



SOLVANG

The Danish Capital of America

2021 CONSUMER CONFIDENCE REPORT

conservation

A NEW WAY OF LIFE

CITY OF SOLVANG 1644 OAK STREET SOLVANG, CA 93463 (805) 688-5575
<https://www.cityofsolvang.com/ccr2021>

2021 Consumer Confidence Report

Water System Name: CITY OF SOLVANG

Report Date: JUNE 1, 2022

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, 2021 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): Well 3 & 7A River Wells; Well 4, 21, 22 & 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 Ext. 229

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.

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 (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)	8/10/20	20	0	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppb)	8/10/20	20	78	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)	2019-2021	63	55-72	none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm)	2019-2021	605	433-718	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)	2019-2021	0.22	<0.1-0.3	2	1	Erosion of Natural deposits; water additive which promotes strong teeth
Nitrate (ppm) (as N)	2019-2021	9.33	<4.0-16.0	45	45	Runoff & leaching from fertilizer use; sewage; erosion of natural deposits
Nitrate and Nitrite (as N) (ppm)	2019-2021	1.82	<0.9-3.5	10	10	Runoff & leaching from fertilizer use; sewage; erosion of natural deposits
Hexavalent Chromium (ppb)	2019-2021	<.1	<1-1	N/A	.02	Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities; erosion of natural deposits.
Tetrachloroethylene (PCE) (ppb)	2016-2021	.32	0-0.9	1	N/A	Leaching from PVC pipes; discharge from factories, dry cleaners and auto shops (metal degreasers)
Gross Alpha Activity (pCi/L)	2019-2021	9.28	2-14.6	15	N/A	Erosion of natural deposits
Uranium (pCi/L)	2016-2021	7.02	3.11-11.1	20	.5	Erosion of natural deposits
Total Trihalomethane (TTHM) (ppb)	1/21-10/21	23.4	5-47	80	N/A	Byproduct of drinking water chlorination
Haloacetic Acid (HA A5) (ppb)	1/21-10/21	11.3	5-23	60	N/A	Byproduct of drinking water chlorination
Selenium (ppb)	2019-2021	15.5	10-23	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)	2019-2021	86.2	51-111	*2	N/A	Runoff/leaching from natural deposits; seawater influence
Odor (units)	2019-2021	2	0	3	N/A	Natural occurring materials
Specific conductance (Umhos/cm)	2019-2021	1279	792-1600	**2	1	Substance that forms ions when in water; seawater influence
Sulfate (ppm)	2019-2021	254	145-331	*2	N/A	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	2019-2021	908	710-1050	***2	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)	2019- 2021	250	200-300	---	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)	2019- 2021	8	<1.0-10	---	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 (1-800-426-4791) or at <https://www.epa.gov/lead>



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

COVERING THE REPORTING PERIOD OF JANUARY-DECEMBER 2021

Please see last page for key to abbreviations.

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

PRIMARY STANDARDS--Mandatory Health-Related Standards

CLARITY (a)

Combined Filter Effluent Turbidity (a)	NTU	TT=<1 NTU every 4 hours TT=95% of samples <0.3 NTU			Range	0.04 - 0.14	NA	Soil runoff
					%	100%	NA	

INORGANIC CHEMICALS

Aluminum	mg/L	1 (b)	0.6	0.05	Range	ND - 0.086	ND - 0.055	Erosion of natural deposits; residual from some surface water treatment processes
Arsenic, Total	ug/L	10	0.004	2	Range	ND	2.4	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
					Average	ND	2.4	
Fluoride	mg/L	2	1	0.1	Range	ND	0.1	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
					Average	ND	0.1	

RADIONUCLIDES

Gross Beta Particle	pCi/L	50 (g)	(0)	4	Range	ND	7.2	Decay of natural and man-made deposits
					Average	ND	7.2	

DISTRIBUTION SYSTEM MONITORING

Total Chlorine Residual	mg/L	MRDL = 4.0	MRDLG = 4.0	NA	Range	1.37 - 3.58	NA	Drinking water disinfectant added for treatment
Total Coliform Bacteria	--	(c)	(0)	--	Average	2.79	NA	
					Range	0	NA	Naturally present in the environment
					Average	0	NA	
					Highest	0%	NA	
Fecal Coliform and E.coli (c)	--	0	(0)	--	Range	0	NA	Human and animal fecal waste
					Average	0	NA	
					Highest	0%	NA	
Total Trihalomethanes (d)	ug/L	80	NA	(0.5)	Range	43 - 58	NA	By-product of drinking water chlorination
					Average	51	NA	
					Highest LRAA	52.8	NA	
Haloacetic Acids (d)	ug/L	60	NA	(1) (e)	Range	6.3 - 11	NA	By-product of drinking water chlorination
					Average	9	NA	
					Highest LRAA	13.0	NA	

SECONDARY STANDARDS--Aesthetic Standards

Chloride	mg/L	500 (j)	NA	(1)	Range	94 - 147	90 - 137	Runoff/leaching from natural deposits; seawater influence
Color	ACU	15 (j)	NA	(3)	Average	116	112	
					Range	ND	10	Naturally occurring organic materials
Corrosivity (Aggressivity Index) (i)	SU	non-corrosive	NA	(0.1)	Average	ND	10	
					Range	12	12.6	
Iron, Total	mg/L	0.3 (j)	NA	(0.01)	Average	12	12.6	
					Range	ND	0.010	Leaching from natural deposits; industrial wastes
Magnesium, Total	mg/L	NA	NA	(0.1)	Average	ND	0.010	
					Range	16	16	Runoff/leaching from natural deposits; seawater influence
Manganese, Total	ug/L	50 (j)	NA	(2)	Average	16	16	
					Range	ND	8.3	
Odor Threshold	TON	3 (j)	NA	(1)	Average	ND	8.3	
					Range	ND - 2	1 - 4	Naturally occurring organic materials
Specific Conductance	uS/cm	1600 (j)	NA	NA	Average	1	2	
					Range	580 - 802	538 - 741	Substances that form ions when in water; seawater influence
Sulfate	mg/L	500 (j)	NA	(0.5)	Average	644	591	
					Range	84	45	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (TDS)	mg/L	1000 (j)	NA	(10)	Average	84	45	
					Range	360	310	Runoff/leaching from natural deposits
					Average	360	310	

Parameter	Units	State MCL	PHG (MCLG)	State DLR	TREATED		SOURCE	
					Range Average	CCWA	STATE WATER	Major Sources in Drinking Water
Turbidity (Monthly) (a)	NTU	5 (j)	NA	(0.1)	Range Average	ND - 0.25 0.06	ND - 4.8 1.24	Soil runoff

ADDITIONAL PARAMETERS (Unregulated)

2-Methylisoborneol	ng/L	NA	NA	(1)	Range	ND - 18	ND - 48	An organic compound mainly produced by blue-green algae (cyanobacteria)
					Average	5.9	12.2	
Alkalinity (Total) as CaCO ₃ equivalents	mg/L	NA	NA	(2)	Range	62 - 92	70 - 104	Runoff/leaching from natural deposits; seawater influence
					Average	78	90	
Anion Sum - Calculated	meq/L	NA	NA	(0.001)	Range	6.1	5.4	
					Average	6.1	5.4	
Bicarbonate Alkalinity as HCO ₃	mg/L	NA	NA	(2)	Range	96	110	
					Average	96	110	
Calcium	mg/L	NA	NA	(1)	Range	24	24	Runoff/leaching from natural deposits; seawater influence
					Average	24	24	
Carbonate as CO ₃	mg/L	NA	NA	(2)	Range	ND	3.6	
					Average	ND	3.6	
Cation Sum - Calculated	meq/L	NA	NA	(0.001)	Range	6.2	5.6	
					Average	6.2	5.6	
Chromium, Hexavalent	ug/L	NA	0.02	NA	Range	0.13	0.062	Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities; erosion of natural deposits
					Average	0.13	0.062	
Geosmin	ng/L	NA	NA	(1)	Range	ND - 17	ND - 51	An organic compound mainly produced by bacterial growth in surface water
					Average	3.8	19.0	
Hardness (Total) as CaCO ₃	mg/L	NA	NA	(3)	Range	98 - 162	100 - 166	Leaching from natural deposits
					Average	123	124	
Heterotrophic Plate Count (f)	CFU/mL	TT	NA	NA	Range	0 - 221	NA	Naturally present in the environment
					Average	3	NA	
Langelier Index @ 25 °C	NONE	NA	NA	(-14)	Range	0.075	0.69	
					Average	0.075	0.69	
Langelier Index @ 60 °C	NONE	NA	NA	(-14)	Range	0.51	1.1	
					Average	0.51	1.1	
Magnesium, Total	mg/L	NA	NA	(0.1)	Range	16	16	Runoff/leaching from natural deposits; seawater influence
					Average	16	16	
pH	SU	NA	NA	(0.1)	Range	7.4 - 8.8	7.7 - 9.5	Runoff/leaching from natural deposits; seawater influence
					Average	8.3	8.7	
Potassium	mg/L	NA	NA	(1)	Range	3.6	3.6	Runoff/leaching from natural deposits; seawater influence
					Average	3.6	3.6	
Sodium	mg/L	NA	NA	(1)	Range	83	68	Runoff/leaching from natural deposits; seawater influence
					Average	83	68	
Total Organic Carbon (TOC) (g)	mg/L	TT	NA	(0.3)	Range	1.1 - 4.1	1.9 - 5.6	Various natural and man made sources
					Average	2.2	3.7	

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

ABBREVIATIONS AND NOTES

Footnotes:

- (a) 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.
- (b) Aluminum has a Secondary MCL of 0.2 ppm.
- (c) 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. This Water Quality Report reflects changes in drinking water regulatory requirements during 2021. These revisions add the requirements of the federal Revised Total Coliform Rule. The revised rule maintains the purpose to protect public health by ensuring the integrity of the drinking water distribution system and monitoring for the presence of microbials (i.e., total coliform and E. coli bacteria). The U.S. EPA anticipates greater public health protection as the rule requires water systems that are vulnerable to microbial contamination to identify and fix problems. Water systems that exceed a specified frequency of total coliform occurrences are required to conduct an assessment to determine if any sanitary defects exist. If found, these must be corrected by the water system. The state Revised Total Coliform Rule became effective July 1, 2021.
- (d) Compliance based on the running quarterly annual average of distribution system samples.
- (e) 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.
- (f) Pour plate technique
- (g) TOCs are taken at the treatment plant's combined filter effluent.
- (h) State MCL is 45 mg/L as NO_3 , which equals 10 mg/L as N.
- (i) $\text{AI} \geq 12.0$ = Non-aggressive water
 AI (10.0 - 11.9) = Moderately aggressive water
 $\text{AI} \leq 10.0$ = Highly aggressive water
Reference: ANSI/AWWA Standard C400-93 (R98)
- (j) Secondary MCL

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
ND = Non-detected above detection limit (DLR)
NTU = Nephelometric Turbidity Units
pCi/L = PicoCuries per liter
PHG = Public Health Goal
ppb = parts per billion, or micrograms per liter ($\mu\text{g/L}$)
ppm = parts per million, or milligrams per liter (mg/L)
TON = Threshold Odor Number
TT = Treatment Technique
LRAA = Locational Running Annual Average

2021 Annual Water Quality Report - Santa Ynez River Water Conservation District, ID No.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 TT=95% of samples <0.3 NTU			Range %	0.04 - 0.14 100%	NA NA	Soil runoff
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INORGANIC CHEMICALS

Aluminum	ppm	1000	600	50	Range Average	ND - 0.086 0.061	ND ND	Residue from water treatment process; erosion of natural deposits
Arsenic	ppb	10	0.004	2	Range Average	ND ND	ND - 3 0.5	Erosion of natural deposits; orchard runoff; from glass/electronics production wastes
Barium	ppm	1	2	0.1	Range Average	ND ND	ND - 0.1 0.09	Discharges of oil drilling wastes and metal refineries; erosion of natural deposits
Chromium (Total Cr)	ppb	50	(100)	10	Range Average	ND ND	ND - 21 3.2	Erosion of natural deposits; steel, pulp mills, and chrome plating wastes
Fluoride	ppm	2	1	0.1	Range Average	ND ND	ND - 0.31 0.3	Erosion of natural deposits; water additive for tooth health
Nickel	ppb	100	12	10	Range Average	ND ND	ND - 13 1.2	Erosion of natural deposits; discharge from metal factories
Nitrate (as Nitrogen)	ppm	10	10	0.4	Range Average	ND ND	ND - 6.8 1.7	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Selenium	ppb	50	30	5	Range Average	ND ND	ND - 11 4.3	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits

RADIONUCLIDES

Gross Alpha ^b	pCi/L	15	NA	3	Range Average	ND ND	ND - 7.2 2.7	Erosion of natural deposits
Uranium ^c	pCi/L	20	0.5	1	Range Average	NC NC	1.6 - 5.6 3.5	Erosion of natural deposits

SECONDARY STANDARDS--Aesthetic Standards

Aluminum	ppb	200	NA	50	Range Average	ND - 0.086 0.061	ND ND	Residue from water treatment process; Erosion of natural deposits
Chloride	ppm	500	NA	--	Range Average	94 - 147 116	26 - 57 39	Runoff/leaching from natural deposits; seawater influence
Color	ACU	15	NA	--	Range Average	ND ND	ND - 3 0.3	Naturally-occurring organic materials
Corrosivity (Aggressive Index) ^d	none	non-corrosive	NA	--	Range Average	12 12	12.1 - 12.7 12.3	Balance of hydrogen, carbon, & oxygen in water, affected by temperature & other factors
Iron	ppb	300	NA	100	Range Average	ND ND	ND - 140 13	Leaching from natural deposits; industrial wastes
Odor Threshold	TON	3	NA	1	Range Average	ND - 2 1	1 - 3 1	Naturally-occurring organic materials
Specific Conductance	µmho/cm	1600	NA	--	Range Average	580 - 802 644	700 - 1100 895	Substances that form ions when in water; seawater influence
Sulfate	ppm	500	NA	0.5	Range Average	84 84	30 - 270 163	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (TDS)	ppm	1000	NA	--	Range Average	360 360	400 - 710 569	Runoff/leaching from natural deposits;
Lab Turbidity (ID#1) Turbidity (State Water)	NTU	5	NA	--	Range Average	ND - 0.25 0.06	ND - 1.60 0.50	Soil erosion/runoff
Zinc	ppb	5000	NA	50	Range Average	ND ND	ND - 100 9	Leaching from natural deposits; industrial wastes

ADDITIONAL PARAMETERS (Unregulated)

Alkalinity (Total) as CaCO ₃ equivalents	ppm	NA	NA	--	Range Average	62 - 92 78	260 - 360 291	Runoff/leaching from natural deposits; seawater influence
Boron	ppb	NA	NL=1,000	100	Range Average	NC NC	110 - 320 186	Runoff/leaching from natural deposits; wastewater, and fertilizers/pesticides.
Calcium	ppm	NA	NA	--	Range Average	24 24	34 - 100 71	Runoff/leaching from natural deposits; seawater influence
Chromium, Hexavalent ^e	ppb	NA	0.02	1.0	Range Average	0.13 0.13	ND - 16 6.8	Discharges from industrial manufacturers; erosion of natural deposits

2021 Annual Water Quality Report - Santa Ynez River Water Conservation District, ID No.1

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

ADDITIONAL PARAMETERS (Unregulated)

Geosmin	ng/L	NA	NA	(1)	Range Average	ND - 17 3.8	NC NC	An organic compound mainly produced by blue-green algae (cyanobacteria)
Hardness (Total) as CaCO ₃	ppm	NA	NA	--	Range Average	98 - 162 123	290 - 510 405	Leaching from natural deposits
Heterotrophic Plate Count ^f	CFU/mL	TT	NA	--	Range Average	0 - 221 3	NA NA	Naturally present in the environment
Magnesium	ppm	NA	NA	--	Range Average	16 16	42 - 100 55	Runoff/leaching from natural deposits; seawater influence
2-Methylisoborneol (MIB)	ng/L	NA	NA	NA	Range Average	ND - 18 5.9	NC NC	An organic compound mainly produced by blue-green algae (cyanobacteria)
pH	pH Units	NA	NA	--	Range Average	7.4 - 8.8 8.3	7.35 - 8.10 7.61	Runoff/leaching from natural deposits; seawater influence
Potassium	ppm	NA	NA	--	Range Average	3.6 3.6	2.0 - 2.7 2.2	Runoff/leaching from natural deposits; seawater influence
Sodium	ppm	NA	NA	--	Range Average	83 83	38 - 60 47	Runoff/leaching from natural deposits; seawater influence
Total Organic Carbon (TOC) ^g	ppm	TT	NA	0.30	Range Average	1.1 - 4.1 2.2	NA NA	Various natural and manmade sources.
Vanadium	ppb	NA	NL=50	3	Range Average	NC NC	ND - 23 11	Leaching from natural deposits; industrial wastes

Distribution System Water Quality

ORGANIC CHEMICALS

Total Trihalomethanes ^h	ppb	80	NA	NA	Range Highest LRAA	43 - 58 52.8	5.7 - 53.5 36.2	By-product of drinking water chlorination
Haloacetic Acids	ppb	60	NA	1,2 ⁱ	Range Highest LRAA	6.3 - 11 13.0	2.7 - 15.4 11.3	By-product of drinking water chlorination

DISINFECTION

Total chlorine residual CCWA Distribution	ppm	MRDL = 4.0	MRDLG = 4.0	--	Range Average	1.37 - 3.58 2.79	-- --	Measurement of the disinfectant used in the production of drinking water
Free/total chlorine residual ID No.1 Distribution	ppm	MRDL = 4.0	MRDLG = 4.0	--	Range Average	-- --	0.48 - 3.72 1.82	Measurement of the disinfectant used in the production of drinking water

Abbreviations and Notes

Footnotes:

- 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.
- 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 are from most recent sampling of all supply wells.
- Uranium monitoring is dependent on measured gross alpha particle activity.
- The District's Water Supply Permit, issued by DDW (formerly DPH), requires monitoring of the asbestos levels in the distribution system in the areas that contain asbestos cement pipes whenever the aggressive index (AI) of the water served to the public is below 11.5.
- There is currently no MCL for Hexavalent Chromium. The previous MCL of 10.0 ppb was withdrawn on September 11, 2017.
- Pour plate technique -- monthly averages.
- TOCs are taken at the State Water treatment plant's combined filter effluent.
- Compliance based on the LRAA of distribution system samples. Values reported are the range of all 2021 sample results and highest locational running annual average.
- 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 No.1 = Santa Ynez River Water Conservation District, Improvement District No.1
 LRAA - Locational Running Annual Average
 NA = Not Applicable
 NC = Not Collected
 ND = Non-detect
 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
 TON = Threshold Odor Number
 µmho/cm = micromhos per centimeter

City of Solvang Conservation Efforts

The City of Solvang is currently under Stage 2 Drought Regulations.

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

Conservation Programs

☐ Landscape Rebate

For more information on these programs, please contact the City of Solvang at 805-688-5575 X 202

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.
- (i) 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.

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)

Abbreviations

ACU = Apparent Color Units

