

WATER QUALITY DATA TABLE

Detected Compounds	MCLG	MCL	Highest Level	Range of Detection	Typical Sources	Sample Date
INORGANIC CONTAMINANTS						
Fluoride (ppm)	4	4	1.92	ND - 1.92	Naturally present in the environment. We do not add fluoride to the drinking water. Fluoride was found in the Central, Knolls Vista, Montlake, and Wheeler zones within allowable levels.	2022
Nitrate (ppm)	10	10	1.48	ND - 1.48	Naturally present in the environment. Nitrate was detected in the Lakeview, Wheeler, and Larson zones within allowable levels.	2022
Trichloroethylene	0.5	5.0	1.81	ND - 1.81	An industrial solvent	2022
Coliform Bacteria	Each month we take 25 or more bacteriological samples to check for bacteria in the water. All samples were satisfactory, meaning no bacteria in the water for 2022. Month of May 2022 we got 23 out of 25 samples.					

In 2023 the City Water Division will participate with the Environmental Protection Agency in sampling our wells for Unregulated Contaminants. This program occurs every three years. The EPA determines what tests to run to ensure water is safe to drink. We drew samples for approximately 10 different analysis categories in our 19 wells. No chemicals or contaminants were detected in the samples for 2022.

UNIT DESCRIPTIONS	IMPORTANT DRINKING WATER DEFINITIONS
<b>mg/L:</b> Number of milligrams of substance in one liter of water	<b>MCLG:</b> 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.
<b>ppm:</b> Parts per million, or milligrams per liter	<b>MCL:</b> Maximum Contaminant Level: this highest level of a contaminant that is allowed in drinking water. MCLs are set as close as feasible using the best available treatment technology.
<b>ppb:</b> Parts per billion, or micrograms per liter	<b>N/A:</b> Not applicable
<b>ND:</b> Not detected	<b>ppm:</b> Parts per million, or milligrams per liter (mg/L). The equivalent of one second in 12 days.
<b>gpg:</b> Grain per gallon	<b>ppb:</b> Parts per billion, or micrograms per liter (ug/L). The equivalent of one second in 32 years.

LEAD & COPPER

*In 2023 the City Water Division will participate with the Environmental Protection Agency in sampling our distribution system for lead and copper. Samples will be taken from 31 homes within the distribution system.*

Contaminant	Year of Testing	Measure	90th Percentile	# of Sites Exceeding Action Level	Action Level	Common Sources of Substance
Lead	2020	ppb	.233	0	15 ppb	Corrosion of household plumbing systems; erosion of natural deposits
Copper	2020	ppm	0.0447	0	1.3 ppm	

**90th Percentile Value:** 90% of the samples were at or below this value. EPA considers the 90th percentile value the same as an average value for other contaminants. Lead and copper are regulated by a treatment technique that requires systems to control the corrosiveness of their water. If more than 10% of tap water samples exceed the action level, water systems must take additional steps.

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

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. The City of Moses Lake Water Division 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 several 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 (800-426-4791)** or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).



WAIVERS

The State Department of Health automatically grants sampling waivers for many of our sources. The City of Moses Lake Water Division takes samples from the wells in accordance with EPA and Washington State Department of Health, Office of Drinking Water regulations.

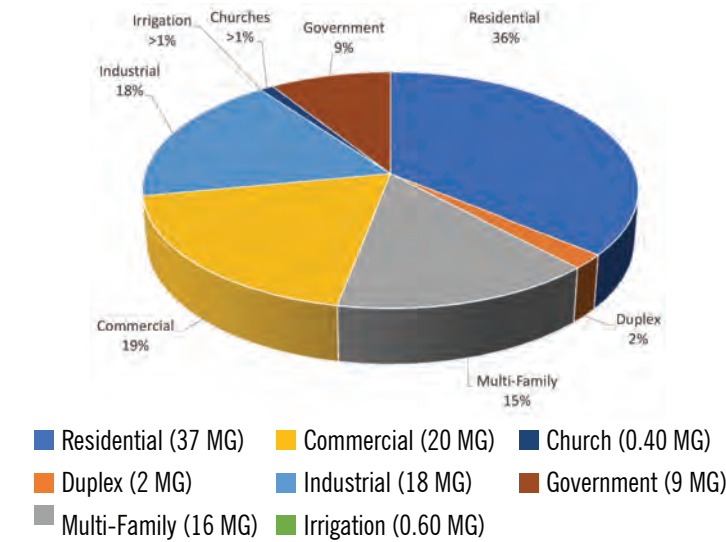
pH Levels range from 8.0 to 8.5

December 2022

WATER CONSUMPTION

% WATER USE BY USER CLASS	USER CLASS	# ACCOUNTS BILLED	CUBIC FEET	GALLONS	MG
36%	Residential (37 MG)	7,781	4,930,300	36,878,644	37
2%	Duplex (2 MG)	232	272,200	2,036,056	2
15%	Multi-Family (16 MG)	239	2,084,300	15,590,564	16
19%	Commercial (20 MG)	924	2,684,500	20,080,060	20
18%	Industrial (18 MG)	19	2,464,700	18,435,956	18
> 1%	Irrigation (0.60 MG)	103	87,600	655,248	1
1%	Church (0.40 MG)	38	48,900	365,772	0
9%	Government (9 MG)	152	1,213,400	9,076,232	9
TOTAL CONSUMPTION			13,785,900	103,118,532	103

WATER USE BY USER CLASS

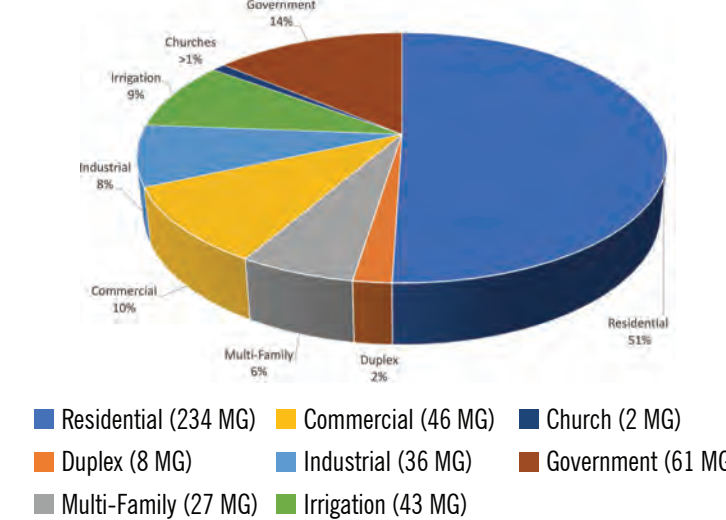


August 2022

WATER CONSUMPTION

% WATER USE BY USER CLASS	USER CLASS	# ACCOUNTS BILLED	CUBIC FEET	GALLONS	MG
51%	Residential (234 MG)	7,800	31,333,500	234,374,580	234
2%	Duplex (9 MG)	231	1,149,600	8,599,008	8
6%	Multi-Family (27 MG)	239	3,577,700	26,761,196	27
10%	Commercial (46 MG)	938	6,124,200	45,809,016	46
8%	Industrial (36 MG)	19	4,775,200	35,718,496	36
9%	Irrigation (43 MG)	269	5,709,700	42,708,556	43
1%	Church (2 MG)	38	265,700	1,987,436	2
14%	Government (61 MG)	171	8,224,500	61,519,260	61
TOTAL CONSUMPTION			61,160,100	457,477,548	457

WATER USE BY USER CLASS



WATER CONSERVATION

In 2018, the City of Moses Lake implemented water conservation throughout the city water distribution area beginning June 1st through September 30th. The City will continue this program each year. Addresses with **ODD** numbers shall be allowed to irrigate on odd numbered days. Addresses with **EVEN** numbers shall be allowed to irrigate on even numbered days.

Any property with irrigation meters two inches (2") and larger will be restricted to irrigate from midnight to 8:00 a.m. or on a schedule approved by the Municipal Services Director.

**Authority:** Municipal code 13.07.010 Water Rationing (Ord. 2737, 11/11/14)

WATER CONSERVATION IDEAS TO HELP YOU SAVE WATER IN YOUR YARD, LAWN, OR GARDEN:

- 1 Adjust sprinklers so only your lawn is water and not the house, sidewalk, or street.
- 2 Monitor your water bill for unusually high use. Your bill and water meter are tools that can help you discover leaks.
- 3 Choose shrubs and groundcovers instead of turf for hard-to-water areas such as steep slopes and isolated strips.
- 4 Group plants with the same watering needs together to avoid overwatering some while underwatering others.



2022 | WATER QUALITY REPORT



HEALTH INFORMATION

*PROVIDED BY THE EPA*

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 **(800-426-4791)**.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised 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 can be particularly at risk from infections. These people should seek advice about drinking water from their health care 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 **(800-426-4791)**.

YOUR DRINKING WATER

This report is provided to you to help you make informed decisions about the water you drink and to encourage you to get involved in protecting and improving your drinking water resource. The report tells you the source of the water we provide, the quality of the water, and who makes the management decisions. The report is required by the Federal Clean Water Act, which refers to it as the Consumer Confidence Report. As the water system's certified operator, I encourage you to call us with any concerns you have. Our goal is to provide you with fast, friendly, helpful, and efficient service.

**Chad Strevy**  
Water Services Manager / 509.764.3948

IMPORTANT INFORMATION

This is very important information regarding the City of Moses Lake public potable (drinking) water system. You may wish to have this information translated.

Este informe contiene informacion muy importante sobre su agua potable. Traduzcalo o habale con alguien que lo entienda bien.

В этом сообщении содержится важная информация о воде, которую вы пьёте. Попросите кого-нибудь перевести для вас это сообщение или поговорите с человеком, который понимает его содержание.

このレポートには飲料水に関する重要な情報が記載されています。この英文を訳してもらうか、またはどなたか英語が分かる方にたずねてください。



WATER SOURCE

All but one of our 19 wells draw water from confined aquifers in basalt rock over 205 feet below the ground surface. Well 29, is in an industrial zone, is 135 feet deep, and draws from an alluvial aquifer that is composed of flood deposits. The City of Moses Lake wells have a pumping capacity of approximately 30 million gallons of water per day.

WATER USE EFFICIENCY

**In 2003** the State Legislature passed the Municipal Water Law, which directed the Department of Health (DOH) to adopt a rule that establishes Water Use Efficiency (WUE) requirements for all municipal water suppliers. Several components are included, including auditing for leakage, setting WUE goals, and submitting annual reports to the State DOH.

**In June 2010**, the City Council set a goal to reduce the average residential water usage by 2% before 2015. This goal focuses on customer water use and water savings. All users are encouraged to conserve water in their daily lives. In February 2016, the City Council reset the goal to continue to reduce the average annual consumption per residential connection by 2% by 2022.

**In 2020**, the City Council reviewed and approved recommendations in a water rate study carried out by the FCS Group. That study recommended a new use-based cost of service. City staff carried out a process in 2021 to review the new use-based cost of service and implemented new water and sewer rates in January 2022. The new use-based rates include fixed meter charges for all user classes and tiered rates for residential users which incentivize conservation and increase affordability.

CONTAMINANT INFORMATION

*Provided by the Environmental Protection Agency (EPA) 40 CFR Part 141*

The sources of drinking water (both tap 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, in some cases, radioactive material; and can pick up substances resulting from the presence of animals or from human activity.

CONTAMINANTS 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, and wildlife.

**INORGANIC CONTAMINANTS** such as salts and metals, which can occur naturally or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

**PESTICIDES & HERBICIDES** which may come from various sources such as agriculture, urban storm water 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 storm water runoff, and septic systems.

**RADIOACTIVE CONTAMINANTS** which can occur naturally or result from oil and gas production and mining activities.

CROSS-CONNECTION CONTROL

PROGRAM

City of Moses Lake's Cross-Connection Control Program (CCCCP)

The purpose of this ordinance, in conjunction with the current edition of the State of Washington Administrative Code (WAC) **246-290-490**, is to protect the public water system from contamination via cross-connections. Controlling and preventing cross-connections is accomplished by either removing the cross-connection or installing an approved backflow preventer.

An approved backflow preventer is required for the safety of the city water system. The Water Division shall ensure that cross-connections between the distribution system and a consumer's water system are eliminated or controlled by the installation of the appropriate backflow preventer in commensurate with the degree of hazard.

STEPS FOR SETTING UP A BACKFLOW ASSEMBLY TESTING ACCOUNT:

- Browse to this address:  
**moses-lake-permit-portal.azurewebsites.net**
- Register for a user account.
- Select Start New, Cross Connection Program, Choose Create Residential or Commercial.
- Enter your address in the Location field and select the magnifying glass.
- Select the Create button.
- Answer the questions in the Application Data Section and Save it.
- Additional instructions are in the Help Message tab.
- Select the Submit Permit button on the top right corner of the Overview section.
- Wait for the City to accept your application. You will receive an email notification when it has been accepted.
- Login to the Portal and Request an inspection by the City of Moses Lake Water Division from the Available Inspections section on the Home tab.

If you have any questions or concerns regarding the Cross-Connection Control Program please call me. Your cooperation in this matter is greatly appreciated and will help protect our public potable water supply.

**Shanda Creiglow**  
Water Quality Specialist  
screiglow@cityofml.com / 509-764-3953 **Office**

PUBLIC CITY COUNCIL MEETINGS

The public potable water system is owned and operated by the City of Moses Lake. Its direction is provided by the City Council through the City Manager. The City Council meets on the second and fourth Tuesday each month, at 6:00 p.m. in the Council Chambers in the Civic Center located at 401 S. Balsam. The public is encouraged to attend. Information for citizens to join remotely can be found on the posted agenda online **www.cityofml.com**.

CONTACT PHONE NUMBERS

Water Division . . . . .	509-764-3951
Building Department. . . . .	509-764-3756
City Manager . . . . .	509-764-3701
Water Billing Office . . . . .	509-764-3715
After Hours Water Emergencies. . . . .	509-762-1160
Grant County Building Department . . . . .	509-754-2011
WA State Department of Health . . . . .	509-329-2100
US EPA Safe Drinking Water Hotline . . . . .	800-426-4791
EPA's Website. . . . .	www.epa.gov/safewater
City of Moses Lake Website . . . . .	www.cityofml.com



WATER SERVICE ZONES & HARDNESS

The City of Moses Lake Water system is divided into **6 Service Zones**. The water in each zone is comprised of a combination of the wells in the zone. Hardness levels are listed by wells.

ZONE	LOCATION	WELLS	PPM
CENTRAL	Downtown, Peninsula & Westlake Areas	4, 7, 10, 19 & 31	16-117 ppm (1-7 gpg)
KNOLLS VISTA	Knolls Vista Area	3, 9, 14 & 33	54-90 ppm (3-5 gpg)
LAKEVIEW	Lakeview Terrace Area	11 & 12	208 ppm (1-12 gpg)
LARSON	Grant County Airport	21, 23, 24, 28 & 29	58-193 ppm (3-11 gpg)
MONTLAKE	Below Division Street	8	169 ppm (10 gpg)
WHEELER	Wheeler Corridor	17 & 18	16-166 ppm (1-10 gpg)

WATER HARDNESS RATING

*Hardness in ppm*

0 – 60 . . . . .	Soft	121 – 180 . . . . .	Hard
61 – 120 . . . . .	Moderately Hard	181 – Up . . . . .	Very Hard

FLUORIDE

*Secondary Maximum Contaminant Level Exceeded*

The City of Moses Lake Water System, I.D. 56300X, located in Grant County recently violated the Secondary Maximum Contaminant Level (SMCL) of 2 mg/L for fluoride in drinking water. Fluoride contamination is rarely due to human activity. Fluoride occurs naturally in some areas and can be found in high concentrations in the aquifer of our source water.

This is an alert about your drinking water and a cosmetic dental problem that might affect children under nine years of age. At low levels, fluoride can help prevent cavities, but children drinking water containing more than 2 milligrams per liter (mg/L) of fluoride may develop cosmetic discoloration of their permanent teeth (dental fluorosis). The drinking water provided by the City of Moses Lake has a natural fluoride concentration between no detection and 1.92 mg/L. Fluoride is not added to City water. All well tested are below 2.00 mg/L.

Dental fluorosis, in its moderate or severe forms, may result in a brown staining and/or pitting of the permanent teeth. This problem occurs only in developing teeth, before they erupt from the gums. Children under nine should be provided with alternative sources of drinking water or water that has been treated to remove the fluoride to avoid the possibility of staining and pitting of their permanent teeth. You may also want to contact your dentist about proper use by young children of fluoride-containing products. Older children and adults may safely drink the water.

Drinking water containing more than 4 mg/L of fluoride (the U.S. Environmental Protection Agency's drinking water standard) can increase your risk of developing bone disease. Your drinking water does not contain more than 4 mg/L of fluoride, but we're required to notify you when we discover that the fluoride levels in your drinking water exceed 2 mg/L because of this cosmetic dental problem.

Some home water treatment units are also available to remove fluoride from drinking water. To learn more about available home water treatment units, you may call NSF International at **1-877-8-NSF-HELP**.

At this time no action is required by the water users. We are continuing to monitor fluoride levels. We will inform you if they exceed the limit of 4 mg/L. For more information, please call the Water Division at 509-764-3951. This notice is being sent to you by the City of Moses Lake Water Division, in the Water Quality Report, being mailed in June or July 2023.

DRINKING WATER INFORMATION

To ensure that tap water is safe to drink, the Department of Health and EPA prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) and the Washington Department of Agriculture regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

NOTICE TO DRINKING WATER

CUSTOMERS

PFAS Detection


Drinking water samples collected from: City of Moses Lake, 56300X, Grant, Well 23, Well 24, Well 29, and Well 19 on March and April included detections.


In 2021, the Washington State Board of Health (SBOH) adopted a rule that requires our water system to test for a new class of contaminants not currently regulated by the Environmental Protection Agency (EPA). The rule also requires us to notify you if our results exceed a SAL.

What should you do?


**There is nothing required of you at this time.**


The Washington State Department of Health (DOH) recommends the following:

 If you are pregnant, breastfeeding, or mixing infant formula with tap water, use an alternative source for drinking or mixing infant formula or install home water treatment, such as reverse osmosis or an activated carbon filter, that is certified to lower the levels of PFAS in your water. Follow the manufacturer's maintenance and replacement recommendations.

 All consumers can learn about PFAS and the steps you can take to reduce your exposure to PFAS in drinking water, while your water system evaluates options. Visit the PFAS information page:

**www.doh.wa.gov/CommunityandEnvironment/Contaminants/PFAS** on the state's DOH website to help you become an informed citizen and participate in any local decisions.

 Do NOT boil your water to reduce PFAS. Boiling your water will not reduce PFAS levels.

 If you have specific health concerns, consult your healthcare provider.

THERMAL EXPANSION

The city installs check valves at the meter on most services. Consumers should be aware that the installation of a check valve results in a closed plumbing system within the premises. Provisions may have to be made by the owner to provide for thermal expansion within the closed system, such as the installation of an approved thermal expansion device.

PFAS Contaminant	Well 29	Well 23	Well 24	Well 19	Sal
	Detected Level — ppt*				
PFOA <i>perfluorooctanoic acid</i>	ND	ND	ND	ND	10
PFOS <i>perfluorooctane sulfonic acid</i>	4.53 ppt	9.00	3.4 ppt	ND	15
PFHxS <i>perfluorohexane sulfonic acid</i>	3.32 ppt	12.90	ND	7.5ppt	65
PFBS <i>perfluorobutane sulfonic acid</i>	ND	2.47	ND	ND	345
PFPeA <i>perfluoropentanoic acid</i>	ND	2.35	ND	ND	
PFPPa <i>perfluorohexanoic acid</i>	ND	3.39	ND	ND	

*\*ppt — parts per trillion or nanograms per liter*

What are the potential health effects?

**There are many different PFAS. We are still learning about their health effects in people.**

You can learn more at **atsdr.cdc.gov/pfas/index**.

What is a State Action Level (SAL)?

Washington State develops SALs to protect the health of drinking water consumers from contaminants that are not regulated federally. The PFAS SALs are public health goals for lifetime consumption of water. They also apply to water consumption by pregnant and breastfeeding persons and infants over shorter periods of time (months). If you have been drinking water over the SAL, it doesn't mean you will get sick or have health problems from this exposure. When tap water exceeds a SAL, the state department of health recommends that the water system take action to bring the level below the SALs for long term drinking.

What is being done?

- ☐ We are working with the Department of Health (DOH) to determine next steps.
- ☐ We will continue to update you about steps we take to resolve this problem.
- ☐ We will continue to test our water for PFAS, as required.

**Please share this notice with others who may drink this water**, especially those who may not have received this notice directly (for example, people in apartments and businesses). We encourage you to post it in a public place, share copies by hand, or mail.