



The Town of Wellington Continues to Meet State & Federal Health Standards

The U.S. Environmental Protection Agency (EPA) and the State of Colorado require all water agencies to produce an annual report on the previous year informing customers about the quality of their drinking water. The Annual Drinking Water Quality Report includes details about the origin of the Town water supply, what it contains, and how it compares to state standards.



Based on water quality monitoring data collected in 2018, the Town of Wellington's water met all state and federal drinking water health standards, which are the primary standards for treating and monitoring water. All state compliance testing was completed by a State of Colorado certified laboratory.

A Message from the Director

I am pleased to share the 2018 Drinking Water Quality Report. As your water purveyor, our top priority is to produce safe, high-quality drinking water for our residents.

To ensure we meet our goal, drinking water is routinely monitored for contaminants in accordance with federal and state regulations. We are pleased to present highlights of the 2018 Water Quality Report to you. The full report can be viewed in it's entirety at <https://www.colorado.gov/cdphe/ccr>, by clicking on "Draft Consumer Confidence Reports" and searching for "Wellington Town Of". The Public Water System Identification number is CO-0135838.

If you want additional information or have questions and/or comments, please contact The Water Treatment Plant Superintendent, Rich Fulton, at fultonrd@wellingtoncolorado.gov.

Sincerely,

Bob Gowing
Public Works Director



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How Can I Get More Involved?

Public Utility issues are often discussed at Town of Wellington Board meetings. The Town Board Meetings are held on the second and fourth Tuesday of each month at 7:30pm at the Leeper Center Board Room. The meetings can also be viewed on a live stream on the Town of Wellington's Facebook page. For more information on upcoming agenda items involving the Public Work's Department, visit <http://www.wellingtoncolorado.gov/AgendaCenter/Board-of-Trustees-3> for the current Board agenda.

WATER SUPPLY

WHAT'S IN MY WATER BEFORE IT'S TREATED?

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. Contaminants that may be present in source water include:

- **Microbial contaminants**, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- **Inorganic contaminants**, such as salts and metals, that can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- **Pesticides and herbicides** that may come from a variety of sources such as agriculture, urban storm water runoff and residential uses.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals that are byproducts of industrial processes and petroleum production and can also come from gas stations, urban storm water runoff, agricultural application and septic systems.
- **Radioactive contaminants** that can be naturally occurring or be the result of oil and gas production and mining activities.

IMPORTED WATER SUPPLY AND THE IMPACT ON WATER QUALITY

In 2018, water for the Town of Wellington customers was produced from two water sources using three unique treatment systems. The water sources include the primary source for the Water Treatment Plant, North Poudre Irrigation Reservoir #3, as well as a ground water well system. The North Poudre Irrigation Reservoir #3 is located Northwest of the Town, and it includes the conventional treatment, as well as the Micro-Filtration Unit. The Town owned wells which provide the water for the Nano-Filtration Unit are located on the Coal Creek alluvial. Once the well water is treated through the Nano-Filtration Unit, it is blended into the overall distribution system.

Total production totals for both sources are as follows:

- 297.4 million gallons were produced from North Poudre Reservoir #3 Conventional/Micro Filtration treatment plants
- 68.9 million gallons were produced from the well system through the Nano-Filtration Unit

General Information

All 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 (1-800-426-4791) or by visiting <http://water.epa.gov/drink/contaminants>. In order to ensure tap water is safe to drink, the Colorado Department of Public Health and Environment prescribes regulations limiting the amount of certain contaminants in water provided by public water systems.

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 who have undergone organ transplants, people with HIV-AIDS or other immune system disorder, some elderly, and infants can be particularly at risk of infections. These people should seek advice about drinking water from their health care providers. For more information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and microbiological contaminants call the EPA Safe Drinking Water Hotline. In order to ensure that tap water is safe to drink, the Colorado Department of Public Health and Environment prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protections for public health.

Lead in Drinking Water

If present, elevated levels of lead can cause serious health problems (especially for pregnant women and young children). It is possible that lead levels at your home may be higher than other homes in the community as a result of materials used in your home's plumbing. If you are concerned about lead in your water, you may wish to have your water tested. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 20 seconds to 2 minutes before using water for drinking or cooking. Additional information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the safe Drinking Water Hotline (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>.

Source Water Assessment and Protection (SWAP)

The Colorado Department of Public Health and Environment may have provided us with a Source Water Assessment Report for our water supply. For general information or to obtain a copy of the report please visit www.colorado.gov/cdphe/ccr. The report is located under "Guidance: Source Water Assessment Reports". Search the table using 135838, WELLINGTON TOWN OF. The Source Water Assessment Report provides a screening-level evaluation of potential contamination that could occur. It does not mean that the contamination has or will occur. We can use this information to evaluate the need to improve our current water treatment capabilities and prepare for future contamination threats. This can help us ensure that quality finished water is delivered to your homes. In addition, the source water assessment results provide a starting point for developing a source water protection plan. Potential sources of contamination in our source water area are listed on the next page.

Please contact us to learn more about what you can do to help protect your drinking water sources, any questions about the Drinking Water Quality Report, to learn more about our system, or to attend scheduled public meetings. We want you, our valued customers, to be informed about the services we provide and the quality water we deliver to you every day.

Our Water Sources

<u>Sources (Water Type - Source Type)</u>	<u>Potential Source(s) of Contamination</u>
WELL NO. 2 (Groundwater-Well) TOWN WELL NO 3 (Groundwater-Well) NORTH POUDBRE IRRIGATION COMPANY CANAL 2 (Surface Water-Intake) NORTH POUDBRE RESERVOIR 3 (Surface Water-Intake) WELL NO. 1 (Groundwater-Well)	There is no SWAP report, please contact us regarding potential sources of contamination.

Terms and Abbreviations

- **Maximum Contaminant Level (MCL)** – The highest level of a contaminant allowed in drinking water.
- **Treatment Technique (TT)** – A required process intended to reduce the level of a contaminant in drinking water.
- **Health-Based** – A violation of either a MCL or TT.
- **Non-Health-Based** – A violation that is not a MCL or TT.
- **Action Level (AL)** – The concentration of a contaminant which, if exceeded, triggers treatment and other regulatory requirements.
- **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 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.
- **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.
- **Violation (No Abbreviation)** – Failure to meet a Colorado Primary Drinking Water Regulation.
- **Formal Enforcement Action (No Abbreviation)** – Escalated action taken by the State (due to the risk to public health, or number or severity of violations) to bring a non-compliant water system back into compliance.

Terms and Abbreviations continued

- **Variance and Exemptions (V/E)** – Department permission not to meet a MCL or treatment technique under certain conditions.
- **Gross Alpha (No Abbreviation)** – Gross alpha particle activity compliance value. It includes radium-226, but excludes radon 222, and uranium.
- **Picocuries per liter (pCi/L)** – Measure of the radioactivity in water.
- **Nephelometric Turbidity Unit (NTU)** – Measure of the clarity or cloudiness of water. Turbidity in excess of 5 NTU is just noticeable to the typical person.
- **Compliance Value (No Abbreviation)** – Single or calculated value used to determine if regulatory contaminant level (e.g. MCL) is met. Examples of calculated values are the 90th Percentile, Running Annual Average (RAA) and Locational Running Annual Average (LRAA).
- **Average (x-bar)** – Typical value.
- **Range (R)** – Lowest value to the highest value.
- **Sample Size (n)** – Number or count of values (i.e. number of water samples collected).
- **Parts per million = Milligrams per liter (ppm = mg/L)** – One part per million corresponds to one minute in two years or a single penny in \$10,000.
- **Parts per billion = Micrograms per liter (ppb = ug/L)** – One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- **Not Applicable (N/A)** – Does not apply or not available.
- **Level 1 Assessment** – A study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.
- **Level 2 Assessment** – A very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

Detected Contaminants

WELLINGTON TOWN OF routinely monitors for contaminants in your drinking water according to Federal and State laws. The following table(s) show all detections found in the period of January 1 to December 31, 2018 unless otherwise noted. The State of Colorado 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, or the system is not considered vulnerable to this type of contamination. Therefore, some of our data, though representative, may be more than one year old. Violations and Formal Enforcement Actions, if any, are reported in the next section of this report.

Note: Only detected contaminants sampled within the last 5 years appear in this report. If no tables appear in this section then no contaminants were detected in the last round of monitoring.

Disinfectants Sampled in the Distribution System TT Requirement: At least 95% of samples per period (month or quarter) must be at least 0.2 ppm OR If sample size is less than 40 no more than 1 sample is below 0.2 ppm Typical Sources: Water additive used to control microbes						
Disinfectant Name	Time Period	Results	Number of Samples Below Level	Sample Size	TT Violation	MRDL
Chlorine	December, 2018	Lowest period percentage of samples meeting TT requirement: 100%	0	10	No	4.0 ppm

Lead and Copper Sampled in the Distribution System								
Contaminant Name	Time Period	90 th Percentile	Sample Size	Unit of Measure	90 th Percentile AL	Sample Sites Above AL	90 th Percentile AL Exceedance	Typical Sources
Copper	09/07/2018 to 09/20/2018	1.05	20	ppm	1.3	1	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead	09/07/2018 to 09/20/2018	8	20	ppb	15	2	No	Corrosion of household plumbing systems; Erosion of natural deposits

Disinfection Byproducts Sampled in the Distribution System									
Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Total Haloacetic Acids (HAA5)	2018	25.34	1.6 to 45.9	8	ppb	60	N/A	No	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHM)	2018	57.06	15.2 to 90.1	8	ppb	80	N/A	No	Byproduct of drinking water disinfection
Chlorite	2018	0.26	0 to 0.5	12	ppb	1.0	.8	No	Byproduct of drinking water disinfection

Total Organic Carbon (Disinfection Byproducts Precursor) Removal Ratio of Raw and Finished Water								
Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	TT Minimum Ratio	TT Violation	Typical Sources
Total Organic Carbon Ratio	2018	1.3	1.13 to 1.56	11	Ratio	1.00	No	Naturally present in the environment
*If minimum ratio not met and no violation identified then the system achieved compliance using alternative criteria.								

Disinfectants Sampled at the Entry Point to the Distribution System (<i>Chlorine/Chloramine Row is Optional, Chlorine Dioxide is Required</i>)						
Disinfectant Name	Year	Number of Samples Above or Below Level	Sample Size	TT/MRDL Requirement	TT/MRDL Violation	Typical Sources
Chlorine/Chloramine	2018	0	8452	TT = No more than 4 hours with a sample below 0.2 MG/L	No	Water additive used to control microbes
Chlorine Dioxide	2018	0	364	MRDL = 800 ppb	No	Water additive used to control microbes

Summary of Turbidity Sampled at the Entry Point to the Distribution System						
Contaminant Name	Sample Date	Level Found	TT Requirement	TT Violation	Typical Sources	
Turbidity	Date/Month: Feb	<u>Highest single</u> measurement: 0.453 NTU	Maximum 1 NTU for any single measurement	No	Soil Runoff	
Turbidity	Month: Dec	<u>Lowest monthly</u> percentage of samples meeting TT requirement for our technology: 100 %	In any month, at least 95% of samples must be less than 0.1 NTU	No	Soil Runoff	

Radionuclides Sampled at the Entry Point to the Distribution System

Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Gross Alpha	2015	0.98	0 to 1.96	2	pCi/L	15	0	No	Erosion of natural deposits
Combined Radium	2018	0.9	0.9 to 0.9	1	pCi/L	5	0	No	Erosion of natural deposits
Combined Uranium	2015	1	0 to 2	2	ppb	30	0	No	Erosion of natural deposits

Inorganic Contaminants Sampled at the Entry Point to the Distribution System									
Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Barium	2018	0.07	0.07 to 0.07	1	ppm	2	2	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride	2018	0.33	0.09 to 0.5	4	ppm	4	4	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate	2018	1.6	0.1 to 3.1	2	ppm	10	10	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

Synthetic Organic Contaminants Sampled at the Entry Point to the Distribution System									
Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Dalapon	2018	0.33	0 to 1.3	4	ppb	200	200	No	Runoff from herbicide used on rights of way

Cryptosporidium and Raw Source Water E. coli		
Contaminant Name	Year	Number of Positives
E. Coli	2018	11
		19

Secondary Contaminants**					
**Secondary standards are non-enforceable guidelines for contaminants that may cause cosmetic effects (such as skin, or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water.					
Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure
Sodium	2018	24	24 to 24	1	ppm
					N/A

Violations, Significant Deficiencies, Backflow/Cross-Connection, and Formal Enforcement Actions

Violations						
Name	Category	Time Period	Health Effects	Compliance Value	TT Level or MCL	
PUBLIC NOTICE	FAILURE TO NOTIFY THE PUBLIC - NON-HEALTH-BASED	03/31/2018 - 04/05/2018	N/A	N/A	N/A	N/A
DISINFECTION BYPRODUCTS	FAILURE TO MONITOR AND/OR REPORT - NON-HEALTH-BASED	04/01/2018 - 06/30/2018	N/A	N/A	N/A	N/A
CROSS CONNECTION RULE	FAILURE TO MEET CROSS CONNECTION/BACKFLOW REQUIREMENTS - NON-HEALTH-BASED - M613	02/28/2018 - 04/16/2018	N/A	N/A	N/A	N/A
CROSS CONNECTION RULE	FAILURE TO MEET CROSS CONNECTION/BACKFLOW REQUIREMENTS - HEALTH-BASED - M612	02/28/2018 - 04/16/2018	May pose a risk to public health.	N/A	N/A	N/A

Resolved Violation Information

Started gathering documentation and initiated new Surveys on March 12, 2018.
Alternative Survey Compliance Ratio Application completed and submitted on March 30, 2018.
Violations Public Notice and Certificate of Delivery on April 2, 2018.
Completed accurate Surveys for 2016 and 2017 in April 2018.
2016 and 2017 Backflow Reports completed and submitted on May 1, 2018.
Backflow Prevention and Cross Connection Control Program completed and submitted on May 8, 2018.
Alternative Survey Compliance Ratio Approved by CDPHE on August 31, 2018.
2018 Backflow Report completed and submitted on April 19, 2019.

In regards to the Disinfection Byproducts Violation, they were sampled in May versus the requirement of April