



**CONSUMER CONFIDENCE REPORT**  
**for Calendar Year 2016**  
**City of Sebastopol Municipal Water System**  
**July 1, 2017**

**We test the 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, 2016**

If you have questions about the contents of this report, or concerns about drinking water quality in Sebastopol, please contact **Public Works Department, 714 Johnson Street, Sebastopol, CA 95472, Phone: (707) 823-5331 Fax: (707) 823-4721**  
Dante Del Prete, Superintendent of Public Works  
Or visit our City website at <http://www.ci.sebastopol.ca.us>

**Opportunities for public participation in decisions affecting drinking water quality in Sebastopol include**  
**Regularly Scheduled Meetings of the Sebastopol City Council**

*1<sup>st</sup> and 3<sup>rd</sup> Tuesdays of each month*

*Sebastopol Youth Annex, 425 Morris Street, Sebastopol.*

*Agendas are posted at City Hall and published in Sonoma West Times and News in advance of the meetings.*

*Contact the City Clerk at (707) 823-1153 for additional information.*

*It is important that this report reach all of our water customers and consumers. If your property is a rental, or if you are a business owner or manager, please distribute this information to your tenants. Additional copies of this report are available at City Hall or the Public Works Department.*

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

**Drinking Water Source Water Assessment**

*An assessment of the drinking water source(s) for the Sebastopol Municipal Water system was completed in November 1998. Our sources are considered most vulnerable to the following activities associated with contaminants detected in the water supply; gas stations, dry cleaners, leaking underground storage tanks. In addition, our sources are considered vulnerable to a number of other activities such as metal plating/finishing, plastics/synthetics producers, septic systems, and sewer lines. A copy of the complete assessment is available for inspection or purchase at the Engineering Division.*

**General Information About Drinking Water and Possible Sources of Contamination**

*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 applications, and septic systems.*
- *Radioactive contaminants, that can be naturally-occurring or be the result of oil and gas production and mining activities.*

**Source Water Testing Regulations and Monitoring Results**

*In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the State Water Resources Control Board (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Board regulations also establish limits for contaminants in bottled water that provide the same protection for public health. Sebastopol monitors its water wells for over 80 different constituents, according to USEPA and State Board requirements. Results reported in the following tables are for detected contaminants only. All testing results are available for inspection at the Public Works Department.*

**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.

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

**Level 1 Assessment:** A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

**Level 2 Assessment:** A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an *E. coli* MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

**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)

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 State Board 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.

\*Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided following these tables.

**TABLE 1 - SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA**

Microbiological Contaminants (to be completed only if there was a detection of bacteria)	Highest No. of Detections	No. of months in violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria	(In a mo.) 1	0	More than 1 sample in a month with a detection	0	Naturally present in the environment.
Fecal Coliform and <i>E. coli</i>	(In the year) 0	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.
<i>E. coli</i> (Federal Revised Total Coliform Rule)	0 (from 4/1/16-12/31/16)	0	(a)	0	Human and animal fecal waste

(a) Routine and repeat samples are total coliform-positive and either is *E. coli*-positive or system fails to take repeat samples following *E. coli*-positive routine sample or system fails to analyze total coliform-positive repeat sample for *E. coli*.

**TABLE 2 - SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER**

Lead and Copper (to be completed only if there was a detection of lead or copper in the last sample set)	Sample Date	No. of samples collected	90 <sup>th</sup> percentile level detected	No. Sites exceeding AL	AL	MCLG	Typical Source of Contaminant
Lead (ppb)	8/11/2015 - 9/01/2015	20	<5.0	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits.
Copper (ppm)	8/11/2015 - 9/01/2015	20	0.17	0	1.3	1.3	Internal corrosion of household water plumbing systems; erosion of natural deposits; leaching from wood preservatives.

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

<b>Chemical or Constituent (and reporting units)</b>	<b>Sample Date</b>	<b>Level Detected</b>	<b>Range of Detections</b>	<b>MCL</b>	<b>PHG (MCLG)</b>	<b>Typical Source of Contaminant</b>
Sodium (ppm)	Well 4 - 2014 Well 6 - 2015 Well 7 - 2015 Well 8 - 2014	19.5	18 - 21	N/A	N/A	Salt present in the water and is generally naturally occurring.
Hardness (ppm)	"	86.5	77 - 98	N/A	N/A	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**

<b>Chemical or Constituent (and reporting units)</b>	<b>Sample Date</b>	<b>Level Detected</b>	<b>Range of Detections</b>	<b>MCL</b>	<b>PHG (MCLG)</b>	<b>Typical Source of Contaminant</b>
Radioactivity (Gross Alpha) (pCi/L)	Well 4 - 2016 Well 6 - 2016 Well 7 - 2016 Well 8 - 2016	.85	.44 - 1.85	15	(0)	Erosion of natural deposits.
Fluoride (ppm)	Well 4 - 3/25/14 Well 6 - 5/12/15 Well 7 - 8/31/15 Well 8 - 3/25/14	.16	0.14 - 0.18	2	(4.0)	Erosion of natural deposits, water additive that promotes strong teeth; discharge from fertilizer and aluminum factories.
Arsenic (ppb)	Well 4 - (2013) Well 6 - (2015) Well 7 - (2015) Well 8 - (2014)	2.4	<2.0 - 11	10	(0)	Erosion of natural deposits, runoff from orchards, glass and electronics production wastes.
Barium (ppm)	Well 4 - (2014) Well 6 - (2015) Well 7 - (2015) Well 8 - (2014)	0.13	<0.1 - 0.5	1	(2)	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Chromium (ppb)	Well 4 - (2016) Well 6 - (2016) Well 7 - (2016) Well 8 - (2014)	2.23	<1.00 - 6.0	50	(100)	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits.
Nitrate (ppm)	Various in 2016	1.4	.04 - 2.8	45	45	Runoff and leaching from fertilizer use; leaching from septic tanks, sewage, and erosion from natural deposits.
Tetrachloroethylene	Well 4 - (2016) Well 6 - (2012) Well 7 - (2011) Well 8 - (2014)	.0	0.0 - 0.0	5	(0)	Discharge from factories, dry cleaners, and auto shops (metal degreaser).
Chlorine (ppm)	Weekly (Various Locations)	.22	.03 - .58	MRDL = 4	MRDLG = 4	Drinking water disinfectant added for treatment.
TTHMs (ppb)	8/2/16	4.8	3.3 - 6.3	80	N/A	Byproduct of drinking water disinfection.
HAA5 (ppb)	8/2/16	ND	ND	60	N/A	Byproduct of drinking water disinfection.
Hexavalent Chromium (ppb)	Well 4 - (2014) Well 6 - (2014) Well 7 - (2016) Well 8 - (2014)	1.36	0.0 - 5.1	10	0.02	Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities; erosion of natural deposits.

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

<b>Chemical or Constituent (and reporting units)</b>	<b>Sample Date</b>	<b>Level Detected</b>	<b>Range of Detections</b>	<b>MCL</b>	<b>PHG (MCLG)</b>	<b>Typical Source of Contaminant</b>
Turbidity (Units)	Well 4 - (2014) Well 6 - (2015) Well 7 - (2015) Well 8 - (2014)	.31	0.17 - 0.43	5	N/A	Soil runoff.
Total Dissolved Solids (TDS) (ppm)	Well 4 - (2014) Well 6 - (2015) Well 7 - (2015) Well 8 - (2014)	197.5	140 - 260	1000	N/A	Runoff/leaching from natural deposits.
Specific Conductance (micromhos)	Well 4 - (2014) Well 6 - (2014) Well 7 - (2015) Well 8 - (2014)	315	290 - 350	1600	N/A	Substances that form ions when in water; seawater influence.
Chloride (ppm)	Well 4 - (2014) Well 6 - (2015) Well 7 - (2015) Well 8 - (2014)	13	9.5 - 16	500	N/A	Runoff/leaching from natural deposits; seawater influence.
Sulfate (ppm)	Well 4 - (2014) Well 6 - (2015) Well 7 - (2015) Well 8 - (2014)	18	14 - 23	500	N/A	Runoff/leaching from natural deposits & industrial wastes.
Color (units)	Well 4 - (2014) Well 6 - (2015) Well 7 - (2015) Well 8 - (2014)	5.75	3.0 - 10.0	15	N/A	Naturally-occurring organic materials.
Odor (ton)	Well 4 - (2014) Well 6 - (2015) Well 7 - (2015) Well 8 - (2014)	1.5	<1 - 3.0	3	N/A	Naturally-occurring organic materials

**Summary Information for Contaminants Exceeding an MCL, MRDL, or AL, or a Violation of Any Treatment Technique or Monitoring and Reporting Requirement during calendar year 2016.**

\*Arsenic

While your drinking water meets the federal and state standard for arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The U.S. Environmental Protection Agency continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

**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).

*Lead-Specific Language for Community Water Systems:* 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. City of Sebastopol is 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 do so, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering plants. 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 (1-800-426-4701) or at <http://www.epa.gov/lead>.