CONSUMER CONFIDENCE REPORT 2016

Annual Drinking Water Quality Report for January 1, 2016 to December 31, 2016

Fayette Water Supply Corporation



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Office Hours

Monday – Friday 8:00 a.m. to 5:00 p.m.

8:00 a.m. to 5:00 p.m.

Public Participation Opportunities

Members are welcome to attend the monthly Board Meetings held every third Monday of the month at 5:30 p.m. Please contact the FWSC office for details.

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.

Fayette Water Supply Corporation (FWSC)

Fayette Water Supply Corporation (FWSC) was incorporated on November 5, 1973, as a

Texas Non-Profit Corporation. The Corporation was formed for the purpose of furnishing a water supply for general farm use and domestic purposes to individuals residing in the rural communities of Fayette County. Individuals who desire to have this service must become members of the Corporation. The governing body consists of a Board of Directors totaling seven members. These directors are elected by the Corporation's members at the annual meeting held on the fourth Monday in March and they serve without any compensation. The Corporation selects its own management staff, sets its own rates, establishes its own budgets and controls all aspects of the daily operations. It receives no funding from any outside entity.

The Board of Directors and staff are committed to providing the highest quality of potable water and reliable service to its members. This Consumer Confidence Report (CCR), also known as a Water Quality Report, summarizes the results of many tests and measurements performed at FWSC's water plants and throughout the water distribution system. The United States EPA requires water systems to test for up to 97 contaminants.

FWSC is currently serving 2,340 members residing in the rural areas of Fayette County with approximately 450 miles of distribution lines. The Corporation owns all but one of its well site properties. The property un-owned is under a 100 year lease. FWSC is under one Certificate of Convenience and Necessity (CCN), which consist of two Public Water Supply (PWS) systems. These systems are divided by the Colorado River, east and west of La Grange.

The system west of the river serves from Holman to Muldoon to Cistern to West Point with approximately 1,800 members. The system extends partially into Gonzales County, and a line extension being added this summer will extend FWSC into a small portion of Bastrop County and provide service to an additional 40 members. To distribute water, this system consists of 5 wells, 2 standpipes and an elevated tower. The system has a division of three pressure plains and uses a booster station to distribute water between them for emergencies. This system has three inter-connects with adjoining water systems, one with the City of La Grange and two with Fayette County Water Control and Improvement District (FCWCID). This system accounts for approximately three fourths of the member base served by FWSC.

The system east of the river serves from La Grange to Rutersville to Walhalla with approximately 540 members and consists of 2 wells and one inter-connect with the City of La Grange. This system accounts for the remaining one fourth of the member base served by FWSC. Each system's test results are located within the following pages.

Where Do We Get Our Drinking Water?

FWSC gets its drinking water from ground water sources known as aquifers. TCEQ completed an assessment of FWSC's source water and results indicate that some of FWSC's sources are susceptible to certain contaminants. The sampling requirements for FWSC's water systems are based on this susceptibility and previous sample data. Any detection of these contaminants may be found in this Consumer Confident Report. For more information on source water assessments and protection efforts at FWSC's system, please contact Jennifer Riley - FWSC Office Manager at 979-968-6475.

Information about Source Water Assessments

A Source Water Susceptibility Assessment for your drinking water source(s) is currently being updated by the Texas Commission on Environmental Quality. This information describes the susceptibility and types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. The information contained in the assessment allows us to focus source water protection strategies

*For more information about your sources of water, please refer to the Source Water Assessment Viewer available at the following URL: <u>http://gis3.tceg.state.tx.us/swav/Controller/index.jsp?wtrsrc=</u> *Further details about sources and source-water assessments are available in Drinking Water Watch at the following URL: <u>http://dww.tceg.texas.gov/DWW</u>

Este reporte incluye informaciòn importante sobre el agua para tomar. Para asistencia en espanol, favor de llamar al telefono (979) 968-6475.



Drinking Water Sources:

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 EPAs 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; those 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 at (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. FWSC are responsible for providing high quality drinking water, but FWSC 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 two 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.

Water Quality Test Results Language:

<u>Definitions</u>. The following tables contain scientific terms and measures, some of which may require explanation.

<u>Maximum Contaminant Level (MCL) –</u> 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

<u>Maximum Contaminant Level Goal (MCLG) –</u> 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.

<u>Maximum Residual Disinfectant Level (MRDL)</u> – 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.

<u>Maximum Residual Disinfectant Level Goal (MRDLG) –</u> 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.

Action Level (AL) – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

<u>Treatment Technique (TT) –</u> A required process intended to reduce the level of a contaminant in drinking water.

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 – 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.

Abbreviations

<u>Avg</u> - Regulatory compliance with some MCLs are based on running annual average of monthly samples.

MFL - Million fibers per liter

na: - Not applicable

<u>NTU</u> - 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.

<u>**ppt**</u> - Parts per trillion, or nanograms

per liter (ng/L)

ppq - Parts per quadrillion, o

picograms per liter (pg/L)

<u>mrem/yr</u> – Millirems per year (a measure of radiation absorbed by the body)



West System

A leaky toilet can waste 200 gallons of water per day. Public Water System (PWS) ID TX 0750022 Serving members of rural Fayette County West of the Colorado River



Water Source Information

Source Water Name	Type of Water	Report Status	Location		
3 - WEST POINT	GW	Y	Aquifer: Queen City		
4 - SWISS ALP	GW	Y	Aquifer: Jasper		
8 - FM 1115	GW	Y	Aquifer: Queen City		
7 - Roy Rd/Brewer	GW	Y	Aquifer: Carrizo		

Fayette Water Supply Corporation has emergency interconnect agreements with the following systems that were not used by FWSC during 2016. The water source for The City of La Grange and the Fayette County Water Control and Improvement District – Monument Hill is ground water. For further information regarding water quality, please feel free to contact them for their Consumer Confidence report.

- City of La Grange (PWS ID TX0750003), 801 W. Lower Line St., La Grange TX 78945 (979) 968-5033 or visit them online: <u>http://www.cityoflg.com/departments/utilities.php</u>
- Fayette County Water Control and Improvement District (FCWCID) Monument Hill (PWS ID TX0750009), 343 State Loop 92, La Grange TX 78945 (979) 968-5514 or visit them online: <u>http://monumenthillwater.com/home/</u>



2016 Regulated Contaminants Detected

Disinfectant Residual Data

Disinfectant	Year	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Violation	Likely Source of Contamination
Free Chlorine	2016	0.83	0.23	1.94	4.0	<4.0	ppm	Ν	Chlorine gas; Water additive used to control microbes

Lead and Copper

Definitions: Action Level Goal (AGL): 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.

Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90 th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	08/20/2014	1.3	1.3	0.27	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	08/20/2014	0	15	2.1	0	ppb	Ν	Corrosion of household plumbing systems; Erosion of natural deposits

Lead – 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.

2016 Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)	2016	12	2.3 - 15.7	n/a	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2016	87	17.6 - 108	n/a	80	ppb	Y	By-product of drinking water disinfection.

2016 Regulated Contaminants Continued

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic - While your drinking water meets EPA standards for arsenic, it does contain low levels of arsenic. EPAs standard balances the current understanding of arsenics possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.	2016	8	0-8.3	n/a	10	ррb	Ν	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	2016	0.0261	0.014 – 0.0261	2	2	ppm	Ν	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Nitrate [measured as Nitrogen]	2016	0.07	0.01 - 0.07	10	10	ppm	Ν	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Selenium	2016	6.8	5.2 - 6.8	50	50	ppb	Ν	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
Radioactive Collection Highest Level Contaminants Date Detected		of Levels ected	MCLG M	ICL Uı	nits V	Violation	Likely S	Source of Contamination

Containing	Duite	Detterted	Dettetted					
Beta/photon emitters	03/19/2015	17.7	0 - 17.7	0	4	mrem/yr	N	Decay of natural and man-made deposits.
*EPA considers 50 pCi/L t	to be the level of co	ncern for beta particles						
Combined Radium 226/228	03/19/2015	1.5	1.09 – 1.5	0	5	pCi/L	Ν	Erosion of natural deposits.
Gross alpha excluding radon and uranium	03/19/2015	4.3	0-4.3	0	15	pCi/L	Ν	Erosion of natural deposits.
Uranium	03/19/2015	5.8	0-5.8	0	30	ug/L	Ν	Erosion of natural deposits.

Violations Table

Public Notification Rule – The Public Notification Rule helps to ensure that consumers will always know if there is a problem with their drinking water. These notices immediately alert consumers if there is a serious problem with their drinking water (e.g., a boil water emergency).

Violation Type	Violation Begin	Violation End	Violation Explanation
Public Notice Rule Linked to Violation	05/19/2016	06/28/2016	FWSC failed to adequately notify you, our drinking water consumers, about a violation of the drinking water regulations.

Total Trihalomethanes (TTHM) - Trihalomethanes are a group of volatile organic compounds that are formed when chlorine, added to the water during the treatment process for disinfection, reacts with naturally-occurring organic matter in the water. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidney, or central nervous systems, and may have an increased risk of getting cancer. You do not need to use an alternative water supply. However, if you have health concerns, you may want to talk to your doctor to get more information about how this may affect you.

Fayette Water Supply Corporation (FWSC) is working to correct the problem by increasing the flushing throughout the West Point area. FWSC will conduct routine testing until the water is in compliance with TCEQ/U.S. EPA drinking water standards. FWSC is drilling a new well at the intersection of HWY 71 and Loop 543 and the water will be blended with the West Point water to assist in eliminating the problem.

Violation Type	Violation Begin	Violation End	Violation Explanation
MCL, LRAA	01/01/2016	03/31/2016	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.
MCL, LRAA	04/01/2016	06/30/2016	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.
MCL, LRAA	07/01/2016	09/30/2016	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.
MCL, LRAA	10/01/2016	12/31/2016	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.

Texas Water Development Board

In the water loss audit submitted to the Texas Water Development Board for the time period of January – December 2016, FWSC lost an estimated 89,381,456 gallons of water. This amount of water loss is also represented as 135.52 gallons per connection per day or 680.22 gallons lost per mile per day. If you have any questions about the water loss audit, please contact the FWSC office at 979-968-6475.



~	Mater oource information		
	Source Water Name	Type of Water	Report Status
	5 - WATHATTA / 1234 FM 1201	GW	v

 6 - RUTERSVILLE / 3327 SH 159
 GW
 Y
 Aquifer: Yegua Jackson

 Fayette Water Supply Corporation has an emergency interconnect agreement with The City of La Grange that was not used during 2016. For further

information regarding their water quality, please feel free to contact them for their Consumer Confidence report.

 City of La Grange (PWS ID TX0750003), 801 W. Lower Line St., La Grange TX 78945 (979) 968-5033 or visit them online: <u>http://www.cityoflg.com/departments/utilities.php</u>

2016 Regulated Contaminants Detected



Disinfectant	Year	Average	Minimum	Maximum	MRDL	MRDLG	Unit of	Violation	Likely Source of Contamination
Free	2016	Level	Level	Level	4.0	<4.0	Measure ppm	N	Chlorine gas; Water
Chlorine	2010	1.12	0.23	5.00	4.0	₹.0	ppm		additive used to control microbes

Lead and Copper

Definitions: Action Level Goal (AGL): 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.

Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90 th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	09/28/2015	1.3	1.3	0.54	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	09/28/2015	0	15	2.4	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits

Lead – 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.

2016 Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acid (HAA5)	2016	3	3 – 3	n/a	60	ppb	N	By-product of drinking water disinfection.

Texas Water Development Board

In the water loss audit submitted to the Texas Water Development Board for the time period of January – December 2016, FWSC lost an estimated 28,003,871 gallons of water. This amount of water loss is also represented as 142.87 gallons per connection per day or 852.48 gallons lost per mile per day. If you have any questions about the water loss audit, please contact the FWSC office at 979-968-6475.

Location Aquifer: Jasper

2016 Regulated Contaminants Continued

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination	
Total Trihalomethanes (TTHM)	2016	17	17 - 17	n/a	80	ppb	N	By-product of drinking water disinfection.	
Barium	05/27/2015	0.071	0.071 - 0.071	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.	
Fluoride	05/27/2015	0.21	0.21 – 0.21	4	4	ppm	Ν	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.	
Nitrate [measured as Nitrogen]	2016	0.03	0.02 - 0.03	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	
Selenium	05/27/2015	5.3	5.3 – 5.3	50	50	ppb	N	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.	
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected		MCLG	MCL	Units V	iolation	Likely Source of Contamination
Beta/photon emitters	05/19/2015	13.6	13.6 – 13.6		0	4	mrem/yr	N	Decay of natural and man-made deposits.
*EPA considers 50 pCi/L to be the level of concern for beta particles									
Combined Radium 226/228	08/13/2012	2	2 - 2	0	5	pCi/L	Ν	Erosion of natural deposits.	
Synthetic Organic Contaminants including pesticides and herbicides	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination	
Di (2-ethylhexyl) phthalate	2016	2.1	0-2.1	0	6	ppb	N	Discharge from rubber and chemical factories.	

Violations Table

No violations for the year the report covers



Small faucet leaks in a home can waste up to 3,000 gallons of water per year.



Use Water Wísely

A dripping faucet can waste 170 gallons of water per day.

Fayette Water Supply Corporation

Thirsty for Knowledge

Let's Learn About Water

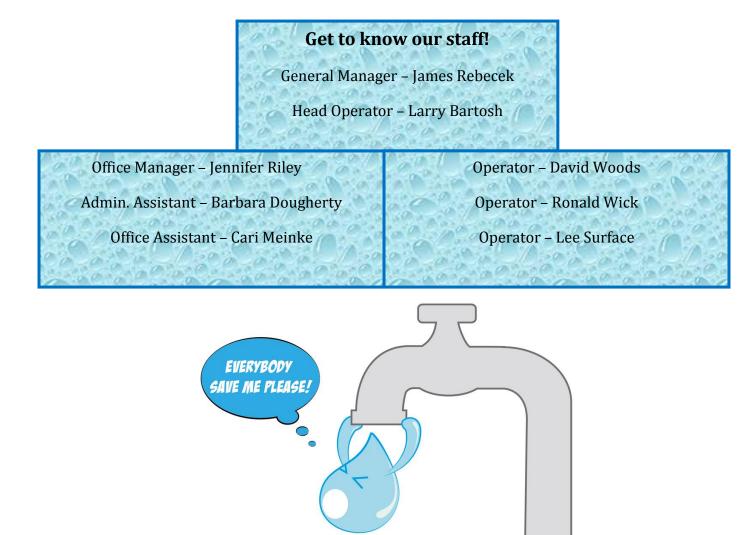
Do you know how much water a family of four uses every day in the United States? Not 50 gallons, not 100 gallons, but 400 gallons! You could take up to 10 baths with that much water—but who would want to do that? Fortunately, there are many things we can do to save water.

Why Save Water

Did you know that less than 1% of all the water on Earth can be used by people? The rest is salt water (the kind you find in the ocean) or is permanently frozen and we can't drink it, wash with it, or use it to water plants.

As our population grows, more and more people are using this limited resource. Therefore, it is important that we use our water wisely and not waste it.

For more information visit: http://www.epa.gov/watersense/kids/whysave.html



Consumer Confidence Report Enclosed

Fayette Water Supply Corporation P.O. Box 724 La Grange, TX 78945