

# 2011 Consumer Confidence Report

Water System Name: Bodega Bay Public Utility District Report Date: March 2012

*We test the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of our monitoring for the period of January 1 - December 31, 2011.*

**Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien.**

Type of water source(s) in use: Wells

Name & location of source(s): Salmon Creek Wells (2) Roppolo Wells (4) Bodega Dunes Wells (2)

Drinking Water Source Assessment information: A source water assessment was conducted by the California Department of Health Services in March 2002. This report is available at the District Office. From the assessments it was determined that the Salmon Creek Wells are most vulnerable to grazing, the Bodega Dunes Wells are most vulnerable to septic systems and sewer collection systems, and the Roppolo Wells are most vulnerable to automobile gas stations.

Time and place of regularly scheduled board meetings for public participation: The Board of Directors meet on the third Wednesday of each month at 9:00 a.m., at the District Office located at 265 Doran Park Road.

For more information, contact: Janet Mantua – District Clerk Phone: (707) 875-3332

## TERMS USED IN THIS REPORT

**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.

**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 (USEPA).

**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 Residual Disinfectant Level (MRDL):** 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):** 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.

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

**Secondary Drinking Water Standards (SDWS):** MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

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

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

**Variations and Exemptions:** Department permission to exceed an MCL or not comply with a treatment technique under certain conditions.

**ND:** not detectable at testing limit

**ppm:** parts per million or milligrams per liter (mg/L)

**ppb:** parts per billion or micrograms per liter (ug/L)

**ppt:** parts per trillion or nanograms per liter (ng/L)

**ppq:** parts per quadrillion or picogram per liter (pg/L)

**pCi/L:** picocuries per liter (a measure of radiation)

**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.

**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 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 can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- *Radioactive contaminants*, that can be naturally-occurring or be the result of oil and gas production and mining activities.

**In order to ensure that tap water is safe to drink**, the USEPA 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 provide the same protection for public health.

**Tables 1, 2, 3, 4, and 5, list all of the drinking water contaminants that were detected during the most recent sampling for the constituent.** The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The Department allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old.

<b>TABLE 1 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA</b>					
<b>Microbiological Contaminants</b> (complete if bacteria detected)	<b>Highest No. of Detections</b>	<b>No. of months in violation</b>	<b>MCL</b>	<b>MCLG</b>	<b>Typical Source of Bacteria</b>
Total Coliform Bacteria	1	0	More than 1 sample in a month with a detection	0	Naturally present in the environment
Fecal Coliform or <i>E. coli</i>	1	0	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or <i>E. coli</i>	0	Human and animal fecal waste

<b>TABLE 2 – SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER</b>						
<b>Lead and Copper</b> (complete if lead or copper detected in the last sample set)	<b>No. of samples collected</b>	<b>90<sup>th</sup> percentile level detected</b>	<b>No. sites exceeding AL</b>	<b>AL</b>	<b>PHG</b>	<b>Typical Source of Contaminant</b>
Lead (ppb)	20	<5.	0	15	.02	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	20	1.9	7	1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short period of time may experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years may suffer liver or kidney damage. People with Wilson’s Disease should consult their personal doctor.

**TABLE 3 – SAMPLING RESULTS FOR SODIUM AND HARDNESS**

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	4/08/2009 To 11/05/2011	52.5	16-110	none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm)	4/08/2009 To 11/05/2011	311	96-720	none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

**TABLE 4 – DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD**

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Arsenic (ppb)	4/08/2009 To 11/05/2011	.91	<2-3.1	10	.004	Erosion of natural deposits; runoff from orchards; glass & electronics production wastes
Barium (ppm)	4/08/2009 To 11/05/2011	.052	<001-.21	1	2	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Chromium (ppb)	4/08/2009 To 11/05/2011	.28	<1-1.7	50	(100)	Discharge from steel and pulp mills and chrome plating, erosion of natural deposits
Fluoride (ppm)	4/08/2009 To 11/05/2011	.14	<.1-.21	2	1	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (ppm)	4/08/2009 To 11/05/2011	6.31	<2-18	45 as Nitrate	45 as NO3	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits

**TABLE 5 – DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD**

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Bicarbonate (mg/L)	4/08/2009 To 11/05/2011	200	110-240	N/A	N/A	N/A
Calcium (mg/L)	4/08/2009 To 11/05/2011	73.2	17-180	N/A	N/A	N/A
Chloride (mg/L)	4/08/2009 To 11/05/2011	102.66	340	500	N/A	Runoff/leaching from natural deposits; seawater influence
Color (Units)	4/08/2009 To 11/05/2011	22.5	5-50	15 Units	N/A	Naturally occurring organic materials
Iron (ug/L)	4/08/2009 To 11/05/2011	70	<100-200	300	N/A	Leaching from natural deposits; industrial wastes
Magnesium (mg/L)	4/08/2009 To 11/05/2011	31.33	12-66	N/A	N/A	N/A

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Manganese (ug/L)	4/08/2009 To 11/05/2011	42.33	<20-170	50	N/A	Leaching from natural deposits
Odor-Threshold (Units)	4/08/2009 To 11/05/2011	.70	<1-3	3 Units	N/A	Naturally occurring organic materials
pH (Std Units)	4/08/2009 To 11/05/2011	7.65	7.1-8.1	N/A	N/A	N/A
Specific Conductance (micromhos)	4/08/2009 To 11/05/2011	971.7	280-2200	1600	N/A	Substances that form ions when in water; seawater influence
Sulfate (mg/L)	4/08/2009 To 11/05/2011	26.26	2.6-60	500	N/A	Runoff/leaching from natural deposits; industrial wastes
Total Alkalinity (mg/L)	4/08/2009 To 11/05/2011	163.7	92-190	N/A	N/A	N/A
Total Dissolved Solids (mg/L)	4/08/2009 To 11/05/2011	596.6	160-1200	1000	N/A	Runoff/leaching from natural deposits
TTHMs (Total Trihalomethanes) (ppb)	12/29/2011	6.25	4.6-7.9	80	N/A	Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience liver, kidney, or central nervous system problems, and may have an increased risk of getting cancer.
Turbidity (Units)	4/08/2009 To 11/05/2011	4.84	1.2-22	5 Units	N/A	Soil runoff-Turbidity is a measure of cloudiness of the water. We monitor it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.

### Additional General Information on Drinking Water

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 can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

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 health care providers. USEPA/Centers for Disease Control (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 (1-800-426-4791).