2014 ANNUAL WATER QUALITY REPORT

Santa Ynez River Water Conservation District, Improvement District No. 1 (District)

To All District Customers:

This report provides a summary of the water quality results from sampling of District water supply wells, distribution system, and State Water Project supplies for the 2014 calendar year. As a public water purveyor to the communities of Santa Ynez, Los Olivos, Ballard, the City of Solvang, and the Santa Ynez Band of Chumash Indians, the District operates under a permit issued by the State Water Resources Control Board, Division of Drinking Water (DDW) (formerly California Department of Public Health). In accordance with this Water Supply Permit and California Safe Drinking Water regulations, the District routinely tests all ground water sources for a complete set of potential contaminants as well as other water quality constituents. State Water supplies are similarly tested by the Central Coast Water Authority (CCWA). The results of these sampling and monitoring efforts for the 2014 calendar year are included in this report, along with additional information regarding your water supplies. Analytical data presented in this report represent the quality of the water delivered daily to you through your water service connection.

District water sources in use in 2014:

1) Ground Water - 19 supply wells

In 2014, the District operated nine (9) active supply wells pumping ground water from the Santa Ynez Upland ground water basin. Bounded by the foothills of the San Rafael Mountains to the north, this wedge-shaped area encompasses approximately 130 square-miles, paralleling the Santa Ynez River to the south and narrowing east to Red Rock Canyon. Active District wells in the Upland Basin range in depth from less than 500 feet to over 1,300 feet. The production rate (i.e., flow rate) of these "Upland" wells ranges from 350 to over 1,200 gpm (gallons/minute).

Separated from the southern margin of the Upland Basin by a barrier of impermeable rocks are the waterbearing alluvial (sand and gravel) deposits that fill the trough-like channel carved within the Santa Ynez River floodplain. During 2014, the District utilized ten (10) wells constructed in these alluvial deposits to a maximum depth of 70 feet. The production rate of these wells ranges from 150 to 650 gpm.

2) Surface Water – State Water Project

While the District still maintains an annual entitlement to water from Cachuma Lake, the only source of surface water served by the District comes from the State Water Project. The District's entitlement from the Cachuma Project is exchanged for an equal amount of State Water under an "Exchange" agreement with water agencies on the south coast of Santa Barbara County. In addition to the exchanged Cachuma water, the District also receives State Water directly by entitlement. Surface water from the California Aqueduct is treated at the Polonio Pass Water Treatment plant in San Luis Obispo County prior to entering the 143-mile long pipeline en route to the District's Mesa Verde Pumping Plant in Santa Ynez. Exchange water and State Water supplies made up approximately 17 percent of the District's total supply in 2014.

The District monitored seven (7) inactive wells during the 2014 calendar year: three wells located in the Upland Basin; and four wells located adjacent to the active Santa Ynez River channel. Wells are designated inactive for a variety of reasons including operational restrictions, regulatory requirements, and water quality parameters.

Drinking Water Source Assessments

The 1996 Amendments to the Federal Safe Drinking Water Act established the Drinking Water Source Assessment and Protection (DWSAP) Program to assess all sources of drinking water for vulnerability to contamination and to establish source protection programs. The District has evaluated each of the well locations in the District following the program guidelines. In summary, possible contaminating activities (PCAs) in the Upland Basin include septic systems and agricultural drainage. Contaminant sources that have the potential to affect wells located within the Santa Ynez River floodplain include septic systems, other wells (active and abandoned), agricultural drainage, upstream contaminant sources, application of agricultural chemicals, and surface runoff from roads. All completed assessments are available for viewing at the District office.

For the 2014 reporting period, the only contaminant associated with these PCAs detected in any of the wells was nitrate. Nitrate was detected in all of the operating Upland Basin wells, with concentrations ranging from non-

detect to 19 parts per million (ppm). Nitrate detected in the active river wells ranged from non-detect to 2.7 ppm. Annual monitoring of all water supply wells is required to assure that concentrations remain below the 45 ppm Maximum Contaminant Level (MCL) for nitrate. Should nitrate concentrations exceed one-half the MCL, more frequent (quarterly) monitoring would be required.

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 make drinking water aesthetically pleasing (i.e., protect the odor, taste, and appearance of the water).

Primary Drinking Water Standards (PDWS): MCLs for contaminants that affect health along with their monitoring, reporting, 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 health at the established MCL.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLGs are set by the U.S. Environmental Protection Agency. **Maximum Residual Disinfectant Level (MRDL**): The level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

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 Office of Environmental Health and Hazard Assessment (OEHHA).

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).

Regulatory Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Detection Limit for the Purposes of Reporting (DLRs): The minimum concentration a certified laboratory must detect for a given analytical parameter to comply with State regulations.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Potential Contaminants in Source Water

Federal regulation requires the following information to be included in this report. Because it is general information, it does not necessarily apply to the drinking water provided by the District. Information specific to your drinking water is found in the summary table below.

In general, sources of 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 could be present in source water include the following:

- *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*, which 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, and septic systems.
- *Radioactive contaminants*, which 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. Environmental Protection Agency (USEPA) and DDW prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. DDW regulations also establish limits for contaminants in bottled water that require the same level of protection for public health.

EPA Safe Drinking Water Hotline

All 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. Regulations in California establish limits requiring bottled water to provide the same protection of public health as the public water purveyor. More information about contaminants and potential health effects is available on-line at the U.S. Environmental Protection Agency's (EPA) Safewater website at *http://www.epa.gov/safewater* on the Internet or by calling the EPA Safe Drinking Water Hotline (1-800-426-4791).

Additional Information Regarding Your Drinking Water

Hexavalent Chromium (Cr6)

Chromium is a naturally occurring metal present in ore deposits and rock types found in the nearby San Rafael Mountains, which make up a large portion of the Upland Basin watershed area that recharges the District's ground water wells. As a result, chromium (including Cr6) is present in the District's active Upland Basin water supply wells. On July 1, 2014, the State of California enacted a new MCL for Cr6 in drinking water of 10 ppb, previously regulated under the Total Chromium MCL of 50 ppb. As a result, the District removed from service, three of its water supply wells with Cr6 concentrations in exceedance of the new regulatory limit. No supply wells exceeding the new 10 ppb threshold have been used since July 1, 2014. The District is in the process of studying various treatment systems, well modification techniques, and blending options to regain the water production capacity lost due to the more stringent regulation. Cr6 concentrations in other Upland Basin supply wells are near but below the new MCL and are being evaluated for treatment as well, should the need arise in the future.

Drought Conditions

Prevailing drought conditions are affecting most of California and the Santa Ynez Valley is no exception. Surface water supplies are diminishing locally and across the state affecting our Cachuma entitlement, our Santa Ynez River alluvial wells, and our State Water entitlement. As a result, the District is relying more heavily on the Upland Basin supply wells which are also experiencing production losses as water levels drop due to limited recharge and increased private and public ground water pumping within the basin. Ground water quality can also be affected by the drop in water levels in these wells.

For example, Well 6 was reactivated last summer after seven years of non-use. Following well rehabilitation and renewed pumping from the well, it was noted that iron and manganese results were above historic levels (and above the secondary drinking water standards) and use of the well was discontinued. It is possible that these elevated contaminant levels are an indirect result of the steady drop in water levels from pumping within the Basin (i.e., the well is producing from zone of poorer water quality lower in the aquifer).

Recommendation for Customers with Special Water Needs

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised individuals such as people with cancer undergoing chemotherapy, people who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, and/or 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).

Analytical Results

The following summary table of analytical results lists the range and average concentrations of the drinking water contaminants (as well as other water quality constituents) that were detected during the most recently required sampling for each source and constituent listed. Also listed are results of the District's required distribution system sampling. It is worth noting that chemicals not detected are not included in the report. Additionally, DDW sampling requirements allow for source monitoring of certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year. Therefore, some of the data listed in the tables, though representative of the source water quality, are more than a year old.

2014 Annual Water Quality Report - Santa Ynez River Water Conservation District, ID#1 SAMPLING RESULTS: PRIMARY AND SECONDARY STANDARDS

						Drinking Wa	ter Source	
	T	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	1	TT-~1 N		hours	Range	0.04 - 0.11	NA	
Effluent Turbiditv ^a	NTU	TT=<1 NTU every 4 hours TT=95% of samples <0.3 NTU			%	100%	NA	Soil runoff
INORGANIC CHEMICAL	s	1						
Aluminum ^b	ppb	1000 (b)	600	50	Range Average	ND - 110 69	ND - 130 10	Residue from water treatment process; Erosion of natural deposits
					Range	ND	ND - 2.3	Erosion of natural deposits; orchard runoff;
Arsenic	ppb	10	0.004	2.0	Average	ND	0.7	glass and electronic production waste
	a a b	4000	0000	400	Range	44	ND - 170	Erosion of natural deposits; oil drilling
Barium	ppb	1000	2000	100	Average	44	22	and metal refinery wastes
Chromium +6	ppb	NA	0.02	1.0	Range	NC	ND - 25.3	Discharges from industrial manufacturers; erosion
(before 7/1/14) Chromium +6	FF-4				Average	NC	5.3	of natural deposits Discharges from industrial manufacturers; erosion
(after 7/1/14)	ppb	10	0.02	1.0	Range Average	ND ND	ND - 10.0 2.3	of natural deposits
		50	(4.00)	40	Range	ND		Erosion of natural deposits; steel,
Chromium (Total Cr)	ppb	50	(100)	10	Average	ND	11.0	pulp mills, and chrome plating wastes
Fluoride	ppm	2	1	0.1	Range	ND	-	Erosion of natural deposits;
	PPIII	-		0.1	Average	ND	0.26	water additive for tooth health
Lead	ppb	AL = 15	0.2	5	Range	ND ND	ND - 22 1.7	Discharges from industrial manufacturers; internal corrosion of plumbing systems
					Average Range	ND	ND - 12	Erosion of natural deposits; orchard runoff;
Nickel	ppb	100	12	10	Average	ND	0.9	glass and electronic production waste
			10		Range	0.38	ND - 3.4	Runoff and leaching from fertilizer use; leaching
Nitrate + Nitrite (as N)	ppm	10		0.4	Average	0.38	1.3	from septic tanks and sewage; erosion of natural
				 	Ű			deposits Runoff and leaching from fertilizer use; leaching
Nitrate (as NO ₃)	ppm	45	45	2	Range	1.71	ND - 19	from septic tanks and sewage; erosion of natural
		.0		2	Average	1.71	2.9	deposits
RADIONUCLIDES		1						1
Gross Alpha ^c	pCi/L	15	NA	3	Range	ND	ND - 13	Erosion of natural deposits
				 	Average	ND	4.0	
Uranium ^d	pCi/L	20	0.5	1	Range	NC NC	2.4 - 6.4 3.8	Erosion of natural deposits
	_				Average Range	4.1	NC	
Gross Beta Particle	pCi/L	50	(0)	4	-	4.1	NC	Decay of natural and man-made deposits
SECONDARY STAN								
SECONDART STAN	NUARUS		- Standar	tele	Average	4.1	NC	
		5Aestheti	c Standar	ds	Average	4.1	NC	
Chloride					Range	78 - 170	29 - 59	Runoff/leaching from natural deposits;
Chloride	ppm	500	c Standar NA	rds 	Range Average	78 - 170 120	29 - 59 43	Runoff/leaching from natural deposits; seawater influence
Chloride Color (ACU)					Range Average Range	78 - 170 120 ND	29 - 59 43 0.7	
Color (ACU)	ppm Units	500 15	NA NA		Range Average Range Average	78 - 170 120 ND ND	29 - 59 43	seawater influence
	ppm	500	NA		Range Average Range	78 - 170 120 ND	29 - 59 43 0.7 ND - 9	seawater influence Naturally-occurring organic materials Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood
Color (ACU) Copper	ppm Units ppb	500 15 1000 non-	NA NA NA		Range Average Range Average Range Average Range	78 - 170 120 ND ND ND ND ND ND	29 - 59 43 0.7 ND - 9 ND - 210 16 non-	seawater influence Naturally-occurring organic materials Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood Balance of hydrogen, carbon, & oxygen in
Color (ACU)	ppm Units	500 15 1000	NA NA	 50	Range Average Range Average Range Average Range Average	78 - 170 120 ND ND ND ND ND non- corrosive	29 - 59 43 0.7 ND - 9 ND - 210 16 non- corrosive	seawater influence Naturally-occurring organic materials Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood Balance of hydrogen, carbon, & oxygen in water, affected by temperature & other factors
Color (ACU) Copper	ppm Units ppb	500 15 1000 non-	NA NA NA	 50	Range Average Range Average Range Average Range Range	78 - 170 120 ND ND ND ND non- corrosive ND	29 - 59 43 0.7 ND - 9 ND - 210 16 non- corrosive ND - 430	seawater influence Naturally-occurring organic materials Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood Balance of hydrogen, carbon, & oxygen in water, affected by temperature & other factors Leaching from natural deposits;
Color (ACU) Copper Corrosivity Iron	ppm Units ppb SI ppb	500 15 1000 non- corrosive 300	NA NA NA NA	 50 	Range Average Range Average Range Average Range Average Average	78 - 170 120 ND ND ND ND non- corrosive ND ND	29 - 59 43 0.7 ND - 9 ND - 210 16 non- corrosive ND - 430 70	seawater influence Naturally-occurring organic materials Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood Balance of hydrogen, carbon, & oxygen in water, affected by temperature & other factors Leaching from natural deposits; industrial wastes
Color (ACU) Copper Corrosivity	ppm Units ppb SI	500 15 1000 non- corrosive	NA NA NA	 50 	Range Average Range Average Range Average Range Range	78 - 170 120 ND ND ND ND non- corrosive ND	29 - 59 43 0.7 ND - 9 ND - 210 16 non- corrosive ND - 430	seawater influence Naturally-occurring organic materials Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood Balance of hydrogen, carbon, & oxygen in water, affected by temperature & other factors Leaching from natural deposits;
Color (ACU) Copper Corrosivity Iron Manganese	ppm Units ppb SI ppb ppb	500 15 1000 non- corrosive 300 50	NA NA NA NA NA	 50 100	Range Average Range Average Range Average Range Average Range Range	78 - 170 120 ND ND ND ND non- corrosive ND ND ND ND ND ND ND - 1	29 - 59 43 0.7 ND - 9 ND - 210 16 non- corrosive ND - 430 70 ND - 200 15.4 ND - 5	seawater influence Naturally-occurring organic materials Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood Balance of hydrogen, carbon, & oxygen in water, affected by temperature & other factors Leaching from natural deposits; industrial wastes Leaching from natural deposits
Color (ACU) Copper Corrosivity Iron Manganese Odor Threshold	ppmUnitsppbSIppbppbUnits	500 15 1000 non- corrosive 300	NA NA NA NA	 50 	Range Average Range Average Range Average Range Average Range Average Range Average Range Average	78 - 170 120 ND ND ND ND non- corrosive ND ND ND ND ND ND ND - 1 ND	29 - 59 43 0.7 ND - 9 ND - 210 16 non- corrosive ND - 430 70 ND - 200 15.4 ND - 5 1.7	seawater influence Naturally-occurring organic materials Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood Balance of hydrogen, carbon, & oxygen in water, affected by temperature & other factors Leaching from natural deposits; industrial wastes Leaching from natural deposits Naturally-occurring organic materials
Color (ACU) Copper Corrosivity Iron Manganese Odor Threshold Specific	ppm Units ppb SI ppb ppb Units µmho/	500 15 1000 non- corrosive 300 50	NA NA NA NA NA	 50 100	Range Average Range Average Range Average Range Average Range Average Range Average Range Average Range	78 - 170 120 ND ND ND ND ND ND ND ND ND ND ND - 1 ND 606 - 969	29 - 59 43 0.7 ND - 9 ND - 210 16 non- corrosive ND - 430 70 ND - 200 15.4 ND - 5 1.7 710 - 1100	seawater influence Naturally-occurring organic materials Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood Balance of hydrogen, carbon, & oxygen in water, affected by temperature & other factors Leaching from natural deposits; industrial wastes Leaching from natural deposits Naturally-occurring organic materials Substances that form ions
Color (ACU) Copper Corrosivity Iron Manganese Odor Threshold	ppmUnitsppbSIppbppbUnits	500 15 1000 non- corrosive 300 50 3 1600	NA NA NA NA NA NA	 50 100 1 	Range Average Range Average Range Average Range Average Range Average Range Average Range Average Range Average	78 - 170 120 ND ND ND ND ND ND ND ND ND ND ND - 1 ND 606 - 969 769	29 - 59 43 0.7 ND - 9 ND - 210 16 non- corrosive ND - 430 70 ND - 430 70 ND - 200 15.4 ND - 5 1.7 710 - 1100 875	seawater influence Naturally-occurring organic materials Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood Balance of hydrogen, carbon, & oxygen in water, affected by temperature & other factors Leaching from natural deposits; industrial wastes Leaching from natural deposits Naturally-occurring organic materials Substances that form ions when in water; seawater influence
Color (ACU) Copper Corrosivity Iron Manganese Odor Threshold Specific	ppm Units ppb SI ppb ppb Units µmho/	500 15 1000 non- corrosive 300 50 3	NA NA NA NA NA NA	 50 100 1	Range Average Range Average Range Average Range Average Range Average Range Average Range Average Range Average Range Range	78 - 170 120 ND ND ND ND non- corrosive ND ND ND ND ND ND ND - 1 ND 606 - 969 769 120	29 - 59 43 0.7 ND - 9 ND - 210 16 non- corrosive ND - 430 70 ND - 430 70 ND - 200 15.4 ND - 5 1.7 710 - 1100 875 13 - 240	seawater influence Naturally-occurring organic materials Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood Balance of hydrogen, carbon, & oxygen in water, affected by temperature & other factors Leaching from natural deposits; industrial wastes Leaching from natural deposits Naturally-occurring organic materials Substances that form ions when in water; seawater influence Runoff/leaching from natural deposits;
Color (ACU) Copper Corrosivity Iron Manganese Odor Threshold Specific Conductance	ppm Units ppb SI ppb Units ppb ppb ppb ppb ppb ppb ppb ppb units ppm	500 15 1000 non- corrosive 300 50 3 1600 500	NA NA NA NA NA NA NA	 50 100 1 0.5	Range Average Range Average Range Average Range Average Range Average Range Average Range Average Range Average	78 - 170 120 ND ND ND ND ND ND ND ND ND ND ND - 1 ND 606 - 969 769	29 - 59 43 0.7 ND - 9 ND - 210 16 non- corrosive ND - 430 70 ND - 430 70 ND - 200 15.4 ND - 5 1.7 710 - 1100 875	seawater influence Naturally-occurring organic materials Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood Balance of hydrogen, carbon, & oxygen in water, affected by temperature & other factors Leaching from natural deposits; industrial wastes Leaching from natural deposits Naturally-occurring organic materials Substances that form ions when in water; seawater influence Runoff/leaching from natural deposits; industrial wastes
Color (ACU) Copper Corrosivity Iron Manganese Odor Threshold Specific Conductance Sulfate Total Dissolved Solids	ppm Units ppb SI ppb Units units	500 15 1000 non- corrosive 300 50 3 1600	NA NA NA NA NA NA	 50 100 1 	Range Average Range Average Range Average Range Average Range Average Range Average Range Average Range Average Range Average	78 - 170 120 ND ND ND ND ND ND ND ND ND ND ND ND - 1 ND 606 - 969 769 120 120 120 340 - 572 428	29 - 59 43 0.7 ND - 9 ND - 210 16 non- corrosive ND - 430 70 ND - 430 70 ND - 200 15.4 ND - 5 1.7 710 - 1100 875 13 - 240 136	seawater influence Naturally-occurring organic materials Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood Balance of hydrogen, carbon, & oxygen in water, affected by temperature & other factors Leaching from natural deposits; industrial wastes Leaching from natural deposits Naturally-occurring organic materials Substances that form ions when in water; seawater influence Runoff/leaching from natural deposits;
Color (ACU) Copper Corrosivity Iron Manganese Odor Threshold Specific Conductance Sulfate Total Dissolved Solids Lab Turbidity (ID#1)	ppm Units ppb SI ppb Units ppb ppb ppb ppb ppb ppb ppb ppb units ppm	500 15 1000 non- corrosive 300 50 3 1600 500	NA NA NA NA NA NA NA	 50 100 1 0.5	RangeAverageRangeAverageRangeAverageRangeAverageRangeAverageRangeAverageRangeAverageRangeAverageRangeAverageRangeAverageRangeAverageRangeAverageRangeAverageRangeAverageRangeAverageRangeAverageRangeAverageRange	78 - 170 120 ND ND ND ND ND ND ND ND ND ND ND ND - 1 ND 606 - 969 769 120 120 120 120 340 - 572 428 0.04 - 0.11	29 - 59 43 0.7 ND - 9 ND - 210 16 non- corrosive ND - 430 70 ND - 430 70 ND - 200 15.4 ND - 5 1.7 710 - 1100 875 13 - 240 136 440 - 730 567 ND - 4.8	seawater influence Naturally-occurring organic materials Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood Balance of hydrogen, carbon, & oxygen in water, affected by temperature & other factors Leaching from natural deposits; industrial wastes Leaching from natural deposits Naturally-occurring organic materials Substances that form ions when in water; seawater influence Runoff/leaching from natural deposits; industrial wastes
Color (ACU) Copper Corrosivity Iron Manganese Odor Threshold Specific Conductance Sulfate Total Dissolved Solids	ppm Units ppb SI ppb Units ppb ppb	500 15 1000 non- corrosive 300 50 3 1600 500 1000	NA NA NA NA NA NA NA NA	 50 100 1 0.5 	RangeAverageRangeAverageRangeAverageRangeAverageRangeAverageRangeAverageRangeAverageRangeAverageRangeAverageRangeAverageRangeAverageRangeAverageRangeAverageRangeAverageRangeAverageRangeAverageRangeAverage	78 - 170 120 ND ND ND ND ND ND ND ND ND ND ND ND - 1 ND 606 - 969 769 120 120 120 340 - 572 428	29 - 59 43 0.7 ND - 9 ND - 210 16 non- corrosive ND - 430 70 ND - 200 15.4 ND - 5 1.7 710 - 1100 875 13 - 240 136 440 - 730 567	seawater influence Naturally-occurring organic materials Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood Balance of hydrogen, carbon, & oxygen in water, affected by temperature & other factors Leaching from natural deposits; industrial wastes Leaching from natural deposits Naturally-occurring organic materials Substances that form ions when in water; seawater influence Runoff/leaching from natural deposits; industrial wastes Runoff/leaching from natural deposits;

						Drinking Wa				
Parameter	Units	State MCL	PHG (MCLG)	State DLR	Range Average	State Water	Ground Water	Major Sources in Drinking Water		
ADDITIONAL PARA				DER	Average	Water	Water			
Alkalinity (Total) as	ppm	NA	NA		Range	60 - 96	230 - 330	Runoff/leaching from natural deposits;		
CaCO ₃ equivalents	PP				Average	77	291	seawater influence		
Calcium	ppm	NA	NA		Range	50 - 86	43 - 100	Runoff/leaching from natural deposits;		
· · · · · · · · · · · · · · · · · · ·					Average	66	66	seawater influence		
Hardness (Total) as	ppm	NA	NA		Range	116 - 182	190 - 480	Leaching from natural deposits		
CaCO ₃ Heterotrophic Plate					Average	138 0 - 1	365			
		TT	NA		Range		1	Naturally present in the environment		
Count ^e					Average	0.3				
Magnesium	ppm	NA	NA		Range	24	42 - 84	Runoff/leaching from natural deposits;		
	-				Average	24	53	seawater influence		
рН	pH Lipite	NA	NA		Range	7.3 - 10 8.2	7.0 - 8.1	Runoff/leaching from natural deposits;		
	Units				Average Range	4.8	7.6 1.6 - 3.4	seawater influence Runoff/leaching from natural deposits;		
Potassium	ppm	NA	NA		Average	4.8	2.3	seawater influence		
					Range	130	32 - 130	Runoff/leaching from natural deposits;		
Sodium ppm		opm NA	NA		Average	130	45	seawater influence		
Total Organic Carbon					Range	1.9 - 3.5				
(TOC) ^f	ppm	TT	NA	0.30	Average	2.4		Various natural and manmade sources.		
					Average	2.4				
Constituents of Co	ncern									
Boron	ppb	NA	NL=1,000	100	Range	NC	ND - 460	Runoff/leaching from natural deposits;		
ololi pp.			,		Average	NC	185	wastewater, and fertilizers/pesticides.		
Vanadium	ppb	NA	NL=50	3	Range	NC	ND - 18	Leaching from natural deposits;		
					Average	NC	12	industrial wastes		
Distribution System	n Water	Quality								
MICROBIOLOGICAL Total Coliform (TC)		5.0% of			Range	0 - 1				
			0							
Bacteria ^g		monthly	0		Average	0.03		Naturally present in the environment		
CCWA Distribution	_	samples			Highest	0 - 1				
Total Coliform Bacteria		>1 positive	0		Highest #		0 Positive	Naturally present in the environment		
ID#1 Distribution		per month	_		pos / mo					
Fecal Coliform					Range	0 Positives		1		
and <i>E. Coli</i>			0		Average	0 Positives		Human and animal fecal waste		
CCWA Distribution					Highest	0 Positives				
Fecal Coliform		1 positive;			Highest #					
and <i>E. Coli</i>		with repeat	0		pos / mo		0 Positive	Human and animal fecal waste		
ID#1 Distribution		TC positive			w/ repeat					
ORGANIC CHEMICALS										
Total Tribalomathana	ppb	80 60	NA NA	NA 1,2 ^h	Range	46 - 64	ND - 58.7	By-product of drinking water		
Total Trihalomethanes ^h	hhn				Highest	59	42.9	chlorination		
Haloacetic Acids ^j	ppb				Range	8.2 - 18	1.0 - 18.5	By-product of drinking water		
	հեր	00	11/1	١,٧	Highest	12	12.6	chlorination		
DISINFECTION										
Total chlorine residual		MRDL =	MRDLG =		Range	1.5 - 3.2		Measurement of the disinfectant		
000444 81 41		4 0	40		Avorago	2.3		used in the production of drinking water		
	ppm	4.0	4.0		Average					
CCWA Distribution Free/total chlorine residua ID#1 Distribution		4.0 MRDL = 4.0	4.0 MRDLG = 4.0		Range Average		0.07 - 2.3	Measurement of the disinfectant used in the production of drinking water		

Abbrevations and Notes

Footnotes:

(a) Turbidity (NTU) is a 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.
- Compliance based on the running quarterly annual average of distribution system samples. (h) Values reported are range of all sample results and highest running annual average.
- Monochloroacetic Acid (MCAA) has a DLR of 2.0 ug/L while the other four Haloacetic Acids (j) 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 (μ g/L)

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

µmho/cm = micromhos per centimeter

(unit of specific conductance of water)

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 2014 reporting period. Secondary standards for iron (2 samples) and manganese (1 sample) were exceeded for two isolated samples. Inorganic analyses from a Well 14 sample taken in July resulted in anomalous iron, copper, and lead results, with iron and lead above the regulatory standards (Action Level for lead). Two follow-up samples from Well 14 yielded non-detect (ND) results for all of the above constituents confirming that initial concentrations were false positive results due to a recently installed sample tap made of copper tubing and other metal components. Sampling of Well 6 (in July) yielded iron and manganese results (410 ppm and 200 ppm, respectively) in exceedance of the secondary standards. This well was only used during the month of August and then removed from service. 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, State Water) and dilution within the distribution system.

SAMPLING RESULTS: DISTRIBUTION SYSTEM MONITORING										
Microbiological Contaminants	No. of Samples Required ¹	No. of Samples Collected	Highest Number of detections	No. of months in violation		MCL	MCLG	Typical Source of Bacteria		
Total Coliform Bacteria	160	208	(In a mo.)	0		More than 1 sample in a month with a detection	0	Naturally present in the environment		
Fecal Coliform or <i>E. coli</i>	160	208	(In the year)		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		
Lead and Copper ²	No. of samples collected	90 th percentile level detected	No. Sites exceeding AL	AL	MCLG	Typical Source of Contaminant				
Lead (ppb)	20	ND	1 ³	15	2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits.				
Copper (ppm)	20	0.086	0	1.3	0.17	Internal corrosion of household water plumbing systems; erosion of natural deposits; leaching from wood preservatives.				

Notes:

1. Three bacteriological samples per week are required based on the number of District service connections, as specified in the California Code of Regulations (CCR), Chapter 15, Title 22 (Domestic Water Quality and Monitoring). The District optionally monitors bacteria at a fourth location weekly to assure representative sampling of the entire distribution system.

- 2. Sampling requirements are specified in the Lead and Copper Rule, CCR, Title 22 and are based on the population served. Samples are obtained from a representative sampling of customer's internal plumbing. Following initial sampling specified in CCR, Title 22, Chapter 17.5, representative sampling for lead and copper is required once every three years. The data summary displayed in the above table is from data obtained in August of 2012. The next scheduled sampling for lead and copper is in the summer of 2015.
- 3. Analytical results from a repeat sample taken at the one site that exceeded the Action Level were non-detect.

Surface Water Supply – The State Water Project

As stated above, the surface water from State Water Project made up approximately 17 percent of the District's water supply for 2014. Runoff from the Sierra Nevada watershed travels more than 500 miles through the rivers, pipelines, and aqueducts that make up the State Water Project before reaching the District's Mesa Verde Pumping Station. This "State" water is treated at the Polonio Pass Water Treatment Plant (PPWTP), a 43 million-gallon per day facility designed and constructed to treat and purify all water served to San Luis Obispo and Santa Barbara Counties. The operation of the plant is the responsibility of the Central Coast Water Authority (CCWA), an agency formed in 1991 to finance, construct, and operate State water treatment and delivery facilities on behalf of all Santa Barbara County participants in the State Water Project. CCWA conducts weekly testing of the treated State water at numerous locations along its 143-mile pipeline route to Santa Ynez to assure the delivery of the highest quality treated water to their (and our) customers. For more information about the treatment and delivery of State water, please visit CCWA at the following web site: <u>www.ccwa.com</u>.

As a reminder, water from the State Water Project that is served throughout the District is disinfected with chloramines as the final step in the raw water treatment process. Chloramine treatment is an effective disinfectant and has resulted in reduced taste and odor complaints. While chloramines do not pose a health hazard to the general population, they can be dangerous to people undergoing kidney dialysis unless the chloramines are reduced to acceptable levels. Dialysis patients should already be aware of this concern and be taking the proper precautions when receiving dialysis treatment. Additionally, **chloraminated water is toxic to fish**. Local pet and fish suppliers should be contacted to obtain the necessary treatment for chloraminated water to assure it is safe for fish.

Cross-Connection Control Program

As many of our residential and commercial customers know, the District requires the installation and maintenance of backflow prevention devices where "an actual or potential cross-connection" exists, to protect and ensure safe water quality within our distribution system. Resolution No. 482 establishes the District's Cross-Connection Control Program to assure compliance with DDW regulatory requirements (17 CCR, Section 7584) and to prevent the contamination of our distribution system. For additional information regarding this program, pick up a copy of our free cross-connection control brochure or the District's Cross-Connection Control policy at the District office, located in Santa Ynez at 3622 Sagunto Street.

2015 Annual Water Quality Report (AWQR) – Electronic Delivery

Similar to this year, look for the 2015 AWQR to be delivered electronically, which minimizes printing and mailing costs as well as reducing paper consumption. Hard copies will be available at the District office and will be mailed or emailed upon request. Reminder notices and URL location will be posted on the monthly billing cards prior to July of next year.

Attention Landlords and Other Property Managers:

We recommend that landlords and other property managers display this report in a public location such as a lobby, laundry room, or community room. If you would like to receive additional copies of this report, please contact the District office at (805) 688-6015.

Public Participation

If you are interested in learning more about your water supply, District customers and other members of the public are invited to attend the regularly scheduled meetings of the Board of Trustees on the **third Tuesday of** each month, 5:30 P.M., at the District Office, 3622 Sagunto Street, Santa Ynez.

District staff appreciate this opportunity to communicate our efforts in delivering a reliable, high quality drinking water to District customers. We are interested in any questions, suggestions or concerns you may have pertaining to this report or any other water quality issues. For additional information, please contact Eric Tambini, Water Resources Manager, at the District office [(805) 688-6015].

<u>Our Mission Statement</u>: To provide the residential and agricultural customers in the Santa Ynez River Water Conservation District, Improvement District No.1 service area with a reasonably priced, reliable, high quality water supply, and efficient and economical public services.