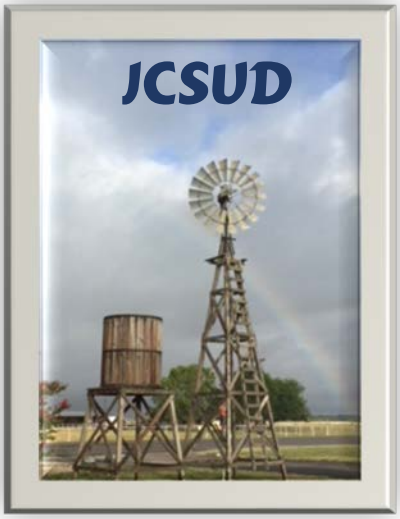


JOHNSON COUNTY SPECIAL UTILITY DISTRICT

Annual Water Quality Report - Consumer Confidence 2018

This report published in 2018 is intended to provide you with information about your drinking water and the District's efforts to provide safe drinking water. The latest test results data, Jan-Dec 2017, is used for this publication. Providing water / wastewater services to some 17,000 connections, JCSUD's service area covers the majority of rural Johnson County and some of Tarrant, Ellis and Hill counties.

The article below lists just some of the recent projects that are integral in keeping the long-term commitment to provide safe drinking water now and in the future at the most fair and reasonable cost while conserving resources. The Board of Directors and Staff are partnered together to exhibit the District's best management practice to uphold our credibility as a public utility and regional water supplier.

Current Initiatives

by Terry Kelley, GM

Smart-meter conversion for the entire system JCSUD has thoroughly researched the merits of implementing an Advanced Meter Infrastructure (AMI) system to streamline today's workload, enhance conservation, and reduce water loss control. AMI is quickly becoming the new standard among public water systems, other utilities in Texas and around the country for the same reasons. AMI platforms from a specialized data management software system which integrates with replacing meters with new "smart meters" system-wide. Now comes a unique opportunity for the District to monitor customer water usage like never before to respond better more intelligently to call-ins regarding usage or billing concerns. AMI also offers a website portal to customers for direct access to their account and observing their own usage history even as frequent as hourly flow data. In turn, customers observe first hand if continuous low flows exist, which could indicate a leak. Unknown high-flows can occur randomly to evidence unintended use, such as a sprinkler system operating when the customer wasn't aware. This new technology enables the customer to monitor usage to save water and money. Operations become more efficient since accurate data is available to customers. In turn there are fewer call-ins which translates into fewer truck rolls and safer work conditions. Meter readers can now focus more than ever before on staying current with daily work orders. We have engaged a consulting firm with an extensive background in advising and procuring AMI systems for utilities across the country. Estimated completion of this project expected to be 3rd quarter 2019.

Redline Projects About one-third of the system consists of 3-inch and smaller diameter lines. JCSUD maintains a system hydraulic software model to predict how new connections coming on the system will trigger new facilities and more water lines. Waterline segments are identified and ranked in accordance with the need to be upsized or replaced. Lines designated as priority are called "redlines."

The District's strategy is to replace or supplement existing lines with larger ones as soon as practical. Compared to normal construction projects requiring a higher level of engineering, design, and easement acquisition, the in-house workforce generally manages the prelim work prior to construction for a redline project. However, the construction phase is outsourced to a selected contractor based on competitive quantity pricing and their ability to perform the work over the course of several projects as long as construction pricing remains competitive. Over the last four years redline projects funded through 2017 totals $2.1 million for some 9 miles (comparable distance from Cleburne courthouse to I-35 via US 67) of 6, 8, and 12 inch pipe. In 2017 about 6800 linear feet of 6 inch waterline was installed along S. Hwy 171 (Hillsboro Hwy.) and CR 314. Also, an 8 inch waterline extension for 1670 linear ft. was added on CR 913A.

The Capital Improvements Program in 2017 was more robust to schedule five redline projects for a combined 22K linear feet of 6 and 8 inch waterline. But easement acquisition and dealing with new subdivision growth made for higher hurdles this year to complete all that was planned. Two 2017 projects carry over into 2018. The Chambers St. 6 inch line extension for some 2600 linear ft. and 4 inch line to replace a 2 inch line along CR 205 for some 7750 linear ft. The Chambers St. line extension will remove about 10 retail connections on the transmission line between the Mansfield take-point meter to the Plant 27 pump station. Transmission lines work best when they are solely dedicated to transport water to elevated tanks and pump stations without serving residential meters along the way.

Relocate District Office/Service Center Campus

In 2012 a building fund account was set up towards the prospect of developing a new campus for a new central office/service center facilities. In January 2014, the District purchased property as the first big step towards this initiative. The current office location at 2849 S. Hwy. 171 was constructed in 1980 on a 5-acre tract south of Cleburne. At the time, the primary focus was on the rural families which populated this part of Johnson County. The new Service Center was completed in early 2017 and system operations is better equipped to work from this new location. Phase 2 construction which includes the administration building, parking, and entry/exit flow is currently underway. Another noteworthy item is that 40% of the remainder cost for Phase 2 ($3.7 million) is covered by non-operating revenue (sources other than ratepayer collections). The other 60% is derived from cost reductions associated with the SWATS plant budget. The District shifted its main water supply taking from Lake Granbury to the City of Mansfield in 2014. The costly reverse osmosis (desalinized) drinking water from Lake Granbury was once our only surface water source. Today it represents about 16% of the JCSUD's total sources supplied. The new administration building does not burden ratepayers with any added cost to finally complete the new office complex.

As the District recently celebrated its 50-year anniversary, this new office complex also demonstrates the cause towards excellence in planning best for those we serve going into the next 50 years. The Board's vision will soon become reality to centrally locate the new office complex while affording proper amenities and enhanced customer service. Completion is expected in the last quarter of 2018.

REGULATED SUBSTANCES

Substance	Unit of Measure	Year	Highest Level Detected	Individual samples range	MCL	MCLG	Typical Source
Barium	ppm	2017	0.038	0.032 - 0.038	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Fluoride	ppm	2017	2.44	0.31 – 2.44	4	4	Erosion of natural deposits; water additive which at low levels promotes strong teeth; discharge from fertilizer and aluminum factories.
Nitrate	ppm	2017	0.34	0.04 - 0.34	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Chromium	ppb	2017	4.1	2.2 – 4.1	100	100	Discharge from steel and pulp mills; Erosion of natural deposits.
Combined Radium 226/228	pCi/L	2017	1.5	1.5 – 1.5	5	0	Erosion of natural deposits
Xylenes	ppm	2017	0.003	0 – 0.003	10	10	Discharge from petroleum and chemical factories.

Disinfectant Residual

Disinfectant	Unit of Measure	Year	Average Level	Range of Levels	MRDL	MRDLG	Typical Source
Chloramines Free Chlorine	ppm	2017	2.36	0.34 – 3.97	4.0	<4.0	Water additive used to control microbes

Disinfection Byproducts *The values in the Highest Average column is the highest average of all sample results collected over a year.*

Substance	Unit of Measure	Year	Highest Average	Individual Samples Range	MCL	Typical Source
Haloacetic Acids HAA5	ppb	2017	30	5.7 – 72.8	60	By-products of drinking water disinfection
Total Trihalomethanes TTHM	ppb	2017	52	3.86 – 102	80	

Turbidity is a measure of the clarity of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. During the reporting year, samples taken to measure turbidity met water quality standards.

Substance	Unit of Measure	Year	Highest Single Measurement	Lowest Monthly % of Samples Meeting Limits	Turbidity Limits	MCL	Typical Source
Turbidity	NTU	2017	.22	100%	0.3	TT	Soil Runoff

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 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 to take to minimize exposure is available from the Safe Drinking Water Hotline at (800) 426-4791 or at http://www.epa.gov/safewater/lead.

Tap water samples were collected for lead and copper analyses from homes throughout the service area.

Lead and Copper	Unit of Measure	Sampled	The 90th Percentile	No. of Sites Above AL	Action Level	Typical Source
Copper	ppm	2017	0.2	0	1.3	Corrosion of household plumbing systems; Erosion of natural deposits. Leaching from wood preservatives.
Lead	ppb	2017	3.2	0	15	Corrosion of household plumbing systems; Erosion of natural deposits.

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

Public water suppliers are required to submit their annual Water Loss Audit report to the Texas Water Development Board. Every water system has water loss and commit to reporting to its customers the percentage of unmetered water from the total supply which is pumped annually. It can range up to 50% for some. Over the last few years JCSUD's water loss ranges from 15 to 18%. For 2017, JCSUD accounts for 16% total water loss or 255 MG (million gal) of the 1590 MG that was pumped into the system.

There are two categories of water loss called Apparent Losses and Real Losses. Real Losses include the weeps and seeps which go undetected among the 884 miles of water mains throughout the distribution system. Apparent Losses are mainly due to meter inaccuracy. Over time, mechanical meters tend to "under register" the actual amount which flows through them. In turn this generates water loss and accounts for about 15% of the total system losses.

According to EPA publication about water loss, 16% is on the low end of the average water loss value for public water systems. Nevertheless, the District is committed to reducing water loss to adopt a Water Loss Control Program. A water loss control program consists of three major steps. The critical first step is the **water audit**. A water audit identifies and quantifies the water uses and losses from a water system. The **intervention process** addresses the findings of the water audit through implementation of controls to reduce or eliminate water losses. The **evaluation step** uses performance indicators to determine the success of the chosen intervention actions. Utilizing the standard terminology and the three steps of a water loss control program, systems can determine their baseline water use and loss, prioritize and implement water efficiency projects and operational changes, and evaluate and continuously improve water loss Water Audit Evaluation Intervention.

Under the Microscope

We are pleased to report that during the past year, the water delivered to your home or business complies with all state and federal drinking water requirements. The tables on page 2 show what substances were detected in our drinking water during the last testing period. Although all of the substances listed are under the Maximum Contaminant Level (MCL) set by the U.S. Environmental Protection Agency (EPA), it is important to inform of what was detected and how much of the substance was present in the water. The state requires monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. Contaminants that may naturally exist in untreated water include organic biological elements, such as bacteria and viruses; inorganics, such as salts and metals; pesticides and herbicides; chemicals from industrial or petroleum use; and radioactive materials. Fortunately, the report shows that contaminants do not exist in our local sources at action levels.

Many substances (such as calcium, sodium, or iron) which are often found in drinking water, can cause taste, color, and odor concerns. The taste and odor substances are called secondary substances and are regulated by the State of Texas, not the EPA. These substances are not causes for health concerns. Secondaries are not required to be reported in this document but they may affect the appearance and taste of your water.

Some Secondary Substances

This chart lists other items for which the water is tested. These items do not relate to public health but rather to aesthetic effects.
These items are often important to industrial users.

No MCL exists

Item	Measure	Avg Level
Calcium	ppm	1.85
Iron	ppm	0.05
pH	units	8.55
Sodium	ppm	222
Total Hardness	ppm	7.33

Community Participation

The District is governed by a Board of seven directors, each serving three year terms. In accordance with the Texas Election Code, each year the District orders an election which is scheduled for the first Saturday in February. The last day to file for a place on the ballot is 60 days before the Election Day. To learn more about the District's governance and the schedule for the next election planning cycle, please call the office. The Board regularly meets on the third Tuesday of each month beginning at 5:30 pm at the District office. An open forum at the beginning of each meeting is a time to receive public comments or concerns by those who wish to attend. Address: 2849 S Highway 171, Cleburne, TX Phone: 817-760-5200

En Español:
Este informe incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (817) 760-5200.

DEFINITIONS and ABBREVIATIONS

MCLG: Maximum Contaminant Level Goal. The level of a contaminant in drinking water which there is no known or expected health risk. MCLGs allow for a margin of safety.

MCL: Maximum Contaminant Level. The highest permissible level of a contaminant in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MRDL: Maximum Residual Disinfectant Level. The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for 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 disinfectant to control microbial contamination.

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

TT: Treatment Technique, a required process to reduce the level of a contaminant in drinking water.

NTU: Nephelometric Turbidity Units

ppm: parts per million, or milligrams per liter (mg/L) – or one ounce in 7,350 gallons of water

ppb: parts per billion, or micrograms per liter (µg/l) – or one ounce in 7,350,000 gallons of water.

pCi/L: picocuries per liter (measure of radioactivity)

In the interest of conservation, the District has adopted the year-round policy that outdoor watering with sprinkler systems is prohibited between 10 am and 6 pm, which aligns with the idea to make every drop count.

Convenient Options for our Customers:

- Go paperless. Receive email notification when bill is ready.
- Sign up to receive and pay bill with text message system.
- Call toll free number 877-768-0858 for automated pay.
- Visit website: http://www.jcsud.com to pay your bill online.
- Pay by mail, in person, or night drop.
- We accept Visa, MasterCard, Discover, American Express

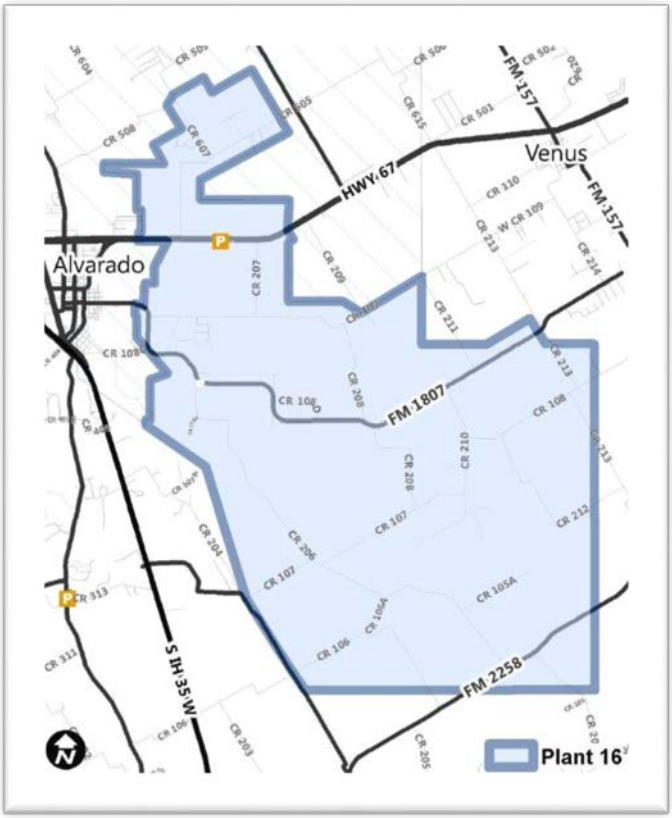
Source Water Assessment

The TCEQ completed an assessment of our source water and results indicate that some of our sources are susceptible to certain contaminants. The sampling requirements for our water system are based on this susceptibility and previous sample data. Any detections of these substances may be found in this Consumer Confidence Report.
The District has two main water production sources. About 30 percent of total production comes from well water (Trinity Aquifer) and 70 percent is from purchased surface water from Lake Granbury and the City of Mansfield.
For more information about our focus on protection efforts, contact Danny Armstrong at 817-760-5200.
All sources are monitored and tested according to state regulations.

PWS ID# TX 1260018

Required Language about Fluoride

This is an alert about drinking water and a cosmetic dental problem that might affect children under the age of nine. At low levels, fluoride can help prevent cavities, but some children drinking water with more than 2 milligrams per liter (mg/L) of fluoride may possibly develop cosmetic discoloration of their permanent teeth (dental fluorosis), which can occur only in developing teeth before they erupt from the gums. Your drinking water does not contain more than 4.0 mg/L of fluoride, which is the maximum contaminate level limit, yet a notice is needed because of a 2.4 mg/L sample reported, as explained here.



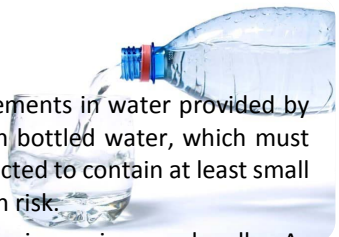
Systems exceeding the fluoride secondary constituent level (SCL) of 2.0 mg/L but has not exceeded the maximum contaminant level (MCL) are required to notify customers in the Consumer Confidence Report. In this reporting cycle in 2017, one ground water well pump station sample triggers an alert for a specific area. There is a small portion within the distribution system where a producing Paluxy well recently produced a fluoride level of 2.4 mg/L. The subject area represents only 5% of the total system connections (some 700 residents) that should be mindful of this notice. The subject area is just east of Alvarado and generally south of U.S. Hwy. 67 around the F.M. 1807 corridor, as shown on the map at left.

For more information, please call Danny Armstrong, Operations Manager, 817-760-5224.

Special Health Information *Required language for ALL community public water suppliers:*

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; 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 provider. Additional guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the EPAs Safe Drinking Water Hotline at 800-426-4791.

Some Elements are Expected



To ensure tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain elements in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. Measurable amounts do not necessarily indicate that the water poses a health risk.

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, in fewer cases, radioactive material and substances resulting from the presence of animals or from human activity.

PWS ID# TX 1260018