



# 2013 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 this year's annual water quality report. Wellington's water for the year of 2013 was of good quality and significant improvements were made over last year. If you have any questions about this report you may contact Mike Bean at (970) 690-0357. 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 report are available at Town Hall, 3735 Cleveland Ave., from 8:00 am to 5:00 pm Monday through Friday. The Town of Wellington's Public Water System Identification Number is CO-0135838.

## Wellington's Water for Calendar Year 2013

Wellington's water system met all Federal and State standards for monitoring and reporting in 2013. The average turbidity, an indicator of how clean water is, was 0.02 NTU's in 2013. Turbidity was significantly below the required 0.30 NTU's in 95% of samples. 100% of all turbidity measurements were less than 0.30 NTUs. The Town finished an in-depth leak detection throughout the water distribution system and found no serious leaks. The Town made improvements to computerized control (SCADA). Raw water pumps at the Conventional plant were put on variable frequency drive controls. A water clarification aid pump was also added and tied to flow pacing for the Micro-Filtration Plant. A new Hach DR 6000 Spectrophotometer was added to the laboratory as well.

## Current Status of Wellington's Water Treatment System.

Water for the year was produced from 2 sources. Wellington # 3 Reservoir and a ground-water well system. Together total production was 234 million gallons in 2013. Approximately 89 million came from the conventional plant; 84 million from the Micro-filtration plant and 61 million gallons from the well system. Reservoir # 3 is located on the west side of County Road 11 between County Roads 66 and 68. This reservoir delivers a good quality raw water with one exception, hardness. Reservoir number #3 is primarily used for irrigation water. When water is flowing through the reservoir for irrigation (summer) the hardness of the water drops. Town-owned wells are used for potable supply as well as for irrigation purposes. Wells are located on the Coal Creek alluvial. Well water is treated through a Nano-Filtration Unit producing an exceptional high quality product.

A word about our SWAP (Source Water Assessment Protection report) - We now have a completed and revised assessment of our source water. The final version is available at: <http://www.colorado.gov/cs/Satellite/CDPIHE-WQ/CBON/1251596794156>

If you have questions or concerns about the SWAP report, please call the SWAP program at (303) 692-3592. 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.

## 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](http://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 home's 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 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. Some of our data, though representative, may be more than one year old. All other data is from January 1, 2013 to December 31, 2013 unless otherwise noted. The Town has waivers on testing for cyanide, asbestos and all unregulated inorganic contaminants.

Microbiological Contaminants	MCL	MCLG	Level Detected/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	Seven(7) Distribution Samples Per Month in 2013	Naturally present in the environment.
Turbidity	0.30 (TT)	N/A	0.02 Average 0.01-0.166 Range	NTU	Yes	Continuous Monitoring(2013)	Soil Runoff
Lowest monthly percent of turbidity readings above the TT limits	95%	100%	100%	Percentage	Yes	Continuous Monitoring(2013)	
Radiological Contaminants	MCL	MCLG	Level Detected/Range	Unit	Meet the standard?	Sample Dates	Likely Sources
Gross Alpha	15	0	2	pCi/L	Yes	2013	Erosion of natural deposits
Combined Uranium	30	0	1	pCi/L	Yes	2013	
Lead and Copper	MCL	MCLG	90th percentile value	Unit	Meet the standard?	Sample Dates	Likely Sources
Lead	15 (AL)	0	8	ppb	Yes	07/2011	Corrosion of household plumbing systems. Erosion of natural deposits
Copper	1.3 (AL)	1.3	0.657	ppm	Yes	07/2011	Corrosion of household plumbing systems. Erosion of natural deposits Leaching from wood preservatives.
Inorganic Contaminants	MCL	MCLG	Level Detected/Range	Unit	Meet the standard?	Sample Dates	Likely Sources
Fluoride	4.0	4.0	0.12	ppm	Yes	10/29/2013	Erosion of natural deposits, water additive which promotes strong teeth. Discharge from fertilizer and aluminum factories.
Nitrates	10	10	1.7	ppm	Yes	10/29/2013	Runoff from fertilizer use; leaching from septic tanks, sewage.
Regulated Organics	MCL	MCLG	Level Detected/ Average (Range)	Unit	Meet the standard?	Sample Dates	Likely Sources
Chlorite	1.0	0.80	0.34 (0-0.69)	ppm	Yes	Daily at entry point and once/quarter in Distribution sites(2013)	By-product of micro-organism control
Chlorine	4.0	4.0	0.72 (0.23-1.32)	ppm	Yes	Continuous at entry point and in Distribution(2013)	Drinking water chlorination (bacteriological control)
Trihalomethanes	80	n/a	61.92 (33.8 - 81.7)	ppb(RAA)	Yes	One/site/quarter(2013)	By-product of drinking water chlorination
Haloacetic acids	60	n/a	29.80 (6.7 - 47.5)	ppb(RAA)	Yes	One/site/quarter(2013)	By-product of drinking water chlorination
Total Organic Carbon	Must be >1.0	n/a	1.26	Rem. Ratio	Yes	One/month(2013)	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	20.8	ppm	Yes	10/29/2013	Naturally present in environment