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Vianey Lopez Councilmember, District 6

**City Council Office** 300 West Third Street, Oxnard, CA 93030

**Public Information** You are invited to attend any of the regularly scheduled

City Council meetings:

When: Tuesdays at 6:00 PM (twice a month)

Where: City Council Chambers 305 West Third Street, Oxnard, CA 93030

For more information: visit www.Oxnard.org/CCR or call (805) 385-8136

For additional information: Environmental Protection Agency Safe Drinking Water Hotline: (800) 426-4791

# Drinking Water Consumer Confidence Report

2018 Annual Water Quality Report for City of Oxnard Water Customers

This report contains important information about your drinking water.

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

# **Drinking Water Consumer Confidence Report 2018**

Please share this information with others at your location by posting this notice in a public place or common area. This Drinking Water Consumer Confidence Report is available in English and Spanish (Español) on the City's website at www.oxnard.org/CCR. For any questions about this report, please contact the Water Division Manager, Omar Castro, at (805) 385-8136.

#### Dear Valued Customer,

I am pleased to share the 2018 Drinking Water Consumer Confidence Report. Oxnard's water team is dedicated to delivering reliable, high-quality drinking water at the lowest possible cost that meets or exceeds all water quality standards, each and every day.

This report contains important water quality testing results, background on our water resources, and information about our continued investment in water infrastructure and supplies. We invite you to partner with us to support Oxnard's health and vitality today and into the future.

Sincerely,

**Omar Castro** 

Water Division Manager



### DRINKING WATER SOURCES AND TREATMENT

Oxnard's water supplies include imported water from the Calleguas Municipal Water District (Calleguas), regional water purchased from the United Water Conservation District (United), and water from City groundwater wells.

# IMPORTED WATER: CALLEGUAS MUNICIPAL WATER DISTRICT (45% OF SUPPLY)

Calleguas is a member agency of the Metropolitan Water District of Southern California (Metropolitan), the major water importer and wholesale agency for Southern California. Water supplied to Oxnard from Calleguas originates in Northern California via the State Water Project: a system of reservoirs, aqueducts and pump stations. This water is treated either by Metropolitan's Jensen Water Treatment Plant or by Calleguas' Lake Bard Water Filtration Plant. Both Metropolitan and Calleguas perform routine watershed surveys, source water quality sampling and analyses, and operational and treatment activities to ensure the water supplied maintains a high quality.

#### GROUNDWATER: UNITED WATER CONSERVATION DISTRICT (25% OF SUPPLY)

United manages, stores and may periodically release water from Lake Piru into the Santa Clara River. During high flows and after storms, United may also divert Santa Clara River water into spreading ponds near El Rio, capturing water that would have otherwise been lost to the ocean. This river water infiltrates and recharges the Oxnard Plain groundwater aquifer. Later the groundwater is extracted, treated, and delivered to several retail water agencies in the region including Oxnard. United performs regular watershed surveys as well as routine sampling and water quality analyses to ensure that water stored, treated, and delivered to its customers maintains a consistent quality.

#### GROUNDWATER: OXNARD (30% OF SUPPLY)

Oxnard Water operates ten groundwater wells that are tested and monitored on a regular basis to meet all drinking water standards. To produce an aesthetically pleasing drinking water quality, City well water is either blended with water from Calleguas or United well water or treated water from the City's Groundwater Desalter Treatment Facility. The Desalter, fed by City wells, improves water quality by using reverse osmosis treatment to remove dissolved minerals and is capable of processing up to 7.5 million gallons of water per day.

Oxnard Water also conducts routine source water assessments in order to detect potential contaminants in the groundwater before they become a problem. This includes possible contaminants from local gas stations, private septic systems, drainage from agriculture, and industrial facilities such as chemical and petroleum processing and storage facilities, dry cleaners, metal plating, finishing and fabricating facilities.

#### **REASON FOR THIS REPORT**

Oxnard Water is committed to informing City residents about the sources and quality of their drinking water. The City is proud to have successfully met strict water quality guidelines set by the California Division of Drinking Water (CDDW) and the US Environmental Protection Agency (USEPA). This report is a summary of water quality monitoring results from January through December 2018.

#### WATER QUALITY MONITORING

All of the monitoring conducted is necessary to ensure that your water is safe to drink and also aesthetically pleasing. Monitoring is a result of prescribed regulations from the USEPA as well as the CDDW. These regulations limit the amount of certain health-based and aesthetic contaminants in water provided by all public water systems. Many of the monitoring, treatment, and water quality requirements that are placed upon local drinking water supplies are actually more stringent than for bottled water.

Here is some additional information that may provide assistance in interpreting information in the 2018 Water Quality Tables:

- Some of the parameters measured will change very infrequently in their environment. For these parameters, the State allows the City to monitor them less than once a year. Therefore, some of the City's data - although representative - is more than one year old.
- Unregulated contaminant monitoring is conducted in order to assist USEPA and CDDW to determine where certain contaminants occur and whether the contaminants need to be regulated. There are many more contaminants that were monitored than what is reported in the included water quality table; however, they were never detected in your drinking water so they are not listed.
- The sources of drinking water (both tap 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 materials, 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, which 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, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- Radioactive contaminants that can be naturally-occurring or be the result of oil and gas production and mining activities.
- In order to ensure that tap water is safe to drink, the USEPA and State Water Resources Control 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 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).
- Your drinking water comes from a blend of sources. The water quality data presented in this report is based on the blended water supply that is delivered through the water distribution system.



#### IMPORTANT HEALTH INFORMATION

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).

Nitrate (as Nitrogen) in drinking water at levels above 10 mg/L is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate (as Nitrogen) levels above 10 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.

The City's water supply has been tested for lead. Lead sampling shows levels are below regulatory limits. In addition, the City conducted lead sampling at 33 schools under the "Lead Sampling in Schools" program in 2018-19. 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, water meters and home plumbing. Oxnard Water 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 http://www.epa.gov/safewater/lead.



# Be Water Wise

Help conserve our precious water supplies and save money...

Switch to high-efficiency toilets, washing machines and irrigation devices. Fix leaks right away. Change your thirsty lawn to a beautiful, water-saving California Friendly® Landscape.

Learn more and apply for rebates at **bewaterwise.com**<sup>®</sup>







### City of Oxnard Summary of Water Quality Results / Summary of Water Quality Results For 2018

The water quality tables describe the parameters measured in the various water supply sources and the results of those measurements during 2018. Please note that the summary tables represent a blend of water quality which is delivered to customers throughout the City.

Parameter	MCL [MRDL]	PHG (MCLG) [MRDLG]	Range	Average	Year Tested	Major Sources in Drinking Water

#### **PRIMARY DRINKING WATER STANDARDS - Mandatory Health-Related Standards**

INORGANIC CHEMICALS						
Arsenic (ppb)	10	0.004	0.85 - 1.3	1.08	2018	Erosion of natural deposits, orchard runoff
Fluoride (ppm)	2.0	1.0	0.38 - 0.58	0.5	2018	Water additive that promotes strong teeth
Nitrate (as N) (ppm)	10	10	2.1 - 4.0	2.87	2018	Runoff & leaching from fertilizer & sewage
Selenium (ppb)	50	30	2.2 - 6.1	4.12	2018	Erosion of natural deposits; discharge from refineries
RADIOLOGICALS (a)(b)						
Gross Alpha Particle Activity (pCi/L)	15	0	1.67 - 5.24	3.62	2018	Erosion of natural deposits
Gross Beta Particle Activity (pCi/L)	50	0	2.1 - 3.9	3.42	2018	Decay of natural and manmade deposits
Uranium (pCi/L)	20	0.43	2.2 - 4.4	3.17	2018	Erosion of natural deposits

### City of Oxnard Summary of Water Quality Results / Summary of Water Quality Results For 2018

Parameter	Secondary MCL	Notification Level	Range	Average	Year Tested	Major Sources in Drinking Water

#### **SECONDARY DRINKING WATER STANDARDS - Aesthetic Standards**

Aluminum (ppb)	200		6.8 - 23.0	15.4	2018	Erosion of natural deposits, residual from water treatment process
Chloride (ppm)	500		47 - 78	63.7	2018	Runoff and leaching from natural deposits; seawater influence
Iron (ppb)	300		ND - 4	3.5	2018	Leaching from natural deposits; industrial waste
Manganese (ppb)	50	500	ND - 5.6	3.8	2018	Leaching from natural deposits
Odor Threshold (Units)	3.0		1.0 - 1.0	1.0	2018	Naturally-occurring organic materials
Specific Conductance (µS/cm)	1,600		900 - 1,100	1,000	2018	Substances that form ions when in water, seawater influence
Sulfate (ppm)	500		170 - 280	220	2018	Runoff and leaching from natural deposits
Total Dissolved Solids (ppm)	1,000		470 - 700	570	2018	Runoff and leaching from natural deposits
Turbidity (NTU)	5.0		ND	ND	2018	Soil runoff

#### **ADDITIONAL PARAMETERS (Unregulated)**

	•	•				
Alkalinity (ppm)	NS	NS	130 - 160	142.5	2018	Erosion of natural material
Calcium (ppm)	NS	NS	64.9 - 97.7	80.2	2018	Erosion of natural material
Hardness (Total Hardness) (ppm)	NS	NS	264 - 382	319.7	2018	Erosion of natural material
Magnesium (ppm)	NS	NS	24.8 - 33.6	29	2018	Erosion of natural material
pH (pH Units)	NS	NS	7.39 - 7.96	7.6	2018	
Potassium (ppm)	NS	NS	3.5 - 4.0	3.8	2018	Erosion of natural material
Sodium (ppm)	NS	NS	72.0 - 83.0	77.2	2018	Erosion of natural material; Seawater influence

#### ADDITIONAL PARAMETERS (Unregulated) noted in the source water prior to blending.

NS	1	0.35 - 0.62	0.44	2018	Naturally present in the environment
NS	800	6.0 - 95.0	37.7	2018	By-product of water disinfection
NS	50	0.96 - 2.0	1.59	2018	Various natural and manmade sources
	NS NS NS	NS 1   NS 800   NS 50	NS 1 0.35 - 0.62   NS 800 6.0 - 95.0   NS 50 0.96 - 2.0	NS 1 0.35 - 0.62 0.44   NS 800 6.0 - 95.0 37.7   NS 50 0.96 - 2.0 1.59	NS 1 0.35 - 0.62 0.44 2018   NS 800 6.0 - 95.0 37.7 2018   NS 50 0.96 - 2.0 1.59 2018

### City of Oxnard Summary of Water Quality Results / Summary of Water Quality Results For 2018

Parameter		State MCL [MRDL]	PHG (MCLG) [MRDLG]	Range	Avera	ge Gre	atest RAA	Major Sources in Drinking Water
DISINFECTION R	ELATED MONIT	ORING				I		
Disinfectant Residual Total chlorine, as residua	l (ppm)	[4.0]	[4.0]	0.03 - 2.8	1.52	2	1.65	Disinfectant added to control microbiological parameters
Disinfection By-Products (HAA5) (ppb)	Haloacetic acids	60	N/A	ND - 13	6.16	5	7	Byproducts of drinking water disinfection using chlorine
Total trihalomethanes (T	THM) (ppb)	80	N/A	1.4 - 38	26.7	5	22.5	Byproducts of drinking water disinfection using chlorine
DISINFECTION-R	ELATED MONII	ORING noted in so	urce water prie	or to blending	<u>.</u>			
Bromate (ppb) (c)		10	0.1	2.2 - 3.7	3.13	5		Byproduct of drinking water disinfection
LEAD AND COPP		NG 2018						
Copper (d) (ppb)		1,300 (AL)	300	90th percentile value			580	Erosion of natural materials and corrosion of household plumbing fixtures
				No. of sites sampled			52	
				Sites exceeding AL			0	
Lead (d)(ppb)		15 (AL)	0.2	90th percentile value			6.1	Erosion of natural materials and corrosion of household plumbing fixtures
				No. of sites sampled			52	_
				Sites exceeding AL			3	
Abbreviat	ions and Definiti	ons						
AL	Federal Regulat	tory Action Level			NTU	Nephelon	netric turbic	lity units
DDW	Department of	Drinking Water			pCi/L	picoCuries per liter		
MCL	Maximum Con	taminant Level			PHG	Public Health Goal		
MCLG	Maximum Con	taminant Level Goal			ppb	Parts per billion = Micrograms per liter $(ug/l)$		
MRDL	Maximum Resi	dual Disinfectant Leve	el		ppm	Parts per i	million =Mi	lligrams per liter (mg/l)
MRDLG	Maximum Resi	dual Disinfecant Leve	l Goal		RAA	Running Annual Average		
NA	Not Applicable				SWRCB	State Water Resources Control Board		
ND	Not Detected				uS/cm	microSien	nen per cer	ntimeter.
NS	No Standard							

- a SWRCB DDW considers 50 pCi/L to be the level of concern for beta particles; the gross beta particle activity MCL is 4 millirem/year annual dose equivalent to the total body or any internal organ.
- c Compliance for treatment plants that use ozone is based on a running annual average of monthly samples.
- b Radionuclides are sampled over a range from throughout a given year to every 6 years.
- d Lead and Copper Monitoring was last conducted throughout the City's distribution system in 2018 and is scheduled to be sampled again in 2021.



## Water is Life, Infrastructure Makes It Happen

Water reliability is important to the quality of life and economic vitality of our community. Capital projects that replace, renew and upgrade our water system pipelines, wells and treatment facilities keep our infrastructure healthy and working for the coming decades. Here's some highlights from recent projects:

#### **GROUNDWATER WELL REHABILITATION**

Oxnard's system includes 10 groundwater wells that pump about 30% of the water supply. Well equipment and components must be inspected, maintained and replaced to keep them operating efficiently. Two wells were rehabilitated in 2018 which helps to improve our overall well operations.

#### **PIPE REPLACEMENT**

Water system pipelines made of cast iron become brittle and are prone to breaks as they become older. Oxnard has a schedule to systematically replace these aging pipes. In 2018 the City replaced approximately 12,000 feet of cast iron water main with polyvinyl chloride (PVC) pipes, which can last up to 100 years.

#### DESALTER TREATMENT FACILITY MEMBRANE REPLACEMENT

The Desalter Facility cleans groundwater that otherwise could not be used as a water source. It uses reverse osmosis technology to remove dissolved minerals but over time, the membrane cartridges that filter the minerals exceed their useful life. To keep this treatment facility running smoothly, the Water Division purchased 996 new reverse osmosis membranes to replace two of the three membrane trains.

#### **RECYCLED WATER EXPANDED USE**

In 2016, Oxnard's Advanced Water Purification Facility (AWPF) began delivering recycled water after years of planning and investment. The largest water treatment facility of its kind in our area, the AWPF currently supplies highly-purified water to agriculture, landscaping and industry. In 2014, new regulations were adopted that allows the injection of recycled water into groundwater aquifers. Following a rigorous regulatory and testing program, the water can be pumped out (recovered) after 3-4 months, treated again, and distributed as potable water. This is known as "indirect potable reuse" or IPR.

Oxnard is making progress in demonstrating this option's viability for our community. To date, the Aquifer Storage and Recovery (ASR) well test system includes one ASR well, three monitoring wells, and pumping equipment. The Los Angeles Regional Water Quality Control Board is expected to approve the project in 2019, which is required to begin the yearlong testing phase. Currently in design, the remaining well equipment is projected to be constructed within 18 months to two years. While there are additional tasks and phases which may delay the schedule, recycled water is targeted to be added as a water source by 2022. This important project will help reduce reliance on costly imported water, protect our groundwater resources, and create a beneficial reuse of a scarce resource that would otherwise be lost to the ocean.



**City of Oxnard** Water Division 251 S. Hayes Avenue Oxnard, CA 93030

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To All Postal Customers