

City of DuPont

DuPont, WA...A Rich History and a Vibrant Future



2016 Water Quality Report

Drinking Water Quality Annual Report

We are very pleased to present the 2016 Water Quality Report to our water system customers. Our constant goal is to provide you with a safe, dependable supply of drinking water. As part of our continued commitment to ensuring the quality of your water, we want to keep you informed about the drinking water and services we have delivered to you during the past year (January 1, 2016, through December 31, 2016). We are proud that your drinking water meets or exceeds all Federal and State requirements.

Your City's Water System

The City of DuPont (Water System ID 20500) currently uses groundwater from five (5) wells for its public water supply. The City's water supply wells are located at Bell Hill (3) and Hoffman Hill (2), as shown on the map to the right. Bell Hill Wells 1 and 3 draw water from the Red Salmon Springs Aquifer; Bell Hill Well 2 draws water from the deeper undifferentiated Outwash/Lakewood Glacier Aquifer. Hoffman Hill Wells 1 and 2 draw water from the Red Salmon Springs Aquifer. Additional booster pumps were placed into service in 2003 to provide adequate pressure to customers on Hoffman Hill. All City wells access deep aquifers, making them less susceptible to contaminants.



The City has two active storage reservoirs: A 3.0 million-gallon reservoir at Hoffman Hill, and a 1.0 million-gallon reservoir at Bell Hill. The only treatment used on DuPont's groundwater sources is the addition of small amounts of chlorine to provide disinfection.

Water Quality Protection Programs

The City of DuPont is committed to supplying its customers with high-quality and aesthetically-pleasing drinking water. The City has adopted the following practices to ensure that the drinking water provided meets or exceeds all federal and state standards.

- 1995 Washington State Department of Health Water Source Assessment. Our water system sources have a low susceptibility to potential sources of contamination. Additional information is on file at the Public Works Department and can be found online at www.doh.wa.gov/CommunityandEnvironment/DrinkingWater/SourceWaterProtection/Assessment.aspx.
- 2011 Water System Comprehensive Plan. The City prepared a comprehensive analysis of all aspects of the water system, identifying current and future plans to continue to provide high-quality drinking water to its customers. This plan, which includes a Water Conservation Program, has been approved by the Washington State Department of Health. A copy of the plan is on file at the Public Works Department.
- 2011 Wellhead Protection Program. The City is in the process of implementing a program that sets protective boundaries around the City's wells. This program will identify potential contamination sources around the wells and will provide notification of these sites to City residents.
- 2013 Washington State Department of Health Sanitary Survey. Overall operation and maintenance of the facilities are excellent. Improvements have been made to provide additional protection for the emergency wells and facilities. The full report is on file in the Public Works Department.
- Cross Connection Control Program. The City of DuPont is aggressively protecting our water supply from contamination with its "Cross Connection Control Program". It ensures that used or contaminated water does not re-enter the water system. This program assures that customers take proper precautions to prevent this from happening, by inspecting and testing backflow devices as well as assuring plumbing codes are properly followed. For DuPont water customers that are regulated by this program, we will contact you when backflow assembly tests and inspections are due. More detailed information is available by contacting the Public Works Department.

What is a Cross Connection?

A cross-connection is any temporary or permanent connection between a public water system or a consumer's potable (i.e., drinking) water system and any source or system containing non-potable water or other substances. An example is the piping between a public water system or potable water system and an auxiliary water system, cooling system, or irrigation system. The City welcomes input from its residents on methods to protect and conserve its water supply and can provide additional information

about ways you can help protect groundwater. Residents with input on water issues or this report may contact the DuPont Public Works Department at City Hall, 912-5381.

Water Quality Monitoring Requirements

The City of DuPont routinely monitors for contaminants in your drinking water as required by Federal and State laws. Some of the monitoring and sampling frequencies are shown below. The City is currently in compliance with all existing water quality monitoring requirements. The second table below shows the results of our monitoring for the period of January 1 to December 31, 2016, or from the last set when sampling occurred. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. It is important to remember that the presence of these contaminants does not necessarily pose 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 at 1-800-426-4791.

We are proud that your drinking water exceeds all Federal and State requirements. Through our monitoring and testing the EPA has determined that your water is **SAFE**.

Contaminant Type	Monitoring Requirements (1)
Bacteriological Contaminants	10 samples per month in the distribution system
Inorganic Chemicals	1 sample every three years at each well
Lead and Copper	30 samples every three years at selected residents' taps
Volatile Organic Chemicals	1 sample every three years at each well
Synthetic Organic Chemicals	The City currently has a monitoring waiver for synthetic organic chemicals because its previous sample recorded no detections. The normal monitoring period required is 1 sample every 3 years at each well.
Radionuclides	1 sample every 4 years at each well
Trihalomethanes	1 sample annually collected at the far end of the distribution system

(1) Increased monitoring is required for any chemicals detected above an "Action Level" or a "MCL."

Water Quality Data

Constituent	Highest Level Allowed (MCL)	Highest Level Detected	Ideal Goal (MGLG)	Regulation Met?	Potential Source of Contaminant	Location	Date
Regulated At The Groundwater Sources							
Arsenic*	0.01 ppm	0.005 ppm	0	Yes	natural deposits	Bell Hill Well #2	7/25/16
Manganese**	0.05 ppm	0.26 ppm	n/a	No	natural deposits	Bell Hill Well #2	10/07/16
Iron **	0.3 ppm	0.33 ppm	n/a	No	natural deposits	Bell Hill Well #2	10/07/16
Sodium***	n/a	8.0 ppm	n/a	Yes	natural deposits	Bell Hill Well #2	7/25/16
Barium	2.0 ppm	1.0 ppm	2.0 ppm	Yes	natural deposits	Bell Hill Well #3	7/25/16
Mercury	0.002 ppm	0.0003 ppm	0.002 ppm	Yes	natural deposits	Bell Hill Well #3	7/25/16
Nitrate	10 ppm	1.0 ppm	10 ppm	Yes	natural deposits	Hoffman Hill Well #1	10/10/16
Regulated At The Distribution System							
Total Trihalomethane	0.08 ppm	0.0018 ppm	n/a	Yes	By-product of disinfection	4301 Pioneer Ave.	7/25/16
Regulated At The Consumer's Tap							
Lead & Copper Required every 3 years	90% of taps Sampled must be below the Action Level						
Lead	0.015 ppm	0.008 ppm	0	Yes	Corrosion of household plumbing	32 Sites	2016
Copper	1.3 ppm	0.20 ppm	1.3 ppm	Yes	Corrosion of household plumbing	32 Sites	2016

* While our drinking water meets EPA's standard for arsenic, it does contain low levels of naturally occurring arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

** As iron & manganese has regularly exceeded the secondary MCL in Bell Hill Well #2, the City remedies this problem either by not using the well or by mixing the high manganese water with water from other wells to lower the concentration of manganese. Iron & manganese are monitored for aesthetic reasons and has no ill health effects associated with it.

*** Secondary Maximum Contaminant Level (SMCL): These standards are developed to protect the aesthetic qualities of drinking water and are not health based.

Note: Lead and Copper 90th Percentile: Out of every 10 samples, 9 were at or below this level. The table does not include the other 59 volatile organic chemicals and 55 synthetic organic chemicals we tested for — including many industrial chemicals, herbicides and pesticides — but did not find.

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.

Part per million (ppm): One part per million, or one milligram per liter (mg/L) corresponds to one penny in \$10,000, or one penny in a million pennies.

Secondary MCLs: MCLs based on factors other than health effects, such as taste and aesthetics.

MCLs are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, a person would generally have to drink 2 liters of water every day at the MCL level over their lifetime to have a one-in-a-million chance of having the described health effect.

General Health Effects Information



Groundwater-sourced drinking water travels through the ground, dissolving naturally occurring minerals, and it can pick up substances resulting from the presence of animals or human activity. To ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Contaminants that may be present include microbes, inorganic and organic chemicals, pesticides and herbicides, and radioactive materials.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, 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 health care providers. EPA and Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

The City of DuPont’s aquifer sources do not contain lead or copper. However, lead and copper can leach into residential water from building plumbing systems. Lead and copper monitoring is conducted at homes categorized as high risk. Compliance is determined on a regional basis. The City is in compliance with all Federal and State lead and copper monitoring requirements. We sampled 32 sites in 2016.

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 6 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 www.epa.gov/safewater/lead.

Thank you for allowing us to continue providing your household with clean, quality water. In order to maintain a safe and dependable water supply we are required to make periodic improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. We thank you for your continued support and understanding.

We at the City of DuPont Public Works Department work around the clock to provide top quality water to every household. We ask that all our customers help us protect our water sources, through individual stewardship and conservation.

Please contact the City of DuPont Public Works Department at 912-5381 or visit our website at www.dupontwa.gov if you have additional questions. We constantly monitor for various contaminants in the water supply to meet all regulatory requirements.

Where can I find out more information about my drinking water?

Additional questions or comments about the City’s water supply, or other general drinking water issues, can be directed to the following contacts:

City of DuPont	1700 Civic Drive, DuPont, WA 98327	(253) 912-5381
Environmental Protection Agency	Safe Drinking Water Hotline	(800) 426-4791
Washington State Department of Health	Northwest Drinking Water Operations 20425 72nd Ave. South, Building 2, Suite 310 Kent, WA 98032-2358	(253) 395-6750

How can I get more involved in decisions affecting my drinking water?

The DuPont City Council regularly meets at 7:00 PM at the DuPont City Hall on the second and fourth Tuesday of each month.

Is bottled water cleaner and safer than tap water?

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contamination 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 Environment Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

Who regulates bottled water?

The Federal Food and Drug Administration regulate contaminants in bottled water and is responsible for providing the same levels of public health protection.

Why is chlorine added to my water?

Pursuant to state and federal laws, very small amounts of chlorine are added to your water as a disinfecting agent to protect you from disease-causing microorganisms. If you are bothered by the chlorine taste, keep a pitcher of tap water in the refrigerator. The chlorine will dissipate rapidly if the water is allowed to sit for a time.

Is fluoride added to our drinking water?

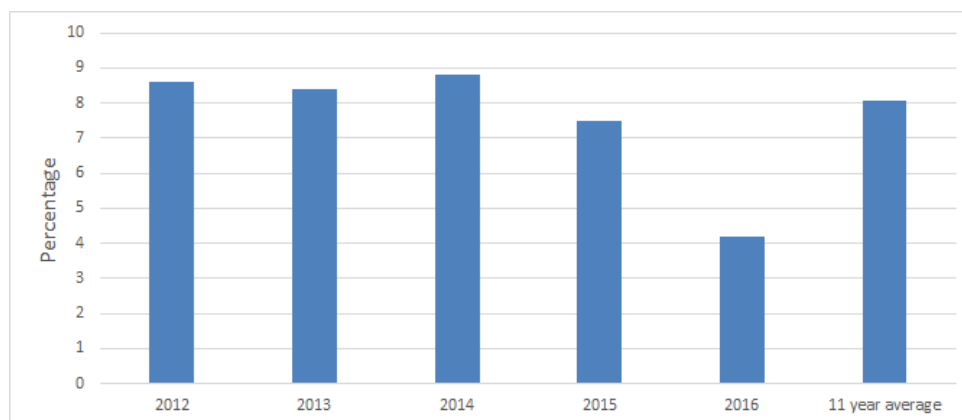
No, the City does not add fluoride to its drinking water supply.

Water Use Efficiency Performance Report

In 2003, the Washington State Legislature passed the Municipal Water Law to address the increasing demand on our state's water resources. The law established that all water suppliers must use water more efficiently to help them meet future demands. The State Department of Health has been directed to adopt an enforceable Water Use Efficiency (WUE) program intended to achieve a high level of stewardship among all water suppliers, contribute to long-term supply reliability and public health concerns, and ensure efficient operation and management of water systems. We are proud to report we have been implementing many of the new requirements. Below is a summary of our goals.

1. Water savings goals.
 - Unauthorized water use is less than 10% of water production
 - Leak detection and repair program is implemented
 - Public education efforts
 - Large area landscape management
2. Action steps for achieving goals.
 - Aggressively seek out unauthorized water use
 - Repair leaks once detected
 - Educate the public through newsletters, pamphlets, and the City's website
 - Implement landscape management through the use of a weather station and computer-controlled irrigation timing. This system has been in use for several years. As new parks come on line, they are incorporated into the management system.

The table below shows percentage of unauthorized withdrawals or unaccounted-for water.
Our goal is to have less than 10% unaccounted-for water



For information on water conservation, go to

<http://www.dupontwa.gov/index.aspx?nid=243>