

# Annual Drinking Water Quality Report

TX2000005

NORTH RUNNELS WSC

Annual Water Quality Report for the period of January 1 to December 31, 2018

For more information regarding this report contact:

This report is intended to provide you with important information about your

Name: Todd Henderson

drinking water and the efforts made by the water system to provide safe

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drinking water.

Este reporte incluye informacion importante sobre el agua para tomar. Para asistencia en espanol, favor de llamar al telefono (325)754-5000.

NORTH RUNNELS WSC is Purchased Surface Water

Public participation: Board Meeting 2<sup>nd</sup> Wednesday each month at 7 pm at NRWSC office, 1020 N Main, Winters, TX.

## Sources of 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.

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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>.

## Information about your Drinking Water

For more information about your sources of water, please refer to the Source Water Assessment Viewer available at the following URL:  
<http://gis3.tceq.state.tx.us/swav/Contoller/index.jsp?wtrsrc=>

Further details about sources and source-water assessments are available in Drinking Water Watch at the following URL:  
<http://dww.tceq.texas.gov/DWW>

Source Water Name		Type of Water	Report Status	Location
SW from CITY OF BALLINGER	I/C with TX2000001	SW	A	Ballinger, TX – Ballinger Lake
SW from CITY OF WINTERS	CC from TX2000003 CITY OF	SW	A	Winters, TX – Elm Creek Reservoir

The TCEQ has completed a Source Water Susceptibility Assessment for your drinking water systems that own their services. The report 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 system(s) from which we purchased our water received the assessment report. For more information on source water assessments and protection efforts at our system, contact Manager, Todd Henderson.

## 2018 Water Quality Test Results

### Lead and Copper

**Definitions:**

**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.

**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 <sup>th</sup> Percentile	# Sites over AL	Units	Violation	Likely Source of Contamination
Copper	09/08/2016	1.3	1.3	0.473	0	ppm	N	Erosion of natural deposits; Corrosion of household plumbing systems.
Lead	09/08/2016	0	15	3.16	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

### Water Quality Test Results

**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 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 health risk. 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 7,350,000 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

**Microbiological (Coliforms) Testing results in the North Runnels WSC Distribution System During 2018**

Type of Contaminant	Sampling Year	Total coliform Maximum Contaminant Level	E. coli Maximum Contaminant Level	Total Number of Positive E. coli or Total coliform Samples	Violation	Likely Source of Contaminant
Coliform bacteria	2018	Two or more samples collected in a month which are total coliform positive	0	0	N	Naturally present in environment

**Regulated Contaminants in the Winters Source Water**

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic	2018	0.0014	0.0014-0.0014	0	10	ppm	N	Erosion of natural deposits; Runoff from orchards; Runoff from grass and electronics production wastes.
Barium	2018	0.25	0.25-0.25	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	2018	0.212	0.212-0.212	4	4	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate (measured as Nitrogen)	2018	0.113	0.113	10	10	ppm	N	Runoff from fertilizer use; leaching from septic tanks, sewage; Erosion of natural deposits.
Selenium	2018	0.005	0.005-0.005	50	50	ppm	N	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.

**Regulated Contaminants in the Ballinger Source Water**

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	2018	0.12	0.12-0.12	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	2018	0.53	0.53-0.53	4	4	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate (measured as Nitrogen)	2018	0.578	0.578-0.578	10	10	ppm	N	Runoff from fertilizer use; leaching from septic tanks, sewage; Erosion of natural deposits.

## 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)	2018	68	0-181	No goal for the total	60	ppb	Y	By product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2018	64	6.33-194	No goal for the total	80	ppb	N	By product of drinking water disinfection.
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Nitrate [measured as Nitrogen]	2018	0.116	0.116-0.116	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Nitrite [measured as Nitrogen]	06/01/2015	0.01	0.01-0.01	1	1	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	MRDL	MRDLG	Unit of Measure	Violation	Source in Drinking Water
Chloramines (Total)	2018	2.95	.5-5.0	4	4	ppm	N	Water additive used to control microbes.

## Violation Table

Chlorine			
Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.			
Violation Type	Violation Begin	Violation End	Violation Explanation
Disinfectant Level Quarterly Operating Report (DLQOR)	04/01/2018	06/30/2018	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.
Disinfectant Level Quarterly Operating Report (DLQOR)	10/1/2018	12/31/2018	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.

## Violation Table

<b>Consumer Confidence Rule</b>			
The Consumer Confidence Rule requires community water systems to prepare and provide to their customers annual consumer confidence reports on the quality of the water delivered by the systems.			
<b>Violation Type</b>	<b>Violation Begin</b>	<b>Violation End</b>	<b>Violation Explanation</b>
CCR Adequacy/Availability/Content	07/01/2018	3/15/2019	We failed provide to you, our drinking water customers, an annual report that adequately informed you about the quality of our drinking water and the risks from exposure to contaminants detected in our drinking water.

<b>Haloacetic Acids (HAA5)</b>			
Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.			
<b>Violation Type</b>	<b>Violation Begin</b>	<b>Violation End</b>	<b>Violation Explanation</b>
Failure submit OEL Report for HAA5	9/7/2018	11/9/2018	We failed to submit our operational evaluation level OEL report to our regulator. The report is needed to determined best treatment practices necessary to minimize possible future exceedances of HAA5
MCL, LRAA	1/1/2018	3/31/2018	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	4/1/2018	6/30/2018	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.

## Other Information

Turbidity measurements are continuously taken and recorded every 15 minutes.

<b>Turbidity</b>	<b>Limit (Treatment Technique)</b>	<b>Level Detected</b>	<b>Violation</b>	<b>Likely Source of Contamination</b>
<b>City of Winters</b>				
Highest single measurement	1 NTU	0.3 NTU	N	Soil Runoff
Lowest single measurement	0.3 NTU	100%	N	Soil Runoff

<b>Turbidity</b>	<b>Limit (Treatment Technique)</b>	<b>Level Detected</b>	<b>Violation</b>	<b>Likely Source of Contamination</b>
<b>City of Ballinger</b>				
Highest single measurement	1 NTU	0.24 NTU	N	Soil Runoff
Lowest single measurement	0.3 NTU	100%	N	Soil Runoff

Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system & disinfectants.