



2011 Annual Water Quality Report

How Good Is Our Water?

This brochure is a summary of the quality of water provided to the customers of the Big Bear City Community Services District. Included are details about where your water comes from, what it contains, and how it compares to State standards. *Este folleto es un resumen de la calidad del agua suministrada a los clientes de la comunidad de ciudad Big Bear servicios de distrito. Se incluyen los detalles acerca de dónde viene el agua, lo que contiene, y cómo compara con las normas estatales. Tradúzcalo o hable con alguien que lo entienda bien.*

Where Does Our Water Come From?

The Big Bear City Community Services District's water department serves 6,018 customers from a system comprised of 81.7 miles of water mains, 11 vertical wells, 2 sealed springs, 2 horizontal wells, and 4 storage reservoirs with a total storage capacity of 6.25 million gallons.

Why Is There Anything In My 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.

What Else Should I Know?

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 contaminants and potential health effects may be obtained by calling the EPA's Safe Drinking Water Hotline (800) 426-4791.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-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, 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 (800) 426-4791.

How Can I Get Involved?

Our Board of Directors meets on the first and third Mondays of each month at 5:30 p.m. at the District office. We encourage participation from the public.

Where Can I Get More Information?

The Big Bear City Community Services District office is located at 139 E. Big Bear Blvd. and is open Monday through Friday from 7:30 a.m. until 4:30 p.m. Our phone number is (909) 585-2565. For questions regarding your water quality, ask for Greg Ricketts. The Environmental Protection Agency's Safe Drinking Water Hotline is (800) 426-4791.

What Contaminants May Be Present In Source Water Before We Treat It?

- **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 result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- **Radioactive contaminants**, which can be naturally-occurring or the result of oil and gas production and mining activities.

A source water assessment was conducted for the Big Bear City Community Services District Water System in September of 2002. A copy of the complete assessment may be viewed at the Big Bear City Community Services District Office or at the DHS San Bernardino District Office, 464 West 4th Street, Suite 437, San Bernardino, CA 92401, or you may request a summary of the assessment be sent to you by contacting Jerry Griffith, Water Department Superintendent, Big Bear City Community Services District, P.O. Box 558, 139 E. Big Bear Blvd., Big Bear City, CA 92314, (909) 585-2565.

Water Data for 2011

Our water is tested by independent laboratories to assure that it meets all drinking water standards. The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the test data, though representative, is more than one year old. Test results are presented in Tables 1, 2, and 3.

The following terms and abbreviations are used in Tables 1, 2, and 3:

- **Public Health Goal (PHG):** 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 Environmental Protection Agency.
- **Maximum Contaminant Level Goal (MCLG):** 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. Environmental Protection Agency.
- **Maximum Contaminant Level (MCL):** 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 are set to protect the odor, taste, and appearance of drinking water.
- **Nephelometric Turbidity Units (NTU):** This is a measure of the suspended material in water.
- **Regulatory Action Level (A/L):** The concentration of a contaminant which, when exceeded, triggers treatment or other requirements that a water system must follow.
- **n/a:** not applicable
- **ppm:** parts per million
- **ppb:** parts per billion
- **pCi/l:** picocuries per liter (a measure of radiation)



Big Bear City Community Services District
139 E. Big Bear Blvd., P.O. Box 558, Big Bear City, CA 92314
(909) 585-2565 www.bbccsd.org

Table 1: Unregulated Contaminants

Unregulated Contaminant	Last Sampled	Unit	Goal (PHG or MCLG)	Maximum Allowed (MCL)	Detected Level (Average)	Range of Values Detected	Major Sources
Hexavalent Chromium	2005	ppb	2	50	1.5	0-3.4	Erosion of natural deposits
Vanadium	2011	ppb	n/a	50	3.84	0-6	Erosion of natural deposits
Dichlorodifluoromethane	2007	ppb	n/a	1000	0	0	Erosion of natural deposits

Table 2: Regulated Contaminants

Regulated Contaminant	Last Sampled	Unit	Goal (PHG or MCLG)	Maximum Allowed (MCL)	Detected Level (Average)	Range of Values Detected	Major Sources
Clarity							
Turbidity	2011	NTU	n/a	5	0.13	0.1-1.4	Soil runoff
Microbiological							
Total Coliform Bacteria	2011	# positive	0	2/month	0	0	Naturally in the environment
Inorganic Chemicals							
Aluminum	2011	ppb	600	1000	0	0	Erosion of natural deposits
Arsenic	2011	ppb	4	10	0	0	Erosion of natural deposits
Barium	2011	ppm	2	1	0	0	Erosion of natural deposits
Fluoride	2011	ppm	1	2	0.79	0.1-1.3	Erosion of natural deposits
Nitrate (as NO3)	2011	ppm	45	45	4.35	0-9.9	Erosion of natural deposits
Lead and Copper Rule							
Lead ¹	2010	ppb	2	AL=15	0	all sites <AL	Corrosion of household plumbing systems
Copper	2010	ppm	0.17	AL=1.3	0.20	all sites <AL	Corrosion of household plumbing systems
Radioactivity							
Gross Alpha Activity	2011	pCi/l	0	15	1.4	0-5.6	Erosion of natural deposits
Uranium	2011	pCi/l	0	20	6.3	0-6.3	Erosion of natural deposits
228 Radium ²	2011	pCi/l	0	0.019	0.04	0-0.44	Erosion of natural deposits
Secondary Standards							
Color	2011	units	n/a	15	3	3-5	Naturally occurring organic materials
Odor-Threshold	2011	units	n/a	3	1	1	Naturally occurring organic materials
Chloride	2011	ppm	n/a	500	7.1	1.6-11	Runoff/leaching from natural deposits
Iron	2011	ppb	n/a	300	11.65	0-23.8	Leaching from natural deposits
Manganese	2011	ppb	n/a	50	0	0	Runoff/leaching from natural deposits
Sulfate	2011	ppm	n/a	500	28.8	10-41.7	Runoff/leaching from natural deposits
Total Dissolved Solids	2011	ppm	n/a	1000	296	220-330	Runoff/leaching from natural deposits
Specific Conductance	2011	micromhos	n/a	1600	482	350-532	Substances that form ions when in water
Foaming Agents (MBAS)	2011	ppb	n/a	500	0	0	Municipal & industrial waste discharges
Corrosivity	2011	n/a	n/a	noncorrosive	noncorrosive	noncorrosive	Balance of hydrogen, carbon, and oxygen in water
Additional							
PH	2011	units	n/a	n/a	7.7	7.5-8.0	n/a
Hardness (CaCO3)	2011	ppm	n/a	n/a	227	130-260	n/a
Sodium	2011	ppm	n/a	n/a	17.5	3.2-27	n/a
Calcium	2011	ppm	n/a	n/a	53	33-60	n/a
Potassium	2011	ppm	n/a	n/a	2.0	1.5-3.5	n/a
Magnesium	2011	ppm	n/a	n/a	24.7	12-37	n/a

¹Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and/or flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800) 426-4791.

²Per CDPH, Radium 228 Testing has replaced Gross Alpha Activity Testing for radioactivity.

Table 3: Volatile Organic Contaminants

Volatile Organic Contaminant*	Last Sampled	Unit	Goal (MCL)	Maximum Allowed (MCL)	Detected Level (Average)	Range of Values Detected	Major Sources
Carbon Tetrachloride	2011	ppb	.01	0.5	0	0	Discharge from chemical plants and other industrial activities
1, 1 Dichloroethane (1, 1 - DCA)	2011	ppb	3	5	0	0	Extraction and degreasing solvents
1, 1, 1, Trichloroethane (1, 1, 1 - TCA)	2011	ppb	1000	200	0	0	Discharge from metal degreasing sites & factories; manufacture of food wrappers
Trichloroethylene (TCE)	2011	ppb	0.8	5	0	0	Discharge from metal degreasing sites and other factories

* Contaminants listed in Table 3 are blended in a 2.5 million gallon reservoir.