TABLE 8-SAMPLING RESULTS SHOWING TREATMENT OF SURFACE WATER SOURCES					
Treatment Technique (a) (Type of approved filtration technology used)	Pall membrane microfiltration with chlorination.				
Turbidity Performance Standards (b) (that must be met through the water treatment process)	Turbidity of the filtered water must:  1 – Be less than or equal to 0.1 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	0.018				
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.
- \* Any violation of a TT is marked with an asterisk. Additional information regarding the violation is provided earlier in this report.

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 Department of Public Health (Department) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department 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>.

OUR MISSION STATEMENT: TO PROVIDE OUR SERVICES TO THE MORTHSTAR COMMUNITY IN A HIGH QUALITY, SAFE, EFFICIENT, PROFESSIONAL, AND COURTEOUS MANNER

## Northstar Community Services District 908 Northstar Drive Northstar, Calif. 96161



Northstar Community Services District Annual Water Quality Report 2011 80

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





## **Dear Customer:**

The Northstar Community Services District (NCSD) is proud to provide some of the nation's cleanest drinking water. In 2011, as in years past, our water met or exceeded 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 two locations. The first source is a natural mountain spring located in the mid-mountain region of the Northstar-at-Tahoe Resort. The water is collected in the Big 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 second source is a well (TH-2) located in the Martis Valley that was developed in 2007 to help meet future water demands as the community continues to expand.

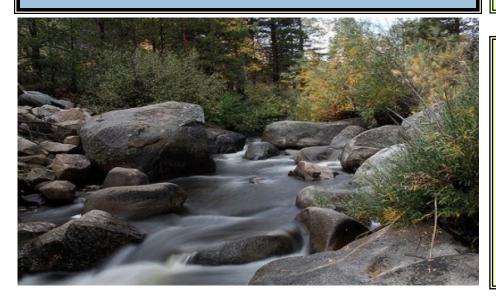
We are committed to delivering the highest quality drinking water, ensuring that our customers receive clean, safe water from their taps.

In 2011 the District delivered over 182 million gallons of drinking water through 30 miles of pipeline to over 1,800 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:

Phone: (530) 562-0747 Fax: (530) 562-1505 www.northstarcsd.com

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



## **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 level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

ND: Not Detectable at testing limit.

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 (ug/L)

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

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 ó hablcon alguien que lo entienda bien.

	POST AND CONTRACTOR OF THE STREET WAY I I	COLUMN CONTRACT OF STATE	TEST RESULTS THROUGH DECE ING RESULTS FOR COLIFORM BA		, 2011
Microbiological Contaminant	Highest No. of detections	No. of months in violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria	(In a mo.) 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) 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

TABLE 2 - SAMPLING RESULTS FOR LEAD AND COPPER							
Lead & Copper (units) Sample Dates	No. of samples collected	90 <sup>th</sup> % tile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant	
Lead (ppb) 2009	20	4.0	0	15	2	Erosion of natural deposits; internal corrosion of household water plumbing; discharges from industrial manufacturers	
Copper (ppb) 2009	20	202	0	1300	170	Erosion of natural deposits; internal corrosion of household plumbing; leaching from wood preservatives	

TABLE 3 - SAMPLE RESULTS FOR SODIUM AND HARDNESS							
Chemical or Constituent (units)	Source	Sample Date	Level Detected	MCL	PHG (MCLG)	Typical Source of Contaminant	
Sodium	Big Springs	2005	5.2	none	none	Generally found in ground & surface	
(ppm)	Well TH2	2007	25.3			water	
Hardness	Big Springs	2005	51	none	none	Generally found in ground & surface	
(ppm)	Well TH2	2007	90			water	

TABLE 4 - DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD								
Chemical or Constituent (units)	Source	Sample Date	Level Detected	MCL	PHG (MCLG)	Typical Source of Contaminant		
Nickel (ppb)	Big Springs Well TH2	2005 2007	11 ND	100	12	Erosion of natural deposits; discharge from metal factories		

TABLE 5 - DETECTION OF CONTAMINANTS WITH A <u>SECONDARY</u> DRINKING WATER STANDARD							
Chemical or Constituent (units)	Source	Sample Date	Level Detected	MCL	PHG (MCLG)	Typical Source of Contaminant	
Chloride (ppm)	Big Springs Well TH2	2005 2007	0.3 4.5	500	none	Substances that form ions when in water; seawater influence	
Specific Conductance (μS/cm)	Big Springs Well TH2	2005 2007	130 262	1600	none	Substances that form ions when in water; seawater influence	
Sulfate (ppm)	Big Springs Well TH2	2005 2007	ND 12.9	50	none	Runoff/leaching from natural deposits; industrial wastes	
Total Dissolved Solids (ppm)	Big Springs Well TH2	2005 2007	101 192	1000	none	Runoff/leaching from natural deposits	

TABLE 6 - DETECTION OF UNREGULATED CONTAMINANTS								
Chemical or Constituent (units)	Source	Sample Date	Level Detected	Notification Level	Typical Source of Contaminant			
Vanadium (ppb)	Well TH2	2007	8.0	50	Runoff/leaching from natural deposits			

TABLE 7 - DISINFECTANTS & DISINFECTION BYPRODUCTS IN THE DISTRIBUTION SYSTEM								
Chemical or Constituent (units)	Sample Date	Level Detected	MCL	MRDL	Typical Source of Contaminant			
Chlorine Residual (ppm)	2011	0.81	4.0	4	Water additive used to control microbes			
Total Trihalomethanes (ppb)	2011	1.2	80	N/A	By-product of drinking water chlorination			
Halocetic Acids (ppb)	2011	ND	60	N/A	By-product of drinking water chlorination			

Tables 1, 2, 3, 4, and 5 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 Department 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.