| SAMPLING RESULTS SHOWING TREATMENT OF SURFACE WATER SOURCES   |  |  |  |  |  |  |  |
|---|--|--|--|--|--|--|--|
| Treatment Technique (Type of approved filtration technology used)                                     | Pall membrane microfiltration with chlorination.   |  |  |  |  |  |  |
| Turbidity Performance Standards <sup>(a)</sup> (that must be met through the water treatment process) | Turbidity of the filtered water must:  1 – Be less than or equal to 0.3 NTU in 95% of measurements in a month.  2 – Not exceed 1.0 NTU for more than eight consecutive hours.  3 – Not exceed 1 NTU at any time. |  |  |  |  |  |  |
| Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.                   | 100%   |  |  |  |  |  |  |
| Highest single turbidity measurement during the year  | 0.045  |  |  |  |  |  |  |
| Number of violations of any surface water treatment requirements                                      | 0  |  |  |  |  |  |  |

(a) 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.

These tables list all of the drinking water contaminants that were detected during 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. The State allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old.

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. More information about contaminants and potential health effects can be obtained by calling the USEPA'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. 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 from the Safe Drinking Water Hotline (1-800-426-4791).

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 2003, the NCSD conducted a source water assessment on the Big Springs source. The source is considered most vulnerable to the following activities: recreational areas, sewer collection systems, automobile repair shops, chemical/petroleum pipelines, and machine shops. These activities are not associated with any detected contaminants.

In order to ensure that tap water is safe to drink, the 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. State Board regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

#### 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, pets 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.
- 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, that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- Radioactive contaminants that can be naturally-occurring or be the result of oil and gas production and mining activities.

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. The NCSD 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 <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.



Northstar Community Services District Northstar Water System Annual Water Quality Report \$\iff 2019 \text{ \infty}\$





This state-mandated annual report contains important information about the quality of your drinking water.

**Our Mission Statement:** The Morthstar Community Services District delivers core public services to enhance the quality of life in the community.

Morthstar Community Services District 900 Morthstar Drive Truckee, CA 96161

## **Dear Customer:**

The Northstar Community Services District (NCSD) is proud to provide some of the nation's cleanest drinking water. In 2019, as in years past, our water met or exceeded all federal and state standards for drinking water. The State of California mandates that we send this Annual Water Quality Report to you, which includes important information about your drinking water.

The NCSD draws its source water from four locations. Two sources are natural mountain springs located in the mid-mountain region of the Northstar California Resort. The water is collected in the Big Springs collection system and Sawmill Flat Springs collection system and then treated at the District's state-of-the-art Water Treatment Facility prior to being delivered to the customers' tap. The other two sources are wells (TH-1 and TH-2) located in the Martis Valley that were developed in 2013 and 2007, respectively, to help meet future water demands as the community continues to expand.

We are committed to delivering the highest quality drinking water, ensuring that our customers receive clean, safe water from their taps.

In 2019, the District delivered roughly 175 million gallons of drinking water through 30 miles of pipeline to over 900 residential and commercial services throughout the Northstar community.

Should you have any questions or would like to obtain additional information, please contact the Northstar Community Services District.

www.northstarcsd.org

#### **KEY WATER QUALITY TERMS**

**AL - Regulatory Action Level:** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which 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 MCLGs as is economically and technologically 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).

MRDL - Maximum Residual Disinfectant Level: The highest level of a disinfectant allowed in drinking water.

MRDLG - Maximum Residual Disinfectant Level Goal: The level of a drinking water disinfectant below which there is no known or expected risk to health.

**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.

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

ppb: parts per billion or micrograms per liter  $(\mbox{\sc ug/L})$ 

ND: Not Detectable at testing limit.

# In case of a water or sewer emergency, please call 530-562-0747



### Want More Information?

The NCSD Board of Directors meets regularly each month. Please feel free to participate in these meetings. For meeting dates, times and locations please contact our main office at (530) 562-0747. You may also find more information by visiting our website:

www.northstarcsd.org

Este informe contiene información muy importante sobre su agua potable.

Tradúzcalo o habla con alguien que lo entienda bien.

| NCSD WATER QUALITY TEST RESULTS THROUGH DECEMBER 31, 2019 |                           |                                  |  |      |                                      |  |  |  |
|---|---------------------------|----------------------------------|--|------|--------------------------------------|--|--|--|
| SAMPLING RESULTS FOR COLIFORM BACTERIA                    |                           |                                  |  |      |                                      |  |  |  |
| Microbiological<br>Contaminant                            | Highest No. of detections | No. of<br>months in<br>violation | MCL  | MCLG | Typical Source of<br>Bacteria        |  |  |  |
| Total Coliform<br>Bacteria                                | (In a mo.)<br>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>                          | (In the year)<br>0        | 0                                | A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or <i>E. coli</i> | 0    | Human and animal fecal waste         |  |  |  |

| SAMPLING RESULTS FOR LEAD AND COPPER     |                          |  |                              |     |     |   |  |  |  |
|--|--------------------------|--|------------------------------|-----|-----|---|--|--|--|
| Lead & Copper<br>(units)<br>Sample Dates | No. of samples collected | 90 <sup>th</sup> % tile<br>level<br>detected | No. sites<br>exceeding<br>AL | AL  | PHG | Typical Source of Contaminant   |  |  |  |
| Lead (ppb)<br>2018                       | 10                       | 2.45   | 0                            | 15  | 0.2 | Erosion of natural deposits; internal corrosion of household water plumbing; discharges from industrial manufacturers |  |  |  |
| Copper (ppm)<br>2018                     | 10                       | 0.069  | 0                            | 1.3 | 0.3 | Erosion of natural deposits; internal corrosion of household plumbing; leaching from wood preservatives               |  |  |  |

| SAMPLING RESULTS FOR SODIUM AND HARDNESS |             |                |                   |      |   |  |  |
|--|-------------|----------------|-------------------|------|---|--|--|
| Chemical or Constituent (units)          | Source      | Sample<br>Date | Level<br>Detected | MCL  | PHG                                     | Typical Source of Contaminant  |  |
| Sodium                                   | Big Springs | 2017           | 3.8               | none | none                                    | Runoff / leaching from natural deposits  |  |
| (ppm)                                    | TH1 / TH2   | 2018/2017      | 22 / 14           |      |   |  |  |
| Hardness                                 | Big Springs | 2017           | 57                | none | none                                    | Runoff / leaching from natural deposits  |  |
| (ppm)                                    | TH1 / TH2   | 2018/2017      | 59 / 93           |      | 100000000000000000000000000000000000000 | The second secon |  |

| DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD |                          |                   |                   |     |       |                               |
|--|--------------------------|-------------------|-------------------|-----|-------|-------------------------------|
| Chemical or Constituent (units)                                  | Source                   | Sample<br>Date    | Level<br>Detected | MCL | PHG   | Typical Source of Contaminant |
| Arsenic<br>(ppb)   | Big Springs<br>TH1 / TH2 | 2017<br>2017/2017 | ND<br>6.7 / 1.4   | 10  | 0.004 | Erosion of natural deposits   |

| DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD |                          |                   |                   |      |      |   |  |  |
|--|--------------------------|-------------------|-------------------|------|------|---|--|--|
| Chemical or Constituent (units)                                    | Source                   | Sample<br>Date    | Level<br>Detected | MCL  | PHG  | Typical Source of Contaminant                               |  |  |
| Chloride<br>(ppm)  | Big Springs<br>TH1 / TH2 | 2017<br>2018/2017 | 0.7<br>8.2 / 4.0  | 500  | none | Runoff / leaching from natural deposits                     |  |  |
| Specific Conductance<br>(µS/cm)                                    | Big Springs<br>TH1 / TH2 | 2017<br>2018/2017 | 134<br>259 / 266  | 1600 | none | Substances that form ions when in water; seawater influence |  |  |
| Sulfate<br>(ppm)   | Big Springs<br>TH1 / TH2 | 2017<br>2018/2017 | 0.4<br>11 / 17.2  | 500  | none | Runoff / leaching from natural deposits                     |  |  |
| Total Dissolved Solids (ppm)                                       | Big Springs<br>TH1 / TH2 | 2017<br>2018/2017 | 91<br>180 / 197   | 1000 | none | Runoff / leaching from natural deposits                     |  |  |

| DISINFECTANTS & DISINFECTION BYPRODUCTS IN THE DISTRIBUTION SYSTEM |                |                   |               |                 |  |  |  |  |  |
|--|----------------|-------------------|---------------|-----------------|--|--|--|--|--|
| Chemical or Constituent (units)                                    | Sample<br>Date | Level<br>Detected | MRDL<br>(MCL) | MRDLG<br>(MCLG) | Typical Source of Contaminant            |  |  |  |  |
| Chlorine Residual (ppm)  | 2019           | 0.60              | 4.0           | 4               | Water additive used to control microbes  |  |  |  |  |
| Total Trihalomethanes (ppb)  | 2019           | 3.2 – 3.5         | (80)          | (N/A)           | Byproduct of drinking water disinfection |  |  |  |  |
| Halocetic Acids (ppb)  | 2019           | 4.9 – 5.7         | (60)          | (N/A)           | Byproduct of drinking water disinfection |  |  |  |  |