caused by the backup. Sanitary sewer line blockages are typically caused by roots, grease, and improper disposal of waste items such as grease from cooking, wipes, and disposable diapers. Tree roots can enter the sanitary sewer system at joints and cracks in the sewer service lines and mains year around. Grease can solidify in the sewer lines and restrict other waste from properly flowing through. The lines can then be blocked by disposable diapers, paper towels, feminine hygiene products, washing machine lint, or similar items that might get flushed down the drain or toilet when they should be disposed of using your household trash can. As a resident, you play an important role in keeping the City's main sewer line and your own private sewer line clean and clear of blockages.

THE FOLLOWING ITEMS SHOULD BE DISPOSED OF IN YOUR TRASH CAN, NOT IN THE SANITARY SEWER SYSTEM:

- Diapers
- Sanitary napkins
- Rags, shop towels, or flushable wipes
- Garage waste products such as oil, grease, gasoline, antifreeze
- Household waste such as ashes, corrosives, glass, metals, paint, poisons, or solvents
- Yard waste such as sand, soil, or mud

IF A SEWER BACKUP OCCURS ON YOUR PROPERTY, THE CITY ENCOURAGES YOU TO TAKE THE FOLLOWING STEPS:

1. Call the City immediately at (952) 563-8777 or 24-hour number, (952) 563-4905, to report the sewer backup. City crews will first check the City's mainline sewer to ensure it is flowing properly. If the blockage is in one of the City's main sewer lines, the City will attempt to clear the blockage.
2. If the blockage is determined to be on the private lateral, then residents should make the proper arrangements for the blockage to be cleared. Remember, residents are responsible for scheduling and paying for service to clear such a blockage.
3. If you have homeowners or another type of property insurance coverage, notify your insurance agent of the sewer backup to see if such a claim is covered.
4. Clean the entire contaminated area in a safe and professional manner. It may be a good idea to use the services of a reputable company experienced in cleaning up after sewer backups.
5. Document the actions you take (calls, contacts, costs) in response to the sewer backup.

If you have further questions, please visit the City's website at <https://www.bloomingtonmn.gov/util/wastewater-sanitary-sewer-collection> or call the Utilities Division at (952) 563-8777.

Customer Service processes more than **135,000** meter readings per year and manages approximately **27,000** accounts

Index

UAR 1

UAR 2

UAR 3

UAR 4

UAR 5



PREVENT HOUSEHOLD WATER LEAKS.

Household leaks can waste nearly 1 trillion gallons of water a year nationwide, according to the Environmental Protection Agency (EPA). Finding and eliminating indoor water leaks in your home saves not only water but also money.

EVERY DROP COUNTS!

The City of Bloomington drinking water comes from the City’s Water Treatment Plant and from the City of Minneapolis, which means a portion of our water supply depends on what Mother Nature provides.

That said, take steps each day to do your part in keeping healthy water levels in our storage tanks by finding and eliminating indoor & outdoor water leaks — ultimately preventing water waste and saving you money.

To get started:

- Become a leak detective and track down those pesky leaks in your home. Check your toilet for leaks. To do this, put a few drops of food coloring in the tank and wait 30 minutes to see if the color appears in the bowl. If it does, you may have a leaking flapper valve.
- Think about replacing older toilets with new, efficient WaterSense-labeled models, which use less water without sacrificing performance. These “WaterSense” toilets can be found at any big box store.
- Make sure the sinks in the kitchen and bathroom are not dripping. Don’t forget to open the cabinet doors and check the hot and cold supply lines for leaks.
- In the spring, be sure to check your outdoor faucets, hoses, SPK systems. Just one broken sprinkler head can waste as much as 25,000 gallons of water in just 6 months. Spring into action with a Sprinkler Spruce-up! See EPA link for more useful tips before ramping up your watering efforts. <https://www.epa.gov/watersense/sprinkler-spruce-up>

Customer Service continually strives to meet or exceed our customers’ expectations. In addition to the permitting duties, staff is charged with mandated **ONE-CALL UTILITY LOCATING**. Customer Service also oversees the water meter maintenance program, and read more than 134,480 readings in 2023.

Index

UAR 1

UAR 2

UAR 3

UAR 4

UAR 5