



MEET OUR NEW DEPUTY EXECUTIVE DIRECTOR OF IPS

City of Tuscaloosa Executive Director of Infrastructure and Public Services (IPS) Tera Tubbs recently announced Jarrod Milligan as the deputy executive director of IPS. As deputy executive director Milligan will help Tubbs oversee all public service and infrastructure activities including engineering, transportation, water and sewer, environmental services, fleet maintenance and facility maintenance.

Milligan has been an employee of the City of Tuscaloosa since 2007. He started his career with the City working in the Office of City Engineer. In 2012, Milligan moved to the Water and Sewer Department overseeing operations in the water distribution and wastewater collections system division. In July of 2016 he was announced as the Director of Logistics and Asset Management. He is a registered professional engineer and holds a Bachelor of Science in Civil Engineering from the University of Alabama.

JERRY PLOTT WATER PLANT RECEIVES OPTIMIZATION AWARD

In October 2016, The City of Tuscaloosa's Jerry Plott Water Plant was recognized for the third consecutive year by the Alabama Department of Environmental Management for achieving an optimized level of performance that is three times beyond the minimum requirements established by the United States Environmental Protection Agency. Please join us in thanking the staff of the City of Tuscaloosa Water Treatment Plants for their dedication to ensure that our customers receive the best possible water quality.



Chris Jarrell receives the 2016 Optimization Award from Laura Taylor of ADEM

THE SOURCE OF OUR DRINKING WATER

Lake Tuscaloosa is our primary source for drinking water. It is a 5,885-acre impoundment of North River and several other creeks and holds over 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 published the required Source Water Assessment data. The data may be viewed in the Business Office at 2230 6th Street.

PARTICIPATE IN PROTECT OUR WATER SOURCE

During the 2016 Lake Cleanup Day, 4850 pounds of trash was removed by over 75 registered volunteers. On Saturday September 23, 2017, The Lakes Division will host the ninth annual Lake Cleanup Day. For information on this year's event, how you can participate or future events, please email or call Dana Willingham at dwillingham@tuscaloosa.com, or 205-349-0279.

OUR WATER TREATMENT PROCESSES

The Ed Love facility is a conventional treatment plant. Raw water is dosed with chlorine dioxide, and 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. Sodium hypochlorite is added for disinfection. Fluoride is added for the prevention of tooth decay, and zinc polyphosphate is added for corrosion control. The finished water is pumped into the water distribution system.

While the same basic treatment is used at the Jerry Plott Water Plant as the Ed Love Water Plant, the chemicals and techniques vary. 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.

The settled water is pumped to seven membrane filter racks. Using pressure, the water is squeezed through the pores of the membranes while impurities are left behind. Sodium hydroxide is added for pH control. Sodium hypochlorite, fluoride, and zinc polyphosphate are also added. The finished water then goes to the water distribution system. The water produced at these two plants is very similar.

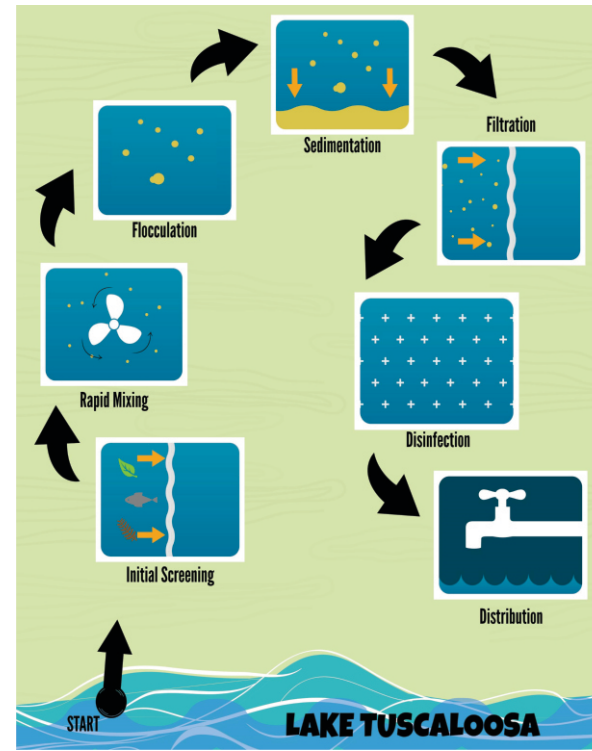
The plants are maintained by 32 full-time employees. These employees are responsible for producing water that meets all state and federal drinking water standards. Water is supplied to nearly 200,000 consumers in the service area. The plants are operated 24 hours a day, 365 days a year.

- Water Mains in Service, 4" and larger.....692 Miles
- Water Storage Tanks.....13 Tanks
- Water Booster Pump Stations.....10 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.....3541 Hydrants

The City of Tuscaloosa's Mayor and Council

Walter Maddox,	Mayor	Phyllis W. Odom,	Dist. 1
Raevan Howard,	Dist. 2	Cynthia Lee Almond,	Dist. 3
Matthew Calderone,	Dist. 4	Kip Tyner,	Dist. 5
Eddie Pugh,	Dist. 6	Sonya McKinstry,	Dist. 7

The Tuscaloosa City Council meetings are held every Tuesday at 6:00 p.m. in the Council Chambers on the second floor of Tuscaloosa City Hall, 2201 University Boulevard. The agenda for each meeting is published in the Tuscaloosa News and on the City of Tuscaloosa website at www.tuscaloosa.com, or you may contact the City Clerk at (205) 248-5010 for more information.



IMPORTANT CONTACT INFORMATION

Water Billing Office Turn On/Turn Off		
Office Hours:	Mon. – Fri. 7 a.m. – 5 p.m.	205- 248-5500
Drive Through:	Mon. – Fri. 7 a.m. – 5 p.m.	
Lakes Division		
Office Hours:	Mon. – Fri. 7:30 a.m. – 3:30 p.m.	205- 349-0279
Distribution Division Line Breaks/Leaks		
Office Hours:	Mon. – Fri. 7 a.m. – 3:30 p.m.	205- 248-5950
Tuscaloosa 311 Call Center		
Operational Hours:	Mon. – Fri. 7 a.m. – 7 p.m.	Dial 311
Calling 311 connects you to all nonemergency City services. Remember our motto "Make One Call to City Hall."		



Tera Tubbs, Executive Director

2017 ANNUAL WATER QUALITY REPORT



Ed Love Water Filtration Plant
1125 Jack Warner Parkway North East
Tuscaloosa, Alabama 35404-1056
Telephone 205-248-5630 Fax 205-349-0213
www.tuscaloosa.com

Office Hours: Monday – Friday 7 a.m. to 3:30 p.m.

Additional Information:
Stephen Daly, Deputy Director,
Water & Sewer Process Assets



Jerry Plott Water Plant
Tuscaloosa, AL 35406
2101 New Watermelon Road
205-248-5600

THE SAFE DRINKING WATER ACT

The Safe Drinking Water Act (SDWA) was signed into law on December 16, 1974. The purpose of the law is to ensure that the nation's water supply systems that serve 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 by visiting EPA's website 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 1-800-426-4791.

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 it 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** - parts per million and is equal to mg/L or milligrams per liter
- ppb** - parts per billion and is equal to µg/L or micrograms per liter
- ppt** - parts per trillion and is equal to ng/L or nanograms per liter
- pCi/L** - picocuries per liter, a measure of radiation
- ntu** - Nephelometric Turbidity Units
- cfu** - Colony Forming Units
- MFL** - 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 civic engagement of these citizens, this program continues to be very successful. The City has always maintained compliance with this regulation. We would like to applaud 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, 2016	Units	MCL	MCLG	Highest Level in Distribution System	Range of detections	Violation (Yes/No)
Total Coliform Bacteria	Presence of total coliform bacteria in 5% of the 120 required monthly samples	0	0	Coliform Present in 1.0 % of samples in one month	Not detected	No
Major Sources in Drinking Water: Naturally present in the environment						
In 2016, 7 of 2429 samples were positive for Total Coliform or 0.29%.						
Total Organic Carbon	mg/L	TT	N/A	1.8	1.2-1.8	No
Turbidity	NTU	95% <math><0.3</math>	N/A	0.708	0.002-0.708	No
Chlorine as Cl ₂	mg/L	4	4	2.7	0.3 - 2.7	Yes
Chlorine Dioxide as ClO ₂	mg/L	0.8	0.8	0.7	0.0 - 0.7	No
Chlorite as ClO ₂	mg/L	1	1	0.556	0.556	No
RADIOLOGICAL						
All results meet or surpass Federal Drinking Water Regulations						
Gross Alpha	pCi/L	15	0	0.8+/-0.7	0.04-0.8 - 0.81-0.7	No
INORGANIC CHEMICALS						
All results meet or surpass Federal Drinking Water Regulations						
Fluoride as F ⁻	mg/L	4	4	0.92	0.06 - 0.92	No
Nitrate as NO ₃ ⁻ -N	mg/L	10	10	0.24	0.20 - 0.24	No
Sulfate as SO ₄	mg/L	50	50	28.2	16.3 - 28.2	No
DISINFECTION BY-PRODUCTS						
All results meet or surpass Federal Drinking Water Regulations						
Period Covered: 12 Months Ending December, 2016	Units	LRAA	MCLG	Average Level in Distribution System	Range of detections	Violation (Yes/No)
Haloacetic Acids	µg/L	60	N/A	42.2	15.0 - 42.2	No
The sum of Dibromoacetic, Dichloroacetic, Monobromoacetic, Monochloroacetic, & Trichloroacetic Acids The Local Running Annual Average, LRAA, equal to or less than 60 µg/L.						
Total Trihalomethanes	µg/L	80	N/A	95.6	20.1 - 95.6	No
The sum of Chloroform, Bromodichloromethane, Dibromochloromethane & Bromoform The Local Running Annual Average, LRAA, 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, 2016	Units	MCL	MCLG	Highest Level in Distribution System	Range of detections	Violation (Yes/No)
Lead as Pb	mg/L	AL= 0.015	0	<math><0.005</math>	<math><0.005</math>	No
Copper as Cu	mg/L	AL= 1.3	1.3	0.132	<math><0.050</math> - 0.132	No
There were no violations, more than 90% of samples were below the action level. No lead was detected and no copper results were above the action level.						
ORGANIC CHEMICALS UNREGULATED CONTAMINANTS						
All results meet or surpass Federal Drinking Water Regulations						
Period Covered: 12 Months Ending December, 2016	Units	MCL	MCLG	Highest Level in Distribution System	Range of detections	Violation (Yes/No)
Bromodichloromethane	µg/L	N/A	N/A	4.33	2.46 - 4.33	No
Chloroform	µg/L	N/A	N/A	12.7	4.19 - 12.7	No
Dibromochloromethane	µg/L	N/A	N/A	7.2	0.76 - 7.20	No

WATER QUALITY REPORT TABLE OF PRIMARY DRINKING WATER PARAMETERS MONITORING PERIOD ENDING DECEMBER 2016 WATER SOURCE LAKE TUSCALOOSA

MICROBIOLOGICAL			RADIOLOGICAL		
Analyte	MCL	Highest Level Detected	Analyte	MCL	Highest Level Detected
Total Coliform Bacteria	<math><5\%</math>	1.00%	Beta / Photon Emitters	4 mrem / yr	N/A
Turbidity	<math><0.3</math> NTU	0.708	Alpha Emitters	15 pCi/L	0.8+/-0.7
INORGANIC CHEMICALS					
Arsimony as Sb	6 ppb	ND	Radium 228	N/A	0.9+/-0.6
Arsenic as As	10 ppb	ND	Combined Radium	5 pCi/L	N/A
Asbestos*	7 MFL	N/A	Uranium	30 ppb	N/A
ORGANIC CHEMICALS					
Endrin	2 ppb	ND			
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	0.92			
Lead as Pb	AL=15 ppb	ND			
Mercury as Hg	2 ppb	ND			
Nitrate as NO ₃ ⁻ -N	10 ppm	0.24			
Nitrite as NO ₂ ⁻ -N	1 ppm	ND			
Selenium as Se	50 ppb	ND			
Thallium as Tl	2 ppb	ND			
DISINFECTION BY-PRODUCTS					
Chlorine	4 ppm	2.7			
Chloramines	4 ppm	N/A			
Chlorite	1 ppm	0.556			
Chlorine Dioxide	800 ppb	440			
Bromate	10 ppb	ND			
Total Organic Carbon	TT	1.8			
Total Trihalomethanes	80 ppb	58.3			
Haloacetic Acids	60 ppb	37.0			
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	0.2 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			
Endothal	100 ppb	ND			