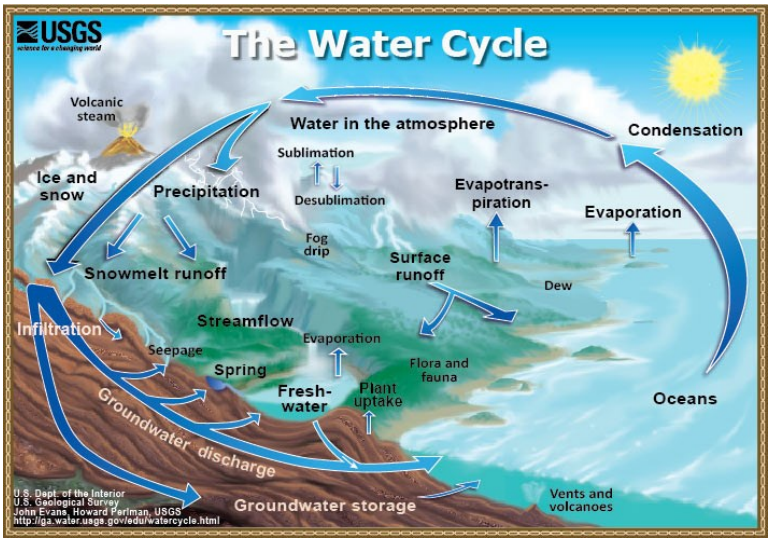
Water Quality Consumer Confidence Report

For samples collected during 2012 in the Applegate Water System

PCWA Water is Safe and Healthy

Placer County Water Agency is proud to supply safe and healthy water. We are pleased to report this year - as we have each and every year since 1991 - that the drinking water supplied to you meets or exceeds state and federal public health standards for drinking water quality and safety. California water retailers, including PCWA, are required by law to inform customers about the quality of their drinking water. The results of PCWA's testing and monitoring programs of 2012 are reported in this newsletter. If you have any questions about this report, please contact the PCWA Customer Services Center at (530) 823-4850 or (800) 464-0030.



Ensuring The Safety of Your Drinking Water

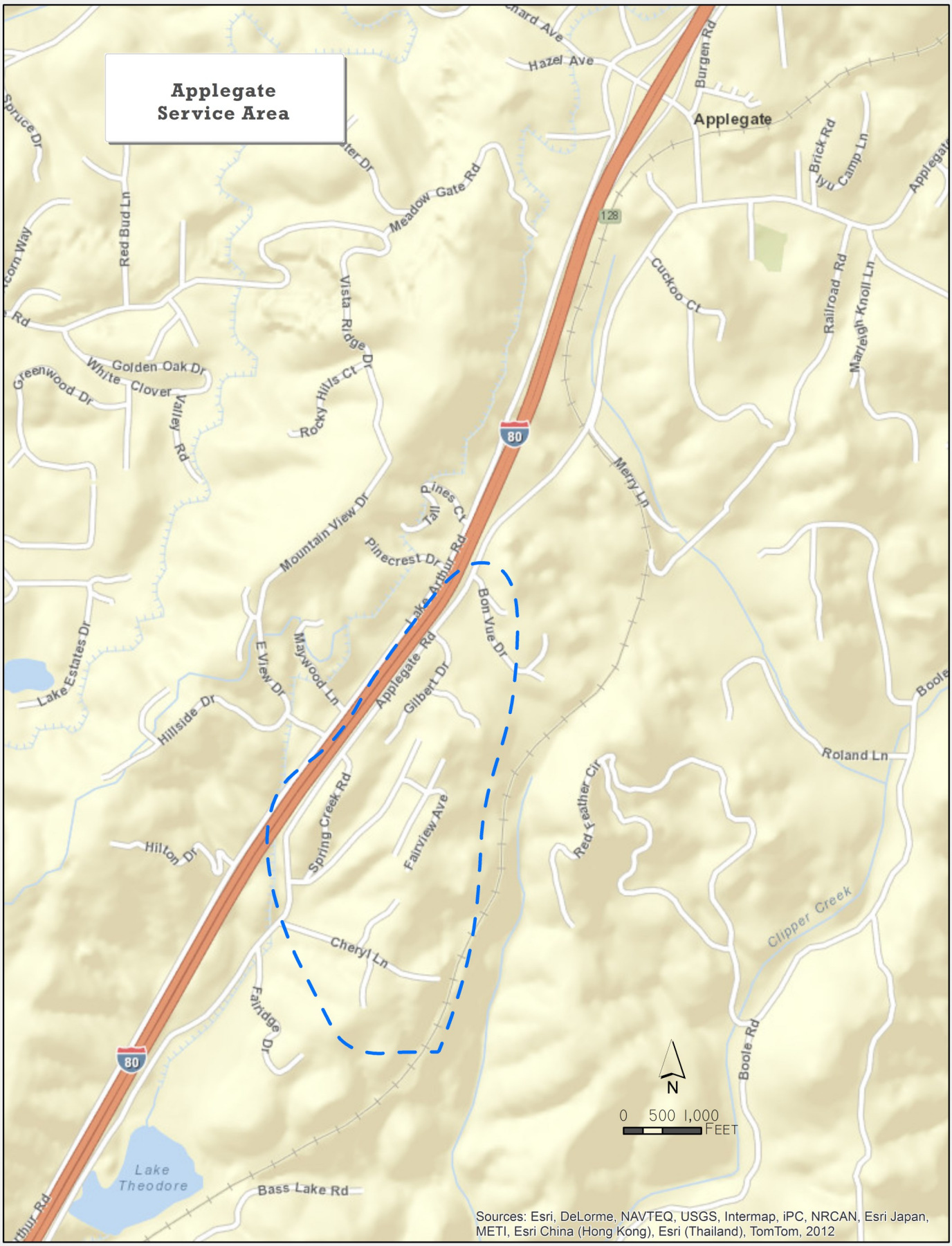
In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the California Department of Public Health prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. State regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

About Your Drinking Water

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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the U.S. Environmental Protection Agency's **Safe Drinking Water Hotline: 1-800-426-4791**

The Source of Your Water Supply

Your water originates in the Sierra snowpack. Surface water from the Yuba and Bear River watersheds and Lake Spaulding flows into the PG&E and PCWA delivery systems. The water is treated at the water treatment plant listed in this report. PCWA has completed and updated a Sanitary Survey and Source Water Assessment of the Yuba-Bear River watershed (2012). It was found the watershed was vulnerable to contaminants from highways, roadways and railroads near rivers and canals, septic tanks, utility pipelines crossing canals, upstream recreation, historic and active mining operations, utility operations, and timber harvest. Contaminants associated with these activities that could pose a threat to source water include but are not limited to sediment, bacteria, viruses, parasites, pesticides, herbicides and trace metals. Historically, contaminant levels have been very low in the source water and watershed. Full details of the Source Water Assessment may be seen at the Placer County Water Agency Business Center, 144 Ferguson Road, in Auburn.


Applegate
Service Area
Applegate
Hazel Ave
Burgen Rd
Brick Rd
Meadow Gate Rd
Red Bud Ln
Vista Ridge Dr
Cuckoo Ct
Railroad Rd
Marleigh Knoll Ln
Golden Oak Dr
White Clover
Greenwood Dr
Valley Rd
Rocky Hills Ct
Merry Ln
Mountain View Dr
Pinecrest Dr
Lake Arthur Rd
Bon Vue Dr
Lake Estates Dr
E View Dr
Maywood Ln
Applegate Rd
Gilbert Dr
Hillside Dr
Roland Ln
Spring Creek Rd
Fairview Ave
Red Feather Cir
Hilton Dr
Clipper Creek
Cheryl Ln
Fairridge Dr
Boole Rd
Lake Theodore
Bass Lake Rd
80
128
N
0 500 1,000
FEET
Sources: Esri, DeLorme, NAVTEQ, USGS, Intermap, iPC, NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, 2012

Applegate Water Quality Results

Primary Drinking Water Standards

Turbidity Performance Standards (that must be met through the water treatment process)

Turbidity is a measurement of clarity or the level of suspended matter in the water. In reporting turbidity, the highest single measurement and the lowest monthly percentage of samples meeting the turbidity limits are specified.

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 NTU at any time.

Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1	**100%**
Highest single turbidity measurement during the year	**0.14**
Number of violations of any surface water treatment requirements	**0**

CONSTITUENT	UNITS	MCL or [MRDL]	PHG, (MCLG) or [MRDLG]	PCWA Range and Average or (HRAA)	Typical Source of Contaminant
Total Trihalomethane	ug/L	80	None	51.0-71.0 (62.0)	Byproduct of drinking water disinfection
Total Haloacetic Acids	ug/L	60	None	27.0-41.0 (38.0)	Byproduct of drinking water disinfection
Chlorine	mg/L	[4]	[4]	0.29-1.03 (0.67)	Drinking water disinfectant added for treatment
Total Organic Carbon	mg/L	TT=RAA<2	None	0.99-1.3 (1.2)	Various natural and manmade sources

Secondary Drinking Water Standards

Total Dissolved Solids	mg/L	1,000	None	37	Runoff / leaching from natural deposits
Specific Conductance	uS/cm	1,600	None	51-54 52.5	Substances that form ions when in water
Chloride	mg/L	500	None	4.3	Runoff / leaching from natural deposits
Sulfate	mg/L	500	None	0.94	Runoff / leaching from natural deposits
Odor	units	3	None	1	Naturally-occurring organic materials

Monitoring of Unregulated Substances

Sodium	mg/L	None	None	5.3	Runoff / leaching from natural deposits
Hardness	mg/L	None	None	11	Runoff / leaching from natural deposits

DEFINITIONS: Understanding Your Water Quality Report

MCL: Maximum Contaminant Level. The highest level of a contaminant that is allowed in drinking water. Primary MCL's are set as close to the PHG's (or MCLG's) as is economically and technologically feasible. Secondary MCL's 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. Set by the U.S. Environmental Protection Agency.

MRDL: Maximum Residual Disinfectant Level. 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.

MRDLG: Maximum Residual Disinfectant Level Goal. The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Primary Drinking Water Standard. MCL's and MRDL's for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

PHG: Public Health Goal. The level of a contaminant in drinking water below which there is no known or expected risk to health. PHG's are set by the California Environmental Protection Agency.

AL: Action Level. The concentration of a contaminant, which if exceeded, triggers treatment or other requirements which a water system must follow.

NTU: Nephelometric Turbidity Units. A measure of the clarity of water. Turbidity is monitored because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.

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

pCi/L: picocuries per liter. A measure of radiation.

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

ug/L: micrograms per liter or parts per billion (ppb)

uS/cm: MicroSiemens per centimeter

RAA: Running Annual Average

HRAA: Highest Running Annual Average

<: Less Than

ND: ND or Non-Detected: An analysis result below detectable levels.

NA: Non-Applicable

Environmental Influences on Drinking Water

The sources of drinking water (both 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 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, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

• **Inorganic contaminants**, such as salt and metals, which can be naturally-occurring or result from urban storm water 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 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 storm water 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.

Statement on Lead

(none found in this system)

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. PCWA 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 http://www.epa.gov/safewater/lead.

Note to At-Risk Water Users

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-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 at (800) 426-4791.

What You Should Know About Cryptosporidium

Cryptosporidium is a microbial pathogen found in most surface waters throughout the U.S.. Although filtration removes Cryptosporidium, the most commonly used filtration methods cannot guarantee 100 percent removal. Placer County Water Agency tested the untreated source water for Cryptosporidium from 2008-2010. Our monitoring indicates the presence of these organisms in our source water in ranges from non-detected to 0.711 organisms per liter. Again, these results are for the untreated, raw water. The design of the EPA study conducted here did not call for treated water samples. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of Cryptosporidium may cause an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks; however, immune-compromised people are at greater risk of developing life-threatening illness. We encourage immune-compromised individuals to consult their health care provider regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water.

2012 Testing Results

Measurements reported here were collected in 2012 (unless otherwise noted). In accordance with federal regulations, data is from the most recent tests. We are allowed to monitor for some contaminants less than once per year because concentrations of these contaminants do not change frequently.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

Frequently Asked Questions About Water Quality

It is important for you to know that we take our customers' concerns very seriously. We feel that you wouldn't be calling if there weren't cause for concern, so we investigate every claim fully and in a timely manner before closing a case. Below are some answers to the most common questions or concerns. You may find that this information solves your issue, but please feel free to call the numbers listed below if you feel it does not. FOR INFORMATION on water quality or questions about this report, PCWA customers are invited to contact the PCWA Customer Service Center at (530) 823-4850 or (800) 464-0030.

Do we have hard water?

No, at less than 20 mg/L (milligrams per liter) PCWA water is on the low end of soft water. General guidelines for classification of waters are: 0 to 60 mg/L as calcium carbonate is classified as soft; 61 to 120 mg/L as moderately hard; 121 to 180 mg/L as hard; and more than 180 mg/L as very hard.

Is there Fluoride in my water?

PCWA does not fluoridate its water. There is a very small portion of the City of Rocklin, which receives water from the City of Roseville during high demand in warm months only. In addition, our Bianchi system receives Roseville water at all times. Roseville is required to fluoridate its water. To find maps of these areas, you can go to:

http://www.pcwa.net/water-resources/water-quality.html

My water smells like Chlorine!

Chlorine is required in the distribution system to keep bacteria from making it to your tap. We regulate our Chlorine dosage very strictly so that we have just enough without having too much. The maximum level for Chlorine is 4 mg/L (milligrams per liter), and a common level for our systems is between 0.5 and 1 mg/L. Some people are more sensitive to the smell of Chlorine in water. It is common for people to think that the level of the Chlorine must be too high under these circumstances; however, we've found that the most common reason for smelling Chlorine at your tap is when the Chlorine is dissipating or the level is dropping. The reason for this is that the water sits in your plumbing before you use it. Most likely, if you flush your taps out, the smell will disappear.

Why is my tap water milky or cloudy?

This is caused by tiny air bubbles in the water. It is completely harmless. Cold water from snowmelt has the potential to hold lots of air. As the water warms a bit on its way to your tap, it has more potential to release that air. When you turn on your tap, the rapid reduction in pressure causes the air to come out of solution, and creates the milky look you see. If this is the case, it will clear before your eyes as in the picture.

How do I know my water is safe?

Distribution operators and treatment plant operators certified by the California Department of Public Health collect hundreds of bacteriological samples each year throughout the water distribution systems as well as performing thousands of individual tests in the treatment facilities and in the distribution system, of which the only the detected constituents are found in your annual Consumer Confidence Report. Field tests for things like temperature, turbidity, pH and chlorine residual help to let us know that our water is maintaining its quality throughout the distribution system.

Frequently Asked Questions About Water Quality

Continued...

My water is dirty!

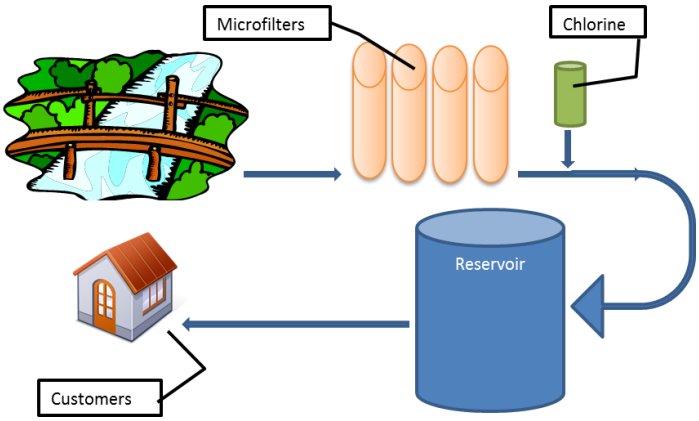
It is actually very common for people to experience discolored or "dirty" water at their tap. In most cases, we can trace this condition to a particular aspect of the household plumbing. It is very common for a water heater to corrode or rust and cause discolored water in the hot water. You can test this by turning your tap to the full hot position and observe whether the water is discolored. If the water is discolored in your hot water, but not cold, you can be reasonably certain the issue lies in your water heater. If the problem occurs in the cold water as well, and doesn't clear up after running for a few minutes, we may need to flush the main line. If you get discolored water out of your cold water tap and it clears up after running for several minutes, the main line is likely clean and you may have a plumbing fixture or an old galvanized line causing the problem.

Why are there pink or dark stains in my toilet or around my drains?

Airborne organisms are usually the cause. You will see grey, black, or sometimes pink filmy stains on surfaces that are regularly moist, including toilet bowls, shower heads, shower drains, sink drains, dishwashers, shower and bath floors and walls. These organisms are not in the drinking water, but they find moist areas of your house to thrive. The only way to control these organisms is to disinfect the surfaces regularly, and ventilate the area well.

How is my water treated?

Your water is treated by micro membrane filtration and disinfection. The facility or facilities serving your area are operated by California Department of Public Health certified operators. It may also be comforting for you to know that our facilities have built-in fail-safes which will immediately shut the treatment process down and not allow any water to the system if something within the facility is not operating correctly. The operators receive alarms for immediate intervention so they can correct the problem and begin treating water again.



My water tastes like chemicals!

Another common call we get is that the water has a strong chemically taste all of a sudden. Most times, this can be traced to the either the Chlorine topic covered earlier, or to a hose bib being left on. This is most common during warm times of year when the hot sun beats down on a pressurized hose and creates backpressure. When you open a tap inside the house, you can be sure that high pressure hose water feeds right into your house, and it doesn't taste good. The best way to avoid this is to always shut your hose off at the hose bib shut-off valve, and depressurize your hose. For this reason, it is not a good idea to have your hose bib set up as it is in the picture.