

This report was prepared by: Beaumont-Cherry Valley Water District 560 Magnolia Ave. Beaumont, CA 92223

# Meeting the Challenge

We are proud to present our annual water quality report covering all testing performed between January 1 and December 31, 2011. Over the years we have dedicated ourselves to producing drinking water that is well within all state and federal standards. While continuing to serve the diverse needs of all our water users, we strive to adopt new methods for delivering the best quality drinking water to you. As new challenges to drinking water safety emerge, we remain dedicated to the protection and safe distribution of source water and water conservation.



Beaumont-Cherry Valley Water District is a special district that provides drinking water and non-potable water for irrigation, landscaping and other

purposes. The Beaumont-Cherry Valley Water District operates for the sole benefit of its customers, directly reinvesting rate revenue for improvements and enhancements to system operations.

For more information about this report, or for any questions relating to your drinking water, please call Anthony Lara, Assistant General Manager, at (951) 845-9581.

## **Community Participation**

You are invited to participate in our public forum to comment on your drinking water. The Board of Directors meets the second Wednesday of each month beginning at 7 p.m. at the BCVWD Public Board Room, located at 560 Magnolia Ave., Beaumont CA 92223.

## Where Does My Water Come From?

The Beaumont-Cherry Valley Water District pumps water from two sources: the Beaumont Basin (Basin) and Edgar Canyon (Little San Grogonio Creek). Our primary source is from the Basin, located hundreds of feet below ground-level. Our secondary source is Edgar Canyon to the East, which follows the contour of Oak Glen Road in Cherry Valley.

These sources provide roughly 3.6 billion gallons of drinking water every year. Always at the forefront of our District policies is managing these resources in a responsible and environmentally friendly manner. In order to augment water supplies in the Basin, the District continues to purchase and recharge California State Water Project (imported water from the statewide water project facilities). In 2011, 2.6 billion gallons of water was recharged into the Basin through the District's solely owned and operated Recharge and Reclamation facility located on the corner of Beaumont Avenue and Cherry Valley Boulevard.

The Beaumont-Cherry Valley Water District has developed a non-potable water system (not suitable for drinking) for irrigation purposes. The non-potable system provides for the use and distribution of unfiltered California State Project Water, recycled water, and water from wells that may not meet drinking water standards for irrigation purposes. The District continues to work with neighboring agencies to secure sources of recycled water. The non-potable water system delivers water to irrigation customers such as parks, green belts, cemeteries, and golf courses within the District's service area, therefore reducing the demand on the District's groundwater resources.

## 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 State 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, which are by-products of industrial processes and petroleum production, and which 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.

### 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.

Nitarte in drinking water at levels above 45 mg/L is a heath risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 45 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.

Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity.

### **Testing For Radon**

Radon is a radioactive gas that you cannot see, taste, or smell. It is found throughout the U.S. Radon can move up through the ground and into a home through cracks and holes in the foundation. Radon can build up to high levels in all types of homes. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. Compared to radon entering the home through soil, radon entering the home through tap water will in most cases be a small source of radon in indoor air. Radon is a known human carcinogen. Breathing air containing radon can lead to lung cancer. Drinking water containing radon may also cause increased risk of stomach cancer. If you are concerned about radon in your home, test the air in your home. Testing is inexpensive and easy. You should pursue radon removal if the level of radon in your air is 4 pCi/L of air or higher. There are simple ways to fix a radon problem that are not too costly. For additional information, call California's radon program (1-800-745-7236), the U.S. EPA Safe Drinking Water Act Hotline (1-800-426-4791), or the National Safety Council Radon Hotline (1-800-SOS-RADON).

## 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 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) 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. If you would like to review the Source Water Assessment Plan, please feel free to contact our office during regular office hours.



### Who uses the most water?

On a global average, most freshwater withdrawals—69 percent—are used for agriculture, while industry accounts for 23 percent and municipal use (drinking water, bathing and cleaning, and watering plants and grass) just 8 percent.

#### How much water does a person use every day?

The average person in the U.S. uses 80 to 100 gallons of water each day. During medieval times a person used only 5 gallons per day.

## Should I be concerned about what I'm pouring down my drain?

If your home is served by a sewage system, your drain is an entrance to your wastewater disposal system and eventually to a drinking water source. Consider purchasing environmentally friendly home products whenever possible, and never pour hazardous materials (e.g., car engine oil) down the drain. Check with your health department for more information on proper disposal methods.

### How long does it take a water supplier to produce one glass of drinking water?

It can take up to 45 minutes to produce a single glass of drinking water.

### How much emergency water should I keep?

Typically, 1 gallon per person per day is recommended. For a family of four, that would be 12 gallons for 3 days. Humans can survive without food for 1 month, but can only survive 1 week without water.

# 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 table below shows only those contaminants that were detected in the water. The state allows us to monitor for certain substances less 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 SUBS	STANCE	S											
SUBSTANCE (UNIT OF MEASURE)		YEAR SAMPLED			MCL [MRDL]			AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE		
Chlorine (mg/L)		2011			[4.0 mg/L]	[4.0]	mg/L]	0.9 mg/L	0.8-0.9	No	Drinking water disinfectant added for traetment		
Chromium (ppb)		2011			50		(00	8.8	3.5–20	No	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits		
Fluoride (ppm)		2011			2.0		1	0.5	0.3–0.9	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories		
Nickel (ppb)		2009-2011		1	100 ppb		ppb	1 ppb	0-14 ppł	No	Erosion of natural deposits; discharge from metal factories		
Nitrate [as nitrate] (ppm)		2011			45		5	9.0	3.2–33.0	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits		
TTHMs [Total Trihalomethanes] (ppb)		2011			80		IA	1.2	ND-2.0	No	By-product of drinking water disinfection		
<b>Total Coliform Bacteria</b> [ <b>Total Coliform Rule</b> ] (% positive samples)		2	2011	More than 5.0% of monthly samples are positive			0)	0	NA	No	Naturally present in the environment		
Tap water samples were collected for lead and copper analyses from sample sites throughout the community													
SUBSTANCE YE				PHG (MCLG)			SITES ABOVE AL/ TOTAL SITES VIOLATION		TYPICAL SC	TYPICAL SOURCE			
Copper (ppm)	200	19	1.3	0.3	0.18	0/3	0	No		nternal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood reservatives			
<b>Lead</b> (ppb) 20		19	15	0.2	< 5	1/3	0			ternal corrosion of household water plumbing systems; discharges from industrial manufacturers; osion of natural deposits			
OTHER REGULATI	ED SUB	STAN	CES										
SUBSTANCE (UNIT OF MEASURE)			MCL [MRDL]	PHG (MCLG) [MRDLG]	AMOUNT DETECTED	RANGE			YPICAL SOURCE				
Bicarbonate (ppm)		20	11	NS	NS	210	180–23	230 No		Generally found in ground & surface water			
Calcium (ppm)		20	2011		NS	42	29–55	No	Gen	Generally found in ground & surface water			
Magnesium (ppm)		20	11	NS	NS NS		8.3–19	) No	Generally found in ground & surface water				
Potassium (ppm)		20	11	NS	NS 1.		1.1–2.0	) No	Generally found in ground & surface water				
Sodium (ppm)		20	11	NS	NS	19	11–37	No	Gen	Generally found in ground & surface water			
Total Alkalinity (ppm)		20	11	NS	NS	170	170 140–190		Gen	Generally found in ground & surface water			
Total Hardness (ppm)		20	11	NS	NS NS 1		50 110–210		Gen	Generally found in ground & surface water			

SECONDARY SUBSTANCES											
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	PHG (MCLG)	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE				
Chloride (ppm)	2011	500	NS	8.1	4–22	No	Runoff/leaching from natural deposits; seawater influence				
Foaming Agents [MBAS]	2011	500	NS	NA	NA	No	Municipal and industrial waste discharges				
Iron ug/L	2009-2011	300 ug/L	NS	ND	0-120 ug/L	No	Leaching from natural deposits; industrial wastes				
Specific Conductance (uS/ cm)	2009-2011	1,600 uS/cm	NS	420 uS/cm	340-580 uS/cm	No	Substances that form ions when in water; seawater infuence				
Sulfate (ppm)	2011	500	NS	22	8.3–63	No	Runoff/leaching from natural deposits; industrial wastes				
<b>Total Dissolved Solids</b> (ppm)	2011	1,000	NS	230	170–380	No	Runoff/leaching from natural deposits				
Turbidity	2009-2011	5 NTU	NS	0.1 NTU	0-0.68 NTU	No	Soil runoff				

### Definitions

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

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

**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).

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