

#### **Board of Directors**

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## **Educational Information**

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 is available online at

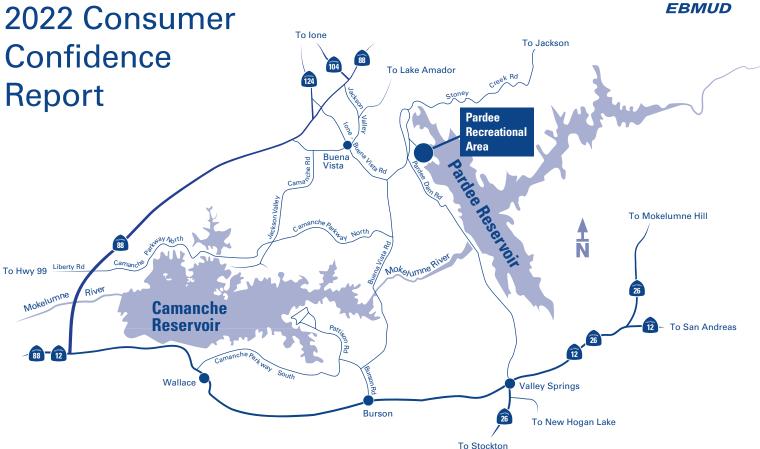
www.epa.gov/ground-water-and-drinking-water.

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 online at www.cdc.gov/parasites/crypto/index.html.

**Cryptosporidium** is a microbial pathogen found in surface water throughout the U.S. Although filtration removes Cryptosporidium, the most commonly used filtration methods cannot guarantee 100 percent removal. Pardee Recreation Water Treatment Plant (WTP) does remove Cryptosporidium and giardia as their sizes are larger (crypto 3-5 micron, giardia 7-14 micron) than the filtration membrane which is 0.01 micron. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of Cryptosporidium may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people, infants, small children, and the elderly are at greater risk of developing life threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water.

# **Pardee Recreation Area**





# **Water System Information**

This report includes information such as the source water, its water quality and comparisons to state and federal drinking water standards. For more information, please call the Pardee Water/Wastewater Supervisor at (209) 772-8368.

The Park Advisory Board meets in March, July and November at Pardee Center to discuss matters relating to water quality. For exact dates and times, please call (209) 772-8204. Public participation is encouraged.

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

# **Water Source and Treatment**

Pardee Reservoir is the water source for Pardee Recreation Area. The Recreation Area is served by a state-of-the-art ultrafiltration membrane water treatment facility with chlorine for disinfection. Ultrafiltration can remove particles as small as 0.01 microns. The distribution system is served by a 97,000 gallon water storage tank. The water treatment facility and distribution system are operated by state certified operators.

This report describes the results from water sampling for potential contaminants and gives information on water related activities. The State Water Resources Control Board (State Water Board), Division of Drinking Water sets water quality requirements for the Pardee Recreation Area water system, in order to ensure that the water is safe to drink. Complying with

regulations requires an extensive monitoring program in both the source and treated waters. All water quality regulations were met

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the State Water Board prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. California Department of Public Health (CDPH) and United States Food and Drug Administration regulations establish limits for contaminants in bottled water that provide the same protection for public health. Additional information on bottled water is available on the CDPH website at www.cdph.ca.gov/ Programs/CEH/DFDCS/Pages/FDBPrograms/FoodSafetyProgram/ Water.aspx.

## **Source Water Protection Activities**

The State Water Board requires water utilities to determine the types of activities that can pollute their drinking water sources. EBMUD evaluated more than 100 activities that take place near this EBMUD reservoir, and found that the source is most vulnerable to gasoline storage and dispensing at the recreation area marina and boating. In 2022, no contaminants associated with these activities were detected in EBMUD's drinking water.

The detailed results of the source water assessment completed in 2002 can be reviewed at EBMUD's headquarters at Pardee Center, northeast of Valley Springs, or at the Stockton State Water Board office.

# Pardee Recreation Area 2022 Water Quality Data

The tables list all the drinking water contaminants that we detected from January 1 through December 31, 2022, unless noted otherwise. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk.

# **Primary Contaminants**

	MCL, AL or [MRDL]	PHG, (MCLG) or [MRDLG]	Average	Range	Sample Year	Typical Sources
Inorganic Contaminants						
Copper (ppb)	AL=1300	300	90th Percentile =84	No sites above AL out of 5 sites sampled	2022	Corrosion of household plumbing; erosion of natural deposits
Lead (ppb) *	AL=15	0.2	90th Percentile =3.3	No sites above AL out of 5 sites sampled	2022	Corrosion of household plumbing; erosion of natural deposits
Disinfection Byproducts, Disinfectant Residuals						
Chlorine residual as Cl <sub>2</sub> (ppm)	[4]	[4]	1.1 <sup>a</sup>	0.8-1.3	2022	Drinking water disinfectant added for treatment
Haloacetic Acids, 5 species (ppb)	60	NA	24	24	2022	By-product of drinking water disinfection
Trihalomethanes (ppb)	80	NA	29	29	2022	By-product of drinking water disinfection

a) Highest Running Annual Average

# **Secondary Contaminants**

	MCL	Result	Sample Year	Typical Sources
Chloride (ppm)	250	5	2022	Runoff/leaching from natural deposits
Color (color units)	15	3	2022	Naturally occurring organic materials
Odor-Threshold (TON)	3	1	2022	Naturally occurring organic materials
Specific Conductance (μS/cm)	900	83	2022	Substances that form ions when in water
Sulfate (ppm)	250	2	2022	Runoff/leaching from natural deposits
Total Dissolved Solids (ppm)	500	56	2022	Runoff/leaching from natural deposits

# **Other Parameters**

	Result
Alkalinity, total as CaCO <sub>3</sub> (ppm)	28
Calcium (ppm)	4
Hardness, as CaCO <sub>2</sub> (ppm)	22

	Result
Magnesium (ppm)	1.2
pH (pH units)	8.2
Potassium (ppm)	0.7
Sodium (ppm)	10

# **Treatment of Surface Water Sources**

Treatment Technique	Nanofiltration membrane treatment
Turbidity Performance Standards	1. Be less than or equal to 0.3 NTU in 95% of measurements in a month 2. Not exceed 1.0 NTU at any time
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1	100%
Highest single turbidity measurement during the year	0.05 NTU
Number of violations of any surface water treatment requirements	0

# **Terms Used**

### AL = regulatory action level.

The concentration which, 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 economically and technologically feasible.

#### 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.

#### MRDL = Maximum Residual Disinfectant Level.

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.

### MRDLG = Maximum Residual Disinfectant Level Goal.

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.

# NA = Not Applicable

#### NL = Notification Level.

Notification levels are health-based advisory levels established by the State Board for chemicals in drinking water that lack MCLs.

# NTU = Nephelometric Turbidity Units.

# **PDWS = Primary Drinking Water Standard.**

MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, 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 California Environmental Protection Agency.

**ppb = parts per billion.** One ppb is like 3 seconds in 100 years.

**ppm = parts per million.** One ppm is like 30 seconds in one year.

### Secondary drinking water standard (SDWSs).

MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDSWs do not affect the health at the MCL levels.

#### **TON = Threshold Odor Number.**

A measurement of odors in water.

### TT = Treatment Technique.

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

**Turbidity** = A measure of cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

### $\mu$ S/cm = micro siemens per centimeter.

A measure of conductivity.

**90**<sup>th</sup> **percentile =** A measure that indicates 90 percent of the samples had a lower result.

# **Contaminants in Drinking 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 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.

Private plumbing and fixtures may add lead or copper levels above the level delivered by EBMUD. Hot water systems can contain elevated levels of lead and copper so it is not advisable to drink from hot water faucets. For additional information see the Note about Lead on the bottom of this page.

**Radioactive Contaminants**, that can be naturally-occurring or be the result of oil and gas production and mining activities.

**Pesticide and Herbicide Contaminants,** that may come from a variety of sources, such as agriculture, urban stormwater 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 storm water runoff, agricultural application, and septic systems.

**Secondary Contaminants** affect aesthetic qualities such as taste, odor, or appearance. The clarity of the water can be measured by color, turbidity and aluminum content.

**Other Parameters** are water quality measurements which may be of interest to some consumers.

### \* Note about 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 lead service lines and home plumbing. EBMUD is responsible for providing high quality drinking water and has replaced all known lead service lines in the EBMUD system, but cannot control the variety of materials used in existing home plumbing components.

When your water has been sitting for several hours, you can minimize the potential for lead exposure by running your faucet for 30 seconds to two 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 online from the USEPA at www.epa.gov/lead.