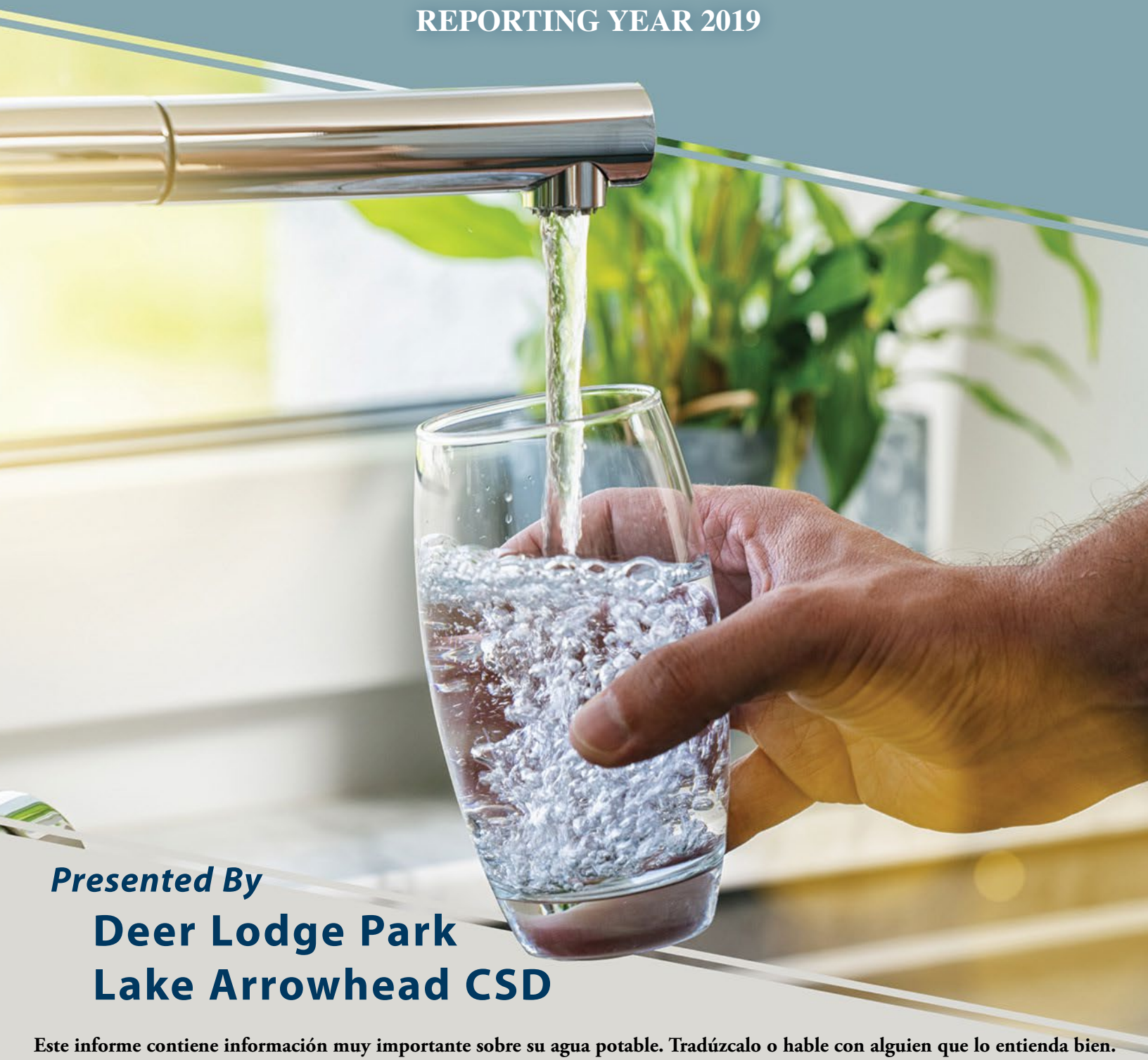
# ANNUAL WATER QUALITY REPORT

**REPORTING YEAR 2019**



***Presented By***

## Deer Lodge Park
## Lake Arrowhead CSD

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

PWS ID#: 3600087

## We Are Always There for You

Once again, we are proud to present our annual water quality report covering all testing performed between January 1 and December 31, 2019. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best-quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all our water users.

Please remember that we are always available should you ever have any questions or concerns about your water.

## Where Does My Water Come From?

The sources of water supplied to district customers in Deer Lodge Park include one groundwater well and purchased water from Crestline-Lake Arrowhead Water Agency (CLAWA). During the winter, when the water table is higher, the well is our primary source of water. CLAWA water is used to supplement well water, and, when possible, it is turned off. During the summer and fall, when the water table drops, CLAWA water is delivered at the minimum amount needed to compensate for the additional customer demand. The well is running at this time at a rate that will not exceed its safe yield.

The purchased water comes from Northern California via the California Aqueduct and flows into Lake Silverwood. CLAWA treats the water and delivers it to the district's distribution system, where it is blended with local well water. State-of-the-art treatment processes are used to ensure that the water delivered to your home is safe and pleasant tasting.

## FOG (fats, oils, and grease)

You may not be aware of it, but every time you pour fat, oil, or grease (FOG) down your sink (e.g., bacon grease), you are contributing to a costly problem in the sewer collection system. FOG coats the inner walls of the plumbing in your house as well as the walls of underground piping throughout the community. Over time, these greasy materials build up and form blockages in pipes, which can lead to wastewater backing up into parks, yards, streets, and storm drains. These backups allow FOG to contaminate local waters, including drinking water. Exposure to untreated wastewater is a public health hazard. FOG discharged into septic systems and drain fields can also cause malfunctions, resulting in more frequent tank pump-outs and other expenses.

Communities spend billions of dollars every year to unplug or replace grease-blocked pipes, repair pump stations, and clean up costly and illegal wastewater spills. Here are some tips that you and your family can follow to help maintain a well-run system now and in the future:

**NEVER:**

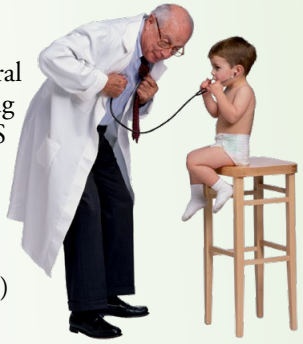
- Pour FOG down the house or storm drains.
- Dispose of food scraps by flushing them.
- Use the toilet as a wastebasket.

**ALWAYS:**

- Scrape and collect FOG into a waste container, such as an empty coffee can, and dispose of it with your garbage.
- Place food scraps in waste containers or garbage bags for disposal with solid wastes.
- Place a wastebasket in each bathroom for solid wastes like disposable diapers, creams and lotions, and personal hygiene products, including nonbiodegradable wipes.

## 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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or http://water.epa.gov/drink/hotline.



## Community Participation

You are invited to participate in our public forum and voice your concerns about your drinking water. Regular meetings of the Board of Directors are held on the fourth Tuesday of every month (with the exceptions of November and December) at 5:30 p.m. at the District Board Room (27307 State Highway 189, Suite 104) in Blue Jay. Special meetings may be held, if necessary, throughout the year, with dates, times, and locations to be determined.

## Substances That Could Be in 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.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (U.S. EPA) 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 U.S. Food and Drug Administration regulations and California law 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 at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk.

> We remain vigilant in delivering the best-quality drinking water

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 can 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 by-products of industrial processes and petroleum production and which can also come from gas stations, urban stormwater runoff, agricultural applications, and septic systems;

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

More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

## Lead in Home Plumbing

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. We are responsible for providing high-quality drinking water, but we 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 do so, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering plants.) 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 (800) 426-4791 or at www.epa.gov/safewater/lead.

## Questions?

For more information about this report, or for any questions relating to your drinking water, please call Mica O'Connell, Water Treatment Supervisor, at (909) 336-7165 or Customer Service at (909) 336-7100. You may also visit our website at http:/www.lakearrowheadcsd.com.

## Source Water Assessment

A Source Water Assessment Plan (SWAP) was completed in January 2003; you may request a copy at our district office. The plan is an assessment of the delineated area around our listed sources through which contaminants, if present, could migrate and reach our source water. It also includes an inventory of potential sources of contamination within the delineated area and a determination of the water supply's susceptibility to contamination by the identified potential sources.

The Vulnerability Summary concluded that the well site is at low risk for contamination and that the sources are considered most vulnerable to the following activities and are not associated with any detected contaminants: managed forests and wells and water supply.

## Water Conservation Tips

You can play a role in conserving water and saving yourself money in the process by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever you can. It is not hard to conserve water. Here are a few tips:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water-using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.

## Information on the Internet

The U.S. EPA (https://goo.gl/TFAMKc) and the Centers for Disease Control and Prevention (www.cdc.gov) websites provide a substantial amount of information on many issues relating to water resources, water conservation, and public health. Also, the Division of Drinking Water and Environmental Management has a website (https://goo.gl/kGepu4) that provides complete and current information on water issues in California, including valuable information about our watershed.

## Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule, and the water we deliver must meet specific health standards. Here we only show those substances that were detected in our water (a complete list of all our analytical results is available upon request). Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels.

The state recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

**REGULATED SUBSTANCES**

| | | | | Deer Lodge Park | | Crestline-Lake Arrowhead Water Agency (CLAWA) | | | |
|---|---|---|---|---|---|---|---|---|---|
| SUBSTANCE (UNIT OF MEASURE) | YEAR SAMPLED | MCL [MRDL] | PHG (MCLG) [MRDLG] | AMOUNT DETECTED | RANGE LOW-HIGH | AMOUNT DETECTED | RANGE LOW-HIGH | VIOLATION | TYPICAL SOURCE |
| **Chlorine** (ppm) | 2019 | [4.0 (as Cl2)] | [4 (as Cl2)] | 1.07 | 0.24–1.99 | NA | NA | No | Drinking water disinfectant added for treatment |
| **Fluoride** (ppm) | 2019 | 2.0 | 1 | ND | NA | ND | NA | No | Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories |
| **Haloacetic Acids** (ppb) | 2019 | 60 | NA | 4.03 | ND–7.20 | 4.6 | ND–9 | No | By-product of drinking water disinfection |
| **Nitrate [as nitrogen]** (ppm) | 2019 | 10 | 10 | 0.45 | 0.45–0.45 | 0.03 | ND–0.40 | No | Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits |
| **TTHMs [Total Trihalomethanes]** (ppb) | 2019 | 80 | NA | 31.83 | ND–66.1 | 46.9 | 24.6–68.6 | No | By-product of drinking water disinfection |
| **Turbidity**[1] (NTU) | 2019 | TT | NA | 0.60 | 0.06–0.60 | 0.03 | 0–0.20 | No | Soil runoff |
| **Turbidity** (Lowest monthly percent of samples meeting limit) | 2019 | TT = 95% of samples meet the limit | NA | NA | NA | 100 | NA | No | Soil runoff |

**Tap water samples were collected for lead and copper analyses from sample sites throughout the community**

| SUBSTANCE (UNIT OF MEASURE) | YEAR SAMPLED | AL | PHG (MCLG) | AMOUNT DETECTED (90TH %ILE) | SITES ABOVE AL/TOTAL SITES | VIOLATION | TYPICAL SOURCE |
|---|---|---|---|---|---|---|---|
| **Copper** (ppm) | 2019 | 1.3 | 0.3 | 0.15 | 0/5 | No | Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives |
| **Lead** (ppb) | 2019 | 15 | 0.2 | ND | 0/5 | No | Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits |

## SECONDARY SUBSTANCES

| SUBSTANCE (UNIT OF MEASURE) | YEAR SAMPLED | SMCL | PHG (MCLG) | Deer Lodge Park AMOUNT DETECTED | Deer Lodge Park RANGE LOW-HIGH | Crestline-Lake Arrowhead Water Agency (CLAWA) AMOUNT DETECTED | Crestline-Lake Arrowhead Water Agency (CLAWA) RANGE LOW-HIGH | VIOLATION | TYPICAL SOURCE |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** (ppm) | 2019 | 500 | NS | 18 | 18–18 | 71 | 36–110 | No | Runoff/leaching from natural deposits; seawater influence |
| **Color** (Units) | 2019 | 15 | NS | 1.3 | 1–5 | NA | NA | No | Naturally occurring organic materials |
| **Corrosivity** (Units) | 2019 | Non-corrosive | NS | 11.98 | 11.98–11.98 | NA | NA | No | Natural or industrially influenced balance of hydrogen, carbon, and oxygen in the water affected by temperature and other factors |
| **Odor–Threshold** (TON) | 2019 | 3 | NS | 1.04 | 1–2 | 1 | 1–1 | No | Naturally occurring organic materials |
| **Specific Conductance** (µS/cm) | 2019 | 1,600 | NS | 439.4 | 399–495 | NA | NA | No | Substances that form ions when in water; seawater influence |
| **Sulfate** (ppm) | 2019 | 500 | NS | 4.4 | 4.4–4.4 | 39.25 | 31–48 | No | Runoff/leaching from natural deposits; industrial wastes |
| **Total Dissolved Solids** (ppm) | 2019 | 1,000 | NS | 240 | 240–240 | 251.88 | 170–330 | No | Runoff/leaching from natural deposits |
| **Turbidity** (NTU) | 2019 | 5 | NS | 0.247 | 0.07–1.15 | NA | NA | No | Soil runoff |

## UNREGULATED AND OTHER SUBSTANCES [2]

| SUBSTANCE (UNIT OF MEASURE) | YEAR SAMPLED | Deer Lodge Park AMOUNT DETECTED | Deer Lodge Park RANGE LOW-HIGH | Crestline-Lake Arrowhead Water Agency (CLAWA) AMOUNT DETECTED | Crestline-Lake Arrowhead Water Agency (CLAWA) RANGE LOW-HIGH |
|---|---|---|---|---|---|
| **Boron**[3] (ppb) | 2019 | ND | NA | 90 | ND–160 |
| **Calcium** (ppm) | 2019 | 52 | 52–52 | NA | NA |
| **Magnesium** (ppm) | 2019 | 11 | 11–11 | NA | NA |
| **pH** (Units) | 2019 | 7.37 | 7.01–8.25 | 8.14 | 7.70–8.40 |
| **Potasium** (ppm) | 2019 | 3.1 | 3.1–3.1 | NA | NA |
| **Sodium** (ppm) | 2019 | 22 | 22–22 | 61.38 | 40–87 |
| **Total Hardness** (ppm) | 2019 | 180 | 180–180 | 83.88 | 59–110 |
| **Vanadium** (ppb) | 2019 | 3.2 | 3.2–3.2 | ND | NA |

[1] Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system. High turbidity can hinder the effectiveness of disinfectants.

[2] Unregulated contaminant monitoring helps U.S. EPA and the State Water Resources Control Board determine where certain contaminants occur and whether the contaminants need to be regulated.

[3] Notification Level = 1,000 ppb.

## Definitions

**90th %ile:** The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90 percent of our lead and copper detections.

**AL (Regulatory Action Level):** The concentration of a contaminant 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. Secondary MCLs (SMCLs) 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. EPA.

**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

**ND (Not detected):** Indicates that the substance was not found by laboratory analysis.

**NS:** No standard

**NTU (Nephelometric Turbidity Units):** Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**pCi/L (picocuries per liter):** A measure of radioactivity.

**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 EPA.

**ppb (parts per billion):** One part substance per billion parts water (or micrograms per liter).

**ppm (parts per million):** One part substance per million parts water (or milligrams per liter).

**TON (Threshold Odor Number):** A measure of odor in water.

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

**µS/cm (microsiemens per centimeter):** A unit expressing the amount of electrical conductivity of a solution.