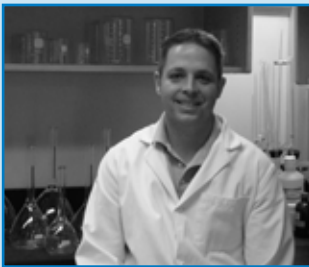


Highlands Ranch

CLEAN & SECURE

Esta es información importante. Si no la pueden leer, necesitan que alguien se la traduzca.

2011 Water Quality Report



Peter Purchase conducts water quality tests.

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For More Information

If you have questions about this report or your water services, please contact Centennial Water at 303-791-2185, ext. 3523. We want you, our valued customer, to be informed about your water utility.

Board meetings are held at the District Office Building, 62 W. Plaza Dr., Highlands Ranch, CO 80129. Please visit www.highlandsranch.org for a board meeting schedule.



Colorado Medication Take-Back Project

More than seven million Americans currently abuse prescription drugs, according to the 2009 Substance Abuse and Mental Health Administration's National Survey on Drug Use and Health. Each day, approximately, 2,500 teens use prescription drugs to get high for the first time according to the Partnership for a Drug Free America. Studies show that a majority of abused prescription drugs are obtained from family and friends, including the home medicine cabinet.

The Colorado Medication Take-Back Project is a network of secure boxes for the collection of unused and unwanted household medications. The boxes offer a secure, convenient and environmentally sound option for the disposal of unused and unwanted household medications, free of charge. The Highlands Ranch location can be found at the King Soopers located at 9951 S. University Blvd.

The detection of trace amounts of medications in wastewater treatment plant effluents and drinking water supplies has raised concerns about potential impacts to ecosystems and human health. Although some of this pollution is caused by metabolized medicines in human and animal waste, a significant portion comes from flushing unwanted drugs and over-the-counter medications. Unused medicines kept in the home also may fall into the hands of children or drug abusers.

People without access to a take-back program or local collection events should avoid flushing medicine down the drain or toilet. Instead, unwanted medicine should be mixed with kitty litter or coffee grounds to make it unusable, and discarded in the household trash. For more information concerning permanent drop-off sites around the metro Denver area, please visit www.coloradomedtakeback.info. For information about pharmaceutical take-back events held throughout the year in Highlands Ranch, please visit www.highlandsranch.org.

Got Drugs?



Colorado Source Water Assessment & Protection (SWAP) Program

The SWAP program was initiated to protect the quality of groundwater and surface water supplies. The Colorado Department of Public Health and Environment (CDPHE) has provided Centennial Water with a SWAP report for both our surface and groundwater supply. You may obtain a copy of the report by visiting www.cdphe.state.co.us/wq/sw/swaphom.html, or by contacting Centennial Water at 303-791-2185, ext. 3523.

Potential sources of contamination in our source water may come from both discrete sources (Environmental Protection Agency (EPA) abandoned contaminated sites, EPA hazardous waste generators, EPA chemical inventory/storage sites, solid waste sites, permitted wastewater discharge sites, aboveground, underground and leaking storage tank sites, existing/abandoned mine site, and other facilities) and from dispersed sources (land use/cover: commercial/industrial/transportation, high/low intensity residential, urban recreation grasses, row crops, fallow, pasture/hay, quarries/strip mines/gravel pits, deciduous forest, evergreen forest, mixed forest, and septic systems, and roads).

The SWAP report provides a screening level of potential contamination that could occur. It does not mean that contamination has or will occur. We can use this information to evaluate the need to improve our current water treatment capabilities and prepare for future contamination threats. This can help us ensure that quality finished water is delivered to your home. In addition, the source water assessment results provide a starting point from which a source water protection plan may be developed.

Centennial Water maintains a variety of programs and procedures to ensure that Highlands Ranch has a safe and secure water supply. For more information about these programs and procedures, or to learn how to help protect your drinking water sources, please visit www.highlandsranch.org, or contact Centennial Water at 303-791-2185, ext. 3523.

2011 Highlands Ranch Water Quality Report

This report is designed to inform you about the quality of the water we deliver every day. Our constant goal is to provide a safe and dependable supply of drinking water. We want you to understand the efforts we make to protect our water resources. We are committed to ensuring the quality of your water. Last year, as in years past, your tap water met all U.S. Environmental Protection Agency (EPA) and state drinking water health standards. Our surface water sources are the South Platte River with diversions through the City Ditch, Nevada Ditch, Last Chance Ditch and South Platte Alluvial Wells, transported to storage in McLellan Reservoir or the South Platte Reservoir. Our secondary water source are non-tributary wells in Denver Basin Aquifers.

Is our community's drinking water regularly tested?

Yes. Centennial Water & Sanitation District routinely monitors constituents in your drinking water according to federal and state laws. The table in this report shows the monitoring results for the period of January 1 through December 31, 2010.

Are there contaminants in drinking water?

All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. *It is important to remember the presence of these contaminants does not necessarily pose a health risk.* Immuno-compromised people such as people with cancer undergoing chemotherapy, people who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly individuals, and infants, can be particularly at risk of infections. These people should seek advice about drinking water from their health care providers. For more information about contaminants and potential health effects, or to receive a copy of the EPA and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and microbiological contaminants, call the EPA *Safe Drinking Water Hotline* at 1-800-426-4791.

Why does drinking water sometimes contain 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 from human activity.

- **Microbial 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, 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 the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

The Water Quality Data Table to the right contains many terms and abbreviations that may be unfamiliar. The following definitions should help you better understand these terms:

- **Action Level (AL):** The concentration of a contaminant, if exceeded, triggers treatment or other requirements a water system must follow.
- **Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
- **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 allow for a margin of safety.
- **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.
- **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.
- **Nephelometric Turbidity Unit (NTU):** Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of five NTU is just noticeable to the average person.
- **Non-Detects (ND):** Laboratory analysis indicates that the constituent is not present. (< Symbol for less than, the same as ND).
- **Parts per billion (ppb):** One part per billion corresponds to one minute in 2000 years, or a single penny in \$10,000,000.
- **Parts per million (ppm):** One part per million corresponds to one minute in two years, or a single penny in \$10,000.
- **PicoCuries per Liter (pCi/L):** A measure of radioactivity in water.
- **Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.
- **Running Annual Average (RAA):** An average of monitoring results for the previous 12 calendar months.
- **Secondary Maximum Contaminant Level (SMCL):** Non-enforceable, recommended limits for substances that affect the taste, odor, color or other aesthetic qualities of drinking water, but do not pose a health risk.

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Results of Lead Monitoring

Pregnant women 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 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 flush your tap for 30 seconds to two minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline at 1-800-426-4791.

Centennial Water & Sanitation District's Water Quality Data Table

PWSID # CO 0118015

The table below lists all of the drinking water contaminants detected during the calendar year of this report. The presence of contaminants in water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done from January 1 to December 31, 2010. According to either EPA or state requirements, certain contaminants may be monitored less than once per year because the concentrations of these contaminants do not change frequently. The state has issued waivers for monitoring asbestos, cyanide, dioxin and glyphosate.

| Regulated Copper and Lead | Results at the 90th Percentile | AL | MCLG | Meets EPA Standards | Likely Source |
|---|-----------------------------------|-----|------|------------------------|---|
| Copper (ppm) (0 of 30 samples exceeded the AL) | 0.27 | 1.3 | 1.3 | Yes | Corrosion of household plumbing systems |
| Lead (ppb) (3 of 30 samples exceeded the AL) | 2.7 | 15 | 0 | Yes | Corrosion of older household plumbing systems |

| Regulated Disinfectants & Disinfection Byproducts | Range | Highest RAA Level | MCL | MCLG | Meets EPA Standards | Likely Source |
|--|-----------------------------|----------------------|-------------|--------------|------------------------|--|
| Chloramines (ppm) | 0.5-3.5 Average = 2.0 | NA | 4 (MRDL) | 4 (MRDLG) | Yes | Water additive used to control microbes |
| Haloacetic Acids (ppb) | 9.8-22.3 Average = 14.9 | 16.4 | 60 | NA | Yes | Byproduct of drinking water disinfection |
| Total Trihalomethanes (ppb) | 14.2-45.4 Average = 29.8 | 30.8 | 80 | NA | Yes | Byproduct of drinking water disinfection |

| Regulated Radioactive Substances | Range | Highest Level | MCL | MCLG | Meets EPA Standards | Likely Source |
|--------------------------------------|---------|------------------|-----------------------|------|------------------------|--|
| Alpha Emitters (pCi/L) | 0.3-0.3 | 0.3 | 15 | 0 | Yes | Erosion of natural deposits |
| Beta/photon Emitters (pCi/L) | 2.1-2.1 | 2.1 | Trigger level = 15 | 0 | Yes | Decay of natural and man-made deposits |
| Radium (combined 226/228) (pCi/L) | 0.1-0.1 | 0.1 | 5 | 0 | Yes | Erosion of natural deposits |

| Regulated Microbiological | Range | Highest Level | MCL | MCLG | Meets EPA Standards | Likely Source |
|--|--------|------------------|-----|------|------------------------|--------------------------------------|
| Total Coliform (% positive samples/month) | ND-1.1 | 1.1 | 5 | 0 | Yes | Naturally present in the environment |

| Regulated Turbidity | Sample Date | Level Found | TT Requirement | Likely Source |
|---------------------|----------------------------------|--|---|---------------|
| Turbidity (NTU) | 5-3-10 10-18-10 10-19-10 | Highest single measurement: 0.09 | Maximum 1 NTU for any single measurement. | Soil runoff |
| Turbidity (%) | Months: January - December | Lowest monthly percentage of samples meeting TT requirements for our technology: 100% | In any month, at least 95% of samples must be less than 0.3 NTU. | Soil runoff |

2011 Highlands Ranch Water Quality Report

| Disinfection Byproducts | Compliance Description | | | | Requirement | Likely Source |
|-------------------------|---|--|--|--|-------------|--|
| Total Organic Carbon | We used enhanced treatment to remove the required amount of natural organic material and/or we demonstrated compliance with alternative criteria. | | | | TT | Natural organic material that is present in the environment. |

| Regulated Organic and Inorganic Substances | Range | Highest Level | MCL | MCLG | Meets EPA Standards | Likely Source |
|--|---------|---------------|-------|-------|---------------------|---|
| Barium (ppb) | 65-65 | 65 | 2,000 | 2,000 | Yes | Erosion of natural deposits |
| Selenium (ppm) | 1.1-1.1 | 1.1 | 50 | 50 | Yes | Erosion of natural deposits, discharge from mines |
| Fluoride (ppm) | 0.9-0.9 | 0.9 | 4 | 4 | Yes | Erosion of natural deposits |

| Other Monitoring | Range | Highest Level | MCL | MCLG | Likely Source |
|------------------------------|---------|---------------|------------|------|--------------------------------------|
| Nickel (ppb) | 3.5-3.5 | 3.5 | NA | NA | Naturally present in the environment |
| Sodium (ppm) | 47-47 | 47 | NA | NA | Naturally present in the environment |
| Total Dissolved Solids (ppm) | 382-382 | 382 | 500 (SMCL) | NA | Erosion of natural deposits |



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