



2013 WATER QUALITY REPORT

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Billing Rate: \$0.20/100 Gallons
2013 Gallons Produced

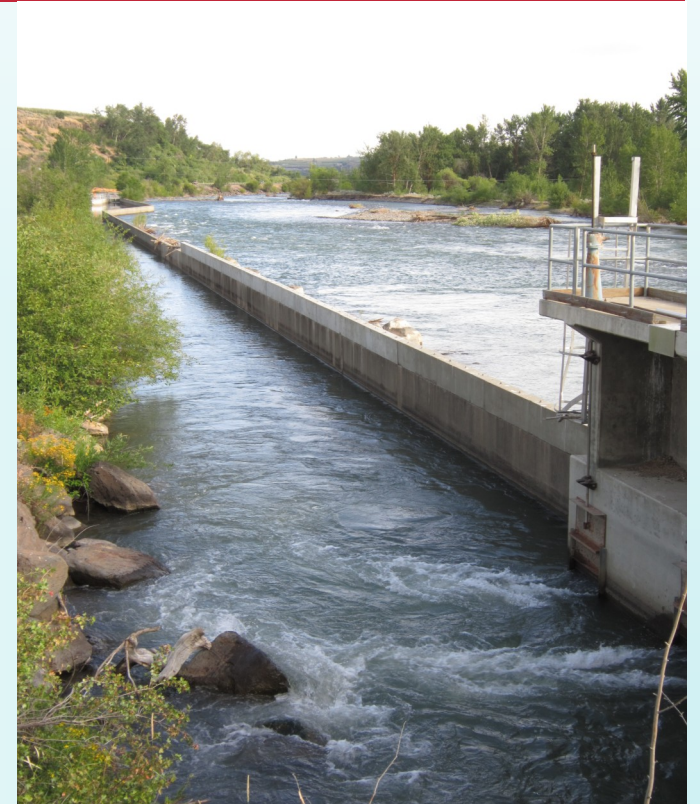
Naches River WTP	2.4 Billion
Airport Well	225 Million
Kissel Well	253 Million
Kiwanis Well	257 Million
Gardner Well	659 Million

Naches River Water Treatment Plant

The City of Yakima is pleased once again to present for you our annual report of water quality. In addition to disclosing the results of our major testing programs, we hope this letter will inform you about your tap water and inspire confidence that the water we all rely on is of the highest quality possible. In pursuit of that goal the Water and Irrigation Division staff is committed to around-the-clock vigilance and service, and we are proud to announce that your tap water meets and exceeds all state and federal requirements.

WHERE YOUR WATER COMES FROM

The Naches River supplies most of Yakima's drinking water. Our diversion is located along Hwy 12 and supplies the Naches River Water Treatment Plant at Rowe Hill. After treatment, water flows by gravity along the highway into town. During times of heavy runoff or when the Plant requires downtime maintenance, we can draw upon our 4 wells. They are located at Kiwanis Park, Kissel Park, Gardner Park, and Yakima Airport. These wells draw from the Ellensburg Aquifer and are also tested regularly.





Every year we take hundreds of samples and analyze them for disinfection byproducts, synthetic and volatile organics, biological, radiological, and inorganic contaminants. The tables below show the most important and frequently requested results for 2013. If you have any questions about these tests or if you would like to know about a substance not listed here you can call the Water Quality Specialist at 509-576-6477.

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. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

Microbial Contaminants

Each year 840 samples from the distribution system are collected and analyzed to comply with the Total Coliform Rule (TCR). Coliforms are environmentally ubiquitous bacteria that live in the ground. The presence of coliforms in the water may indicate a leak, a cross-connection, or other problems.

Name	Units	MCL	MCLG	Number detected	Range low/high	Violation?
Total Coliform	Sample	<5%	0	0.12%*	0—100%	No

* The 0.12% detected indicates that one sample of 840 was positive. Repeat and upstream/downstream sampling were all negative.

Disinfection and Disinfection Byproducts

Disinfection Byproducts (DBP's) are formed when the chlorine added as a disinfectant combines with the naturally occurring organic matter (NOM) to form potentially harmful compounds. These compounds are divided into two main groups: Trihalomethanes (THM's) and Haloacetic Acids (HAA5's.)

Name	Units	MCL / MRDL	Range	2013 Average	Violation?
Chlorine	mg/L	4.0	0.06—1.64	0.84	No
TTHM's	ppb	80	0.0—69.0	28.5	No
HAA5's	ppb	60	0.0—53.9	18.3	No

Turbidity

Turbidity is a measure of the "cloudiness" of water. High turbidity can indicate poor water quality. Sources of turbidity are generally attributed to soil runoff caused by heavy rain or snowmelt.

Name	Units	MCL	2013 Average	Range low/high	Violation?
Turbidity	NTU	TT	0.03	0.01—0.08	No

Glossary for Tables

< = less than

MCL = Maximum Contaminant Level, the highest level of a contaminant allowed in drinking water.

MCLG = Maximum Contaminant Level Goal, the level of contaminant below which there is no known or expected health risk.

mg/L = milligrams per liter. Equal to ppm.

MRDL = Maximum Residual Disinfectant Level, the highest level of a disinfectant allowed in drinking water.

MRDLG = Maximum Residual Disinfectant Level Goal, the level of drinking water disinfectant below which there is no known or expected health risk.

NTU = Nephelometric Turbidity Unit.

ppm = part per million

ppb = part per billion

TT = Treatment Technique, a required process intended to reduce the level of a contaminant.

Fluoride

Fluoride is added to drinking water to improve dental health. Fluoridation in Yakima began in 2004 after a referendum vote in 2001. For more information about water system fluoridation, please visit the DOH website: http://www.doh.wa.gov/Portals/1/Documents/Pubs/160-021_Fluoridate_Facts.pdf

Name	Units	MCL	MCLG	2013 Average	Range	Violation?
Fluoride	ppm	4.0	2.0	0.92	0.77—1.22	No

Primary Standards

National Primary Drinking Water Regulation primary standards are legally enforceable standards that apply to public water systems. There are more primary standards not included here because they were present in undetectable amounts.

Name	Units	MCL	MCLG	Amount detected	Violation?	Source
Arsenic	ppm	0.01	0	0.00022	No	Erosion of natural deposits, industrial waste.
Barium	ppm	2	2	0.00212	No	Erosion of natural deposits, industrial waste.
Chromium	ppm	0.1	0.1	<0.0001	No	Erosion of natural deposits, industrial waste.
Nitrate	ppm	10	10	<0.07	No	Erosion of natural deposits, fertilizer runoff, sewage, and faulty septic systems.
Nitrite	ppm	1	1	<0.07	No	Erosion of natural deposits, fertilizer runoff, sewage, and faulty septic systems.
Thallium	ppm	0.0005	0.002	0.00013	No	Industrial waste.

Lead and Copper

Lead and copper are specially regulated contaminants under the Lead and Copper Rule, however lead is also a primary regulated substance. They are included here as an inorganic environmental contaminant from the WTP, and not as the results of our tri-annual Lead and Copper testing program.

Name	Units	MCL	MCLG	Amount detected	Violation?
Lead	mg/L	0.015	0	< 0.0001	No
Copper	mg/L	1.3	0	0.000064	No

Secondary Standards

Secondary standards are non-enforceable guidelines regulating contaminants that may have cosmetic or aesthetic effects, such as taste, odor, or staining. Substances listed here that do not have an MCL are presented by popular request.

Name	Units	MCL	Amount detected	Name	Units	MCL	Amount Detected
Calcium	mg/L	—	8.29	Manganese	mg/L	0.05	<0.0001
Color	mg/L	15	< 4	Sodium	mg/L	250	2.2
Iron	mg/L	0.3	<0.0097	Sulfate	mg/L	—	6.91
Magnesium	mg/L	—	1.52	Zinc	mg/L	5	0.00066

Questions, Comments, Concerns?

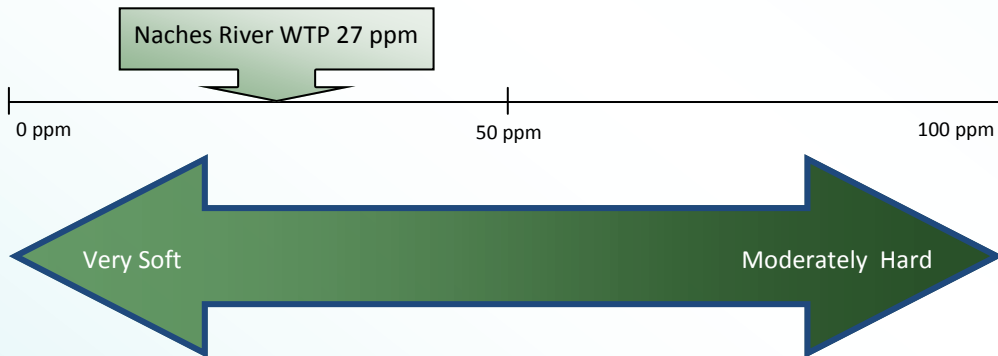
The City of Yakima welcomes your input! The City Council meets on the first and third Tuesday of each month at City Hall Council Chambers. You are encouraged to attend. If you would like to schedule a tour of the Naches River Water Treatment Plant, please call 575-6177. If you would like to talk about this report please call 576-6477.

About Lead in Drinking Water

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Yakima is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure to lead by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (800) 426-4791, or <http://www.epa.gov/safewater/lead>.

How Hard Is My Water?

Hardness is a term used to describe water when substantial amounts of Magnesium and Calcium are present. These nontoxic minerals can leave behind deposits on basins and fixtures called water spots, and hard water does not dissolve soap as readily as softer water so lather and suds are more difficult to produce.



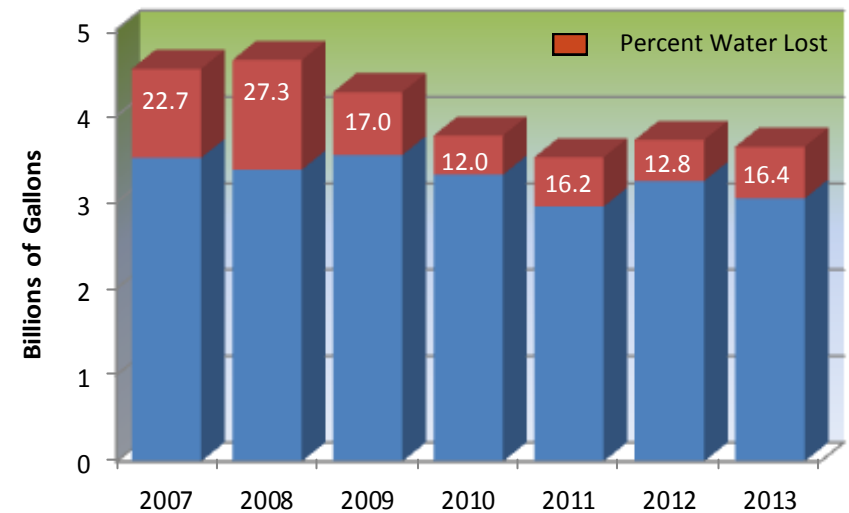
What can you do to conserve water ?

The most effective method to conserve water is to fix any leaks around the home. Did you know:

- According to the American Water Works Association (AWWA), the average American household uses 180-250 gallons of water each day and loses 14 percent of that to leakage.
- The average household's leaks can account for more than 10,000 gallons of water wasted every year, or the amount of water needed to wash 270 loads of laundry.
- A leaky faucet that drips at the rate of one drip per second can waste more than 3,000 gallons per year. That's the amount of water needed to take more than 180 showers.
- Common types of leaks found in the home include worn toilet flappers, dripping faucets, and other leaking valves. Fixing easily corrected household water leaks can save homeowners about 10 percent on their water bills.

Water and Health

Some people may be more vulnerable to certain chemical compounds and substances 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, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA and the Center for Disease Control guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the **Safe Drinking Water Hotline (800-426-4791)**.



Improving Efficiency

Since 2007 all water agencies across the state have been required to determine how much water is lost and to make improvements in order to conserve our precious resources. As you can see, we have made significant strides in our efforts to contain losses, and we are working hard toward our goal. With the installation of Automated Meter Reading, or AMR, we are confident that measurement accuracy will take us past our target of less than 10% water unaccounted for.

In order to comply with regulations and to keep up with ever-improving technological standards, the Naches River Water Treatment Plant began an overhaul of its backwash lagoon, electrical service and distribution system, and the SCADA system. This 3.4 million dollar project began in October 2013 and will finish in May 2014.



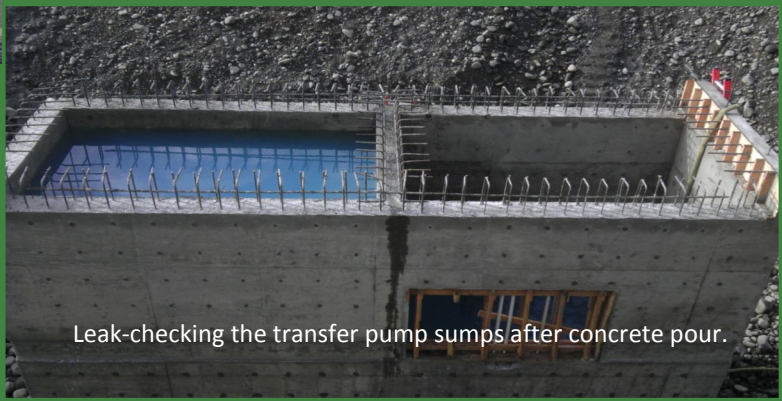
Forming and rebar of the backwash lagoons. Over 2,500 cubic yards of concrete were poured.



Forming up the walls of the transfer pump building sumps.



Core drilling the WTP for backwash waste lines.



Leak-checking the transfer pump sumps after concrete pour.



Excavation of new 42 inch waste line, the old sump, and grade checking the elevations for the new sump. The large red shorebox was used to prevent undermining the filter building foundation.



Northernmost lagoon fully wetted with transfer pump building in background.