



This report is published by the San Juan Wholesale Customer Agencies: San Juan Water District, Citrus Heights Water District, Fair Oaks Water District and Orange Vale Water Company. San Juan Water District provides reliable, high-quality water supplies to our customers. We serve nearly 184,000 customers in our retail and wholesale service areas throughout Sacramento and Placer counties. We test our surface water, which comes from the American River watershed, and our local groundwater for microbiological and chemical quality.

The U.S. Environmental Protection Agency and the State Water Resources Control Board maintain strict water quality standards designed to protect customers from waterborne disease organisms and harmful chemicals. As a public water agency, we are required by the USEPA to provide you with an annual Consumer Confidence Report.

This report provides you with information about drinking water quality and how we comply with drinking water quality standards. As your water provider, we are proud to report this year's CCR concludes that, once again, your drinking water meets all federal and state drinking water standards.

WHERE DOES YOUR WATER COME FROM?

Water from the Agencies comes from two sources: treated surface water and groundwater. San Juan Water District diverts and treats surface water from Folsom Lake. This treated water is then distributed to the Agencies. Orange Vale Water Company and San Juan Water District receive 100 percent of their supply from treated surface water. If you are a consumer of Citrus Heights or Fair Oaks Water Districts, your water is a mixture of treated surface water from San Juan Water District and groundwater from local wells.

SJWD - 100% surface water

OVWC - 100% surface water

CHWD - 84% surface water, 16% groundwater

FOWD – 67.5% surface water, 32.5% groundwater

Source water assessments have been conducted for all the water sources to enable the Agencies to understand the activities that have the greatest potential for contaminating the drinking water supplies. The groundwater sources were assessed in 2002 and the surface water source was evaluated in 2001. New wells for Citrus Heights Water District were assessed in 2008, 2009, and 2015. A new well for Fair Oaks Water District was assessed in 2014. These assessments were conducted in accordance with State Board guidelines and copies of the complete assessments are available for review at the respective agency offices.

San Juan Water District conducted the evaluation of the Folsom Lake source. It was found to be most vulnerable to potential contamination from the Folsom Lake State Recreation Area facilities, high-density housing and associated activities such as sewer and septic systems and fertilizer, pesticide and herbicide application, as well as illegal activities and dumping. The source water is typically treated using conventional treatment with filtration and disinfection that is designed to remove many contaminants. Again this year, your water meets all federal and state drinking water standards.

Citrus Heights and Fair Oaks water districts conducted assessments of their local groundwater wells. It was found that all the wells are vulnerable to commercial urban activities, such as active and historic gas stations, dry cleaners, leaking underground storage tanks, known contaminant plumes, automobile repair shops, and sewer collection systems, none of which are associated with any detected contaminants. One well for Fair Oaks Water District was found to be vulnerable to irrigation, associated with low level detects of nitrate.

Although Orange Vale Water Company does not currently utilize available local groundwater, assessments found that wells within their service area would be most vulnerable to rural grazing activities.

WHAT'S IN YOUR WATER?

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 the 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 naturallyoccurring 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 thattap water is safe to drink, the U.S. Environmental Protection Agency (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.

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 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).

A NOTE FOR SENSITIVE POPULATIONS

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

GENERAL INFORMATION ON LEAD

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 San Juan Family Agencies are 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 epa.gov/safewater/lead.

The San Juan Family Agencies also conducts lead tap sampling in schools if requested. None was requested in 2018.

GENERAL INFORMATION ON ARSENIC

While your drinking water meets the federal and state standard for arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The U.S. Environmental Protection Agency continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

KEY TO ABBREVIATIONS

PPB	parts per billion or micrograms per liter (µg/L)									
PPM	parts per million or milligrams per liter (mg/L)									
pCi/L	picocuries per liter									
NTU	nephelometric turbidity units									
μS/CM	microsiemens per centimeter									
ND	not detected									
NR	not required									
N/A	not applicable									

WATER QUALITY DEFINITIONS

 $\label{eq:maximum contaminant Level (MCL)} \begin{tabular}{ll} \textbf{Maximum Contaminant Level (MCL)} \end{tabular} \begin{tabular}{ll} \textbf{The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water. \end{tabular}$

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 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.

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 Standard (PDWS) — MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

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.

Notification Level (NL) — Health-based advisory level set by the State Board for constituents with no MCL. This is not an enforceable standard, although requirements and recommendations may apply if detected above this level.

UNREGULATED CONTAMINANT MONITORING RULE (UCMR) RESULTS

USEPA requires public water systems to collect data for unregulated constituents in drinking water supplies under the Unregulated Contaminant Monitoring Rule program. Currently, these constituents have no drinking water standards but may be regulated in the future. The third round (UCMR3) was conducted from 2013 - 2015 and the fourth round (UCMR4) will be conducted from 2018 - 2020.

More information on the UCMR3 round can be found at **epa.gov/dwucmr/third-unregulated-contaminant-monitoring-rule**. Citrus Heights Water District and Fair Oaks Water District conducted sampling in 2014, while Orange Vale Water Company and San Juan Water District conducted sampling in 2015. Several constituents were detected, none at any level of human health concern.

Constituent	Range (ug/L)	Average (ug/L)	Human Health Advisory	Potential Sources	
HCFC-22 (chlorodifluoromethane)	ND-0.11 ¹	ND 1	None	Refrigerant and propellant	
Vanadium	1.1-11 ¹ 0.52-8.1 ² 0.47-1.0 ³ 0.63-1.2 ⁴	7.2 ¹ 3.4 ² 0.67 ³ 1 ⁴	State Board Notification Level – 50 ug/L	Naturally- occurring metal	
Molybdenum	ND-1 ¹ ND-1.7 ²	ND 1,2	USEPA Lifetime Health Advisory – 40 ug/L	Naturally- occurring metal	
Strontium	46-460 ¹ 46-220 ² 52-64 ³ 46-59 ⁴	245 ¹ 120 ² 59.8 ³ 53 ⁴	USEPA Lifetime Health Advisory – 4,000 ug/L	Naturally- occurring metal	
Hexavalent Chromium	$\begin{array}{c} 0.056-2.3^{\ 1} \\ 0.035-0.47^{\ 2} \\ 0.067-0.09^{\ 3} \end{array}$	1.41 ¹ 0.17 ² 0.08 ³	Public Health Goal – 0.02 ug/L	Naturally- occurring metal	
Chlorate	ND-40 ¹ ND-240 ²	ND ¹ 37 ²	State Board Notification Level – 800 ug/L	Oxidant used in pyrotechnics and possible by-product of water treatment	
Testosterone	ND-0.00013 ¹	ND ¹	None	Mammalian hormone	

- 1 Citrus Heights Water District (wells, treated surface water from SJWD, and distribution system 2014)
- 2 Fair Oaks Water District (wells, treated surface water from SJWD, and distribution system 2014)
- 3 SJWD (treated surface water and distribution system 2015)
- 4 Orange Vale Water Company (treated surface water from SJWD and distribution system 2015)

More information on the UCMR4 round can be found at **epa.gov/dwucmr/ fourth-unregulated-contaminant-monitoring-rule**. Only Fair Oaks Water District was required to monitor in 2018. Several constituents were detected, none at any level of human health concern.

Constituent	Range (ug/L)	Average (ug/L)	Human Health Advisory	Potential Sources
Manganese	ND - 18 ¹	5.9 ¹	USEPA Lifetime Health Advisory - 300 ug/L State Board Notification Level – 500 ug/L	Naturally-occurring metal
HAA5	ND - 25 ¹	6.7 1	State Board Maximum Contaminant Level – 60 ug/L	By-product of drinking water disinfection
HAA9	ND - 25 ¹	12.9 ¹	None	By-product of drinking water disinfection
Bromide	ND - 32 ¹	24.7 1	None	Naturally-occurring compound

1 - Fair Oaks Water District (wells, treated surface water from SJWD, and distribution system - 2018)

SAN JUAN WHOLESALE CUSTOMER AGENCIES - 2018 TABLE OF DETECTED CONSTITUENTS

DETECTED PRIMARY DRINKING WATER CONSTITUENTS regulated to protect your health																
		PHG or (MCLG)	CLG) MCL or or [MRDL]	San Juan Surface Water Including Orange Vale Water Company(a)		Citrus Heights Groundwater		Fair Oaks Groundwater								
CONSTITUENT	UNITS	or [MRDLG]		RANGE	AVERAGE	YEAR SAMPLED	RANGE	AVERAGE	YEAR Sampled	RANGE	AVERAGE	YEAR SAMPLED	MAJOR SOURCES			
Arsenic	PPB	0.004	10	ND	ND	2016	ND - 3.7	ND	2016	ND - 7.8	5.0	2014	Erosion of natural deposits; runoff from orchards; glass and electronics production waste			
Barium	PPM	2	1	ND	ND	2016	ND - 0.12	ND	2016	ND	ND	2014	Erosion of natural deposits and wastes from metal refineries			
Fluoride	PPM	1	2.0	ND	ND	2016	ND - 0.18	ND	2016	ND - 0.11	ND	2014	Erosion of natural deposits; discharge from fertilizer and aluminum factories			
Nitrate (as N)	PPM	10	10	ND	ND	2018	ND - 2.8	ND	2018	ND	ND	2018	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits			
Uranium	pCi/L	0.43	20	NR	N/A	N/A	ND - 1.3	ND	2017	ND	ND	2018	Erosion of natural deposits			
Chlorine Residual - distribution system	PPM	[4]	[4]	0.35 - 0.92 (0.28 - 0.89)	0.74 (0.61)	2018	0.22 - 1.01	0.7	2018	0.2 - 0.88	0.52	2018	Drinking water disinfectant added for treatment			
Total Trihalomethanes - distribution system	PPB	N/A	80	32 - 54 (33 - 59)	48 (54)	2018	ND - 48	40	2018	ND - 46	35.5	2018	By-product of drinking water disinfection			
Haloacetic Acids - distribution system	PPB	N/A	60	17 - 31 (20 - 32)	29.1 (31)	2018	ND - 38	30	2018	ND - 37	25.1	2018	By-product of drinking water disinfection			
Control of Disinfection By-Product Precursors (TOC) (treated water) (b)	PPM	N/A	TT = 2	0.9 - 1.63	1.14	2018	NR	N/A	N/A	NR	N/A	N/A	Various natural and manmade sources			
CONSTITUENT	UNITS	PHG OR (MCLG)	MCL	LEVEL	FOUND	YEAR SAMPLED	LEVEL	FOUND	YEAR SAMPLED	LEVEL	FOUND	YEAR SAMPLED	MAJOR SOURCES			
	NTU	N/A	TT = 1	0.0)49	2018	N	IR	N/A	N	R	N/A				
Turbidity (b)	% Samples	N/A	NTU TT = ≤0.3	10	00	2018	N	NR		NR		N/A	Soil runoff			
CONSTITUENT	UNITS	PHG OR (MCLG)	NTU AL	90th PERCENTILE	# SAMPLED/ # EXCEED AL	YEAR SAMPLED	90th PERCENTILE	# SAMPLED/ # EXCEED AL	YEAR SAMPLED	90th PERCENTILE	# SAMPLED/ # EXCEED AL	YEAR SAMPLED	MAJOR SOURCES			
Lead (c)	PPB	0.2	15	ND	30/1 (30/1)	2018 (2018)	ND	30/0	2018	ND	30/0	2016	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits			
Copper	PPM	0.3	1.3	0.067 (0.11)	30/0 (30/0)	2018 (2018)	0.095	30/0	2018	0.059	30/0	2016	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives			
CONSTITUENT	UNITS	PHG OR (MCLG)	MCL	HIGHEST Monthly Result	# MONTHS WITH POSITIVE SAMPLE	YEAR Sampled	HIGHEST MONTHLY RESULT	# MONTHS WITH POSITIVE SAMPLE	YEAR SAMPLED	HIGHEST MONTHLY RESULT	# MONTHS WITH POSITIVE SAMPLE	YEAR SAMPLED	MAJOR SOURCES			
Total Coliform Bacteria	% Samples	(0)	>5% monthly samples positive	2.32 (N/A)	1 (N/A)	2018	0	0	2018	0	0	2018	Naturally present in the environment			
		DE	TECTED				ER CONSTI	TUENTS reg	julated for	aesthetic	qualities					
CONSTITUENT	UNITS	PHG or	MCL		Juan Surface W Orange Vale Wate		Citru	s Heights Groundw	vater .	Fair	Oaks Groundw	ater	MAJOR SOURCES			
CONSTITUENT	00		00	(MCLG)	(MCLG)	MOL	RANGE	AVERAGE	YEAR SAMPLED	RANGE	AVERAGE	YEAR SAMPLED	RANGE	AVERAGE	YEAR SAMPLED	IIIAGGII GGGIIGEG
Total Dissolved Solids	PPM	N/A	1,000	39	39	2016	190 - 260	234	2016	110 - 150	132	2014	Runoff/leaching from natural deposits			
Specific Conductance	μS/CM	N/A	1,600	68 - 100	81	2016	260 - 360	312	2016	120 - 240	182	2018	Substances that form ions when in water			
Sulfate	PPM	N/A	500	7.5	7.5	2016	8.4 - 12	10.16	2016	4.3 - 15	7.78	2014	Runoff/leaching from natural deposits			
Chloride	PPM	N/A	500	2.8	2.8	2016	10 - 18	14.6	2016	3.2 - 5.9	4.2	2014	Runoff/leaching from natural deposits			
Turbidity	NTU	N/A	5	0.017 - 0.049	0.023	2018	ND - 0.1	ND	2016	ND	ND	2014	Soil runoff			
							DRINKING	WATER CO	NSTITUEN	TS (d)						
CONSTITUENT	UNITS	PHG or (MCLG)	NL		Juan Surface W Prange Vale Wate AVERAGE	er Company YEAR	Citru	s Heights Groundw	YEAR	Fair RANGE	Oaks Groundw	YEAR	MAJOR SOURCES			
Bicarbonate Alkalinity	PPM	N/A	NONE	14	14	SAMPLED 2016	130 - 180	148	2016	54 - 89	68.1	SAMPLED 2014	Bicarbonate alkalinity is the measure of the capacity of water or any solution to neutralize or "buffer" acids, represented as the bicarbonate ion.			
Hardness	PPM	N/A	NONE	20	20	2016	110 - 150	130	2016	47 - 82	59.8	2014	Hardness is the sum of polyvalent cations present in the water, generally naturally occurring magnesium and calcium.			
Sodium	PPM	N/A	NONE	2.3	2.3	2016	11 - 22	17.2	2016	4.9 - 13	8.1	2014	Naturally occurring salt in the water			
Calcium	PPM	N/A	NONE	5.4	5.4	2016	24 - 33	28.6	2016	12 - 19	14.5	2014	Erosion of natural deposits			
Magnesium	PPM	N/A	NONE	1.5	1.5	2016	12 - 16	13.2	2016	4.1 - 8.3	5.72	2014	Erosion of natural deposits			

⁽a)—Data for OVWC Distribution System is shown in parenthesis.

The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

⁽b)—Only surface water sources must comply with PDWS for Control of Disinfection By-Product Precursors and turbidity. Turbidity is a mesure of the cloudiness of water.

We monitor for it because it is a good indicator of the effectiveness of our filtration system.

(c)—No schools requested any of the family agencies conduct monitoring for lead in 2018.

(d)—Unregulated contaminant monitoring helps determine where certain contaminants occur and whether they need to be regulated.



2018 CONSUMER CONFIDENCE REPORT

Yearly Water Quality Report

San Juan Wholesale Customer Agencies

P.O. Box 2157 Granite Bay, CA 95746

Board of Directors

Edward J. "Ted" Costa Marty Hanneman Kenneth H. Miller Dan Rich Pamela Tobin

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.



CONTACT US

If you have any questions about this report or your water supply, please contact your local water provider. Each of the member agencies holds monthly board meetings that are open to the public as indicated below.



Contact Person: Brian Hensley (916) 725-6873 bhensley@chwd.org chwd.org

Board Meetings: 3rd Wednesday each month 6:30 p.m. 6230 Sylvan Road Citrus Heights



Contact Person: Michael Nisenboym, P.E. (916) 844-3513 mnisenboym@fowd.com fowd.com

Board Meetings: 2nd Monday every month 6:30 p.m. 10326 Fair Oaks Boulevard Fair Oaks



Contact Person: Mark Dubose (916) 988-1693 mdubose@orangevalewater.com orangevalewater.com

Board Meetings: 1st Tuesday each month 4:00 p.m. 9031 Central Avenue Orangevale



Contact Person: Greg Turner (916) 791-1715 gturner@sjwd.org sjwd.org

Board Meetings: 4th Wednesday each month 6:00 p.m. 9935 Auburn-Folsom Road Granite Bay

LEARN MORE ABOUT YOUR WATER AT SJWD.ORG