



2016 TOWN OF WELLINGTON ANNUAL WATER QUALITY REPORT

Esta es información importante. Si no la pueden leer, necesitan que alguien se la traduzca.

We are pleased to present to you a synopsis of the 2016 Water Quality Report. You can view this report in its entirety at <https://www.colorado.gov/cdphe/ccr>. Click on "Draft Consumer Confidence Reports (Water Quality Report)", scroll down to Wellington Town Of, click and open report. Public Water System Identification number CO-0135838

Our processes have produced a good quality drinking water throughout the Year of 2016. Any questions, comments or concerns may be directed to Mr. Mike Bean at (970) 690-0357 or (970) 568-3021. The opportunity for public participation in decisions affecting Wellington's water, is available at Town Board meetings. The Town Board meets the second and fourth Tuesday of each month at 7:30 pm at the Leeper Center. Copies of this pamphlet are available at the Town Hall, 3735 Cleveland Ave., from 8:00 am to 5:00 pm Monday through Friday.

Wellington's Water for the Calendar Year 2016

Wellington's water system had three violations during the calendar year of 2016. The time period between: 05/01/2016 - 10/04/2016, No Certified Operator for the Distribution System, this was resolved when the Operator renewed their license with the State of Colorado. The time periods between: 04/01/2016 - 06/30/2016 and 07/01/2016 - 09/30/2016; Monitoring, routine (DBP), Major non-health based violations. These violations did not pose any health risks to the citizens of Wellington. They have been resolved with follow up sampling procedures and protocols. Other than the three violations the Wellington Water System met all Federal and State standards for monitoring and reporting in 2016.

The Highest turbidity reading, (an indicator of how well the water has been filtered and or treated) was 0.178 NTU's in 2016. Our turbidity was continuously below the required 0.30 NTU's in 100% of samples. The average Hardness in 2016 was 229 mg/L. The average Alkalinity was 127.5 mg/L. All other water treatment parameters were equal to or below Federal, State and Local Government required analytical results. Bacteriological sampling was also conducted monthly, throughout our distribution system, a total of 10 samples were taken per month, all bacteriological testing was negative.

A complete explanation of The UCMR Rule including all Contaminants can be viewed at .

<http://water.epa.gov/lawsregs/rulesregs/sdwa/ucmr/ucmr3/index.cfm>.

<http://water.epa.gov/scitech/drinkingwater/dws/ccl/ccl3.cfm#chemical>

Current Status of Wellington's Water Treatment System

Water for the Town of Wellington Customers was produced from 2 water sources and 3 different treatment systems: The North Poudre Irrigation Reservoir #3 and a ground-water well system. Together total production was: 317.79 million gallons in 2016. Approximately 169 million gallons was produced at the Conventional Treatment Plant; 68 million gallons was produced at the same location through the Micro-Filtration unit and 80.790 million gallons was produced from our well system through the Towns Nano-Filtration unit.

Reservoir # 3 is located on the west side of County Road 11 between County Roads 66 and 68 and is the source water for the Main Plant. This reservoir is a run off reservoir and as such the Raw water quality is at times slightly undesirable, however the Conventional and Micro-Filtration Plants always produce a beautiful quality drinking water.

Town-owned wells are used for Raw water supplied to the Nano-Filtration unit, as well as for irrigation throughout some of the Towns park and recreation areas, to include the Middle School and Eyestone Elementary.

The Town wells are located on the Coal Creek alluvial. Well water is treated through the Nano-Filtration Unit producing an exceptionally high quality product., which is then blended into the Distribution System.

The Micro-Filtration and Nano-Filtration units, both employ membrane filtration technology the difference between them is the particle size removed from the source water.

EXPLANATION OF CONTAMINANTS AND THEIR PRESENCE IN DRINKING WATER

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk. 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 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 other microbiological contaminants, call the EPA Safe Drinking Water Hotline at 1-800-426-4791 or: www.epa.gov/safewater

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, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, or mining and 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, which are byproducts of industrial processes and petroleum production, and may also come from gas stations, urban storm water runoff, and septic systems.

> **Radioactive contaminants**, that can be naturally occurring or be the result of oil and gas production and mining activities.
In order 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. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

In the table on the back you may find terms and abbreviations you are not familiar with. In order to help you better understand these terms we have provided the following definitions:

Maximum contaminant level (MCL). - The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's 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. MCLG's allow for a margin of safety.

Secondary maximum contaminant level (SMCL) - non-mandatory standards set forth merely as guidelines for water systems

Treatment technique (TT) - A required process intended to reduce the level of a contaminant in drinking water.

Action level (AL) - The concentration of a contaminant which, if exceeded, triggers a treatment or other requirement which a water system must follow.

Nephelometric Turbidity Unit (NTU) - Nephelometric turbidity units is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Parts per million (ppm) - most common unit used in measuring the concentration of a contaminant in water. One milligram per liter of water (mg/l) is equal to one part per million.

Parts per billion (ppb) - Unit used in measuring low-level concentration of a contaminant in water. One microgram per liter of water (ug/l) is equal to one part per billion.

Running Annual Average (RAA) - Total Organic Carbon, Trihalomethane and Haloacetic acid compliance is determined using a running annual average

Picocuries per liter (pCi/L) - Picocuries per liter is a measure of the radioactivity in water.

Waiver - State permission not to test for a specific contaminant.

DBP- Disinfection Byproduct (organics plus chlorine)

TTHM- Total Trihalomethanes (an indicator DBP)

HAA- Haloacetic acids (an indicator DBP)

IDSE- Initial Distribution System Evaluation

Infants and young children are typically more vulnerable to lead in drinking water than the general population. 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 homes plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested. In addition you should flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline at (800) 426-4791.

Some people who drink water containing Trihalomethanes or Haloacetic acids 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.

Nitrates in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.

The State requires The Town of Wellington to monitor for certain contaminants less than once per year due to the fact that 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. Some of our data, though representative, may be more than one year old. All other data is from January 1, 2016 to December 31, 2016 unless otherwise noted. The Town has waivers on testing for cyanide, asbestos .

Microbiological Contaminants	MCL	MCLG	Level Detect-ed/Range	Unit	Meet the standard?	Sample Dates	Likely Sources
Total Coliform Bacteria	One positive monthly sample	0	Absent in 100% of samples	Absent or Present	Yes	Ten (10) Distribution Samples Per Month in 2016	Naturally present in the environment.
Turbidity	0.30 (TT)	N/A	0.178 Highest Read	NTU	Yes	Cont. Monitoring 2016	Soil Runoff
Lowest monthly percent of turbidity readings above the TT limits.	95%	100%	100%	Percentage	Yes	Cont. monitoring 2016	
Radiological	MCL	MCLG	Level Detect-ed/Range	Unit	Meet the standard?	Sample Dates	Likely Sources
Gross Alpha	15	0	0 - 1.96	pCi/L	Yes	2015	Erosion of natural deposits
Combined Uranium	30	0	0 - 2	ppb	Yes	2015	Erosion of natural deposits
Combined Radium	5	0	0.3 - 0.5	pCi/L	Yes	2016	Erosion of natural deposits
Lead and Copper	MCL	MCLG	90th percentile value	Unit	Meet the standard?	Sample Dates	Likely Sources
Lead	15 (AL)	1	5.7	ppb	Yes	07/2014 to 08/2014	Corrosion of household plumbing systems. Erosion of natural deposits.
Copper	1.3 (AL)	1.3	0.46	ppm	Yes	07/2014 to 08/2014	Corrosion of household plumbing systems. Erosion of natural deposits. Leaching from wood preservatives.
Inorganic Contaminants	MCL	MCLG	Level Detected	Unit	Meet the standard?	Sample Dates	Likely Sources
Fluoride - 006T –Nano	4.0	4.0	0.11	mg/L	Yes	10/21/2016	Erosion of natural deposits.,water additive which promotes strong teeth, Discharge from fertilizer and aluminum factories. Runoff from fertilizer use; leaching from septic tanks, sewage;
012 - Plant Finished	4.0	4.0	0 - 0.78	mg/L	Yes	10/12/2016	
Nitrates - 006T - Nano	10	10	3.2	mg/L	Yes	10/21/2016	
012 - Plant Finished	10	10	0 - 3.2	mg/L	Yes	10/12/2016	
Regulated Organics	MCL	MCLG	Level Detected Average (Range)	Unit	Meet the standard?	Sample Dates	Likely Sources
Chlorite EP1 Plant	1.0	0.80	0.25(0 - 0.65)	mg/L	Yes	Daily at entry point and one set of three quarterly in Distribution sites (2016)	By-product of micro-organism control
Distribution System Chlorine	1.0	0.80	0.55(0.2 - 0.68)	mg/L	Yes		Drinking water disinfection with chlorination (bacteriological control)
Chlorine	4.0	4.0	0.88(0.34 - 1.52)	mg/L	Yes		Continuous at entry point and in Distribution (2016)
Trihalomethanes	80	n/a	53.4(20.5 - 96)	ppb(RAA)	Yes	Two/sites/quarterly (2016)	By-product of drinking water disinfection with chlorination
Haloacetic acids	60	n/a	33.04(12.13 - 56.8)	ppb(RAA)	Yes	Two/sites/quarterly (2016)	By-product of drinking water disinfection with chlorination
Total Organic Carbon	Must be >1.0	n/a	1.17(0.97– 1.41)	Removal Ratio	Yes	One/month (2016)	Naturally occurring in environment; we use enhanced treatment to remove the required amount of natural organic material and have demonstrated compliance with alternative compliance criteria. Organics combined with chlorine
Unregulated Contaminants	SMCL	MCLG	Level Detected Range	Unit	Meet the standard?	Sample Dates	Likely Sources
Sodium	N/A	N/A	16.4	ppm	Yes	10/12/2016	Naturally present in environment
Barium	N/A	2	0.07	Ppm	Yes	10/12/2016	Discharge of drilling wastes, metal refineries, erosion of natural deposits
Chromium	N/A	100	2	Ppb	Yes	10/12/2016	Discharge from steel and pulp mills; erosion of natural deposits
Dalaphon	N/A	200	0 - 1.4	ppb	Yes	5/2016 - 10/2016	Runoff from Herbicide used in right of ways