# Consumer Confidence Report – 2024 Covering Calendar Year – 2023

WASHINGTON CO RWD #3 (NEW,#1)

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This report is a snapshot of the quality of the water that we provided last year. Included are the details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards. We are committed to providing you with information because informed customers are our best allies. If you would like to be actively involved in the decision-making processes that affect drinking water quality, please call WASHINGTON CO RWD #3 (NEW,#1) at 918-371-2055.

Your water comes from:

Source Name	Source Water Type	
CANEY RIVER	Surface Water	
OOLAGAH LAKE	Surface Water	

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those 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).

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).

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, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Please contact us to obtain more information about a source water assessment and its availability.

Contaminants that may be present in source water before we treat it include: <u>Microbial contaminants</u>, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, livestock operations and wildlife. <u>Inorganic contaminants</u>, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

<u>Pesticides and herbicides</u>, which may come from a variety of sources such as storm water run-off, agriculture, and residential users.

<u>Radioactive contaminants</u>, which can be naturally occurring or the result of mining activity.

<u>Organic contaminants</u>, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and also come from gas stations, urban storm water run-off, and septic systems.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limits the amount of certain contaminants in water provided by public water systems. We treat our water according to EPA's regulations. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Our water system is required to test a minimum of 30 samples per month in accordance with the Total Coliform Rule for microbiological contaminants.

Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public.

#### **Water Quality Data**

The following tables list all of the drinking water contaminants which were detected during the 2023 calendar year. The presence of these contaminants does not necessarily indicate the water poses a health risk. Unless noted, the data presented in this table is from the testing done January 1- December 31, 2023. The state requires us 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. Some of the data, though representative of the water quality, is more than one year old.

#### **Terms & Abbreviations**

<u>Maximum Contaminant Level Goal (MCLG)</u>: the "Goal" is the level of a contaminant in drinking water below which there is no known or expected risk to human health. MCLGs allow for a margin of safety.

<u>Maximum Contaminant Level (MCL)</u>: the "Maximum Allowed" MCL is 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.

<u>Secondary Maximum Contaminant Level (SMCL):</u> recommended level for a contaminant that is not regulated and has no MCL.

Action Level (AL): the concentration of a contaminant that, if exceeded, triggers treatment or other requirements.

<u>Treatment Technique (TT)</u>: a required process intended to reduce levels of a contaminant in drinking water.

<u>Maximum Residual Disinfectant Level (MRDL)</u>: 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.

Non-Detects (ND): lab analysis indicates that the contaminant is not present.

Parts per Million (ppm) or milligrams per liter (mg/l)

Parts per Billion (ppb) or micrograms per liter (µg/l)

Picocuries per Liter (pCi/L): a measure of the radioactivity in water.

Millirems per Year (mrem/yr): measure of radiation absorbed by the body.

Monitoring Period Average (MPA): An average of sample results obtained during a defined time frame, common examples of monitoring periods are monthly, quarterly and yearly.

Nephelometric Turbidity Unit (NTU): a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person. Turbidity is not regulated for groundwater systems.

Running Annual Average (RAA): an average of sample results obtained over the most current 12 months and used to determine compliance with MCLs.

<u>Locational Running Annual Average (LRAA):</u> Average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

Monitoring and Reporting (M/R): a violation for failure to conduct regular monitoring of drinking water quality or to submit monitoring results in a timely fashion.

Operational Evaluation Level (OEL): a report triggered by the disinfection by-products rule.

### Please Note: Because of sampling schedules, results may be older than 1 year

Regulated Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
BARIUM	8/24/2022	0.076	0.076	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
FLUORIDE	8/24/2022	0.2	0.2	ppm	4	4	Natural deposits; Water additive which promotes strong teeth.

Disinfection Byproducts	Monitoring Period	Highest RAA	Range (low/high)	Unit	MCL	MCLG	Typical Source
TOTAL HALOACETIC ACIDS (HAA5)	2023	35	16.2 - 43.7	ppb	60	0	By-product of drinking water disinfection
TTHM	2023	75	33.7 - 98.8	ppb	80	0	By-product of drinking water disinfection

Lead and Copper	Monitoring Period	90 <sup>th</sup> Percentile	Range (low/high)	Unit	AL	Sites Over AL	Typical Source
COPPER, FREE	2020 - 2022	0.72	0.042 - 1.5	ppm	1.3	1	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.
LEAD	2020 - 2022	0	0 - 16	ppb	15	1	Corrosion of household plumbing systems; Erosion of natural deposits.

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. Your water system 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 or at http://www.epa.gov/safewater/lead.

Chlorine/Chloramines Maximum Disinfection Level	MPA	MPA Units	RAA	RAA Units
10/01/2023 - 10/31/2023	2	MG/L	2	MG/L

Total Organic Carbon Lowest Month for Removal	Number of Samples	Actual Removal Ratio	Required Removal Ratio	Lowest Monthly Removal Ratio
10/1/2023 - 10/31/2023			1 RATIO	1.71

Radiological Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
COMBINED RADIUM (-226 & -228)	2/24/2021	1.042	1.042	pCi/L	5	0	Erosion of natural deposits
GROSS BETA PARTICLE ACTIVITY	2/24/2021	2.27	2.27	pCi/L	50	0	Decay of natural and man-made deposits

Secondary Contaminants-Non Health Based Contaminants-No Federal Maximum Contaminant Level (MCL) Established.	Collection Date	Highest Value	Range (low/high)	Unit	SMCL
SODIUM	10/11/2023	55.7	55.7	MG/L	

During the 2023 calendar year, we had the below noted violation(s) of drinking water regulations.

Compliance Period	Analyte	Comments
No Violations Occurred in the Calen	dar Year of 2023	

Additional Required Health Effects Language:

Some 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.

Water System	Туре	Category	Analyte	Compliance Period
No Violations Occurred in the Calenda	ar Year of 2023			

## 2023 Water Quality Data

This table shows data for samples collected during 2023 (unless otherwise noted). Analyses made by professionals after water treatment showed the levels of all contaminants found were much less than the maximum allowable levels established by the state and federal regulatory agencies.

#### \*Definitions:

AL = Action Level: The concentration of a contaminant which, if exceeded, triggers a treatment or other requirement 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 contaminant in drinking water below which there is no known or expected health risk.

MRDL = Maximum Residual Disinfectant Level: The highest level of disinfectant allowed in drinking water.

LRAA = Locational Running Annual Average: The average of the last 12 months or last 4 quarters for each monitoring location. Calculated RAA might include results from 2022.

NTU = Nephelometric Turbidity Unit

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

su = Standard Units

ppm: parts per million or milligrams per liter (mg/L)

ppb: parts per billion or micrograms per liter (ug/L)

CFU: Colony Forming Units

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

mrem= millirem: The unit of radiation dose,

"The U.S. Public Health Service recommended a fluoride concentration of 0.7 mg/L (parts per million [ppm]) to maintain dental cavity prevention benefits and reduce the risk of dental fluorosis. COT ordinances require the maximum content of fluoride to be no more than 0.7 ppm.

\*\*\* The MCL for beta particles is 4 mrem\*/year. EPA considers 50 pCi/L to be the level of concern for beta particles.

\*\*\*\* Calculated RAA includes the results from 2022. And the range reflects the results in 2023.

Regulated Contaminants	Unit	(MCLG*)	Highest Level Allowed (MCL*)	Our Tap Water	Compliance	Likely Source of Contaminants	
norganic Compounds		A A CONTRACT		<b>在国际企业工程的</b>			
Atrazine	ppb*	3	3	Highest Running Annual Average: 0.384****	Yes	Runoff from herbicide used on row crops.	
				Range detected: 0.312 - 0.353 Highest level: 0.061		Naturally present in the environment, drilling was	
Barium	ppm*	2	2	Range detected: 0.033 - 0.061	Yes	metal refineries.	
Chlorite	ppm	0.8	1	Highest level: 0.320	Yes	By-product of drinking water disinfection.	
	e.e	GRRV		Range detected: 0 - 0.320	1 NV212	Corrosion of household plumbing systems, erosic	
Copper	ppm	1.3	1.3 (AL*)	90th percentile = 0.390	Yes	of natural deposits, leaching from wood	
00000000			M675-519-500	0 sites above AL*		preservatives.  Erosion of natural deposits, water additive which	
Fluoride	ppm	4	4	Average detected: 0.69 **	Yes	promotes strong teeth, discharge from fertilizer as	
				Range detected: 0.38- 0.88		aluminum factories.	
Lead	ppb	0	15 (AL*)	90th percentile = 1.06  0 sites above AL*	Yes	Corrosion of household plumbing systems, erosion of natural deposits.	
			Nitrate=10 Nitrite=1	Highest level: 1.90		Naturally occurring, fertilizers, sewage treatmen	
Nitrate/Nitrite Total	ppm	10/1	Total =11	Range detected: 0 - 1.90	Yes	plants, leaching from septic tanks, erosion of natu deposits.	
Disinfection Residual	A COLUMN TO A	DE CAME	Total - 11	Nalige detected. 0 - 1.00		асроль.	
			4.0 (MRD) 1)	Highest Running Annual Average: 2.5	Yes	Water additive used to control microbes.	
Chloramine as Chlorine	ppm	4	4.0 (MRDL*)	Range detected: 1.6 - 3.1	res	yyatei addiuye used to control microbes.	
Disinfection By-Procucts							
Total Trihalomethanes	ppb	N/A	80 (LRAA*)	Highest Locational Running Annal Average (LRAA): 35	Yes	By-product of drinking water disinfection.	
				Range detected: 17 - 45  Highest Locational Running Annal Average (LRAA): 22****		*	
Haloacetic Acids	ppb	N/A	60 (LRAA*)	Range detected: 5.0 - 16	Yes	By-product of drinking water disinfection.	
Precursor Removal					in the second		
Total Organic Carbon	N/A	N/A	TT* = Ratio must be greater than or equal to	Running Annual Average 1.69	Yes	Naturally found in the environment.	
Total Organic Carbon	IVA	IVA	1.00 for compliance	Lowest Month for Removal: December 1.27	103	reading found in the characteristic	
Microbiological							
Coliform Bacteria	CFU*	0	Presence of Coliform bacteria in < 5% of	Month having the highest % positive: November	Yes	Naturally present in the environment.	
			samples	2 positive Coliform results in 218 samples: 0.92%			
Clarity				Lowest monthly % of samples with < 0.3 NTU: 100%		er til filler i hverbever et av jedges se til studio	
Turbidity	NTU*	N/A	TT*= less than 0.3 NTU 95 percent of the time.	Highest single reading: 0.13	Yes	Soil runoff.	
Radiological: Most recent tes	sting in De	cember 2022		riigitest sirigio reading. 0.13			
Gross Alpha	pCi/L*	0	15	< 3.00	Yes	Erosion of natural deposits.	
O10001 spila	Post					•	
	2.2	1 2	50 ***	<4.00	Yes	Decay of natural and man-made deposits.	
Gross Beta	pCi/L	0	19889				
Gross Beta Radium 226	pCi/L pCi/L	0	5 (Combined Total)	< 1.00	Yes	Erosion of natural deposits.	
100/2009 100/0000	E CONTRACTOR OF THE PARTY OF TH		5 (Combined Total)	< 1.00 < 1.00	Yes Yes	Erosion of natural deposits.  Erosion of natural deposits.	
Radium 226 Radium 228	pCVL.	0 0	commended Level			Erosion of natural deposits.	
Radium 226 Radium 228	pCVL.	0 0		<1.00		ALLOW AND THE PROPERTY OF THE	
Radium 226	pCVL.	0 0	commended Level	< 1.00  Average detected: 13.3		Erosion of natural deposits.	
Radium 226 Radium 228 Secondary Contaminants	pCi/L pCi/L	0 0	commended Level ealth Based Standards)	< 1.00 Average detected: 13.3 Range detected: 10.8 - 18.4		Erosion of natural deposits.  Likely Source of Contaminants  Naturally present, brine from oilfield operations.	
Radium 226 Radium 228 Secondary Contaminants	pCi/L pCi/L	0 0	commended Level ealth Based Standards)	< 1.00  Average detected: 13.3  Range detected: 10.8 - 18.4  Range detected: 7.5 - 8.6		Erosion of natural deposits.  Likely Source of Contaminants	
Radium 226 Radium 228 Secondary Contaminants Chloride	pCi/L pCi/L	0 0	commended Level ealth Based Standards)	< 1.00  Average detected: 13.3  Range detected: 10.8 - 18.4  Range detected: 7.5 - 8.6  Average detected: 23.3		Erosion of natural deposits.  Likely Source of Contaminants  Naturally present, brine from oilfield operations.  Measure of acidity. Naturally present, adjusted in	
Radium 226 Radium 228 Secondary Contaminants Chloride	pCi/L pCi/L ppm	0 0	commended Level alth Based Standards) 250 6.5 - 8.5	< 1.00  Average detected: 13.3  Range detected: 10.8 - 18.4  Range detected: 7.5 - 8.6		Erosion of natural deposits.  Likely Source of Contaminants  Naturally present, brine from oilfield operations.  Measure of acidity. Naturally present, adjusted in drinking water treatment.	
Radium 226 Radium 228 Secondary Contaminants Chloride pH Sulfate	pCi/L pCi/L ppm	0 0 Rec (Non-He	commended Level alth Based Standards) 250 6.5 - 8.5	< 1.00  Average detected: 13.3  Range detected: 10.8 - 18.4  Range detected: 7.5 - 8.6  Average detected: 23.3		Erosion of natural deposits.  Likely Source of Contaminants  Naturally present, brine from oilfield operations  Measure of acidity. Naturally present, adjusted drinking water treatment.	
Radium 226 Radium 228 Secondary Contaminants Chloride	pCVL pCi/L ppm su ppm	0 0 Ree (Non-He (Non-He Second rou Cryptosporic cannot guar the organisi include naus	commended Level alth Based Standards)  250  6.5 - 8.5  250  commended Level and of monitoring (over 48 mc furm is a microbial pathogen antee 100 percent removal. as are dead or if they are capsea, diarrhea, and abdominal of developing life-threatening life-threatening life-threatening	< 1.00  Average detected: 13.3  Range detected: 10.8 - 18.4  Range detected: 7.5 - 8.6  Average detected: 23.3	Yes  In source water removes cryptos ir rese cryptosportifithin a few week snauther to the company of the compa	Erosion of natural deposits.  Likely Source of Contaminants  Naturally present, brine from offield operations  Measure of acidity. Naturally present, adjusted i drinking water treatment.  Naturally present in the environment.  Likely Source of Contaminants  only and were not detected at levels of concern; poridium, the most commonly-used filtration methor Current test methods do not allow us to determinosis, an abdominal infection. Symptoms of infectios. However, immuno-compromised people are at regarding appropriate precautions to take to avoid	
Radium 226 Radium 228 Secondary Contaminants Chloride pH Sulfate Other Required Monitoring	pCVL pCi/L ppm su ppm	Rec Second rou Cryptosporic cannot guar the organism include naus greater risk tinfection. C	commended Level alth Based Standards)  250  6.5 - 8.5  250  commended Level and of monitoring (over 48 mc furm is a microbial pathogen antee 100 percent removal. as are dead or if they are capsea, diarrhea, and abdominal of developing life-threatening life-threatening life-threatening	Average detected: 13.3  Range detected: 10.8 - 18.4  Range detected: 7.5 - 8.6  Average detected: 2.3.3  Range detected: 4.61 - 55.3  Range detected: 4.61 - 55.3  Inth duration) was completed in 2017. Detections were found in surface water throughout the U.S. Although filtration our monitoring indicates the presence of these organisms in or able of eausing disease. Ingestion of cryptospridium may eau cramps. Most healthy individuals can overcome the disease we diness. We encourage immuno-compromised individuals to a fundamental middlesses.	Yes  In source water removes cryptos ir rese cryptosportifithin a few week snauther to the company of the compa	Erosion of natural deposits.  Likely Source of Contaminants  Naturally present, brine from oilfield operations  Measure of acidity. Naturally present, adjusted i drinking water treatment.  Naturally present in the environment.  Likely Source of Contaminants  only and were not detected at levels of concern; poridium, the most commonly-used filtration methor Current test methods do not allow us to determinosis, an abdominal infection. Symptoms of infections. However, immuno-compromised people are at regarding appropriate precautions to take to avo	