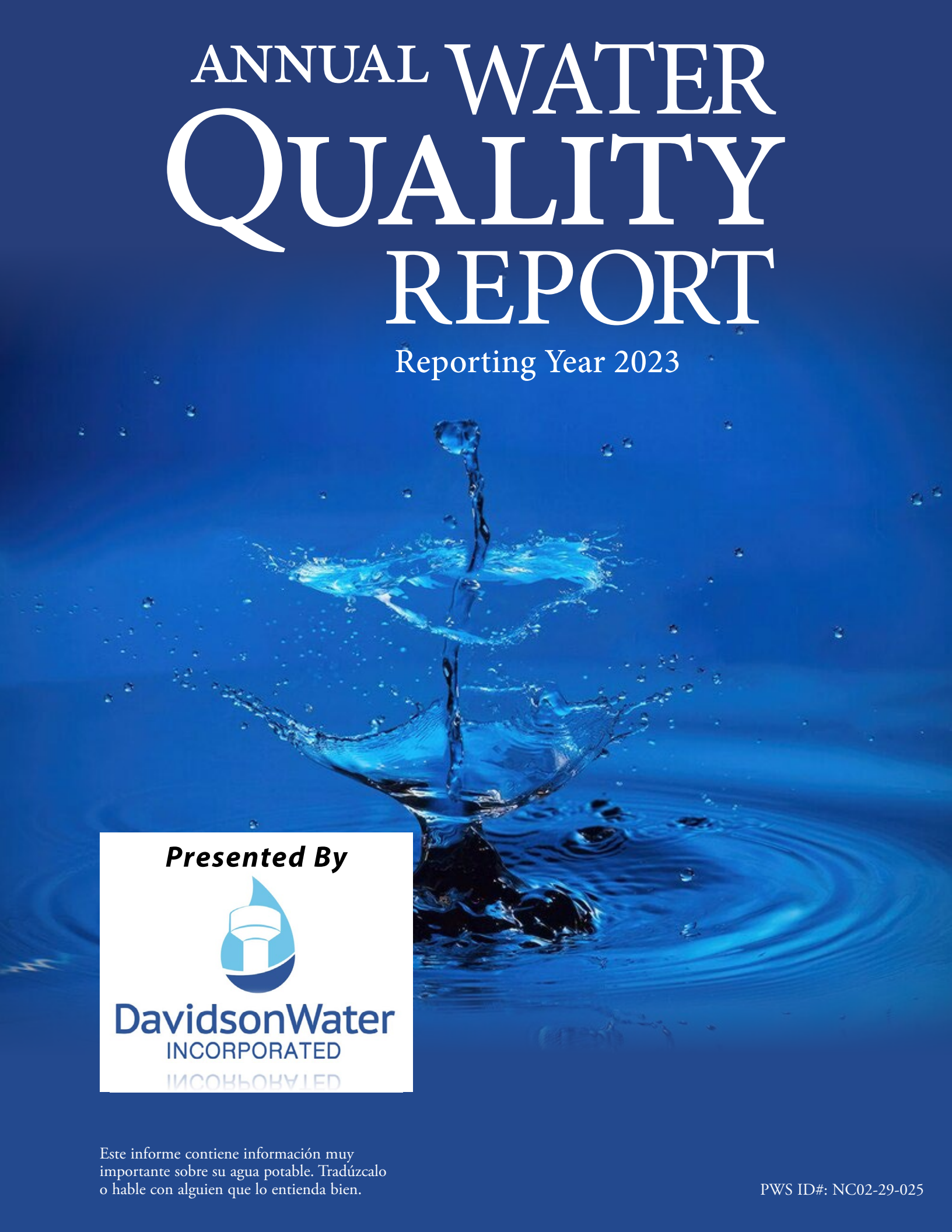
ANNUAL WATER QUALITY REPORT

Reporting Year 2023



Presented By

DavidsonWater
INCORPORATED

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

PWS ID#: NC02-29-025

Our Commitment

We are pleased to present to you this year's annual water quality report. This report is a snapshot of last year's water quality covering all testing performed between January 1 and December 31, 2023. Included are details about your sources of water, what it contains, and how it compares to standards set by regulatory agencies. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water and providing you with this information because informed customers are our best allies.

Lead in Home Plumbing

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We are responsible for providing high-quality drinking water, but we cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to two minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at (800) 426-4791 or at www.epa.gov/safewater/lead.

Non-English Speaking Populations

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. Environmental Protection Agency (EPA)/Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or http://water.epa.gov/drink/hotline.

Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals, in some cases radioactive material, and substances resulting from the presence of animals or from human activity. Substances that may be present in source water include:

Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;

Pesticides and Herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses;

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and may also come from gas stations, urban stormwater runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Questions?

For more information about this report, or for any questions relating to your drinking water, please call Craig Koonts, water plant superintendent, at (336) 248-7691.

Annual Meeting Report on Operations of Davidson Water Inc.

March 11, 2024

Good evening. I want to introduce some of the management team that is with us tonight:

Robert Walters, Vice President, Construction and Engineering

Eric Hege, CIO

Jonathan Ray, Director of Water Services

Josh James, Controller

Danny Thompson, Civil Engineer/GIS Manager

Ben Palmer, Civil Engineer/Asset Manager

Craig Koonts, Water Plant Superintendent

Lisa Koonts, Human Resources

Susan Little, Administrative Services Supervisor

I am pleased to report to the membership that Davidson Water has approximately 66,500 total connections and 60,666 active meters. Currently, the company has 85 full-time employees and one part-time employee.

Water Treatment Plant, Water Quality, and WTP Projects

Our average daily flow was 10.71 million gallons per day (mgd), and peak flow was just under 15.44 mgd. Water quality remains our top priority, with all test results being well within U.S. EPA regulations.

U.S. EPA-required Fifth Unregulated Contaminant Monitoring Rule (UCMR5) testing was conducted quarterly to determine if 30 specified chemical contaminants were present in our water as it entered the distribution system. The 30 were 29 per- and polyfluoroalkyl substances (PFAS) and lithium. Each round of testing delivered nondetectable results for all contaminants.

Next to our largest reservoir along the Yadkin River, we completed a streambank restoration project to correct erosion damage from multiple heavy floods. The project was funded by a $500,000 grant from the Federal Emergency Management Agency (FEMA). Both design and purchasing activities continued on our generator replacement project, which is scheduled to be completed later this year. The 2,700 kilowatt-hour generator was ordered 18 months ago, and it may or may not be here by July of this year. At a projected cost of well over $4 million, this project will ensure we maintain the ability to provide water during power outages. Also, planning and plans for replacement of multiple high-service pumps and valves are underway.

Distribution Projects

Our distribution system saw large-line upgrades, line extensions, and pipe relocation of 23 miles of new line and 11 miles of replacement pipe. We have approximately 1,939 miles of water lines. We have approximately 52 active projects, including at least 13 new projects permitted with North Carolina Department of Environmental Quality (NCDEQ) projects that are either under construction or in the process of beginning construction.

Supply chain issues for material to complete as well as start projects continue to be a problem. These issues resulted in project delays including Highway 52 PS and three miles of line replacement on West Lexington Avenue, but we are finally near completion. We have several North Carolina Department of Transportation (NCDOT) projects requiring water line relocation, including Gumtree Road and Hebron Church Road and I-85 and U.S. Highway 64 near New Bowers Road and Nucor Steel. We have reviewed approximately 38 subdivisions and townhomes that became active within the last year.

Meter Services

The Meter Services Department is continuing to install drive-by radio read meters or automatic meter read (AMR) for our high-demand, large-meter customers for detailed consumption tracking. Some of these high-demand customers are utilizing ultrasonic meters and cellular real-time consumption readings. Our goal is to be completely AMR by 2027. For all residential and small business customers, we are utilizing 100-percent AMR technology. We have also implemented a retired meter change-out program for residential customers, currently replacing all meters from 2004 and older.

Customer Service and IT

The asset management system we started in the previous year is now feature point complete. While it will continue to evolve, it can now assist us in maintaining records and performing preventative maintenance as we move forward. We have also laid the groundwork for our upcoming lead and copper survey and begun preparations for making this available toward the end of the year to meet regulatory requirements. Our work order system continues to be refined by adding features and improvements to make it more efficient and accurate.

Our migration of handheld mobile devices and truck units from Verizon to FirstNet, by AT&T, is complete. While no carrier has 100-percent coverage, the overall differences with FirstNet have been very noticeable. We are seeing an increased reduction in areas lacking coverage when compared to the Verizon network, especially in the northern part of Davidson County. This keeps our field in better contact with their work orders and one another.

Our revised office hours have helped provide our staff the ability to manage and balance their transactions at the beginning and ending of each day in a much more efficient manner. The two drive-through windows successfully handle the bulk of the on-site payments to help get our members back on their way as quickly as possible. For those who want more convenient remote payment options, we still provide autodraft, phone, and web pay options as well.

Capital Credits Update

The board of directors approved the retirement of $420,351.24 in capital credits. Capital credits are excess margins (or profits) created by nonprofit companies. This money was distributed

to members and former members that received water service from Davidson Water in 1991. Some of the checks sent out could include dollar amounts from other years.

Employee Giving and Community Outreach

Davidson Water employees have been very generous in giving back to the community in more ways than one. This past year, our annual United Way campaign contributions totaled $7,905. Our annual food drive is always a huge success. This past year, employees and the company contributed $785, along with nonperishable food items for Greater Things Outreach Center in Welcome. Davidson Water sponsored two Angel Tree children last Christmas with generous contributions from employees and the company.

Scholarships

Davidson Water annually awards four college scholarships in the amount of $2,000 each to deserving high school seniors in memory of past board members. Last year's recipients were:

Lindsay Cook, East Davidson High School
Taylor Robbins, Central Davidson High School
Grace Scott, Ledford High School
Shelby Spach, Wheatmore High School.

Davidson Water also awarded four $1,000 scholarships to students attending Davidson County Community College. Last year's recipients were:

Anna Marie Fergerson, Ledford High School
Jenna Leigh Jenkins, West Davidson High School
Grace Adele Prevette, East Davidson High School
Madison Tesh, North Davidson High School.

In closing, I want to emphasize our commitment to our mission of providing safe, reliable water to our members at the lowest possible cost. We will continue to do that with the leadership of our board and management, the expert guidance of our professional partners, the dedication and expertise of our employees, and the support of our members. Thank you.

Ron Sink

General Manager

Annual Meeting

Davidson Water, Inc.'s annual meeting is usually held on the second Monday in March. A notice with a proxy statement is mailed prior to the meeting.

This year's meeting was on Monday, March 11, 2024, at 7:30 p.m. at Davidson Water's office in Welcome. President Lee Comer presided. Reid Smith, Secretary, read the minutes from the 2023 meeting. Bob Biesecker from Turlington & Company went over the financial statements and year-end audit. Mr. Biesecker stated the company was in sound financial shape. Ron Sink, CEO and General Manager, reported on operations and maintenance of the water system, along with capital improvements.

The following were elected to the Board of Directors for a three year term: Ben Hege, District 1; Reid Smith, District 2; Jason Gallimore, District 3; and Christopher Fitzgerald, At-large. With there being no further business, the meeting was adjourned.

Where Does My Water Come From?

The Gregg W. Stabler Treatment Plant is located on Koontz Road near Highway 64 West in Lexington. Our source water is the Yadkin River, which begins in Blowing Rock, where it starts out as a small stream and follows along Highway 321 and then State Road 268, deepening as other tributaries feed into it. The Yadkin feeds into the W. Kerr Scott Dam reservoir. The W. Kerr Scott Dam is an earthen dam built in 1960 by the Army Corps of Engineers for flood control. The reservoir has 125 miles of shoreline and holds up to 112,000 acre-feet of water, or 36.5 billion gallons. (An acre-foot is one acre of water one foot deep, or 325,000 gallons.) A minimum flow must be released through the dam to keep a constant supply of water flowing down the Yadkin.

During 2023 Davidson Water purchased water from the City of Winston-Salem and the City of Archdale to supplement peak usage or emergency needs. To obtain a water quality report from these communities, please call:

City of Winston-Salem: (336) 727-8000

City of Archdale: (336) 434-7364

Protecting Your Water

Bacteria are a natural and important part of our world. There are around 40 trillion bacteria living in each of us; without them, we would not be able to live healthy lives. Coliform bacteria are common in the environment and are generally not harmful themselves. The presence of this bacterial form in drinking water is a concern, however, because it indicates that the water may be contaminated with other organisms that can cause disease.

In 2016 the U.S. EPA passed a regulation called the Revised Total Coliform Rule, which requires water systems to take additional steps to ensure the integrity of the drinking water distribution system by monitoring for the presence of bacteria like total coliform and E. coli. The rule requires more stringent standards than the previous regulation, and it requires water systems that may be vulnerable to contamination to have procedures in place that will minimize the incidence of contamination. Water systems that exceed a specified frequency of total coliform occurrences are required to conduct an assessment and correct any problems quickly. The U.S. EPA anticipates greater public health protection under this regulation due to its more preventive approach to identifying and fixing problems that may affect public health.

Though we are fortunate in having the highest-quality drinking water, our goal is to eliminate all potential pathways of contamination into our distribution system, and this requirement helps us accomplish that goal.

Source Water Assessment

The North Carolina Department of Environment and Natural Resources (DENR), Public Water Supply (PWS) Section, Source Water Assessment Program (SWAP) conducted assessments for all drinking water sources across North Carolina. The purpose of the assessments was to determine the susceptibility of each drinking water source (well or surface water intake) to potential contaminant sources (PCSs). The results of the assessment are available in SWAP Assessment Reports that include maps, background information, and a relative susceptibility rating of higher, moderate, or lower.

The relative susceptibility rating of each source was determined by combining the contaminant rating (number and location of PCSs within the assessment area) and the inherent vulnerability rating (i.e., characteristics or existing conditions of the well or watershed and its delineated assessment area). It is important to understand that a higher susceptibility rating does not imply poor water quality, only the system's potential to become contaminated by PCSs in the assessment area. The assessment findings are summarized in the table below:

SUSCEPTIBILITY OF SOURCES TO POTENTIAL CONTAMINANT SOURCES (PCSS)

SOURCE NAME	SUSCEPTIBILITY RATING	SWAP REPORT DATE
Yadkin River	Higher	September 5, 2017

The complete SWAP Assessment Report is available at https://www.ncwater.org/?page=600. Note that because SWAP results and reports are periodically updated by the PWS Section, the results available on this website may differ from the results that were available at the time this Consumer Confidence Report was prepared. If you are unable to access your SWAP report online, you may mail a written request for a printed copy to Source Water Assessment Program – Report Request, 1634 Mail Service Center, Raleigh, NC 27699-1634, or email swap@ncdenr.gov. Please indicate your system name and number and provide your name, mailing address, and phone number. If you have any questions about the SWAP report, please contact the source water assessment staff at (919) 707-9098.

What are PFAS?

Per- and polyfluoroalkyl substances (PFAS) are a group of manufactured chemicals used worldwide since the 1950s to make fluoropolymer coatings and products that resist heat, oil, stains, grease, and water. During production and use, PFAS can migrate into the soil, water, and air. Most PFAS do not break down; they remain in the environment, ultimately finding their way into drinking water. Because of their widespread use and their persistence in the environment, PFAS are found all over the world at low levels. Some PFAS can build up in people and animals with repeated exposure over time.

The most commonly studied PFAS are perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS). PFOA and PFOS have been phased out of production and use in the United States, but other countries may still manufacture and use them.

Some products that may contain PFAS include:

- Some grease-resistant paper, fast food containers/wrappers, microwave popcorn bags, pizza boxes
- Nonstick cookware
- Stain-resistant coatings used on carpets, upholstery, and other fabrics
- Water-resistant clothing
- Personal care products (shampoo, dental floss) and cosmetics (nail polish, eye makeup)
- Cleaning products
- Paints, varnishes, and sealants

Even though recent efforts to remove PFAS have reduced the likelihood of exposure, some products may still contain them. If you have questions or concerns about products you use in your home, contact the Consumer Product Safety Commission at (800) 638-2772. For a more detailed discussion on PFAS, please visit http://bit.ly/3Z5AMm8.

What's Your Water Footprint?

You may have some understanding about your carbon footprint, but how much do you know about your water footprint? The water footprint of an individual, community, or business is defined as the total volume of freshwater that is used to produce the goods and services that are consumed by the individual or community or produced by the business. For example, 11 gallons of water is needed to irrigate and wash the fruit in one half-gallon container of orange juice. Thirty-seven gallons of water is used to grow, produce, package, and ship the beans in that morning cup of coffee. Two hundred and sixty-four gallons of water is required to produce one quart of milk, and 4,200 gallons of water is required to produce two pounds of beef.

According to the U.S. EPA, the average American uses over 180 gallons of water daily. In fact, in the developed world, one flush of a toilet uses as much water as the average person in the developing world allocates for an entire day's cooking, washing, cleaning, and drinking. The annual American per capita water footprint is about 8,000 cubic feet, twice the global per capita average. With water use increasing sixfold in the past century, our demands for freshwater are rapidly outstripping what the planet can replenish. To check out your own water footprint, go to www.watercalculator.org.

Satellite Data Leak Detection

In 2023, Davidson Water contracted with ASTERRA to provide use of their patent-protected technology for infrastructure leak detection in urban and rural water systems. Using L-band synthetic aperture radar (SAR) mounted on a satellite, the technology quickly locates non-surfacing leaks, allowing leak detection crews to focus on targeted repairs and minimize the need for unnecessary digging. Because of the satellite observation point is orbiting 390 miles above the Earth, this allows for simultaneous monitoring of pipes within a large network like our system, which covers approximately 580 square miles, and reveals potential underground leaks as small as 0.2 gallons per minute. Compared to traditional methods, DWI can identify more leaks and increase field crew efficiency.

The core technology on which ASTERRA is based was first applied in the search for underground water on Mars and other planets. Lauren Guy, the geophysicist and entrepreneur who developed the approach, quickly recognized that if it could work so far away, it could be even more effective here on Earth. The water was closer, the need more immediate, and the technology had the potential to solve a number of critical problems.

Around the world, nearly 17 billion gallons of treated drinking water (64 billion liters) are lost every day to leaks. With growing populations and diminishing freshwater supplies, electricity and wasted production cost are better controlled.

As of today ASTERRA is helping us identify leaks within our over 1900 miles of water piping, which Davidson Water's leak detection team will be investigating for possible leaks.

Tap vs. Bottled

Thanks in part to aggressive marketing, the bottled water industry has successfully convinced us all that water purchased in bottles is a healthier alternative to tap water. However, according to a four-year study conducted by the Natural Resources Defense Council (NRDC), bottled water is not necessarily cleaner or safer than most tap water. In fact, about 40 percent of bottled water is actually just tap water, according to government estimates.

The Food and Drug Administration (FDA) is responsible for regulating bottled water, but these rules allow for less rigorous testing and purity standards than those required by the U.S. EPA for community tap water. For instance, the high mineral content of some bottled waters makes them unsuitable for babies and young children. Further, the FDA completely exempts bottled water that's packaged and sold within the same state, which accounts for about 70 percent of all bottled water sold in the United States.

People spend 10,000 times more per gallon for bottled water than they typically do for tap water. If you get your recommended eight glasses a day from bottled water, you could spend up to $1,400 annually. The same amount of tap water would cost about 49 cents. Even if you installed a filter device on your tap, your annual expenditure would be far less than what you'd pay for bottled water. For a detailed discussion on the NRDC study results, visit https://goo.gl/Jxb6xG.

Safeguard Your Drinking Water

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:

- Eliminate excess use of lawn and garden fertilizers and pesticides – they contain hazardous chemicals that can reach your drinking water source.
- Pick up after your pets.
- If you have your own septic system, properly maintain it to reduce leaching to water sources, or consider connecting to a public water system.
- Dispose of chemicals properly; take used motor oil to a recycling center.
- Volunteer in your community. Find a watershed or wellhead protection organization in your community and volunteer to help. If there are no active groups, consider starting one. Use U.S. EPA's Adopt Your Watershed to locate groups in your community.

- Organize a storm drain stenciling project with others in your neighborhood. Stencil a message next to the street drain reminding people "Dump No Waste – Drains to River" or "Protect Your Water." Produce and distribute a flyer for households to remind residents that storm drains dump directly into your local water body.

Lead Awareness

Lead is never present when water flows from the treatment facility, nor is it present in the water mains running along our roads. However, in structures built before North Carolina began enforcement of the federal ban on lead (March 1987), lead may be present in the pipe connecting the structure to the water system - known as a service line - or in the plumbing. Plumbing sources of lead include lead-based solder used to join copper pipes and some brass and chrome-plated brass faucets. Lead solder was not banned until 1986, so older homes may have lead solder within their plumbing systems. Old faucets and other end-use devices can also contain lead.

Lead enters drinking water primarily as the result of corrosion of materials. Stable water quality greatly reduces the potential for lead corrosion and the release of lead into drinking water. Davidson Water has never changed water sources in over 50 years, and our operations staff monitor and adjust water quality daily to ensure water is stable and not corrosive. We also routinely take representative samples throughout our water system to verify that we comply with all drinking water regulations for lead and many other water quality parameters. The results of those tests are provided to you each year in our annual water quality report.

The U.S. EPA has recently updated its Lead and Copper Rule to require water utilities to create an inventory of all service lines in their system and develop a replacement plan for all lines that are lead. The ownership of the service line splits at the meter between Davidson Water and the member, with both portions of the service line included in the inventory.

First, some background information. No lead exists in Davidson Water's source water or the main water lines, and Davidson Water does not have any lead service lines. In December 2022, Davidson Water began a comprehensive inventory of our entire water distribution network, which encompasses more than 66,000 residential and commercial service connections.

Davidson Water-Owned Portion of Service Lines

Davidson Water has historical engineering specifications, purchase orders, and as-built records to demonstrate that lead was not a material used for any of the utility-owned portions of the service lines in our system.

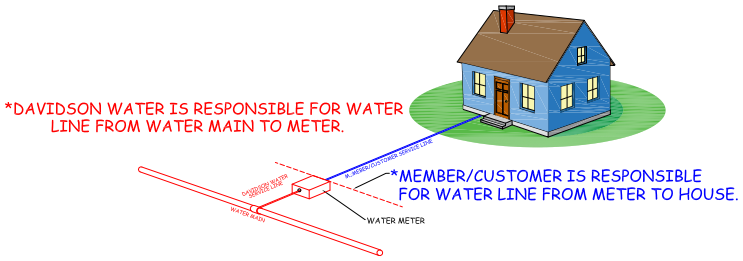
Member-Owned Portion of Service Lines

Using our tap installation records and county tax information, we have identified approximately 33,000 connections made prior to the 1987 North Carolina enforcement of the federal lead ban. Because our system originated in the late 1960s and lead pipe was phased out in the 1950s, it is unlikely that any of those connections utilized service lines constructed from lead. However, regardless of the low likelihood of lead anywhere in our system, we must verify the material of construction utilizing one of the approved verification methods before we can declare a service line "non-lead."

Our meter service techs are now documenting the service line material on the member side of the meter whenever they complete a work order. In 2024 we will be making a system map available to members that displays the service line inventory for every account. This map will also include instructions on how a member can upload their service line material if known. The purpose of collecting this data is to reduce the number of service lines with a material of construction characterized as "unknown." Please be on the lookout for future communications regarding the service line inventory map as well as additional information on this service line inventory process.

Additional Resources on Lead in Water: https://www.davidsonwater.com/MemberInfo/FaqLead.aspx

American Water Works Association, "Together, Let's Get the Lead Out" https://www.youtube.com/watch?v=PqFHrae92OM



Water Treatment Process

The treatment process consists of a series of steps. First, raw water is drawn from our source and sent through a series of three reservoirs to allow natural settling of silt and particulate matter. The first chemical added is chlorine dioxide. The water then goes to a mixing tank where ferric sulfate and pH-adjusting chemicals are added. The addition of these substances causes small particles, called floc, to adhere to one another, making them heavy enough to be removed from the water in a set of clarifiers. Sodium hypochlorite (bleach) is then added for disinfection. At this point, the water is filtered through layers of fine coal and silicate sand. As smaller suspended particles are removed, turbidity disappears and clear water emerges.

Bleach is added again as a precaution against any bacteria that may still be present throughout the distribution system. (We carefully monitor the amount of bleach, adding the lowest quantity necessary to protect the safety of your water without compromising taste.)

Seasonally, a portion of filtered water is processed through granular activated carbon filters to remove taste- and odor-causing compounds and reduce potential disinfection by-products. Finally, caustic soda (to adjust the final pH and alkalinity), fluoride (to prevent tooth decay), and a corrosion inhibitor (to protect distribution system pipes) are added before the water is pumped to clearwells, water towers, and your home or business.

Davidson Water 1995 High Service Pump Station Upgrade

DWI contracted with Charles R. Underwood Inc. (CRU) to evaluate replacement of 8 pumps, motors and valves in the older 1995 High Service pump station at our water treatment plant. Our engineer, Hazen and Sawyer, assisted by providing 30-day water model simulations of multiple new pump candidates. The simulations looked at current average day demands and year 2030 max day demands. The SIMFLO model 14M, 4-stage pump was selected for both the West Davidson and Hyattown zones based on efficiency, interchangeability, and flow performance. CRU worked closely with SIMFLO, based in Lubbock, Texas, to specify our new pumps to meet the necessary installation and performance conditions. In February, Davidson Water staff was able to visit SIMFLO's new state of the art manufacturing, and soon to be completed largest pump testing facility in the US, to witness the pump construction process and the final pump testing. We are excited to have these pumps installed by mid-2024, which will improve the functionality and reliability of the water system.

SIMFLO

"We see water differently"

DavidsonWater INCORPORATED

"Our mission of providing safe, reliable water to our members at the lowest possible cost."

CRU

"Our mission is to provide our customers with the best product for each individual application while keeping their budget and time schedule top priorities."

What Causes the Pink Stain on Bathroom Fixtures?

The reddish-pink color frequently noted in bathrooms on shower stalls, tubs, tile, toilets, sinks, and toothbrush holders and on pets' water bowls is caused by the growth of the bacterium Serratia marcescens. Serratia is commonly isolated from soil, water, plants, insects, and vertebrates (including humans). The bacteria can be introduced into the house through any of these sources. The bathroom provides a perfect environment (moist and warm) for bacteria to thrive.

The best solution to this problem is to clean and dry these surfaces to keep them free from bacteria. Chlorine-based compounds work best, but keep in mind that abrasive cleaners may scratch fixtures, making them more susceptible to bacterial growth. Chlorine bleach can be used periodically to disinfect the toilet and help eliminate the occurrence of the pink residue. Keeping bathtubs and sinks wiped down using a solution that contains chlorine will also help to minimize its occurrence. Serratia will not survive in chlorinated drinking water.

Fixtures with Green Stains

A green or blue-green stain on kitchen or bathroom fixtures is caused by tiny amounts of copper that dissolve in your home's copper plumbing system when the water sits unused overnight. Copper staining may be the result of a leaky faucet or a faulty toilet flush valve, so be sure your plumbing is in good working order.

Copper stains may also be caused by overly hot tap water. Generally speaking, you should maintain your water temperature at a maximum of 120 degrees Fahrenheit. You should consult the owner's manual for your heater or check with your plumber to determine your current heat setting. Lowering your water temperature will reduce the staining problem and save you money on your energy bill.

Also keep in mind that a tap that is used often throughout the day usually will not produce copper stains, so if you flush the tap for a minute or so before using the water for cooking or drinking, copper levels will be reduced.

BY THE NUMBERS

5.1 TRILLION

The dollar value needed to keep water, wastewater, and stormwater systems in good repair.

2

How often in minutes a water main breaks.

1.7 TRILLION

The gallons of drinking water lost each year to faulty, aging, or leaky pipes.

12 THOUSAND

The average amount in gallons of water used to produce one megawatt-hour of electricity.

47.5 TRILLION

The amount in gallons of water used to meet U.S. electric power needs in 2020.

33

The percentage of water sector employees who will be eligible to retire by 2033.

What's a Cross-Connection?

Cross-connections that contaminate drinking water distribution lines are a major concern. A cross-connection is formed at any point where a drinking water line connects to equipment (boilers), systems containing chemicals (air conditioning systems, fire sprinkler systems, irrigation systems), or water sources of questionable quality. Cross-connection contamination can occur when the pressure in the equipment or system is greater than the pressure inside the drinking water line (backpressure). Contamination can also occur when the pressure in the drinking water line drops due to fairly routine occurrences (main breaks, heavy water demand), causing contaminants to be sucked out from the equipment and into the drinking water line (backsiphonage).

Outside water taps and garden hoses tend to be the most common sources of cross-connection contamination at home. The garden hose creates a hazard when submerged in a swimming pool or attached to a chemical sprayer for weed killing. Garden hoses that are left lying on the ground may be contaminated by fertilizers, cesspools, or garden chemicals. Improperly installed valves in your toilet could also be a source of cross-connection contamination.

Community water supplies are continuously jeopardized by cross-connections unless appropriate valves, known as backflow prevention devices, are installed and maintained. We have surveyed industrial, commercial, and institutional facilities in the service area to make sure that potential cross-connections are identified and eliminated or protected by a backflow preventer. We also inspect and test backflow preventers to make sure that they provide maximum protection. For more information on backflow prevention, contact the Safe Drinking Water Hotline at (800) 426-4791.

Count on Us

Delivering high-quality drinking water to our customers involves far more than just pushing water through pipes. Water treatment is a complex, time-consuming process. Because tap water is highly regulated by state and federal laws, water treatment plant and system operators must be licensed and are required to commit to long-term, on-the-job training before becoming fully qualified. Our licensed water professionals have a basic understanding of a wide range of subjects, including mathematics, biology, chemistry, and physics. Some of the tasks they complete on a regular basis include:

- Operating and maintaining equipment to purify and clarify water.
- Monitoring and inspecting machinery, meters, gauges, and operating conditions.
- Conducting tests and inspections on water and evaluating the results.
- Maintaining optimal water chemistry.
- Applying data to formulas that determine treatment requirements, flow levels, and concentration levels.
- Documenting and reporting test results and system operations to regulatory agencies.
- Serving our community through customer support, education, and outreach.

So the next time you turn on your faucet, think of the skilled professionals who stand behind each drop.

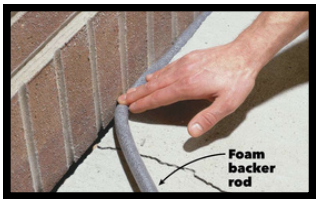
How to Prevent Frozen Pipes

When water freezes, it expands in volume by 9%. Even a small amount of ice in your water pipes can cause a pipe to fail. But the real damage comes when the ice melts and the water flows through the new crack into your cabinets, attics, and crawl spaces leading to property damage and unexpected expense.

Here are tips to help prevent pipes from freezing.

Insulate pipes: Pipes in unheated areas such as basements, attics, and crawl spaces are more susceptible to freezing. Insulating these pipes can help keep them warm and prevent freezing.

Seal leaks: Seal any leaks or gaps in your home's exterior walls, floors and foundation. This will help keep cold air out and warm air in.



Keep the heat on: Keep your home's temperature above 55°F even when you are away. This will help keep your pipes warm and prevent freezing.

Open cabinet doors: Open cabinet doors under sinks to allow air to circulate around the pipes.

Let faucets drip: Letting faucets drip can help prevent pipes from freezing. Running water through the pipes, even at a tricke, can help prevent freezing.

Cut off valve: Know where your main cut-off valve is located if a pipe beaks, you can limit flooding damage by shutting off the valve.

Before winter arrives, by preparing your pipes for freezing temperatures, you can avoid any unwanted surprises!

DavidsonWater
INCORPORATED

Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule, and the water we deliver must meet specific health standards. Here, we only show those substances that were detected in our water (a complete list of all our analytical results is available upon request). Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels.

The state recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chlorine (ppm)	2023	[4]	[4]	2.05	1.41–3.12	No	Water additive used to control microbes
Chlorine Dioxide (ppb)	2023	[800]	[800]	50	ND–450	No	Water additive used to control microbes
Chlorite (ppm)	2023	1	0.8	0.14	ND–0.72	No	By-product of drinking water disinfection
Haloacetic Acids [HAAs]–Stage 2 (ppb)	2023	60	NA	23.3[1]	14–42	No	By-product of drinking water disinfection
Total Organic Carbon [TOC] (removal ratio)	2023	TT[2]	NA	2.15	1.7–2.3	No	Naturally present in the environment
TTHMs [total trihalomethanes]–Stage 2 (ppb)	2023	80	NA	37.5[1]	15–88	No	By-product of drinking water disinfection
Turbidity[3] (NTU)	2023	TT = 1 NTU	NA	0.13	NA	No	Soil runoff
Turbidity (lowest monthly percent of samples meeting limit)	2023	TT = 95% of samples meet the limit	NA	100	NA	No	Soil runoff

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2022	1.3	1.3	0.449	0/50	No	Corrosion of household plumbing systems; Erosion of natural deposits

SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	MCLG	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Fluoride (ppm)	2023	2.0	NA	0.78	0.67–0.93	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
pH (units)	2023	6.5-8.5	NA	6.98	6–7.60	No	Naturally occurring

Definitions

90th %ile: The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

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

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.

NA: Not applicable.

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

removal ratio: A ratio between the percentage of a substance actually removed to the percentage of the substance required to be removed.

SMCL (Secondary Maximum Contaminant Level): These standards are developed to protect aesthetic qualities of drinking water and are not health based.

TT (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water.

UNREGULATED SUBSTANCES [4]				
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Chlorate (ppb)	2015	110	86–110	NA
Chromium-6 (ppb)	2015	0.05	0.04–0.05	NA
Perfluorobutanoic Acid [PFBA] (ppb)	2018	40	18–40	Disinfection by-product
Perfluorodecanoic Acid [PFDA] (ppb)	2018	0.47	ND–0.47	Naturally occurring
Sodium (ppm)	2023	15.7	15.7–15.7	NA
Strontium (ppb)	2015	47.9	46.8–47.9	NA
Sulfate (ppm)	2023	18	18–18	Runoff/leaching from natural deposits; Industrial wastes

[1] Based on a locational running annual average.

[2] Depending on the TOC in our source water, the system must have a certain percentage removal of TOC or achieve alternative compliance criteria. If we do not achieve that percentage removal, there is an alternative percentage removal. If we fail to meet the alternative percentage removal, we are in violation of a treatment technique.

[3] Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. The turbidity rule states that 95% or more of the monthly samples must be less than or equal to 0.3 NTU.

[4] Unregulated contaminants are those for which U.S. EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the U.S. EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulations are warranted.

Table Talk

Get the most out of the Testing Results data table with these simple suggestions. In less than a minute, you will know all there is to know about your water.

> For each substance listed, compare the value in the Amount Detected column against the value in the MCL (or AL or SMCL) column. If the Amount Detected value is smaller, your water meets the health and safety standards set for the substance.

Other Table Information Worth Noting

Verify that there were no violations of the state and/or federal standards in the Violation column. If there was a violation, you will see a detailed description of the event in this report.

If there is an ND or a less-than symbol (<), that means that the substance was not detected (i.e., below the detectable limits of the testing equipment).

The Range column displays the lowest and highest sample readings. If there is an NA showing, that means only a single sample was taken to test for the substance (assuming there is a reported value in the Amount Detected column).

If there is sufficient evidence to indicate from where the substance originates, it will be listed under Typical Source.

What type of container is best for storing water?

Consumer Reports has consistently advised that glass or bisphenol A (BPA)-free plastics such as polyethylene are the safest choices. To be on the safe side, do not use any container with markings on the recycle symbol showing 7PC (that's code for BPA). You could also consider using stainless steel or aluminum with BPA-free liners.

How much emergency water should I keep?

Typically, one gallon per person per day is recommended. For a family of four, that would be 12 gallons for three days. Humans can survive without food for one month but can only survive one week without water.

How long can I store drinking water?

The disinfectant in drinking water will eventually dissipate, even in a closed container. If that container housed bacteria prior to filling up with the tap water, the bacteria may continue to grow once the disinfectant has dissipated. Some experts believe that water can be stored up to six months before needing to be replaced. Refrigeration will help slow the bacterial growth.

How long does it take a water supplier to produce one glass of treated drinking water?

It can take up to 45 minutes to produce a single glass of drinking water.

How many community water systems are there in the U.S.?

About 53,000 public water systems across the United States process 34 billion gallons of water per day for home and commercial use. Eighty-five percent of the population is served by these systems.

Which household activity wastes the most water?

Most people would say the majority of water use comes from showering or washing dishes; however, toilet flushing is by far the largest single use of water in a home (accounting for 40 percent of total water use). Toilets use about 4 to 6 gallons per flush, so consider an ultra-low-flow (ULF) toilet, which requires only 1.5 gallons.