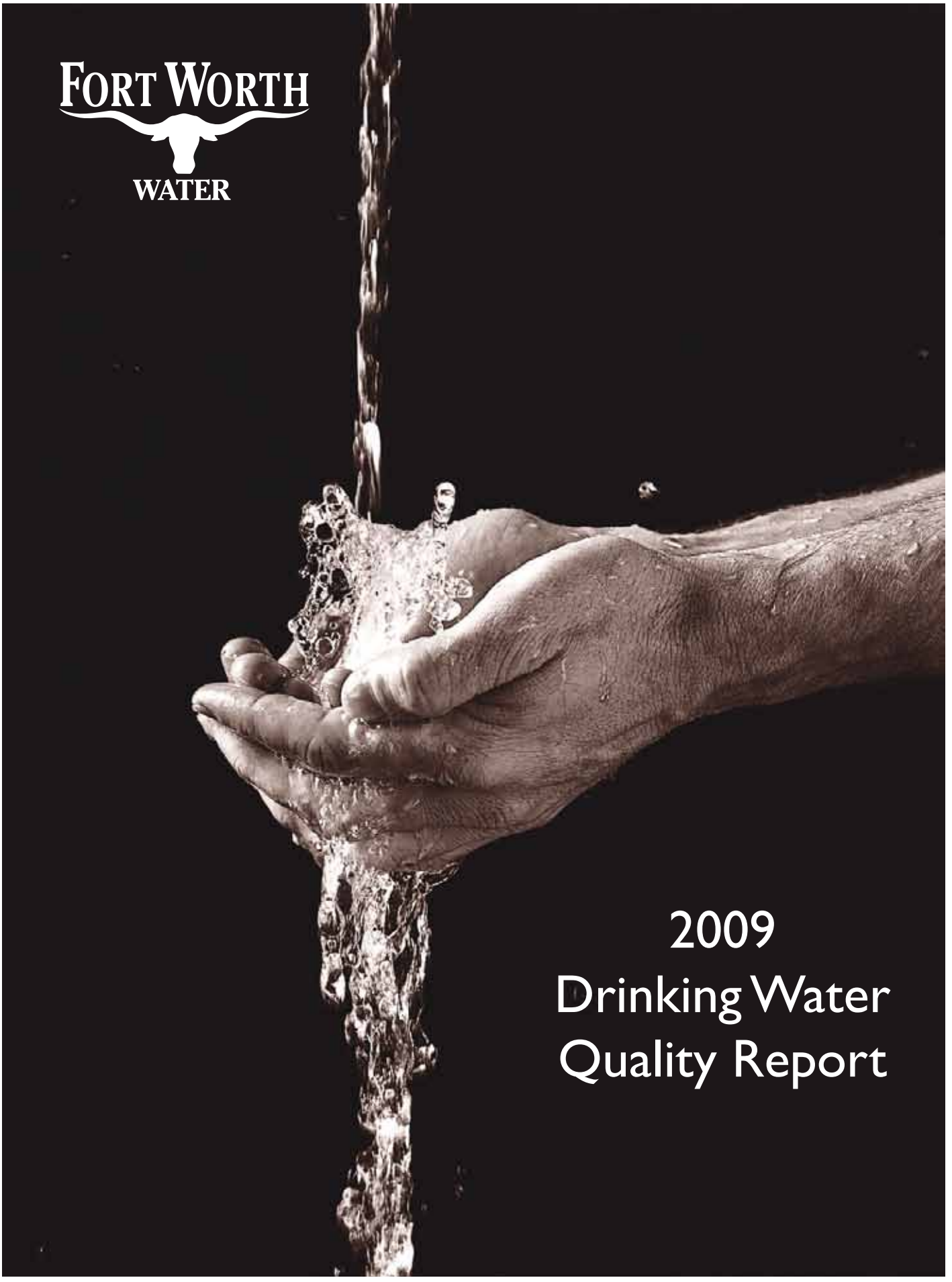
FORT WORTH
WATER



2009 Drinking Water Quality Report

A Message from the Water Director

It is time once again to tell you about the quality of the drinking water you have received. The bottom line is it is still very good.

However, I do need to let you know we had a monitoring violation in October 2009. You will find this reported on page 3. We have implemented new follow-up procedures in the laboratory to guard against this sort of mistake from recurring.

On the following pages, you will find several tables with several columns and lots of numbers. It is the shaded columns you'll want to compare to see how our drinking water stacks up against state and federal regulations. You can see for yourself that the news is good.

S. Frank Crumb, P.E.

The employees in this department realize your health, safety and quality of life are dependent everyday on how well we do our jobs. The water we provide does so much more than provide a cool drink or a refreshing shower. It provides sanitation, fights fires and supports our economy.

I want to offer you the opportunity to learn more about us and your water. We are available to come to your neighborhood group or civic organization. There are numerous topics we can discuss — how we treat drinking water, how we clean wastewater, how to be efficient with your water use in the landscape, how you keep your sewer pipes and ours fat free, or just how to understand all the information in this report. The list goes on and on.

Please e-mail us at WPE@forworthgov.org or call us 817-392-7240 to request a speaker. We have programs for school-age through senior citizens and can customize the talks for your group.

Fort Worth
Water Department

817-FW-24-HRS
(817-392-4477)

wpe@FortWorthGov.org

www.FortWorthGov.org/water

www.savefortworthwater.org

Administrative Office:
Fort Worth City Hall, Second Floor
1000 Throckmorton St.

The Water Department is part of the Fort Worth city government. The City Council meets each Tuesday at City Hall, 1000 Throckmorton St. The meetings are at 7 p.m on the 1st & 2nd Tuesday of the month. The meetings are at 10 a.m. all other Tuesdays.

Mailing this report to our customers is a federal and state requirement. It also is posted on our website.

If you would like additional copies, contact us at WPE@FortWorthGov.org or 817-392-4477.

Only Tap Water **Delivers**

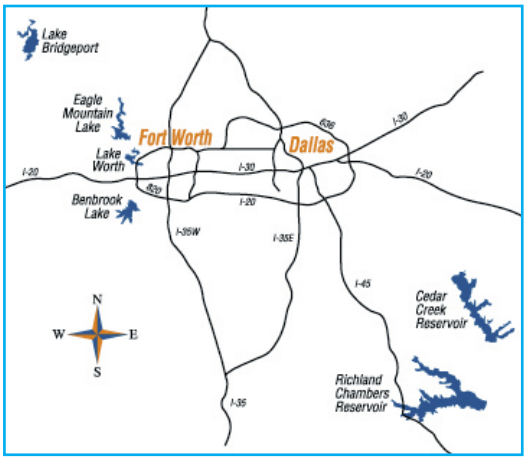
...public health protection
...fire protection
...support for the economy
...the overall quality of life we enjoy

American Water Works Association

Lakes Are Sources for City's Drinking Water

Fort Worth uses surface water from Lake Bridgeport, Eagle Mountain Lake, Lake Worth, Benbrook Lake via the Clear Fork of the Trinity River, Cedar Creek Reservoir and Richland-Chambers Reservoir.

Fort Worth owns Lake Worth. The U.S. Army Corps of Engineers is responsible for Benbrook Lake. The other four lakes are owned and operated by Tarrant Regional Water District (TRWD).



TRWD monitors the raw water at all intake sites for *Cryptosporidium,* a microbial parasite common in surface water. The source is human and animal fecal waste in the watershed.

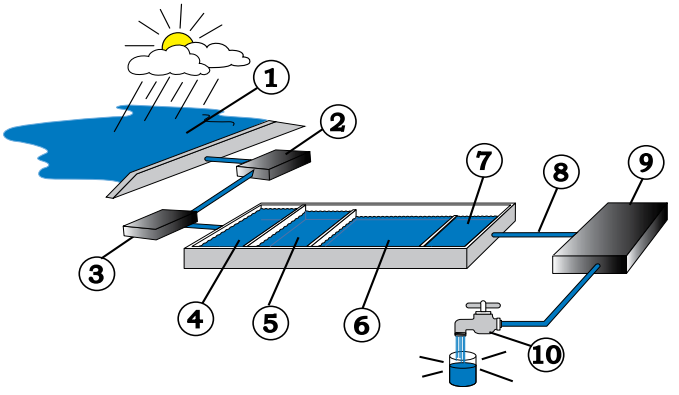
The 2009 monthly testing revealed very low levels. The testing methods used cannot determine if the parasite is dead and inactive or alive and capable of causing cryptosporidiosis. This is an abdominal infection that causes nausea, diarrhea and abdominal cramps after indigestion. The drinking water treatment process is designed to remove *Cryptosporidium* through filtration.

The turbidity measure on page 2 of this report shows the effectiveness of Fort Worth's filtration. Turbidity measures the clarity of water.

TCEQ has conducted assessments of Fort Worth's water supply lakes. The assessment report describes the susceptibility and types of constituents that may come in contact with our source waters based on human activity and natural conditions. For more information on the source water assessments, please contact us.

Treatment Turns Lake Water into Drinking Water

1. Reservoirs: Fort Worth water comes from six lakes.
2. Raw Water Pump Station: Here water is pumped from the lake to the water treatment plant.
3. Primary Disinfection: Either ozone or monochloramine (chlorine and ammonia) is added to kill bacteria and viruses. The Eagle Mountain and Rolling Hills water treatment plants use ozone. The North Holly and South Holly water treatment plants use monochloramine.
4. Mixing Chamber: Chemicals, called coagulants and polymers, are added to the water to cause small particles to adhere to each other.
5. Coagulation Basin: The particulate matter begins to clump together.
6. Sedimentation Basin: Particles settle to the bottom of the basin and are removed.
7. Filters: Water is filtered through four feet of coal, sand and gravel.
8. Disinfection: Chloramine is added to provide disinfection all the way to your faucet. The chlorine kills bacteria and viruses. Ammonia is added to reduce the chlorine odor and the amount of chlorine by-products created.
9. Clearwell Storage: Water is temporarily stored in tanks before it is pumped to the public.
10. Distribution: Drinking water reaches the public through more than 3,200 miles of pipeline.



What's in Your Water

Contaminant	Measure	MCL	2009 Level	Detection Range	MCLG	Common Sources of Substance
Beta particles & Photon emitters [1]	pCi/L	50	6.6	4.6 to 6.6	N/A	Decay of natural and man-made deposits of certain minerals that are radioactive and may emit forms of radiation known as photons and beta radiation
Fluoride	ppm	4	0.82	0.67 to 0.82	4	Water additive that promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories
Nitrate (measured as Nitrogen)	ppm	10	0.30	0.04 to 0.30	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (measured as Nitrogen)	ppm	1	0.024	0.015 to 0.024	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Bromate	ppb	10	4.63	1.24 to 4.63	0	By-product of drinking water disinfection
Haloacetic Acids	ppb	60	22.7	10.7 to 22.7	N/A	By-product of drinking water disinfection
Total Trihalomethanes	ppb	80	44.8	12.6 to 44.8	N/A	By-product of drinking water disinfection
Total Coliforms (including fecal coliform & E. coli)	% of positive samples	Presence in 5% of monthly samples	Highest monthly percent of positive samples is 1.1%	0 to 1.1%	0	Coliforms are naturally present in the environment as well as feces; fecal coliforms and E. coli only come from human and animal fecal waste.
Turbidity [2]	NTU	TT	0.54 Highest single result 99.4% Lowest monthly % of samples ≤ 0.3 NTU	N/A	N/A	Soil runoff

Contaminant	Measure	MRDL	2009 Level	Detection Range	MRDLG	Common Sources of Substance
Chloramines	ppm	4	3.4	1.3 to 4.3	4	Water additive used to control microbes

Contaminant	High	Low	Average	MCL	MCLG	Common Sources of Substance
Total Organic Carbon[3]	1	1	1	TT = % removal	N/A	Naturally occurring

[1] The test results shown above are from 2005. Because Fort Worth historically has had low levels of radionuclides in its water, TCEQ has Fort Worth on a reduced monitoring schedule. The next testing is scheduled for 2011.

[2] Turbidity is a measure of the cloudiness of water. It is monitored because it is a good indicator of the effectiveness of the filtration system.

[3] Total Organic Carbon is used to determine disinfection by-product precursors. Fort Worth was in compliance with all monitoring and treatment technique requirements for disinfection by-product precursors.

You may be more vulnerable than the general population to certain microbial contaminants, such as *Cryptosporidium*, in drinking water. Infants, some elderly or immunocompromised persons, such as those undergoing chemotherapy for cancer, those who have undergone organ transplants, those who are undergoing treatment with steroids and people with HIV/AIDS or other immune system disorders can be particularly at risk from infections.

You should seek advice about drinking water from your physician or health care provider.

Additional guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* are available from the U.S. Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

Contaminant	Measure	90th percentile [4]	# of sites exceeding action level	MCL	MCLG	Common Sources of Substance
Lead	ppb	4.9	1	Action Level =15	N/A	Corrosion of household plumbing systems; erosion of natural deposits
Copper	ppm	0.39	0	Action Level =1.3	N/A	

[4] 90th percentile value: 90% of the samples were at or below this value. EPA considers the 90th percentile value the same as an "average" value for other contaminants. Lead and copper are regulated by a treatment technique that requires systems to control the corrosiveness of their water. If more than 10% of tap water samples exceed the action level, water systems must take additional steps.

What You Should Know about Lead in Drinking Water

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Fort Worth drinking water does not have elevated lead levels.

Lead in drinking water is primarily from materials and components associated with service lines and home plumbing.

The city of Fort Worth 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 two 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. The Water Department can do lead and copper testing for $27.20 per faucet. Call 817-392-4477 to make the arrangements.

Information on lead in drinking water, testing methods, and steps you can take to minimize your exposure is available from the Safe Drinking Water Hotline at 800-426-4791 or at www.epa.gov/safewater/lead.

Abbreviations Used in Tables

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

MCL - Maximum Contaminant Level; 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.

MCLG - Maximum Contaminant Level Goal; 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.

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. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

N/A - Not Applicable.

NTU - Nepholometric Turbidity Unit; a measure of water turbidity or clarity.

pCi/L - Picocuries per liter; a measure of radioactivity.

ppb - Parts per billion or micrograms per liter (mg/L).

ppm - Parts per million or milligrams per liter (mg/L).

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

Monitoring Violation

Violation Type	Health Effects	Duration	Explanation	Steps to Correct
Repeat Coliform Monitoring - Major - No Repeat Samples	We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets standards. During this compliance period, we did not correctly monitor, and therefore, cannot be sure of the quality of your drinking water during that time.	October 20, 2009	We did not collect the required repeat samples for one positive coliform bacteria sample.	Our laboratory has made changes in monitoring and reporting to ensure there is daily follow up by supervisory personnel of the routine coliform bacteria monitoring in the water distribution system.

Unregulated Contaminants

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

Contaminant	Measure	Range of Detects	2009 Level	MCL	MCLG	Common Sources of Substance
Chloral Hydrate	ppb	0.15 to 0.96	0.96	Not regulated	0	By-product of drinking water disinfection
Bromoform	ppb	1.6 to 2.9	2.9	Not regulated	0	By-products of drinking water disinfection; not regulated individually; included in Total Trihalomethanes
Bromodichloromethane	ppb	5.3 to 19.6	19.6	Not regulated	0	
Chloroform	ppb	3.0 to 18.0	18.0	Not regulated	0	
Dibromochloromethane	ppb	3.8 to 13.7	13.7	Not regulated	60	
Monochloroacetic Acid	ppb	4.4 to 5.3	5.3	Not regulated	0	By-products of drinking water disinfection; not regulated individually; included in Haloacetic Acids
Dichloroacetic Acid	ppb	4.3 to 11.1	11.1	Not regulated	0	
Trichloroacetic Acid	ppb	2.5 to 7.7	7.7	Not regulated	300	
Monobromoacetic Acid	ppb	0.15 to 0.8	0.8	Not regulated	0	
Dibromoacetic Acid	ppb	1.8 to 3.8	3.8	Not regulated	0	

Contaminants Can Naturally Occur in Water

As water travels over the land or through the ground, it dissolves naturally occurring minerals and radioactive material. Water also can pick up substances resulting from animal waste or human activity.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate the water poses a health risk.

Contaminants that may be present in source water before treatment include microbes, inorganic contaminants, pesticides, herbicides, radioactive materials and organic chemical contaminants.

In addition, contaminants may be found in drinking water that may cause taste, color or odor problems. These types of problems are not necessarily causes for health concerns. For more information on taste, odor or color of drinking water, please contact us at 817-392-4477 or wpe@FortWorthGov.org.

To ensure tap water is safe to drink, the U.S. Environmental Protection Agency (EPA) and the Texas Commission on Environmental Quality (TCEQ) regulate the amount of certain contaminants in water provided by public systems.

Secondary Constituents

This chart lists other items for which the water is tested. These items do not relate to public health but rather to the aesthetic effects. These items are often important to industrial users.

Item	Measure	2009 Level
Bicarbonate	ppm	95 to 117
Calcium	ppm	139 to 156
Chloride	ppm	16 to 34
Conductivity	µmhos/m	337 to 458
pH	units	8.2 to 8.6
Magnesium	ppm	3 to 10
Sodium	ppm	23 to 32
Sulfate	ppm	27 to 39
Total Alkalinity as $CaCO_3$	ppm	95 to 119
Total Dissolved Solids	ppm	197 to 265
Total Hardness as $CaCO_3$	ppm	90 to 164
Total Hardness in Grains	grains/gallon	5 to 10

The Fort Worth Water Department Laboratory was the first municipal lab in Texas to earn accreditation under the National Environmental Laboratory Accreditation Program. It is accredited for water, wastewater and soils testing. Some of the testing for this report was performed by the city lab and other by state contract labs.

Frequently Asked Questions About Drinking Water

Why am I receiving this report?

In 1996, Congress added a requirement to the Safe Drinking Water Act that water utilities annually send a water quality report to their customers. EPA and TCEQ developed rules which outline the information the reports must include.

If my water tastes or smells different, does that mean it's not safe to drink?

Contaminants may be found in drinking water that can cause taste, color or odor problems. These types of problems are not necessarily causes for health concerns.

Taste and odor problems may originate in any lake for a number of reasons, such as algae growth, a change in temperature, excessive rainfall, flooding, or dry weather conditions.

Water that has been stored in a pipe for a long time, especially during warm weather, also may develop an odor. That is why you may notice a change in your water after returning from vacation.

What if my water looks dirty or rusty?

Main breaks, construction in your neighborhood, or fire hydrant testing can cause water to look dirty or rusty. This condition can also occur where there are dead-end lines in the distribution system. The water will generally clear up within an hour or two.

While these situations do not affect the safety of the water, they are investigated. Once the construction activity is complete, run water from all your faucets to flush your pipes. Once the water runs clear, turn off the faucets.

Why do I have to treat the water in my aquarium?

Fort Worth uses chloramines to disinfect the water. That makes the water safe for people to drink, but it's unsafe for fish.

Chloramines leave behind trace amounts of chlorine and ammonia that can kill fish. Contact your pet store for the best way to treat water for use in your aquarium.

What should I do if I think there's something wrong with my water?

Call 817-FW-24-HRS (817-392-4477). A representative will take your information and forward it to our laboratory. A laboratory employee will collect a sample from the outside tap nearest your water meter. Once the sample is analyzed, you are informed of the results.

Water employees should be wearing a city uniform and carry a city identification card. Employees do not enter your home to take the sample.

Will using a home treatment device make my water safer or healthier?

Not necessarily. Some people use home water filters to improve the taste, smell and/or appearance of their tap water, but it may not make the water safer or healthier.

The federal government in 1974 enacted the Safe Drinking Water Act, which sets standards to protect the public from waterborne illnesses. This law requires regular testing by water providers to ensure the standards are met. Fort Worth conducts thousands of tests each year.

Anyone with a medical condition that could place them at a higher risk should discuss any special needs with their physician.

If you purchase a home water treatment unit, be certain to follow the manufacturer's instructions for operation and maintenance, especially changing the filter regularly. Improper maintenance can reduce water quality.

Also, different filters accomplish different things. Some home filters are for taste and odor problems, while others are effective in removing metals and still others in particle removal.

It is very important to use filters certified by the National Sanitation Foundation (NSF) for the aesthetic factor or contaminant removal desired.

For more information about water filters, visit www.drinktap.org and click the "Water Information" link.

How to properly dispose of unused medicines

Studies indicate drugs are showing up in rivers and lakes - the water supply for many people in this country.

The amounts being found are in parts per trillion and far below any therapeutic dosage levels. What this means to humans and the environment is the subject of several ongoing studies.

In February 2007, the federal government released guidelines for properly disposing of old and unused prescription medicines.

Take unused, unneeded, or expired prescription drugs out of their original containers and throw them in the trash. To ensure the drugs are not diverted to illegal uses:

- Mix them with an undesirable substance, such as used coffee grounds or kitty litter.; or
- Put them in unmarked containers, such as empty cans or sealable bags.

Check with your pharmacy to see if it accepts unused pharmaceuticals and handles their proper disposal.

The city's Environmental Collection Center, 6400 Bridge St, accepts your expired and leftover prescription medicines. The drive-through center is free to Fort Worth residents and open 11 a.m. to 7 p.m. Thursdays and Fridays and 9 a.m. to 3 p.m. on Saturdays. For directions, call 817-871-5257.

You should always refer to printed material accompanying your medication for specific instructions on proper disposal.

For more information about personal care products, pharmaceuticals and the environment, visit one of the following websites.

www.epa.gov/ppcp
www.whitehousedrugpolicy.gov

In its last session, the Texas Legislature passed SB1757 at the urging of the water industry in Texas. This bill directs the Texas Commission on Environmental Quality to study the current methods of disposal and make recommendations for how consumers, health care providers, and others may dispose of unused pharmaceuticals so they do not enter the wastewater system.

TCEQ formed the Pharmaceutical Disposal Advisory Group to obtain information so it can adequately respond to the Senate bill. Information about the PDAG is available online at www.tceq.state.tx.us/permitting/water_supply/pdw/pdagroup.

Learn more about water by visiting these Web sites. Many of these sites offer resources for teachers and children.

Fort Worth Water
www.FortWorthGov.org/water
www.savefortworthwater.org

Tarrant Regional Water District
www.trwd.com
www.savetarrantwater.com

U. S. Environmental Protection Agency
www.epa.gov

Texas Commission on Environmental Quality
www.tceq.state.tx.us

Texas Water Development Board
www.twdb.state.tx.us
www.savetexaswater.org

American Water Works Association
www.awwa.org
www.drinktap.org

Water Environment Federation
www.wef.org

National Sanitation Foundation
www.nsf.org

Texas Water Conservation Association
www.twca.org