

# 2016



## ANNUAL DRINKING WATER QUALITY REPORT —— Madison Suburban Utility District ——

Test results from 2015

Madison Suburban Utility District is committed to providing customers with safe and reliable drinking water as we have for over 77 years.

We are pleased to present our Annual Drinking Water Quality Report and annual newsletter. The water treated and distributed by the District meets or exceeds all State and Federal requirements and the EPA's health standards. Our test results are included later in this report.

### THE WATER WE DRINK

In light of recent media coverage concerning water systems, MSUD thought this an excellent opportunity to provide the transparency customers deserve concerning their tap water. Share this report with your neighbors and others that may use MSUD water. And remember all public water systems must provide a Water Quality Report each year. Encourage those you know to read the Report issued by their own water provider.

<https://www.epa.gov/ccr>



We want to provide you with the information YOU need to ensure your tap water is safe all the way to your faucet. Do you know where your tap water comes from? Or how water is treated to make it drinkable? Or how water gets to your home?



MSUD employs the most highly trained drinking water professionals in the State. All certified Water Treatment and Distribution Operators complete years of rigorous training, both in the field and in the classroom, must pass the Standardize Tests administered by the State, and must earn continuing education credits to stay current on new regulations, operational best practices, and available resources.

## WATER TREATMENT PROCESS

MSUD utilizes some of the most current technology and water chemistry processes to efficiently treat raw river water and transform it into crystal clear, safe drinking water. The MSUD Treatment Plant sends an average of 8 million gallons a day into the distribution system, and has a capacity of nearly double that. Water treatment involves two types of processes: (1) physical removal of particulates and contaminants and (2) chemical disinfection. Plant Operators are continuously monitoring the river water and adjusting treatment processes to ensure the finished water is just right. The diagram below outlines how we treat the water you drink.

## WHAT IS THE SOURCE OF MY WATER?

Your water comes from the Cumberland River. As a surface water source, it has been rated as highly susceptible to potential contamination based on geologic factors and human activities in the vicinity. A source water assessment has been conducted and is available for review at the Madison Suburban Utility District offices and can be viewed online at <https://www.tn.gov/environment/article/wr-wq-source-water-assessment>.

## CONTAMINANTS IN BOTTLE AND TAP

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. Community water systems are required to disclose the detection of contaminants; however, bottled water companies are not required to comply with this regulation. 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 the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791) or visit <http://water.epa.gov/drink/>.

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, 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, agricultural livestock operation, and wildlife.

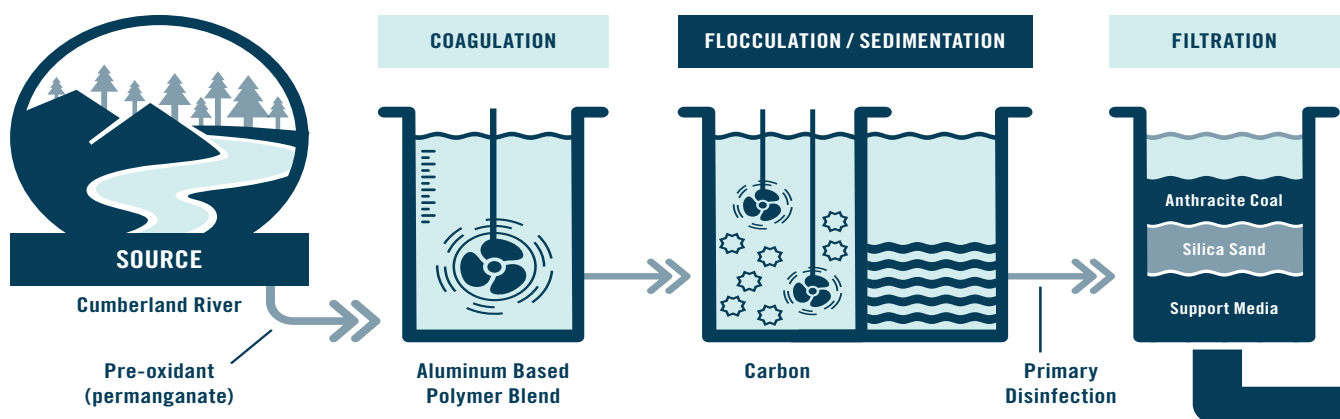
**INORGANIC CONTAMINANTS**, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

**PESTICIDES AND HERBICIDES**, which may come from a variety of sources such as agriculture, stormwater runoff, and residential uses.

**ORGANIC CHEMICAL CONTAMINANTS**, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

**RADIOACTIVE CONTAMINANTS**, which can be naturally occurring or be the result of oil and gas production and mining activities.

## WATER TREATMENT PROCESS



# WATER TREATMENT PROCESS

## PRE-OXIDANT:

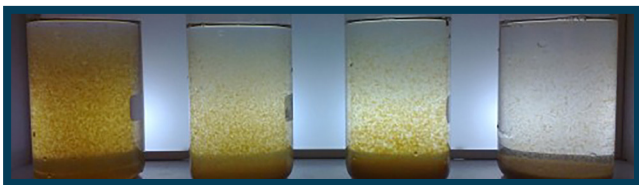
Permanganate is added to immobilize heavy metals and organic chemical compounds. It also offers mild disinfectant properties.

## COAGULATION:

This is the chemical process of rapidly mixing “coagulants” with river water. Most particles in source water have negative charges causing them to repel each other, much like the negative ends of two magnets. Coagulation changes the negative charges to neutral. The aluminum based polymer coagulants do an excellent job of neutralizing sediments and organic material.

## FLOCCULATION:

Coagulated water is slowly mixed causing the neutral particles (the sediments and suspended organic material) to collide and clump together to form floc. The floc particles continue to clump together forming larger and larger clumps trapping most of the sediment and suspended organic material. The floc now looks like snowflakes suspended in the water. Powdered carbon is added after flocculation and before sedimentation to absorb obnoxious tastes and odors and some organic compounds (like pharmaceuticals and endocrine disruptors). The carbon will settle out in the next process.



## SEDIMENTATION:

The floc particles are heavier than water. As the water enters the sedimentation basins the mixing is stopped, allowing the particles to sink to the bottom. The clear water is collected from the top of the basins and sent on to be filtered. This process removes nearly all the chemical material added to the water thus far as well as the bulk of the sediment, organic matter, heavy metals, and microorganisms.

## PRIMARY DISINFECTION:

Small amounts of chlorine are added to inactivate viruses, bacteria, and other microorganisms and maintain filter performance. Chlorine also serves as an oxidant to immobilize any metals that may have made it through the previous steps.

## FILTRATION:

Water is passed through deep filtration beds to produce water that is crystal clear. Extremely small particles are removed during this process. MSUD produces water with turbidities (cloudiness) significantly better than drinking water standards.

## SECONDARY DISINFECTION / FINISHING:

Finished (filtered) water is once again disinfected to destroy harmful bacteria and viruses. An additional amount, known as a chlorine residual, is applied to protect treated water from recontamination as it travels through the distribution system. MSUD also adds a corrosion inhibitor (phosphate) and fluoride to promote healthy teeth and bones.

Secondary Disinfection,  
Corrosion Control, Fluoridation



## THE BIG DEAL ABOUT LEAD AND OTHER CONTAMINANTS:

### WHAT WE DO

Once the water leaves the Treatment Plant it travels through main transmission lines, in and out of storage tanks, and through smaller distribution lines to each customer's meter.

You can imagine maintaining water quality through hundreds of miles of pipe and 12-15 million gallons of water could be daunting. Our certified Distribution Operators maintain system performance in several ways. All lines are flushed from every hydrant at least once a year to clear the lines of debris and test line pressures and flows. Some areas are flushed more often to maintain water quality, especially areas of low usage. When we flush the lines it is possible a small amount of water carrying sediment may make its way into your service line. Please look for signs in your neighborhood to indicate we've flushed that day, and allow your water to run a few minutes to clear out any deposits or air. You may always call with questions.

Water quality is continuously monitored at each of our 6 water storage tanks with use of in-line instrumentation. This data is transmitted back to the Control Room in real-time so the Operator on shift can identify potential problems immediately, and it also provides us with trending historical information to better understand water usage and water age in our community for planning purposes.

Each month the District collects samples from 80 or more different locations throughout the service area to "spot check" water quality at individual homes and businesses. All these results are reported to the State monthly and to you in the form of this report each year. This is in addition to the hundreds of other tests we perform at the Treatment Plant monthly before the water is allowed into the system.

One component we test for daily is the corrosion inhibitor added at the Treatment Plant. This mineral compound is safe for drinking and often added to bottled water to improve taste. It minimizes the corrosion potential of the water to protect the distribution mains and also the pipes in your home.



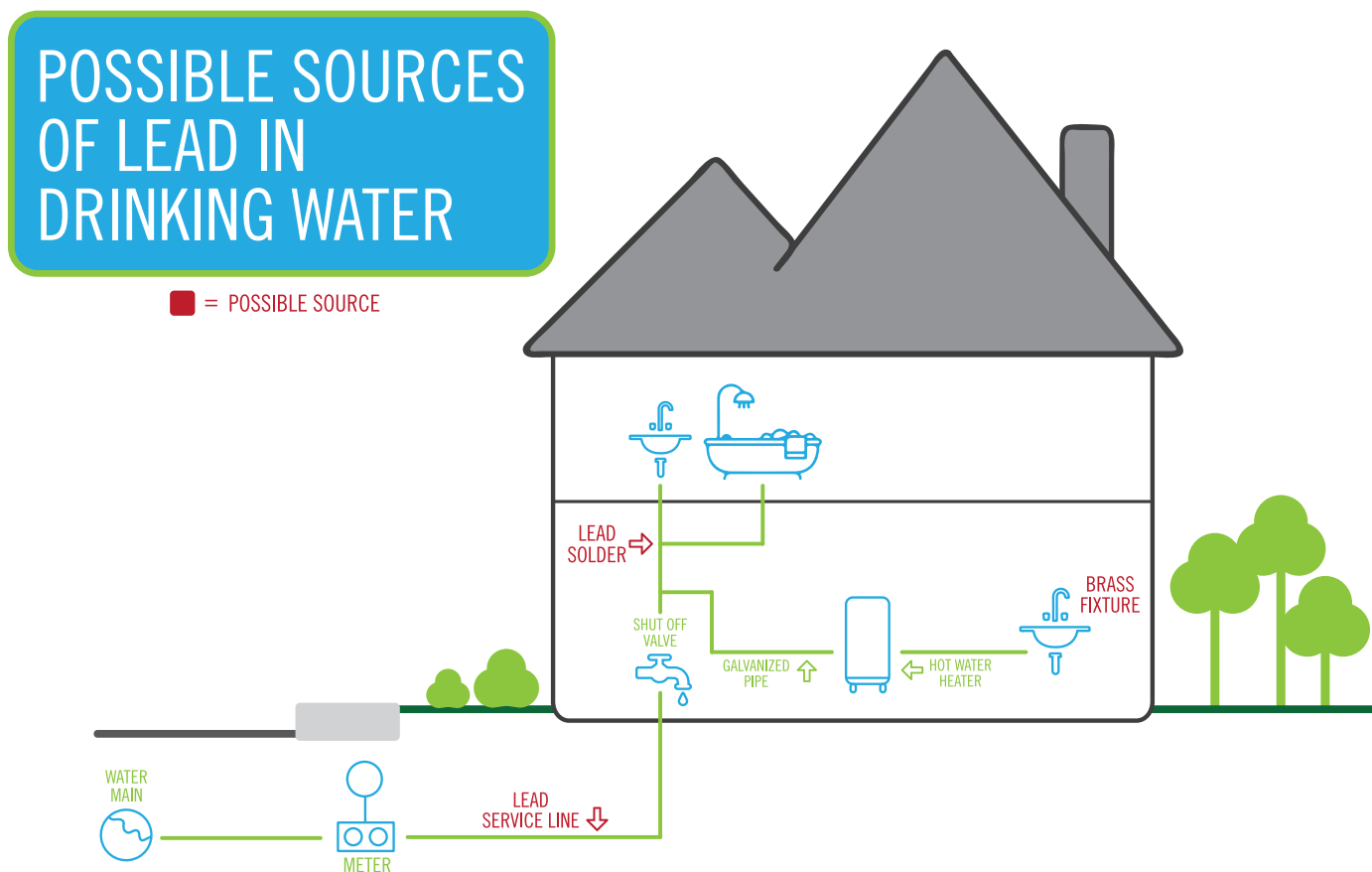


**Breaks happen.** MSUD faces the same infrastructure challenges as most US cities, however; since 1990 MSUD has undertaken an aggressive approach to replace aging and undersized water mains with new, more reliable water mains. But breaks can happen even on newer lines. Shifts in the ground or excessive weight can cause pipe failures, or in some cases accidental penetration from other contractors/utilities (like drilling into the line) or damage to above ground features like fire hydrants. We work hard to get service restored as soon as safely possible.

It is our top priority to maintain water quality during pipe failures or with the installation of new features. We follow all the industry best practices and methods approved by the State and the AWWA (American Water Works Association) to properly clean and disinfect all surfaces in contact with water. We take all possible steps to prevent contamination during a failure, but if contamination is suspected we take immediate action to correct the problem and inform those customers affected. Typically the water pressure in the pipe prevents anything from getting in, but if contaminants did make it in, the residual disinfectant (chlorine) in the water should take care of it. We follow up with testing to ensure the water is safe.

## WHAT YOU CAN DO

These practices keep the water safe before it gets to you, but what about once it goes through your meter? We can't control the materials used inside your home. Plumbing materials that were the norm 60 years ago may now be a potential danger to its users. It is important to know what types of pipes you have in your home. The diagram here identifies possible locations to find lead in your home or business. The use of lead service lines was banned in the 1980s and lead solder used on copper piping was banned in 1986. If your home was built in 1987 or after, chances are your home plumbing is safe. If you're unsure what materials are in your home have a Licensed Plumber (<http://verify.tn.gov/>) check it out for you. These pictures can give you something to look for.



Lead is often leached from plumbing materials in your home such as a lead service line, lead solder used to join copper pipes, or from brass faucets. Sometimes lead can be redeposited onto galvanized pipe or in your hot water heater and leach out again later. If known sources of lead are removed from your home it's a good idea to thoroughly flush the rest of your home and have the water tested before using it for drinking or cooking.



A lead pipe can be easily scratched with a key.  
(photo courtesy of US EPA Region 5)

Replacing pipes can be costly for a property owner. The CDC and EPA uphold that there is NO safe level of lead however, MSUD is adamant about helping our customers achieve safe water straight from your tap. We are not currently aware of any lead components in any of the pipe we maintain. Lead has never been detected in the water leaving the Treatment Plant. Small amounts of lead have only ever been detected coming from inside a few residences or businesses at levels below the EPA Action Level.



Lead service lines often have a "bulb" shaped connection.  
(photo courtesy of US EPA Region 5)

To help protect the pipes in your home from corrosion MSUD adds a mineral blend to prevent leaching of lead and other harmful metals from your home plumbing. We also frequently measure the corrosive potential of our water to ensure its being treated properly.

MSUD has been in full compliance with the Lead and Copper Rule, as issued by EPA, since its promulgation in 1991. Our monitoring results are published in this Report each year.

**Lead Levels** – If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. 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 about 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 by visiting

<https://www.epa.gov/your-drinking-water/basic-information-about-lead-drinking-water>.

## WATER TESTING

Home testing kits from the local hardware store can seem like a good idea, convenient and sometimes cheaper. MSUD advises customers to use caution when looking into these kits, when results can be misleading or not at all accurate. The best test results are those from EPA approved methods, analyzed by a drinking water certified laboratory.

Visit [drinktap.org](https://www.epa.gov/your-drinking-water/basic-information-about-lead-drinking-water) for information about testing your water. MSUD offers water testing to our customers, at our discretion, for common contaminants. If you are concerned about water call our Water Quality Department at 615-865-1636. We will follow up with a complete investigation into your water, from the main to your faucet.

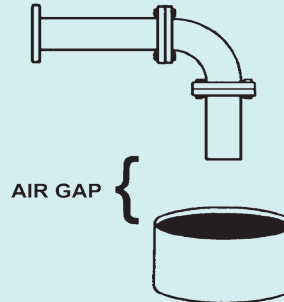
## WATER SAFETY 101

Some customers prefer to filter their tap water before drinking. If you decide to do so, be sure to follow the manufacturers' recommendations for maintenance and cleaning. And only use trusted NSF approved filters (this should include the filter in your refrigerator or ice maker). If you filter water to store for later use, it should be refrigerated and not stored longer than 3 days. Improper use of these filtration systems could pose a serious health risk to your family.

Your water can also become contaminated from other points in your home. Cross connections potentially allow contaminated water to enter your family's drinking water. You can protect your family by preventing situations where the back-flow of water can occur. A backflow occurs when the water in your pipes flows the opposite direction it was intended. This can happen either by back-siphonage or back pressure, when a sudden unintended change in water pressure causes the water to flow towards the water main and away from your faucet, or from one part of your home to another.

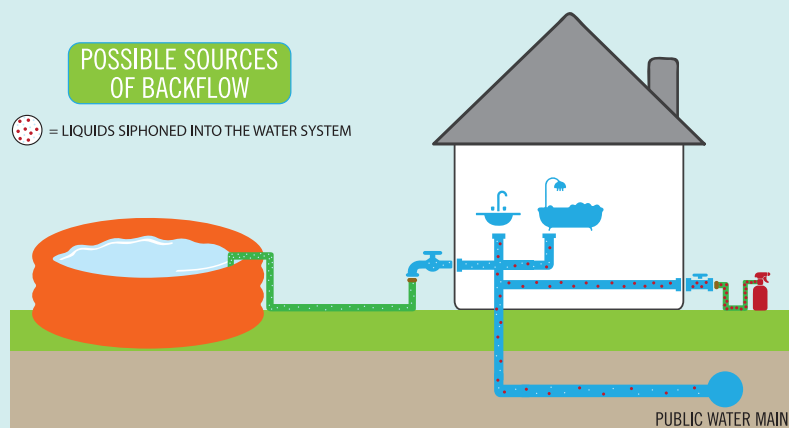


**WRONG**



**RIGHT**

Make sure you have an Air Gap between all faucets and the surface of the container you are filling or install a vacuum breaker on your outside hose bib.



Backflow prevention is required by District policy on things like irrigation systems, fire protection systems, pools and hot tubs, boilers/heaters, commercial ice makers, and home water treatment systems and water softeners. Commercial customers will have their backflow devices inspected annually by a State Certified Backflow Inspector on our Staff.

Call our Backflow Department for more information or questions: **615 589-3663** or the main office at **615-868-3201**.

## MONITORING YOUR WATER QUALITY

Every year we monitor the presence of over 100 compounds in your water, before, during, and after treatment. Reported on the next page is only the compounds we have detected, and are monitored under the Primary Drinking Water Standard established by EPA. For more information on the Safe Drinking Water Act and current standards visit

<http://water.epa.gov/lawsregs/rulesregs/sdwa/>.

## DO I NEED TO TAKE SPECIAL PRECAUTIONS?

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 (1-800-426-4791).

# WATER QUALITY RESULTS 2015

## MONITORED AT THE TREATMENT PLANT

Contaminant	Violation	Date Collected	Level Detected	Unit of Measure	Range	MCL	MCLG	Likely Sources of Contaminants
Barium	No	7/9/12	0.03	ppm	n/a	2	n/a	Discharge of drilling waste or metal refineries; erosion of natural deposits
Nitrate	No	2/10/15	0.31	ppm	n/a	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium	No	7/14/15	4.1	ppm	n/a	n/a	n/a	Erosion of natural deposits; used in water treatment
Turbidity <sup>1</sup>	No	Daily	0.11	NTU	0.023-0.114	TT	n/a	Soil runoff
Total Organic Carbon <sup>2</sup>	No	Monthly	39% removed*			TT	TT	Naturally present in the environment
Chloroform	No	5/12/15	6.8	ppb	n/a	unregulated		By-product of drinking water chlorination
Bromodichloromethane	No	5/12/15	2.4	ppb	n/a	unregulated		By-product of drinking water chlorination
*(35% required)								

## MONITORED AROUND THE DISTRICT

Contaminant	Violation	Date Collected	Level Detected	Unit of Measure	Range	MCL	MCLG	Likely Sources of Contaminants
Fluoride	No	quarterly	0.548	ppm	0.44-0.68	4.0	4.0	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Total Trihalomethanes <sup>3</sup>	No	quarterly	45 highest LRAA	ppb	18-57	80 LRAA	n/a	By-product of drinking water chlorination
Total Haloacetic Acids	No	quarterly	37 highest LRAA	ppb	18-65	60 LRAA	n/a	By-product of drinking water chlorination
Total Coliform Bacteria	No	daily	1.2%	n/a	n/a	presence of coliform bacteria in 5% of monthly samples	0	Naturally present in the environment

Contaminant	Violation	Date Collected	Level Detected	Unit of Measure	Range	MRDL	MRDLG	Likely Sources of Contaminants
Chlorine	No	daily	1.48	ppm	0.02-2.70	4.0	4.0	Water additive used to control microbes

## MONITORED AT THE CUSTOMER'S TAP

Contaminant	Violation	Date Collected	Level Detected	Unit of Measure	Range	MCL	MCLG	Likely Sources of Contaminants
Copper <sup>4</sup>	n/a	2014	0.26	ppm	0.01-0.42	AL=1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead <sup>5</sup>	n/a	2014	0.5	ppb	BDL-3.9	AL=15	0	Corrosion of household plumbing systems; erosion of natural deposits
*Level detected is 90th percentile of 30 households sampled in 2014.								

1. Turbidity is a measure of the cloudiness of the water. We monitor it because it's a good indicator of the effectiveness of our filtration system. We met the treatment technique for turbidity with 100% of daily samples below the limit of 0.15 NTU. 2. We met the treatment technique requirement for total organic carbon removal. 3. While your drinking water meets EPA's standard for trihalomethanes, it does contain low levels. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer. 4 Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's disease should consult their personal doctor. 5. Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (1-800-426-4791). Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.



## WATER QUALITY RESULTS TABLE DEFINITIONS:

- **AL** - Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.
- **BDL** - Below Detection Level laboratory analysis indicates that the contaminant is not present at a level that can be detected.
- **MCL** - Maximum Contaminant Level, or 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. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.
- **LRAA** - Locational Running Annual Average, the arithmetic average calculated from the current and previous 3 quarters measurements.
- **MCLG** - Maximum Contaminant Level Goal, or 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 the 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.
- **NTU** - Nephelometric Turbidity Unit, nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- **ppb** - parts per billion or ug/L, micrograms per liter - explained as a relation to time and money as one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- **ppm** - parts per million or mg/L, milligrams per liter - explained as a relation to time and money as one part per million corresponds to one minute in two years or a single penny in \$10,000.
- **TT** - Treatment Technique, or a required process intended to reduce the level of a contaminant in drinking water.



## HOW DO I CONTACT MSUD?

FOR BILLING AND ACCOUNT INFORMATION:  
**615-868-3201, MONDAY – FRIDAY, 7:30-4:00;**  
OR VISIT **WWW.MSUD.NET**

FOR EMERGENCIES AND TO REPORT A LEAK  
ON THE STREET: **24HR/DAY CALL 615-865-1636**

QUESTIONS ABOUT THIS REPORT OR  
WATER QUALITY? **615-865-1636**

### EN ESPAÑOL:

Este informe contiene información muy importante.  
Tradúcelo ó hable con alguien que lo entienda bien.

The District's Board of Commissioners meets each month at the Business Office, 108 W. Webster St, Madison, TN. These meetings are open to the public. Call for specific dates and times. Decisions by the Board of Commissioners on customer complaints brought before the Board of Commissioners under the District's customer complaint policy may be reviewed by the Utility Management Review Board of the Tennessee Department of Environment and Conservation pursuant to Section 7-82-702(7) of the Tennessee Code Annotated.



## THANK YOU

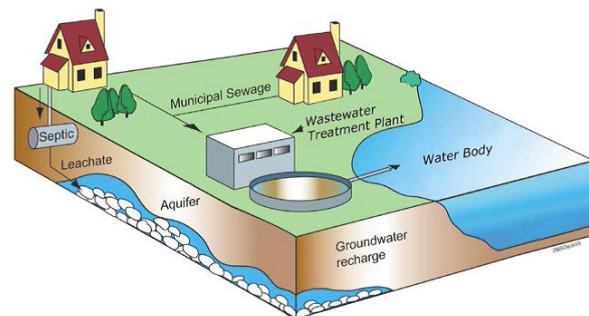
Thank you for allowing us to continue to provide your family with quality drinking water. We ask that all our customers help us protect our water sources, which are the heart of our community. If you notice something unusual or out of the ordinary, please contact us. As always, we welcome your questions and concerns.

Please share this publication with others who may use MSUD water and may not have received this notice, such as those in apartment buildings or community living.

This Report is available electronically at our website: <http://msud.net/madison/madccr2016.pdf>. You may also email [waterplant@msud.net](mailto:waterplant@msud.net) or call 615-865-1636 to request a copy be mailed.

## PROTECTING OUR WATER

The best and most cost-effective way to ensure safe water at the tap is to keep our source waters clean. Dispose of used and old paint and motor oil at designated drop-off locations. These chemicals, if allowed to leach into the ground and pavement, eventually make their way to the river and into our drinking water.



## THINK BEFORE YOU FLUSH!

Flushing unused or expired medicines can be harmful to your drinking water. Properly disposing of unused or expired medication helps protect you and the environment. Keep medications out of Tennessee's waterways by disposing in one of our permanent pharmaceutical take back bins. There are nearly 100 take back bins located across the state, to find a convenient location please visit: [www.tn.gov/environment/article/sp-unwanted-pharmaceuticals](http://www.tn.gov/environment/article/sp-unwanted-pharmaceuticals).

**Dispose Locally at:**

**Metro Police Department • Madison Precinct**

400 Myatt Dr, Madison, TN

Monday - Friday: 8:00 am - 4:00 pm

# MADISON RIVERGATE

area chamber of commerce

*Join us as we advance our community and economic prosperity.*

- **Convenience**—only 8 Miles from Downtown Nashville, Minutes from Opry Mills
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**For More Information 865-5400**  
**[madisonrivergatechamber.com](http://madisonrivergatechamber.com)**

Our time is now...

# Goodlettsville's

# music

# on Main

## 2016

presented by:

**June 16: Entice**  
**July 21: Harpeth Hill**  
**August 18: The NashTones**

Goodlettsville City Hall Park  
 6:30 - 8:00 p.m.  
 Including Food Vendors & a Kids Zone

## Cross Connection Questionnaire

The following questionnaire asks you about cross connections and the prevention of backflows to protect the water system.

Please read the definitions and questions carefully. If you answer YES to ANY of the questions, please return the completed questionnaire to us by mail, email ([msud@msud.net](mailto:msud@msud.net)) or you can submit it online at <http://msud.net/ccsurvey.html>.

Your participation is much appreciated.

**Backflow:** The reversal of the intended direction of flow of water or mixtures of water and other liquids, gases, or other substances into the distribution pipes of a potable water system from any source.

**Cross-Connection:** Any physical arrangement whereby public water supply is connected, directly or indirectly, with any other water supply system, sewer, drain, conduit, pool, storage reservoir, plumbing fixture or other device which contains, or may contain, contaminated water, sewage, or other waste or liquid of unknown or unsafe quality which may be capable of contaminating the public water supply as result of backflow caused by the manipulation of valves, because of ineffective check valves or backpressure valves or because of any other arrangement.

Madison Utility District  
P.O. Box 175  
Madison, TN 37116-0175

PLACE  
STAMP  
HERE

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# THE MADISON SUBURBAN UTILITY DISTRICT

## Cross Connection Questionnaire Survey

\* Occupant \_\_\_\_\_

\* Occupant Address \_\_\_\_\_

1) Occupancy: \_\_\_\_\_ Own \_\_\_\_\_ Rent \_\_\_\_\_

2) Meter serves Homes \_\_\_\_\_ How Many? \_\_\_\_\_  
Buildings \_\_\_\_\_ How Many? \_\_\_\_\_

3) Do you have a Hot Tub: YES \_\_\_\_\_ NO \_\_\_\_\_

4) Do you have a swimming pool? YES \_\_\_\_\_ NO \_\_\_\_\_

5) Do you have a Jacuzzi? YES \_\_\_\_\_ NO \_\_\_\_\_

6) Do you have a waterbed? YES \_\_\_\_\_ NO \_\_\_\_\_

7) Do you have a solar water heating system? YES \_\_\_\_\_ NO \_\_\_\_\_

8) Do you have a Green House? YES \_\_\_\_\_ NO \_\_\_\_\_

9) Do you have an underground sprinkler system? YES \_\_\_\_\_ NO \_\_\_\_\_

10) Do you have darkroom equipment? YES \_\_\_\_\_ NO \_\_\_\_\_

11) Do you have a drip/soaker/irrigation system? YES \_\_\_\_\_ NO \_\_\_\_\_

12) Do you have insecticide sprayers that attach to a garden hose? YES \_\_\_\_\_ NO \_\_\_\_\_

13) Do you have a utility sink with a threaded faucet? YES \_\_\_\_\_ NO \_\_\_\_\_

14) Do you have a wood burning hot water heater? YES \_\_\_\_\_ NO \_\_\_\_\_

15) Do you have a portable dialysis machine? YES \_\_\_\_\_ NO \_\_\_\_\_

16) Do you have a bathtub that fills from the bottom? YES \_\_\_\_\_ NO \_\_\_\_\_

17) Do you have a water softener or any extra water treatment system? YES \_\_\_\_\_ NO \_\_\_\_\_

18) Do you have an auxiliary water supply on your premises? YES \_\_\_\_\_ NO \_\_\_\_\_

19) Do you have livestock and use a water trough or water system connected to public water? YES \_\_\_\_\_ NO \_\_\_\_\_

20) Does a creek, river, or spring water run near or on your property? YES \_\_\_\_\_ NO \_\_\_\_\_

21) Do you have a booster pump? YES \_\_\_\_\_ NO \_\_\_\_\_

22) Do you have any other type of water pump? YES \_\_\_\_\_ NO \_\_\_\_\_

23) Do you receive irrigation water from a different source? YES \_\_\_\_\_ NO \_\_\_\_\_

24) Do you have a backflow protection device on your property now? YES \_\_\_\_\_ NO \_\_\_\_\_

25) Do you have any situation that you are aware of that could create a cross-connection? YES \_\_\_\_\_ NO \_\_\_\_\_

26) Do you run a business from your home? YES \_\_\_\_\_ NO \_\_\_\_\_

27) Do you have any other water-using equipment on your property not mentioned above? YES \_\_\_\_\_ NO \_\_\_\_\_

If yes, please list \_\_\_\_\_

Print Name\* \_\_\_\_\_ Phone#\* \_\_\_\_\_ Email Address \_\_\_\_\_

Signature\* \_\_\_\_\_ Date\* \_\_\_\_\_

\*REQUIRED FIELDS

Please notify this office if any of the above conditions change.

P.O. Box 175, Madison, Tennessee 37116-0175, (615) 868-3201, Fax (615) 868-5595