# GREEN VALLEY MUTUAL WATER COMPANY

## 2020 Consumer Confidence Report

Este informe contiene información muy importante sobre su agua potable. Traducir o hablar con alguien que entiende bien.

## WATER QUALITY

The Green Valley Mutual Water Company (GVMWC) regularly monitors water quality to ensure high quality and compliance with the stringent requirements of both the state and federal guidelines. Drinking water standards also called MCLs, are established in two categories: primary and secondary standards. Primary standards relate to public health and secondary standards relate to aesthetic standards such as taste, odor, and color. Recent changes in the California law (Health and Safety Code Section 116470) require that we provide additional water quality information. The additional information includes public health goals (PHG) or maximum contaminant level goals (MCLG). Definitions of these terms are found in this report along with a listing of the PHGs or MCLGs for each detected chemical.

## WATER QUALITY MONITORING

Samples are taken from our distribution system weekly to monitor bacteriological water quality. Well samples are tested quarterly for bacteria and the physical qualities of the water such as clarity, odor, and color. In compliance with the State and EPA regulations, we test for the above contaminants.

The water quality data found in this report represents the test results for the constituents detected but does not indicate all that we test for. For example, we test for over 60 organic constituents, but none were detected. Water Quality or water system information is always available to you at our office. If you should have any questions please contact Kevin Floyd, at (909) 867- 2912 during regular business hours.

## WATER SUPPLY

The Green Valley Mutual Water Company receives its water from two sources: Local ground water and imported State surface water sold to us from the Crestline - Lake Arrowhead Water Agency (CLAWA). CLAWA distributes water from the State water project and pumps the water to us, from Lake Silverwood.

GVMWC owns, operates, and maintains over 25 wells in and around Green Valley Lake. The wells are commonly grouped into well groups for composite sampling. They are: **Tank Farm, Park, Stable, Meadow, Ski Hill, Angeles High Springs, and Snow Canyon** well systems. There are three separate pressure zones in GVL. Water is pumped and transferred between these zones to maintain an adequate supply for all. The wells feed directly into the distribution system and back feed to fill the tanks. On average we produce and distribute about 27 million gallons of water per year. Our total storage capacity is 1.7 million gallons held in storage tanks.

## SOURCE WATER PROTECTION

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:

- Eliminate excess use of lawn and garden fertilizers and pesticides – they contain hazardous chemicals that can reach your drinking water source.
- Pick up after your pets. (**Yes, even in the forest**).
- If you have your own septic system, properly maintain your system to reduce leaching to water sources or consider connecting to a public water system.
- Dispose of chemicals properly; take used motor oil to a recycling center.
- Volunteer in your community. Find a watershed or wellhead protection organization in your community and volunteer to help. If there are no active groups, consider starting one. Use U.S. EPA's Adopt Your Watershed to locate groups in your community or visit the Watershed Information Network's How to Start a Watershed Team.

**Organize a storm drain stenciling project with your local government or water supplier. Stencil a message next to the street drain reminding people "Dump No Waste – Drains to River" or "Protect Your Water". Produce and distribute a flyer for households to remind residents that storm drains dump directly into your local water body.**

## WATER CONSERVATION

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference – try one today and soon it will become second nature.

- Take short showers – a 5-minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair, and shaving and save up to 500 gallons a month.
- Use a water-efficient showerhead. They are inexpensive, easy to install, and can save you up to 750 gallons a month.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Water plants only when necessary.
- Plant only drought-tolerant plants, preferably noninvasive and indigenous.
- Fix leaking toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- **ALWAYS** turn your water off at your **stop and waste valve** to protect your property from domestic leaks while you are not at home.

Please be aware of any leaks that you may have and periodically check your plumbing for any current, or potential problem that may exist. ***Water conservation should be considered a way of life here in Southern California.***

## DRINKING WATER CONTAMINANTS

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 human activity.

Contaminants that may be present in source water include:

- Microbiological 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, and farming.
- Pesticides and herbicides, which 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 byproducts of industrial processes and petroleum production, and can also come from stormwater runoff, gas stations, and septic systems.
- Radioactive contaminants, that can be naturally occurring or be the result of oil and gas production and mining activities. 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 can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline (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, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. U.S. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

This Consumer Confidence Report (CCR) reflects changes in drinking water regulatory requirements during 2016. All water systems are required to comply with the state Total Coliform Rule. Effective April 1, 2016, all water systems are also required to comply with the federal Revised Total Coliform Rule. The new federal rule maintains the purpose to protect public health by ensuring the integrity of the drinking water distribution system and monitoring for the presence of microbials (i.e., total coliform and E. coli bacteria). The U.S. EPA anticipates greater public health protection as the new rule requires water systems that are vulnerable to microbial contamination to identify and fix problems. Water systems that exceed a specified frequency of total coliform occurrences are required to conduct an assessment to determine if any sanitary defects exist. If found, these must be corrected by the water system.

## BOARD MEETINGS

Regular meetings of the GVMWC Board of Directors are held monthly, typically on the third Monday of the month. Agendas are posted 96 hours in advance at the Water Company bulletin board and on the website at www.GVMWC.org. If planning to attend a board meeting, please provide 24-hour written notice via a written letter or by emailing office@gvmwc.org.

## LEAD AND COPPER

Green Valley Mutual Water Company is currently conducting Lead and Copper tap sampling once a year. We are also conducting a study on the corrosivity of our well water and how it reacts with household plumbing.

### *HOW DOES LEAD GET INTO YOUR DRINKING WATER?*

Lead is unusual among drinking water contaminants in that it seldom occurs naturally in water supplies like rivers and lakes. Lead enters drinking water primarily as a result of the corrosion or wearing away of materials containing lead in household plumbing. These materials include lead-based solder used to join copper pipe, brass, and chrome-plated brass faucets. Brass faucets, fittings, and valves, including those advertised as "lead-free," may contribute lead to drinking water. As of June 19, 1986, new or replaced water service lines and new household plumbing materials could not contain more than 8% lead. Lead content was further reduced on January 4, 2014, with the adoption of the requirement that the amount of lead used in plumbing materials intended for contact with drinking water must be certified as "lead-free" (weighted average of wetted surface cannot be more than 0.25% lead). Consumers should be aware of this when choosing fixtures and take appropriate precautions. Visit the NSF Web site at www.nsf.org to learn more about lead-containing plumbing fixtures. When water stands in lead pipes or plumbing systems containing lead for several hours or more, the lead may dissolve into your drinking water. This means the first water drawn from the tap in the morning, or later in the afternoon after returning from work or school, can contain fairly high levels of lead.

**Health Effects**

**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. Green Valley Mutual Water Company is responsible for providing high-quality drinking water but cannot control the variety of materials used in the plumbing components in homes. 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 are available from the Safe Drinking Water Hotline or at http://www.epa.gov/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/or flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the U.S. EPA Safe Drinking Water Hotline (1-800- 426-4791).**

***How Can I Get Rid of Lead in My Drinking Water?*** **If you do have lead in your drinking water, the best way to get rid of the lead is to replace any pipe, fitting, or fixture that has any lead in it!**

**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 economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

**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 U.S. Environmental Protection Agency (USEPA).

**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 Residual Disinfectant Level (MRDL)**: 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.

**Maximum Residual Disinfectant Level Goal (MRDLG)**: 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.

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

**Secondary Drinking Water Standards (SDWS)**: MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

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

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

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

**ND**: not detectable at testing limit

**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 picogram per liter (pg/L)

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

**TABLE 1 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA**

| Microbiological Contaminants | Highest No. of Detections | No. of months in violation | MCL | MCLG | Typical Source of Bacteria |
|---|---|---|---|---|---|
| | | | | | |
| **Total Coliform Bacteria** | (In a mo.)<br>0 | 0 | 1 sample in a month with a detection | 0 | Naturally present in the environment |
| **Fecal Coliform or *E. coli*** | (In the year)<br>0 | 0 | A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or *E. coli* | 0 | Human and animal fecal waste |

**TABLE 2 – SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER**

| Lead and Copper | Violation Y/N | No. of samples collected | 90th percentile level detected | No. sites exceeding AL | AL | PHG | Typical Source of Contaminant |
|---|---|---|---|---|---|---|---|
| **Lead (ppb)** | **N** | **20** | **7.5 ug/L ppb** | **2*** | **15 ug/L** | **0.2** | Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits |
| **Infants and children who drink water containing lead in excess of the action level may experience delays in their physical or mental development. Children may show slight deficits in attention span and learning abilities. Adults who drink this water over many years may develop kidney problems or high blood pressure.** | | | | | | | |
| **Copper (ppm)** | **N** | **20** | **1.0 mg/L ppm** | **1** | **1.3 mg/L** | **0.3** | Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives |

**TABLE 3 – SAMPLING RESULTS FOR SODIUM AND HARDNESS**

| Chemical or Constituent (and reporting units) | Violation Y/N | Sample Date | Level Detected | Range of Detections | MCL | PHG (MCLG) | Typical Source of Contaminant |
|---|---|---|---|---|---|---|---|
| **Sodium (ppm)** | N | 2020 | Avg. 10.2 | 6.8-18 | none | none | Salt present in the water and is generally naturally occurring |
| **Hardness (ppm)** | N | 2020 | Avg. 94 | 22-170 | none | none | Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring |

| TABLE 4 – SAMPLING RESULTS FOR PRIMARY, SECONDARY, AND OTHER CONSTITUENTS | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Chemical or Constituent** | **Violation Y/N** | **AVG. Level Detected** | **Range of Detections** | **Unit of Measure** | **MCL [MRDL]** | **PHG (MCLG) [MRDLG]** | **Typical Source of Contaminant** |
| **Radioactive Contaminants** | | | | | | | |
| **Gross Alpha** | N | **12.175** | **0-24* 2018** | pCi/L | 15 | None | Erosion of natural deposits. |
| **Uranium** | N | **13.125** | **0-26* 2018** | pCi/L | 20 | 0.43 | Erosion of natural deposits. |
| **Turbidity** | | | | | | | |
| **Turbidity*** | N | 0.83 | 0-1.9 | Units | 5 | N/A | Soil Runoff |
| ***Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality. High turbidity can also hinder the effectiveness of disinfectants** | | | | | | | |

| **Chemical or Constituent (and reporting units)** | **Violation Y/N** | **Sample Date** | **Level Detected** | **Range of Detections** | **MCL** | **PHG (MCLG)** | **Typical Source of Contaminant** |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemical Contaminants** | | | | | | | |
| **Nitrate as N (NO3-N)** | N | 0.26 | 0-0.93 | mg/L(ppm) | 10 | 10 | Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits. |
| **Aluminum (ppm)** | N | 0.024 | 0-0.19 | mg/L(ppm) | 1 | 0.6 | Erosion of natural deposits; residue from some surface water treatment processes |
| **Arsenic* (ppb)** | N | 0.775 ug/L | 0-6.2 ug/L | ug/L(ppb) | 10 ug/L | 0.004 ug/L | Erosion of natural deposits; runoff from orchards; glass and electronics production wastes |
| **Well** | Sample Date | Result | In Service Y/N | ***While your drinking water meets the federal and state standard for arsenic, it does contain low levels of arsenic. The arsenic 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.*** | | | |
| **Meadow #1** | **9/15/2020** | 6.2 ug/L | Y | | | | |
| ***Some people who drink water containing arsenic in excess of the MCL over many years may experience skin damage or circulatory system problems and may have an increased risk of getting cancer.** | | | | | | | |
| **Disinfection Byproducts (Trihalomethanes/Haloacetic Acids)** | | | | | | | |
| **Total Trihalomethanes** | N | 4.7 | 4.7 | ug/L(ppb) | 80 | N/A | Byproduct of drinking water disinfection |
| **Total Haloacetic Acids** | N | ND | ND | ug/L(ppb) | 60 | N/A | Byproduct of drinking water disinfection |
| **REGULATED SECONDARY CONTAMINANTS** | | | | | | | |
| **Iron*** | N | 0.144 mg/L | 0-0.41 mg/L | mg/L(ppm) | 0.3 mg/L | N/A | Leaching from natural deposits; industrial wastes |
| *"Iron was found at levels that exceed the secondary MCL of 0.3 mg/L. The iron MCL was set to protect you against unpleasant aesthetic effects (e.g., color, taste, and odor) and the staining of plumbing fixtures (e.g., tubs and sinks) and clothing while washing. The high iron levels are due to leaching of natural deposits." | | | | | | | |
| **Chloride** | N | 2.475 mg/L | 1.0-5.3 mg/L | mg/L(ppm) | 500 mg/L | N/A | Runoff/leaching from natural deposits; seawater influence |
| **Color** | N | 0.93 Units | 0-7.5 Units | Units | 15 Units | N/A | Naturally occurring organic materials |
| **Manganese** | N | 14.75 ug/L | 0-68 ug/L | ug/L(ppb) | 50 ug/L | N/A | Leaching from natural deposits |
| **Odor-Threshold** | N | 1 Units | 1-1 Units | Units | 3 Units | N/A | Naturally occurring organic materials |
| **Sulfate** | N | 2.15 mg/L | 0.74-5 mg/L | mg/L(ppm) | 500 mg/L | N/A | Runoff/leaching from natural deposits; industrial wastes |
| **Total Dissolved Solids (TDS)** | N | 129 mg/L | 52-210 mg/L | mg/L(ppm) | 1000 mg/L | N/A | Runoff/leaching from natural deposits |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Vanadium** | N | 0.7 ug/L | 0-5.6 ug/L | ug/L(ppb) | N/A | N/A | Runoff/leaching from natural deposits |
| **Zink** | N | 0.0825 mg/L | 0-0.43 mg/L | mg/L(ppm) | 5 mg/L | N/A | Runoff/leaching from natural deposits; industrial wastes |

We on occasion need to purchase water from C.L.A.W.A., Crestline Lake Arrowhead Water Agency.
Typically, we only purchase water for emergencies, (Fires, Broken Mains, Etc.).
The following page is the Water Quality Data from C.L.A.W.A.

CRESTLINE-LAKE ARROWHEAD WATER AGENCY
WATER QUALITY DATA 2020

| TEST RESULTS | | | | | | |
|---|---|---|---|---|---|---|
| Contaminant | Average Level Detected | Range of Levels Detected | Units | MCL | PHG | Major Sources in Drinking Water |
| PRIMARY STANDARDS | | | | | | |
| Total Trihalomethanes* | 38.0* | 24.6-68.6 | ug/L | 80 | N/A | Byproduct of drinking water disinfection |
| Haloacetic Acids* | 5.1* | 0-9.0 | ug/L | 60 | N/A | Byproduct of drinking water disinfection |
| INORGANIC CHEMICALS | | | | | | |
| Fluoride (naturallyoccurring) | 0.05 | 0-.13 | mg/L | 2 | 1 | Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizerand aluminum factories |
| Nitrate (as N) | 0.15 | 0-.62 | mg/L | 10 | 10 | Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of naturaldeposits |
| SECONDARY STANDARDS | | | | | | |
| Chloride | 65.56 | 56-85 | mg/L | 500 | N/A | Runoff/leaching from natural deposits; seawater influence |
| Sulfate | 51 | 41-62 | mg/L | 500 | N/A | Runoff/leaching from natural deposits; industrialwastes |
| Total Dissolved Solids (TDS) | 275 | 240-330 | mg/L | 1000 | N/A | Erosion of natural deposits Soil Runoff |
| OTHER CONSTITUENTS | | | | | | |
| Sodium | 59.44 | 49-71 | mg/L | N/A | N/A | "Sodium" refers to the salt present in the waterand is generally naturally occurring |
| Total Hardness | 93.5 | 81-100 | mg/L | N/A | N/A | "Hardness" is the sum of polyvalent cations present in the water, generally magnesium andcalcium. The cations are usually naturally occurring. |
| Odor - Threshold | 1 | 1-Jan | TON | 3 | N/A | Naturally occurring organic materials |
| Unregulated Contaminants*** | | | | | | |
| Boron | 153.13 | 0-200 | ug/L | 1000 | N/A | Erosion of natural deposits |
| Vanadium | 0 | 0-0 | ug/L | 50 | N/A | Erosion of natural deposits |

| | | | | | | |
|---|---|---|---|---|---|---|
| pH | 8.2 | 7.9-8.4 | UNIT | 6.5-8.5 | N/A | |

*Total Trihalomethanes and Haloacetic Acids are reported as the Highest Locational Running Annual Average.

| SAMPLING RESULTS SHOWING TREATMENT OF SURFACE WATER SOURCES | |
|---|---|
| Treatment Technique (a)<br>(Type of approved filtration technology used) | Conventional Treatment with multimedia pressure filters |
| Turbidity Performance Standards (b)<br>(That must be met through the water treatment process) | Turbidity of the filtered water must:<br>1 – Be less than or equal to _0.3 NTU in 95% of measurements in a month.<br>2 – Not exceed _1.0_ NTU for more than eight consecutive hours.<br>3 – Not exceed _5.0_ NTU at any time. |
| Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1. | 100% |
| Highest single turbidity measurement during the year | 0.7 NTU |
| Number of violations of any surface water treatment requirements | 0 |

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

(b) 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.