

THE DISTRICT DISPATCH

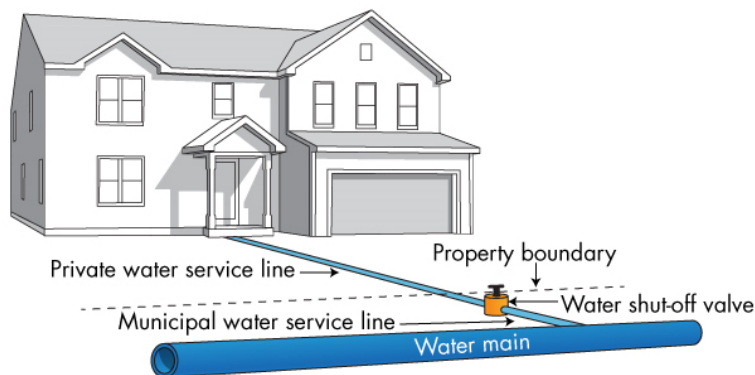
Spring 2023 Edition

Annual Water Quality Report and Water Use Efficiency Data Inside



Lead and Galvanized Service Line Inventory

On January 15, 2021, the U.S. Environmental Protection Agency (EPA) issued Lead and Copper Rule Revisions (LCRR) that went into effect immediately. Included in the revisions is a requirement for all public water systems to inventory all water service lines that may contain lead for **both the public and private portions of every service line**. The inventory must be completed and reported to the state in which they are located by October 16, 2024. Currently, Manchester Water District serves just under 3,400 individual accounts. During the next year-and-a-half, Manchester Water District personnel will be researching each service connection to determine the type of pipe used for the service line, both to the meter from the water main, and after the meter to the residence. If it is determined that the pipe from the meter to the residence may contain lead or lead fittings, the owner will be notified in writing. Manchester Water District began an aggressive effort to remove all potential sources of lead fittings from the water main to the meter in the 1990's. For further information regarding the rule revisions and Inventory plan, please contact the District office at (360) 871-0500.



Employee Spotlight: Cody Hodge—Renaissance Man



Leon Battista Alberti (1404-1472) first put forth the notion that “a man can do all things if he will.”

Meet Cody Hodge. In the spring of 2019, Manchester Water District published a classified ad for a Service Technician's Apprentice on the Operations crew. Among the dozens of applicants was a Jack-of-all-Trades family man looking for a career. Since joining the crew nearly four years ago, Cody has demonstrated remarkable mechanical aptitude, work ethic, and a seemingly magical ability to figure out complex electrical circuits and hydraulic controls. Cody has found a home at the District and is highly regarded by staff and customers alike. When not at work, Cody's accomplishments are similarly diverse as a husband and father. His hobbies include quality time with the family, motorecycling, snow skiing and rock climbing. Coworkers may think of him as a pony-tailed Harry Potter just doing his magic on any project, Alberti may have called him a renaissance man. Either way, we're glad he's home.

2022 Water Quality Report—Water System ID #507002

Manchester Water District was formed in 1942 under Chapter 57 of the Revised Code of Washington. The District is governed by an elected three-member Board of Commissioners and staffed by eight full-time employees. The District serves 3,449 accounts, which represents a population of nearly 10,000 people. The distribution system covers approximately 38 miles of water pipe, and in 2022 delivered 201 million gallons of water to customers in the Manchester, Yukon Harbor, South Colby, Harper, and Southworth neighborhoods. To ensure that sufficient water is available during peak demands and maintain fire protection, the District stores roughly 3.2 million gallons of water in the five reservoirs located through the service area.

The Board of Commissioners and Staff of Manchester Water District are proud to present the 2022 Consumer Confidence Report. This report includes water quality data that conforms to federal regulations set forth in the Safe Drinking Water Act (SDWA). Under the SDWA, water utilities must provide water quality information to each customer annually. This report demonstrates that ***your drinking water meets or exceeds state and federal drinking water quality standards.***

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. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at (800) 426-4791.

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 with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their healthcare providers. EPA/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.

Manchester Water District sources water from eleven groundwater wells. The deep wells are located throughout the District's service area. Depending on location, some District customers may receive water from a single source, while others may be supplied by multiple sources. Manchester Water District treats all water with trace amounts of chlorine. This disinfection process is required by the Department of Health to provide a barrier of protection against bacterial growth in the distribution system. Chlorine also helps minimize the effects of hydrogen sulfide that can naturally occur in groundwater sources. Hydrogen sulfide causes what is typically referred to as a "rotten egg smell". In addition to chlorine, sodium fluoride is added to all District water. District customers voted to add fluoride to their drinking water in 1969, and have repeatedly held up the mandate since. District staff works diligently to maintain a fluoride level of .70 parts per million throughout the distribution system.

Manchester Water District Sources of Supply		
Department of Health Source Number	Manchester Water District Name	Approximate Location
S01	Well 1	Manchester Village
S02	Well 2	Manchester Village
S04	Well 4	Bulman Road
S09	Well 9	Sedgwick Road
S10	Well 10	Manchester Heights
S11	Well 11	Manchester Heights
S13	Wells 5 & 8	Sedgwick Road
S14	Wells 6 & 7	Garfield Avenue

A *Source Water Assessment Program (SWAP)* was compiled by the Washington State Department of Health to highlight significant sources of contamination for community water systems in Washington State, if available. An interactive map of the assessment data and Manchester Water District's susceptibility rating can be found at www.doh.wa.gov/communityandenvironment/drinkingwater/sourcewaterprotection/assessment.aspx

Manchester Water District Sampling Schedule	
Parameter	Monitoring Schedule
Chlorine Residual	Daily Monitoring
Fluoride Residual	Daily Monitoring
Total Coliform—E Coli	Monthly Monitoring
Lead & Copper	Every 3 Years
Asbestos	Every 9 Years
Total Trihalomethane (THM)	Annual Monitoring
Halo-Acetic Acids (HAA5)	Annual Monitoring
Nitrates	Annual Monitoring
Inorganic Chemicals	Every 9 Years
Volatile Organic Chemicals	Every 6 Years
Herbicides	Every 9 Years
Pesticides	Every 9 Years
Soil Fumigants	Every 3 Years
Radionuclides	Every 6 Years

Contaminants that may be included in source water include:

Microbial Contaminants	Such as viruses, parasites, and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife.
Inorganic Contaminants	Such as salts and metals, which can occur naturally or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, and farming.
Pesticides & Herbicides	Which may come from various 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. They can also come from gas stations, urban stormwater runoff, and septic systems.
Radioactive Contaminants	Which can occur naturally or result from oil and gas production and mining activities.

Listed within this report are the few substances that were detected in Manchester Water District's most recent set of sampling results. Manchester Water District takes hundreds of samples each year. We have not listed the substances that were tested, but NOT detected. The Department of Health has granted complete waivers for dioxin, endoathal, glyphosate, diquat, and insecticides. While we strive to make this report as user-friendly as possible, we understand that some questions may arise. For additional water quality questions or concerns, please contact the Manchester Water District office at (360) 871-0500. There are certified Water Distribution Managers who will be more than happy to assist you.

2022 Water Quality Analysis

The table below lists all the drinking water contaminants that were detected between January 1 and December 31, 2022. The presence of these contaminants does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented represents water quality testing performed during the 2022 calendar year. Washington State requires Manchester Water District to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Data that is not from 2022 will be noted with the most recent sample date.

Parameter	Maximum Contaminant Level (MCL)	Maximum Contaminant Level Goal (MCLG)	Potential Sources	Average Level Detected in Most Recent Samples	Range of Levels Detected in Most Recent Samples	Meets Standards
Sampled in the Distribution System						
Asbestos <i>2019 Sample</i>	7 MFL	N/A	Decay of asbestos cement (AC) water mains; Erosion of natural deposits	ND	N/A	YES
Halo-Acetic Acid <i>Monitored Annually</i>	60 ppb	N/A	By-product of drinking water disinfection	5.0 ppb	N/A <i>Single Site—No Range</i>	YES
Trihalomethanes <i>Monitored Annually</i>	80 ppb	N/A	By-product of drinking water disinfection	9.5 ppb	N/A <i>Single Site—No Range</i>	YES
Chlorine <i>Monitored Daily</i>	4 ppm	4 ppm	Water additive used to control microbes	.49 ppm	.31—.63 ppm	YES
Fluoride <i>Monitored Daily</i>	4 ppm	4 ppm	Water additive to promote dental health	.67 ppm	.53—.86 ppm	YES
Total Coliform <i>Monitored Routinely</i>	0	0	Naturally occurring organism	No coliform was detected in any of the 120 samples taken in 2022		YES
Sampled at Groundwater Sources						
Nitrates <i>Monitored Annually</i>	10 ppm	10 ppm	Runoff from fertilizer use; Leaching from septic tanks; Sewage; Erosion of natural deposits	.69 ppm	ND—2.32 ppm	YES
Gross Alpha <i>Monitored Annually</i>	15 pCi/L	N/A	Erosion of natural deposits	3.10 pCi/L	N/A <i>Single Site—No Range</i>	YES
Radium 228 <i>Monitored Annually</i>	5 pCi/L	N/A	Erosion of natural deposits	.53 pCi/L	N/A <i>Single Site—No Range</i>	YES
Iron* <i>2022 Sample</i>	.3 ppm <i>SMCL</i>	N/A	Erosion of natural deposits	ND	N/A <i>Single Site—No Range</i>	YES
Manganese* <i>2022 Sample</i>	.05 ppm <i>SMCL</i>	N/A	Leaching from natural deposits	.150 ppm*	N/A <i>Single Site—No Range</i>	YES
Sampled at Customer Taps						
Lead** <i>2022 Sample</i>	15 ppb <i>Action Level</i>	0	Corrosion of household plumbing systems; Erosion of natural deposits	2.7 ppb <i>90th Percentile</i>	0 sample sites out of 20 exceeded the Action Level	YES
Copper** <i>2022 Sample</i>	1.3 ppm <i>Action Level</i>	1.3 ppm	Corrosion of household plumbing systems; Erosion of natural deposits	.17 ppm <i>90th Percentile</i>	0 sample sites out of 20 exceeded the Action Level	YES

Explanation of Terms	
MCL	Maximum Contaminant Level —Highest level of a contaminant allowed in drinking water. MCLs are set as close to the MCLGs as feasible using 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.
SMCL	Secondary Maximum Contaminant Level —Secondary Contaminant standards are developed to protect the aesthetic qualities of drinking water and are not health based.
Action Level	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
Lead & Copper <i>90th Percentile</i>	Specific to Lead & Copper Testing —Out of every 10 homes sampled, 9 were at or below this level.

Units of Measurement	
ppm	Parts per Million
ppb	Parts per Billion
pCi/L	Picocuries per Liter
MFL	Millions of Fibers per Liter
ND	Not Detected in laboratory samples
N/A	Not Applicable

*Iron & Manganese in Drinking Water
Iron & Manganese standards are achieved through blending of other drinking water sources.
There are no adverse health effects from Iron & Manganese in drinking water at the levels detected. The primary impact of Iron & Manganese in drinking water is aesthetic quality. Elevated levels may cause discoloration in water. This can stain laundry and porcelain fixtures, promote bacterial growth in the distribution system, and in high concentrations customers may notice a metallic taste.
Manchester Water District employs various methods to reduce the impact of Iron & Manganese on drinking water quality. This includes, but is not limited to; blending drinking water sources and regularly flushing the distribution system in affected areas.

**A Note about Lead & Copper in Drinking Water from the Environmental Protection Agency
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. Manchester Water District is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 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 <i>Safe Drinking Water Hotline</i> , or at www.epa.gov/safewater/lead

Commissioners' Corner

In 2022, the installation of a 35kw solar array was completed at the District's Field Operations Complex. In conjunction with a matching grant from the Washington State Department of Commerce, the District added efficient and environmentally friendly solar power to offset the cost of electricity at our Wells 1 and 2, as well as the workshop and



Bob Ballard



Steve Pedersen

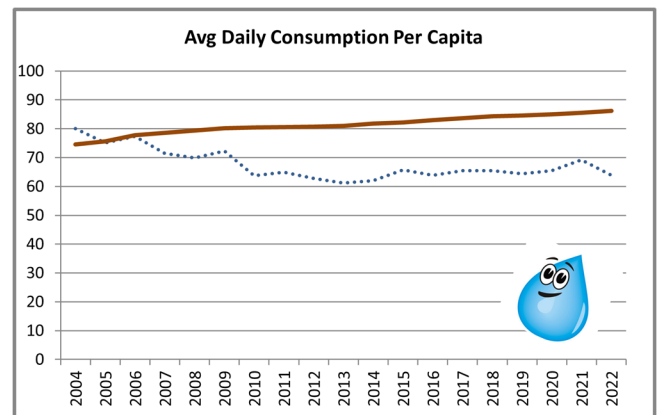


Jim Strode

Field office. Moving forward, District staff will track the return on investment using historical data and upcoming power bills for the site. Other capital improvement projects in the works include a water treatment facility at Well 10 in the northern end of our service territory, and a new replacement well at our Sedgwick well-field to the south. These projects are intended to improve service and reliability to all of our customers for decades to come.

Water Conservation Trends

According to the U.S. Geological Survey (USGS), the average American consumes about 80-100 gallons of water per day (gpd) for culinary, sanitary, and all other uses. In 2015, Manchester Water District billed 3,298 accounts for 197,252,903 gallons consumed, or an average daily consumption of 66 gpd per capita. In 2019, this figure dropped to just 65 gpd among District customers. In 2022, the District billed 3,449 accounts for 201,018,754 gallons, or an average daily consumption of 64 gpd. This is a 7-percent decrease in per capita consumption over 2021 data, which may reflect post-pandemic trends as people return to the workplace; as well as voluntary conservation efforts. In 2022, the District produced 223,009,340 gallons and billed customers for 201,018,754 gallons. This resulted in 9.9-percent unaccounted-for-production. For a distribution system of the District's size and complexity, 10-percent or less unaccounted for water over a 3-year average is considered acceptable. The District's 3-year average is 8.5-percent.



Payment Options

Customers are finding great success using Xpress Bill Pay for making and scheduling payments, checking their balances, and setting up paperless billing options. The efficiency and ease of the service, along with the security of Xpress Bill Pay has proven to be a popular option amongst customers. Xpress Bill Pay has options for email and text message notifications, automatic and one-time payments, as well as a free app for your phone.

For more information, please contact the office, or visit www.manchesterwater.org.

xpress BILL PAY

Manchester Water District Board of Commissioners

Steve Pedersen

Chairman

James Strode

Secretary

Robert Ballard

Commissioner

General Manager—Dennis O'Connell

The Manchester Water District Board of Commissioners meet on the second Tuesday of every month at 5:30 pm. Meetings are held at the Field Operations Workshop at 2082 Spring Street, unless otherwise posted. Meetings are open to all, and public participation is encouraged.

Water Efficient Appliance Rebates

Manchester Water District offers rebate incentives for customers who have purchased new, water-efficient appliances. If you have purchased a water-efficient toilet, washing machine, and/or dishwasher in the past six months—you may be eligible. For more information, please contact (360) 871-0500, or visit the Conservation page at www.manchesterwater.org



American Water Works
Association

Dedicated to the World's Most Important Resource



Manchester Water District Administrative Office Location & Hours

8185 E Daniels Loop, Suite 111 Port Orchard, WA 98366

Monday through Friday, 8:00 am—4:30 pm