WHERE DOES OUR DRINKING WATER COME FROM?

Our water comes from a variety of sources including surface water from the Cache la Poudre River basin (Barnes Meadow, Comanche, Hourglass, Peterson, Milton Seaman, and Twin Lake) within the Cache la Poudre River, the Big Thompson River, and the Colorado River. Greeley also uses six high-mountain reservoirs in the Cache la Poudre River basin (Chesler Park Reservoir, Hetzner Lake, Lake Estes, Lake Grant, Kama Reservoir, and Twin Lakes) and two surface reservoirs (Black River Reservoir and Mara Reservoir). In 1907, Greeley built its first water treatment plant and in 1975, it was finished.

WHERE CAN I GET MORE INFORMATION?

If you would like more information about the material covered in this report, you can contact Angela Miles, Regulatory Compliance Coordinator, at 970.350.9209 or, if you’d like to view the report online, visit http://www.greeleygov.com/water and click on Annual Drinking Water Quality Report. You can also access information about drinking water in general on EPW’s drinking water website at http://www.epa.gov/safewater. Additionally, the public is welcome to attend meetings of Greeley’s Water & Sewer Board, which are held on the third Wednesday afternoon of every month at City Hall, located at 1000 10th Street. For more information on times, dates and locations of the Board meetings, please contact Norma Wegher at 970.350.9812.

2004 ANNUAL DRINKING WATER QUALITY REPORT

Welcome to the City of Greeley’s seventh annual Drinking Water Quality Report. The information in this report covers drinking water information from calendar year 2004. This report not only contains important information, it also provides an opportunity for our customers to learn more about their drinking water and why it is essential to monitor and test the quality.

Contaminants Commonly Found in Sources of Drinking Water

The sources of drinking water (both from the tap 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 accumulate substances resulting from the presence of animals or from human activity. Contaminants that may be present in the sources of our drinking water include:

- Microbiological 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 natural processes;
- Pesticides and herbicides that may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses;
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems; and
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production or mining activities.

Important Contact Information

Drought/water conservation line & to report watering violations: 970.336.4134
www.greeleygov.com/waterconservation
Water emergencies daytime: 970.350.9810
Water emergencies after hours: 970.350.9600
Taste & odor concerns: 970.350.9934
Questions about this report: 970.350.9209
www.greeleygov.com/water

Spanish: 970.350.9811

Jon Monson, Director
Water & Sewer Department
cause disease, and it may be spread through means other than drinking water. Cryptosporidium must be ingested to cause disease. Ingestion of cryptosporidium may cause cryptosporidiosis, an abdominal infection. Symptoms of cryptosporidiosis, which may include cramping, may be spread through means other than drinking water. Cryptosporidium is a microbial pathogen that is found in rivers and lakes across the United States. Although filtration removes cryptosporidium, the most commonly used filtration methods cannot guarantee 100% removal. Our monitoring indicates the presence of this organism in finished water reservoirs at the end of that 35 miles of wooden aqueducts to deliver drinking water for its customers. In 1905, the 5,000 or so citizens voted to bond themselves for what was considered to be a good drinking water. In 1907, still Greeley's primary source of drinking water, was built in 1907.

A Word About Cryptosporidium
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Greeley drinking water comes from surface waters located in three major river basins, also called watersheds: the Cache la Poudre River basin (Barnes Meadow, Comanche, Hourglass, Peterson, Milton Seaman, and Twin Lake) within the Cache la Poudre River basin, the Big Thompson River basin (Boyd Lake, Lake Loveland, and Horseshoe Lake) to provide storage for peak summer demands. Finally, Greeley owns a portion of the Colorado-Big Thompson Watershed system consisting of a series of infiltration wells on the Cache la Poudre River, the Big Thompson River, and the Colorado River. Greeley also uses six high-mountain reservoirs in the Cache la Poudre River basin (Barnes Meadow, Comanche, Hourglass, Peterson, Milton Seaman, and Twin Lake) within the Roosevelt National Forest to capture water from spring snowmelt for redistribution during the summer and fall when there is high water demand, but low-river flows. In addition, Greeley uses a plains reservoir system (Boyd Lake, Lake Loveland, and Horseshoe Lake) to provide storage for peak summer demands. Finally, Greeley owns a portion of the Colorado-Big Thompson (C-BT) Project. We store our portion of the water from the C-BT Project in Lake Granby, Horseooth Reservoir, and Carter Lake, which can deliver water to either the Cache la Poudre or Big Thompson River Systems to meet Greeley water demands.

WHERE DOES OUR DRINKING WATER COME FROM?
Greeley's water system consists of two major rivers, the Cache la Poudre River, the Big Thompson River, and the Colorado River. Greeley also uses six high-mountain reservoirs in the Cache la Poudre River basin. A series of infiltration wells on the Cache la Poudre River, the Big Thompson River, and the Colorado River. Greeley also uses six high-mountain reservoirs in the Cache la Poudre River basin. Greeley drinking water comes from surface waters located in three major river basins, also called watersheds: the Cache la Poudre River basin (Barnes Meadow, Comanche, Hourglass, Peterson, Milton Seaman, and Twin Lake) within the Roosevelt National Forest to capture water from spring snowmelt for redistribution during the summer and fall when there is high water demand, but low-river flows. In addition, Greeley uses a plains reservoir system (Boyd Lake, Lake Loveland, and Horseshoe Lake) to provide storage for peak summer demands. Finally, Greeley owns a portion of the Colorado-Big Thompson (C-BT) Project. We store our portion of the water from the C-BT Project in Lake Granby, Horseooth Reservoir, and Carter Lake, which can deliver water to either the Cache la Poudre or Big Thompson River Systems to meet Greeley water demands.
Milligrams per liter (mg/L).

Benefits of the use of a drinking water disinfectant, disinfectant level goal. The level of a disinfectant allowed in drinking water. There is an action level of a disinfectant allowed in drinking water. MCLGs allow for a

AL: Treatment technique. A

ppm: Parts per million, or

TT: Treatment technique. A

ppb: Parts per billion or micrograms per liter (µg/L).

NTU: Nephelometric turbidity unit. A measure of cloudiness.

pCi/l: Pico curies per liter, a measure of radioactivity.

mils/µm: Parts per million, or micrograms per liter (µg/L).

CLARIFICATION OF USE

How is the water treated?

TREATMENT PROCESS

Treated water, the levels detected, and the maximum contaminant levels. As you peruse the tables, you will see that we met all water quality standards despite challenges from drought conditions.

Vulnerable Populations

Imuno-compromised persons, such as those with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune deficiencies.

Additional Monitoring

Every three years, Greeley also monitors a list of more than 100 other regulated contaminants. Greeley last tested for these contaminants in 2003 and none were detected in your drinking water. For a list of the contaminants which we tested but did not detect, please contact the Regulatory Compliance Coordinator at 970.350.9209. In addition, the EPA requires water systems to monitor for certain unregulated (that have no MCL) contaminants. Of the unregulated contaminants, Greeley detected sodium at 18.0 ppm at the Boyd Lake Plant north of Fort Collins.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. Due to an oversight on June 1, 2004, we have every reason to believe that the drinking water was in compliance with the treatment technique standard. We recognized the importance of fulfilling all of the monitoring requirements and had implemented proper procedures to prevent further occurrences. Please share this information with other people who drink this water, especially those who may not receive this water quality report (for example, people in apartments, nursing homes, schools and businesses).

For further information please contact Angela Miles, Regulatory Compliance Coordinator at 970.350.9209.

The final treatment step is disinfection by chlorine gas which kills any remaining viruses and bacteria.

The treated water is then piped to Greeley where it is disinfected and treated.

Step 1 - Flocculation: Chemical enhancers are first mixed into the raw water to allow mud, algae and other particles to stick together.

Step 2 - Sedimentation: The "floc" (coagulated mud, algae, and other particles) sinks to the bottom of sedimentation basins, where it is disposed of at a later time.

Step 3 - Filtration: Next, the water passes through a series of filters, which stop most impurities, like bacteria, from passing through.

Step 4 - Disinfection: The final treatment step is disinfection by chlorine gas which kills any remaining viruses and bacteria.

This report is available on the web at www.greeleygov.com/water.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. Due to an oversight on June 1, 2004, the City of Greeley missed one day of sampling for chlorine dioxide and chloride and therefore did not notify the public in this report. Since chlorine dioxide and chloride values for all of the other days of the year were well within the standards, we are confident that chlorine and chloride to believe that the drinking water was within the standards on June 1 as well. The City of Greeley recognizes the importance of fulfilling all of the monitoring requirements and has implemented proper procedures to prevent further occurrences. Please share this information with other people who drink this water, especially those who may not receive this water quality report (for example, people in apartments, nursing homes, schools and businesses). You can do this by posting this Public Notification in a public place or by distributing copies by hand or mail. For more information about contaminants and potential health effects or to receive a copy of the US EPA/Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants, call the Safe Drinking Water Hotline (800-426-4791).

Online reports show that water quality results are from January 1 - December 31, 2004, unless otherwise indicated.

Key To The Tables

AL: 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 allowed in drinking water below which there are no known health effects. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLG: Maximum contaminant level goal. The highest level of a contaminant allowed in drinking water below which there are no known or expected risks to health. MCLGs allow for a margin of safety.

MRDL: Maximum residual disinfectant level. The highest level of a disinfectant allowed in drinking water. There is convincing evidence that this level 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 are no known or expected risks to health. MRDLGs do not reflect the benefits of using disinfectants to control microbial contaminants.

NTU: Nephelometric turbidity unit. A measure of cloudiness.

pCi/l: Pico curies per liter, a measure of radioactivity.

ppb: Parts per billion or micrograms per liter (µg/L).

ppm: Parts per million, or micrograms per liter (µg/L).

TT: Treatment technique. A

TT</=0.3 100%

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