

Rainbow Water District

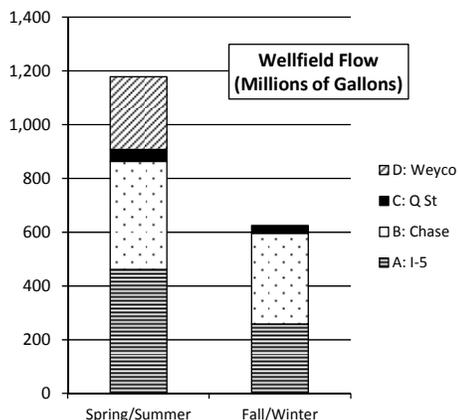
2013 Safe Drinking Water Report

(Water Quality Test Results for 2013)



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 Springfield, OR 97477
www.RWDonline.net

We are pleased to share this year's Annual Water Quality Report with you! This report is designed to inform you about the quality of water we deliver to you and to explain what the numbers mean. If you have any questions, please call us at (541) 746-1676.



Rainbow Water District is interconnected with Springfield Utility Board (SUB) and Eugene Water and Electric Board (EWEB), allowing each utility to assist the others in the event of a regional emergency. While SUB and EWEB are supplied from a combination of groundwater and surface water sources (the McKenzie and Willamette Rivers), Rainbow relies on local groundwater alone for our normal water supply.

Last year, water was supplied by **four wellfields, sources A-D:**

I-5 - Two wells which provided 39% of our April-September demand and 41% of our October-March water demand.

Chase - Four wells which provided 34% of our spring/summer demand and 54% of our fall and winter demand.

Q Street - A single well which operates primarily during the spring through fall months, providing about 4-5% of our supply.

Weyerhaeuser - Three wells which provided about 23% of our spring and summer demand and rested over the winter. These wells are jointly owned by SUB.

Water is pumped from underground and stored in two hilltop reservoirs. These reservoirs maintain pressure in the piping system as water use fluctuates throughout the day, and they provide an emergency reserve for fire protection.

We sample the water at our wells and at system monitoring points on a regular basis, to look for harmful chemicals or bacteria and verify the water system is operating properly.

A *Source Water Assessment* that evaluates risks to our groundwater has been completed as part of the Drinking Water Protection Plan that Rainbow completed jointly with SUB. 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.

Here is what the EPA says about drinking water contaminants:

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or manmade. These substances can be microbes, inorganic or organic chemicals and radioactive substances. 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 water contaminants and their potential health effects can be obtained on the web at www.epa.gov/safewater or by calling EPA's Safe Drinking Water Hotline at 1-800-426-4791.

Drinking water sources (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.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is mainly from materials and components associated with service lines and home plumbing. Rainbow Water District 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 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 or at www.epa.gov/safewater/lead.

In order to ensure that tap water is safe to drink, the EPA has regulations that limit the amount of certain contaminants in water provided by public water systems and require monitoring for these contaminants. (Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.)

Some people 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, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their personal health care providers. EPA (Environmental Protection Agency) and CDC (Centers for Disease Control) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbiological contaminants are available by calling the Safe Drinking Water Hotline at 1-800-426-4791.

Contaminants in drinking water sources may include:

Microbial contaminants, such as viruses and bacteria, may come from wildlife or septic systems. *Radioactive contaminants* can occur naturally. *Inorganic contaminants*, such as salts and metals, can occur naturally or result from urban stormwater runoff, industrial or domestic wastewater discharges or farming. *Organic chemical contaminants*, including synthetic and volatile organic chemicals, are byproducts of industrial processes, and can come from septic systems, gas stations, and urban stormwater runoff. *Pesticides and herbicides* may come from a variety of sources such as farming, urban stormwater runoff and home or business use.

RAINBOW WATER DISTRICT CONSUMER CONFIDENCE REPORT DATA

TESTING AT WELLFIELD ENTRY POINTS TO THE DISTRIBUTION SYSTEM (2013 or most recent results)

Chemical	Category	Range Detected (Year Tested)	In Compliance?	Federal Limit*	Federal Goal*	Likely Source of Contamination
Nitrate (as Nitrogen)	Regulated Inorganic	ND - 1.7 ppm (2013)	Yes	10 ppm	10 ppm	Fertilizer runoff, leaching from septic tanks, sewage, erosion of natural deposits
Arsenic	Regulated Inorganic	ND - 4.8 ppb (2012, 2013)	Yes	10 ppb	0 ppb	Erosion of natural deposits
Gross Alpha** (excluding Ra, U)	Regulated Radionuclides	ND - 3.3 pCi/L (2009, 2012)	Yes	15 pCi/L	0 pCi/L	Erosion of natural deposits
Sodium***	UNREGULATED Inorganic	5.1 - 21.9 ppm (2012, 2013)	Yes	No MCL. 20 ppm is advisory only.	n/a	Fertilizer runoff, leaching from septic tanks, sewage, erosion of natural deposits

TESTING AT ROUTINE DISTRIBUTION SYSTEM LOCATIONS (2013 or most recent results)

Chemical	Contaminant Category	Range Detected (Year Tested)	In Compliance?	Federal Limit*	Federal Goal*	Likely Source of Contamination
Total Coliform Bacteria	Regulated Microbiological	0 positive in 2013**** (Out of 103 samples)	Yes	no more than 1 positive sample per month	0	Naturally present in the environment
Fecal Coliform & E.Coli Bacteria	Regulated Microbiological	0 positive in 2013 (Out of 103 samples)	Yes	0 positive samples	0	Human & animal fecal waste
Chlorine	Disinfectant	0.25 - 0.74 ppm (2013) RAA = 0.51	Yes	4 ppm	4 ppm	Water additive used to control microbes
Copper	Regulated Inorganics	ND - 0.76 ppm (2012) 90th percentile summary is 0.52 ppm	Yes 0 sites > AL	Action Level = 1.35 ppm	0	Corrosion of household plumbing systems
Lead	Regulated Inorganics	ND - 3.8 ppb (2012) 90th percentile summary is 2.6 ppb	Yes 0 sites > AL	Action Level = 15.5 ppb	0	Corrosion of household plumbing systems, erosion of natural deposits
Total Trihalomethanes	Disinfection Byproducts	ND - 1.25 ppb (7/2013)	Yes	80 ppb	0	Byproducts of the disinfection process
Total Haloacetic Acids	Disinfection Byproducts	ND (7/2013)	Yes	60 ppb	0	Byproducts of the disinfection process

Definitions: Not Detected (ND) indicates the contaminant was not detected at levels above the laboratory's reporting capability.

Action Level (AL) is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Maximum Contaminant Level (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level 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.

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

Maximum Residual Disinfectant Level Goal (MRDLG) is 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.

One **Part Per Million (ppm)** corresponds to one penny in \$10,000 or about one minute in 2 years. Measurements in ppm indicate only one milligram of contaminant per liter of water.

One **Part Per Billion (ppb)** corresponds to one penny in \$10,000,000 or approximately one minute in 2,000 years. It takes 1,000 parts per billion to equal one part per million. **Picocuries Per Liter (pCi/L)** is a measurement of radioactivity, a trillion times smaller than one Curie.

Running Annual Average (RAA) is computed using monthly or quarterly results and is a value used to determine compliance.

Notes

* Federal Limits may be either the MCL or the MRDL. Federal Goals may be either the MCLG or MRDLG. Maximum contaminant levels (MCLs) are the highest levels of chemicals that the EPA has determined to be acceptable for life-long consumption. MCLs are set at very stringent levels. To understand the possible health effects described for many regulated chemicals, a person would have to drink 2 liters (about 8 glasses) of water every day at the MCL for a lifetime to have a one-in-a-million chance of having the undesirable health effects.

** Some contaminants are monitored less than once per year. Data shown are the most recent monitoring done in compliance with regulations.

*** Sodium is not a regulated contaminant, but we show the results of sodium testing for all water sources since some source water contains an amount of sodium which people with high blood pressure may wish to know about.

**** No detections out of 103 treated water distribution system samples. Total coliform detected in 1 out of 10 source water assessment samples, collected at wells prior to treatment.

FAQs – Frequently Asked Questions about Rainbow’s Water

Q. *Why does my bill increase in the summer?*

A. Rainbow charges a base amount plus a three-tiered usage rate that encourages water conservation. A “unit” of water is 748 gallons. For the first 25 units of water used, which is more than sufficient for most indoor water needs, the cost in 2013 was \$1.00 per unit. During the summer you may wash your car, clean sidewalks, fill the wading pool or water the lawn and garden. As you use more water during the warmer months, you will also pay a higher amount per unit if your use reaches the 2nd (25-49 units) or 3rd (50+ units) tier.

Q. *How do Rainbow’s water rates compare to other utilities?*

A. Our rates continue to be some of the lowest in Oregon, and we have been able to maintain rates about 10-25% lower than SUB and EWEB. Each year our Budget Committee reviews our operating costs and a list of what we hope to accomplish in the coming year, and makes recommendations regarding rates and an operating budget to the Board of Commissioners. Like other area water utilities, we have found it necessary to periodically raise rates to maintain services. A local option levy allows us to collect property taxes and hire the City of Springfield to provide fire protection and emergency medical services. Your monthly water bills cover the cost of normal operation, and allow us to hire staff, buy electricity and chlorine, keep up with technology and procure parts and supplies to pump and treat groundwater. Future needs will involve replacement of parts of our extensive system of wells, piping and storage reservoirs that are subject to increasing age and regulations.

Q. *Can I track my water use? How do I know if I have a water leak?*

A. You may read your own water meter at any time during the month. Your water meter is usually in the front yard by the curb, housed in a concrete or plastic meter box with a concrete and metal lid. If you lift the metal lid and look in the box, you will see your meter, which has a display like a car odometer. Read just the black numbers on a white background, and you can keep track of how many units you are using. Each unit equals 748 gallons. On the top of most water meters, near the odometer-style numbers, will be a red triangle-shaped “leak detector.” Make sure you are not using any water in the house and watch the triangle for a few minutes. If the triangle is spinning you are using water somewhere and might have a leak. Call our office at 541-746-1676 and we can give you more tips on where to look and how to tell if you have a leak. Any leak on your side of the meter, between the meter and your house, is your responsibility to repair. If it appears there is a leak on the street side of the meter, please let us know so we can investigate and take care of any leaks that are our responsibility.

Q. *Can I pay my bill over the phone or internet? Where do I pay?*

A. We accept cash, checks, and money orders. You may pay in person, or send your payment by mail. We also allow you the option of paying by credit or debit card. (We use another company, *Official Payments*, to provide this service. They will charge you \$1.95 to process the transaction. See the PAY NOW button at www.rwdonline.net for more information.) We are located at 1550 N. 42nd Street, Springfield. (Look for the white tanks on 42nd Street, between Olympic and Marcola Road. Our driveway is adjacent to the westbound Highway 126 on-ramp.) Our office is open 8am-5pm, Monday through Friday. A mail slot on the front of the building may be used for after-hours payments.

Q. *How much should I water my lawn and garden?*

A. Grass needs to have a deep root system to survive and flourish. The amount that is needed depends on the temperature and rate of evaporation. View our website for wise watering tips and to subscribe to the Green Grass Gauge weekly advisory email sponsored by the Regional Water Providers. See www.RWDonline.net/ggg.html for more information.

Q. *Where does my water come from? How is it treated?*

A. All of Rainbow’s water comes from wells, with the groundwater naturally filtered by local sands and gravels as it is pumped from the ground. We add a small amount of chlorine as a disinfectant. We do not add any fluoride. The pH of Rainbow’s water typically runs from 6.9 to 7.9, depending on which wells are running. (In times of crisis, we are also able to purchase water from (or sell water to) SUB or EWEB, activating our mutual aid agreements and emergency connections. This water could temporarily include water from surface water sources.)

Q. *What is a backflow device, and why do I need to get it tested?*

A. Water should flow from Rainbow’s piping system to you, and never in the opposite direction. A backflow device is installed between the public and private systems to protect against reverse flow situations. The most common backflow device installation is for irrigation (sprinkler) systems. To ensure that the device is functioning properly and only allowing flow in one direction, water providers work with property owners, plumbers and licensed contractors to install and test these devices.

Q. *Is my water hard or soft?*

A. Water is referred to as “hard” if it contains high mineral content. While the mineral content varies at our different wellfields, most of Rainbow’s water is considered “soft.” Mineral content tends to be slightly higher during the high demand summer months.

2013 Safe Drinking Water Report

“Rainbow Water (and Fire) District provides high-quality drinking water and emergency response services at a fair cost to our customers while protecting our assets for long-term success.” We continually strive to provide top quality water to every tap, and we ask that all customers help us protect the water sources that we share.



This report shows that **Rainbow’s water meets or exceeds all federal and state guidelines for water quality.** The enclosed information is provided to inform and educate you about your water and your water utility. If you want to learn more about Rainbow, we invite you to call our Superintendent or attend a meeting of the Board of Commissioners. These are held on the second Wednesday of every month, beginning at 5:30 pm, in our offices at 1550 N. 42nd Street. Our Budget Committee meets every year in April and May.

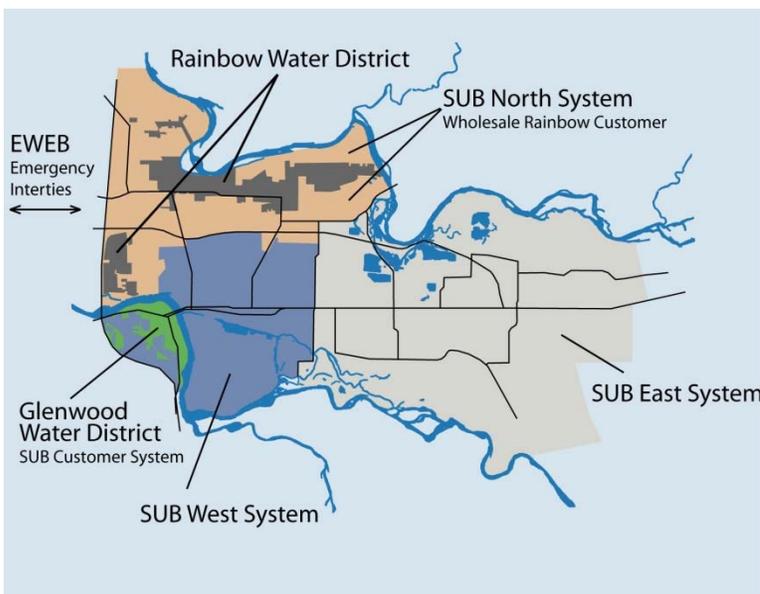
For more information about your water utility or this water quality report, please visit our website at www.RWDonline.net or call our Superintendent, Jamie Porter, at 541-746-1676.

PLANNING AHEAD



As we celebrate our 65th anniversary this year, we recognize that parts of our system are ready to retire. We are busy planning for the next generation, and need to be ready to upgrade or replace components. We will share more in the coming months.

Learning that Oregon is at risk for a large earthquake off of our coast, we hired structural engineers to examine and tell us how to strengthen our tanks. This project is part of our commitment to keep water available to our customers for drinking and fire protection needs.



Water System Fast Facts

Average flow, millions of gallons per day: 3 (winter) & 7 (summer)
 System size: 2,400 connections serving 6,300 people
 Storage/Supply: 10 wells, with 5 million gallons in 2 reservoirs

Typical 2013 residential bill assuming 12 units and a ¾-inch meter:
 \$12.00 base rate + \$1.00/unit (748 gallons) water usage = \$24.00
 In comparison, for the same 12 units usage (about 9,000 gallons),
 SUB customers paid \$27.42 and EWEB customers paid \$31.74.

In 2014, SUB customers will pay \$29.87 for a 12-unit bill.
 EWEB customers will pay \$33.65 for a 12-unit bill.
 Rainbow’s rates are currently under review.

Our rates increase after 25 units of use to encourage conservation.

Serial Levy property taxes are used to hire the City of Springfield to provide fire protection and emergency medical services.