# 2015 CONSUMER CONFIDENCE REPORT

# conserve



CITY OF SOLVANG 1644 OAK STREET SOLVANG, CA 93463 (805) 688-5575 http://www.cityofsolvang.com/ccr2015

# 2015 Consumer Confidence Report

Water System Name: CITY OF SOLVANG	Report Date: JUNE 2016									
	as required by state and federal regulations. This report shows December 31, 2015 and may include earlier monitoring data.									
Este informe contiene información muy importante so entienda bien.	bre su agua potable. Tradúzcalo ó hable con alguien que lo									
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 Upland Wells; Santa Ynez River Water Conservation District, Improvement District No. 1 (ID#1) & Central Coast Water Authority (CCWA)										
	e Assessments for the City's wells were completed September									
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: <u>Matt van der Linden</u>	Phone: ( 805 ) 688-5575									
TERMS USED	IN THIS REPORT									
<b>Maximum Contaminant Level (MCL)</b> : 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.	<ul> <li>Primary Drinking Water Standards (PDWS): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.</li> <li>Secondary Drinking Water Standards (SDWS): MCLs for contaminents that affect tasta oder, or appearance of the secondary principal secondary of the secondary principal secondary principal</li></ul>									
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).	contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels. <b>Treatment Technique (TT)</b> : A required process intended to reduce the level of a contaminant in drinking water.									
<b>Public Health Goal (PHG)</b> : The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the	<b>Regulatory Action Level (AL)</b> : The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.									
California Environmental Protection Agency. <b>Maximum Residual Disinfectant Level (MRDL)</b> : The highest level of a disinfectant allowed in drinking	<b>Variances and Exemptions</b> : State Board permission to exceed an MCL or not comply with a treatment technique under certain conditions.									
water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial	<b>ND</b> : not detectable at testing limit <b>ppm</b> : parts per million or milligrams per liter (mg/L)									
contaminants.	<b>ppb</b> : parts per billion or micrograms per liter ( $\mu$ g/L)									
MaximumResidualDisinfectantLevelGoal(MRDLG):The level of a drinking water disinfectant	<b>ppt</b> : parts per trillion or nanograms per liter (ng/L)									
below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use	<b>ppq</b> : parts per quadrillion or picogram per liter (pg/L)									
of disinfectants to control microbial contaminants.	<b>pCi/L</b> : picocuries per liter (a measure of radiation)									

**The sources of drinking water** (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

### Contaminants that may be present in source water include:

- *Microbial contaminants*, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- *Inorganic contaminants*, such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- *Pesticides and herbicides*, that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- *Organic chemical contaminants*, including synthetic and volatile organic chemicals, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- *Radioactive contaminants*, that can be naturally-occurring or be the result of oil and gas production and mining activities.

**In order to ensure that tap water is safe to drink**, the USEPA and the State 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, 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 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.

### City of Solvang

### 2015 Water Quality Table

TABLE 1 –	SAMPLING	RESULT	S SHOWI	NG THE DI	ETECTION	OF COLI	FORM BACTERIA
Microbiological Contaminants (complete if bacteria detected)	Highest No. of Detections		No. of months in violation		CL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria	0		0	More than 1 month with a		0	Naturally present in the environment
Fecal Coliform or <i>E. coli</i>	0		0	A routine sar repeat sample total coliform sample also c coliform or <i>H</i>	e detect n and either letects fecal	0	Human and animal fecal waste
TABLE 2	- SAMPLIN	IG RESUL	TS SHOW	VING THE I	DETECTIO	ON OF LEA	D AND COPPER
Lead and Copper (complete if lead or copper detected in the last sample set)	Sample Date	No. of samples collected	90 <sup>th</sup> percentile level detected	No. sites exceeding AL	No. sites exceeding AL		Typical Source of Contaminant
Lead (ppb)	8/14	20	ND	0	15	0.2	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	- SAMPL	ING RESU	JLTS FOR S	SODIUM A	ND HARD	NESS
<b>Chemical or Constituent</b> (and reporting units)	Sample Date	Level Detecte		Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant

Sodium (ppm)	3/11/15	62.2	54-73	none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm)	3/11/15	586	477-680	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 A	L is asterisked	. Additional info	rmation regarding i	the violation i	s provided late	
TABLE 4 – DET	ECTION O	F CONTAMIN	ANTS 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)	3/11/15	.18	0.1-0.2	2	1	Erosion of Natural deposits; water additive which promotes strong teeth
Nitrate (ppm) (as NO3)	3/11/15	6.7	1.3-16.9	45	45	Runoff & leaching from fertilizer use; sewage; erosion of natural deposits
Nitrate and Nitrite (as N) (ppm)	3/11/15	1.7	0.3-3.8	10	10	Runoff & leaching from fertilizer use; sewage; erosion of natural deposits
Hexavalent Chromium (ppb)	3/11/15	.25	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)	2013	0.575	0.5-0.8	5	N/A	Leaching from PVC pipes: discharge from factories, dry cleaners and auto shops (metal degreasers)
Gross Alpha Activity (pCi/L)	2013	8.745	5.07-13.6	15	N/A	Erosion of natural deposits
Uranium (pCi/L)	2013	6.78	3.66-9.89	20	0.5	Erosion of natural deposits
Trihalomethane (TTHM) (ppb)	1/14- 10/14	44.9	31.8-59.4	80	N/A	Byproduct of drinking water chlorination
Haloacetic Acid (HA A5) (ppb)	1/14- 10/14	9.5	5-20	60	N/A	Byproduct of drinking water disinfection.
Selenium (ppb)	3/11/15	11.25	4-16	50	50	Erosion of natural deposits; discharge chemical manufacturers and runoff from livestock lot.
TABLE 5 – DETE	CTION OF	CONTAMINA	NTS WITH A <u>S</u>	ECONDAR	<u>Y</u> DRINKIN	IG WATER STANDARD
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Chloride (ppm)	3/11/15	90	53-145	500	N/A	Runoff/leaching from natural deposits; seawater influence
Odor (units)	3/11/15	<1	<1	3 units	N/A	Natural occurring materials
Specific conductance (Umhos/cm)	3/11/15	1418	1260-1600	1600	N/A	Substance that forms ions when in water; seawater influence
Sulfate (ppm)	3/11/15	273.8	189-300	500	N/A	Runoff/leaching from natural deposits; industrial wastes

Total Dissolved Solids (ppm)	3/11/15	920	840-1040	1000	N/A	Runoff/leaching from natural deposits
	TABLE (	6 – DETECTIO	N OF UNREGUI	LATED CO	ONTAMINA	NTS
<b>Chemical or Constituent</b> (and reporting units)	Sample Date	Level Detected	Range of Detections	Notifica	tion Level	Health Effects Language
Boron (ppb)	3/11/15	200	100-300	1	000	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)	3/11/15	6	<2.0-9.0		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. Immunocompromised 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 <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.

### 2015 Annual Water Quality Report - Santa Ynez River Water Conservation District, ID#1

						Drinking Wa	ate	r Source	
		State	PHG	State	Range	State		Ground	
Parameter	Units	MCL	(MCLG)	DLR	Average	Water		Water	Major Sources in Drinking Water
PRIMARY STANDA	RDSM	andatory H	lealth-Re	lated Sta	andards				

### CLARITY

Combined Filter	NTU	TT=<1 NTU every 4 hours	Range	0.03 - 0.17	NA	Soil rupoff
Effluent Turbidity <sup>a</sup>	NIU	TT=95% of samples <0.3 NTU	%	100%	NA	Soil runoff

### INORGANIC CHEMICALS

b b	ppb	1000 (b)	600	50	Range	ND - 110	ND - 130	Residue from water treatment process;
Aluminum	ppp	(d) 0001	000	50	Average	73	13	Erosion of natural deposits
Arsenic	ppb	10	0.004	2.0	Range	ND	ND - 2.3	Erosion of natural deposits; orchard runoff;
Alsenic	ppp	10	0.004	2.0	Average	ND	0.7	glass and electronic production waste
Chromium +6	ppb	10	0.02	1.0	Range	ND	0.2 - 9.6	Discharges from industrial manufacturers; erosion
	php	10	0.02	1.0	Average	ND	2.1	of natural deposits
Chromium (Total Cr)	nnh	50	(100)	10	Range	ND	ND - 8.5	Erosion of natural deposits; steel,
Chronnum (Total CI)	ppb	50	(100)	10	Average	ND	2.1	pulp mills, and chrome plating wastes
Fluoride		2	1	0.1	Range	ND	0.17-0.37	Erosion of natural deposits;
Fluonde	ppm	2	I	0.1	Average	ND	0.3	water additive for tooth health
					Range	NC	ND - 2.2	Runoff and leaching from fertilizer use; leaching
Nitrate + Nitrite (as N)	ppm	10	10	0.4	Average	NC	0.9	from septic tanks and sewage; erosion of natural
					Average	NC.	0.9	deposits
					Range	0.43	ND -1.9	Runoff and leaching from fertilizer use; leaching
Nitrate (as Nitrogen)	ppm	10	10	0.4	Average	0.43	0.38	from septic tanks and sewage; erosion of natural
					Average	0.43	0.30	deposits

### RADIONUCLIDES

с с	pCi/L	15	NA	2	Range	ND	ND - 13	Erosion of natural deposits
Gross Alpha	poi/L	15	INA	3	Average	ND	5.4	
., . d	pCi/L	20	0.5	1	Range	NC	2 - 6.9	Erosion of natural deposits
Uranium	poi/L	20	0.5	1	Average	NC	4.8	

# SECONDARY STANDARDS--Aesthetic Standards

a					Range	80 - 205	24 - 59	Runoff/leaching from natural deposits;
Chloride	ppm	500	NA		Average	122	38	seawater influence
	Units	15	NA		Range	ND	ND - 9	Noturelly accurring arganic motorials
Color (ACU)	Units	15	INA		Average	ND	0.6	Naturally-occurring organic materials
Corrosivity	SI	non-	NA		Range	non-	non-	Balance of hydrogen, carbon, & oxygen in
Conosivity	31	corrosive	INA		Average	corrosive	corrosive	water, affected by temperature & other factors
Iron	ppb	300	NA	100	Range	ND	ND - 350	Leaching from natural deposits;
non	ppp	300	INA	100	Average	ND	47.0	industrial wastes
Manganasa	nnh	50	NA		Range	ND	ND - 220	Leaching from natural deposits
Manganese	ppb	50	INA		Average	ND	32	
Odor Threshold	Units	3	NA	1	Range	ND - 1	ND - 5	Naturally-occurring organic materials
	Units	3	INA	1	Average	ND	1.5	Inaturally-occurring organic materials
Specific	µmho/	1600	NA		Range	654 - 1160	780 - 930	Substances that form ions
Conductance	cm	1600	INA		Average	781	823	when in water; seawater influence
Sulfate	nnm	500	NA	0.5	Range	97	53 - 270	Runoff/leaching from natural deposits;
Sullate	ppm	500	INA	0.5	Average	97	168	industrial wastes
Total Dissolved	<b>n</b> nm	1000	NA		Range	349 - 708	470 - 730	Runoff/leaching from natural deposits;
Solids	ppm	1000	INA		Average	437	603	Runon/leaching from hatural deposits,
Lab Turbidity (ID#1)	NTU	5	NA		Range	0.04 - 0.14	ND - 4.8	Soil erosion/runoff
Turbidity (State Water)	NIU	5	INA		Average	0.07	0.5	
Zinc	nnh	5000	NA	50	Range	ND	ND - 59	Runoff/leaching from natural deposits;
	ppb	5000	INA	50	Average	ND	5.9	industrial wastes

# ADDITIONAL PARAMETERS (Unregulated)

Alkalinity (Total) as	ppm	NA	NA		Range	66 - 92	230 - 320	Runoff/leaching from natural deposits;
CaCO <sub>3</sub> equivalents	ppm	INA.			Average	79	284	seawater influence
Calcium	ppm	NA	NA		Range	58 - 96	44 - 100	Runoff/leaching from natural deposits;
Calcium	ppm	INA.			Average	69	74	seawater influence
DCPA (total Mono &	ppb	NA	NA	NA	Range	0.13	NC	
Diacid Degredates)	ppp	INA.			Average	0.13	NC	
Geosmin	ng/L	NA	NA	NA	Range	ND - 4	NC	
Geosiniin	ng/L	INA.			Average	2	NC	
Hardness (Total) as	ppm	NA	NA		Range	128 - 206	190 - 480	Leaching from natural deposits
CaCO <sub>3</sub>	Phil	NA NA	NA.		Average	146	378	

### 2015 Annual Water Quality Report - Santa Ynez River Water Conservation District, ID#1

						Drinking Wa	alt	el Source	
		State	PHG	State	Range	State		Ground	
Parameter	Units	MCL	(MCLG)	DLR	Average	Water		Water	Major Sources in Drinking Water
Heterotrophic Plate	CFU/mL	TT	NA		Range	0 - 6		NA	
Count <sup>e</sup>	CFU/ML	11	NA		Average	0.5		NA	Naturally present in the environment
Magnesium	ppm	NA	NA		Range	18	1[	18 - 58	Runoff/leaching from natural deposits;
Viagnesium	ppin	IN/A	11/3		Average	18		46	seawater influence
2-Methylisoborneol	ng/L	NA	NA	NA	Range	ND - 1003	I	NC	
	ng/∟	IN/A	11/3	INA.	Average	111		NC	
рΗ	рΗ	NA	NA		Range	7.6 - 8.8		7.0 - 8.1	Runoff/leaching from natural deposits;
	Units	IN/A	11/3		Average	8.2		7.6	seawater influence
Potassium	000	NA	NA		Range	3.4		2.0 - 3.4	Runoff/leaching from natural deposits;
-0185510111	ppm	INA.	1974		Average	3.4		2.5	seawater influence
Sodium		NA	NA		Range	84	1[	39 - 130	Runoff/leaching from natural deposits;
Souluiti	ppm	INA	INA		Average	84	1	54	seawater influence
Fotal Organic Carbon		TT	NIA	0.00	Range	1.9 - 3.1	1[	NA	
(TOC) <sup>f</sup>	ppm	TT	NA	0.30	Average	2.5		NA	Various natural and manmade sources.
Constituents of Cor	ncern								
		NA	NII -1 000	100	Range	NC		110 - 460	Runoff/leaching from natural deposits;
Boron	ppb	INA	NL=1,000	100	Average	NC	11	232	wastewater, and fertilizers/pesticides.
/anadium	ppb	NA	NL=50	3	Range	NC	1 [	ND - 32	Leaching from natural deposits;
	hhn	NА	NL=50	3	Average	NC		10	industrial wastes
Distribution System	Water (	Juality							

### **ORGANIC CHEMICALS**

ORCANIO OFILINICALO								
	dqq	80	NA	NA	Range	53 - 68	8.3 - 74.	2 By-product of drinking water
Total Trihalomethanes <sup>9</sup>	php	80	IN/A	IN/A	Highest	61	37.3	chlorination
Haloacetic Acids <sup>h</sup>	dqq	60	NA	1,2 <sup>h</sup>	Range	8.2 - 18	2.3 - 18	7 By-product of drinking water
Haldacelic Acids	ppp	00		1,2	Highest	12.4	9.7	chlorination
DISINFECTION								
Total chlorine residual		MRDL =	MRDLG =		Range	1.1 - 3.5		Measurement of the disinfectant
CCWA Distribution	ppm	4.0	4.0		Average	2.3		used in the production of drinking water
Free/total chlorine residual		MRDL =	MRDLG =		Range		0.03 - 2.	5 Measurement of the disinfectant
ID#1 Distribution	ppm	4.0	4.0		Average		1.3	used in the production of drinking water

### Abbrevations and Notes

Footnotes:

- (a) Turbidity (NTU) is a  $% \left( {\left( {{{\rm{NTU}}} \right)} \right)$  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) 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.
- (h) 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
- 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 ( $\mu$ g/L)

ppm = parts per million, or milligrams per liter (mg/L) SI = saturation index

 $\mu$ mho/cm = micromhos per centimeter

(unit of specific conductance of water)

### **Summary of Analytical Results**

The summary table of analytical results confirms that water served by the District met all primary drinking water standards during the 2015 reporting period. Secondary standards for iron, manganese, and odor were exceeded in samples from Well 6 only, following an extended period of non-use and a well rehabilitation effort. The well was used in April during a pump test period for less than two days. 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. Actual concentrations delivered to District customers were less due to blending of multiple sources (e.g., other wells) and dilution within the distribution system.



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

### COVERING THE REPORTING PERIOD OF JANUARY-DECEMBER 2015

Please see last page for key to abbreviations.

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

# PRIMARY STANDARDS--Mandatory Health-Related Standards

### CLARITY (a)

Combined Filter	NTU	TT=<1 NTU every 4 hours	Range	0.03 - 0.17	NA	Soil runoff
Effluent Turbidity	NIO	TT=95% of samples <0.3 NTU	%	100%	NA	

### **INORGANIC CHEMICALS**

Aluminum p		1 (b)	0.6	0.05	Range	ND - 0.11	ND	Residue from water treatment process;
	ppm		0.0	0.05	Average	0.073	ND	Erosion of natural deposits
Arsenic, Total	ppb	10	0.004	2	Range	ND	2.4	Erosion of natural deposits; runoff from orchards;
		10	0.004		Average	ND	2.4	glass and electronics production wastes
Nitrate as Nitrogen		10 (h)	10	0.4	Range	0.43	0.43	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural
Nillale as Nillogen	ppm	10 (11)	10	0.4	Average	0.43	0.43	deposits

### RADIONUCLIDES

Gross Beta Particle	nCi/l	50	(0)	1	Range	ND	4.5	Decay of natural and man-made deposits
Gross Beta Particle	pCI/L	50	(0)	4	Average	ND	4.5	Decay of natural and man-made deposits

### DISTRIBUTION SYSTEM MONITORING

Total Chlorine Residual	ppm	MRDL =	MRDLG =	NA	Range	1.1 - 3.5	NA	Measurement of the disinfectant
Total Chionne Residual	ppin	4.0	4.0	IN/A	Average	2.3	NA	used in the production of drinking water
Total Trihalomethanes					Range	53 - 68	NA	
	ppb	80	NA	NA	Average	61	NA	By-product of drinking water chlorination
(0)					Highest LRAA	61.8	NA	
					Range	8.2 - 18	NA	
Haloacetic Acids (d)	ppb	60	NA	(e)	Average	12.4	NA	By-product of drinking water chlorination
					Highest LRAA	13	NA	

### SECONDARY STANDARDS--Aesthetic Standards

Chloride	ppm	500	NA	NA	Range	80 - 205	77 - 184	Runoff/leaching from natural deposits;	
Chionde	ppm	500			Average	122	117	seawater influence	
Color	ACU	15	NA	NA	Range	ND	20	Netwolk converse organic motorials	
Color	ACU	15	NA	NA	Average	ND	20	Naturally-occurring organic materials	
Corrosivity	None	non-	NA	NA	Range	non-corrosive	non-corrosive	Balance of hydrogen, carbon, & oxygen in water,	
(Aggresivity Index)	None	corrosive	INA	NA	Average	non-corrosive	non-corrosive	affected by temperature & other factors	
Odor Threshold T	TON	3	NA	1	Range	ND - 1	ND - 8	Naturally-occurring organic materials	
	TON	5	INA.		Average	ND	1.3	Naturally-occurring organic materials	
Specific	uS/cm	1600	NA	NA	Range	654 - 1160	566 - 1063	Substances that form ions	
Conductance	uo/cm	1000			Average	781	710	when in water; seawater influence	
Sulfate	ppm	500	NA	0.5	Range	97	85	Runoff/leaching from natural deposits;	
Sullate	ppm	500		0.5	Average	97	85	industrial wastes	
Total Dissolved	nnm	1000	NA	NA	Range	349 - 708	300 - 648	Runoff/leaching from natural deposits;	
Solids (TDS)	ppm	1000			Average	437	398	Runon/leaching normatural deposits,	
Turbidity (Monthly)	NTU	5	NA	NA	Range	0.04 - 0.14	0.06 - 7.1	Soil runoff	
ruibidity (wontiny)	NIU	Э	INA	NA NA	Average	0.07	1.2		

						TREATED	SOURCE	
		State	PHG	State	Range		STATE	
Parameter	Units	MCL	(MCLG)	DLR	Average	CCWA	WATER	Major Sources in Drinking Water
ADDITIONAL PA	RAMETE	RS (Unreg	ulated)					

Alkalinity (Total) as		NA	NIA	NA	Range	66 - 92	Π	32 - 92	Runoff/leaching from natural deposits;
CaCO <sub>3</sub> equivalents	ppm	NA	NA	NA	Average	79		69	seawater influence
Calcium	nnm	NA	NA	NA	Range	58 - 96	11	58 - 92	Runoff/leaching from natural deposits;
Calcium	ppm	INA	INA	NA	Average	69		69	seawater influence
DCPA (total Mono &	ppb	NA	NA	NA	Range	0.13		0.12	
Diacid Degredates)	ppp	IN/A	IN/A	114	Average	0.13		0.12	
Geosmin	ng/L	NA	NA	NA	Range	ND - 4		ND - 13	
Occaniin	ng/L	IN/A	na.	114	Average	2		5	
Hardness (Total) as	ppm	NA	NA	NA	Range	128 - 206		124 - 212	Leaching from natural deposits
CaCO <sub>3</sub>	ppin	1177	11/1	1.0.1	Average	146		146	
Heterotrophic Plate	CFU/mL	TT	NA	NA	Range	0 - 6		NA	Naturally present in the environment
Count (f)	01 0/112				Average	0.5		NA	
Magnesium	ppm	NA	NA	NA	Range	18		18	Runoff/leaching from natural deposits;
magnoolann	PP				Average	18		18	seawater influence
Manganese, Total	ppb	NA	NA	NA	Range	ND		10	Runoff/leaching from natural deposits;
mangarioco, rotai	660	101			Average	ND		10	seawater influence
2-Methylisoborneol	ng/L	NA	NA	NA	Range	ND - 1003		ND - 303	
	ng/L	INA.			Average	111		42	
~II	pН	NA	NA	NA	Range	7.6 - 8.8		7.7 - 9.3	Runoff/leaching from natural deposits;
рН	Units	INA	INA	N/A	Average	8.2		8.7	seawater influence
Deteccium		NA	NA	NA	Range	3.4		3.5	Runoff/leaching from natural deposits;
Potassium	ppm	NA	INA	NA	Average	3.4		3.5	seawater influence
Sodium	nnm	NA	NA	NA	Range	84		80	Runoff/leaching from natural deposits;
Soulum	ppm	INA	INA	NA	Average	84		80	seawater influence
Total Organic Carbon		тт	NIA	0.20	Range	1.9 - 3.1		3.4 - 6.3	Various natural and manmada assures -
(TOC) (g)	ppm	TT	NA	0.30	Average	2.5		4.8	Various natural and manmade sources.

### 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 samles 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.
- (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.

### 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 ( $\mu$ g/L) ppm = parts per million, or milligrams per liter (mg/L) TON = Threshold Odor Number TT = Treatment Technique LRAA = Locational Running Annual Average



# **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: <a href="https://www.cityofsolvang.com">www.cityofsolvang.com</a>

# Ways You Can Help

# **Conservation Programs**

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

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

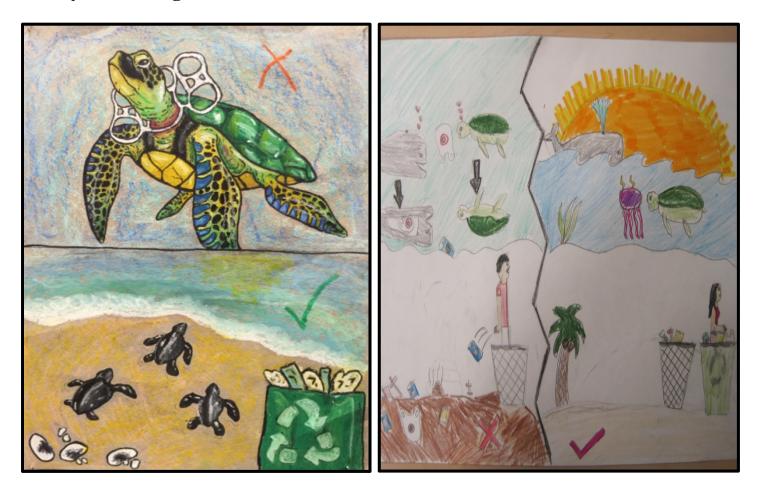
# Water Wise Facts

- 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, <u>www.waterwisesb.org</u>
  - o Brochures: <u>http://www.waterwisesb.org/brochures.wwsb</u>

# **City of Solvang Water Conservation Poster Contest Grand Prize Winners**



# Solvang Winner: Audrey Mayfield (8<sup>th</sup> Grade) Buellton Winner: Annette Figueroa (6<sup>th</sup> Grade)

### 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
- $ppb = parts per billion, or micrograms per liter (\mu g/L)$
- ppm = parts per million, or milligrams per liter (mg/L)

SI = saturation index

 $\mu$ mho/cm = micromhos per centimeter, (unit of specific conductance of water)



# Please Conserve Water