

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.

Our Great Lake - Lake Tuscaloosa –
Protect. Preserve. Play.

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:

- 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.ourgreatlake.org for all the latest reports and information on our lake

WHAT TREATMENT TECHNIQUES ARE USED TO TREAT MY WATER?

The raw water from Lake Tuscaloosa is gravity fed approximately two miles to the Raw Water Pumping Station, which is a quarter of a mile from the Ed Love Water Plant. The raw water is pumped into a raw water flash mixer where aluminum sulfate and lime are added for coagulation and potassium permanganate is added when necessary for removal of iron and manganese for taste and odor control.

Next, the water flows through four flocculators and four settling basins. The water is then filtered through multi-media filters, lime is added for pH 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. At this point, the water is pumped into the Distribution System, which consists of nine booster pump stations and thirteen storage tanks.

The Ed Love Water Plant, which is named after former superintendent Ed E. Love, is a multi-million dollar facility. The plant is maintained by 36 full-time employees. These employees are responsible for the highest quality water possible for more than 200,000 consumers. The treatment of the water is skillfully handled by our manager, a chief operator, two biologists, an analyst, a senior secretary, eight operators, two operator trainees, three maintenance operators, one electronics technician, two solids operators, two maintenance operator assistants, and eleven operator assistants. The Ed Love Water Plant is operated and maintained 24 hours a day, 365 days a year, which includes weekends and all holidays.

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

Water Mains in Service, 4" and larger.562 Miles
Water Storage Tanks.....13 Tanks
Water Booster Pump Stations.....9 Stations
Water Storage Capacity.....25.4 Million Gallons
Water Treatment Capacity...45.7 Million Gallons / Day
Public Fire Hydrants.....3492 Hydrants

The Ed Love Water Plant has been an award winning plant for the last ten 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.

The City is currently in the final stages of construction of a new water plant to facilitate the tremendous growth of our area. The plant is being built on the north side of the Black Warrior River near the Lake Tuscaloosa Dam. The projected completion date for this new plant is summer of 2008. The City has finished the implementation of the Supervisory Control Acquisition Data Administration or SCADA system for the Water & Sewer System and continues to upgrading the security system for the Water Department. The SCADA system allows for continuous monitoring and better control of the water system's assets.

**Thank you for allowing us to serve
you and to present this
tenth Annual Water Quality Report.**

The Employees of the Ed E. Love Water Plant

WATER AND SEWER DEPARTMENT

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

The Tuscaloosa City Council Meetings are held once a week, in the City Council Chambers on second floor of Tuscaloosa City Hall. The meeting times are Tuesdays 6:00 PM and the address is 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 205-349-0499.

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 a.m. - 4:30 p.m.
Monday - Friday
(205) 248-5500
Drive Through Hours
7:30 a.m. - 5:00 p.m.

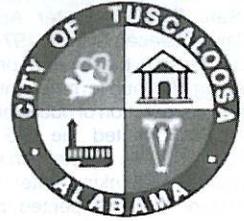
**Hilliard N. Fletcher
Wastewater Plant**
Office Hours:
7:00 a.m. - 3:30 p.m.
Monday - Friday
(205) 349-0273

**Distribution Division
Line Breaks/Leaks**
Office Hours:
7:00 a.m. - 3:30 p.m.
Monday - Friday
(205) 349-0280

**Lakes Division
Source Division**
Office Hours:
7:00 a.m. - 3:30 p.m.
Monday - Friday
(205) 349-0279

Ed Love Water Filtration Plant
Office Hours:
7:00 a.m. - 3:30 p.m.
Monday - Friday
(205) 349-0247

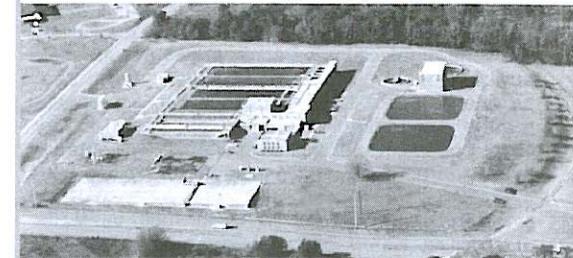
Additional Information:
Perry Acklin, Manager Water Treatment
Water Works Office (205) 248-5500
The Jerry Plott Water Treatment Plant is near completion instead of new water treatment plant.



CITY OF TUSCALOOSA WATER AND SEWER DEPARTMENT

2008

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>
<http://www.ourgreatlake.org>

**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.

The 1996 amendments to the SDWA contained extensive 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. The amendments created the need for this report showing consumers the detected amounts of contaminants and the plain language definitions shown in this pamphlet.

The amendments recognized that some people might 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

- 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.
- 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 treatment technology.
- 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*

- 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.
- Treatment Technique or TT:** A required process intended to reduce the level of a contaminant in drinking water.
- 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 following definitions.

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

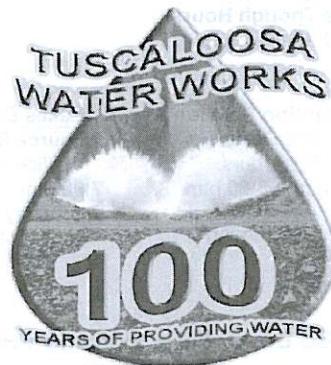
ppt means parts per trillion and is equal to ng/L or nanograms per liter

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.



In 2007, the City of Tuscaloosa Water Department celebrated its 100th year of producing safe drinking water for our area. Although there have been many changes over the years from source water locales to treatment techniques, our commitment to providing quality drinking water remains unchanged. We always welcome the community's comments and suggestions in helping to make your water utility the best that it can be. Thank you for the opportunity to continue to serve you.

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, 2007	Units	MCL	MCLG	Highest Level in Distribution System	Range of detections	Violations (Yr/No)
Major Sources in Drinking Water						
Total Coliform Bacteria	Presence of total Coliform bacteria in <5% of the 120 required monthly samples			Coliform Present in 1.0% of samples in one month	Not detected - 1.0%	No
Only 6 of 2731 samples were positive for Total Coliform or 0.22%, in 2007. No samples were E.coli positive.						
Total Organic Carbon	mg/L	TT	N/A	2.1	1.4 - 2.1	No
Naturally present in the environment						
Turbidity	NTU	0.3	N/A	0.221	0.010 - 0.221	No
Soil Runoff - Turbidity can interfere with disinfection.						
Chlorine as Cl ₂	mg/L	4	4	3.6	0.2 - 3.6	No
Water additive used to control microbes.						
RADIOLOGICAL						
All results meet or surpass Federal Drinking Water Regulations						
Gross Alpha	pCi/L	15	0	0.0 - 4.0	0.0 - 0.4	No
Erosion of natural deposits						
INORGANIC CHEMICALS						
All results meet or surpass Federal Drinking Water Regulations						
Fluoride as F ⁻	mg/L	4	4	1.2	0.06 - 1.20	No
Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizers and aluminum factories						
Nitrate as NO ₃ -N	mg/L	10	10	0.33	0.26 - 0.33	No
Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits						
Sulfate as SO ₄	mg/L	50	50	30.6	26.7 - 30.6	No
Erosion of natural deposits						
DISINFECTION BY-PRODUCTS						
All results meet or surpass Federal Drinking Water Regulations						
Period Covered: 12 Months Ending December, 2007	Units	MCL	MCLG	Average Level in Distribution System	Range of detections	Violations (Yr/No)
Major Sources in Drinking Water						
Haloacetic Acids	µg/L	60	N/A	17.5	7.0 - 47.4	No
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	46.6	13.6 - 138	No
By-product of drinking water chlorination						
The sum of Chloroform, Bromochloromethane, 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, 2007	Units	MCL	MCLG	Highest Level in Distribution System	Range of detections	Violations (Yr/No)
Major Sources in Drinking Water						
Lead as Pb	mg/L	AL=0.015	0	0.203	nd - 0.203	No
Corrosion of household plumbing system; Erosion of natural deposits						
Copper as Cu	mg/L	AL=1.3	1.3	3.550	nd - 3.65	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, 2007	Units	MCL	MCLG	Highest Level in Distribution System	Range of detections	Violations (Yr/No)
Major Sources in Drinking Water						
Bromochloromethane	µg/L	N/A	N/A	8.83	5.46 - 8.83	No
By-Product of drinking water chlorination						
Bromoform	µg/L	N/A	N/A	0.50	<0.50 - 0.50	No
By-Product of drinking water chlorination						
Chloroform	µg/L	N/A	N/A	8.65	7.38 - 8.65	No
By-Product of drinking water chlorination						
Dibromochloromethane	µg/L	N/A	N/A	5.65	2.07 - 5.65	No
By-Product of drinking water chlorination						

WATER QUALITY REPORT TABLE OF PRIMARY DRINKING WATER PARAMETERS MONITORING PERIOD ENDING DECEMBER 2005 WATER SOURCE LAKE TUSCALOOSA

MICROBIOLOGICAL			RADIOLOGICAL		
Analyte	MCL	Highest Level Detected	Analyte	MCL	Highest Level Detected
Total Coliform Bacteria	<5%	1.09%	Beta / Photon Emitters	4 mrem / yr	N/A
Turbidity	<0.3 NTU	0.221	Alpha Emitters	15 pCi/L	0.0 ± 0.4
INORGANIC CHEMICALS					
Antimony as Sb	6 ppb	ND	Combined Radium	5 pCi/L	N/A
Arsenic as As	10 ppb	ND	Uranium	30 ppb	N/A
Asbestos*	7 MFL	N/A	ORGANIC CHEMICALS		
Barium as Ba	2 ppm	ND	Endrin	2 ppb	ND
Beryllium as Be	4 ppb	ND	Epichlorohydrin	TT	ND
Cadmium as Cd	5 ppb	ND	Glyphosate	700 ppb	ND
Chromium as Cr	100 ppb	ND	Heptachlor	400 ppb	ND
Copper as Cu	AL=1.3 ppm	ND	Heptachlor epoxide	200 ppt	ND
Cyanide as Cn	200 ppb	ND	Hexachlorobenzene	1 ppb	ND
Fluoride as F	4 ppm	ND	Hexachlorocyclopentadiene	50 ppb	ND
Lead as Pb	AL=15 ppb	ND	Lindane	200 ppt	ND
Mercury as Hg	2 ppb	ND	Methoxychlor	40 ppb	ND
Nitrate as NO ₃ -N	10 ppm	ND	Dixamyl (Vydate)	200 ppb	ND
Nitrite as NO ₂ -N	1 ppm	ND	PCB's	500 ppt	ND
Selenium as Se	50 ppb	ND	Pentachlorophenol	1 ppb	ND
Thallium as Tl	2 ppb	ND	Picloram	500 ppb	ND
DISINFECTION BY-PRODUCTS					
Chlorine	4 ppm	3.6	Simazine	4 ppb	ND
Chloramines	4 ppm	ND	Toxaphene	3 ppb	ND
Chlorite	1 ppm	ND	Benzene	5 ppb	ND
Chlorine Dioxide	800 ppb	ND	Carbon tetrachloride	5 ppb	ND
Bromate	10 ppb	ND	Chlorobenzene	100 ppb	ND
Total Organic Carbon	TT	2.1	Dibromochloropropane	200 ppt	ND
Total Trihalomethanes	80 ppb	138	o-Dichlorobenzene	600 ppb	ND
Haloacetic Acids	60 ppb	47.4	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					
Diquat					
20 ppb ND					
Vinyl Chloride					
2 ppb ND					
Xylenes					
10 ppm ND					