



WATER QUALITY REPORT

2009

FROM THE CITY OF COPPERAS COVE

The 2009 Annual Report on Drinking Water Quality describes the Public Water System of the City of Copperas Cove, its water source and quality of our water supply. This report also conforms to the new Federal regulation to provide this annually. The City supported the passage of this regulation and we believe this information provides a valuable service to our customers.

In this report we attempt to balance your right to know against the sheer volume of information that we could provide. If some of this information appears complex, it is because drinking water is a complex business.

Our goal is to provide you with the best and safest drinking water that we can. The City's water system has been rated as a Superior Water System by the Texas Commission on Environmental Quality (TCEQ), the regulatory agency for the State of Texas.

Safe drinking water is our main concern for our customers. ***The bottom line is this: Out water is safe to drink. We have no water quality violations and our water quality meets, or is better than, State and Federal standards.***

The information in this report is also submitted to the TCEQ and to the United States Environmental Protection Agency (EPA). Both agencies monitor our compliance with the many regulatory standards and testing protocols required to assure safe drinking water.

For More Information About This Report Contact

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Director of Water/Wastewater
254-547-0751

TCEQ
<http://www.tceq.state.tx.us>

Daniel Hawbrecker
Water Department Superintendent
254-547-2416

PUBLIC PARTICIPATION OPPORTUNITIES

The City of Copperas Cove is Mayor/Council governed, to participate in meetings, call 254-547-4221.

COUNCIL MEETS THE FIRST & THIRD TUESDAYS OF EACH MONTH
UNLESS OTHERWISE POSTED.
COUNCIL MEETINGS START AT 7:00 P.M.

FOR MORE WATER QUALITY INFORMATION

Bell County W.C.I.D. #1
201 South 38th St
254-501-9243
<http://www.bellco-wcid.org>

TCEQ
<http://www.tceq.state.tx.us>

EPA Safe Drinking Water
Hotline 1/800-426-4791
<http://www.epa.gov/OW>

En Espanola

Estereporte incluye informacion importante sobre el agua para tomar.
Para obtener una copia de esta informacion traducida al Espanola,
favor de llamar al telefono - (254) 547-0751.

Other non-English speaking
customers requiring translation,
please call - (254) 547-0751

CITY OF COPPERAS COVE **SERVICE AREA**

The City of Copperas Cove obtains all of its water, pre-treated from Bell County Water Control and Improvement District #1 (BCWCID #1) from Lake Belton surface water supply. A Source Water Susceptibility Assessment for Belton lake has been updated by the Texas Commission on Environmental Quality (TCEQ) and is available at their Austin office. The report will describe the susceptibility and types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. The information contained in the assessment will allow us to focus our source water protection strategies. For more information on source water assessments and protection efforts at our system, please contact us.

The City's Water Distribution System starts at a 500,000 gallon ground storage tank located in Killeen. From there, two sets of supply pumps convey water through two different parallel transmission lines. One is a twenty (20") inch line, and the other is a thirty (30") line. Once the water reaches Copperas Cove, it is distributed to twelve (12) storage tanks for a combined storage of 7.60 million gallons.

Within the City, the Water Distribution Department maintains over 200 miles of water lines of various sizes, 1,000 fire hydrants, pumps/motors, and approximately 12,000 water meters. In addition, the City supplies water to Topsey Water Corporation, Cedar Grove Mobile Home Park, and Central Texas College.

The City is currently able to purchase up to 13.5 million gallons of water per day from BCWCID #1.

STATE AND FEDERAL AGENCIES MONITOR WATER QUALITY

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

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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling EPA's Safe Drinking Water Hotline at 1-800-426-4791.



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, agriculture livestock operations, and wildlife.

Inorganic contaminants, such as salts 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, which 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, and septic systems.

Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

About the following pages

The pages that follow list all of the federally regulated or monitored constituents which have been found in your drinking water. The United States Environmental Protection Agency requires water systems to test up to 97 constituents. Listed are constituents that were detected in your drinking water.

SPECIAL NOTICE FOR THE ELDERLY, INFANTS, CANCER PATIENTS, PEOPLE WITH HIV/AIDS OR OTHER IMMUNE DISORDERS

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. EPA/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 (800-426-4791).

IMPORTANT DEFINITIONS

Maximum Residual Disinfectant Level Goal (MRDLG)

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 contamination.

Maximum Residual Disinfectant Level (MRDL)

The highest level of disinfectant allowed in drinking water.

There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Contaminant Level (MCL)

The highest level of a contaminant that is allowed in drinking water.

The MCL's are set as close to the MCLG's as feasible using the best 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.

MCLG's allow for a margin of safety.

Treatment Technique (TT)

A required process intended to reduce the level of a contaminant in drinking water.

Action Level (AL)

Used in place of MCL's. Triggers additional requirements but exceeding action levels does not constitute a violation as does exceeding a MCL.

NTU - nephelometric Turbidity Units

MFL - million fibers per liter

Pci/l - picocuries per liter (a measure of radioactivity)

ppm - parts per million, or milligrams per liter (mg/l)

ppb - parts per billion, or micrograms per liter (ug/l)

ppt - parts per trillion, or nanograms per liter

ppq - parts per quadrillion, or picograms per liter

CRYPTOSPORIDIUM MONITORING INFORMATION

Cryptosporidium is a microbial pathogen that may be found in water contaminated by feces. Although filtration removes Cryptosporidium, it cannot guarantee 100 percent removal nor can the testing methods determine if the organisms are alive and capable of causing cryptosporidiosis, an abdominal infection with nausea, diarrhea and abdominal cramps that may occur after ingestion of contaminated water.

BCWCID #1 completed its compliance schedule meeting the requirements of the Long Term 2 (LT2) Enhanced Surface Water Treatment Rule. Monitoring for cryptosporidium and E. Coli began in October 2006 and ended in September 2008. After 48 samples, no microbial pathogens were found.

SECONDARY CONSTITUENTS

Many constituents (such as calcium, sodium, or iron) which are often found in drinking water, can cause taste, odor, and color problems. The taste and odor constituents are called secondary constituents and are regulated by the State of Texas, not EPA. These constituents are not causes for health concerns. Therefore, secondaries are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

Inorganic Contaminants

Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2008	Barium	0.06	0.06	0.06	2	2	ppm	Discharge of drilling wastes; discharges from metal refineries; erosion of natural deposits.
2009	Fluoride	0.34	0.22	0.49	4	4	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
2009	Nitrate	0.11	0.11	0.11	10	10	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
2009	Gross beta emitters	4.7	4.0	5.5	50	0	pCi/L	Decay of natural and man-made deposits.

Organic Contaminants

Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2009	Atrazine	0.16	0.16	0.17	3	3	ppb	Runoff from herbicide used on tow crops
2009	Carbon tetrachloride	0.6	<0.5	1.80	5	0	ppb	Discharge from chemical plants and other industrial activities
2009	Di (2-ethylhexyl phthalate	0.22	<0.6	0.66	6	0	ppb	Discharge from rubber and chemical factories

Maximum Residual Disinfectant Level

Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Source of Contaminant
2009	Chloramine Residual	1.98	0.5	3.9	4	4	ppm	Disinfectant used to control microbes.

Disinfection Byproducts

Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	Unit of Measure	Source of Contaminant
2009	Total Haloacetic Acids	20.3	10.5	43.2	60	ppb	Byproduct of drinking water disinfection
2009	Total Trihalomethanes	42.7	23.4	95.2	80	ppb	Byproduct of drinking water disinfection

*Unregulated initial distribution system evaluation for disinfection byproducts waived or not yet sampled.

Unregulated Contaminants

Bromoform, chloroform, dichlorobromomethane, and dibromochloromethane are disinfection byproducts. There is no maximum contaminant level for these chemicals at the entry point to distribution.								
Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	Unit of Measure	Source of Contaminant		
2009	Chloroform	5.4	5.0	5.7	ppb	Byproduct of drinking water disinfection.		
2009	Bromoform	0.9	<1.0	1.4	ppb	Byproduct of drinking water disinfection.		
2009	Bromodichloromethane	7.3	4.8	8.8	ppb	Byproduct of drinking water disinfection.		
2009	Dibromochloromethane	5.3	2.8	6.6	ppb	Byproduct of drinking water disinfection.		

Lead and Copper

Year	Contaminant	The 90th Percentile	Number of Sites Exceeding Action Level	Action Level	Unit of Measure	Source of Contaminant
2007	Lead	3.7	0	15	ppb	Corrosion of household plumbing systems: erosion of natural deposits.
2007	Copper	0.174	0	1.3	ppm	Corrosion of household plumbing systems: erosion of natural deposits: leaching from wood preservatives.

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. This water supply 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>.

Total Coliform

Total coliform bacteria are used as indicators of microbial contamination of drinking water because testing for them is easy. While non-disease causing organisms themselves, they are often found in association with other microbes that are capable of causing disease. Coliform bacteria are more hardy than many disease-causing organisms: therefore their absence from water is a good indication that the water is microbiologically safe for human consumption.

Year	Contaminant	Highest Monthly % of Positive Samples	MCL	Unit of Measure	Source of Contaminant
2009	Total Coliform Bacteria	2	*	Presence	Naturally present in the environment

Fecal Coliform REPORTED MONTHLY TESTS FOUND NO FECAL COLIFORM BACTERIA

Total Coliform REPORTED MONTHLY TESTS FOUND NO COLIFORM BACTERIA

Secondary and Other Constituents Not Regulated

(No associated adverse health effects)

Year or Range	Constituent	Average Level	Minimum Level	Maximum Level	Secondary Limit	Unit of Measure	Source of Contaminant
2009	Bicarbonate	154	152	155	NA	ppm	Corrosion of carbonate rocks such as limestone
2009	Calcium	52.4	49.6	53.9	NA	ppm	Abundant naturally occurring element.
2009	Chloride	37	37	38	300	ppm	Abundant naturally occurring element: used in water purification: byproduct of oil field activity
2008	Zinc	0.002	0	0.005	0.05		
2013 2008	Copper	0.001	0	0.003	NA	ppm	Corrosion of household plumbing systems: erosion of natural deposits: leaching from wood preservatives
2013 2008	Manganese	0.002	0.002	0.003	0.05		
2008	Hardness as Ca/Mg	174	168	177	NA	ppm	Naturally occurring calcium and magnesium
2013 2008	Magnesium	10.5	10.3	10.8	NA	ppm	Abundant naturally occurring element
2009	pH	7.0	7.0	7.1	>7.0	units	Measure of corrosivity of water
2009	Sodium	17.8	17.7	17.9	NA	ppm	Erosion of natural deposits: byproduct of oil field activity.
2009	Sulfate	24	24	24	300	ppm	Naturally occurring: common industrial byproducts: byproduct of oil field activity.
2009	Total Alkalinity as CaCO ₃	126	125	127	NA	ppm	Naturally occurring soluble mineral salts
2009	Total Dissolved Solids	234	230	237	1000	ppm	Total dissolved mineral constituents in water
2013 2008	Nickel	0.002	0.002	0.002	NA	PPM	Erosion of natural deposits

Turbidity and NTUs

Turbidity

Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease causing organisms. These organisms include bacteria, virus, and parasites that can cause symptoms such as nausea, cramps, and diarrhea and associated headaches.

<i>Year</i>	<i>Constituent</i>	<i>Highest Single Measurement</i>	<i>Lowest Monthly % of Samples Meeting Limits</i>	<i>Turbidity Limits</i>	<i>Unit of Measure</i>	<i>Source of Constituents</i>
2009	Turbidity	0.29	100.0	0.3	NTU	Soil Runoff

Total Organic Carbon

Total organic carbon (TOC) has no health effects. The disinfectant can combine with TOC to form disinfection byproducts. Disinfection is necessary to ensure that water does not have unacceptable levels of pathogens. Byproducts of disinfection include trihalomethanes (THMs) and haloacetic acids (HAA) which are reported elsewhere in this report.

Year	Contaminant	Average Level	Minimum Level	Maximum Level	Unit of Measure	Source of Contaminant
2009	Source Water	10.10	4.95	12.50	ppm	Naturally present in the environment.
2009	Drinking Water	3.93	3.68	4.38	ppm	Naturally present in the environment.
2009	Removal Ratio	56.86	-	-	% removal*	NA

*Removal ratio is the percent of TOC removed by the treatment process divided by the percent of TOC required by TCEQ to be removed.



WATER DEPARTMENT
914 Tank
Copperas Cove, Texas 76522

WATER CONSERVATION TIPS

Water conservation measures are an important first step in protecting our water supply. Such measures not only save the supply of our source water, but can also save you money by reducing your water bill. Here are a few suggestions.

Conserving water inside your home:

- Fix leaking faucets, pipes, toilets, etc.
- Replace old fixtures; install water-saving devices in faucets, toilets, and appliances.
- Wash only full loads of laundry.
- Do not use the toilet for trash disposal.
- Take shorter showers.
- Turn off water while shaving or brushing teeth.
- Soak dishes before washing.
- Run the dishwasher only when full.

Conserving water outdoors:

- Water the lawn and garden in the early morning or evening.
- Use mulch around plants and shrubs.
- Repair leaks in faucets and hoses.
- Use water-saving nozzles.
- Use water from a bucket to wash your car; save the hose for rinsing.

Information on other ways that you can help conserve water can be found at www.epa.gov/safewater/publicoutreach/index.html.