2019 Consumer Confidence Report for the City of Pullman Drinking Water System, Pullman WA

Dear Water Customers:

The City of Pullman Water Department is pleased to present a summary on the quality of the water provided to you during the past year. The federal Environmental Protection Agency Safe Drinking Water Act (SDWA) requires that utilities issue an annual "Consumer Confidence" report to customers in addition to other notices that may also be required by law. This report details where our water comes from, what it contains, and the risks that water testing and water treatment are designed to prevent. The City of Pullman is committed to providing you with a safe and reliable water supply. Informed customers are our best allies in maintaining safe drinking water.

The City of Pullman's drinking water meets or surpasses most federal and state drinking water standards. Call us for more information about the next opportunity for public participation in decisions about our drinking water, or find out more on the Internet at **http://www.pullman-wa.gov.**

Overview

In 2019, the City of Pullman Water Department pumped, treated, and distributed 917.9 million gallons of water. The average daily use per capita for the year was 88 gallons per person. The City also distributed free water conservation devices to the public. The City of Pullman is an active member of the Palouse Basin Aquifer Committee (PBAC) and, with the support of the citizens of Pullman, has made great strides in maintaining, protecting, and conserving the City's water supply. For more information on the mission of PBAC visit the PBAC website at **http://www.webs.uidaho.edu/pbac/**.

Water Source

The City of Pullman is supplied by groundwater pumped from five wells located throughout the city. The wells range in depth from 167 to 932 feet.

An Explanation of the Water Quality Data Table

The table displays the results of our water quality analyses. Every regulated contaminant that was detected in the water — even in the minutest trace — is listed here. The table contains the name of each substance, the highest level allowed by regulation; the ideal goals for public health, the amount detected, the usual sources of such contamination, footnotes explaining the findings, and a key to units of measurement.

Important Definitions

- **Maximum Contaminant Level (MCL):** 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.
- **Maximum Contaminant Level Goal (MCLG):** 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.
- **Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
- **Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.
- **Maximum Residual Disinfectant Level (MRDL):** 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.
- **Maximum Residual Disinfectant Level Goal (MRDLG):** 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.

EPA Primary Standards

Contaminant[1]	Date[2] Sampled	Range of[6] Detections	Unit	MCL	MCLG	Major Sources in Drinking Water	Violation
Barium	5/17/2019	0.0707 - 0.0836	mg/l	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.	No
Chlorine	12/30/2019	0 - 1.16	ppm	MRDL=4.0	MRDLG=4.0	Water additive to control microbes	No
Chromium (Total)	5/17/2019	0.0012 -	mg/l	0.1	0.1	Discharge from steel and pulp mills; erosion of natural deposits.	No
Copper[3]	9/30/2019	0.00249 - 0.229	mg/l	AL=1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits	No
Fluoride	12/5/2019	0.396 - 1.23	ppm	4.0	4.0	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories	No
Gross Alpha Radiation	10/18/2017	0.246 - 3.44	pCi/l	15	0	Erosion of natural deposits of certain mineral that are radioactive and may emit a form of radiation known as "alpha radiation".	No
Haloacetic Acids	9/30/2019	0.99 - 2	ug/l	60	n/a	Byproduct of drinking water disinfection	No
Lead[4]	9/30/2019	0.00103 -	mg/l	AL=0.015	AL=0.0	Corrosion of household plumbing systems; erosion of natural deposits	No
Nitrate as Nitrogen	7/9/2018	3.42 - 3.61	mg/l	10	10	Erosion of natural deposits; runoff from fertilizer use; leaching from septic tanks, sewage	No
Radium 228	10/18/2017	0.0321 - 0.631	pCi/l	5	0	Erosion of natural deposits	No
Total Trihalomethane	8/20/2018	1.33 - 5.83	ug/l	80	n/a	Byproduct of drinking water disinfection	No
Turbidity	5/17/2019	0.49 - 8.23	NTU	5	n/a	Soil runoff	Yes

EPA Secondary Standards

Contaminant[1]	Date[2] Sampled	Range of[6] Detections	Unit	MCL	MCLG	Major Sources in Drinking Water	Violation
Chloride	5/17/2019	4.88 - 8.56	mg/l	250		Erosion of natural deposits	No
Color	5/17/2019	10 - 15	color unit		15	Erosion of natural deposits	No
Copper[3]	9/30/2019	0.00249 - 0.229	mg/l	AL=1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits	No
Fluoride	12/5/2019	0.396 - 1.23	ppm	4.0	4.0	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories	No
Iron	5/17/2019	0.358 - 1.48	mg/l	0.3		Erosion of natural deposits	Yes[5]
Manganese	9/30/2019	0.0328 - 113	mg/l	0.05		Erosion of natural deposits	Yes[5]
Sulfate	5/17/2019	2.01 - 9.16	mg/l	250		Erosion of natural deposits	No
Total Dissolved Solids	5/17/2019	204 - 244	mg/l	500		Erosion of natrual deposits	No
Zinc	5/17/2019	0.00154 -	mg/l	5		Erosion of natural deposits	No

Unregulated Contaminants Monitoring Requirement[7]

Contaminant[1]	Date[2] Sampled	Range of[6] Detections	Unit	MCL	MCLG	Major Sources in Drinking Water	Violation
2-Methoxyethanol	9/30/2019	0.13	ug/l				N/A
2-Propen-l-ol (Allyl alcohol)	9/30/2019	0.17	ug/l				N/A
alpha-BHC	9/30/2019	0.0032	ug/l				N/A
Bromide	9/30/2019	30 - 33.2	ug/l				N/A
Bromochloroacetic Acid	9/30/2019	0.38 - 0.68	ug/l				N/A
Bromodichloroacetic Acid	9/30/2019	0.59 - 0.62	ug/l				N/A
Butylated Hydroxyanisole	9/30/2019	0.0096 - 0.0098	ug/l				N/A
Chlorodibromoacetic Acid	9/30/2019	0.45 - 0.48	ug/l				N/A
Chlorpyrifos	9/30/2019	0.0096 - 0.0097	ug/l				N/A
Chromium (Total)	5/17/2019	0.0012 -	mg/l	0.1	0.1	Discharge from steel and pulp mills; erosion of natural deposits.	No
Dibromoacetic Acid	9/30/2019 disinfection	0.5 - 0.6	ug/l			Byproduct of drinking water	No
Dichloroacetic Acid	9/30/2019	0.49 - 0.83	ug/l				N/A
Dimethipin	9/30/2019	0.064 - 0.065	ug/l				N/A
Ethoprop	9/30/2019	0.0096 - 0.0097	ug/l				N/A
Germanium	9/30/2019	0.2 - 0.32	ug/l				N/A
HAA9 Group	9/30/2019	2.5 - 3.7	ug/l				N/A
Haloacetic Acids	9/30/2019 disinfection	0.99 - 2	ug/l	60	n/a	Byproduct of drinking water	No
Manganese	9/30/2019	0.0328 - 113	mg/l	0.05		Erosion of natural deposits	Yes[5]
Merphos-Oxone	9/30/2019	0.022	ug/l				N/A
Monobromoacetic Acid	9/30/2019	0.1	ug/l				N/A
Monochloroacetic Acid	9/30/2019	0.67	ug/l				N/A
n-Butanol	9/30/2019	0.67	ug/l				N/A
O-Toluidine	9/30/2019	0.0022 - 78	ug/l				N/A
Oxyfluorfen	9/30/2019	0.016 - 0.017	ug/l				N/A
Permethrin	9/30/2019	0.012 - 0.013	ug/l				N/A
Profenofos	9/30/2019	0.096 - 0.097	ug/l				N/A
Quinoline	9/30/2019	0.0065	ug/l				N/A
Tebuconazole	9/30/2019	0.064 - 0.065	ug/l				N/A
Total Brominated HAAs	9/30/2019	2 - 2.3	ug/l				N/A
Total Organic Carbon	9/30/2019	500	ug/l				N/A
Tribromoacetic Acid	9/30/2019	0.67	ug/l				N/A

Required Additional Health Information

To ensure that tap water is safe to drink, EPA prescribes limits on the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water.

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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800) 426-4791).

Our drinking water is groundwater supplied by five underground wells. As water travels over the surface of or through the ground, it dissolves naturally occurring minerals and radioactive materials, and can pick up many substances produced by the presence of animals or human activity. Contaminants that may be present in source water include:

A. Inorganic contaminants, such as salts and metals, which can occur naturally or result from storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

B. Pesticides and herbicides, which may come from a variety of sources such as agriculture, storm water runoff, and residential uses.

C. Microbial contaminants such as viruses, parasites and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations or wildlife.

D. Radioactive contaminants which can occur naturally or result from oil and gas production and mining activities.

E. Organic chemical contaminants, including synthetic and volatile organics, which are by-products of industrial processes and petroleum production, and can also come from gas stations, storm water runoff and septic systems.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as cancer patients undergoing chemotherapy, those who have had organ transplants, those 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 are available from the Safe Drinking Water Hotline (800)-426-4791.

In Washington State, lead in drinking water comes primarily from materials and components used in household plumbing. The more time water has been sitting in pipes the more dissolved metals, such as lead, it may contain. Elevated levels of lead can cause serious health problems, especially in pregnant women and young children.

To help reduce potential exposure to lead: for any drinking water tap that has not been used for six hours or more, flush water through the tap until the water is noticeably colder before using for drinking or cooking. You can use the flushed water for watering plants, washing dishes or general cleaning. Only use water from the cold-water tap for drinking, cooking and especially for making baby formula. Hot water is likely to contain higher levels of lead. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water is available from EPA's Safe Drinking Water Hotline at 1-(800) 426-4791 or online at **http://www.epa.gov/safewater/lead**.

National Primary Drinking Water Regulation Compliance

Other Monitoring

The City of Pullman also tests for other substances and microscopic organisms that are sometimes found in water for which no standards have been set. The City has taken the initiative to monitor issues that concern the people in this area, even though the City is not required by law to do so. As part of the City's water quality report, it is important to point out that tests have been performed to detect the presence of herbicides and pesticides and no evidence of either has been found. The City of Pullman is active in protecting the community and will notify consumers immediately of any waterborne health threat.

The City of Pullman Water Department is available to answer any questions regarding water quality and supply. Please contact Art Garro at (509) 338-3238 for more information. Water Quality Data for community water systems throughout the United States is available on the World Wide Web at **http://www.waterdata.com**.

Unregulated Contaminants Monitoring Requirement[7] *Continued*

Contaminant[1]	Date[2] Sampled	Range of[6] Detections	Unit	MCL	MCLG	Major Sources in Drinking Water	Violation
Trichloroacetic Acid	9/30/2019	0.42 - 0.54	ug/l				N/A
2-Methoxyethanol	9/30/2019	0.13	ug/l				N/A
2-Propen-l-ol (Allyl alcohol)	9/30/2019	0.17	ug/l				N/A
alpha-BHC	9/30/2019	0.0032	ug/l				N/A
Bromide	9/30/2019	30 - 33.2	ug/l				N/A
Bromochloroacetic Acid	9/30/2019	0.38 - 0.68	ug/l				N/A
Bromodichloroacetic Acid	9/30/2019	0.59 - 0.62	ug/l				N/A
Butylated Hydroxyanisole	9/30/2019	0.0096 - 0.0098	ug/l				N/A
Chlorodibromoacetic Acid	9/30/2019	0.45 - 0.48	ug/l				N/A
Chlorpyrifos	9/30/2019	0.0096 - 0.0097	ug/l				N/A
Dibromoacetic Acid	9/30/2019	0.5 - 0.6	ug/l			Byproduct of drinking water disinfection	No
Dichloroacetic Acid	9/30/2019	0.49 - 0.83	ug/l				N/A
Dimethipin	9/30/2019	0.064 - 0.065	ug/l				N/A
Ethoprop	9/30/2019	0.0096 - 0.0097	ug/l				N/A
Germanium	9/30/2019	0.2 - 0.32	ug/l				N/A
HAA9 Group	9/30/2019	2.5 - 3.7	ug/l				N/A
Haloacetic Acids	9/30/2019	0.99 - 2	ug/l	60	n/a	Byproduct of drinking water	No
	disinfection						
Manganese	9/30/2019	0.0328 - 113	mg/l	0.05		Erosion of natural deposits	Yes[5]
Merphos-Oxone	9/30/2019	0.022	ug/l				N/A
Monobromoacetic Acid	9/30/2019	0.1	ug/l				N/A
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n-Butanol	9/30/2019	0.67	ug/l				N/A
O-Toluidine	9/30/2019	0.0022 - 78	ug/l				N/A
Oxyfluorfen	9/30/2019	0.016 - 0.017	ug/l				N/A
Permethrin	9/30/2019	0.012 - 0.013	ug/l				N/A
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Quinoline	9/30/2019	0.0065	ug/l				N/A
Tebuconazole	9/30/2019	0.064 - 0.065	ug/l				N/A
Total Brominated HAAs	9/30/2019	2 - 2.3	ug/l				N/A
Total Organic Carbon	9/30/2019	500	ug/l				N/A
Tribromoacetic Acid	9/30/2019	0.67	ug/l				N/A
Trichloroacetic Acid	9/30/2019	0.42 - 0.54	ug/l				N/A

Footnotes:

1. Only contaminants that were found in the drinking water are listed.
2. Some contaminants are not required to be sampled annually. Only the most recent sample date is listed.
3. The highest detection is reported as the 90th percentile sample. In 2019 a total of 32 samples were analyzed with 0 above the Action Limit
4. The highest detection is reported as the 90th percentile sample. In 2019 a total of 32 samples were analyzed with 0 above the Action Limit
5. Iron and manganese are not regulated by the EPA, however, the Washington State Department of Health has established a Secondary MCL for iron and manganese. Secondary MCLs are based on factors other than health effects. For these contaminants, aesthetic quality is the basis for the Secondary MCL. There are no requirements to treat or remove these contaminants from the drinking water.
6. The lowest to highest detected contaminant levels for any contaminant for samples taken between 1/1/2015 and 12/31/2019.
7. The fourth Unregulated Contaminant Monitoring Rule (UCMR 4) was published in the Federal Register on December 20, 2016. UCMR 4 requires monitoring for 30 chemical contaminants between 2018 and 2020 using analytical methods developed by EPA and consensus organizations. This monitoring provides a basis for future regulatory actions to protect public health.

Key:

ND = None Detected
ppb = parts per billion, or micrograms per liter (ug/L)
ppm = parts per million, or milligrams per liter (mg/L)
umhos/cm = micromhos per centimeter