

# 2016 WATER QUALITY REPORT



The City of Winters, population 7080 is served by 2056 water connections. Over 309 million gallons of water were supplied in 2016. The average per capita (person) per day use delivered was 118 gallons.

The City pumps drinking water from five wells into a single system. The wells draw from 2 aquifers at depths ranging from 158 feet to 630 feet. Winters has two wells with auxiliary power supplies, that are capable of supplying the entire system if necessary. The system operates at a pressure of 55 to 60 psi (pounds per square inch). The wells are able to respond independently and jointly to address pressure changes.

The goal of the City of Winters Public Works Department is to provide residents and all water users within the city with a safe and dependable drinking water supply. To this end, members of the department attend workshops and trainings which enhance their knowledge of our city's water system. Staff has taken the steps necessary to become Certified Water Distribution Operators, at levels ranging from D1 through D3.

City water is tested regularly for various minerals, chemicals and constituents in accordance with State and Federal regulations. Last year, as in years past, your tap water met all EPA and State drinking water health standards, with the exception of Hexavalent Chromium (Ch 6). Although our Ch 6 levels have remained the same, the Department of Drinking Water lowered the MCL in July 2014 from 50 ppb to 10 ppb. As a result the City is no longer in compliance with 4 of our 5 wells. The City is working on resolving this issue and expect to be fully compliant by 2020. The City has sent out special notifications regarding Ch 6 compliant efforts and will continue to do so twice a year.

This report presents results from water sampling conducted in the past year and includes State and Federal standards and definitions and explanations of possible contamination sources.

## WATER CONSERVATION TIPS

Current drought conditions bring attention to the importance of conserving water whenever and wherever possible. Here are a few suggestions.

### Conserving water inside your home:

- Fix leaking faucets, pipes, toilets, etc.
- Replace old fixtures; install water-saving devices in faucets, toilets and appliances.
- Wash only full loads of laundry.
- Take shorter showers.
- Turn off water while shaving and brushing teeth.
- Run the dishwasher only when full.

### Conserving water outdoors:

- Reduce your lawn area with drought tolerant plants
- Water the lawn and garden in the early morning or evening.
- Use mulch around plants and shrubs.
- Repair leaks in faucets and hoses.
- Use water-saving nozzles.
- Use water from a bucket to wash your car: Save the hose for rinsing.
- Adjust the timer on automatic sprinklers according to seasonal water demands and weather conditions.
- Make sure your sprinkler is placed so it waters only the landscape area and not the sidewalk, the lawn, not the pavement.
- Sweep and rake your driveway and sidewalks instead of hosing them down.

## Contact Us

For more information about this report or any questions related to drinking water issues please call Carol Scianna, Public Works, Environmental Service Manager at 794-6715 or via email [carol.scianna@cityofwinters.org](mailto:carol.scianna@cityofwinters.org).

## GENERAL DRINKING WATER

The source of drinking water (tap and bottled) include lakes, rivers, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves 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, agriculture livestock operations and wildlife.
- *Inorganic Contaminants* such as salts and metals that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil & gas production, mining or farming.
- *Pesticides and Herbicides* may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses.
- *Organic Chemical Contaminants* including synthetic and volatile organic chemical byproducts of industrial processes and petroleum production, gas stations, urban stormwater runoff and septic systems.
- *Radioactive Contaminants* which can be naturally-occurring or the result of oil & gas production and mining activities.

In order to ensure that tap water is safe to drink, USEPA and the Department of Drinking Water (DDW) prescribe regulations that limit the amount of certain contaminants in water provided by the public water systems. DDW regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

All drinking water (tap and bottled) may reasonably be expected to contain at least a small amount of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline at (800) 426-4791

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

## City of Winters Water Sampling Analysis Results

Sampling Dates: Quarterly 2016 ~ Title 22 June 9, 2016

### PRIMARY DRINKING WATER STANDARD

(Regulated in order to protect against possible adverse health effects.)

SUBSTANCE (units)	YEAR SAMPLED	MCL	PHG	AVERAGE	RANGE LOW-HIGH	TYPICAL SOURCE
Barium (ppb)	2016	1000	2	75	0-150	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Hexavalent Chromium –(ppb)	2016	10	2	16.5	2.4-30	Erosion of natural deposits
Nitrate (ppm)	2016	10	10	3.2	1.2-5.4	Runoff and leaching from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits (See "Nitrate Info" box for health information)
Fluoride (ppm)	2016	2	1	0.1	0--0.1	Erosion of natural deposits

**Tap water samples were collected for lead and copper analysis from 20 homes within service area-August 2014**

SUBSTANCE (UNITS)	ACTION LEVEL	PHG	AMOUNT DETECTED	AMOUNT DETECTED (90th %ile)	HOMES ABOVE ACTION LEVEL	TYPICAL SOURCE
Copper (ppp)	1.3	0.3	0.25	0.13	0	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppp)	15	2	ND	ND	0	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers, erosion of natural deposits.

### SECONDARY DRINKING WATER STANDARD

(Regulated in order to protect against the odor, taste and appearance of drinking water.)

SUBSTANCE (units)	YEAR SAMPLED	MCL	AVERAGE	RANGE LOW-HIGH	TYPICAL SOURCE
Chloride (ppm)	2016	500	14	11-17	Runoff/leaching from natural deposits; seawater influence
Sulfate (ppm)	2016	500	40.5	30-51	Runoff/Leaching from natural deposits
Specific Conductance us/cm)	2016	1600	625	500-750	Substances that form ions when in water; seawater influence
Total Dissolved Solids [TDS] (ppm)	2016	1000	355	270-440	Runoff/Leaching from natural deposits
Turbidity (NTU)	2016	5	.21	.11-.31	Soil Runoff

### DEFINITIONS

<b>AL</b> (Action Level)	Level above which water treatment or other regulatory requirements must be enacted by the water system operator.
<b>MCL</b> (Maximum Contaminant Level)	The highest level of a contaminate allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCGLs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste and appearance of drinking water.
<b>MRDL</b> Maximum Residual Disinfectant Level	The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of disinfectant is necessary for control of microbial contaminants.
<b>PHG</b> (Public Health Goal)	The level below which there is no known or expected health risk, Set by the CA EPA/ US EPA.
<b>NA</b>	Not Applicable
<b>ND</b>	Not detectable at testing limit
<b>NTU</b> (Nephelometric Turbidity Units)	The standard unit for turbidity measurements
<b>ppb</b>	parts per billion or micrograms per liter (ug/l)
<b>ppm</b>	parts per million or milligrams per liter (mg/l)
<b>pCi/L</b>	Picocuries per liter (a measure of radiation)
<b>Us/cm</b> (micromhos per centimeter)	A measure of electrical conductance.
<b>PDWS</b>	Primary Drinking Water Standard: MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

### COLIFORM BACTERIA SAMPLING RESULTS

NUM-BER OF SAMPLES	POSITIVE SAMPLES	MCL	PHG	VIOLA-TIONS	TYPICAL SOURCE
105	1	2 per month	0	0	Naturally present in the environment; human and animal waste

### UNREGULATED AND OTHER SUBSTANCES

SUBSTANCE (UNITS)	YEAR SAMPLED	AL	Average	RANGE LOW-HIGH
Calcium (ppm)	2016	N/A	50.5	33-68
Hardness (ppm)	2016	N/A	310	250-370
Magnesium (ppm)	2016	N/A	44.5	40-49
pH (units)	2016	N/A	8.0	7.9-8.1
Sodium (ppm)	2016	N/A	17.5	16-19
Total (ppm) Alkalinity	2016	N/A	250	200-300

#### NITRATE INFO

Nitrate in drinking water at levels above 45 ppm is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in serious illness; symptoms include shortness of breathe and blueness of the skin. Nitrate levels above 45 mg/L may also affect the ability of the blood to carry oxygen inn other individual, such as pregnant women and those with specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advise from your health care provider. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity.

#### SPECIAL HEALTH INFORMATION

Some people may be more vulnerable than others to contaminants in drinking water. Immuno-compromised persons such as persons undergoing cancer chemotherapy, persons who have undergone organ transplants, people with a 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. The USEPA/CDC (Centers for Disease Control) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available for the Safe Drinking Water Hotline.