

2018 Water Quality Report

WESTHAVEN COMMUNITY SERVICES DISTRICT

California Public Water System Number 1210024

April 2019

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

The WCDSD is governed by a five-member Board of Directors elected by the District residents or, lacking sufficient candidates for an election, appointed by the County Board of Supervisors. Current Board members are: **David Hankin** (President), **Bill Verick** (Vice-President), **Steven Phipps** (Finance Officer), **Michael Moon** (Safety Committee) and **Barbara Cline**. Staff are **Paul-Rosenblatt** (Manager/Operator), **Milo Butterworth** (Operator) and **Roxanne Levang** (Secretary/Bookkeeper).

You are encouraged to attend monthly Board meetings at the Westhaven Fire Hall at **446 6th Ave.** on the **3rd Wednesday** at **6:30 pm.**

For more information, contact Paul Rosenblatt at 677-0798 or
prosenblatt.wcsd@suddenlinkmail.com

We routinely collect samples for all drinking water quality testing required by State and Federal Regulations. This report shows the most recent results for contaminants detected in all WCDSD monitoring, from January 1, 2009 through December 31, 2018. Complete records are available in the WCDSD office.

SPECIFIC INFORMATION ABOUT YOUR DRINKING WATER:

Water for the Westhaven Community Services District originates from one groundwater source on 4th Ave. near Transit Ave. known as the **4th Ave. Well** and three combined surface water sources on the eastern edge of the community known as the **Springs**.

In August of 2002 and January of 2003 the California Department of Health Services completed **Drinking Water Source Assessments** for the WCDSD's water sources. The Assessments' Vulnerability Summaries state that the **4th Ave. Well** is considered most vulnerable to animal operations, septic systems, storage tanks, housing and wells, and that the contaminants Barium, Chromium and Nitrate have been detected. The **Spring** sources are considered most vulnerable to Managed Forests, and no contaminants have been detected.

A copy of the complete assessment may be viewed at the WCDSD office at 446 B Sixth Ave.

Tables 1, 2, 3, 4 and 5 list all of the drinking water contaminants that were detected in the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Additionally, the State Board requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Therefore, some of the data, though representative of the water quality, are more than one year old.

Table 6 shows microbiological quality sampling results for the 4th Avenue Well.

Table 7 illustrates the performance of the District's slow sand filter.

SPECIFIC CONTAMINANTS OF CONCERN TO WCSO CUSTOMERS

Disinfection By-Products (DBPs)

Some of the WCSO's recent testing results for the DBPs Trihalomethanes and Haloacetic Acids have exceeded the MCL (see Table 4). DBPs are formed when chlorine is combined with naturally occurring compounds in the water. The WCSO is currently investigating treatment options that will reduce DBPs to safe levels. You can remove DBPs from your tap water with a filter containing activated carbon.

ADDITIONAL GENERAL INFORMATION ON DRINKING WATER:

To ensure that tap water is safe to drink, 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.

The sources of drinking 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 and transports naturally occurring minerals, sometimes including radioactive material, and it can also transport substances resulting from the presence of humans and other animals.

Contaminants that may be present in untreated source water include:

- **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, livestock operations or wildlife.
- **Inorganic contaminants**, such as salts and metals, which may be naturally-occurring or may come from sources such as urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- **Pesticides and herbicides**, which may come from sources such as logging, agriculture, urban storm water runoff or residential use.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which may be byproducts of industrial processes and petroleum production, or may come from sources such as gas stations, urban storm water runoff or septic systems.
- **Radioactive contaminants**, which may be naturally-occurring or may come from sources such as oil and gas production or mining activities.

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. Information about contaminants and known or suspected health effects can be obtained from the USEPA's Safe Drinking Water Hotline **1-800-426-4791** or visiting **water.epa.gov/drink/hotline/index.cfm**

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

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water comes primarily from materials associated with service lines and home plumbing fixtures. The Westhaven CSD's service lines are essentially lead free, but we cannot control the makeup of materials used in plumbing

components within your home. 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. 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>**

DEFINITIONS OF SOME OF THE TERMS USED IN THIS REPORT:

(AL) Regulatory Action Level: The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

(MCL) Maximum Contaminant Level: 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. Secondary MCLs are set to protect the odor, taste and appearance of drinking water

(MCLG) Maximum Contaminant Level Goal: 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 (USEPA).

(MFL) Millions of Fibers per Liter

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

(MRDLG) Maximum Residual Disinfectant Level Goal: The level of a disinfectant added for water treatment 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.

(ND) Non Detectable at testing limit

(NTU) Nephelometric Turbidity Units – a measure of water clarity

(pCi/L) picocuries per liter (a measure of radiation)

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

(PHG) Public Health Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the CA Environmental Protection Agency.

(ppm) parts per million or milligrams per liter (mg/L)

(ppb) parts per billion or micrograms per liter (ug/L)

(ppt) parts per trillion or nanograms per liter (ng/L)

(ppq) parts per quadrillion or picograms per liter

(TDS) Total Dissolved Solids

(TT) Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water

(uS/cm) Microsiemens per centimeter

Variances and Exemptions: State Board permission to exceed an MCL or not comply with a treatment technique under certain conditions.

TABLE 1 - SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA IN 2018

Microbiological Contaminants	Most detections in a month	Months in violation	Maximum Contaminant Level (MCL)	MCLG	Typical Source of Bacteria
Total Coliform Bacteria	0	0	More than 1 sample in a month with a detection	0	Naturally present in the environment
Fecal Coliform or <i>E. coli</i>	0	0	A routine sample and the repeat sample detect total coliform, and either sample also detects fecal coliform	0	Human and animal fecal waste

TABLE 2 - SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER IN 2018

Lead and Copper (reporting units)	No. of samples collected	90 th percentile detected	No. Sites exceeding AL	Action Level (AL)	MCLG	Typical Source of Contaminant
Lead (ppb)	5	4.2 *	0	15	2	Corrosion of household plumbing systems; erosion of natural deposits ***
Copper (ppb)	5	5.5 **	0	1,300	170	Corrosion of household plumbing systems; erosion of natural deposits ***

The primary source of lead and copper in WCSD tap water is corrosion of the customer's pipes and fixtures. Lead and copper samples are taken from water left standing in the pipes overnight.

Lead and copper can be reduced to negligible or non-detectable levels by flushing your faucet for thirty seconds to two minutes first thing in the morning.

* **Lead** - Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (1-800-426-4791).

** **Copper** is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time may experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years may suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

*** The main element of **WCSD's corrosion control program** is a calcite (limestone) filter at the 4th Ave. Well which raises the pH of the well water and effectively reduces its corrosiveness. Water from the well is blended with water from the surface sources, reducing corrosiveness throughout the water distribution system.

TABLE 3 - SAMPLING RESULTS FOR SODIUM AND HARDNESS

Chemical or Constituent (reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	2013	13.0	11.0-14.0	None	None	Naturally occurring
Hardness (ppm)	2013	34.0	17.0-51.0	None	None	Naturally occurring

TABLE 4 - DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD

Chemical or Constituent (reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Aluminum (ppb)	2015	5.3	ND - 10	1000	600	Erosion of natural deposits
Barium (ppb)	2015	54	54-170	1000	2000	Erosion of natural deposits: discharge of oil drilling wastes: metal refineries
Chromium (ppb)	2015	ND	ND-3.5	50	(100)	Erosion of natural deposits: discharge from steel and pulp mills: chrome plating
Chromium - Hexavalent (ppb)	2016	ND	ND - 3.1	10	0.02	
Nickel (ppb)	2015	ND	ND - 10	100	12	Erosion of natural deposits
Nitrate (as Nitrogen) (ppm)	2017	3.7	0.89 - 7.7	10	45	Erosion of natural deposits: runoff and leaching from fertilizer, septic tanks and sewage
Radium 228 (pCi/L)	2013	0.045	ND - 0.09	2		Naturally occurring
Disinfection Byproducts (after treatment):		Annual Avg.				
Total Trihalomethanes (ppb)	2018	85.8	8.1-90 *	80	N/A	Byproducts of drinking water chlorination (disinfection)
Haloacetic Acids (ppb)	2018	79.25	5.3-200**	60	N/A	
Chlorine (as Cl ₂) (ppb)	2017	340	10-870	4,000	4,000	Drinking water treatment

* Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience liver, kidney, or central nervous system problems, and may have an increased risk of getting cancer.

** Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

TABLE 5 - DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD

Chemical or Constituent (reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Total Dissolved Solids (ppm)	2015	130	68-140	500	N/A	Runoff / leaching from natural deposits
Specific Conductance (uS/cm)	2014	88	68-260	1,600	N/A	Ion-forming substances
Chloride (ppm)	2013	15	8.1-21.0	250	N/A	Runoff / leaching from natural deposits: seawater influence
Sulfate (ppm)	2013	7.2	3.1-10.0	250	N/A	Runoff / leaching from natural deposits: industrial waste

TABLE 6 - SAMPLING RESULTS SHOWING FECAL INDICATOR-POSITIVE GROUND WATER SOURCE SAMPLES IN 2016

Microbiological Contaminants	Total No. of Detections	Sample Dates	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
<i>E. coli</i>	0	N/A	0	0	Human and animal fecal waste
Enterococci	0	N/A	TT	n/a	Human and animal fecal waste
Coliphage	0	N/A	TT	n/a	Human and animal fecal waste

TABLE 7 - SAMPLING RESULTS SHOWING TREATMENT OF SURFACE WATER SOURCES IN 2016

<i>Treatment Technique *</i>	Slow Sand Filtration
<i>Turbidity Performance Standards **</i>	<u>Turbidity of the filtered water must be:</u> Less than or equal to 1.00 NTU in 95% of all daily measurements in a month.
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	100%
Highest single turbidity measurement during the year	0.38 NTU (November 12)
Violations of any surface water treatment requirements	0

* A required process intended to reduce the level of a contaminant in drinking water.

** Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance. Turbidity results which meet performance standards are considered to be in compliance with filtration requirements.

NITRATE

Nitrate 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 serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate 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 specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.

The highest levels of Nitrate in WCSD water are found in the 4th Ave. Well. Sampling results have never exceeded the 10 mg/L MCL.

A SUMMARY OF ALL INFORMATION CONTAINED IN THE TABLES CAN BE FOUND ON THE NEXT PAGE.

SUMMARY OF THE INFORMATION IN THE TABLES

<u>TABLE 1</u>	Total and Fecal Coliform in the distribution system – <u>none detected</u>
<u>TABLE 2</u>	Lead and Copper at customers' taps – <u>none exceeding the Action Level (requiring treatment)</u> (<i>Due to reduced levels found in recent samplings, Lead and Copper sampling is now done every three years – next sampling in July 2018</i>)
<u>TABLE 3</u>	Sodium and Hardness – <u>minor amounts</u> – no Maximum Contaminant Level (MCL) exists
<u>TABLE 4</u> Primary	Aluminum, Barium, Chromium and Nickel – <u>all less than 10%</u> of the MCL allowed Chromium, hexavalent – <u>31%</u> of the MCL allowed in 2014 – MCL currently under discussion Nitrate – highest detection was <u>77%</u> of the MCL allowed Radium 228 – highest detection was <u>4.5%</u> of the MCL allowed <u>Haloacetic Acids</u> – <u>EXCEEDING the</u> MCL allowed <u>Total Trihalomethanes</u> - <u>EXCEEDING the</u> MCL allowed Chlorine – highest detection was <u>20%</u> of the MCL allowed
<u>TABLE 5</u> Secondary	Total Dissolved Solids, Specific Conductance, Chloride and Sulfate <u>all less than 20%</u> of the Maximum Contaminant Level allowed
<u>TABLE 6</u>	Fecal Indicator-Positive in Groundwater – <u>no detections</u>
<u>TABLE 7</u>	Filter Performance – highest measurement was 0.38 NTU = <u>38 %</u> of allowable turbidity.