



Thurston County
Public Works Department
2404 A1 Heritage Ct. SW
Olympia, WA 98502

Drinking Water and Your Health



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. For more information about contaminants and potential health effects,

call the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

Some people, however, may be more vulnerable to contaminants in drinking water than the general population. 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 people, and infants can be particularly at risk of infections. These people should seek advice about drinking water from their health care providers.

EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are also available from the EPA hotline.

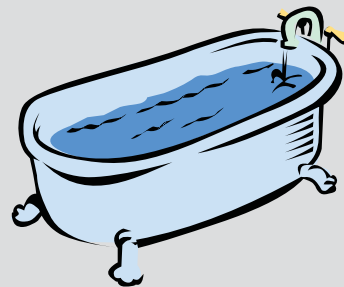
Indoor Drought Busters! 10 Tips to Conserve Your Water

Despite moderate to heavy rainfall this spring, the Northwest faces a serious threat of drought this summer and fall due to low snowpacks. As reported in the National Drought Mitigation Center's spring newsletter, "The Pacific Northwest and the Rocky Mountains are expected to see drought expand and intensify through the next several months."

Here are 10 simple actions you can take to conserve one of our most precious resources.

1. Wash full loads of laundry and dishes. You'll save time, energy and water—as much as 2,000 gallons a year.
2. Waiting for the shower to get hot? Collect the water while you wait. Use it to water plants or rinse vegetables.
3. When washing dishes by hand, turn the water off. Use one sink for washing and a second for rinsing.
4. Boiling eggs, steaming vegetables? Reuse the water. Plants love the nutrients in water used to steam broccoli, asparagus and other vegetables.
5. Don't pre-rinse dishes. Newer dishwashers don't require it.
6. Replace older faucet nozzles or aerators with new ones rated at two gallons per minute or less. Cost: a few dollars.
7. Turn the water off while shaving and brushing your teeth.
8. Got a pre-1994 toilet? Replace it and save up to 10,500 gallons of water and between \$50 and \$125 a year!
9. Install a water-saving showerhead that uses less than 2.5 gallons per minute. You'll save water and energy.
10. Time your showers for a week; then see if you can cut a minute off each shower.

Data courtesy of www.savingwater.org



It's Your Water!

**Thurston County
Water Quality Report
Grand Mound 2010**
#071580



If you are a Grand Mound property manager, please pass this on to your tenant or guest.
Thank you!

Supply and Treatment

The Grand Mound water source consists of two wells, each drilled in the Qva Aquifer approximately 2,200 feet apart. Well #1 is located just off 201st Avenue S.W. Well #2 is located off Tea Street.

The state Department of Health requires the Grand Mound water system, and many other water systems across Washington, to use chlorine to disinfect drinking water.

Trace amounts of sodium hydroxide are also added to balance the natural acidity of the ground water in Grand Mound. The sodium hydroxide reduces the possibility that copper and lead will dissolve into the water from household plumbing.

Dear Water Customer,

Thurston County is pleased to present this annual water quality report for the Grand Mound water system. This report provides detailed results from drinking water tests taken in 2009, and compares the results to federal and state standards.

Thurston County distributes monitoring results every year in accordance with the federal Safe Drinking Water Act and mandates by the Washington State Department of Health. Test results from 2010 will be reported in 2011.

We are proud to report that your water meets or exceeds all standards set for quality and safety. If you have questions about this report or your water utility, please call me at 754-2930 or e-mail petriema@co.thurston.wa.us.

Sincerely,

Mark Petrie

Summary of Results

State and federal laws set strict limits on the level of contaminants allowed in public water systems. We are proud to report your drinking water meets or exceeds all federal and state requirements. Although trace levels of nitrate, copper and lead were detected in 2009, the Environmental Protection Agency (EPA) has determined that your water is SAFE at these levels.

Water Quality Table

Most of the data in this report comes from tests taken January 1 through December 31, 2009. Some of the information is older, because certain contaminants are not tested every year.

The tables list only compounds that were detected. If you are interested in the compounds that were monitored but not detected, please call Mark Petrie, utility operations manager, at 754-2930.

Inorganic contaminants (2009 data)					
Contaminant	Violation Y/N	Level Detected	Allowed Level (MCL)	Ideal Goal (MCLG)	Likely Source of Contamination
Nitrate (as Nitrogen) Well #1	N	3.4 mg/l	10 mg/l	10 mg/l	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits
Nitrate (as Nitrogen) Well #2	Y	No sample pulled. See explanation next page.**	10 mg/l	10 mg/l	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits
Copper and lead (2009 data)					
Contaminant	Violation Y/N	Level Detected	Allowed Level (MCL)	Ideal Goal (MCLG)	Likely Source of Contamination
Copper	N	.053 mg/l	AL=1.3 mg/l	1.3 mg/l	Corrosion of household plumbing systems
Lead	N	.008 mg/l	AL=.015 mg/l	0 mg/l	Corrosion of household plumbing systems
Disinfection byproducts (2009 data)					
Contaminant	Violation Y/N	Level Detected	Allowed Level (MCL)	Ideal Goal (MCLG)	Likely Source of Contamination
Trihalomethanes	N	0.9 ug/l	80 ug/l	n/a	Disinfection byproduct

Definitions

Maximum contaminant level: The "maximum allowed" (MCL) is the highest level of a contaminant allowed in drinking water. MCLs are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink two liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Maximum contaminant level goal: The "goal" (MCLG) is 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.

Parts per million (ppm) or milligrams per liter (mg/l): One part per million corresponds to a single penny in \$10,000 or one minute in two years.

Micrograms per liter (ug/l): Micrograms per liter are equivalent to parts per billion (ppb). One part per billion corresponds to one second in 32 years.

Action level (AL): Action level (AL) refers to the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

How to Reach Us

If you have questions about this report or your water utility, please call Mark Petrie, utility operations manager, at 754-2930 or Denise Velthuysen, accounting assistant, at 709-3077. E-mail addresses are petriema@co.thurston.wa.us and velthud@co.thurston.wa.us. Information is also available at: www.co.thurston.wa.us/wwwm.

What We Look For in Your Water



◆ **Inorganic contaminants**, which are non-carbon based compounds such as metals, nitrates and asbestos. These contaminants are naturally occurring in some water, but can get into water through farming, chemical manufacturing, and other human activities. Nitrates are tested every year, however, most other inorganic contaminants are tested every four years according to a mandated timetable.

◆ **Copper and lead** can leach into residential water from building plumbing that contains copper plumbing, lead-based solder, brass fixtures, or some types of zinc coatings used on galvanized pipes and fittings. Test results are summarized on page 2.

◆ **Microbiological contaminants**, which include viruses and bacteria. These contaminants may come from wastewater treatment plants, septic systems, agricultural livestock operations and wildlife. Of the 24 bacteria samples taken in the Grand Mound distribution system in 2009, none came back positive.

◆ **Synthetic organic chemicals** include pesticides and herbicides, and they may come from agriculture, urban stormwater and residential uses. The latest test results from 2007 showed no detections.

◆ **Organic chemical contaminants**, including synthetic and volatile organic chemicals, are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems. No organic chemicals were detected in 2008. The last year tests were conducted.

◆ **Radionuclides** are radioactive compounds that can occur naturally or result from oil and gas production. The Grand Mound water system is tested for Radium 228. The test results from 2009 show no detections.

◆ **Disinfection byproducts** form when chlorine or other disinfectants used to treat drinking water react with naturally occurring materials in the water. The Grand Mound water system samples for disinfection byproducts in locations throughout the water distribution system. See page 2 for test results.



Explanation of Violation

We, Thurston County Grand Mound Water System, I.D. 071580, located in Thurston County, are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During 2009, we did not monitor or test for nitrate, and therefore cannot be sure of the quality of your drinking water during that time.

Although we did not sample for nitrates from Well #2 in 2009, the utility did sample for nitrates from Well #1. Those results came back below the allowable level as seen in the Water Quality Table on page 2. The oversight was an administrative error, and the utility wants to ensure our customers we have followed up with the Department of Health to sample Well #2 in 2010. The results from both Well #1 and Well #2 have come back below the MCL (allowed level).

Explicación de Infracción

Nosotros, el Sistema de Acueductos de Grand Mound y del Condado de Thurston, con identificación 071580, ubicado en el Condado de Thurston, tenemos la responsabilidad de vigilar regularmente su agua potable, para detectar la presencia de ciertos contaminantes específicos. Los resultados de esta vigilancia regular indican si su agua potable cumple o no con las normas sanitarias. Durante el año 2009, no vigilamos los nitratos ni hicimos la prueba de detección de nitratos; así que no podemos estar seguros de la calidad de su agua potable durante ese período.

Aunque no tomamos muestras para detectar nitratos en el Pozo N.º 2 en 2009, el servicio público sí sacó muestras para detectar nitratos del Pozo N.º 1. Estos resultados salieron por debajo del nivel permitido, como se puede ver en la "Tabla de calidad del agua" en la página 2. Este lapso fue un error administrativo y el servicio público quiere asegurar a nuestros clientes que hicimos los arreglos necesarios con el Departamento de Salud para tomar muestras del Pozo N.º 2 en 2010. Los resultados recibidos, tanto del Pozo N.º 1 como del Pozo N.º 2, salieron por debajo del nivel permitido (MCL, nivel máximo de contaminación).

Para nuestros clientes hispanohablantes: Este informe resume los resultados de los análisis hechos al agua potable durante el 2009. Los resultados demostraron que su agua potable cumplió con todas las normas de seguridad estatales y federales. En cumplimiento con los requisitos en materia de informes, los resultados para 2010 serán enviados por correo en 2011.