# Olivehurst Public Utility District 2016 Water Quality Consumer Confidence Report Public Water System Numbers 5810003 and 5805001



For additional information concerning your drinking water, contact Timothy R. Shaw at (530) 743-0317

Este informe contiene informacion muy importante sobre su aqua beber. Traduzcalo o hable con alquien que lo entienda bien.

Daimntawv tshaj tawm no muaj lus tseemceeb txog koj cov dej haus. Tshab txhais nws, los yog tham nrog tej tug neeg uas totaub txog nws.

Water for the Olivehurst Public Utility District originates from several groundwater sources as follows:

System # 5810003 (Olivehurst)	System # 5805001(Plumas Lake)
Iron and manganese treatment Plant #1 (for wells 10 and 28), #2 (for wells 1 and 4), and #3	The first iron and manganese treatment plant treats water from Wells 1 and
(Wheeler Ranch, for Wells 29 and 30) provide treated water to the distribution system. Well	32. Well 34 has an iron and manganese treatment plant that pumps treated
14 can pump directly into the distribution system during high demand. Well 9 is active but	water directly into the distribution system.
has no pump to pump into the distribution system.	

## **DEFINITIONS OF 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 technologically, and economically feasible.

Primary Drinking Water Standards (PDWS): MCLs for contaminants that affect health along with their monitoring and reporting requirements, and surface water treatment requirements.

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 Federal Environmental Protection Agency (USEPA).

**Notification Level:** Notification levels are health-based advisory levels established by the State Water Resources Control Board (State Board) for chemicals in drinking water that lack a primary maximum contaminant level. When chemicals are found at concentrations greater than their notification level, certain requirements and recommendations apply.

Maximum Residual Disinfectant Level (MRDL): The level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

TON: threshold odor number

**ppb:** parts per billion or micrograms per liter **ppm:** parts per million or milligrams per liter

ND: non detectable at testing limit TDS: total dissolved solids NTU: Nephelometric Turbidity Units

pCi/L: picocuries per liter. Unit of measure used to express the results of radioactivity tests in water.

**μS/cm**: MicroSiemens/cm – measure of conductance in water.

#### BACTERIOLOGICAL WATER QUALITY:

Testing for bacteriological contaminants in the distribution system is required by State regulations. This testing is done regularly to verify that the water system is free from coliform bacteria. The maximum number of positive coliform samples that is allowed by regulations in any one month is one.

In Olivehurst, four samples <u>per week</u> are required by regulations. Coliform bacteria were not detected in any samples in 2016. In Plumas Lake, four samples <u>per week</u> are required by regulations. Coliform bacteria were not detected in any samples in 2016.

### **DETECTED CONTAMINANTS IN OUR WATER SUPPLY:**

The following table gives a list of all detected chemicals in our water during the most recent sampling. Please note that not all sampling is required annually, so in some cases our results are more than one year old.

# Plumas Lake Lead and Copper

Chemical Detected	Year Tested	Numbers of Samples Collected	Number of Samples above AL	MCLG	90th Percentile Result (ppb)	Action Level (ppb)	Origin/Notes
Lead	2012	30	0	0	0	15	Internal corrosion of household plumbing systems; discharges from industrial manufacturing; erosion from natural deposits
Copper	2012	30	0	1300 ppb	62	1300	Internal corrosion of household plumbing systems; leaching from wood preservatives; erosion from natural deposits

# Olivehurst Lead and Copper

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Copper	2011	30	0	1300 ppb	66	1300	Internal corrosion of household plumbing systems; leaching from wood preservatives; erosion from natural deposits
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# **OLIVEHURST**

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			Sodium and Hardness PPN			nation Only)	
Chemical Detected	Year	Source(s) with detection(s)	Range of Detections	Average Detected	MCL or MRDL	PHG	Origin/Notes
Sodium	2011 2012 2015	Wells 1,10,14 Wells 4, 29 Well 28	13 – 22 42 – 73 n/a, one detection	18 57.5 12	none	none	Naturally Occurring
Hardness	2011 2012 2014 2015	All sources Wells 4, 29 Well 30 Well 28	99 - 214 118 - 120 159 - 164 n/a, one detection	139 119 162 90	none	none	Naturally Occurring.
	•		Contaminants with a Prima	ary MCL (PPB	unless otherv	vise stated)	
Arsenic	2011 2012	Well 14 All sources	n/a, one detection ND – 5.3	7 1.1	50	0.004	Naturally Occurring.
Barium	2011 2012	Wells 1,10,14 Well 4, 29	ND – 110 ND - 100	70 50	1000	2000	Naturally Occurring.
Cis-1,2 Dichloro- ethylene	2016	Well 1	ND – 0.75	0.49	6	3	Industrial chemical and is breakdown product of common degreasing solvents
Fluoride** (naturally occurring)	2012 2014 2015	Well 4 All Sources Well 28	0.14 – 0.23 ppm 0.13 – 0.19 ppm n/a, one detection	0.19 ppm 0.16 ppm 0.15 ppm	2 ppm	1 ppm	Naturally Occurring. Water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Gross Alpha	2007 2016	Wells 14, 29, 30 Well 10	1.1 - 1.8 pCi/L n/a, one detection	1.55 pCi/L 1.2 pCi/L	15 pCi/L	none	Naturally occurring. Erosion of natural deposits of certain minerals that are radioactive and may emit a form of radiation known as alpha radiation.
Xylenes	2015	Well 1	ND - 0.64	0.21	1.75	1.8	Discharge from petroleum and chemical factories; fuel solvent
Nickel	2011 2012 2015	Wells 1,10,14 Wells 4, 29 Well 28	ND – 21 ND – 26 n/a, one detection	7 13 11	100	12	Naturally Occurring; discharge from industrial and petroleum processes
		Contai	minants with a Secondary MCL	(Non-Health B	ased, PPB un	less otherwise	e stated)
Chloride	2012 2015	Well 4, 29 Well 28	80 – 120 n/a, one detection	100 ppm 15 ppm	500 ppm	none	Naturally Occurring.
Specific Conductance	2014 2015	All Sources Well 28	220 - 560 µS/cm n/a, one detection	366 μS/cm 250 μS/cm	1600 μS/cm	none	Substances that form ions when in water; seawater influence.
TDS	2012 2014 2015	Treatment plants Well 30 Well 28	370 - 380 ppm n/a, one detection n/a, one detection	375 ppm 434 ppm 160 ppm	1000 ppm	none	Naturally Occurring
Iron	2011 2016	Well 14 Treatment plants	n/a, one detection ND – 310	330 * 9.4	300	none	Naturally Occurring.  * Well 14 is an untreated standby well
Manganese	2011 2016	Well 14 Treatment plants	n/a, one detection ND - 38	<b>320 *</b> 1.2	50	none	Naturally Occurring. * Well 14 is an untreated standby well.
Zinc	2011 2012 2015	Wells 1, 10, 14 Well 4, 29 Well 28	ND – 78 ND – 59 n/a, one detection	26 29.5 74	5000	none	Naturally Occurring.
Odor	2012	System	1.0 – 1.4 units	1.2 units	3 units	none	Naturally Occurring organic materials.
		-	Chlorine Residuals	of the bacteri	ological sam	oles	
Free Chlorine	2016	All Sources	0.46 – 1.02 ppm	0.67 ppm	4.0 ppm	4 ppm	Disinfectant added to the drinking water.
	UCMR 3 (se	ee note) Monitoring	and Unregulated Contaminants	(contaminan		Ls or PHGs, b ion Level	ut with Notification Levels, PPB)
Bromodichloro methane	2014	Well 1	n/a, one detection	1.5		1	Runoff from agricultural fields
Chlorate	2013	Well 1,4,28,30	350 - 700	538	20		Naturally occurring; runoff from industrial waste
Strontium	2013	Well 1,4,28,30	0.12 - 0.39	0.28	(	0.3	Naturally occurring
Bromomethane	2013 2014	Well 30 Well 1	n/a, one detection	3.8 2.5	2		Runoff from agricultural fields
Chloromethane	2013 2014	Well 30 Well 1	n/a, one detection	4 5.8	2		Runoff from industrial and consumer uses
Chromium	2013	Well 28	n/a, one detection	0.34	0.2		Naturally occurring; discharge from chemical and industrial processes.

NOTE: In 2012, USEPA revised the Unregulated Contaminant Monitoring Rule (UCMR 3 assessment monitoring) to assess and establish a new set of unregulated contaminants.

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# **Plumas Lake**

			Sodium and Hardness PP	M (No Standard	s – For Inforn	nation Only)	
Chemical Detected	Year	Source(s) with detection(s)	Range of Detections	Average Detected	MCL or MRDL	PHG	Origin/Notes
Hardness	2012 2013	Well 1 Well 32,34	n/a, one detection 77 - 89	87 83	none	none	Naturally Occurring
Sodium	2011 2012 2013	Well 3 Well 1 Well 32,34	n/a, one detection n/a, one detection 26 - 37	27 24 32	none	none	Naturally Occurring
			Contaminants with a Prin	nary MCL (PPB	unless otherv	vise stated)	
Barium	2012 2016	Well 1 Well 32,34	n/a, one detection 140 - 150	120 145	1000	1000	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits. Well 3 is an untreated standby well
Fluoride** (naturally occurring)	2012 2014 2014	All Sources Well 1 Well 32,34	ND – 0.23 ppm n/a, one detection 0.18 – 0.20 ppm	0.16 ppm 0.14 ppm 0.19 ppm	2 ppm	1 ppm	Naturally Occurring. Water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Gross Alpha	2008 2015	Well 3 All Sources	n/a, one detection ND – 0.75 pCi/L	3.30 pCi/L 0.24 pCi/L	15 pCi/L	none	Naturally occurring. Erosion of natural deposits of certain minerals that are radioactive and may emit a form of radiation known as alpha radiation.  Well 3 is an untreated standby well
		Contan	ninants with a Secondary MC	L (Non-Health B	ased, PPB un	less otherwis	e stated)
Iron	2011	Well 3	n/a, one detection	610 *	300	none	Naturally Occurring; * Well 3 is an untreated standby well
Manganese	2011	Well 3	n/a, one detection	60 *	50	none	Naturally Occurring; * Well 3 is an untreated standby well
Chloride	2011 2012 2016	Well 3 Well 1 Wells 32,34	n/a, one detection n/a, one detection 31 - 34	40 ppm 34 ppm 33 ppm	500 ppm	none	Naturally Occurring; Well 3 is an untreated standby well.
Specific Conductance	2014 2014 2015	Well 1 Wells 32 Well 34	n/a, one detection n/a, one detection n/a, one detection	290 μS/cm 290 μS/cm 290 μS/cm	1600 µS/cm	none	Substances that form ions when in water; seawater influence.
Sulfate	2012 2016	Well 1 Well 32,34	n/a, one detection ND – 5.6	7.6 ppm 2.8 ppm	500 ppm	none	Runoff/leaching from natural deposits; industrial wastes
TDS	2012 2016	Well 1 Wells 32,34	n/a, one detection 200 – 230 ppm	210 ppm 215 ppm	1000 ppm	none	Naturally Occurring
			Chlorine Residua	ls of the bacteri	ological sam	ples	
Free Chlorine	2016	All Sources	0.68 – 1.12 ppm	0.89 ppm	4 ppm	4 ppm	Disinfectant added to the drinking water.
		Unregulated (	Contaminants (contaminants	without MCLs o		vith Notification	on Levels, PPB)
Boron	2003	Well 1	n/a, one detection	100		000	Naturally occurring
Vanadium	2003	Well 3	n/a, one detection	7	50		Naturally occurring; Well 3 is an untreated standby well
Hexavalent Chromium	2003	Well 3	n/a, one detection	2	none		Naturally occurring; Well 3 is an untreated standby well

# GENERAL INFORMATION ON DRINKING WATER:

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. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline at 1-800-426-4791.

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 individuals, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The USEPA/Center for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.

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

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil
  and gas production, mining, or farming.

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- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, agricultural application, 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 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 must provide the same protection for public health.

#### ARSENIC

While your drinking water meets the current federal and state standard for arsenic, it does contain low levels of arsenic. The standard balances the current understanding of arsenic's possible health effects against the cost 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.

#### **REGULAR MEETINGS:**

The Olivehurst Public Utility Board of Directors meets regularly on the third Thursday of every month at 7:00 p.m. The Meetings are held in the Board Chambers at 1970 9th Ave Olivehurst, CA.

A Water and wastewater Committee meets each month and reports back to the Board. The meetings are held at the OPUD offices at 1970 9th Ave Olivehurst, CA.

Copies of Board Meeting agendas and Committee agendas can be obtained by contacting the OPUD office at (530) 743-4657 or visiting the OPUD web site: www.opud.org

A source water assessment has been completed for the wells serving Olivehurst and Plumas Lake. The sources are considered most vulnerable to the following activities:

#### Olivehurst:

Contaminant plume from lumber manufacturing, railroad yards, and sewer collection systems (Well 1 and 4)
Agricultural Drainage and Animal Grazing (Well 10)
Existing and Historic Gas Stations (Well 14)
Sewer Collection Systems (Wells 9, 10, 29, 30)
Septic Systems (Well 14)
Auto Body Shops (Wells 9 and 10)
Airports and Military Installations (Well 28)

# Plumas Lake:

Sewer collection systems Agricultural drainage Grazing Agricultural wells

A copy of the complete assessments may be viewed at:

SWRCB, DDW, District 21 (Valley) 364 Knollcrest Drive, Suite 101 Redding, CA 96002

Attention: Reese Crenshaw, 530-224-4861

Olivehurst Public Utility District 1970 9th Ave/PO Box 670 Olivehurst, CA 95961

Attention: Timothy Shaw, 530-743-0317

The assessments were completed on the dates indicated below:

Olivehurst OPUD #5810003

Well 1 – February 2002 Well 4 – February 2002

Well 10 - May 2002

Well 14 - May 2002

Well 28 - May 2002

Well 29 – June 2007

Well 30 - September 2005

#### Plumas Lake OPUD #5805001

Well 1 – September 2003

Well 32 – September 2003

Well 3 – September 2003

Well 34 – July 2011

# ADDITIONAL INFORMATION:

Unregulated contaminant monitoring helps USEPA and the State Water Resources Control Board to determine where certain contaminants occur and whether the contaminants need to be regulated.

## Metered Water

To comply with State requirements, drinking water meters were installed on all new construction homes in the OPUD service area, e.g. Plumas Lake, Wheeler Ranch, Summerfield, etc. OPUD has begun billing the radio read meters based on the meter reading. State law required that all meters be read by 2010. The goal is to be 100% metered rates by 2025.

## Lead in Drinking Water

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. OPUD 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 at 1-800-426-4791 or at <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.

## \*\*Fluoridation

OPUD treated your water by adding fluoride to the naturally occurring level in both the Olivehurst and Plumas Lake systems in order to prevent dental caries in consumers until May 1, 2013 at which time fluoridation was discontinued. The fluoride levels were maintained at or near a recommended target concentration of 0.7 ppm, during fluoridation, as required by Department of Public Health regulations. Contact OPUD or visit the web page ( <a href="www.opud.org">www.opud.org</a>) for details. Additional information about fluoridation and oral health may be obtained at <a href="http://www.waterboards.ca.gov/certlic/drinkingwater/flouridation/shtml">http://www.waterboards.ca.gov/certlic/drinkingwater/flouridation/shtml</a>

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