

Springfield Utility Board



Purveyors of Fine Water

Go ahead – raise a glass and toast your health!

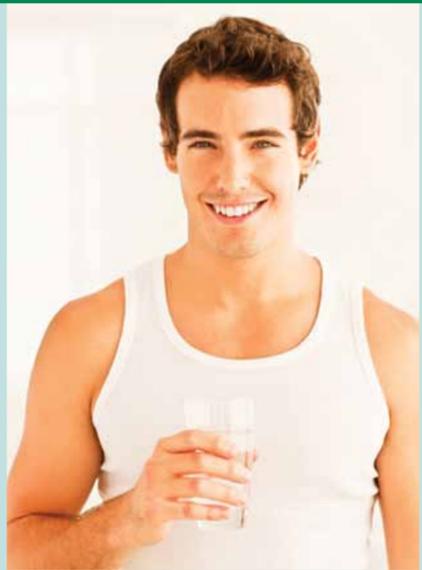
Water is the most healthful drink available anywhere, and here in Springfield, you can indulge with confidence, knowing you're getting some of the best around. But as with anything, quality doesn't happen by accident.

In fact, Springfield water is tasty and pure partly because it gets quite the star treatment on its journey from source to tap. It's filtered and cleaned, tested and stored, coaxed and coddled every step of the way under the watchful eyes of SUB's water quality experts. And, like the celebrity it is, by the time it arrives at homes and businesses throughout our community, it's been heavily guarded and secured via a tightly woven system of protective barriers that do the job, and do it well.

Proof is in the water you drink – **water that meets or exceeds all federal and state water quality standards, and which does so year after year.** To see just what's in the water you drink – and what's not – check out the chart on the back of this report. It shows the results of the thousand of tests your water is subjected to each year.

With all those systems surrounding our water, it's tempting to think that we can sit back, relax and just know that everything is taken care of. But here's the kicker – one of water's most important guardians is you, the water user. So turn the page, and see the simple but effective steps you can take to ensure this important resource can rely on us as much as we rely on it.





The Pathway to Pure Water

Making sure our drinking water makes the trip from source to tap successfully requires we forge a path that lets water flow – but not freely. We want it to flow through a system of protective barriers that stop contaminants cold.

And that system may not look quite the way you think. Some barriers are physical, like treatment plants and reservoirs. Some are processes, like thorough and accurate testing. And some protective barriers are people – in the form of trained experts... and you, the involved and well informed water user!

So what exactly does a well developed protection plan look like? In SUB's case, it looks like collaboration – and eight well-defined and important protective barriers.

The part we do

SUB's **water treatment program** aims to remove bacteria and other contaminants from the water drawn from groundwater wells or siphoned from the river. We use slow sand filter beds, ultra violet light and a small amount of chlorine to get good water off to a great start.

It is then stored in covered **reservoirs**, where we maintain a secure, enclosed environment to protect against the introduction of contaminants. When water is released into the underground **distribution system**, our pipeline installation and maintenance programs ensure that any leaks or main breaks don't result in contamination. And finally, **we train our people** and test and test and **test our water**, ensuring that the water throughout the system meets the highest standards for quality.

The part we all do

The remaining three protective barriers involve a healthy dose of help from everyone in Springfield. One involves our **emergency response**. On the rare occasion such a thing is necessary, it's an all-hands-on-deck moment. For SUB, it means being trained and ready to respond to a crisis, and for water users, it means listening for alerts and putting any recommendations into action.

But as important as emergency preparedness is, the primary way you can help protect water quality is through the everyday actions you take to protect the water supply. Those actions **protect source water** before it gets pumped or drawn, and then keep it safe once delivered to your home by guarding against **cross connections**.

Here's more on both:

Protecting the source

Because Springfield sits on top of most of our water supply, the actions and decisions you take and make all the time are hugely important. Why? Because anything done every day by fifty thousand people has an impact!

Here's what you can do:

- Properly store hazardous materials, including paints, thinner, solvents, motor oil and pesticides. That means setting them in plastic containers so if they leak, they won't soak into the soil.
- Apply lawn and garden chemicals like herbicides and pesticides sparingly. If used excessively, these chemicals can mix with water that runs off to storm sewers, which goes right to our river systems.
- Properly dispose of those hazardous materials. Take them to Lane County's Household Hazardous Waste Collection Center. Call 541-682-4120 for details. And NEVER pour them down sinks or drains.
- Use curbside recycling programs for used motor oil, if offered, or take your car to a quick lube shop for its oil change. Never pour it down a storm sewer, which is a pathway to our rivers.
- Dispose of expired medications by taking them to a MedReuse drop box. The one in Springfield is located at the Springfield Justice Center Lobby at 230 4th Street.
- Prevent cross connections by installing and maintaining backflow preventers on all underground sprinkler systems and by insuring private wells are not connected to household plumbing. What's a cross connection? Keeping reading!

Protecting against Cross Connections

Generally, water delivered to your home flows one-way – the pressure in SUB's system takes water from us to you. But in some circumstances, water pressure can actually reverse, for example when a fire is being fought or if a water main breaks. In that case, water already delivered to your home can flow backwards. This can be a real health problem, both for the people drinking water in your house and for the public water supply. Imagine – if you are washing your car and leave the hose in a bucket of sudsy water when a pressure change occurs, that soapy water can get sucked back into your home's plumbing and into your water supply.

Two barriers keep this from happening. One is a backflow preventer, a device used when plumbing connections are made to devices such as underground sprinkler systems, outdoor spigots, hot tubs and private wells. The second barrier to contamination is education – making sure everyone understands the risks and knows the good habits that prevent problems. For more information on backflow prevention, visit SUB's website at www.subutil.com/water quality

Remember, water is like any other fragile thing we value – from the moment we take it into our care, it demands all our protection!



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>.

2011 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

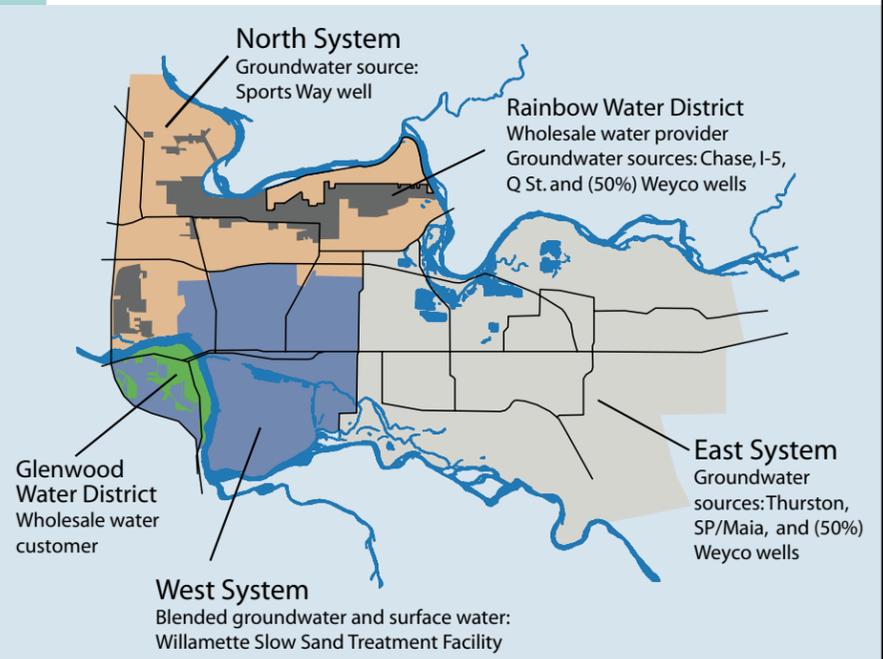
PPM or PARTS PER MILLION: one pound of contaminant per million pounds of water

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	2009	(ND - 4.3)	2009	(ND - 4.3)	Yes	Erosion of natural deposits in groundwater
Nitrate	ppm	10	10	2011	(ND - 1.3)	2011	(ND - 1.6)	Yes	Natural deposits, runoff from fertilizers, leaching from septic tanks, sewage
Disinfectant									
Chlorine	ppm	MRDL = 4	MRDLG = 4	2011	(0.11-0.86) RAA = 0.46	2011	(0.28 - 0.68) RAA = 0.46	Yes	Water additive used to control microbes
Disinfection Byproducts									
Haloacetic acids	ppb	60	0	2011	(ND - 9.7) RAA = 8.1	2010	ND	Yes	Byproduct of drinking water disinfection
Total Trihalomethanes	ppb	80	0	2011	(1.1 - 26.8) RAA = 6.2	2010	(ND - 2.2)	Yes	Byproduct of drinking water disinfection
Microbiological									
Total Coliform	N/A	5% of monthly samples are positive	0	2011	1.6%	2011	0.0%	Yes	Naturally present in the environment
Turbidity	NTU	TT= 5 NTU TT= 95% of monthly tests must be <1.0 NTU	0	2011	(0.04 - 0.92)	2011	N/A	Yes	Soil erosion from runoff
Radiological									
Gross alpha	pCi/L	0	15	2009	(3.0 - 3.3)	2011	N/A	Yes	Erosion of natural deposits
Radium combined	pCi/L	0	5	2009	(ND - 1)	2011	N/A	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)	2009 2009	0.31 (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)	2010 2010	ND (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 sources and water distribution system.
- SUB collects over 740 samples to test for microbial contaminants. Only two of these tests were considered unsatisfactory, but all follow-up samples were found satisfactory. Two unsatisfactory samples are not considered a public health concern.
- SUB conducts over 3,000 field water quality tests and continuously monitors Springfield's drinking water quality.
- Fluoride: There is no detectable fluoride in SUB's drinking water. There is no naturally-occurring fluoride detected in SUB's source water and no fluoride is added to Springfield's drinking water.
- Hardness: SUB's source water supplies are considered soft. The water hardness in the West System is about 15-25 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 not detected to 16 ppm. In the North System sodium levels range from about 8-22 ppm.

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.