



2017
CONSUMER
CONFIDENCE
REPORT

water

conserve

2017 Consumer Confidence Report

Water System Name: CITY OF SOLVANG Report Date: JUNE 2018

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, 2017 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 (Solvang Wells & ID#1 Wells) & Surface Water (CCWA)

Name & general location of source(s): Wells 3 & 7A River Wells; Well 4 & 21 & HCA South Upland Wells; Santa Ynez River Water Conservation District, Improvement District No. 1 (ID#1) & 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 & Fourth Monday of each Month at 1644 Oak Street, Solvang, CA @ 6:30 P.M.

For more information, contact: Mike Mathews 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 (U.S. EPA).

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: 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 (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 byproducts 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 U.S. EPA 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.

Tables 1, 2, 3, 4, 5, and 6 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 AL, MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.

TABLE 1 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA					
Microbiological Contaminants	Highest No. of Detections	No. of Months in Violation	MCL	MCLG	Typical Source of Bacteria
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
<i>E. coli</i>	0	0	A routine sample and a repeat sample detect total coliform and either sample also detects <i>E. coli</i>	0	Human and animal fecal waste

TABLE 2 – SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER							
Lead and Copper	Sample Date	No. of Samples Collected	90 th Percentile Level Detected	No. Sites Exceeding AL	AL	PH G	Typical Source of Contaminant
Lead (ppb)	3/29/17	20	8.7	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppb)	3/29/17	20	620	0	1300	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)	2015-2017	64	57-73	none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm)	2015-2017	574	412-680	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
Fluoride (ppm)	2015-2017	0.15	<0.1-0.2	2	1	Erosion of Natural deposits; water additive which promotes strong teeth
Nitrate (ppm) (as N03)	2015-2017	5.9	<0.5-16.9	45	45	Runoff & leaching from fertilizer use; sewage; erosion of natural deposits
Nitrate and Nitrite (as N) (ppm)	2015-2017	1.4	<.1-3.8	10	10	Runoff & leaching from fertilizer use; sewage; erosion of natural deposits
Hexavalent Chromium (ppb)	2015-2017	.2	<1-1	10	.02	Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities; erosion of natural deposits.
Tetrachloroethylene (PCE) (ppb)	2016-2017	.14	0-0.7	5	N/A	Leaching from PVC pipes; discharge from factories, dry cleaners and auto shops (metal degreasers)
Gross Alpha Activity (pCi/L)	2013-2016	8.6	5-13.6	15	N/A	Erosion of natural deposits
Uranium (pCi/L)	2013-2016	5.27	3.11-9.89	20	.5	Erosion of natural deposits
Trihalomethane (TTHM) (ppb)	1/11-10/11	26.2	9-44.4	80	N/A	Byproduct of drinking water chlorination
Haloacetic Acid (HA A5) (ppb)	1/11-10/11	9	3-12	60	N/A	Byproduct of drinking water chlorination
Selenium (ppb)	2015-2017	9	<1-16	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)	2015-2017	93	71-145	500	N/A	Runoff/leaching from natural deposits; seawater influence
Odor (units)	2015-2017	<1	<1	3 Units	N/A	Natural occurring materials
Specific conductance (Umhos/cm)	2015-2017	1383	1120-1600	1600	N/A	Substance that forms ions when in water; seawater influence
Sulfate (ppm)	2015-2017	269	189-342	500	N/A	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	2015-2017	925	760-1040	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)	2015-2017	220	100-300	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)	2015-2017	5.4	<2.0-9	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 U.S. EPA'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. U.S. EPA/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. [Optional: 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>.



CENTRAL COAST WATER AUTHORITY POLONIO PASS WATER TREATMENT PLANT WATER QUALITY TABLE

COVERING THE REPORTING PERIOD OF JANUARY-DECEMBER 2017

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 (a)	NTU	TT=<1 NTU every 4 hours	Range	0.04 - 0.18	NA	Soil runoff
		TT=95% of samples <0.3 NTU	%	100%	NA	

INORGANIC CHEMICALS

Aluminum	ppm	1 (b)	0.6	0.05	Range	ND - 0.11	ND - 0.77	Residue from water treatment process; erosion of natural deposits
					Average	0.066	0.26	
Nitrate as Nitrogen	ppm	10 (h)	10	0.4	Range	0.44	0.56	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
					Average	0.44	0.56	

DISTRIBUTION SYSTEM MONITORING

Total Chlorine Residual	ppm	MRDL = 4.0	MRDLG = 4.0	NA	Range	1.1 - 3.1	NA	Measurement of the disinfectant used in the production of drinking water
					Average	2.2	NA	
Total Coliform Bacteria (c)	--	5.0% of monthly samples	(0)	--	Range	0	NA	Naturally present in the environment
					Average	0	NA	
					Highest	0%	NA	
Total Trihalomethanes (d)	ppb	80	NA	NA	Range	26 - 55	NA	By-product of drinking water chlorination
					Average	36	NA	
					Highest LRAA	43.5	NA	
Haloacetic Acids (d)	ppb	60	NA	(e)	Range	6.2 - 22	NA	By-product of drinking water chlorination
					Average	14.2	NA	
					Highest LRAA	15.2	NA	

SECONDARY STANDARDS--Aesthetic Standards

Chloride	ppm	500	NA	NA	Range	8 - 145	8 - 142	Runoff/leaching from natural deposits; seawater influence
					Average	39	36	
Color	ACU	15	NA	NA	Range	ND	25	Naturally occurring organic materials
					Average	ND	25	
Corrosivity (Aggressivity Index) (i)	None	non-corrosive	NA	NA	Range	11	11	Balance of hydrogen, carbon, & oxygen in water, affected by temperature & other factors
					Average	11	11	
Odor Threshold	TON	3	NA	1	Range	1.0	ND	Naturally occurring organic materials
					Average	1.0	ND	
Specific Conductance	uS/cm	1600	NA	NA	Range	148 - 758	105 - 702	Substances that form ions when in water; seawater influence
					Average	306	265	
Sulfate	ppm	500	NA	NA	Range	30	13	Runoff/leaching from natural deposits; industrial wastes
					Average	30	13	
Total Dissolved Solids (TDS)	ppm	1000	NA	NA	Range	77 - 394	55 - 365	Runoff/leaching from natural deposits;
					Average	165	142	
Turbidity (Monthly) (a)	NTU	5	NA	NA	Range	0.04 - 0.09	0.43 - 49.3	Soil runoff
					Average	0.05	7.7	

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

ADDITIONAL PARAMETERS (Unregulated)

Alkalinity (Total) as CaCO ₃ equivalents	ppm	NA	NA	NA	Range	24 - 74	21 - 78	Runoff/leaching from natural deposits; seawater influence
					Average	44		
Calcium	ppm	NA	NA	NA	Range	18 - 62	18 - 60	Runoff/leaching from natural deposits; seawater influence
					Average	34		
Chromium, Hexavalent	ppb	NA	0.02	NA	Range	0.050	0.051	Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities; erosion of natural deposits
					Average	0.050		
Hardness (Total) as CaCO ₃	ppm	NA	NA	NA	Range	32 - 140	32 - 140	Leaching from natural deposits
					Average	67		
Heterotrophic Plate Count (f)	CFU/mL	TT	NA	NA	Range	0 - 22	NA	Naturally present in the environment
					Average	0.8		
Iron, Total	ppb	300	NA	100	Range	ND	760	Leaching from natural deposits, industrial wastes
					Average	ND		
Magnesium	ppm	NA	NA	NA	Range	4.8	4.6	Runoff/leaching from natural deposits; seawater influence
					Average	4.8		
Manganese, Total	ppb	NA	NA	NA	Range	ND	39	Runoff/leaching from natural deposits; seawater influence
					Average	ND		
2-Methylisoborneol	ng/L	NA	NA	NA	Range	1 - 3	1 - 3	
					Average	1.6		
pH	pH Units	NA	NA	NA	Range	8.03 - 8.50	7.50 - 8.55	Runoff/leaching from natural deposits; seawater influence
					Average	8.29		
Potassium	ppm	NA	NA	NA	Range	1.7	1.7	Runoff/leaching from natural deposits; seawater influence
					Average	1.7		
Sodium	ppm	NA	NA	NA	Range	24	14	Runoff/leaching from natural deposits; seawater influence
					Average	24		
Total Organic Carbon (TOC) (g)	ppm	TT	NA	0.30	Range	1.6 - 2.7	2.9 - 6.1	Various natural and man made sources
					Average	2.0		

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 0.2 ppm.
- 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.
- 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
- TOCs are taken at the treatment plant's combined filter effluent.
- State MCL is 45 mg/L as NO₃, which equals 10 mg/L as N.
- AI ≥ 12.0 = Non-aggressive water
AI (10.0 - 11.9) = Moderately aggressive water
AI ≤ 10.0 = Highly aggressive water
Reference: ANSI/AWWA Standard C400-93 (R98)

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
 LRAA = Locational Running Annual Average

2017 Annual Water Quality Report - Santa Ynez River Water Conservation District, ID#1

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

PRIMARY STANDARDS--Mandatory Health-Related Standards

CLARITY

Combined Filter Effluent Turbidity ^a	NTU	TT=<1 NTU every 4 hours			Range	0.04 - 0.18	NA	Soil runoff
		TT=95% of samples <0.3 NTU			%	100%	NA	

INORGANIC CHEMICALS

Aluminum ^b	ppm	1 (b)	0.6	0.05	Range	ND - 0.11	ND	Residue from water treatment process; Erosion of natural deposits
					Average	0.066	ND	
Chromium (Total Cr)	ppb	50	(100)	10	Range	ND	ND - 10	Erosion of natural deposits; steel, pulp mills, and chrome plating wastes
					Average	ND	2.5	
Fluoride	ppm	2	1	0.1	Range	ND	0.12 - 0.32	Erosion of natural deposits; water additive for tooth health
					Average	ND	0.22	
Nitrate (as Nitrogen)	ppm	10	10	0.4	Range	0.44	0.56 - 3.4	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
					Average	0.44	1.3	

RADIONUCLIDES

Gross Alpha ^c	pCi/L	15	NA	3	Range	ND	ND - 13	Erosion of natural deposits
					Average	ND	6.0	
Uranium ^d	pCi/L	20	0.5	1	Range	NC	2.0 - 6.5	Erosion of natural deposits
					Average	NC	4.4	

SECONDARY STANDARDS--Aesthetic Standards

Chloride	ppm	500	NA	--	Range	8 - 145	30 - 44	Runoff/leaching from natural deposits; seawater influence
					Average	39	37	
Color	ACU	15	NA	--	Range	ND	ND - 3	Naturally-occurring organic materials
					Average	ND	0.5	
Corrosivity ^e	none	non-corrosive	NA	--	Range	11	non-corrosive	Balance of hydrogen, carbon, & oxygen in water, affected by temperature & other factors
					Average	11		
Iron	ppb	300	NA	100	Range	ND	ND - 160	Leaching from natural deposits; industrial wastes
					Average	ND	91	
Manganese	ppb	50	NA	20	Range	ND	ND - 24	Leaching from natural deposits
					Average	ND	3.0	
Odor Threshold	Units	3	NA	1	Range	1	1 - 4	Naturally-occurring organic materials
					Average	1	1.6	
Specific Conductance	µmho/cm	1600	NA	--	Range	148 - 758	780 - 1100	Substances that form ions when in water; seawater influence
					Average	306	925	
Sulfate	ppm	500	NA	0.5	Range	30	53 - 290	Runoff/leaching from natural deposits; industrial wastes
					Average	30	178	
Total Dissolved Solids (TDS)	ppm	1000	NA	--	Range	77 - 394	470 - 770	Runoff/leaching from natural deposits;
					Average	165	604	
Lab Turbidity (ID#1) Turbidity (State Water)	NTU	5	NA	--	Range	0.04 - 0.09	ND - 0.53	Soil erosion/runoff
					Average	0.05	0.1	

ADDITIONAL PARAMETERS (Unregulated)

Alkalinity (Total) as CaCO ₃ equivalents	ppm	NA	NA	--	Range	24 - 74	260 - 290	Runoff/leaching from natural deposits; seawater influence
					Average	44	276	
Boron	ppb	NA	NL=1,000	100	Range	NC	110 - 380	Runoff/leaching from natural deposits; wastewater, and fertilizers/pesticides.
					Average	NC	211	
Calcium	ppm	NA	NA	--	Range	18 - 62	45 - 110	Runoff/leaching from natural deposits; seawater influence
					Average	34	77	
Chromium, Hexavalent ^f	ppb	NA	0.02	1.0	Range	5	8.8	Discharges from industrial manufacturers; erosion of natural deposits
					Average	5	8.8	
Hardness (Total) as CaCO ₃	ppm	NA	NA	--	Range	32 - 140	350 - 510	Leaching from natural deposits
					Average	67	415	
Heterotrophic Plate Count ^g	CFU/mL	TT	NA	--	Range	0 - 22	NA	Naturally present in the environment
					Average	0.8	NA	
Magnesium	ppm	NA	NA	--	Range	4.8	45 - 60	Runoff/leaching from natural deposits; seawater influence
					Average	4.8	55	

2017 Annual Water Quality Report - Santa Ynez River Water Conservation District, ID#1

Parameter	Units	State MCL	PHG (MCLG)	State DLR	Drinking Water Source		Major Sources in Drinking Water	
					Range Average	State Water		
2-Methylisoborneol (MIB)	ng/L	NA	NA	NA	Range	1 - 3	NC	An organic compound mainly produced by blue-green algae (cyanobacteria)
					Average	1.6	NC	
pH	pH Units	NA	NA	--	Range	8.03 - 8.50	7.3 - 7.7	Runoff/leaching from natural deposits; seawater influence
					Average	8.29	7.5	
Potassium	ppm	NA	NA	--	Range	1.7	2.1 - 2.6	Runoff/leaching from natural deposits; seawater influence
					Average	1.7	2.4	
Sodium	ppm	NA	NA	--	Range	24	40 - 54	Runoff/leaching from natural deposits; seawater influence
					Average	24	47	
Total Organic Carbon (TOC) ^h	ppm	TT	NA	0.30	Range	1.6 - 2.7	NA	Various natural and manmade sources.
					Average	2.0	NA	
Vanadium	ppb	NA	NL=50	3	Range	NC	ND - 23	Leaching from natural deposits; industrial wastes
					Average	NC	14	

Distribution System Water Quality

ORGANIC CHEMICALS

Total Trihalomethanes ⁱ	ppb	80	NA	NA	Range	26 - 55	5.0 - 31.4	By-product of drinking water chlorination
					Highest LRAA	43.5	22.7	
Haloacetic Acids	ppb	60	NA	1,2 ^j	Range	6.2 - 22	ND - 16.9	By-product of drinking water chlorination
					Highest LRAA	15.2	7.7	

DISINFECTION

Total chlorine residual CCWA Distribution	ppm	MRDL = 4.0	MRDLG = 4.0	--	Range	1.1 - 3.1	--	Measurement of the disinfectant used in the production of drinking water
					Average	2.2	--	
Free/total chlorine residual ID#1 Distribution	ppm	MRDL = 4.0	MRDLG = 4.0	--	Range	--	0.06 - 2.54	Measurement of the disinfectant used in the production of drinking water
					Average	--	1.25	

Abbreviations and Notes

Footnotes:

- (a) Turbidity (NTU) 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 0.2 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 and range from most recent sampling of all supply wells.
- (d) Uranium monitoring is dependent on measured gross alpha particle activity.
- (e) AI ≥ 12.0 = Non-aggressive water
AI (10.0 - 11.9) = Moderately aggressive water
AI ≤ 10.0 = Highly aggressive water
Reference: ANSI/AWWA Standard C400-93 (R98)
- (f) There is currently no MCL for Hexavalent Chromim. The previous MCL of 0.010 mg/l was withdrawn on September 11, 2017.
- (g) Pour plate technique -- monthly averages.
- (h) TOCs are taken at the State Water treatment plant's combined filter effluent.
- (i) Compliance based on the LRAA of distribution system samples. Values reported are the range of all 2017 sample results and highest locational 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
- DLR = Detection Limit for the Purpose of Reporting ID#1 = Santa Ynez River Water Conservation District, Improvement District No.1
- LRAA - Locational Running Annual Average
- NA = Not Applicable
- NC = Not Collected
- ND = Non-Detected
- ng/L = nanograms per liter
- 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

Exceedance of Regulatory Standards

The summary table of analytical results confirms that water served by the District met all primary drinking water standards during the 2017 reporting period. Secondary standards for odor was exceeded in one sample from Well 19. These secondary standards are designed to protect consumers against unpleasant aesthetic affects such as color, taste, odor, or the staining of plumbing fixtures or clothing. This well, from one of the District's River well fields, was sampled in March 2016 following an extended period of non-use and only minimally flushed to waste before sampling to avoid excessive water loss during the drought. Sampling from the other four nearby river wells and follow-up sampling from these wells yielded low to non-detect levels for these constituents, indicating that the high odor result was not representative of the water produced. This high result was likely due to the turbulence and inadequate well flushing at startup. Additionally, concentrations delivered to District customers would be less due to blending of multiple sources and dilution within the distribution system.

City of Solvang Conservation Efforts

The City of Solvang has downgraded to Stage 1 Drought Regulations.

For a full list of the regulations, please see: www.cityofsolvang.com

Conservation Programs

Low Flow Toilet Rebates

Landscape Rebate

For more information on these programs, please contact the City of Solvang

at 805-688-5575

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

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 ($\mu\text{g/L}$)
ppm = parts per million, or milligrams per liter (mg/L)
SI = saturation index
 $\mu\text{mho/cm}$ = micromhos per centimeter, (unit of specific conductance of water)

