

# 2014 CONSUMER CONFIDENCE REPORT



water

# conserve



# 2014 Consumer Confidence Report

Water System Name: CITY OF SOLVANG Report Date: June 2015

*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, 2013 and may include earlier monitoring data.*

**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: Ground Water (Wells) & Surface Water (ID#1 and CCWA)

Name & general location of source(s): Wells 3 & 7a River Wells; Well #4 & #21 Upland, Santa Ynez River Water Conservation District, Improvement District No. 1 (SYRWCD.ID1) & Central Coast Water Authority (CCWA)

Drinking Water Source Assessment information: Source Assessments for the City's wells were completed September 2002.

Time and place of regularly scheduled board meetings for public participation: Second and Fourth Monday of each Month at 1644 Oak Street, Solvang, CA @ 6:30 PM.

For more information, contact: Kevin Harmer Phone: (805) 688-5575

## 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 (µg/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 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 provide the same protection for public health.

**Tables 1, 2, 3, 4, 5, 7, and 8 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	0	0	More than 1 sample in a month with a detection	0	Naturally present in the environment
Fecal Coliform or <i>E. coli</i>	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

<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>Sample Date</b>	<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)	8/14	20	ND	0	15	2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	8/14	20	.311	1	1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

**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)	2012-2013	66	56-76	none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm)	2012-2013	625	578-672	none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

\*Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided later in this report.

**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
Fluoride (ppm)	2012-2013	.15	0.1-0.2	2	1	Erosion of natural deposits; water additive which promotes strong teeth
Nitrate (ppm) (as NO <sub>3</sub> )	3/14-4/14	6.8	0.6-18.8	45	45	Runoff & leaching from fertilizer use; sewage; erosion of natural deposits
Nitrate and Nitrite (as N) (ppm)	2012-2013	0.1	0.1	10	10	Runoff & leaching from fertilizer use; sewage; erosion of natural deposits
Hexavalent Chromium (ppb)	7/14-10/14	0.275	0-1.1	10	0.02	Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities; erosion of natural deposits
Tetrachloroethylene (PCE)* (ppb)	4/13-7/13	0.575	0.5-0.8	5	N/A	Leaching from PVC pipes; discharge from factories, dry cleaners and auto shops (metal degreaser)
Gross Alpha Activity (pCi/L)	4/13-7/13	8.745	5.07-13.6	15	N/A	Erosion of natural deposits
Uranium (pCi/L)	7/13	6.78	3.66-9.89	20	0.5	Erosion of natural deposits
Trihalomethane (TTHM) (ppb)	1/14-10/14	35.3	6.0-53.4	80	N/A	Byproduct of drinking water chlorination
Haloacetic Acid (HAA5) (ppb)	1/14-10/14	4.8	2-10	60	N/A	Byproduct of drinking water disinfection.
Selenium (ppb)	3/12-4/13	11.25	2.0-16.0	50	50	Erosion of natural deposits; discharge chemical manufacturers and runoff from livestock lot

**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
Chloride (ppm)	3/12-4/13	91	74-101	500	N/A	Runoff/leaching from natural deposits; seawater influence
Odor (units)	3/12-4/13	<1	<1	3 units	N/A	Natural occurring materials

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

Specific conductance (Umhos/cm)	3/12-4/13	1457.5	1360-1620	1600	N/A	Substance that forms ions when in water; seawater influence
Sulfate (ppm)	3/12-4/13	251.5	196-280	500	N/A	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	3/12-4/13	922.5	880-1010	1000	N/A	Runoff/leaching from natural deposits;

**TABLE 6 – DETECTION OF UNREGULATED CONTAMINANTS**

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notification Level	Health Effects Language
Boron (ppb)	4/13	150	100-200	1000	Some men who drink water-containing boron in excess of the action level over many years may experience reproductive effects based on studies in dogs.
Vanadium (ppb)	4/13	6.5	3-10	50	The babies of some pregnant women who drink water containing vanadium in excess of the action level may have an increased risk of developmental effects, based on studies in laboratory animals.

\*Any violation of an MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.

### 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. The City of Solvang 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 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 <http://www.epa.gov/safewater/lead>.

\* Tetrachloroethylene (PCE): Some people who use water-containing tetrachloroethylene in excess of the MCL over many years, may experience liver problems, and may have an increased risk of getting cancer.

SANTA YNEZ RIVER WATER CONSERVATION DISTRICT, IMPROVEMENT DISTRICT NO. 1

SAMPLING RESULTS: PRIMARY AND SECONDARY STANDARDS

Parameter	Units	State MCL	PHG (MCLG)	State DLR	Drinking Water Source		Major Sources in Drinking Water
					Range Average	State Water	

**PRIMARY STANDARDS--Mandatory Health-Related Standards**

**CLARITY**

Combined Filter Effluent Turbidity <sup>a</sup>	NTU	TT=<1 NTU every 4 hours TT=95% of samples <0.3 NTU	Range %	0.04 - 0.11 100%	NA NA	Soil runoff
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**INORGANIC CHEMICALS**

Aluminum <sup>b</sup>	ppb	1000 (b)	600	50	Range Average	ND - 110 69	ND - 130 10	Residue from water treatment process; Erosion of natural deposits
Arsenic	ppb	10	0.004	2.0	Range Average	ND ND	ND - 2.3 0.7	Erosion of natural deposits; orchard runoff; glass and electronic production waste
Barium	ppb	1000	2000	100	Range Average	44 44	ND - 170 22	Erosion of natural deposits; oil drilling and metal refinery wastes
Chromium +6 (before 7/1/14)	ppb	NA	0.02	1.0	Range Average	NC NC	ND - 25.3 5.3	Discharges from industrial manufacturers; erosion of natural deposits
Chromium +6 (after 7/1/14)	ppb	10	0.02	1.0	Range Average	ND ND	ND - 10.0 2.3	Discharges from industrial manufacturers; erosion of natural deposits
Chromium (Total Cr)	ppb	50	(100)	10	Range Average	ND ND	ND - 27 11.0	Erosion of natural deposits; steel, pulp mills, and chrome plating wastes
Fluoride	ppm	2	1	0.1	Range Average	ND ND	ND - 0.36 0.26	Erosion of natural deposits; water additive for tooth health
Lead	ppb	AL = 15	0.2	5	Range Average	ND ND	ND - 22 1.7	Discharges from industrial manufacturers; erosion of natural deposits
Nickel	ppb	100	12	10	Range Average	ND ND	ND - 12 0.9	Erosion of natural deposits; orchard runoff; glass and electronic production waste
Nitrate + Nitrite (as N)	ppm	10	10	0.4	Range Average	0.38 0.38	ND - 3.4 1.3	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Nitrate (as NO <sub>3</sub> )	ppm	45	45	2	Range Average	1.71 1.71	ND - 19 2.9	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits

**RADIONUCLIDES**

Gross Alpha <sup>c</sup>	pCi/L	15	NA	3	Range Average	ND ND	ND - 13 4.0	Erosion of natural deposits
Uranium <sup>d</sup>	pCi/L	20	0.5	1	Range Average	NC NC	2.4 - 6.4 3.8	Erosion of natural deposits
Gross Beta Particle	pCi/L	50	(0)	4	Range Average	4.1 4.1	NC NC	Decay of natural and man-made deposits

**SECONDARY STANDARDS--Aesthetic Standards**

Chloride	ppm	500	NA	--	Range Average	78 - 170 120	29 - 59 43	Runoff/leaching from natural deposits; seawater influence
Color (ACU)	Units	15	NA	--	Range Average	ND ND	0.7 ND - 9	Naturally-occurring organic materials
Copper	ppb	1000	NA	50	Range Average	ND ND	ND - 210 16	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood
Corrosivity	SI	non-corrosive	NA	--	Range Average	<b>non-</b> <b>corrosive</b>	non-corrosive	Balance of hydrogen, carbon, & oxygen in water, affected by temperature & other factors
Iron	ppb	300	NA	100	Range Average	ND ND	ND - <b>430</b> 70	Leaching from natural deposits; industrial wastes
Manganese	ppb	50	NA	--	Range Average	ND ND	ND - <b>200</b> 15.4	Leaching from natural deposits
Odor Threshold	Units	3	NA	1	Range Average	ND - 1 ND	ND - 5 1.7	Naturally-occurring organic materials
Specific Conductance	µmho/cm	1600	NA	--	Range Average	606 - 969 769	710 - 1100 875	Substances that form ions when in water; seawater influence
Sulfate	ppm	500	NA	0.5	Range Average	120 120	13 - 240 136	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids	ppm	1000	NA	--	Range Average	340 - 572 428	440 - 730 567	Runoff/leaching from natural deposits;
Lab Turbidity (ID#1) Turbidity (State Water)	NTU	5	NA	--	Range Average	0.04 - 0.11 0.07	ND - 4.8 0.8	Soil erosion/runoff
Zinc	ppb	5000	NA	50	Range Average	ND ND	ND - 59 4.5	Runoff/leaching from natural deposits; industrial wastes

SANTA YNEZ RIVER WATER CONSERVATION DISTRICT, IMPROVEMENT DISTRICT NO. 1

Parameter	Units	State MCL	PHG (MCLG)	State DLR	Range Average	Drinking Water Source		Major Sources in Drinking Water
						State Water	Ground Water	
<b>ADDITIONAL PARAMETERS (Unregulated)</b>								
Alkalinity (Total) as CaCO <sub>3</sub> equivalents	ppm	NA	NA	--	Range	60 - 96	230 - 330	Runoff/leaching from natural deposits; seawater influence
					Average	77	291	
Calcium	ppm	NA	NA	--	Range	50 - 86	43 - 100	Runoff/leaching from natural deposits; seawater influence
					Average	66	66	
Hardness (Total) as CaCO <sub>3</sub>	ppm	NA	NA	--	Range	116 - 182	190 - 480	Leaching from natural deposits
					Average	138	365	
Heterotrophic Plate Count <sup>e</sup>	CFU/mL	TT	NA	--	Range	0 - 1	1	Naturally present in the environment
					Average	0.3	1	
Magnesium	ppm	NA	NA	--	Range	24	42 - 84	Runoff/leaching from natural deposits; seawater influence
					Average	24	53	
pH	pH Units	NA	NA	--	Range	7.3 - 10	7.0 - 8.1	Runoff/leaching from natural deposits; seawater influence
					Average	8.2	7.6	
Potassium	ppm	NA	NA	--	Range	4.8	1.6 - 3.4	Runoff/leaching from natural deposits; seawater influence
					Average	4.8	2.3	
Sodium	ppm	NA	NA	--	Range	130	32 - 130	Runoff/leaching from natural deposits; seawater influence
					Average	130	45	
Total Organic Carbon (TOC) <sup>f</sup>	ppm	TT	NA	0.30	Range	1.9 - 3.5	--	Various natural and manmade sources.
					Average	2.4	--	
<b>Constituents of Concern</b>								
Boron	ppb	NA	NL=1,000	100	Range	NC	ND - 460	Runoff/leaching from natural deposits; wastewater, and fertilizers/pesticides.
					Average	NC	185	
Vanadium	ppb	NA	NL=50	3	Range	NC	ND - 18	Leaching from natural deposits; industrial wastes
					Average	NC	12	
<b>Distribution System Water Quality</b>								
<b>MICROBIOLOGICAL</b>								
Total Coliform (TC) Bacteria <sup>g</sup> CCWA Distribution	--	5.0% of monthly samples	0	--	Range	0 - 1	--	Naturally present in the environment
					Average	0.03	--	
					Highest	0 - 1	--	
Total Coliform Bacteria ID#1 Distribution		>1 positive per month	0	--	Highest #	--	0 Positive	Naturally present in the environment
					pos / mo	--		
Fecal Coliform and <i>E. Coli</i> CCWA Distribution	--	--	0	--	Range	0 Positives	--	Human and animal fecal waste
					Average	0 Positives	--	
					Highest	0 Positives	--	
Fecal Coliform and <i>E. Coli</i> ID#1 Distribution	--	1 positive; with repeat TC positive	0	--	Highest #	--	0 Positive	Human and animal fecal waste
					pos / mo	--		
					w/ repeat	--		
<b>ORGANIC CHEMICALS</b>								
Total Trihalomethanes <sup>h</sup>	ppb	80	NA	NA	Range	46 - 64	ND - 58.7	By-product of drinking water chlorination
					Highest	59	42.9	
Haloacetic Acids <sup>i</sup>	ppb	60	NA	1,2 <sup>h</sup>	Range	8.2 - 18	1.0 - 18.5	By-product of drinking water chlorination
					Highest	12	12.6	
<b>DISINFECTION</b>								
Total chlorine residual CCWA Distribution	ppm	MRDL = 4.0	MRDLG = 4.0	--	Range	1.5 - 3.2	--	Measurement of the disinfectant used in the production of drinking water
					Average	2.3	--	
Free/total chlorine residual ID#1 Distribution	ppm	MRDL = 4.0	MRDLG = 4.0	--	Range	--	0.07 - 2.3	Measurement of the disinfectant used in the production of drinking water
					Average	--	1.4	



**CENTRAL COAST WATER AUTHORITY  
 POLONIO PASS WATER TREATMENT PLANT  
 WATER QUALITY TABLE  
 COVERING THE REPORTING PERIOD OF JANUARY-DECEMBER 2014**

Please see last page for key to abbreviations.

Parameter	Units	State MCL	PHG (MCLG)	State DLR	Range Average	TREATED	SOURCE	Major Sources in Drinking Water
						CCWA	STATE WATER	

**PRIMARY STANDARDS--Mandatory Health-Related Standards**

**CLARITY (a)**

Combined Filter Effluent Turbidity	NTU	TT=<1 NTU every 4 hours TT=95% of samples <0.3 NTU	Range	0.04 - 0.11	NA	Soil runoff
			%	100%	NA	

**INORGANIC CHEMICALS**

Aluminum	ppm	1 (b)	0.6	0.05	Range	ND - 0.11	ND - 0.034	Residue from water treatment process; Erosion of natural deposits
					Average	0.069	0.027	
Arsenic, Total	ppb	10	0.004	2	Range	ND	2.0	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
					Average	ND	2.0	
Flouride	ppm	2	1	0.1	Range	ND	0.12	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
					Average	ND	0.12	
Nitrate as Nitrogen	ppm	10 (h)	10	0.4	Range	0.38	0.38	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural
					Average	0.38	0.38	

**RADIONUCLIDES**

Gross Beta Particle	pCi/L	50	(0)	4	Range	4.1	ND	Decay of natural and man-made deposits
					Average	4.1	ND	

**DISTRIBUTION SYSTEM MONITORING**

Total Chlorine Residual	ppm	MRDL = 4.0	MRDLG = 4.0	NA	Range	1.5 - 3.2	NA	Measurement of the disinfectant used in the production of drinking water
					Average	2.3	NA	
Total Coliform Bacteria (c)	--	(c)	0	--	Range	0 - 1	NA	Naturally present in the environment
					Average	0.03	NA	
					Highest	1	NA	
Total Trihalomethanes (d)	ppb	80	NA	NA	Range	46 - 64	NA	By-product of drinking water chlorination
					Average	59	NA	
Haloacetic Acids (d)	ppb	60	NA	(e)	Range	8.2 - 18	NA	By-product of drinking water chlorination
					Average	12	NA	

**SECONDARY STANDARDS--Aesthetic Standards**

Chloride	ppm	500	NA	NA	Range	78 - 170	77 - 168	Runoff/leaching from natural deposits; seawater influence
					Average	120	116	
Color	ACU	15	NA	NA	Range	ND	20	Naturally-occurring organic materials
					Average	ND	20	
Manganese	ppb	50	NA	20	Range	ND	32	Leaching from natural deposits
					Average	ND	32	
Odor Threshold	TON	3	NA	1	Range	ND - 1	ND - 4	Naturally-occurring organic materials
					Average	ND	1.5	
Specific Conductance	uS/cm	1600	NA	NA	Range	606 - 969	565 - 908	Substances that form ions when in water; seawater influence
					Average	769	713	
Sulfate	ppm	500	NA	0.5	Range	120	82	Runoff/leaching from natural deposits; industrial wastes
					Average	120	82	
Total Dissolved Solids (TDS)	ppm	1000	NA	NA	Range	340 - 572	299 - 536	Runoff/leaching from natural deposits;
					Average	428	394	
Turbidity (Monthly)	NTU	5	NA	NA	Range	0.04 - 0.11	0.39 - 5.3	Soil runoff
					Average	0.07	1.2	

**ADDITIONAL PARAMETERS (Unregulated)**

Parameter	Units	State MCL	PHG (MCLG)	State DLR	TREATED		SOURCE	
					Range Average	CCWA	STATE WATER	Major Sources in Drinking Water
Alkalinity (Total) as CaCO <sub>3</sub> equivalents	ppm	NA	NA	NA	Range	60 - 96	78 - 107	Runoff/leaching from natural deposits; seawater influence
					Average	77	90	
Calcium	ppm	NA	NA	NA	Range	50 - 86	52 - 88	Runoff/leaching from natural deposits; seawater influence
					Average	66	66	
Hardness (Total) as CaCO <sub>3</sub>	ppm	NA	NA	NA	Range	116 - 182	116 - 184	Leaching from natural deposits
					Average	138	138	
Heterotrophic Plate Count (f)	CFU/mL	TT	NA	NA	Range	0 - 1	NA	Naturally present in the environment
					Average	0.3	NA	
Magnesium	ppm	NA	NA	NA	Range	24	24	Runoff/leaching from natural deposits; seawater influence
					Average	24	24	
Manganese, Total	ppb	NA	NA	NA	Range	ND	32	Runoff/leaching from natural deposits; seawater influence
					Average	ND	32	
pH	pH Units	NA	NA	NA	Range	7.3 - 10	8.0 - 9.5	Runoff/leaching from natural deposits; seawater influence
					Average	8.2	8.8	
Potassium	ppm	NA	NA	NA	Range	4.8	4.8	Runoff/leaching from natural deposits; seawater influence
					Average	4.8	4.8	
Sodium	ppm	NA	NA	NA	Range	130	110	Runoff/leaching from natural deposits; seawater influence
					Average	130	110	
Total Organic Carbon (TOC) (g)	ppm	TT	NA	0.30	Range	1.9 - 3.5	3.1 - 6.4	Various natural and manmade sources.
					Average	2.4	4.2	

## ABBREVIATIONS AND NOTES

### Footnotes:

- Turbidity (NTU) is a measure of the cloudiness of the water and it is a good indicator of the effectiveness of our filtration system. Monthly turbidity values are listed in the Secondary Standards section.
- Aluminum has a Secondary MCL of 200 ppb.
- Total coliform MCLs: Systems that collect ≥40 samples/month no more than 5.0% of the monthly samples may be Total Coliform positive. Systems that collect <40 samples per month no more than 1 positive sample per month may be Total Coliform positive.  
Fecal coliform/E. coli MCLs: The occurrence of 2 consecutive Total Coliform positive samples, one of which contains fecal coliform/E. coli, constitutes an acute MCL violation. One sample tested positive for total coliform on 12/22/2014. All follow-up samples were negative.
- Compliance based on the running quarterly annual average of distribution system samples.
- Monochloroacetic Acid (MCAA) has a DLR of 2.0 ug/L while the other four Haloacetic Acids have DLR's of 1.0 ug/L.
- Pour plate technique -- monthly averages.
- TOCs are taken at the treatment plant's combined filter effluent.
- State MCL is 45 mg/L as NO<sub>3</sub>, which equals 10 mg/L as N.

### Abbreviations

ACU = Apparent Color Units  
 CCWA = Central Coast Water Authority  
 CFU/ml = Colony Forming Units per milliliter  
 DLR = Detection Level for purposes of Reporting  
 MCL = Maximum Contaminant Level  
 MCLG = Maximum Contaminant Level Goal  
 MRDL = Maximum Residual Disinfectant Level  
 MRDLG = Maximum Residual Disinfectant Level Goal  
 NA = Not Applicable  
 NTU = Nephelometric Turbidity Units  
 pCi/L = PicoCuries per liter  
 PHG = Public Health Goal  
 ppb = parts per billion, or micrograms per liter (µg/L)  
 ppm = parts per million, or milligrams per liter (mg/L)  
 TON = Threshold Odor Number  
 TT = Treatment Technique

## City of Solvang Conservation Efforts

The City of Solvang has declared Stage 2 Drought Regulations and implemented penalties for excessive consumption and limitations on outdoor watering. For a full list of the regulations, please see: [www.cityofsolvang.com](http://www.cityofsolvang.com)

### Ways You Can Help

#### Conservation Programs

- Landscape Rebates
- Shower Head Exchange
- Low Flow Toilet Rebates
- Rain Barrel Rebates
- Low Flow Aerators

For more information on these programs, please contact the City of Solvang at 805-688-5575, ext. 220.

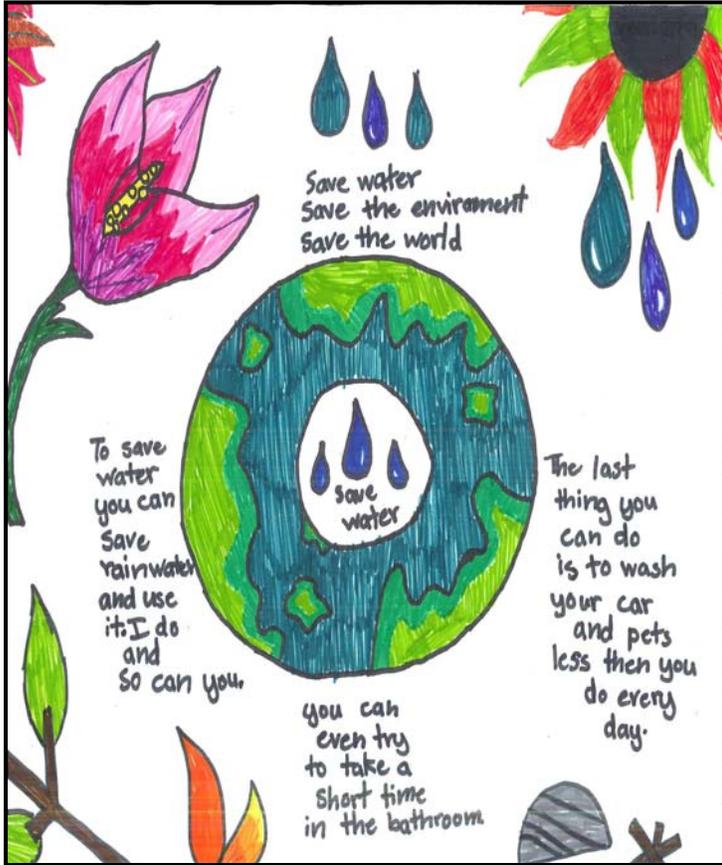
### Water Wise Facts

- 1 Unit of water on your water bill = One Hundred Cubic Feet (1 HCF)
- 1 Unit = 1 HCF = 100 Cubic Feet = 748 gallons
- The State of California Department of Water Resources has determined the minimum quantity of water for health & safety purposes is 50/gallons per person per day.
- For a family of four, 50/gallons per person per day = 8.3 Units/month.

#### Additional Resources

- Waterwise Santa Barbara, [www.waterwisesb.org](http://www.waterwisesb.org)
  - Brochures: <http://www.waterwisesb.org/brochures.aspx?id=616>

# City of Solvang Water Conservation Poster Contest Grand Prize Winners



**K-5<sup>th</sup> Grade Winner: Mariana Hidalgo**



**6<sup>th</sup> – 8<sup>th</sup> Grade Winner: Savannah Hunt**

## ABBREVIATIONS AND NOTES

### Footnotes:

- (a) Turbidity (NTU) is a measure of the cloudiness of the water and is a good indicator of the effectiveness of a filtration system. Monthly turbidity values for State Water are listed in the Secondary Standards section.
- (b) Aluminum has a Secondary MCL of 200 ppb.
- (c) Gross alpha particle activity monitoring required every nine years for State Water; more frequent monitoring is required for some groundwater based on detected levels. Reported average represents highest running source average.
- (d) Uranium monitoring is dependent on measured gross alpha particle activity.
- (e) Pour plate technique -- monthly averages.
- (f) TOCs are taken at the State Water treatment plant's combined filter effluent.
- (g) Total coliform MCLs: No more than 5.0% (State Water) or 1 sample (ID#1) of the monthly samples may be Total Coliform positive. All required follow-up and confirmation samples collected in response to each of the positive Total Coliform samples were absent for Total Coliform.
- (h) Compliance based on the running quarterly annual average of distribution system samples. Values reported are range of all sample results and highest running annual average.
- (j) Monochloroacetic Acid (MCAA) has a DLR of 2.0 ug/L while the other four Haloacetic Acids have DLR's of 1.0 ug/L.

### Abbreviations

- ACU = Apparent Color Units
- CCWA = Central Coast Water Authority
- CFU/ml = Colony Forming Units per milliliter
- ID#1 = Santa Ynez River Water Conservation District, Improvement District No.1
- NA = Not Applicable
- NC = Not Collected
- NL = Notification Level
- NTU = Nephelometric Turbidity Units
- pCi/L = PicoCuries per liter
- ppb = parts per billion, or micrograms per liter (µg/L)
- ppm = parts per million, or milligrams per liter (mg/L)
- SI = saturation index
- µmho/cm = micromhos per centimeter, (unit of specific conductance of water)

