# Todd Creek Village Metropolitan District 2012 Drinking Water Consumer Confidence Report (CCR) For Calendar Year 2011

#### Public Water System ID: CO0101157

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

We are pleased to present to you this year's water quality report. Our constant goal is to provide you with a safe and dependable supply of drinking water. Please contact **Denise Vineyard** at **303-637-0344** with any questions about the Drinking Water Consumer Confidence Report or for public participation opportunities that may affect the water quality.

#### General Information

All 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 Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791) or by visiting http://water.epa.gov/drink/contaminants. 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 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 U.S. Environmental Protection Agency (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).

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

In order to ensure that tap water is safe to drink, the Colorado Department of Public Health and Environment prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

### Lead in Drinking Water

If present, elevated levels of lead can cause serious health problems (especially for pregnant women and young children). 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 lead in your water, you may wish to have your water tested. 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. Additional information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.

## Our Water Source(s)

The Colorado Department of Public Health and Environment has provided us with a Source Water Assessment Report for our water supply. You may obtain a copy of the report by visiting <a href="http://www.cdphe.state.co.us/wq/sw/swapreports/swapreports.html">http://www.cdphe.state.co.us/wq/sw/swapreports/swapreports.html</a>, clicking on Adams County and selecting 101157; Todd Creek Village Metropolitan District or by contacting Denise Vineyard at 303-637-0344. For general information about Source Water Assessment please visit

http://www.cdphe.state.co.us/wq/sw/swaphom.html.

Potential sources of contamination in our source water area come from:

Follow, small grains, pasture/hay, oil/gas, wells and road miles.

The Source Water Assessment Report provides a screening-level evaluation of potential contamination that <u>could</u> occur. It <u>does not</u> mean that the contamination <u>has or will</u> 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 homes. In addition, the source water assessment results provide a starting point for developing a source water protection plan.

Please contact **Denise Vineyard** at 303-637-0344 to learn more about what you can do to help protect your drinking water sources, any questions about the Drinking Water Consumer Confidence Report, to learn more about our system, or to attend scheduled public meetings. We want you, our valued customers, to be informed about the services we provide and the quality water we deliver to you every day.

### Our Water Source(s)

Source	Source Type	Water Type	Location
WELL AL 1	Well	Groundwater UDI Surface Water	N/A
WELL AL 2	Well	Groundwater UDI Surface Water	N/A
WELL NO 3	Well	Groundwater	N/A
WELL NO 7	Well	Groundwater	N/A

#### Terms and Abbreviations

- Maximum Contaminant Level Goal (MCLG) The 'Goal' is 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 Contaminant Level (MCL) The 'Maximum Allowed' is 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.
- Treatment Technique (TT) A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.
- Action Level (AL) The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- 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.
- Average of Individual Samples (No Abbreviation) The typical value. Mathematically it is the sum of values divided by the number of samples.
- Range of Individual Samples (No Abbreviation) The lowest value to the highest value.
- Number of Samples (No Abbreviation) The number or count of values.
- Gross Alpha, Including RA, Excluding RN & U (No Abbreviation) This is the gross alpha particle activity compliance value. It includes radium-226, but excludes radon 222 and uranium.
- Variance and Exemptions (V/E) Department permission not to meet an MCL or a treatment technique under certain conditions.
- Parts per million = Milligrams per liter (ppm = mg/L) One part per million corresponds to one minute in two years or a single penny in \$10,000.
- Parts per billion = Micrograms per liter (ppb = ug/L) One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- Parts per trillion = Nanograms per liter (ppt = nanograms/L) One part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.
- Parts per quadrillion = Picograms per liter (ppq = picograms/L) One part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000.
- Picocuries per liter (pCi/L) Picocuries per liter is a measure of the radioactivity in water.
- Nephelometric Turbidity Unit (NTU) Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- Not Applicable (N/A) Does Not Apply.
- Violation (No Abbreviation) A failure to meet a Colorado Primary Drinking Water Regulation.
- Formal Enforcement Action (No Abbreviation) An escalated action taken by the State (due to the number and/or severity of violations) to bring a non-compliant water system back into compliance by a certain time, with an enforceable consequence if the schedule is not met.

# **Detected Contaminant(s)**

Todd Creek Village Metropolitan District routinely monitors for contaminants in your drinking water according to Federal and State laws. The following table(s) show all detections found in the period of January 1 to December 31, 2011 unless otherwise noted. The State of Colorado requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. Therefore, some of our data, though representative, may be more than one year old. Violations and Formal Enforcement Actions, if any, are reported in the next section of this report.

**Note:** Only detected contaminants sampled within the last 5 years appear in this report. If no tables appear in this section, that means that Todd Creek Village Metropolitan District did not detect any contaminants in the last round of monitoring.

Contaminant Name	Monitoring Period	90th Percentile	Number of Samples	Unit of Measure	Action Level	Sample Sites Above Action Level	Typical Sources
COPPER	01/01/2008 to 12/31/2010	0.525	10	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits.
LEAD	01/01/2008 to 12/31/2010	1	10	ppb	15	0	Corrosion of household plumbing systems; Erosion of natural deposits.

Contaminant Name	Year	Average of Individual Samples	Range of Individual Samples (Lowest - Highest)	Number of Samples	Unit of Measure	MCL	MCLG	MCL Violation?	Typical Sources
CHLORITE	2010	0.139	0 - 0.346	9	ppm	1	0.8	No	By-product of drinking water disinfection.
TOTAL HALOACETIC ACIDS (HAA5)	2011	6.012	4.88 - 7.18	4	ppb	60	N/A	No	By-product of drinking water disinfection.
ТТНМ	2011	14.325	10 - 23.4	4	ppb	80	N/A	No	Byproduct of drinking water disinfection.

Turbidity Sampled at the Entry Point to the Distribution System									
Contaminant Name	Sample Date	Level Found	TT Requirement	TT Violation?	Typical Sources				
TURBIDITY	Date:	Highest single measurement: 0.07 NTU	Maximum 1 NTU for any single measurement	No	Soil Runoff				
TURBIDITY	Month: December, 2011	Lowest monthly percentage of samples meeting TT requirement for our technology: 100%	In any month, at least 95% of samples must be less than 0.3 NTU	No	Soil Runoff				

		Regula	ted Contaminants Sai	mpled at th	e Entry Poi	nt to the	Distribu	tion System	
Contaminant Name	Year	Average of Individual Samples	Range of Individual Samples (Lowest - Highest)	Number of Samples	Unit of Measure	MCL	MCLG	MCL Violation?	Typical Sources
BARIUM	2009	0.014	0.013 - 0.014	2	ppm	2	2	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
CHROMIUM	2009	1.35	0 - 2.7	2	ppb	100	100	No	Discharge from steel and pulp mills; Erosion of natural deposits.
FLUORIDE	2010	0.93	0.93 - 0.93	1	ppm	4	4	No	Erosion of natural deposits; Water additive that promotes strong teeth Discharge from fertilizer and aluminum factories.
NITRATE	2011	0.3	0.3 - 0.3	J	ppm	10	10	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
NITRITE	2007	0.065	0 - 0.13	2	ppm	1	1	No	Runoff from fertilizer use Leaching from septic tanks, sewage; Erosion of natural deposits.

Radionuclides Sampled at the Entry Point to the Distribution System										
Contaminant Name	Year	Average of Individual Samples	Range of Individual Samples (Lowest - Highest)	Number of Samples	Unit of Measure	MCL	MCLG	MCL Violation?	Typical Sources	
COMBINED RADIUM (-226 & -228)	2008	0.7	0.7 - 0.7	1	pCi/L	5	0	No	Erosion of natural deposits.	

	Secondary Contaminants**								
Contaminant Name	Year	Average of Individual Samples	Range of Individual Samples (Lowest - Highest)	Number of Samples	Unit of Measure	Secondary Standard			
SODIUM	2009	89.5	85 - 94	2	ppm	N/A			
TDS	2008	574	574 - 574	1	ppm	500			

<sup>\*\*</sup>Secondary standards are non-enforceable guidelines for contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor or color) in drinking water. EPA recommends these standards but does not require water systems to comply.

Radionuclides	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source	
COMBINED RADIUM (-226 & -228)	1/2/2005	0.7	0.7	pCi/L	5		Erosion of natural deposits	
GROSS ALPHA, EXCL. RADON & U	1/2/2005	1.3	1.3	pCi/L	15	0	Erosion of natural deposits	
GROSS BETA PARTICLE ACTIVITY	1/2/2005	4.9	4.9	pCi/L	4	0	Decay of natural and man-made deposits	
RADON	1/2/2005	97	97	PCI/L				
Secondary Contaminants/ Other Monitoring		Collection Date	Highest Value		Range	Unit	Secondary Standard	
TDS		2/18/2008	574		574	MG/L	500	

### **Health Information About Water Quality**

Infants 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 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800)426-4791.

Radon is a radioactive gas that you cannot see, taste, or smell. It is found in the soil throughout the United States. Radon can move up through the ground and into a home through cracks and holes in the foundation. Radon can reach high levels in all types of homes. Radon can also be released from tap water from showering, washing dishes, and other household activities. Compared to radon entering the home through the soil, radon entering the home through tap water will be, in most cases, a small source of radon in indoor air. Radon is a known human carcinogen. Breathing air that contains radon can lead to lung cancer. Drinking water that contains radon may also cause increased risk of stomach cancer. If you are concerned about radon in your home, test the air in your home. Testing is inexpensive and easy. Fix your home if the level of radon in your air is four (4) picocuries per liter of air (pCi/L) or higher. There are simple ways to fix a radon problem that are relatively inexpensive. For additional information, call the state radon program at 303-692-3030 or call the EPA Radon Hotline 1-800-SOS-RADON.

Certain minerals are radioactive and may emit forms of radiation known as photons and beta radiation. Some people who drink water containing beta particle and photon radioactivity in excess of the MCL over many years may have an increased risk of getting cancer.

# Violation(s) and Formal Enforcement Action(s)

Violations

No Violations to Report

Formal Enforcement Actions

No Formal Enforcement Actions to Report