

D & M Water Supply Corporation

2019 Consumer Confidence Report

PWS ID Number: TX1740010

This is your water quality report for January 1, 2019 to December 31, 2019.

D & M WSC provides ground water and surface water. The ground water comes from the Wilcox-Carrizo Aquifer. The surface water comes from Lake Nacogdoches located in Nacogdoches County and it is purchased from the City of Nacogdoches [PWS #1740003](#).

This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water.

For more information regarding this report contact: General Manager Robert Shumate at 936-559-9900.

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al teléfono (936)559-9900.

The TCEQ completed an assessment of your source water and results indicate that some of your sources are susceptible to certain contaminants. The sampling requirements for your water system is based on this susceptibility and previous sample data. Any detections of these contaminants may be found in this Consumer Confidence Report. For more information on source water assessments and protection efforts at our system, contact Robert Shumate, General Manager 936-559-9900. For more information about your sources of water, please refer to the Source Water Assessment Viewer available at the following URL:

<https://www.tceq.texas.gov/gis/swaview>. Further details about sources and source-water assessments are available in Drinking Water Watch at the following URL: <https://dww2.tceq.texas.gov/DWW/>. Water loss for our water system was less than 20% for 2019.

Information about your Drinking Water

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. 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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at (800) 426-4791.

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 operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water 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, urban storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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 the system's business office.

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; persons 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 providers. Additional guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline (800-426-4791).

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. We are responsible for providing high quality drinking water, but we 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 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 at <http://www.epa.gov/safewater/lead>.

PUBLIC PARTICIPATION OPPORTUNITIES

The public may attend Board of Director meetings. The next meeting is: August 20, 2020 at 6:30 p.m. Regular meetings are the 3rd Thursday of each month. For a current schedule and meeting notices please visit <http://www.dmwater.org/board-meetings> or call 936-559-9900. If you are interested in serving as a director, please contact us for details.

Definitions and Abbreviations	The following tables contain scientific terms and measures, some of which may require explanation.
Action Level:	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Action Level Goal (ALG):	The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.
Avg:	Regulatory compliance with some MCLs are based on running annual average of monthly samples.
Level 1 Assessment:	A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.
Level 2 Assessment:	A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.
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 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 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.
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.
MFL	million fibers per liter (a measure of asbestos)
mrem:	millirems per year (a measure of radiation absorbed by the body)
na:	not applicable.
NTU	nephelometric turbidity units (a measure of turbidity)
pCi/L	picocuries per liter (a measure of radioactivity)
ppb:	micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.
ppm:	milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.
ppq	parts per quadrillion, or picograms per liter (pg/L)
ppt	parts per trillion, or nanograms per liter (ng/L)
Treatment Technique or TT:	A required process intended to reduce the level of a contaminant in drinking water.

Source Water Name		Type of Water		
1 - Alazan	Alazan Plant	Groundwater	Active	Wilcox-Carrizo
3 - Press Rd	Press Rd Plant	Groundwater	Active	Wilcox-Carrizo
4 - Press Rd Remote	Press Rd Plant	Groundwater	Active	Wilcox-Carrizo
5 - Gravel Ridge	Gravel Ridge Plant	Groundwater	Active	Wilcox-Carrizo
7 - New Douglass	Douglass Plant	Groundwater	Active	Wilcox-Carrizo

Lead and Copper Testing is done at the customer's taps. Testing is done every 3 years.								
Lead and Copper	Collection Date	MCLG	Action Level (AL)	90 th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2019	1.3	1.3	0.432	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2019	0	15	0	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)	2019	40	10.7 44.1	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
*The value in the Highest Level Detected column is the highest average of all HAA5 sample results collected at a location over a year								
Total Trihalomethanes (TTHM)	2019	82	13.9 91.2	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
*The value in the Highest Level Detected column is the highest average of all TTHM sample results collected at a location over a year								

Inorganic Contaminants	Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination	
Barium	2019	0.025	0.025 – 0.025	2	2	ppm	N	Discharge of drilling wastes and metal refineries; Erosion of natural deposits.	
Fluoride	2019	0.198	0.198 – 0.198	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.	
Nitrate [measured as Nitrogen]	2019	0.0702	0.0121 – 0.0702	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	
Radioactive Contaminants	Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination	
Combined Radium 226/228	2016	1.5	1.5 – 1.5	0	5	pCi/L	N	Erosion of natural deposits.	
Synthetic organic contaminants including pesticides and herbicides	Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination	
Atrazine	2018	0.5	0 – 0.5	3	3	Ppb	N	Runoff from herbicide used on row crops.	
Maximum Residual Disinfectant Level									
Disinfectant Residual	Date	Average Level	Minimum Level	Maximum Level	MRDL	Violation	MRDLG	Unit of Measure	Source in Drinking Water
Free Chlorine	2019	1.87	0.3	3.7	4.0	N	<4.0	ppm	Water additive used to control microbes.
Coliform	Date	Highest No. of Positive Results		MCLG	MCL	Violation	Likely Sources		
Fecal Coliform	2019	0		0	0	N	Naturally present in the environment.		
Total Coliform	2019	0		0	0	N	Naturally present in the environment.		
Fecal Coliform & E. coli REPORTED MONTHLY TESTS FOUND NO FECAL COLIFORM OR E. COLI BACTERIA.									
Total Coliform REPORTED MONTHLY TESTS FOUND NO TOTAL COLIFORM BACTERIA IN DISTRIBUTION SYSTEM.									
Total coliform bacteria are used as indicator of microbial contamination of drinking water because testing for them is easy. While not disease-causing organisms themselves, they are often found in association with other microbes that are capable of causing disease. Coliform bacteria are more hardy than many disease-causing organisms; therefore, their absence from water is a good indication that the water is microbiologically safe for human consumption.									
Secondary and Unregulated Constituents: Unregulated contaminants are those for which the 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 regulations are warranted.									
Substance	Date	Average Level	Range of Levels	Units	Limit	Likely Source of Contamination			
Aluminum	2019	0.0077	0.0077	ppm	0.2	Abundant naturally occurring element.			
Barium	2019	0.025	0.025	ppm	2				
Bicarbonate	2019	306	306	ppm	na	Corrosion of carbonate rocks such as limestone.			
Calcium	2019	1.23	1.23	ppm	na	Abundant naturally occurring element.			
Chloride	2019	11.4	11.4	ppm	na	Abundant naturally occurring element.			
Chromium	2019	<det.	<det.	ppm	na	Abundant naturally occurring element.			
Magnesium	2019	0.23	0.23	ppm	na	Abundant naturally occurring element.			
Manganese	2019	0.0069	0.0069	ppm	na	Naturally occurring element; runoff from landfills, compost, brush or silage piles, or chemicals such as gasoline.			
Potassium	2019	1.06	1.06	ppm	na	Abundant naturally occurring element.			
Sodium	2019	148	148	ppm	na	Abundant naturally occurring element. Run-off from road salt, fertilizers, industry waste, or sewage.			
Sulfate	2019	12	12	ppm	na	Abundant naturally occurring element.			
Alkalinity, Total	2019	315	315	ppm	na	Alkalinity is the capacity of water to neutralize acids.			
Hardness Total as CaCO3	2019	4.01	4.01	ppm	na	Hardness is a measure of the amount of calcium and magnesium in the water. Guide: Soft 0-17; Slightly hard 17-60; Moderately hard 60-120; Hard 120-180; Very hard >180.			
Total Dissolved Solids (TDS)	2019	418	418	ppm	1000	Inorganic salts (principally calcium, magnesium, potassium, sodium, bicarbonates, chlorides, and sulfates) and some small amounts of organic matter that are dissolved in water.			

Violations			
Lead and Copper Rule: The Lead and Copper Rule protects public health by minimizing lead and copper levels in drinking water, primarily by reducing water corrosivity. Lead and copper enter drinking water mainly from corrosion of lead and copper containing plumbing materials.			
Violation Type	Violation Begin	Violation End	Violation Explanation
LEAD CONSUMER NOTICE (LCR)	12/30/2019	03/05/3020	We failed to provide the results of lead tap water monitoring to the consumers at the location water was tested. These were supposed to be provided no later than 30 days after learning the results.
Total Trihalomethanes (TTHM): 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.			
Violation Type	Violation Begin	Violation End	Violation Explanation
MCL, LRAA	10/01/2019	12/31/2019	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.

Purchased Water Source	Type of Water	Status	Location
From the City of Nacogdoches 1740003 CTY https://www.ci.nacogdoches.tx.us/DocumentCenter/View/825/Water-Quality-Report?bidId=	Surface Water/Groundwater	Active	Lake Nacogdoches and Wilcox-Carrizo Aquifer

Water Quality Test Results 2019 Regulated Contaminants City of Nacogdoches for more information concerning this report please contact The Water Utilities Manager at (936) 564-5046.

Inorganics	Date	Highest Level	Minimum Level	Maximum Level	MCL	MCL G	Units	Source of Contaminant
Barium	2019	0.043	0.01	0.043	2	2	Ppm	Discharge of drilling wastes; Discharge from metal refineries; erosion of natural deposits.
Fluoride	2019	0.641		0.641	4	4	ppm	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate measured as Nitrogen	2019	0.13	0.0623	0.19	10	10	ppm	Runoff from fertilizer use/ leaching from septic tanks, sewage; erosion of natural deposits.
Combined Radium	2017	1.5		1.5	5	0	pCi/L	Erosion of natural deposits.

Maximum Residual Disinfectant Level								
Disinfectant	Date	Highest Level	Minimum Level	Maximum Level	MCL	MCL G	Units	Source of Contaminant
Chloramines	2019	3.43	1.8	4.0	4	<4.0	ppm	Disinfectant to control microbes.

Disinfectants and Disinfection By-Products	Date	Average Level	Minimum Level	Maximum Level	MCLG	MCL	Units	Source of Contaminant
Total Haloacetic Acids	2019	13	7.4	25.5	60	0	ppb	By-product of drinking water chlorination.
Total Trihalomethanes	2019	31	16.2	59.0	80	0	ppb	By-product of drinking water chlorination.
Contaminant	Date	Average Level	Minimum Level	Maximum Level	MCLG	MCL	Units	Source of Contaminant
Total Organic Carbon	2019	4.58	3.2	6.8	n/a	n/a	ppm	Naturally present in the environment.

Fecal Coliform REPORTED MONTHLY TESTS FOUND NO FECAL COLIFORM BACTERIA.

Total Coliform: The Revised Total Coliform Rule (RTCR) seeks to prevent waterborne diseases caused by E. Coli. E. Coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term, effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely compromised immune systems.

Contaminant	Date	MCL	Highest Monthly # of positive samples	Unit of Measure	Source of Contaminant
Total Coliform	2019	5% of monthly samples	3.6	presence	Naturally occurring in the environment

Lead and Copper	Date	Action Level	# of Sites Exceeding Action Level (AL)	90 th Percentile	Source of Contaminant
Lead (ppb)	2017	15	0	1.96	Corrosion of household plumbing systems; erosion of natural Deposits.
Copper (ppm)	2017	1.3	0	0.286	Corrosion of household plumbing systems; erosion of natural deposits: leaching from wood preservatives.

Recommended Additional Health Information for Lead

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. This water supply 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 hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking and 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 at <http://www.epa.gov/safewater/lead>.

Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites.

Constituent	Date	Highest Single Measurement	Lowest Monthly % of Samples Meeting Limits	Limits	Units	Source of Contaminant
Turbidity	2019	0.14	100% of readings were at or below 0.3	0.3	NTU	Soil Runoff.

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. For additional information and data visit epa.gov, or call the Safe Drinking Water Hotline 800-426-4791.

Constituent	Date	Average Level	Minimum Level	Maximum Level	Units	Source of Contaminant
Chloroform	2019	20.9	5.32	36.8	ppb	By-product of drinking water disinfection.
Bromodichloromethane	2019	8.72	2.69	16.3	ppb	By-product of drinking water disinfection.
Dibromochloromethane	2019	3.19	1.73	5.93	ppb	By-product of drinking water disinfection.

Secondary and Other Unregulated Constituents (No associated health effects)

Substance						
Constituent	Date	Average Level	Minimum Level	Maximum Level	Units	Source of Contaminant
Aluminum	2019	0.43	0.25	0.62	ppm	Abundant naturally occurring element
Bicarbonate	2019	22.2	22.2	22.2	ppm	Corrosion of carbonate rocks such as limestone
Chloride	2019	11.9	11.9	11.9	ppm	Abundant naturally occurring element; used in water purification; by-product of oil field activity.
Copper	2017	0.0897	<0.005	0.532	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Hardness as Ca/Mg	2016	17.26	1.31	33.2	ppm	Naturally occurring calcium and magnesium.
Iron	2017	0	0.0	0.0	ppm	Erosion of natural deposits iron or steel water delivery equipment or facilities.
Lead	2017	0.00125	<0.0005	0.0094	ppm	Corrosion of household plumbing systems; erosion of natural deposits.
Manganese	2019	0.0084	0.0018	0.015	ppm	Abundant naturally occurring element.
Nickel	2019	0.0011	0.0011	0.0011	ppm	Erosion of natural deposits.
pH	2011	8.2	7.8	8.6	units	Measure of corrosiveness of water.
Sodium	2019	47.5	23.8	71.3	ppm	Erosion of natural deposits; by-product of oil field Activity.
Sulfate	2019	53.2	53.2	53.2	ppm	Naturally occurring; common industrial by-product; by-product of oil field.
Total Alkalinity as CaCO ₃	2019	<20	<20	<20	ppm	Naturally occurring soluble mineral salts.
Total Dissolved Solids	2019	94	94	94	ppm	Total dissolved mineral constituents in water.
Zinc	2019	0.01	<0.005	0.015	ppm	Moderately abundant naturally occurring element.

Violations

Revised Total Coliform Rule (RTCR)

The Revised Total Coliform Rule (RTCR) seeks to prevent waterborne diseases caused by E. Coli. E. Coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term, effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely compromised immune systems.

Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE, MINOR, (RTCR)	04/01/2019	04/30/2019	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Contacts: D & M Water Supply: (936) 559-9900 www.dmwater.org
Texas Commission on Environmental Quality Region 10, Beaumont: (409) 898-3838
Source Water Assessment <https://www.tceq.texas.gov/gis/swaview>=
Texas Commission on Environmental Quality Austin: (512) 239-1000
Drinking Water Watch <https://dww2.tceq.texas.gov/DWW/>
Environmental Protection Agency Safe Drinking Water Hotline: (800) 426-4791
<http://water.epa.gov/drink/hotline/> additional information at <http://www.epa.gov/safewater/lead>
Conservation Tips: www.watersmart.org.
Local Emergency Response: 911

Boil Water Notices... May be issued in the event of low distribution pressure, water outages, microbiological samples found to contain E. Coli or fecal coliform organisms, failure to maintain adequate chlorine residuals, or other conditions which indicate that the potability of the drinking water supply has been compromised. When a condition occurs requiring a Boil Water Notice: To ensure destruction of all harmful bacteria and other microbes, water for drinking, cooking, and making ice should be boiled and cooled prior to consumption. The water should be brought to a vigorous rolling boil and then boiled for two minutes. In lieu of boiling, you may purchase bottled water or obtain water from some other suitable source. Once the boil water notification is no longer in effect, customers will be notified in a manner similar to the original notice. Notices are issued by D & M WSC through our website <http://dmwater.org/>. To receive Alerts at your email address and/or by text messaging sign up for Alerts at <http://dmwater.org/alerts>. We also use an automated call system to send messages to the phone number of record for service areas affected. Please keep your contact information updated by visiting <https://dmwater.org/contact-us>. Frequently Boil Water Notices are designated for an isolated area of our water system please review the areas included in the public notice announcement.

ATTENTION: SEWER SERVICE CUSTOMERS - Help protect your environment and keep your drain lines flowing. Do not pour GREASE or CHEMICALS down your drain lines. Grease (fat, oil, butter, margarine) of any type does not dissolve in water and will cause a buildup and stop the flow of waste from draining properly. Various chemicals work against approved treatments to the sewer system and are most often hazardous to the environment.

NOTE: Bills are due the 10th of each month. To avoid a late fee, service disconnection and additional fees; all payments must be received by the due date.

For your convenience Utility Payments may be made by:

- On-line <http://www.dmwater.org/> or automated pay by phone 1-855-981-2714 (convenience fee applies)
- Mail to PO Box 9, Douglass, TX 75943 (Please allow 7-10 days for processing)
- In person at the drive through window at 111 Buck Alley, Douglass, TX 75943
- Save time and money sign up for automatic bank draft 936-559-9900 or download the form at http://dmwater.org/documents/305/Bank_Draft_Form.pdf
- At Commercial Bank of Texas (CBTx) local branch offices (Please allow 5 days for processing)

About VFD donations: D & M WSC offers each customer the opportunity to make a voluntary contribution to the local voluntary fire department(s) (VFD's).

- The \$1.00 contribution amount is listed as a separate item on your monthly statement.
- These voluntary contributions will be sent to the following VFD's: Douglass VFD, Lake Nacogdoches VFD and South Nacogdoches VFD. Your donation will go to the VFD for your service address on your water bill.
- This voluntary contribution may be deductible under the Federal Income Tax Law.
- Customers have the right to deduct the \$1.00 VFD contribution from the bill or may choose to donate a different amount (please specify amount with payment).
- For a complete copy of the Corporation's Voluntary Contribution Policy, please make request at the Corporation's office at 111 Buck Alley, Douglass, Texas 75943, by phone 936-559-9900, Corporation's Web Page dmwater.org, or by FAX 936-559-0112.