Olivehurst Public Utility District 2018 Water Quality Consumer Confidence Report Public Water System Numbers 5810003 and 5805001



For additional information concerning your drinking water, contact John Tillotson at (530) 743-0317

Este informe contiene informacion muy importante sobre su agua beber. Traduzcalo o hable con alguien 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. Well 3 can pump directly into the
has no pump to pump into the distribution system.	distribution system in case of an emergency and is untreated.

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

 $pCi/L: \mbox{picocuries per liter. Unit of measure used to express the results of radioactivity tests in water. \label{eq:pci}$

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 2018. In Plumas Lake, four samples <u>per week</u> are required by regulations. Coliform bacteria were not detected in any samples in 2018.

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	90 th Percentile Result (ppb)	Action Level (ppb)	Origin/Notes
Lead	2018	20	0	0	0	15	Internal corrosion of household plumbing systems; discharges from industrial manufacturing; erosion from natural deposits
Copper	2018	20	0	1300 ppb	66	1300	Internal corrosion of household plumbing systems; leaching from wood preservatives; erosion from natural deposits

Olivehurst Lead and Copper

Chemical Detected	Year Tested	Numbers of Samples Collected	Number of Samples above AL	MCLG	90 th Percentile Result (ppb)	Action Level (ppb)	Origin/Notes
Lead	2017	30	0	0	0	15	Internal corrosion of household plumbing systems; discharges from industrial manufacturing; erosion from natural deposits

Copper	2017	30	0	1300 ppb	66	1300	Internal corrosion of household plumbing systems; leaching from wood preservatives; erosion from natural deposits
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			Sodium and Hardness PP	M (No Standard	s – For Inform	nation Only)	
Chemical	Veer	Source(s) with	Range of Detections	Average	MCL or	,	
Detected	Year	detection(s)	Range of Detections	Detected	MRDL	PHG	Origin/Notes
	2011	Wells 1,10,14	13 – 22	18			
Sodium	2012	Wells 4, 29	42 – 73	57.5	none	none	Naturally Occurring
	2015	Well 28	n/a, one detection	12			
	2011	All sources	99 - 214	139			
Hardness	2012	Wells 4, 29	118 – 120	119	none	none	Naturally Occurring.
haranooo	2014	Well 30	159 – 164	162	nono	liono	Hatarany occarring.
	2015	Well 28	n/a, one detection	90			
			Contaminants with a Prin	nary MCL (PPB	unless otherw	vise stated)	
	2011	Well 14	n/a. one detection	7		0.004	
Arsenic	2012	All sources	ND – 5.3	1.1	50	0.004	Naturally Occurring.
	2011	Wells 1.10.14	ND – 110	70			
Barium	2011	Well 4, 29	ND - 100	50	1000	2000	Naturally Occurring.
Cis-1,2 Dichloro-	-	· · · ·				•	Industrial chemical and is breakdown product of
ethylene	2018	Well 1	n/a, one detection	0.77	6	3	common degreasing solvents
Fluoride**	2012	Well 4	0.14 – 0.23 ppm	0.19 ppm			Naturally Occurring. Water additive which
(naturally	2014	All Sources	0.13 – 0.19 ppm	0.16 ppm	2 ppm	1 ppm	promotes strong teeth; discharge from fertilizer
occurring)	2015	Well 28	n/a, one detection	0.15 ppm	- ppm	i ppin	and aluminum factories
occurring)	2007	Wells 14, 29, 30	1.1 - 1.8 pCi/L	1.55 pCi/L			Naturally occurring. Erosion of natural deposits
Gross Alpha	2007	Wells 14, 23, 30 Well 10	n/a, one detection	1.2 pCi/L	15 pCi/L	none	certain minerals that are radioactive and may
	2010	Well 1, 28, 29	ND – 3 pCi/L	1.85 pCi/L	15 poi/L	none	emit a form of radiation known as alpha radiatio
	2017	Well 1, 20, 29	ND=3 pCI/L	1.05 pCI/L			Discharge from petroleum and chemical factorie
Xylenes	2015	Well 1	ND – 0.64	0.21	1.75	1.8	fuel solvent
	2011	Wells 1,10,14	ND – 21	7			
Nickel	2012	Wells 4, 29	ND – 26	13	100	12	Naturally Occurring; discharge from industrial an
NICKCI	2012	Well 28	n/a, one detection	11	100	12	petroleum processes
	2010		inants with a Secondary MC	1	acad DDR un	less otherwis	e stated)
	2012	Well 4, 29	80 – 120	100 ppm	uocu, 11 D uii		
Chloride	2012	Well 28	n/a, one detection	15 ppm	500 ppm	opm none	Naturally Occurring.
Chionae	2013	Well 30	n/a, one detection	120 ppm	Joo ppin		Naturally Occurring.
Specific	2017	Well JU		120 ppm	1600		Substances that form ions when in water;
Conductance	2017	All Sources	220 - 670 µS/cm	393 µS/cm	µS/cm	none	seawater influence.
Ounductance	2012	Treatment plants	370 - 380 ppm	375 ppm			
TDS	2012	Well 30	n/a, one detection	434 ppm	1000	none	Naturally Occurring
100	2015	Well 28	n/a, one detection	160 ppm	ppm	none	Naturally Occurring
	2013	Well 14	n/a, one detection	330 *			Naturally Occurring.
Iron	2011	Treatment plants	300	300	300	none	* Well 14 is an untreated standby well
	2018	Well 14	n/a, one detection	350 *	-		Naturally Occurring.
Manganese	2018	All Sources	100-190	141	50	none	* Well 14 is an untreated standby well.
	2018	Wells 1, 10, 14	ND – 78	26	+		well 14 is an unitedieu Stanuby well.
Zino	2011	Wells 1, 10, 14 Well 4, 29	ND – 78 ND – 59	20	5000	2020	Naturally Occurring
Zinc	2012 2015	Well 4, 29 Well 28	n/a, one detection	29.5 74	0000	none	Naturally Occurring.
Odor	2012	System	1.0 – 1.4 units	1.2 units	3 units	none	Naturally Occurring organic materials.
			Chlorine Residua	Is of the bacteri	ological samp	oles	
Free Chlorine	2018	All Sources	0.24 – 0.58 ppm	0.41 ppm	4.0 ppm	4 ppm	Disinfectant added to the drinking water.
	UCMR 3 /e			ts (contaminant			ut with Notification Levels, PPB)
		a note, monitoring a	ina emegalatea oontaniinan			ion Level	
Bromodichloro	0044	\M/a 4	ala ana detertere	4.5		4	Dura off from a migulation of facility
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	().3	Naturally occurring
Dromomethers	2013	Well 30	n/a ana data dia	2.8		n	Dunoff from opriouthurst fields
Bromomethane 2013 Well 30 n/a, one d		Well 1	n/a, one detection	2.5	2		Runoff from agricultural fields
	2013 Well 30		n/a, one detection	4		2	Runoff from industrial and consumer uses
Chloromethane					2		
Chloromethane	2014	Well 1		5.8		-	Naturally occurring; discharge from chemical

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

Plumas Lake

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			Sodium and Hardness PPN	I (No Standard	ls – For Inform	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 Prima	ary 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 2017	Well 3 All Sources Well 1	n/a, one detection ND – 0.75 pCi/L n/a, one detection	3.30 pCi/L 0.24 pCi/L 3.00 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 MCL	(Non-Health B	ased, PPB ur	less otherwise	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 ppm	40 ppm 34 ppm 33 ppm	500 ppm	none	Naturally Occurring; Well 3 is an untreated standby well.
Specific Conductance	2017 2015	Wells 1, 32 Well 34	290-300 µS/cm n/a, one detection	295 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 Residuals	of the bacteri	ological sam	ples	
Free Chlorine	2018	All Sources	0.70 – 1.14 ppm	0.88 ppm	4 ppm	4 ppm	Disinfectant added to the drinking water.
		Unregulated (د Contaminants (contaminants w ا	vithout MCLs of Notification Leve		vith Notificatio	n Levels, PPB)
Boron	2003	Well 1	n/a, one detection	100	1(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.
- 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.

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 <u>Plumas Lake OPUD #58</u>05001

Well 1 – September 2003

Well 32 – September 2003

Well 3 – September 2003

Well 34 – July 2011

A Water and Sewer 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)	Olivehurst Public Utility District
364 Knollcrest Drive, Suite 101	1970 9th Ave/PO Box 670
Redding, CA 96002	Olivehurst, CA 95961
Attention: Reese Crenshaw, 530-224-4861	Attention: John Tillotson, 530-743-0317

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 http://www.epa.gov/safewater/lead

**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 (www.opud.org) for details. Additional information about fluoridation and oral health may be obtained at http://www.waterboards.ca.gov/certlic/drinkingwater/flouridation/shtml