



# 2003 Drinking Water Quality Report

## **RRA - TURKEY-ESTELLINE WATER SYSTEM**

**Red River Authority of Texas**

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Wichita Falls, Texas 76301  
940/723-8697

### **OUR DRINKING WATER MEETS OR EXCEEDS ALL FEDERAL (EPA) DRINKING WATER REQUIREMENTS**

This report is a summary of the quality of the water we provide our customers. The analysis was made by using the data from the most recent U.S. Environmental Protection Agency (EPA) required tests and is presented in the attached pages. We hope this information helps you become more knowledgeable about what's in your drinking water.

#### **Special Notice for the ELDERLY, INFANTS, CANCER PATIENTS, people with HIV/AIDS or other immune problems:**

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800/426-4791).

#### **En Espanol**

Este reporte incluye informacion importante sobre el agua para tomar. Si tiene preguntas o' discusiones sobre este reporte en espanol, favor de llamar al tel. (940) 723-8697 par hablar con una persona bilingue en espanol.

#### **WHERE DO WE GET OUR DRINKING WATER ?**

The RRA-Turkey-Estelline Water System utilizes ground water from the alluvium formation and surface water from Greenbelt Lake. The ground water is produced through Authority owned wells and purchased from the City of Turkey. Treated surface water is purchased from the Greenbelt Municipal and Industrial Water Authority (GMIWA), who owns and operates Greenbelt Lake. The ground water from the wells and the purchased surface water is mixed in the ground storage tank located at the well site. The Texas Commission on Environmental Quality (TCEQ) has completed a Source Water Susceptibility Assessment for the drinking water source(s) that we own as well as for the system(s) from which we purchase water. This 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. Contact our water system for more information about these reports.

### **ALL DRINKING WATER MAY CONTAIN CONTAMINANTS**

When drinking water meets federal standards there may not be any health based benefits to purchasing bottled water or point of use devices. 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 Environmental Protection Agency's Safe Drinking Water Hotline at (800) 426-4791.

### **PUBLIC PARTICIPATION OPPORTUNITIES**

The Authority's Board of Directors regularly meets on the third Wednesday of January, April, July, and September of each year. Specific times and locations of these and/or any special meetings can be obtained by contacting the Authority at (940) 723-8697.

For more information about the water quality of your water system, public participation programs, water conservation programs, and/or general operations policies, call (940) 723-8697 or e-mail the Authority at: [info@rra.dst.tx.us](mailto:info@rra.dst.tx.us). For service requests or reporting leaks after normal business hours, contact your District Manager, Mr. Rickey Pierce at (940) 937-3949 or Mr. Tim Altman at (940) 937-3251.

### **SYSTEM INFORMATION**

The Red River Authority of Texas owns and operates 29 registered public water supply systems through its Utility Division. The Utility Division maintains over 2,150 miles of transmission lines, two surface water treatment plants, 65 pumping facilities and serves approximately 10,000 customers residing in a 15 county area of the Red River Basin. The Utility Division is subdivided into geographical districts

for proper management, maintenance, and financial accounting of individual systems.

The **RRA-Turkey-Estelline Water System** is one of the water systems operated by the Utility Division's District 11. In 2003, the system served 162 active connections with an average water use of 352 gallons per day per connection. The primary use of the water was rural domestic. No major capital improvement items were scheduled for 2003.

The Authority maintains a Water Conservation and Drought Contingency Plan for the Utility Division. Information on the plan is available on the Authority's web page at [www.rra.dst.tx.us](http://www.rra.dst.tx.us) or can be obtained by calling (940) 723-8697.

### **DEFINITIONS:**

#### **Maximum Contaminant Level (MCL)--**

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

#### **Maximum Contaminant Level Goal (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.

#### **Treatment Technique--**

A required process intended to reduce the level of a contaminant in drinking water.

#### **Action Level--**

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

**NTU** -- Nephelometric Turbidity Units

**MFL** -- million fibers per liter

**pCi/l** -- picocuries per liter (a measure of radioactivity)

**ppm** -- parts per million, or milligrams per liter (mg/l)

**ppb** -- parts per billion, or micrograms per liter (ug/l)

**ppt** -- parts per trillion, or nanograms per liter

**ppq** -- parts per quadrillion, or picograms per liter

### **SECONDARY CONSTITUENTS**

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

### ABOUT THE ATTACHED TABLE

U.S. EPA requires water systems to test up to 97 constituents. The attached table contains all of the federally regulated or monitored constituents which have been found in your drinking water.

#### Inorganics

Year	Constituent	Highest Level at Any Sampling Point	Range of Detected Levels	MCL	MCLG	Unit of Measure	Source of Constituent
2003	Arsenic	4.9	0.0000-4.9000	50	0	ppb	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
2003	Barium	0.221	0.0165-0.2210	2	2	ppm	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
2003	Fluoride	1.5	0.9000-1.5000	4	4	ppm	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
2003	Nitrate	18.3	0.0300-18.3000	10	10	ppm	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
2003	Selenium	31.9	0.0000-31.9000	50	50	ppb	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
2003	Gross alpha adjusted	8.4	1.7000-8.4000	15	0	pci/l	Erosion of natural deposits.
2003	Gross beta emitters	6.8	5.3000-6.8000	50	0	pci/l	Decay of natural and manmade deposits.

NA = MCL nor applicable - not regulated. Special Monitoring requirement.

#### Lead and Copper

Year	Constituent	The 90 <sup>th</sup> Percentile	Number of Sites Exceeding Action Level	Action Level	Unit of Measure	Source of Constituent
2000	Lead	3.9000	0	15	ppb	Corrosion of household plumbing systems; Erosion of natural deposit.
2000	Copper	0.0480	0	1.3	ppm	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.

#### NITRATE

#### (Above 5 mg/l, but below the MCL)

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. If you are caring for an infant you should get advice from your health care provider.



**RETURN SERVICE REQUESTED**

Organics - NOT TESTED FOR OR NOT DETECTED  
 Disinfection By-Products - NOT TESTED FOR OR NOT DETECTED

Total Coliform - NOT DETECTED  
 Fecal Coliform - NOT DETECTED

**Unregulated Contaminants**

Year	Constituent	Average of All Sampling Points	Range of Detected Levels	Reason for Monitoring
1996-2002	Chloroform	67	0.0000-67.0000 ppb	Unregulated contaminant monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants.
1996-2002	Bromoform	2.8	0.0000-2.8000 ppb	Unregulated contaminant monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants.
1996-2002	Bromodichloromethane	42	0.0000-42.0000 ppb	Unregulated contaminant monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants.
1996-2002	Dibromochloromethane	26	0.0000-26.0000 ppb	Unregulated contaminant monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants.

**Turbidity**

Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.						
Year	Constituent	Highest Single Measurement	Lowest Monthly % of Samples Meeting Limits	Turbidity Limits	Unit of Measure	Source of Constituent
2003	Turbidity	.68	100	0.5	NTU	Soil Runoff