



FISHHAWK LAKE RESERVE & COMMUNITY ANNUAL WATER QUALITY REPORT JANUARY 1 - DECEMBER 31, 2017

Fishhawk Lake Reserve and Community is pleased to present to you this year's Annual Water Quality Report. The report is designed to inform customers about water quality and services provided. Our constant goal is to provide customers a safe and reliable supply of drinking water and is committed to ensuring the quality of the drinking water supply. We are pleased to report that the drinking water is safe and meets all Federal and State requirements. The water treatment plant is located on Fishhawk Creek and is considered a surface supply and as such is required to meet a specified degree of treatment. A source assessment is available for customer review. We ask that all customers help us protect our water sources, which are the heart of our community.

We routinely monitor for constituents in the drinking water supply according to Federal and State law. The table shows constituents detected in the drinking water supply for the Communities monitoring period of January 1 to December 31, 2017.

- 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 EPA's Safe Drinking Water Hotline (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, and infants can be particularly at risk from infections. EPA/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 (1-800-426-4791).
- 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. FLRC 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 or at <http://www.epa.gov/safewater/lead>.

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 mineral 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 included:

- 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 stormwater 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 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 gas stations, urban stormwater runoff, 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, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration Regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Some of the monitoring is not performed on an annual basis. See the notes following the table that indicate monitoring intervals that are not annual and the last time monitoring was performed. It should also be noted that we only listed detected constituents.

Terms and abbreviations:

- ND - Non-Detects – Laboratory analysis indicates that the constituent is not present.
- MCL - Maximum Contaminant Level – The highest level of a contaminant allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

- 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 allow for a margin of safety.
- ppm – Parts per million or mg/L - one part per million; corresponds to one minute in two years or a single penny in \$10,000.
- ppb – Parts per billion or Micrograms per liter – one part per billion; corresponds to one minute in 2,000 years or a single penny in \$10,000,000.
- pCi/l - Picocuries per liter; a measure of the radioactivity in water.
- mrem/yr - Millirems per year; a measure of radiation absorbed by the body.
- BFL - Billion fibers per liter; a measure of the presence of asbestos fibers that are longer than 10 micrometers.
- NTU - Nephelometric turbidity unit; a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- Action Level - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

TEST RESULTS

| CONTAMINANT | LEVEL DETECTED | UNIT MEASUREMENT | MCLG | MCL | LIKELY SOURCE OF CONTAMINANT |
|--------------------------------------|-------------------|---------------------|------|-----------|---------------------------------|
| <u>Inorganic Contaminants</u> | | | | | |
| Lead | 0.015 | mg/L | | 0.015 | |
| Copper | 0.029 | mg/L | | 1.300 | |
| Nitrate | ND | ppb | | 10.000000 | |
| VOC's | ND (all 21) | | | | |
| Unregulated VOC's | | | | | |
| - Bromodichloromethane | 0.0047 | mg/L | | | |
| - Chloroform | 0.0496 | mg/L | | | |
| Asbestos (2016) | ND | | | | |

Disinfection By-Product (DBP)

| | | | | | |
|-----------------------|--------|------|--|-------|-------------------------|
| Haloacetic Acids HAA5 | 0.0248 | mg/L | | 0.060 | Disinfected by chlorine |
|-----------------------|--------|------|--|-------|-------------------------|

| | | | | | |
|------|--------|------|--|-------|--|
| TTHM | 0.0582 | mg/L | | 0.080 | |
|------|--------|------|--|-------|--|

Trihalomethanes and Haloacetic Acids. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver and kidneys or central nervous systems, and may increase the risk of getting cancer. Trihalomethanes are required to be monitored annually.

Violations for 2017: Late reporting in November 2017 - Report arrived one day late in mail.

Microbiological Contaminants:

Turbidity has no health effects. However, it can interfere with disinfection and provide a medium for microbial growth, and may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. Proper filter operation is the treatment technique used to reduce turbidity in drinking water. The highest reading for 2017 was 0.407 Ntu on August 9th 2017 (Average was .097 Ntu/day). This was a momentary reading on a higher than normal backwash curve. These occur to varying degrees after backwash of all filters.

* 95% of monthly readings equal to or less than 0.3 NTU and any individual reading more than 1.0 NTU.

Inorganic Contaminants:

Nitrate: Infants below the age of 6 months who drink water containing nitrate in excess of the M.C.L. could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.

Major source of contamination: Run off from Fertilizers, Leaching from Septic Tanks, and Erosion of Natural Mineral Deposits.

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink two liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effects. We've learned through monitoring and testing that some of the constituents have been detected. The EPA has determined that the drinking water IS SAFE at these levels.

If you have any questions about this report or other questions concerning your drinking water or if you want to learn more about the water supply and Operations please contact 503-755-2132 or email communitymanager@fishhawklake.com

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