THE DISTRICT DISPATCH

Spring 2022 Edition

Annual Water Quality Report and Water Use Efficiency Data Inside



Help Wanted - Lead & Copper Water Sampling

As directed by the Washington State Department of Health Office of Drinking Water (ODW), Manchester Water District (District) will soon be collecting representative water samples for the purpose of monitoring lead and copper levels in your drinking water. Based on historically favorable sampling results, the District is required to collect these samples every three years.

To compile the most accurate data, selected homeowners will be asked to participate by collecting water samples from

their kitchen or bathroom faucets. Sampling site selection is of factors including; the age of the home, the location within the distribution system, and the estimated age of the home's plumbing. In the coming months, the District will be sending letters to selected homeowners requesting their assistance. District staff will then hand deliver sample bottles and instructions to each participants home. Samples collected will be sent to an independent laboratory for analysis. Along with the State ODW, each homeowner will receive a copy of the laboratory findings. There is no cost to the homeowner and, as with all water quality sampling data, results will be available to the public upon request. By participating in the process, homeowners can play a pivotal role in helping us all understand the quality of our drinking water. If you have questions regarding the lead and copper sampling process, please contact the District office for further information.



Employee Spotlight: Work Hard, Laugh Hard with Trina Scholer



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 an interesting woman with an eclectic background and infectious energy. Throughout the selection process, Trina Scholer stood out from the others and in June of 2019, she reported for duty. Since that day, Trina has grown to become one of the District's most valued and versatile Service Technicians. Whether knee-deep in mud repairing a main leak, or helping customers with service inquiries and technical questions, she always brings her smile. Trina can do it all. She runs the backhoe, drives the dump truck and even welds up her own tools when needed. She is smart, talented, and would make any workplace a better place. The District is proud of all our employees, and we're grateful everyday that Trina is here with us to work hard, laugh hard, and get the job done.



2021 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 over 3,400 accounts, which represents a population of nearly 10,000 people. The distribution system covers approximately 38 miles of water pipe, and in 2021 delivered 238 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 2021 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 .7 parts per million throughout the distribution system.

Manchester Water District Sources of Supply					
Department of Health Source Number	Manchester Water Dis- trict 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 Contami- 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, endothall, 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.

2021 Water Quality Analysis

The table below lists all the drinking water contaminants that were detected between January 1 and December 31, 2021. 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 2021 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 2021 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 Di	Sampled in the Distribution System							
Asbestos 2019 Sample	7 MFL	N/A	Decay of asbestos cement (AC) water mains; Erosion of natural deposits	ND	N/A	YES		
Halo-Acetic Acid Monitored Annually	60 ppb	N/A	By-product of drinking water disinfection	4.6 ppb	N/A	YES		
Trihalomethanes Monitored Annually	80 ppb	N/A	By-product of drinking water disinfection	13.8 ppb	N/A	YES		
Chlorine Monitored Daily	4 ppm	4 ppm	Water additive used to control microbes	.48 ppm	.28—.71 ppm	YES		
Fluoride Monitored Daily	4 ppm	4 ppm	Water additive to promote dental health	.67 ppm	.57—.84 ppm	YES		
Total Coliform Monitored Routinely	0	0	Naturally occurring organism	No coliform was detected in any of the 120 samples taken in 2021		YES		
Sampled at Groun	dwater Sources							
Nitrates Monitored Annually	10 ppm	10 ppm	Runoff from fertilizer use; Leaching from septic tanks; Sewage; Erosion of natural deposits	.66 ppm	ND—2.33 ppm	YES		
Gross Alpha Monitored Annually	15 pCi/L	N/A	Erosion of natural deposits	ND	ND	YES		
Radium 228 Monitored Annually	5 pCi/L	N/A	Erosion of natural deposits	ND	ND	YES		
Iron* 2020 Sample	.3 ppm <i>sмс</i> г	N/A	Erosion of natural deposits	.07 ppm	ND—.13 ppm*	YES		
Manganese* 2020 Sample	.05 ppm <i>sмс</i> ь	N/A	Leaching from natural deposits	.102 ppm	.102 ppm*	YES		
Sampled at Custor	Sampled at Customer Taps							
Lead** 2019 Sample	15 ppb Action Level	0	Corrosion of household plumbing systems; Erosion of natural deposits	1 ppb 90th Percentile	0 sample sites out of 20 exceeded the Action Level	YES		
Copper** 2019 Sample	1.3 ppm Action Level	1.3 ppm	Corrosion of household plumbing systems; Erosion of natural deposits	.14 ppm 90th Percentile	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 90th Percentile	Specific to Lead & Copper Testing—Out of every 10 homes sampled, 9 were at or below this level.		

**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 Safe Drinking Water Hotline, or at www.epa.gov/safewater/lead

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.

Commissioners' Corner

Once again, the Board of Commissioners would like to thank our customers and staff for continuing to work with us as we navigate the COVID-19 pandemic. In spite of the challenges, the District continues to grow and improve.

One of our upcoming projects is the addition of solar panels at our Field Operations Complex. In conjunction with a matching grant from the Washington State Department of Commerce, the District will add efficient and environmentally friendly solar power to offset the cost of electricity at our Wells 1 and 2, as well as the workshop and field office. Moving forward, the Board and staff of Manchester Water District will continue to seek out ways to improve efficiency and ensure the long term financial health of our community water system.







Steve Pedersen

Jim Strode

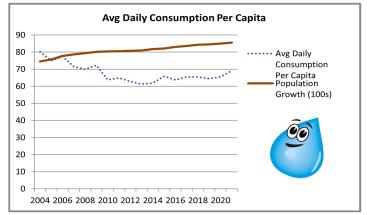
Bob Ballard

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 2021, the District billed 3,422 accounts 214,439,759 gallons, or an average daily consumption of 69 gpd. This 6-percent increase in per capita consumption may reflect evolving stay at home trends as a result of the pandemic; however, Manchester Water District will continue to encourage conservation as a critical component of future system planning.

In 2021, the District produced 219,030,227 gallons and billed customers for 203,172,680 gallons. This resulted in 7.2-percent unaccounted-for-production. For a distribution system of the District's size and complexity, 10-percent or less unaccounted for water is considered acceptable.



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

XPress BILL PAY

Manchester Water District Board of Commissioners

Steve Pedersen James Strode Robert Ballard

Chairman Secretary 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.

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

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





