

Tap Water

It's Cool!

Delivered at a refreshing 56 degrees, the water that falls from your faucet is also cheap, clean, and to most of the world, a *bona fide* miracle.

Pretty cool, right?

In fact, the water that SUB provides to Springfield residents and businesses all day, every day, all year is some of the best around. In the report, you'll discover where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. (Here's a hint: **SUB's water meets or beats all state and federal water quality standards.** There's nothing cooler than that!)

Cheap

Drink the recommended 64 ounces of water a day using bottled water, and you could spend upwards of \$1,800 a year – and that's if you can find a store or a vending machine that'll sell it to you for a buck. Drink that same amount of water from SUB, and you'd be hard pressed to spend 87 cents annually. No wonder retailers call water "blue gold." Why not keep your money in your pocket? Grab a refillable water bottle, turn on your tap, and tank up!

Clean

Tap water doesn't reach your home until it's been coddled at our home. Most of Springfield's water comes from groundwater, which is filtered naturally via layers of sand and rock. To guarantee an ample

supply, SUB supplements some groundwater with water from the sparkling Middle Fork Willamette, then specially filters and treats it. All water is mixed with a small amount of chlorine for safety, then subjected to more than 8,000 tests annually to ensure purity.

Miraculous

If only! There's really no mystery to a clean, plentiful water supply. Acquiring water, making it drinkable, and delivering it to your tap takes the time and talents of a lot of people, from water quality experts to construction workers to engineers to all of us who use the water. The planning required for this extraordinary effort is why so many people worldwide lack access to a clean water supply, and why unsafe water causes nearly 2.2 billion deaths each year, most of them children under five.

Water delivered to your home, clean and ready for the taking, is something special. **Turn the page to find out how you can help keep our water the envy of the world.**



Tap Water.

It's not just for drinking. We use it to fill our hot tubs, water our gardens, wash our dishes and clothes and cars and pets and kids.

There are just so many cool things we can do with tap water. But taking it for granted? Not cool.

Luckily, there are lots of easy ways to protect the resource that gives so much to us.

In your yard:

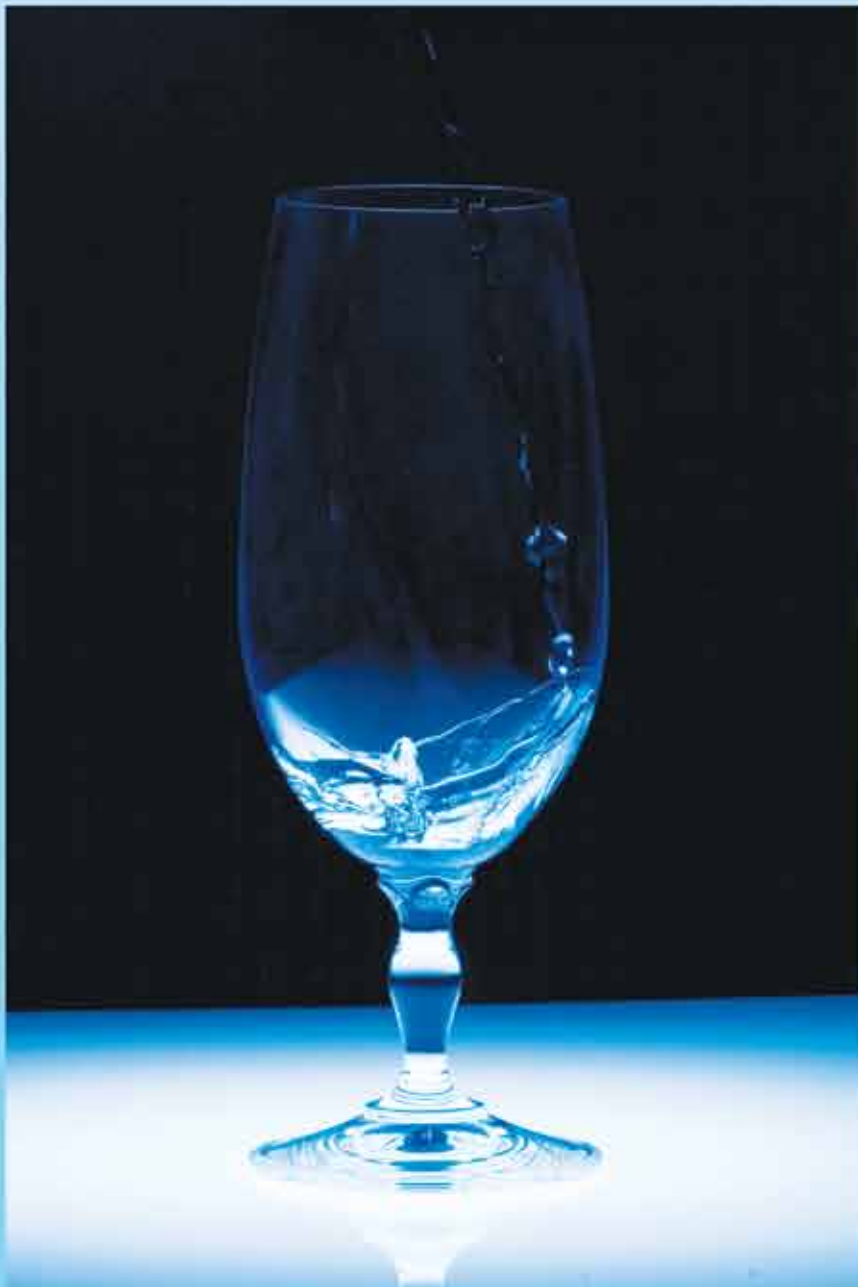
- Apply herbicides and fertilizers sparingly. If used excessively, runoff can end up in our drinking water!
- Have your backflow device tested annually. These protectors keep water used in irrigation, which can be contaminated with fertilizers, animal waste and other toxic materials, from flowing back into your home's water supply system.
- Reduce impervious surfaces around your home. Having fewer concrete and asphalt surfaces reduces runoff from your property. This is important because runoff often carries chemicals and other toxics that head, untreated, for storm drains. This is a direct route to our rivers, and the runoff can reach groundwater as well.
- Plant a rain garden! These are low-lying areas of vegetation that channel and collect runoff, allowing it to filter into the ground rather than washing over hard surfaces to street gutters and storm drains. Rain garden plants and soils also take up nutrients and break down pollutants.

In your home:

- Properly dispose of hazardous materials, such as paints, thinners, solvents and pesticides by taking them to the Household Hazardous Waste Collection Center. Call 541-682-4120 for details.
- Take advantage of your sanitation company's curbside oil recycling program, if they offer it. Alternatively, take your car to one of the quick lube shops for an oil change. Never let oil or other chemicals enter a storm drain.
- If you have unused or unwanted medications in your home, DON'T FLUSH THEM! Take them to a MedReturn box. One is conveniently located inside the Springfield Justice Center at 344 A Street.
- Use non-toxic cleaning products whenever possible.

In the community

- Call 9-1-1 if you notice a hazardous spill. This activates our community's emergency response plan.
- Identify, report and stop polluters, especially in sensitive areas. Watch for Wellhead Protection Area signs in Springfield. These areas are considered sensitive and require extra caution in order to protect our water supply. Keep an eye out for dumping or other illegal activities, and report violations!



As always, SUB delivers pHantastic Water

The drinking water supplied to Springfield homes is of the highest quality and exceeds all drinking water standards. However, plumbing and piping inside homes does vary, and some may contain lead or copper. If those pipes corrode, metals can enter a home's water supply. If these metals are detected at homes in larger communities, federal and state water quality rules require that the pH of all water in the system be adjusted to reduce the potential for corrosion in household plumbing.

Because SUB's testing program has detected small amounts of lead and copper in certain older homes, SUB now is required to raise the pH of its source water. Note that the water's pH will remain well within the standards for healthful consumption. SUB currently raises the pH of the water from its Willamette Slow Sand Treatment Facility through the process of aeration. If required, a small amount of sodium hydroxide also is added, another method for raising pH. SUB's Thurston Wellfield will have its own process for adjusting pH, which will come online sometime next year. If necessary, a third pH adjustment process will be installed at the Weyco wellfield that SUB shares with Rainbow Water District.

If you are concerned about lead in your home's plumbing:

- Have your tap water tested by a state certified water lab. Find these labs under "Water Analysis" in the yellow pages of your phone book, or you can visit:

http://public.health.oregon.gov/HealthyEnvironments/DrinkingWater/documents/lab/rpt_Public_Labs.pdf

- In the morning, or after several hours of non-use, let your tap water run for about two minutes before using. If metals from your pipes have dissolved into the water, this will help flush them away. Remember, boiling water doesn't remove metals.
- Don't use the hot water tap for cooking, drinking or mixing baby formula. Always start with cold water. For more information about lead in water: <http://water.epa.gov/drink/info/lead/index.cfm>



Special Notices

A Source Water Assessment that evaluates risks to groundwater and surface water has been completed as part of Springfield's Drinking Water Protection Plan. The plan was adopted May 17, 1999, and revised October 7, 2002. Copies may be reviewed or purchased for the cost of reproduction at the Springfield Public Library, Springfield Planning Services Division, Rainbow Water District or SUB's Water Service Center.

For more information on water issues

Learn more about water issues by attending SUB Board meetings, volunteering to help with pollution prevention projects, or by serving on a Customer Advisory Committee. If you have questions or need more information, contact:

SUB Water Quality Program Manager
(541) 726-2396

Environmental Protection Agency's Safe Drinking Water Hotline
(800) 426-4791

Oregon Health Authority (OHA) Drinking Water Program
(971) 673-0405

Este reporte contiene información que usted quizás desee tenerlo traducido.

Health Information for SUB Customers

Drinking water (even bottled water) may contain small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. For more information about contaminants and the potential health effects, call the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

The 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. About three quarters of Springfield's drinking water is provided by groundwater wells and the other one quarter is provided by a blend of river and well water that is filtered.

Contaminants that may be present in source water include:

- Inorganics, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Microbial, such as viruses, and bacteria which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum productions, and can also come from gas stations, urban stormwater runoff, and septic systems.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

SPECIAL NOTICES:

To ensure safe drinking water, EPA regulates the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration establishes limits for contaminants in bottled water to provide the same protection for public health.

Some people may be more vulnerable than others to contaminants in drinking water. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons having undergone organ transplants, people with HIV/AIDS or other immune system disorders, infants and some elderly people can be particularly at risk from 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 microbial contaminants are available from the Safe Drinking Water Hotline at the number listed in this report.

CONCERNING LEAD IN YOUR HOME'S 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 Springfield Utility Board 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 by flushing your tap for 30 seconds to two 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 or at <http://www.epa.gov/safewater/lead>.

2012 Springfield Utility Board Consumer Confidence Report Data

A key to abbreviations and terminology used in the tables:

AL or ACTION LEVELS: concentration of a contaminant which, if exceeded, triggers treatment or other requirements a water system must follow

FEDERAL LIMIT or MAXIMUM CONTAMINANT LEVEL: the highest level of a contaminant allowed in drinking water. MCLs are set by the Environmental Protection Agency to be as close to the MCLG as feasible using the best available treatment technology

FEDERAL GOAL or MAXIMUM CONTAMINANT LEVEL

GOAL: the level of a contaminant in drinking water below which there is no known or expected risk to health, as set by the Environmental Protection Agency (MCLGs allow for a margin of safety)

MRDL or Maximum Residual Disinfectant Level: The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants

MRDLG or Maximum Residual Disinfectant Level Goal:

The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

N/A: Not applicable

ND: Not detected

NTU or NEPHELOMETRIC

TURBIDITY UNITS: units of measure for turbidity

pCi/L: picocuries per liter (a measure of radioactivity)

PPB or PARTS PER BILLION: one pound of contaminant per billion pounds of water

PPM or PARTS PER MILLION: one pound of contaminant per million pounds of water

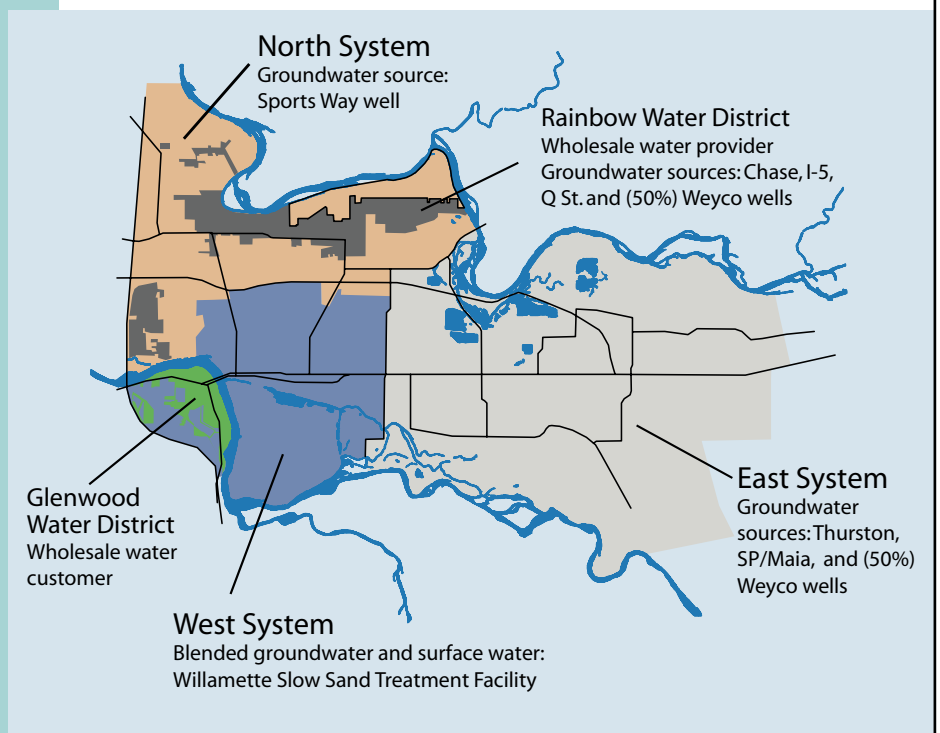
RAA or RUNNING ANNUAL AVERAGE: Computed using monthly or quarterly results and is a value used for compliance

TT or TREATMENT

TECHNIQUE: a required process intended to reduce the level of a contaminant in drinking water

TURBIDITY: a measure of the cloudiness of water caused by suspended particles

Springfield Utility Board Water Systems and Sources



Water quality results

Water Tests	Unit	Federal Limit	Federal Goal	Year Tested	SUB's System (Range detected)	Year Tested	RWD's System (Range detected)	In Compliance?	Typical Source
Inorganics									
Arsenic	ppb	10	0	2012	(ND - 3.3)	2012	(ND - 4.8)	Yes	Erosion of natural deposits in groundwater
Nitrate	ppm	10	10	2012	(ND - 1.7)	2012	(ND - 1.7)	Yes	Natural deposits, runoff from fertilizers, leaching from septic tanks, sewage
Disinfectant									
Chlorine	ppm	MRDL = 4	MRDLG = 4	2012	(0.45-0.51) RAA = 0.48	2012	(0.2 - 0.60) RAA = 0.37	Yes	Water additive used to control microbes
Disinfection Byproducts									
Haloacetic Acids	ppb	60	0	2012	(ND - 15.5) RAA = 5.7	2010	ND	Yes	Byproduct of drinking water disinfection
Total Trihalomethanes	ppb	80	0	2012	(1.52 - 20.4) RAA = 9.35	2010	(ND - 2.2)	Yes	Byproduct of drinking water disinfection
Microbiological									
Total Coliform	N/A	5% of monthly samples are positive	0	2012	0%	2012	0.96%	Yes	Naturally present in the environment
Turbidity	NTU	TT= 5 NTU TT= percentage of samples below 1.0 NTU	0	2012 2012	(0.04 - 0.48) 100%	2012 2012	N/A N/A	Yes Yes	Soil erosion from runoff
Radiological									
Gross Alpha	pCi/L	0	15	2009	(3.0 - 3.3)	2009	(ND - 3.3)	Yes	Erosion of natural deposits
Radium Combined	pCi/L	0	5	2009	(ND - 1)	2012	ND	Yes	Erosion of natural deposits
Lead and Copper Sampling at High Risk Residential Water Taps									
Copper	ppm	AL=1.35 (AL exceeded if 10% or more homes tested above 1.35 ppm)	0	2011 2011	1.19 (3 sites over AL)	2012 2012	0.76 (0 sites over AL)	Yes Yes	Corrosion of household and commercial plumbing
Lead	ppb	AL=15 (AL exceeded if 10% or more homes tested above 15 ppb)	0	2011 2011	8.1 (0 sites over AL)	2012 2012	3.8 (0 sites over AL)	Yes Yes	Corrosion of household and commercial plumbing

Additional water testing information:

- SUB routinely tests for over 120 inorganic and organic chemical contaminants at each of the utility's five drinking water source facilities and throughout the water distribution system.
- SUB collects over 750 samples annually to test for microbial contaminants. All samples tested were found satisfactory.
- SUB monitors Springfield's drinking water quality around-the-clock and also provides over 8000 additional tests throughout the water system to verify that the water is clean and safe.
- Fluoride: There is no detectable fluoride in SUB's source water or drinking water.
- Hardness: SUB's source water supplies are considered soft. The water hardness in the West System is about 30-55 ppm, the East System hardness is about 25-35 ppm, and the North System hardness is about 55-65 ppm.
- pH: The water pH in the West and East Systems is about 6.8-7.0. The North System has a pH range of about 7.1-7.5.
- Sodium: The sodium levels in the West and East Systems range from ND - 16 ppm. In the North System sodium levels range from about 8-22 ppm.

SUB missed one source water sample for January 2012. An additional sample was collected in July 2012. SUB reported 57 out of the 60 required total coliform samples for December 2012. All total coliform samples for December 2012 were satisfactory.

Two source groundwater samples were fecal indicator-positive, one in January and one in February 2012. These two samples were considered unsatisfactory, but all follow-up samples were found satisfactory. These two unsatisfactory samples are not considered a public health concern.

Rainbow Water District Source Water. Samples were collected from untreated sources; total coliform was detected at three wells. A fecal indicator-positive sample was detected at one of these wells. This was corrected by maintaining chlorine dosage, adding continuous monitoring, and documenting that treatment provides 4-log removal of viruses.