

WINTERS WATER FACTS

The City of Winters, population 6,977, is served by 2025 water connections. Over 527 million gallons of water were supplied in 2009, the average per day use per connection was 713 gallons.

The city pumps drinking water from five wells into a single system. The wells are drawing from 2 aquifers at depths ranging from 158 feet to 480 feet. Our water is also partially supplied by Putah Creek underflow and Dry Creek drainage. One of the wells serves as a "backup" well, capable of supplying the entire system if necessary. In the event of a widespread or prolonged power outage, the City has two emergency generators to maintain the water system. 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.

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.

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 795-4910 ext. 115 or via email carol.scianna@cityofwinters.org.



2009 Water Quality Report

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

GENERAL DRINKING WATER INFORMATION

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 presences 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.
- *Pesticide and Herbicides* which 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 California Department of Health (CDPH) prescribe regulations that limit the amount of certain contaminants in water provided by the public water systems. DHS 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 small amounts 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

WATER CONSERVATION TIPS

Water conservation measures are an important first step in protecting our water supply. 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:

- 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 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 lawn, not the pavement.
- Sweep and mop your driveway and sidewalks instead of hosing them down.



City of Winters Water Sampling Analysis Results

Sampling Dates: Quarterly 2009~Title 22 June 09, 2009
 Analysis Completed: Quarterly and June 23, 2009

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 (ppm)	2009	1	2	.114	.069 -.16	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Chromium –Total (ppb)	2009	50	(100)	18	16-20	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
Fluoride (ppm)	2009	2	1	.19	.14 -.24	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Radium 228 (pCi/L)	2009	5	.019	.378	.278 - .450	Erosion of natural deposits
Nitrate (ppm)	2009	45	45	22.22	9-28	Runoff and leaching from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits <i>(See "Nitrate Info" box for health information)</i>
Selenium (ppb)	2009	50	(50)	2.30	2.20-2.40	Discharge from petroleum, glass, and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots
TTHMs [Total Trihalomethanes] (ppb)	2009	80	N/A	.65	ND - 1.3	Byproduct of drinking water disinfection

Tap water samples were collected for lead and copper analysis from 20 homes within service area-August 2008

SUBSTANCE (UNITS)	ACTION LEVEL	PHG	AMOUNT DETECTED	AMOUNT DETECTED (90th %ile)	HOMES ABOVE ACTION LEVEL	TYPICAL SOURCE
Copper (ppm)	1.3	0.3	0.17	0.17	0	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppm)	15	2	0.2	ND	0	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers, erosion of natural deposits.

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.

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)	2009	500	30	19-41	Runoff/leaching from natural deposits; seawater influence
Iron (ppm)	2009	300	ND	ND	Leaching from natural deposit; industrial discharges
Sulfate (ppm)	2009	500	28	24-32	Runoff/Leaching from natural deposits
Odor-Threshold (units)	2009	3	ND	ND	Leaching from natural deposits
Specific Conductance (us/cm)	2009	1600	665	430-900	Substances that form ions when in water; seawater influence
Total Dissolved Solids [TDS] (ppm)	2009	1000	375	240-510	Runoff/Leaching from natural deposits
Turbidity (NTU)	2009	5	.21	.14 -.28	Soil Runoff

UNREGULATED AND OTHER SUBSTANCES

SUBSTANCE (UNITS)	YEAR SAMPLED	AL	Average	RANGE LOW-HIGH
Calcium (ppm)	2009	N/A	425	28-56
Hardness (ppm)	2009	N/A	295	160-430
Magnesium (ppm)	2009	N/A	45.50	21-70
pH (units)	2009	N/A	8.15	8.10-8.20
Sodium (ppm)	2009	NA	26	26
Total (ppm) Alkalinity	2009	342	2800	160-400

Coliform Bacteria Sampling Results

NUMBER OF SAMPLES	POSITIVE SAMPLES	MCL	PHG	VIOLATIONS	TYPICAL SOURCE
115	1	2 per month	0	0	Naturally present in the environment; human and animal waste

Definitions

AL (Action Level)	Level above which water treatment or other regulatory requirements must be enacted by the water system operator.
MCL (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.
MRDL 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.
PHG (Public Health Goal)	The level below which there is no known or expected health risk, Set by the CA EPA/ US EPA.
NA	Not Applicable
ND	Not detectable at testing limit
NTU (Nephelometric Turbidity Units)	The standard unit for turbidity measurements
ppb	parts per billion or micrograms per liter (ug/l)
ppm	parts per million or milligrams per liter (mg/l)
pCi/L	Picocuries per liter (a measure of radiation)
Us/cm (micromhos per centimeter)	A measure of electrical conductance.