WHAT IS THE SOURCE OF OUR DRINKING WATER?

Lake Tuscaloosa is Tuscaloosa's primary surface water supply source for drinking water. Lake Tuscaloosa is a 5,885-acre impoundment of North River and several major creeks. This beautiful man-made lake holds more than 40 billion gallons of excellent quality water. Lake Nicol and Harris Lake are our alternate sources of water. Currently, Harris Lake is used for industrial water.

The City of Tuscaloosa has completed the required Source Water Assessment and has published the data. A copy of the data may be viewed at the City of Tuscaloosa Water & Sewer Department's Office at 2201 University Blvd., 2nd floor.

Lake Tuscaloosa's watershed is comprised of a large portion of three counties. Every activity in the watershed has an impact on the quality of Lake Tuscaloosa, which is our source of drinking water.

WHAT CAN I DO TO PROTECT OUR SOURCE OF DRINKING WATER?

Lake Tuscaloosa as our primary source of drinking water needs to be protected by every individual who drinks and enjoys the water, as well as those who live or travel in the watershed!!! Several tips to help protect our source water are as follows:

- Reduce the polluted run-off of septic tanks by having the tanks serviced and pumped at least once every three years and give the certificate of service to the Lakes Division.
- Reduce the polluted run-off of herbicides, pesticides, fertilizers, and etc. by not over applying or applying when it is going to rain.
- Adopt-a-stream or creek segment and help to restore and preserve.
- Please report any suspicious activity or the dumping of pollutants into any of the lakes to the Lakes Division Manager at (205)349-0279 or to the Ed Love Water Plant at (205)349-0247. Note the location and a description of the incident
- Check out our web site at www.tuscaloosa.com for all the latest reports and information on our Lakes.

Jerry Plott Water Treatment Plant

The plant is located on the north side of the Black Warrior River near the Lake Tuscaloosa Dam.

WHAT TREATMENT TECHNIQUES ARE USED TO TREAT MY WATER?

The City of Tuscaloosa operates two water treatment plants. These are the Ed Love Water Plant, and the Jerry Plott Water Treatment Plant. The Ed Love Water Plant was named for former superintendent Ed E. Love. The Jerry Plott Plant was named after former city councilman Jerry Plott. Both plants treat water from a common intake structure at Lake Tuscaloosa.

The Ed Love facility is a conventional treatment plant. Raw water enters a flash mixer where aluminum sulfate and lime are added for coagulation. Sodium permanganate is added when necessary for removal of iron and manganese for taste and odor control. The water then travels through four flocculators and four settling basins.

The water is then gravity filtered through multi-media filters. Lime is added for pH adjustment and corrosion control. Chlorine is added for disinfection. Fluoride is added for the prevention of tooth decay, and ortho-polyphosphate is added for corrosion control. The finished water is pumped into the Distribution System.

The Jerry Plott Water Plant uses the same basic treatment as the Ed Love Plant, but with some different chemicals and techniques. Coagulation starts in a flash mixer with poly aluminum chloride. As the water passes through one of two flocculators, it enters a settling basin. The plant has two basins. Settling is accelerated with a series of settling plates. This allows for a shorter basin.

The settled water is pumped under pressure to a bank of seven membrane filters. The water is squeezed through the pores of the membranes while impurities are left behind. Sodium hydroxide is added for pH control. Fluoride and orthopolyphosphate are also added. The finished water then goes to the distribution system. The water produced at these two plants is very similar.

The plants are maintained by 35 full-time employees. These employees are responsible for the highest quality water possible for more than 200,000 consumers. The plants are operated 24 hours a day, 365 days a year.

The City's most valuable asset is its abundant supply of excellent quality water! Because of this excellent quality, numerous industries and businesses have selected Tuscaloosa as their home.

Water Mains in Service, 4" and larger	582 Miles
Water Storage Tanks	13 Tanks
Water Booster Pump Stations	8 Stations
Water Storage Capacity	25.4 Million Gallons
Ed Love Treatment Capacity	45.7 Million Gallons / Day
Jerry Plott Treatment Capacity	14 Million Gallons/ Day
Public Fire Hydrants	3725 Hydrants

The Ed Love Water Plant has been an award winning plant for the last eleven years. The Alabama Water and Pollution Control Association based on recommendations of a peer review committee, presents the awards annually. They are given in recognition of outstanding operations achieved by the operators of the plant.

WATER AND SEWER DEPARTMENT

Jimmy W. Junkin, Director
Post Office Box 2090
Tuscaloosa, AL 35403-2090

The Tuscaloosa City Council Meetings are held every Tuesday at 6:00 pm in the City Council Chambers on second floor of Tuscaloosa City Hall, 2201 University Blvd. The agenda for each meeting is published in the Tuscaloosa News on Saturday and on the internet at www.tuscaloosa.com,or you may call 205-248-5010.

The City of Tuscaloosa's Mayor and Council are as follows:

Mayor, Walt Maddox
Bobby Howard, District 1
Harrison Taylor, District 2
Cynthia Almond, District 3
Lee Garrison, District 4
Kip Tyner, District 5
Bob Lundell, District 6
William Tinker, III, District 7

Water Billing Office
Turn On/Turn Off
Office Hours:
8:00 am 4:30 pm
Monday - Friday
(205) 248-5000
Drive Though Hours
7:30 am 5:00 pm

Hilliard N. Fletcher
Wastewater Plant
Office Hours:
7:00 am 3:30 pm
Monday - Friday
(205) 248-5900

Distribution Division
Line Breaks/Leaks
Office Hours:
7:00 am 3:30 pm
Monday - Friday
(205) 349-0280

Lakes Division
Source Division
Office Hours:
7:00 am 3:30 pm
Monday - Friday
(205) 349-0279

Ed Love Water Filtration Plant

Office Hours:
7:00 am 3:30 pm
Monday - Friday
(205) 349-0247

Jerry Plott Water Plant
2101 New Watermelon Road
Tuscaloosa, AL 35406

Additional Information:
Perry A. Acklin
Water Treatment Manager
Phone: (205) 349-0247

Scott Sanderford
Lakes Division Manager
Phone: (205) 349-0279

CITY OF TUSCALOOSA WATER AND SEWER DEPARTMENT

2010

ANNUAL WATER QUALITY REPORT

City of Tuscaloosa
Ed Love Water Filtration Plant
1125 Jack Warner Parkway North East
Tuscaloosa, Alabama 35404-1056
Telephone (205) 349-0247
Fax (205) 349-0213

http://www.tuscaloosa.com

Office Hours:
7:00 a.m. to 3:30 p.m.

THE SAFE DRINKING WATER ACT... What Does It Mean For You?

The Safe Drinking Water Act (SDWA) was signed into law on December 16, 1974. The purpose of the law is to assure that the nation's water **supply systems serving the public meet minimum national standards for the protection of public health.**

The SDWA directed the U.S. Environmental Protection Agency (EPA) to establish national drinking water standards. 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 EPA Safe Drinking Water Hotline 800-426-4791 or EPA's website address www.epa.gov/safewater.

Amended in 1996, the SDWA contains provisions for consumer involvement and right-to-know. The Consumer Confidence Report or Annual Water Quality Report is the centerpiece of public right-to-know in SDWA. This report provides consumers the detected amounts of contaminants, sources of contamination, and plain language definitions.

The amendments recognized that some people may be more vulnerable to contaminants in drinking water than the general population. People who are immuno-compromised such as cancer patients undergoing chemotherapy, organ transplant recipients, HIV/AIDS positive or other immune system disorders, some elderly, and infants can be particularly at risk from infections. People at risk 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.

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 radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

PLAIN LANGUAGE DEFINITIONS

1. **Maximum Contaminant Level Goal or MCLG:** 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.
2. **Maximum Contaminant Level or MCL:** 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 treatmenttechnology.
3. **Maximum Residual Disinfectant Level Goal or 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.

PLAIN LANGUAGE DEFINITIONS continued

4. **Maximum Residual Disinfectant Level or 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.
5. **Treatment Technique or TT:** A required process intended to reduce the level of a contaminant in drinking water.
6. **Action Level or AL:** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

In the following tables you may find terms and abbreviations that might not be familiar to you. To help you better understand these terms we have provided the followingdefinitions:

ppm means parts per million and is equal to mg/L or milligrams per liter
ppb means parts per billion and is equal to µg/L or micrograms per liter
ppt means parts per trillion and is equal to ng/L or nanograms per liter
pCi/L equals picocuries per liter, a measure of radiation
NTU equals Nephelometric Turbidity Units
CFU equals Colony Forming Units
MFL means million fibers per liter longer than 10 micrometers
N/A - not applicable - ND - not detected

Based on a study conducted by ADEM with the approval of the EPA, a statewide waiver for the monitoring of asbestos and dioxin was issued. Thus, monitoring for these contaminants was not required.

EPA Lead and Copper Statement

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. The City of Tuscaloosa is responsible for providing high quality drinking water, but cannot control the variety of materials used in the 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 with 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.

Tuscaloosa's Lead and Copper Program

Since 1991, the City of Tuscaloosa has tested 57 homes annually for the presence of lead and copper. Because of the involvement of these citizens, the lead and copper program continues to be very successful. The City has always maintained compliance with this regulation. We would like to commend those 57 participants for their support of this endeavor.

WATER QUALITY REPORT

PRIMARY DRINKING WATER PARAMETERS
WATER SOURCE LAKE TUSCALOOSA

DETECTED CONTAMINANTS

MICROBIOLOGICAL
All results meet or surpass Federal Drinking Water Regulations

Period Covered: 12 Months Ending December, 2008	Units	MCL	MCLG	Highest Level in Distribution System	Range of detections	Violation (Yes/ No)	Major Sources in Drinking Water
Total Coliform Bacteria	Presence of total coliform bacteria in <5% of the 120 required monthly samples	0	Coliform Present in 1.09 % of samples in one month	Not detected 3.32 %	No		Naturally present in the environment
Only 14 of 2509 samples were positive for Total Coliform or 0.54%, in 2008. No samples were Ecoli positive.							
Total Organic Carbon	mg/L	TT	N/A	2.1	1.3 - 2.1	No	Naturally present in the environment
Turbidity	NTU	0.3	N/A	0.268	0.000 - 0.268	No	Soil Runoff -Turbidity can interfere with disinfection
Chlorine as Cl_2	mg/L	4	4	5.1	0.3 -5.1	Yes *	Water additive used to control microbes
Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to the eyes and nose. Some people who drink water containing chlorine well in excess of the MDRL could experience stomach discomfort.							

RADIOLOGICAL
All results meet or surpass Federal Drinking Water Regulations

Gross Alpha	pCi/L	15	0	3.5 +/- 1.0	0.0 ± 9.6 - 3.5 ± 1.0	No	Erosion of natural deposits

INORGANIC CHEMICALS
All results meet or surpass Federal Drinking Water Regulations

Fluoride as F	mg/L	4	4	1.6	0.00 -1.60	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizers and aluminum factories
Nitrate as NO3 -N	mg/L	10	10	0.32	0.26 -0.32	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sulfate as SO_4	mg/L	50	50	29.4	18.3 - 29.4	No	Erosion of natural deposits.

DISINFECTION BY-PRODUCTS
All results meet or surpass Federal Drinking Water Regulations

Period Covered: 12 Months Ending December, 2008	Units	MCL	MCLG	Average Level in Distribution System	Range of detections	Violation (Yes/ No)	Major Sources in Drinking Water
Haloacetic Acids	µg/L	60	N/A	19.2	6.15 - 49.9	No	By-product of drinking water chlorination
The sum of Dibromoacetic, Dichloroacetic, Monobromoacetic, Monochloroacetic, & Trichloroacetic Acids annual average MCL equal to or less than 60 µg/L.							
Total Trihalomethanes	µg/L	80	N/A	42.4	15.9 - 88.9	No	By-product of drinking water chlorination
The sum of Chloroform, Bromodichloromethane, Dibromochloromethane & Bromoform annual average MCL equal to or less than 80 µg/L.							

LEAD AND COPPER PRIMARY MONITORING
All results meet or surpass Federal Drinking Water Regulations

Period Covered: 12 Months Ending December, 2008	Units	MCL	MCLG	Highest Level in Distribution System	Range of detections	Violation (Yes/ No)	Major Sources in Drinking Water
Lead as Pb	mg/L	AL= 0.015	0	0.009	nd - 0.009	No	Corrosion of household plumbing system; Erosion of natural deposits
Copper as Cu	mg/L	AL= 1.3	1.3	0.341	nd - 0.341	No	Corrosion of household plumbing system; Erosion of natural deposits; Leaching from wood preservatives
There were no violations, more than 90% of samples were below the action level. Only one lead result and only one copper result were above the action level.							

ORGANIC CHEMICALS
UNREGULATED CONTAMINANTS
All results meet or surpass Federal Drinking Water Regulations

Period Covered: 12 Months Ending December, 2008	Units	MCL	MCLG	Highest Level in Distribution System	Range of detections	Violation (Yes/ No)	Major Sources in Drinking Water
Bromodichloro-methane	µg/L	N/A	N/A	8.7	4.69 - 8.70	No	By-Product of drinking water chlorination
Bromoform	µg/L	N/A	N/A	0.60	<0.50 - 0.60	No	By-Product of drinking water chlorination
Chloroform	µg/L	N/A	N/A	11.40	4.87 - 11.4	No	By-Product of drinking water chlorination
Dibromochloro-methane	µg/L	N/A	N/A	5.73	1.85- 5.73	No	By-Product of drinking water chlorination

* On January 1st, 2008 the chlorine leaving the Ed Love plant exceeded the 4.0 MCL for four hours. This water mixed with water already in the distribution system and no high readings were reported. Also no adverse health effects were reported.

WATER QUALITY REPORT

TABLE OF PRIMARY DRINKING WATER PARAMETERS MONITORING PERIOD ENDING DECEMBER 2008
WATER SOURCE LAKE TUSCALOOSA

MICROBIOLOGICAL		
Analyte	MCL	Highest Level Detected
Total Coliform Bacteria	<5%	0.91%
Turbidity	<0.3 NTU	0.288
INORGANIC CHEMICALS		
Antimony as Sb	6 ppb	ND
Arsenic as As	10 ppb	ND
Asbestos*	7 MLF	N/A
Barium as Ba	2 ppm	ND
Beryllium as Be	4 ppb	ND
Cadmium as Cd	5 ppb	ND
Chromium as Cr	100 ppb	ND
Copper as Cu	AL=1.3ppm	ND
Cyanide as Cn	200 ppb	ND
Fluoride as F	4 ppm	ND
Lead as Pb	AL=15 ppb	ND
Mercury as Hg	2 ppb	ND
Nitrate as NO3 -N	10 ppm	ND
Nitrite as NO2 -N	1 ppm	ND
Selenium as Se	50 ppb	ND
Thallium as Tl	2 ppb	ND
DISINFECTION BY-PRODUCTS		
Chlorine	4 ppm	3.1
Chloramines	4 ppm	ND
Chlorite	1 ppm	ND
Chlorine Dioxide	800 ppb	ND
Bromate	10 ppb	ND
Total Organic Carbon	TT	2.5
Total Trihalomathanes	80 ppb	96.7
Haloacetic Acids	60 ppb	68.7
ORGANIC CHEMICALS		
2,4-D	70 ppb	ND
2,4,5-TP(Silvex)	50 ppb	ND
Acrylamide	TT	ND
Alachlor	2 ppb	ND
Atrazine	3 ppb	ND
Benzo(A)pyrene	200 ppb	ND
Carbofuran	40 ppb	ND
Chlordane	2 ppb	ND
Dalapon	200 ppb	ND
Di(2-ethylhexyl)adipate	400 ppb	ND
Di(2-ethylhexyl)phthalates	6 ppb	ND
Dinoseb	7 ppb	ND
Diquat	20 ppb	ND
Dioxin[2,3,7,8-TCDD] *	30 ppq	ND
Endothall	100 ppb	ND

RADIOLOGICAL		
Analyte	MCL	Highest Level Detected
Beta / Photon Emitters	4 mrem / yr	N/A
Alpha Emitters	15 pCi/L	0.2 ± 0.3
Combined Radium	5 pCi/L	N/A
Uranium	30 ppb	N/A
ORGANIC CHEMICALS		
Endrin	2 ppb	ND
Epichlorohydrin	TT	ND
Glyphosate	700 ppb	ND
Heptachlor	400 ppb	ND
Heptachlor epoxide	200 ppt	ND
Hexachlorobenzene	1 ppb	ND
Hexachlorocyclopentadien	50 ppb	ND
Lindane	200 ppt	ND
Methoxychlor	40 ppb	ND
Oxamyl (Vydate)	200 ppb	ND
PCB's	500 ppt	ND
Pentachlorophenol	1 ppb	ND
Picloram	500 ppb	ND
Simazine	4 ppb	ND
Toxaphene	3 ppb	ND
Benzene	5 ppb	ND
Carbon tetrachloride	5 ppb	ND
Chlorobenzene	100 ppb	ND
Dibromochloropropane	200 ppt	ND
o-Dichlorobenzene	600 ppb	ND
p-Dichlorobenzene	75 ppb	ND
1,2-Dichloroethane	5 ppb	ND
1,1-Dichloroethylene	7 ppb	ND
cis-1,2-Dichloroethylene	70 ppb	ND
trans-1,2-Dichloroethylene	100 ppb	ND
Dichloromethane	5 ppb	ND
1,2-Dichloropropane	5 ppb	ND
Ethylbenzene	700 ppb	ND
Ethylene dibromide	50 ppt	ND
Styrene	100 ppb	ND
Tetrachloroethylene	5 ppb	ND
1,2,4-Trichlorobenzene	70 ppb	ND
1,1,1-Trichloroethane	200 ppb	ND
1,1,2-Trichloroethane	5 ppb	ND
Trichloroethylene	5 ppb	ND
Toluene	1 ppm	ND
Vinyl Chloride	2 ppb	ND
Xylenes	10 ppm	ND