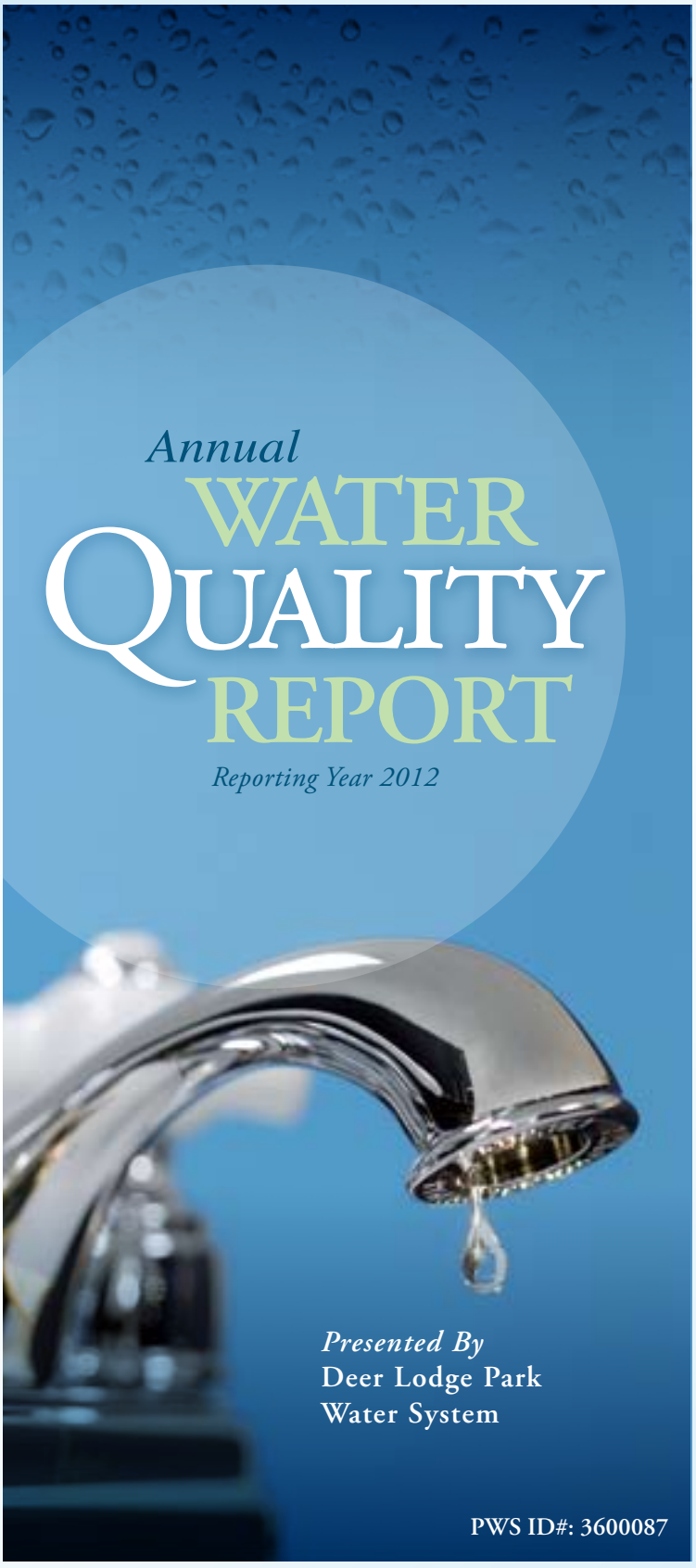
Annual
WATER
QUALITY
REPORT
Reporting Year 2012
Presented By
Deer Lodge Park
Water System
PWS ID#: 3600087

There When You Need Us

We are once again proud to present our annual water quality report covering all testing performed between January 1 and December 31, 2012. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best-quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all our water users.

Please remember that we are always available to assist you should you ever have any questions or concerns about your water.

Community Participation

You are invited to participate in our public forum and voice your concerns about your drinking water. Regular meetings of the Board of Directors are held on the second and fourth Tuesdays of every month (except December) at 6:30 p.m. at the District Board Room (840 Willow Creek Road) in Lake Arrowhead. Special meetings may be held, if necessary, throughout the year, with dates, times, and locations to be determined.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) 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 (800) 426-4791 or http://water.epa.gov/drink/hotline.

Substances That Could Be in Water

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.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (U.S. EPA) and the California Department of Public Health (Department) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that must provide the same protection for public health. 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 water poses a health risk.

Contaminants that may be present in source water include:

Microbial Contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife;

Inorganic Contaminants, such as salts and metals, that can be naturally occurring or can result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;

Pesticides and Herbicides, that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses;

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, that are by-products of industrial processes and petroleum production and that can also come from gas stations, urban stormwater runoff, agricultural applications, and septic systems;

Radioactive Contaminants, that can be naturally occurring or can be the result of oil and gas production and mining activities.

More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Where Does My Water Come From?

The sources of water supplied to District customers in Deer Lodge Park include two groundwater wells and purchased water from Crestline-Lake Arrowhead Water Agency (CLAWA). During the winter, when the water table is higher, the two wells are the primary source of water. CLAWA water is held at standby for supplemental or emergency use. During the summer, when the water table drops, CLAWA water is delivered at the minimum amount needed to compensate for the additional customer demand. The wells are running during this time but at a reduced rate so that we will not exceed the Safe Yield of the wells.

The purchased water comes from Northern California via the California Aqueduct and flows into Lake Silverwood. CLAWA treats the water and delivers it into the District's distribution system, where it is blended with local well water. State-of-the-art treatment processes are used to ensure that the water delivered to your home is safe and pleasant tasting.

How Long Can I Store Drinking Water?

The disinfectant in drinking water will eventually dissipate even in a closed container. If that container housed bacteria before it was filled with the tap water, the bacteria may continue to grow once the disinfectant has dissipated. Some experts believe that water could be stored up to six months before needing to be replaced. Refrigeration will help slow the bacterial growth.

Lead in Home Plumbing

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. We are 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 or at www.epa.gov/safewater/lead.

Source Water Assessment

A Source Water Assessment Plan (SWAP) was completed in November 2002 and January 2003 for both active wells. You may request a copy of the plans at our District Office. Each plan is an assessment of the delineated area around our listed sources through which contaminants, if present, could migrate and reach our source water. It also includes an inventory of potential sources of contamination within the delineated area and a determination of the water supply's susceptibility to contamination by the identified potential sources.

The Vulnerability Summary concluded that the wells are at low risk for contamination and that the sources are considered most vulnerable to the following activities and are not associated with any detected contaminants: Managed Forests and Wells-Water supply.

Questions?

For more information about this report, or for any questions relating to your drinking water, please call Marc Lippert, Water Operations Supervisor, at (909) 336-7113, or Customer Service at (909) 336-7100. You may also visit our Web site at http:/www.lakearrowheadcsd.com.

Fact or Fiction

Water treatment began as a way to remove disease-causing agents. *(Fiction: It was only in the 1950s that scientists began to suspect that water might carry diseases. Although earlier treatment of water could make the water safer, it was mainly done merely to improve the taste, smell, or appearance of the water.)*

About half of the world's water supply is available for drinking. *(Fiction: If all the world's water were fit into a gallon jug, the fresh water available for us to use would equal only about one tablespoon.)*

Due to its unique nature, water boils at the same temperature anywhere on the planet. *(Fiction: At sea level, water boils at 212 degrees Fahrenheit, but on top of Mt. Everest, water boils at 154 degrees.)*

Water regulates the temperature of the Earth. *(Fact: As in the human body, the water in our oceans, lakes, and streams plays a major role in regulating planetary temperatures.)*

The Mississippi River is longer than the Amazon River. *(Fiction: At 3,902 miles the Mississippi River is not as long as the Amazon River, which flows for 4,000 miles.)*

Forty trillion gallons of water a day are carried in the atmosphere across the United States. *(Fact: Forty percent of the atmosphere's moisture content falls as precipitation each day.)*

Sampling Results

During the past year, we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. The tables below show only those contaminants that were detected in the water. The state requires us to monitor for certain substances less often than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

REGULATED SUBSTANCES

				Deer Lodge Park		Crestline-Lake Arrowhead Water Agency (CLAWA)			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Aluminum (ppb)	2012	200	60	ND	NA	59.63	ND–210	No	Erosion of natural deposits; residue from some surface water treatment processes
Chlorine (ppm)	2012	[4.0 (as Cl2)]	[4 (as Cl2)]	1.05	0.23–1.99	NA	NA	No	Drinking water disinfectant added for treatment
Fluoride (ppm)	2012	2.0	1	0.22	0.22–0.22	0.01	ND–0.11	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Gross Alpha Particle Activity (pCi/L)	2012	15	(0)	1.97	ND–6.9	NA	NA	No	Erosion of natural deposits
Haloacetic Acids (ppb)	2012	60	NA	1.68	ND–6.7	2	ND–10	No	By-product of drinking water disinfection
Nitrate [as nitrate] (ppm)	2012	45	45	2.1	2.1–2.1	NA	NA	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
TTHMs [Total Trihalomethanes] (ppb)	2012	80	NA	8.86	ND–38.9	NA	NA	No	By-product of drinking water disinfection
TTHMs [Total Trihalomethanes]–Stage 2 (ppb)	2012	80	NA	NA	NA	30	1.2–120.8	No	By-product of drinking water disinfection
Turbidity[1] (NTU)	2012	TT	NA	NA	NA	0.3	ND–0.3	No	Soil runoff
Uranium (pCi/L)	2012	20	0.43	ND	NA	NA	NA	No	Erosion of natural deposits

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	PHG (MCLG)	AMOUNT DETECTED (90TH%TILE)	SITES ABOVE AL/ TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2010	1.3	0.3	0.325	0/5	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

SECONDARY SUBSTANCES

				Deer Lodge Park		Crestline-Lake Arrowhead Water Agency (CLAWA)			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	PHG (MCLG)	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chloride (ppm)	2012	500	NS	15	15–15	83.63	42–130	No	Runoff/leaching from natural deposits; seawater influence
Color (Units)	2012	15	NS	1	1–2	NA	NA	No	Naturally occurring organic materials
Corrosivity (Units)	2012	Noncorrosive	NS	11.97	11.97–11.97	NA	NA	No	Natural or industrially influenced balance of hydrogen, carbon, and oxygen in the water; affected by temperature and other factors
Iron (ppb)	2012	300	NS	ND	NA	7.5	0–120	No	Leaching from natural deposits; industrial wastes
Odor–Threshold (TON)	2012	3	NS	2.66	1–6	1	1–1	No	Naturally occurring organic materials
pH (Units)	2012	6.5–8.5	NS	7.49	7.11–8.10	NA	NA	No	Naturally occurring
Specific Conductance (µS/cm)	2012	1,600	NS	376	348–446	NA	NA	No	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2012	500	NS	6.8	6.8–6.8	37.56	30–46	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	2012	1,000	NS	220	220–220	300	220–350	No	Runoff/leaching from natural deposits
Turbidity (NTU)	2012	5	NS	0.096	0.06–0.18	NA	NA	No	Soil runoff
Zinc (ppb)	2012	5,000	NS	170	170–170	NA	NA	No	Runoff/leaching from natural deposits; industrial wastes

OTHER SUBSTANCES

		Deer Lodge Park		Crestline-Lake Arrowhead Water Agency (CLAWA)	
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH
Boron (ppb)	2012	ND	NA	114.38	ND–210
Calcium (ppm)	2012	44	44–44	NA	NA
Magnesium (ppm)	2012	10	10–10	NA	NA
Potassium (ppm)	2012	2.7	2.7–2.7	NA	NA
Sodium (ppm)	2012	19	19–19	63.63	42–82
Total Hardness (ppm)	2012	150	150–150	96.5	60–110
Vanadium (ppb)	2012	3.1	3.1–3.1	0.7	ND–4

[1] Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.

Definitions

AL (Regulatory Action Level): The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

µS/cm (microsiemens per centimeter): A unit expressing the amount of electrical conductivity of a solution.

MCL (Maximum Contaminant Level): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs (SMCLs) are set to protect the odor, taste, and appearance of drinking water.

MCLG (Maximum Contaminant Level Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. EPA.

MRDL (Maximum Residual Disinfectant Level): 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.

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.

NA: Not applicable

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NS: No standard

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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

PDWS (Primary Drinking Water Standard): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

PHG (Public Health Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California EPA.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

TON (Threshold Odor Number): A measure of odor in water.

TT (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water.