



CITY OF COPPERAS COVE

WATER QUALITY REPORT

2008

FROM THE CITY OF COPPERAS COVE

The 2008 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

Robert M. McKinnon
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

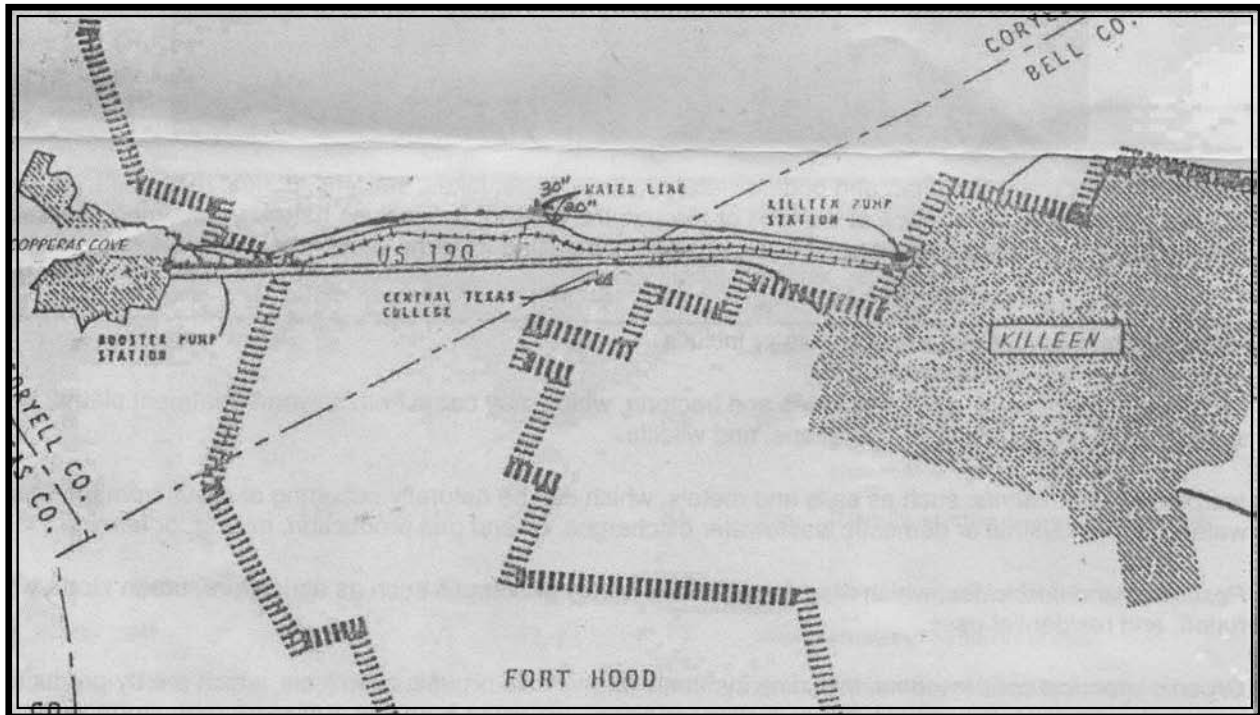
CITY OF COPPERAS COVE SERVICE AREA

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. The TCEQ has completed a source water susceptibility assessment for all drinking water systems that own their own source(s). This report describes the susceptibility and types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. The system from which we purchase our water received the assessment report. We want to emphasize that this assessment does not indicate or imply any health risks. Contact our water system for more information about this report.

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 7.21 million gallons.

Within the City, the Water Distribution Department maintains over 225 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.
2008	Fluoride	0..15	0.14	0.16	4	4	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
2008	Nitrate	0..22	0.17	0.24	10	10	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
2006 2003	Gross beta emitters	3.47	2.8	4.3	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
2008	Atrazine	0.04	<0.20	0.13	3	3	ppb	Runoff from herbicide used on tow crops

Maximum Residual Disinfectant Level

Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Source of Contaminant
2008	Chloramine Residual	2.3	0.5	4	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
2008	Total Haloacetic Acids	16	11.6	21.8	60	ppb	Byproduct of drinking water disinfection
2008	Total Trihalomethanes	21.3	15	33	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		
2008	Chloroform	8.2	1.7	28.0	ppb	Byproduct of drinking water disinfection.		
2008	Bromoform	0.9	<1.0	1.4	ppb	Byproduct of drinking water disinfection.		
2008	Bromodichloromethane	10.1	4.4	14.0	ppb	Byproduct of drinking water disinfection.		
2008	Dibromochloromethane	6.7	2.5	9.7	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.

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
2008	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
2008	Bicarbonate	181	165	190	NA	ppm	Corrosion of carbonate rocks such as limestone
2008	Calcium	52.4	49.6	53.9	NA	ppm	Abundant naturally occurring element.
2008	Chloride	34	33	35	300	ppm	Abundant naturally occurring element: used in water purification: byproduct of oil field activity
2013 2008	Copper	0.001	0	0.003	NA	ppm	Corrosion of household plumbing systems: erosion of natural deposits: leaching from wood preservatives
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
2008	pH	7.9	7.8	8.2	>7.0	units	Measure of corrosivity of water
2013 2008	Sodium	15.8	15.4	16.7	NA	ppm	Erosion of natural deposits: byproduct of oil field activity.
2008	Sulfate	21	21	22	300	ppm	Naturally occurring: common industrial byproducts: byproduct of oil field activity.
2008	Total Alkalinity as CaCO ₃	149	135	156	NA	ppm	Naturally occurring soluble mineral salts
2008	Total Dissolved Solids	255	149	266	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 is the measurement of suspended clay, silt, finely divided organic matter, algae, and other microorganisms. 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, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and headaches. Turbidity is measured in NTU's (nephelometric turbidity units: a measure of the clarity of water).

2008 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.

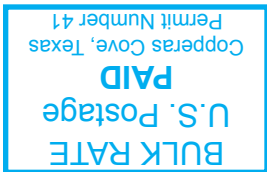
<i>Year</i>	<i>Constituent</i>	<i>Highest Single Measurement</i>	<i>Lowest Monthly % of Samples Meeting Limits</i>	<i>Turbidity Limits</i>	<i>Unit of Measure</i>	<i>Source of Constituents</i>
2008	Turbidity	0.29	100.0	0.3	NTU	Soil Runoff

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	Minimum	Maximum	Unit of Measure	Source of Contaminant
2008	Source Water	7.42	4.91	11.90	ppm	Naturally present in the environment.
2008	Drinking Water	4.10	3.36	4.79	ppm	Naturally present in the environment.
2006	Removal Ratio	39.33	-	-	% 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

YOU CAN PROTECT THE WATER AFTER IT REACHES YOU:

When the District's water reaches your home, it is clean and meets or is better than all state and federal water quality requirements. But without proper precautions, water can be contaminated if a sudden pressure drop in the pipe causes contaminated water to be pulled from your home or yard into your plumbing.

TO PROTECT WATER QUALITY ONCE IT REACHES YOU, TAKE THE FOLLOWING STEPS:

- Do not leave a garden hose connected to a faucet with one end submerged in a swimming pool, bucket, dog's bath water...anything.
- Keep an air gap between your kitchen or bathroom faucet and the water in the sink. Do not attach a hose to your faucet and have the other end submerged in the sink or tub.
- Do not allow garden hoses to be directly connected to pressurized tanks that contain pesticides, herbicides or toxic materials of any kind. Insist that an air gap be maintained between the water source and the tank when the tank is being filled.
- Do not leave your kitchen sink spray nozzle submerged in the sink.
- If you have the typical, older style toilet that fills from the bottom, be cautious about putting toilet bowl cleaners in the tank. If the water pressure drops and the fill valve in the toilet tank is leaking water from the tank, that water can be drawn back into the water lines, especially if there is a faucet open in the house.
- If you have an automatic sprinkler system, make sure that you have a backflow prevention device and that it is working properly.