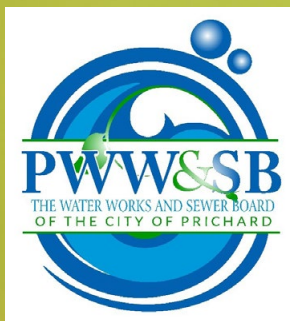


ANNUAL WATER QUALITY REPORT

Reporting Year 2023



Presented By
**The Water Works and Sewer
Board of the City of Prichard**

PWS ID#: AL0001015





To Our Valued Customers:

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 source 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 are committed to ensuring the quality of your water and providing you with this important public health information.

Lead in Home Plumbing

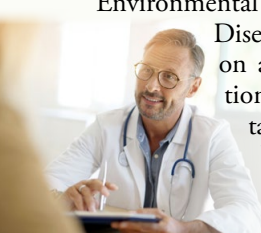
Lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We are responsible for providing high-quality drinking water and removing lead pipes, but we cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, or doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute-accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact PWW&SB at (251) 457-3396. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at epa.gov/safewater/lead.

Source Water Assessment

A Source Water Assessment Plan (SWAP) is now available. If you would like to review the SWAP, please feel free to contact our office at (251) 457-3396 during regular office hours.

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 (U.S. 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 water.epa.gov/drink/hotline.



About Our Violations

1. From October through December 2022, we did not monitor for disinfection by-products (DBP) during the required time frame and therefore cannot be sure of the quality of your drinking water during that time. Because DBPs from this period were used in determining compliance with DBP maximum contaminant levels (MCLs) from January through March, April through June, and July through September 2023, PWW&SB incurred monitoring violations for those quarters. PWW&SB has monitored in a timely manner since sustaining the violation and has been compliant with DBP MCLs. PWW&SB returned to compliance on October 6, 2023, for these violations.

2. PWW&SB received a Notice of Violation on January 20, 2023, for failure to have a current water purchase contract. An updated water purchase contract was submitted, and PWW&SB returned to compliance on January 26, 2023.

3. PWW&SB received a Notice of Violation on May 8, 2023, for failure to submit a corrective action plan (CAP) for the sanitary survey conducted on January 25, 2023, and for failing to submit and revise the Distribution System Evaluation Report (DSER) on time. The revised DSER and the CAP were submitted on May 18 and 31, 2023, respectively, returning PWW&SB to compliance.

4. From June through September 2022, we did not take all the required lead and copper samples and therefore cannot be sure of the quality of your drinking water during that time. PWW&SB has taken the appropriate measures since September 2022, and all applied lead and copper samples are in compliance with regulations. PWW&SB returned to compliance regarding this violation on October 2, 2023.

QUESTIONS?

The Water Works and Sewer Board of the City of Prichard (PWW&SB) is committed to providing you with high-quality water. We also understand that occasional concerns may arise. At times the water may appear cloudy or rusty or have an unusual odor. This change in water quality could be caused by various reasons. Construction in the area, in-house water filtration, water system maintenance, recent plumbing work done in your home or business, or seasonal weather-related changes are just a few possibilities. Whatever the reason, we want to address those concerns, which may be conveyed by calling PWW&SB customer service at (251) 457-3396.

Working to improve your service,
John Young
Receiver, PWW&SB

Substances That Could Be in Water

To ensure that tap water is safe to drink, 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. All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that 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 and radioactive material, and it can pick up 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;

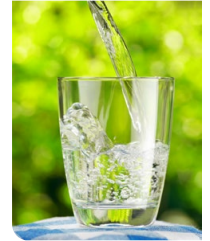
Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and may also come from gas stations, urban stormwater runoff, and septic systems;

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.

FOG (Fats, Oils, and Grease)

You may not be aware of it, but every time you pour fat, oil, or grease (FOG) down your sink (e.g., bacon grease), you are contributing to a costly problem in the sewer collection system. FOG coats the inner walls of the plumbing in your house as well as the walls of underground piping throughout the community. Over time, these greasy materials build up and form blockages in pipes, which can lead to wastewater backing up into parks, yards, streets, and storm drains. These backups allow FOG to contaminate local waters, including drinking water. Exposure to untreated wastewater is a public health hazard. FOG discharged into septic systems and drain fields can also cause malfunctions, resulting in more frequent tank pump-outs and other expenses.



Communities spend billions of dollars every year to unplug or replace grease-blocked pipes, repair pump stations, and clean up costly and illegal wastewater spills. Here are some tips that you and your family can follow to help maintain a well-run system now and in the future:

NEVER:

- Pour FOG down the house or storm drains.
- Dispose of food scraps by flushing them.
- Use the toilet as a wastebasket.

ALWAYS:

- Scrape and collect FOG into a waste container such as an empty coffee can, and dispose of it with your garbage.
- Place food scraps in waste containers or garbage bags for disposal with solid wastes.
- Place a wastebasket in each bathroom for solid wastes like disposable diapers, creams and lotions, and personal hygiene products, including nonbiodegradable wipes.

Public Meetings

Any announcements of public meetings for PWW&SB can be found at fixprichardwater.com.

Water Conservation Tips

You can play a role in conserving water and save yourself money in the process by becoming conscious of the amount of water your household is using and looking for ways to use less whenever you can. It is not hard to conserve water. Here are a few tips:

- Automatic dishwashers use four to six gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water-using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.

Violation Information

We routinely monitor for the presence of drinking water contaminants. Testing results we received in August 2023 show that our system exceeded the MCL of 80 parts per billion (ppb) for total trihalomethanes (TTHM). The chart below lists the locations, disinfectant by-products, and levels that exceeded the MCL.

LOCATION	CONTAMINANT	QUARTER	LEVEL (MG/L)
769 SNOW ROAD NORTH	TTHM	JUL-SEP 2023	0.081

This is not an immediate risk. If it had been, you would have been notified immediately.

Since the time of this violation, MAWSS has increased flushing out of a permanently installed flusher in the area of the violation. Increased flushing lowers water age in the area of concern and typically is the most effective means of lowering TTHM concentration within a specific part of the system. All other service locations tested by MAWSS met drinking water standards.

Some people who drink water containing TTHM in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system and may have an increased risk of getting cancer. If you have specific health concerns, consult your doctor.

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.

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

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.

TON (Threshold Odor Number): A measure of odor in water.

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

µmho/cm (micromhos per centimeter): A unit expressing the amount of electrical conductivity of a solution.



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.

Based on a study conducted with the approval of the U.S. EPA, a statewide waiver for the monitoring of asbestos and dioxin was issued. Monitoring for these contaminants was not required.

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.

We participated in the fifth stage of the U.S. EPA's Unregulated Contaminant Monitoring Rule (UCMR5) program by performing additional tests on our drinking water. UCMR5 sampling benefits the environment and public health by providing the U.S. EPA with data on the occurrence of contaminants suspected to be in drinking water to determine if it needs to introduce new regulatory standards to improve drinking water quality. Unregulated contaminant monitoring data is available to the public, so please feel free to contact us if you are interested in obtaining that information. If you would like more information on the U.S. EPA's Unregulated Contaminant Monitoring Rule, please call the Safe Drinking Water Hotline at (800) 426-4791.

REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Aluminum (ppm)	2023	0.2	NA	0.96	0.12–0.96	No	Naturally occurring
Barium (ppm)	2023	2	2	0.033	0.021–0.033	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chlorine (ppm)	2023	[4]	[4]	1.88	0.45–1.88	No	Water additive used to control microbes
Chlorine Dioxide (ppb)	2023	[800]	[800]	100.0	ND–100.0	No	Water additive used to control microbes
Chlorite (ppm)	2023	1	0.8	0.76	0.22–0.76	No	Disinfection by-product
Combined Radium (pCi/L)	2023	5	0	0.924	0.0194–0.924	No	Erosion of natural deposits
Fluoride (ppm)	2023	4	4	0.88	ND–0.88	No	Water additive promoting strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories
Gross Alpha Particle Activity (pCi/L)	2023	15	0	1.836	-0.094–1.836	No	Erosion of natural deposits
Gross Beta Particle Activity (pCi/L)	2023	4	0	1.242	-0.206–1.242	No	Erosion of natural deposits
HAA5 (ppb)	2023	60	NA	30.6	3.4–39	No	Disinfection by-product
Nitrate (ppm)	2023	10	10	0.02	ND–0.02	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Total Nitrate + Nitrite (ppm)	2023	10	10	0.018	ND–0.018	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Total Organic Carbon [TOC] (removal ratio)	2023	TT ¹	NA	1.30	1.30–1.90	No	Naturally present in the environment
Total Trihalomethanes [TTHM] (ppb)	2023	80 ³	NA	81	4.9–92.0	Yes	Disinfection by-product
Turbidity (NTU)	2023	<0.3	NA	0.099	0.032–0.099	No	Soil runoff

Tap water samples were collected for lead and copper analyses from sample sites throughout the community²

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2023	1.3	1.3	0.0662	0/30	No	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservations
Lead (ppb)	2023	15	0	<0.005	0/30	No	Corrosion of household plumbing systems; erosion of natural deposits



OTHER REGULATED SUBSTANCES⁴

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Alkalinity [as CaCO ₃] (ppm)	2023	NA	NA	15.60	12–15.6	No	Naturally occurring
Calcium (ppm)	2023	NA	NA	15.9	12–15.9	No	Naturally occurring
Carbon Dioxide (ppm)	2023	NA	NA	13.9	10.5–13.9	No	Naturally occurring
Hardness [as CaCO ₃] (ppm)	2023	NA	NA	44.0	33.0–44.0	No	Naturally occurring
Magnesium (ppm)	2023	NA	NA	1.20	0.95–1.2	No	Naturally occurring
Orthophosphate [as P] (ppm)	2023	NA	NA	0.16	0.16 -	No	Corrosion control additive
Sodium (ppm)	2023	NA	NA	4.20	3.1–4.2	No	Naturally occurring
Specific Conductance (µmho/cm)	2023	NA	NA	126.0	100–126	No	Naturally occurring
Temperature (degrees Celsius)	2023	NA	NA	38.0	11.0–38.00	No	Naturally occurring

SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	MCLG	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chloride (ppm)	2023	250	NA	8.20	7.3–8.2	No	NA
Color (units)	2023	15	NA	10.00	5–10	No	NA
Corrosivity ⁴ (units)	2023	Noncorrosive	NA	-1.85	-1.4–-1.85	No	NA
Manganese ⁴ (ppb)	2023	50	NA	5.3	ND–5.3	No	Naturally occurring
Odor (TON)	2023	3	NA	1.0	ND–1.0	No	Naturally occurring organic materials
pH ⁴ (units)	2023	6.5-8.5	NA	7.10	7.1–8.0	No	NA
Sulfate ⁴ (ppm)	2023	250	NA	25.9	19.8–25.9	No	NA
Total Dissolved Solids [TDS] (ppm)	2023	500	NA	110.0	50–110	No	NA

¹The value reported under Amount Detected for TOC is the lowest ratio between percentage of TOC actually removed and percentage of TOC required to be removed. A value of greater than 1 indicates that the water system is in compliance with TOC removal requirements. A value of less than 1 indicates a violation of the TOC removal requirements.

²Samples were taken at 30 locations throughout the Prichard water distribution system during the most recent sampling event in 2023, in accordance with applicable regulations.

³Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems and may have an increased risk of getting cancer.

⁴Special corrosivity monitoring (MAWSS has implemented a corrosion control program).

Where Does My Water Come From?

The water supplied to PWW&SB comes from the Mobile Area Water and Sewer System (MAWSS) Converse Reservoir, also known as Big Creek Lake. PWW&SB has five water storage tanks and over 2,000 fire hydrants. Line flushing to eliminate aged or discolored water is done throughout the system in a systematic method to improve water quality. System pressures are checked and maintained at a level that provides satisfactory usage to customers.

Nondetected Contaminants

MAWSS tests all primary contaminants, which include microbiological contaminants, radionuclides, inorganic chemicals, organic chemicals (synthetic and volatile), and disinfection by-products. In addition, MAWSS tests for secondary contaminants and unregulated synthetic and volatile organic chemicals. The following is a list of all substances analyzed in MAWSS water sampling in 2023.

1,1-Dichloroethane, 1,1-Dichloropropene, 1,1,1-Trichloroethane, 1,1,1,2-Tetrachloroethane, 1,1,2-Trichloroethane, 1,1,2,2-Tetrachloroethane, 1,2-Dichlorobenzene, 1,2-Dichloroethane, 1,2-Dichloropropane, 1,2,3-Trichlorobenzene, 1,2,3-Trichloropropane, 1,2,4-Trichlorobenzene, 1,2,4-Trimethylbenzene, 1,3-Dichlorobenzene, 1,3-Dichloropropane, 1,3,5-Trimethylbenzene, 1,4-Dichlorobenzene, 2,2-Dichloropropane, 3-Hydroxycarbofuran, 4,8-Dioxo-3H-perfluorononanoic acid (ADONA), 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid, 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid, Aldicarb, Aldicarb sulfone, Aldicarb sulfoxide, Antimony, Benzene, Bromobenzene, Bromochloromethane, Bromoform, Bromomethane, Cadmium, Carbaryl, Carbon tetrachloride, Chlorobenzene, Chloroethane, Chloromethane, Chromium, Cis-1,2-dichloroethene, Cyanide, Dibromoacetic acid, Dibromomethane, Dichlorodifluoromethane, Dichloromethane, Ethylbenzene, Fluorotrichloromethane, Hexachlorobutadiene, Hexafluoropropylene oxide dimer acid (HFPO-DA), Isopropylbenzene, Methomyl, Methyl-tert-butyl ether (MTBE), N-butylbenzene, N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA), N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA), N-propylbenzene, Naphthalene, Nickel, O-chlorotoluene (2-), Oxamyl, P-chlorotoluene (4-), P-isopropyltoluene, Perfluorodecanoic acid (PFDA), Perfluorododecanoic acid (PFDoA), Perfluorononanoic acid (PFNA), Perfluorotetradecanoic acid (PFTeDA), Perfluorotridecanoic acid (PFTTrDA), Perfluoroundecanoic acid (PFUnA), Sec-butylbenzene, Selenium, Silver, Tert-butylbenzene, Thallium, Trans-1,2-dichloroethene, Trichloroethene, Zinc

The PWW&SB also tests for the following:

Alpha-hexachlorocyclohexane, Anatoxin-a, Butylated hydroxyl anisole, Chlorpyrifos, Cyindrospermopsin, Dibromochloromethane, Dimethipin, Ethoprop, Microcystin, Total, Monobromoacetic Acid, O-Toluidine, Oxlyflorfen, Permethrins, Total, Profenofos, Quinoline, Tebuconazole, Tribufos