



City of Big Sandy

903.636.4343 | publicworks@bigsandytx.gov

2021 Consumer Confidence Report (CCR) - PWS #2300001

June 28, 2021

This is your water quality report for January 1 to December 31, 2021. As part of our commitment to providing quality drinking water, we have prepared this Water Quality Report (also known as the consumer confidence report) for our customers and the Texas Commission on Environmental Quality (TCEQ). This report contains drinking water data from the 2021 calendar year (Jan 1, 2021 - Dec. 31, 2021) and informs you about the quality of your drinking water.

Este reporte incluye informacion importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono 903.636.4343.

WATER SOURCE

The City of Big Sandy uses groundwater from three wells that draw from the Carrizo-Wilcox Aquifer, which is a major aquifer extending from the Louisiana border to the border of Mexico in a wide band adjacent to and northwest of the Gulf Coast Aquifer.

WATER STORAGE

The City of Big Sandy has the following water storage capacity:

- One (1) elevated tank built in 1935, capacity 50,000 gallons
- One (1) elevated tank built in 1989, capacity 200,000 gallons
- One (1) ground storage tank built in 2005, capacity 87,000 gallons
- One (1) ground storage tank built in 2015, capacity 100,000 gallons

The safe limit on water demand is 330,000 gallons per day. If this amount is exceeded, then a water conservation plan is put into effect.

WATER DISTRIBUTION

The City of Big Sandy water distribution system consists of five (5) high-lift service pumps and miles of 2" through 8" size water lines. The City of Big Sandy water lines are a combination of PVC, galvanized, asbestos cement, and cast iron. Service lines from the water main to the customers consist of PVC, copper and galvanized pipe.

DISINFECTANT

The only treatment the city is required to do is the addition of chlorine. We are required to maintain at least a 0.2 ppm (parts per million) free chlorine residual at the furthestmost point of our system.

TOTAL PUMPAGE

The total gallons pumped in 2021 were 72,717,000. The city has about 725 customer connections.

CERTIFICATION

Water systems must employ persons with state certifications. The City of Big Sandy has one state-certified operator: **Public Works Director Scott Rogers**, who has a "C" License.

| | | |
|------------------------------------------------|--------------|--------------|
| Public Works Telephone Number: | City Hall | 903.636.4343 |
| After Hours Emergency Telephone Number: | Police Dept. | 903.636.4200 |

For more information about this report, or for any questions relating to your drinking water, please email the Public Works Dept. at publicworks@bigsandytx.gov. If you have any health concerns related to the information in this report, we encourage you to contact your health care provider.

Information about your Drinking Water

SUBSTANCES EXPECTED IN DRINKING WATER

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and can pick up substances resulting from the presence of animals or from human activity. Substances that may be present in source water include:

- Microbial contaminants: such as viruses and bacteria, 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 runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- Pesticides and herbicides: 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: can be naturally-occurring or be the result of oil and gas production and mining.

In order to ensure that tap water is safe to drink, the Environmental Protection Agency (EPA) prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water that 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 the Public Works Dept at publicworks@bigsandytx.gov or 903.636.4343.

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.

You may be more vulnerable than the general population to certain microbial contaminants, such as *Cryptosporidium*, in drinking water. Infants, some elderly or immuno-compromised 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* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

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>.

ABBREVIATIONS & DEFINITIONS OF TERMS

| Abbreviation | Term | Definition |
|--------------|------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AL | Action Level | The concentration of a contaminant which, if exceeded, triggers a treatment or other requirement for a system. |
| ALG | Action Level Goal | The level of a contaminant in drinking water below which there is no known or expected risk to health. ALG's allow for a margin of safety. |
| AVG | Average | Regulatory compliance with some MCL's is based on running annual average of monthly samples. |
| MCL | Maximum Contaminant Level | The highest level of a contaminant that is allowed in drinking water. |
| MCLG | Maximum Contaminant Level Goal | The level of a contaminant in drinking water below which there is no known or expected risk to health. Allows for a margin of safety. |
| MFL | Million Fibers per Liter | A measure of asbestos. |
| MRDLG | Maximum Residual Disinfectant Level Goal | The level of a drinking water disinfectant below which there is no known or expected risk to health. Does not reflect use of disinfectants to control microbial contaminants. |
| MRDL | Maximum Residual Disinfectant Level | The highest level of a disinfectant allowed in drinking water. |
| MREM/year | Millirems per Year | A measure of radiation absorbed by the body. |
| NA | Not Applicable | Not applicable. |
| ND | Not Detectable | Not detectable at testing limits. |
| NTU | Nephelometric Turbidity Units | A measure of turbidity. |
| pCi/L | Picocuries per Liter | A measure of radioactivity. |
| ppb | Parts per Billion | Micograms per liter (ug/l) |
| ppm | Parts per Million | Milligrams per liter (mg/l) |
| ppq | Parts per Quadrillion | Picograms per liter (pg/l) |
| ppt | Parts per Trillion | Nanograms per liter (ng/l) |
| TT | Treatment Technique | A required process intended to reduce the level of a contaminant in drinking water. |

INFORMATION ABOUT SOURCE WATER

TCEQ completed an assessment of your source water, and results indicate that some of our sources are susceptible to certain contaminants. The sampling requirements for your water system are based on this susceptibility and previous sample data. Any detection of these contaminants will be found in this Consumer Confidence Report.

For more information on source water assessments and protection efforts at our system, please email us at publicworks@bigsandytx.gov or call us at 903.636.4343.

2021 WATER QUALITY RESULTS

Coliform Bacteria

| Maxim Contaminant Level Goal | Total Coliform Maximum Contaminant Level | Highest No. of Positive | Fecal Coliform or E. Coli Maximum Contaminant Level | Total No. of Positive E. Coli or Fecal Coliform Samples | Violation | Likely Source of Contamination |
|------------------------------|------------------------------------------|-------------------------|-----------------------------------------------------|---------------------------------------------------------|-----------|---------------------------------------|
| 0 | 1 positive monthly sample. | 1 | | 0 | N | Naturally present in the environment. |

| Lead and Copper | Date Sampled | MCLG | Action Level (AL) | 90th Percentile | # Sites Over AL | Units | Violation | Likely Source of Contamination |
|-----------------|--------------|------|-------------------|-----------------|-----------------|-------|-----------|---------------------------------------------------------------------------------------------------------|
| Copper | 09/11/2020 | 1.3 | 1.3 | 0.512 | 0 | ppm | N | Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems. |

The City of Big Sandy is on a reduced sampling schedule for lead and copper, due to our compliance history. The results listed above are distribution samples taken from the customers' tap. Lead and copper has not been detected in water leaving the water treatment facilities. The source of lead and copper is corrosion of household plumbing systems.

| Disinfection By-Products | Collection Date | Highest Level or Average Detected | Range of Individual Samples | MCLG | MCL | Units | Violation | Likely Source of Contamination |
|------------------------------|-----------------|-----------------------------------|-----------------------------|-----------------------|-----|-------|-----------|--------------------------------------------|
| Haloacetic Acids (HAA5) | 2021 | 13 | 12.7 – 12.7 | No goal for the total | 60 | ppb | N | By-product of drinking water disinfection. |
| Total Trihalomethanes | 2021 | 7 | 6.74 – 6.74 | No goal for the total | 80 | ppb | N | By-product of drinking water disinfection. |

* The value in the Highest Level or Average Detected column is the highest average of all sample results collected at a location over a year'

| Inorganic Contaminants-Secondary Constituents | Collection Date | Highest Level or Average Detected | Range of Individual Samples | MCLG | MCL | Units | Violation | Likely Source of Contamination |
|-----------------------------------------------|-----------------|-----------------------------------|-----------------------------|------|-----|-------|-----------|----------------------------------------------------------------------------------------------------------------------------|
| Barium | 2021 | 0.12 | 0.077 - 0.12 | 2 | 2 | ppm | N | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits. |
| Chromium | 2021 | 1.2 | 0 – 1.2 | 100 | 100 | Ppb | N | Discharge from steel and pulp mills; Erosion of natural deposits. |
| Fluoride | 2021 | 0.13 | 0.124 – 0.13 | 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] | 2021 | 0.0733 | 0.0514 – 0.0733 | 10 | 10 | ppm | N | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits. |

Disinfectant Residual

| Disinfectant Residual | Year | Average Level | Range of Levels Detected | MRD L | MRD LG | Unit of Measure | Violation | Source in Drinking Water |
|-----------------------|------|---------------|--------------------------|-------|--------|-----------------|-----------|-----------------------------------------|
| Chlorine Free | 2021 | 1.41 | 0.49-2.20 | 4 | 4 | ppm | N | Water additive used to control microbes |

Violations

| 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 |
| Monitoring, Routine, Major (RTCR) | 01.01.2021 | 01.31.2021 | 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. |

BIG SANDY'S SOURCES OF DRINKING WATER AND DISTRIBUTION SYSTEM

Big Sandy uses ground water from three wells that draw from the Carrizo-Wilcox Aquifer. A source water assessment has been completed by the Texas Commission on Environmental Quality (TCEQ) for all the water sources and the report is available to review by calling us at 903.636.4343 or emailing us publicworks@big sandytx.gov.

The City of Big Sandy is focused on source water protection activities since some of our sources are susceptible to contaminants. The water sampling requirements for our water system are based on this susceptibility and previous sample data. Any detection of these contaminants will be found in this report. For more information on source water assessments and protection efforts please contact us at 903.636.4343.

To monitor water quality in local rivers, streams, and reservoirs, the City of Big Sandy has a Watershed Management Program. We work closely with the Sabine River Authority, Northeast Texas Municipal Water District, Texas Railroad Commission, Texas Commission on Environmental Quality (TCEQ), Texas Parks and Wildlife Commission, American Water Works Association, Texas Water Utilities Association and local industries to monitor and maintain a high level of water quality.

The City of Big Sandy continued its water conservation plan of asking all residents to follow the year-round watering schedule: if your physical street address ends in an odd number (1, 3, 5, etc.), water on Wednesday, Friday, and Sunday. If your physical street address ends in an even number (2, 4, 6, etc.), water on Tuesday, Thursday and Saturday.

The City of Big Sandy submitted a water loss audit for the year 2021. In the water loss audit submitted to the Texas Water Development Board for the time period of Jan-Dec 2021, our system lost an estimated 29,134,920 gallons of water.

STORM WATER POLLUTION PREVENTION PROGRAM

Watersheds may be susceptible to contamination resulting from flood, erosion, and pollution; also referred to as storm water runoff. The City of Big Sandy has incorporated a program to help manage Storm Water Pollution.

Storm water pollution is being reduced from the monitoring and modification of the City’s operations through good municipal housekeeping. Our program also works to control construction runoff resulting in less sediment, the number one pollutant in our watersheds.

Finally, one of the most important parts of this program is the education and involvement of the public and citizens of Big Sandy regarding watersheds and storm water pollution.

GUIDELINES TO HELP PREVENT STORM WATER POLLUTION

1. Use fertilizers sparingly
2. Sweep up driveways, sidewalks, and gutters
3. Never dump, blow, sweep, or wash anything down storm drains
4. Don’t leave bare spots in your yard
5. Compost wastes
6. Use less toxic pesticides, follow labels, and learn how to prevent pest problems
7. Direct downspouts away from paved surfaces; consider a rain garden to capture runoff
8. Take your car to the car wash instead of washing it in the driveway
9. Check your car for leaks and recycle your motor oil
10. Pick up after your pet

CONCLUSION

Thank you for reading through the City of Big Sandy Water Quality Report for 2021. Under the direction of Scott Rogers, Public Works Director, the water department and the service we provide to you is continually improving. We welcome your comments and suggestions.

If you have additional questions, the quickest way to get them answered is to e-mail the following:

| City of Big Sandy Water Department | | | |
|-------------------------------------------|---------------|--------------|------------------------------------------------------------------------------|
| Public Works Director | Scott Rogers | 903.636.4343 | publicworks@bigsandytx.gov |
| PW Maintenance | Rocky Ware | 903.636.4343 | publicworks@bigsandytx.gov |
| PW Maintenance | Jacob Shearer | 903.636.4343 | publicworks@bigsandytx.gov |
| Utility Clerk | Deb Giles | 903.636.4343 | utilityclerk@bigsandytx.gov |
| City Administrator/City Secretary | Laura Rex | 903.636.4343 | city@bigsandytx.gov |



| City of Big Sandy Elected Officials | | | |
|--------------------------------------------|-----------------|--------------|--------------------------------------------------------------------------------|
| Mayor | Rex Rozell | 903.574.2583 | rozell@bigsandytx.gov |
| Mayor Pro Tem | Linda Baggett | 903.720.4021 | lbaggett@bigsandytx.gov |
| Councilmember | David Fonteno | 903.720.1651 | dfonteno@bigsandytx.gov |
| Councilmember | Christine Jones | 903.374.5613 | christine.wilson92@gmail.com |
| Councilmember | Kerry Rickard | 615.594.5829 | krickard@bigsandytx.gov |