

2016 Consumer Confidence Report



Chris, Treatment Plant Maintenance >

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 – 89% surface water, 11% groundwater
FOWD – 88.5% surface water, 11.5% 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. 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. In addition, a watershed sanitary survey is conducted every five years to review the impact of potential contaminants on source water quality, most recently conducted in 2013. 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.

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 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 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 test selected customer taps every three years for lead and over ninety-five percent of samples are non-detectable and therefore not reported in the data table.

SPECIAL INFORMATION ON COLIFORM BACTERIA

This Consumer Confidence Report (CCR) reflects changes in drinking water regulatory requirements during 2016. All water systems are required to comply with the state Total Coliform Rule. Beginning April 1, 2016, all water systems are also required to comply with the federal Revised Total Coliform Rule. The new federal rule maintains the purpose to protect public health by ensuring the integrity of the drinking water distribution system and monitoring for the presence of microbials (i.e., total coliform and *E. coli* bacteria). The U.S. EPA anticipates greater public health protection as the new rule requires water systems that are vulnerable to microbial contamination to identify and fix problems. Water systems that exceed a specified frequency of total coliform occurrences are required to conduct an assessment to determine if any sanitary defects exist. If found, these must be corrected by the water system.

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. Orange Vale Water Company found coliforms in their distribution system indicating the need to look for potential problems in water treatment or distribution. When this occurs, Orange Vale Water Company is required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.

During the past year Orange Vale Water Company was required to conduct one Level 1 assessment. One Level 1 assessment was completed. In addition, Orange Vale Water Company was required to take two corrective actions and they completed both of these actions. The sample site was sterilized and covers were added to the sampling bibs.

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

UNREGULATED CONTAMINANT MONITORING RULE (UCMR3) RESULTS

USEPA requires public water systems to collect data for unregulated constituents in drinking water supplies under the Unregulated Contaminant Monitoring Rule 3. Currently, these constituents have no drinking water standards but may be regulated in the future. More information on this USEPA program can be found at water.epa.gov/lawsregs/rulesregs/sdwa/ucmr/ucmr3/index.cfm. Citrus Heights Water District and Fair Oaks Water District conducted sampling in 2014. 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
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)

WATER QUALITY DEFINITIONS

Maximum Contaminant Level (MCL) — The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

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.

Level 1 Assessment — A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

SAN JUAN WHOLESALE CUSTOMER AGENCIES – 2016 TABLE OF DETECTED CONSTITUENTS

DETECTED PRIMARY DRINKING WATER CONSTITUENTS regulated to protect your health													
CONSTITUENT	UNITS	PHG or (MCLG) or (MRDLG)	MCL or (MRDL)	San Juan Surface Water Including Orange Vale Water Company(a)			Citrus Heights Groundwater			Fair Oaks Groundwater			MAJOR SOURCES
				RANGE	AVERAGE	YEAR SAMPLED	RANGE	AVERAGE	YEAR SAMPLED	RANGE	AVERAGE	YEAR SAMPLED	
Arsenic	PPB	0.004	10	ND	ND	2016	ND - 3.7	ND	2013, 2016	ND - 2.2	ND	2012	Erosion of natural deposits; runoff from orchards; glass and electronics production waste
Barium	PPM	2	1	0.14	0.14	2016	ND - 0.1	ND	2013, 2016	ND	ND	2012	Erosion of natural deposits and wastes from metal refineries
Fluoride	PPM	1	2.0	ND	ND	2016	ND - 0.18	0.1	2013, 2016	ND - 0.11	ND	2012	Erosion of natural deposits; discharge from fertilizer and aluminum factories
Hexavalent Chromium	PPB	0.02	10	ND	ND	2016	ND - 2.9	1.7	2016	ND	ND	2016	Erosion from natural deposits or discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities
Nitrate (as N)	PPM	10	10	ND	ND	2016	ND - 3.8	2.1	2016	ND	ND	2016	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 - 1.2	ND	2013, 2016	NR	N/A	N/A	Erosion of natural deposits
Chlorine Residual - distribution system	PPM	[4]	[4]	0.07 - 1.27 (0.1 - 0.97)	0.57 (0.54)	2016	0.21 - 1.09	0.62	2016	0.13 - 0.83	0.50	2016	Drinking water disinfectant added for treatment
Total Trihalomethanes - distribution system	PPB	N/A	80	49 - 71 (42 - 64)	58 (53)	2016	ND - 65	22	2016	1.2 - 68	57.0	2016	By-product of drinking water disinfection
Haloacetic Acids - distribution system	PPB	N/A	60	17 - 33 (21 - 37)	26.5 (30)	2016	ND - 38	13	2016	ND - 44	35.0	2016	By-product of drinking water disinfection
Control of Disinfection By-Product Precursors (TOC) (treated water) (b)	PPM	N/A	TT = 2	1.1 - 1.5	1.2	2016	NR	N/A	N/A	NR	N/A	N/A	Various natural and manmade sources
CONSTITUENT	UNITS	PHG OR (MCLG)	MCL	LEVEL FOUND			LEVEL FOUND			LEVEL FOUND			MAJOR SOURCES
Turbidity (b)	NTU	N/A	TT = 1 NTU	0.064			NR			NR			Soil runoff
	% Samples	N/A	TT = ≤0.3 NTU	100			NR			NR			
	UNITS	PHG OR (MCLG)	AL	90th PERCENTILE	# SAMPLED/ # EXCEED AL	YEAR SAMPLED	90th PERCENTILE	# SAMPLED/ # EXCEED AL	YEAR SAMPLED	90th PERCENTILE	# SAMPLED/ # EXCEED AL	YEAR SAMPLED	MAJOR SOURCES
Copper	PPM	0.3	1.3	0.072 (0.076)	30/0 (31/0)	2015 (2015)	0.093	30/0	2015	0.059	30/0	2016	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
	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)	>1 monthly sample positive	N/A (3)d	N/A (1)	2016	N/A	N/A	N/A	N/A	N/A	N/A	Naturally present in the environment
Total Coliform Bacteria	% Samples	(0)	>5% monthly samples positive	2.3 (N/A)	1 (N/A)	2016	0	0	2016	0	0	2016	Naturally present in the environment
DETECTED SECONDARY DRINKING WATER CONSTITUENTS regulated for aesthetic qualities													
CONSTITUENT	UNITS	PHG or (MCLG)	MCL	San Juan Surface Water Including Orange Vale Water Company			Citrus Heights Groundwater			Fair Oaks Groundwater			MAJOR SOURCES
				RANGE	AVERAGE	YEAR SAMPLED	RANGE	AVERAGE	YEAR SAMPLED	RANGE	AVERAGE	YEAR SAMPLED	
Total Dissolved Solids	PPM	N/A	1,000	39	39	2016	190 - 260	232	2013, 2016	100 - 400	181	2012	Runoff/leaching from natural deposits
Specific Conductance	µS/CM	N/A	1,600	68 - 100	81	2016	260 - 350	303	2013, 2016	140 - 550	263	2012	Substances that form ions when in water
Sulfate	PPM	N/A	500	7.5	7.5	2016	7.8 - 12	9.8	2013, 2016	3.6 - 28	10.8	2012	Runoff/leaching from natural deposits
Chloride	PPM	N/A	500	2.8	2.8	2016	10 - 18	15	2013, 2016	3.1 - 23	7	2012	Runoff/leaching from natural deposits
Turbidity	NTU	N/A	5	0.018 - 0.064	0.041	2016	ND - 0.1	ND	2013, 2016	0.12 - 0.6	0.35	2012	Soil runoff
DETECTED UNREGULATED DRINKING WATER CONSTITUENTS (c)													
CONSTITUENT	UNITS	PHG or (MCLG)	NL	San Juan Surface Water Including Orange Vale Water Company			Citrus Heights Groundwater			Fair Oaks Groundwater			MAJOR SOURCES
				RANGE	AVERAGE	YEAR SAMPLED	RANGE	AVERAGE	YEAR SAMPLED	RANGE	AVERAGE	YEAR SAMPLED	
Bicarbonate Alkalinity	PPM	N/A	NONE	14	14	2016	130 - 180	147	2013, 2016	66 - 230	110	2012	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	95 - 150	124	2013, 2016	47 - 210	86.8	2012	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 - 23	18	2013, 2016	4.9 - 32	11.6	2012	Naturally occurring salt in the water
Calcium	PPM	N/A	NONE	5.4	5.4	2016	23 - 33	28	2013, 2016	12 - 43	19.6	2012	Erosion of natural deposits
Magnesium	PPM	N/A	NONE	1.5	1.5	2016	9.4 - 16	13.1	2013, 2016	4.2 - 25	9.2	2012	Erosion of natural deposits

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

(b)—Only surface water sources must comply with PDWS for Control of Disinfection By-Product Precursors and turbidity.

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

(d)—OVWC had a TCR Violation in April 2016. A RTRC Level 1 Assessment was completed in May 2016, corrective actions were taken, and Public notice was conducted in June 2016.

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.



2016 CONSUMER CONFIDENCE REPORT

San Juan Wholesale Customer Agencies

P.O. Box 2157
Granite Bay, CA 95746

Board of Directors

Edward J. "Ted" Costa
Kenneth H. Miller
Dan Rich
Pamela Tobin
Bob Walters

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



YOUR DRINKING WATER MEETS ALL STATE AND FEDERAL DRINKING WATER STANDARDS

Lisa, Customer Service >

CONTACT US

If you have questions about this report or your water supply, please contact your water provider. Each of the member agencies holds monthly board meetings that are open to the public. Find out more below!



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

Board meetings
2nd Tuesday each month
6:30 p.m.
6230 Sylvan Road
Citrus Heights



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



Mark DuBose
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Board meetings
1st Tuesday each month
5 p.m.
9031 Central Avenue
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Greg Turner
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Board meetings
2nd and 4th Wed. each month
7 p.m.
9935 Auburn-Folsom Road
Granite Bay

Learn more about your water at sjwd.org