

DEERHORN COMMUNITY WATER ASSOCIATION

41789 Madrone St.
Springfield, OR 97478
www.RWDonline.net/Deerhorn
An Equal Opportunity Provider
1-541-896-3236

Deerhorn contracted with Rainbow Water District for assistance in January 2016. Rainbow processes our monthly water bills and supports the Deerhorn operators with annual maintenance, repairs and troubleshooting. For questions on your bill, or if you cannot reach a Deerhorn operator or board member in an emergency, you may call the Rainbow office on 42nd Street at 541-746-1676. This number rings to Rainbow's 24-hour answering service dispatcher.

Annual Drinking Water Quality Report – 2016

Please use **541-896-3236** to contact the DCWA office for all routine or emergency business. If the office is closed, calls to **541-896-3236** number are transferred to a board member. Rainbow's 24-hour emergency number is **541-746-1676**.

Deerhorn Community Water Association strives to provide top quality water to every tap and we are pleased to present you with our annual report. Our goal is to inform and educate you about your water and water utility, and the need for all of us to work together to protect our drinking water sources. Your Board's constant goal is to provide all of us with a safe and dependable supply of drinking water. The Board hopes everyone appreciates and understands the effort it takes to continually improve the treatment process and protect our water resources.

Where does our water come from?

Our water is pumped from two wells, which draw from an underground aquifer running below the McKenzie River Valley. The water is pumped from underground up to two concrete tanks located on a hillside off upper Bridge St. These reservoirs maintain pressure in the piping system as water use fluctuates throughout the day. The two storage tanks have a total storage capacity of about 145,000 gallons.

How is our water treated?

We add chlorine to disinfect and provide protection from bacteria. Since 1999-2000, we add Soda Ash to raise the pH above 7.0 to make our water less corrosive to the lead and copper used in home plumbing systems. We do not add fluoride or do any other treatment. We sample the water at our wells and system monitoring points on a regular basis, to look for harmful chemicals or bacteria and verify that the water system is operating properly.

Is our water safe?

We are proud to report that *our drinking water meets or exceeds all federal and state water quality standards*. Our system is operated and maintained by three certified small water system operators, Lowell Stanley, Phil Raab & Don Henry with Rainbow Water District personnel providing important backup. When you get a chance, tell these guys how much you appreciate their work.

The Oregon Health Authority inspects water systems every 3-5 years. No significant deficiencies or rule violations were identified during a water system survey on March 8, 2017 and DCWA system facilities were found to be operated and maintained by knowledgeable and competent staff. We are extremely pleased to have again earned an **Outstanding Performance Award** from the state, and will not be inspected again until 2022.

What if I have questions about my water?

If you have any questions about this report or anything else concerning our water system, please contact the system Operator Don Henry at 896-3236 or Board President Loren Berry, 896-9899. The Board wants all of our members to be informed about their water association. If you want to learn more, please attend the annual association membership meeting. The annual association membership meeting is usually held on the second Monday of January, at 7:00 PM. Board member meetings are held throughout the year as needed.

Deerhorn Water System Fast Facts

Average flow, gallons per day: 15,000 (winter) and 60,000 (summer)
System size: 120 connections serving about 275 people
Supply/Storage: 2 wells, with 145,000 gallons in 2 reservoirs

Typical winter bill assuming 6 units of usage and ¾" meter:
 $\$29.50 \text{ base rate} + \$5.40 \text{ usage (6 units} \times \$0.90/\text{unit)} = \$34.90$

Your monthly water bill is our only source of revenue
for operations and maintenance of the water system.

Deerhorn Community Water Association was incorporated June 28, 1968.

About our water source:

A *Source Water Assessment* that evaluates risks to our groundwater was completed for our Association by the Oregon Health Authority in July 2000. As part of this study, we learned more about the groundwater aquifer that supplies our two wells. A copy of this report may be inspected at the Deerhorn office at 41789 Madrone.

Here is what the Environmental Protection Agency (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.

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. Deerhorn Community Water Association is supplied entirely by groundwater wells during normal operations.

To ensure safe drinking water, the 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.

Contaminants that may be present in source water 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.

Some people may be more vulnerable than others to contaminants in drinking water. Immuno-compromised persons such as organ transplant patients, persons undergoing chemotherapy for cancer, people with HIV/AIDS or other immune system disorders, infants and some elderly, can be particularly at risk from infections. These people should seek advice about drinking water from their personal health care providers. Call 1-800-426-4791 (the Safe Drinking Water Hotline) for EPA & Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbiological contaminants, and for more information about water contaminants and their potential health effects.

A note about lead in the water:

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. Deerhorn Community Water Association is responsible for providing high quality drinking water, but we 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 (1-800-426-4791) or at www.epa.gov/safewater/lead.

DEERHORN COMMUNITY WATER ASSOCIATION CONSUMER CONFIDENCE REPORT DATA

TESTING AT WELLFIELD ENTRY POINT "A" TO THE DISTRIBUTION SYSTEM (2016 or most recent results)

Chemical	Category	Source AA Well #1	Source AB Well #2	In Compliance?	Federal Limit*	Federal Goal*	Likely Source of Contamination
Nitrate (as Nitrogen)	Regulated Inorganic	1.30 (2016)		Yes	10 ppm	10 ppm	Fertilizer runoff, leaching from septic tanks, sewage, erosion of natural deposits
Arsenic	Regulated Inorganic	1.0 (05/03/16)		Yes	10 ppb	0 ppb	Erosion of natural deposits
Inorganic Compounds	Regulated Inorganic	ND (10/18/10)		Yes	2 ppm	2 ppm	Erosion of natural deposits
Synthetic Organics	Regulated SOCs	ND (2016)		Yes	varies	varies	Byproducts of industrial processes
Volatile Organics	Regulated VOCs	ND (2016)		Yes	varies	varies	Byproducts of industrial processes
Combined Radium Combined Uranium Gross Alpha***	Regulated Radionuclides	ND (2016)		Yes	5 pCi/L 30 ppb 15 pCi/L	0 pCi/L 0 ppb 0 pCi/L	Erosion of natural deposits
Sodium**	UNREGULATED Inorganic	24.2 from both wells (2008)		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 (2016 or most recent results)

Chemical	Contaminant Category	Distribution System Sample Results	In Compliance?	Federal Limit*	Federal Goal*	Likely Source of Contamination
Total Coliform Bacteria	Regulated Microbiological	0.0% *** (12 samples in 2016)	Yes	no more than 1 positive sample per month	0	Naturally present in the environment
Fecal Coliform and E.Coli Bacteria	Regulated Microbiological	0.0% (12 samples in 2016)	Yes	no positive samples	0	Human and animal fecal waste
Chlorine	Disinfectant	0.18 - 0.51 ppm (2016) RAA = 0.34	Yes	4 ppm	4 ppm	Water additive used to control microbes
Asbestos	Regulated Inorganics	ND (04/2008)	Yes	7 MFL (million fibers per Liter)	7 MFL (million fibers per Liter)	Decay of asbestos cement in water mains; erosion of natural deposits
Copper	Regulated Inorganics	0.208 - 1.53 ppm (2015) 90th percentile summary is 1.20 ppm	Yes 0 sites > AL	Action Level = 1.35 ppm	0	Corrosion of household plumbing systems
Lead	Regulated Inorganics	ND - 2.97 ppb (2015) 90th percentile summary is 2.70 ppb	Yes 0 sites > AL	Action Level = 15.5 ppb	0	Corrosion of household plumbing systems, erosion of natural deposits
Trihalomethanes & Haloacetic Acids	Disinfection Byproducts	TTHM 0.53 ppb HAA5 ND (2014)	Yes	80 ppb 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 - Some contaminants are monitored less than once per year. Data shown are the most recent monitoring done in compliance with regulations.

* 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.

** 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 in any of the 12 distribution system samples. 1 total coliform (but not fecal) detection in 2 source water assessment samples collected at wells prior to treatment.

FAQs – Frequently Asked Questions about Deerhorn’s Water

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

A. In addition to our base rate (In January 2017 this rate was \$29.50 per month for most customers, depending on meter size), we charge \$0.90 for each unit of water used. One “unit” of water equals 748 gallons. During the summer you may wash your car, hose off your sidewalks, fill the wading pool or water the lawn and garden. As you use more water during the warmer months, your bill goes up.

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

A. Our rates are somewhere in the middle when compared with the rates of other communities in western Oregon. The rates each year depend on the cost of pumping, storing, treating and delivering water. Each year the Board reviews expenses and upcoming projects and determines whether rates need to be adjusted. This may occur because of new regulations adopted by state or federal health officials that require additional lab testing and investment in new treatment technologies, or because of increases in the cost of things like gasoline and electricity that make it more expensive to perform the repairs and scheduled maintenance activities that keep the water system fully operational. Your monthly water bills cover the cost of normal operation, and allow us to pay staff, buy electricity and chlorine, keep up with technology and procure parts and supplies to pump and treat groundwater. A portion of the amount received is set aside each year to save for future replacement 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 road, 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. Remember that each unit equals 748 gallons.

On the face of most water meters, near the odometer-style numbers, will be a red triangle or black star-shaped “leak detector.” Make sure you are not using any water in the house and watch the leak detector for a few minutes. If the leak detector is spinning you are using water somewhere and might have a leak. Call the Rainbow office at 541-746-1676 for 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 or sign up for a **free ACH** debit from your checking account. We also allow you the option of paying by credit or debit card, but 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. Rainbow is located at 1550 N. 42nd Street, Springfield. (Look for the white tanks on 42nd Street, between Olympic and Marcola Road. The 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 Eugene-Springfield Regional Water Providers. See www.RWDonline.net/ggg.html for more information.

Q. *Where does my water come from? Is it used efficiently?*

A. All of Deerhorn’s water comes from wells, with the groundwater naturally filtered as it is pumped from the ground. After a minimal amount of treatment for disinfection and pH adjustment, about 80-90% of the water that we pump out of the ground is delivered through piping to your home. Pumped water that is lost and not billed to produce revenue is due to things like leaks and flushing to improve water quality. On your side of the meter, you can improve the efficiency of water you purchase by promptly fixing leaks and not overwatering your lawn.

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

A. Water should flow from Deerhorn’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 possible cross-connections. Backflow devices are required for items such as irrigation (sprinkler) systems, boilers, swimming pools, and rooftop solar water heaters. 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. Deerhorn’s water is considered “soft.” Mineral content, particularly sodium, may be slightly higher during the summer months when well levels are lower as pumps run harder to meet seasonal demands.