



Divining Our Water Future

There's no magic, just an awful lot of planning.

In these days of dynamic change, it's hard to know what's going to happen minute-to-minute, much less twenty years down the road. But that decades-long glance into the future is exactly the task before managers and engineers this year as they update SUB's master plan for the water utility.

As our community grows, figuring out where new services will be needed as we head into the 2020s is no easy task. In fact, sometimes strategic planning can feel a little like sooth-saying. But instead of relying on a crystal ball, our planners lean on experience, calculators and hundreds of hours of research.

So turn the page, and take a look at the path SUB is taking to get us where we need to be.

You'll also see some present-day good news, of the sort you've come to expect: **the water you receive in Springfield is of the highest quality, meeting or exceeding all standards for water quality.** Always has been, and with some good, fluid planning, always will be.

**Springfield Utility Board's
Annual Water Quality
Consumer Confidence Report
2008**

When it comes to providing water to customers, three important factors must come together simultaneously: water has to be available, it has to be made healthful, and it has to get delivered to you. The job of the master plan is to make sure this happens now, ten years from now, and beyond... and, of course, that it's done in a way that manages costs.

When the plan's long-term leaps are shored up by yearly updates, the result is a living document that keeps our community's water resources on track.

Here's a look at what SUB predicts for our water future:

■ Available

As Springfield grows, the additional water needed to support homes and businesses will come in the near term from the Middle Fork Willamette River, and later from the McKenzie. Because rivers can be influenced by human and animal activity, using them as a source to increase our water supply means expanding and building treatment plants. And here's an example of how yearly updating of long-term planning is essential. SUB had been on track to double the capacity at our Slow Sand Filtration plant by 2011. However, because of recent flat demand and the slower growth projections due to the current economy, those plans have been pushed back by several years, as have plans to construct additional filtration plants.

■ Healthful

Treatment plants do a lot of the heavy lifting when it comes to making sure the water that reaches your home is pure and clean. But sometimes, additional measures are necessary. For communities like Springfield with more than 50,000 residents, federal law now requires that water be treated to reduce corrosion in pipes. Corrosion byproducts, such as heavy metals, are unhealthful. Adding small amounts of tasteless corrosion control compounds to the water supply to adjust pH keeps pipes from corroding and lowers the risk that these unhealthy elements will flow out of our taps. The treatment will begin in 2011 or before.

■ Deliverable

One of the most important jobs of the master plan is to determine where Springfield's growth areas will be so that transmission lines and reservoirs can be built to supply the area. Because infrastructure needs to be in place before growth can occur, getting it right is important. For example, ten years ago, north Springfield and the Gateway area were a fraction of the size they are today. Working with City planners, SUB identified it as a growth area, planned the necessary infrastructure and today, much of that work has been completed, with more to come. Likewise, Jasper Natron is now considered a major growth area and will get similar planning attention. Not only is this important to ensure seamless growth, it also allows SUB to spread costs out over many years so that water rates can stay as low and stable as possible.


■ Valuable

Drinking water is a precious resource, and keeping it pure is everyone's responsibility. Luckily, following these simple tips will go a long way toward ensuring a healthful water supply for decades to come:

- Properly dispose of hazardous materials, including paints, thinners, solvents and pesticides.
- Apply lawn chemicals like herbicides and fertilizers sparingly.
- Use curbside recycling programs for used motor oil, if offered, or take your car to a quick lube shop for its oil change.

For details or more tips, go to www.subutil.com.





Planning is bringing
the future into the present
so that you can do
something about it now.



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.

Some contaminants that have the potential to affect Springfield's groundwater and drinking water supply include:

- Chlorine, which is an additive that is used to control microbes.
- Haloacetic Acids (HAA5s), which are the by-product of drinking water disinfection.
- Inorganic contaminants (salts and metals), which can occur naturally or as a result of storm water runoff, wastewater discharges, or farming;
- Microbial contaminants (viruses and bacteria), which come from sewage treatment, septic systems, livestock, and wildlife;
- Organic chemical contaminants (synthetic and volatile organics), which are by-products of industrial processes and can come from gas stations, urban storm water systems and septic systems;
- Pesticides and herbicides, which may come from residential and agricultural use;
- Total Trihalomethanes (TTHMs), which are the by-product of drinking water disinfection;
- Radioactive contaminants, which can occur naturally or result from oil and gas production and mining activities.
- Total Organic Carbon (TOC), which has no health effects; however, TOC provides a medium for the formation of disinfection byproducts. These byproducts include TTHMs & HAA5s.
- Turbidity, which has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. In SUB's system, turbidity is low and there was little coliform bacteria detected.

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. Immunocompromised 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>.

2008 Springfield Utility Board Consumer Confidence Report Data

Inorganic Contaminants	MCLG	MCL	SUB Thurston Wellfield Result	SUB SP/MAIA Wellfield Result	SUB's Willamette Surface Water Treatment Plant Result	SUB/RWD WeyCO Wellfield Result	SUB/RWD Sports Way/ I-5 Wellfield Result	RWD 7th & Q Wellfield Result	RWD Chase Wellfield Result	In Compliance?	Source
Nitrate (ppm)	10	10	ND	ND	ND	ND	1.2	ND	1.5	Yes	Runoff from fertilizer; Erosion from natural deposits
Arsenic (ppb)	0	10	ND	ND	ND	ND	7.4	ND	ND	Yes	Impurities in Carbon Filter Media; Erosions of Natural Deposits

Arsenic is required to be sampled once every 9 years. Arsenic was detected in the first samples at start-up of the Carbon filter Plant. Follow-up samples were non-detect.

Radiological Contaminants	MCLG	MCL	SUB Thurston Wellfield Result	SUB SP/MAIA Wellfield Result	SUB's Willamette Surface Water Treatment Plant Result	SUB/RWD WeyCO Wellfield Result	SUB/RWD Sports Way/ I-5 Wellfield Result	RWD 7th & Q Wellfield Result	RWD Chase Wellfield Result	In Compliance?	Source
Combined Radium (pCi/l) 2003	0	5	ND	ND	1.57	ND	ND	ND	ND	Yes	Erosion from natural deposits
Uranium (ug/l) 2003	0	30	0.028	0.135	0.014	0.031	0.128	0.108	0.0386	Yes	Erosion from natural deposits

SUB system results have been consistently below the MCL and Oregon Health Division has approved sampling reduction to once every six years. These results are from 2003. Next sample series is scheduled for 2009.

Volatile Organic Compounds	MCLG	MCL	SUB Thurston Wellfield Highest Result	SUB SP/MAIA Wellfield Highest Result	SUB's Willamette Surface Water Treatment Plant Highest Result	SUB/RWD WeyCO Wellfield Highest Result	SUB/RWD Sports Way/ I-5 Wellfield Highest Result	RWD 7th & Q Wellfield Highest Result	RWD Chase Wellfield Highest Result	In Compliance?	Source
TTHMs (Total Trihalomethanes) (ppb)	NA	80	1.8	16.5	6.2	5.3	4.3	0.6	1.5	Yes	By-product of drinking water disinfection
Range of Results:			0.7 - 1.8	12.9 - 16.5	3.9 - 6.2	3.9 - 5.3	1.1 - 4.3	ND - 0.6	ND - 1.5		
TTHMs Highest Annual Average = 3.6			TTHMs Range of all Results = ND - 16.5								
HAA5 (Haloacetic Acids) (ppb)	NA	60	18.9	10.4	8.9	4.9	ND	ND	2.1	Yes	By-product of drinking water disinfection
Range of Results:			ND - 18.9	4.8 - 10.4	3.9 - 8.9	3.7 - 4.9	ND	ND	ND - 2.1		
HAA5 Highest Annual Average = 3.2			HAA5 Range of all Results = ND - 18.9								

Disinfectants	MRDL	MRDLG	Highest Detection	Detection Range	Average of all samples	In Compliance?	Source
Chlorine (ppm)	4	4	0.77	0.15 - 0.77	0.54	Yes	Water additive used to control microbes

Inorganic Contaminants	MCLG	MCL	90th Percentile	Homes Exceeding Action Level	In Compliance?	Source	Willamette Treatment Plant Highest Single Measurement	Willamette Treatment Plant Lowest Monthly % of Samples Meeting the limits	In Compliance?	Major Sources in Drinking Water		
Copper (ppm)	1.3	AL=1.3	1.3	5	Yes	Corrosion of household plumbing systems	Turbidity	100%	Yes	Soil Runoff		
Lead (ppb)	0	AL=15	6.7	3	Yes	Corrosion of household plumbing systems	NA	TT*	0.201	100%	Yes	Soil Runoff

*Less than 1 NTU, 95% of the time. May not exceed 5 NTU at any time.

SUB system results have been consistently below the Action Levels and Oregon Health Division has approved sampling reduction to once every three years. These results are from 2008. SUB has started studies to determine treatment to reduce corrosion in our system.

Unregulated results of interest to our customers	Desirable to be less than	SUB Thurston Wellfield Result	SUB SP/MAIA Wellfield Result	SUB's Willamette Surface Water Treatment Plant Result	SUB/RWD WeyCO Wellfield Result	SUB/RWD Sports Way/I-5 Wellfield Result	RWD 7th & Q Wellfield Result	RWD Chase Wellfield Result
Hardness (as CaCO3) (ppm)	250	22 (2003)	67 (2003)	17 (2008)	30 (2003)	64 (2000)	65 (2000)	60 (2000)
Hardness (in grains)		1.3	3.9	1.0	1.8	3.7	3.8	3.5
Sodium (ppm)	NA	ND (2003)	13 (2003)	ND (2008)	5.4 (2003)	12.4 (2000)	19.8 (2000)	9.6 (2000)
Ph		6.6	7.6	6.9	6.6	7.4	7.9	6.7

Note: all results were collected in 2008 unless otherwise noted.

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:

Chuck Davis
SUB Water Quality Program Manager
(541) 726-2396

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

Oregon Department of Human Services (DHS) Drinking Water Program
(503) 731-4010

Este reporte contiene información que usted quizás desee tenerlo traducido.



A key to abbreviations and terminology used in the tables:

AL or ACTION LEVELS: concentration level of a contaminant that, if exceeded, would require treatment or other requirements a water system must follow

AQUIFER: a water-saturated geologic formation capable of transmitting water in sufficient quantity to supply wells or springs

CONTAMINANT: naturally occurring or man-made impurities. A detected contaminant is one that tests at or above the minimum detection limits prescribed in Oregon Administrative Rules – OAR 33-061-0036

CUSTOMERS: service connections to which water is delivered by a community water system

MCL or MAXIMUM CONTAMINANT LEVEL: the highest level of a contaminant allowed in drinking water. MCLs are set as close to the MCLG as feasible using the best available treatment technology

MCLG or MAXIMUM CONTAMINANT LEVEL GOAL: 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)

MRDLG: 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.

MRDL 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

NA or NOT APPLICABLE: no standard established

ND or NOTHING DETECTED: no contaminants 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

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

ug/l: micrograms per liter or Parts per Billion (PPB)

VOLATILE ORGANIC COMPOUNDS (VOCs): man-made organic chemicals that evaporate easily (Trace amounts of TTHMs are the only VOCs detected in the SUB water)

Springfield Utility Board Water Systems

