



JCSUD

Johnson County Special Utility District

817-760-5200

PWS ID#: TX 1260018



Annual Water Quality Report

In 2015 Johnson County Special Utility District celebrates its 50-year anniversary as a public water supplier. It's been quite a journey given its humble beginnings with one well serving a small rural area a few miles from the office. It all started with a handful of families that once hitched their faith to a community project in 1965 with a \$50 contribution. Today, the District serves a population over 40,000, besides being a regional supplier to various communities and municipalities in Johnson County. What a story is ours to tell about all that has happened along the way. I hope you too will share in taking pride for being a part of the organization and what it has evolved into today. In this special watermark anniversary we should challenge ourselves to take on an extra measure of awareness to continue the upward trend with a purpose to honor those that came before us.

2014 Major Achievements *By Terry Kelley, GM*

30" Trinity Basin Transmission Facilities Project. This project completed in 2014, is the District's largest system improvement project to date. There are two major components of this \$19.5 million project. First, a 12-mile, 30" transmission line extension is the final segment in the District's long-term goal of transporting major water supplies from both the Trinity and Brazos Basin sources throughout the service area. The contractor for this \$10.6 million component was for construction on the transmission line which began October 2012. The second component was \$9 million which included construction for two major pump stations along with the necessary control/monitoring equipment at the various delivery points along the transmission system. Both pump stations have a 1 million gallon storage tank. Kimley Horn Engineers of Ft. Worth were charged with the hydro-modeling and design work for the pump station facilities. Childress Engineers of Cleburne was the design engineer of record for construction of the transmission line work. Financing of this project was administered in two separate bond issues which yielded optimum financing. The first bond issue of \$9.5 million in November 2012 financed construction of the transmission line. The final bond issue in March 2013 towards this project was \$7.6 million while the District funded \$2.7 million out of its own reserves. This milestone \$19.8 million project marks the completion of the District's regional supplying network of 46 miles of connected transmission line and related facilities.

Improved System Reliability. When the Trinity Basin Transmission Facilities (30" line and two pump stations) were completed in 2014, the District's development into a regional supplier became a reality. Owning and operating a 46-mile water transmission system reaching across Johnson County from Mansfield in Tarrant County to Lake Granbury in Hood County affords opportunities that did not exist before. The last 12-mile component finally enables the transport of Trinity Basin water as the watershed overlays half of Johnson County. Before, the transmission line system could only transport Brazos (SWATS) water to limited take-point locations. The Mansfield water now becomes the primary source while SWATS water will still be distributed to the western portion of the system. Having both sources available is an added bonus to best mitigate interrupted service. If an outage from one source occurs, the other source can be utilized until full service is restored.

Current Initiatives

Redline Projects. Over the years in adding meters to water lines installed on the smaller lines of the early years, service can be impacted. In some parts of the system, sustainability to adequately provide during peak time conditions, demands our attention to respond. About one-third of the distribution system consists of 3-inch and smaller diameter lines. In maintaining a hydraulic model of

This Consumer Confidence Report covers the 2014 calendar year. It is intended to provide you with information about your drinking water and the efforts made by our water system to provide safe drinking water.



On another Note:

Check out JCSUD's website at www.jcsud.com

the system, we are able to identify the rank of those lines needing replacement. Lines that are highest on the list are called "redlines." The plan is to replace or supplement existing lines with larger ones as soon as practical, or when minimum capacity issues demand. Given that most easements already exist, preliminary costs are less as compared to constructing new lines which requires a higher level of engineering and easement acquisition. The District manages reline projects with in-house forces for the preliminary work of planning, design, inspection, etc. The construction phase is outsourced to a contractor who has been selected based on competitive quantity pricing and to perform the work over the course of several projects as long as pricing remains competitive. In 2013, three redline projects were completed for a total of \$392K. Two more redline projects (County Rd 204 and 401B) were completed in 2014 totaling \$431K. In summary, the District has replaced some 25,300 linear ft. of small lines with 6 and 8 inch pipe.

There are three redline projects scheduled for 2015 and estimated to extend nearly 10,000 linear ft. of 8 inch pipe for an estimated cost of \$460K. Over the last three years, redline projects and funding through 2015 totals \$1.3 million for about 6.7 miles (comparable to the distance between the Courthouse in Cleburne and Rio Vista) of 6 and 8 inch pipe. Since 2013, the District has been on a good roll for this category of capital improvements. Future projects will be identified and ranked for scheduling in subsequent years as the Master Plan stipulates.

Wastewater News

Community Development Grant Project. In 2014, the District was awarded a \$500,000 grant for sewer collection system improvements in Joshua. The District submitted application in 2012. The grant was approved through the Community Development Block program which is administered by the Texas Department of Agriculture. JCSUD's matching funds of \$55,000 rounds out this uniquely favorable project given that funding for wastewater improvement projects is difficult with only 1,750 connections. Completion is estimated for 2015.

REGULATED SUBSTANCES

Substance	Unit of Measure	Year	High Level Detected	Range of Levels	MCL	MCLG	Typical Source
Barium	ppm	2012	0.040	0.034 - 0.040	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Fluoride	ppm	2014	2.02	0.29 – 2.02	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Nitrate	ppm	2014	0.329	0 - 0.329	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage, erosion of natural deposits.
Chromium	ppb	2011	9.16	0 - 9.16	100	100	Discharge from steel and pulp mills; Erosion of natural deposits.
Di(2ethylhexyl) phthalate	ppb	2014	0.5	0 – 0.5	6	0	Discharge from rubber and chemical factories.
Beta/phonon emitters	pCi/L	2011	5	0 – 5	50	0	Decay of natural and man-made deposits.

EPA considers 50 pCi/L to be the level of concern (MCL) for beta particles.

Maximum Residual Disinfectant Level

Disinfectant	Unit of Measure	Year	Average Level	Range of Levels	MRDL	MRDLG	Typical Source
Chloramines Free Chlorine	ppm	2014	2.22	0.30 – 3.60	4.0	<4.0	Disinfectant used to control microbes

Disinfection Byproducts

Substance	Unit of Measure	Year	Average Level	Range of Levels	MCL	Typical Source
Total Haloacetic Acids	ppb	2014	14	7.4 – 24.0	60	By-products of drinking water chlorination
Total Trihalomethanes	ppb	2014	34	3.6 – 41.1	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	2014	0.26	99.9%	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.

Substance	Unit of Measure	Sampled	The 90th Percentile	No. of Sites Above AL	Action Level	Typical Source
Lead	ppb	8/6/2013	2.36	0	15	Corrosion of household plumbing systems; Erosion of natural deposits.
Copper	ppm	8/6/2013	0.0662	0	1.3	Corrosion of household plumbing systems; Erosion of natural deposits. Leaching from wood preservatives.

JCSUD 2014 Water Loss Report

The water loss audit as submitted to the Texas Water Development Board for 2014 reports a system water loss at 160 million gallons. Total system water input was 1,530 million gallons. Total meter consumption was 1,325 million. The difference represents **10.4% in water loss for 2014**. Best estimate reporting shows about one-tenth of this loss is attributable to meter accuracy and unauthorized consumption. The remaining nine-tenths is attributable to maintaining over 900 miles of system piping with more than 350 fire hydrants. Leaks, flushing, and fire suppression are examples of unaccounted-for volumes.

Source Water Assessment

The TCEQ has completed an assessment of our source water and results indicate that our sources have low susceptibility to 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. For more information about our focus on protection efforts, contact Ronnie Nichols. All sources are monitored and tested according to state regulations.

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 at the left 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 the aesthetic effects.		
These items are often important to industrial users.		
No MCL exists		
Item	Measure	Average Level
Calcium	ppm	13.8
Iron	ppm	0.030
pH	Units	8.5
Sodium	ppm	229
Total Hardness		
Calcium Magnesium	ppm	39.3

Community Participation

The District is governed by a Board of nine 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 JCSUD 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 potable. Si tiene preguntas o comentarios sobre este informe en español, favor de llamar al tel. (817) 760-5200 para hablar con una persona bilingüe en español.

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)

MGD: Million Gallons per Day

CareFlite Delivers!

The partnership between JCSUD and CareFlite allows all customers of the water system to become members of CareFlite for \$1 per month. The \$1 covers all members of the household. The customer-domain response has been overwhelming in grasping the opportunity to come under the umbrella of this provision of care. CareFlite (a non-profit company) provides high quality ground and air ambulance transport services in North Texas. It is the oldest joint-use air medical program in the United States and celebrates 36 years of service, transporting patients in North Texas by air and ground ambulance.

The *Caring-Heart Membership* protects your entire household against the out of pocket expenses of a CareFlite ground or air ambulance transport. If you have insurance, you will not receive a balance bill. If you have no insurance, you will automatically receive a 50% discount from CareFlite. By law, anyone in your household who receives Medicaid cannot be a member. Complete details and program rules are available at www.careflite.org

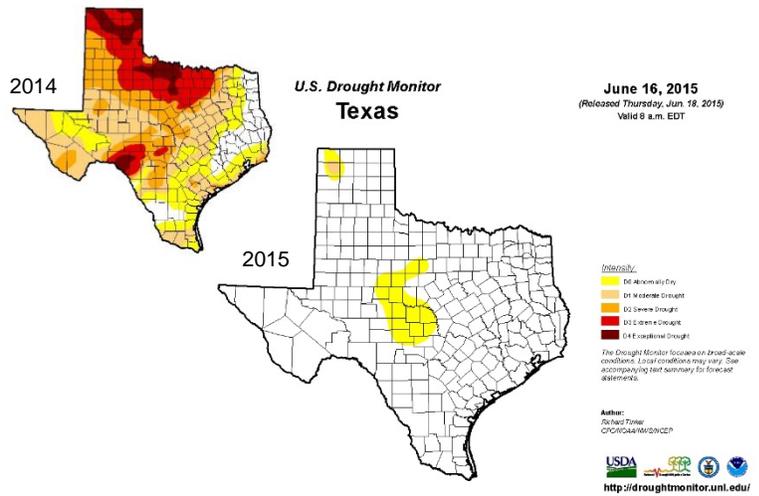
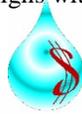
The District has its customers' best interest at heart to engage this program; however, anyone who does not wish to be included, can readily opt out at anytime by informing the District at your convenience. Please consider carefully; the stakes are much higher as the difference in not participating could cost thousands in transport services.

For questions about this program, please contact JCSUD at (817) 760-5200. For questions about CareFlite and the *Caring-Heart Membership* program, call the CareFlite Member Services Office at (972) 339-4220 during weekday business hours. In all emergencies, dial 9-1-1.



Thanks to the recent rains, there's quite a contrast in the current Texas map and last year's map that showed extreme drought conditions covering most of the state.

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. This aligns with the idea to make every drop count.



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



CONVENIENT OPTIONS FOR OUR CUSTOMERS

- Bank draft: receive water bill. Billed amount will be drafted from checking account on due date. Call the office to set up this free service.
- E-bill: receive e-mail notification when your bill is ready. With E-bill, you can receive, view, and pay bill online. Call the office to sign up to go paperless.
- E-pay by Phone: call 877-768-0858.
- Visit website: <https://www.jcsud.com> to pay your bill online.
- Pay by mail, in person, or night drop.
- JCSUD accepts VISA, MASTERCARD and DISCOVER. Never any convenience fees.

Relocate District Office/Service Center Campus. In 2012 a building fund account was set up towards the prospect of building new central office and service center facilities. By the end of 2015, the account is anticipated to be \$1.9 million. The existing campus at 2849 S. Hwy 171 was constructed in 1980 on a 5 acre tract in the southern part of the system. At the time, the prevailing portion of residential service was situated in the southern quadrant, mainly south of U.S. Hwy 67. In the last 35 years, growth has shifted to make the northern half of the system the most dynamic in terms of water utility activities. Also, the administrative element of the business has outgrown the existing office space. New connections and capital improvements are now more focused in the northwest quadrant of the county. In 2007 the District took over the operations of providing water utility service in and around the City of Joshua. Here, trends show that growth is more accelerated in this area within the District. Accordingly, inefficiencies and expenses associated with workforce travel-time have been identified and can be avoided if the office/service center campus is located more central to the prevailing activity in the system. Reports demonstrate that the District is best positioned now financially than any other time to take on such a relocation project. The funding model reflects no plans for having to adjust water rates or issue debt. 2015 marks the 50-year anniversary of this organization's existence in providing water utilities to rural Johnson County. What a watermark achievement this could be as we look towards the next 50 years in having a more centrally located facility with proper amenities for customer convenience while advancing the cause of efficient management and operations. In June 2015, the Board approved to start construction on the property towards this initiative.

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 Safe Drinking Water Hotline at 1-800-426-4791.

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.

