2001 WATER TASTE & SMELL

P/W #6 WTR. TASTE & SMELL
4/5/02 cc: KT JP

City of Dallas

April 1, 2002

Mr. Mike Murphy
Director of Public Works
Town of Addison
P.O. Box 9010
Addison, Texas 75001-9010

Dear Mr. Murphy:

Enclosed is Dallas Water Utilities water quality information for calendar year 2001. We are providing this information for your use in developing your own Consumer Confidence Report to your customers as required in Environmental Protection Agency 40 CFR Parts 141 and 142 National Primary Drinking Water Regulation: Consumer Confidence Reports; Final Rule. You may also refer to Title 30 TAC, Chapter 290.271 - 275, Subchapter H. As the data shows, Dallas water quality in 2001 met or was better than all state and federal water quality requirements.

The enclosed tables represent the detected characteristics that EPA requires to be included in these reports. Although the list is small, Dallas tests for more than 180 constituents. The constituents not listed either were not detected in Dallas drinking water in 2001 or are not required to be listed in this report. If you would like to have a copy of the complete list of constituents for which Dallas tests its drinking water, please contact Wholesale Services Manager Randy Stalnaker at 214/670-5887.

Please bear in mind that, as a retail water supplier, you are responsible for producing your own Consumer Confidence Report for your customers. Your report must include a contact telephone number at your utility and other information unique to your community. Your report must reflect the quality of your system's water in 2001. If you have other water sources in addition to Dallas Water Utilities, your water quality data would not be identical to the information enclosed. Even if Dallas Water Utilities is your only water source, your report needs to include the results of the testing the state and federal governments require you to conduct in your distribution system or at the customer's tap, such as chlorine residual, trihalomethanes, total coliform, fecal coliform, lead and copper.

For more details about the required contents of your report, please see the EPA regulation referred to in the first paragraph of this letter. For answers to specific questions, you may contact the Texas Natural Resource Conservation Commission Water Utilities Division at 512/239-6045.

If you have any questions about the enclosed, please contact Randy Stalnaker at 214/670-5887.

Sincerely,

Mike Rickman
Assistant Director – Water Operations

enclosure
c: Jim Pierce, Assistant Director of Public Works

# 2001 Dallas Water Utilities Water Quality Report

## Water quality monitoring results

As the charts show, the levels of contaminants in Dallas water meet or are better than the amounts allowed by law. The charts list contaminants detected in Dallas drinking water in 2001 and the amounts allowed by the state and federal governments (maximum contaminant level). Definitions of terms are listed below.

Dallas regularly tests drinking water for more than 180 contaminants. About 50,000 tests each month are conducted on Dallas water to ensure that it is clean and meets all water quality requirements.

## Terms used in this report:

**Action Level (AL)** - The concentration of a contaminant which, if reached, triggers treatment or other requirements which a water system must follow.

**Maximum Contaminant Level (MCL)** - The highest level of a contaminant allowed 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 risk to health. MCLGs allow for a margin of safety.

**mrem/year** - Millerems per year (measure of radiation absorbed by the body).

**ND** - Not detected.

**Nephelometric Turbidity Units (NTU)** - Measure of turbidity in water.

**ppm - Parts per million.** One part per million equals one packet of artificial sweetener sprinkled into 250 gallons of iced tea.

**pCi/L** - Pico-curies per liter (a measure of radioactivity).

**ppb - Parts per billion.** One part per billion is equal to one packet of artificial sweetener sprinkled into an Olympic-size swimming pool.

**Treatment Technique (TT)** - A required process intended to reduce the level of a contaminant in drinking water.

**Turbidity** - A measure of the clarity of drinking water. The lower the turbidity, the better.

## Regulated Characteristics

| Contaminant | Maximum Contaminant Level Goal (MCLG) | Maximum Contaminant Level (MCL) | Amount Detected Average | Amount Detected Range | Possible Source |
|---|---|---|---|---|---|
| **Detected Inorganic Contaminants** | | | | | |
| Barium (ppm) | 2 | 2 | 0.030 | 0.018 - 0.031 | Erosion of natural deposits; Discharge of drilling wastes or metal refineries |
| Fluoride (ppm) | 4 | 4 | 0.67 | 0.60 - 0.70 | Water additive to promote strong teeth |
| Lead (ppb) | 0 | AL = 15 | ND | ND - 11 | Corrosion of household plumbing |
| Copper (ppm) | 1.3 | AL = 1.3 | 0.014 | ND - 0.043 | Same as lead |
| Nitrate as Nitrogen (ppm) | 10 | 10 | 0.60 | 0.12 - 0.82 | Runoff from fertilizer use; Leaching from septic tanks, sewage, erosion of natural deposits |
| Nitrite as Nitrogen (ppm) | 1 | 1 | 0.01 | ND - 0.03 | Same as nitrate |
| **Detected Organic Contaminants** | | | | | |
| Atrazine (ppb) | 3 | 3 | 0.44 | 0.20 - 0.71 | Herbicide runoff |
| Simazine (ppb) | 4 | 4 | 0.34 | 0.15 - 0.42 | Herbicide runoff |
| **Detected Microbial Contaminants** | | | | | |
| Total Coliform Bacteria | 0 | 5% of monthly samples | 0.34% | 0% - 0.87% | Naturally present in the environment |
| **Detected Radioactive Contaminants** | | | | | |
| Beta Emitters (pCi/L)† | 0 | 60 | 0.17 | ND - 0.50 | Decay of natural and man-made deposits |
| **Disinfection By-Products** | | | | | |
| Total Trihalomethanes (ppb) | 0 | 100* | 43.1 | 2.6 - 87.5 | By-product of drinking water chlorination |
| **Treatment Requirements** | | | | | |
| Turbidity - plants effluents, NTU | N/A | TT AL = 0.5 | 0.08 | 0.04 - 0.20 | Soil runoff |

*† 50 pCi/L = 4 mrem/year*

** MCL is based on average of four quarterly samples in the distribution system.*

*March 27, 2002*

## Cryptosporidium

During 2001, Dallas continued monthly testing for cryptosporidium in both untreated and treated water. DWU began monitoring for cryptosporidium in 1993. It has been found only in the untreated water supply. Cryptosporidium has not been found in Dallas' treated drinking water. To protect your drinking water, Dallas works to protect the watershed from contamination and optimizes treatment processes. Although Dallas' water treatment process removes cryptosporidium, immuno-compromised persons should consult their doctors regarding appropriate precautions to take to avoid infection.

Cryptosporidium is a tiny intestinal parasite found naturally in the environment. It is spread by human and animal waste. If ingested, it can cause flu-like symptoms. Some of the ways cryptosporidium can be spread include drinking contaminated water, eating contaminated food that is raw or undercooked, exposure to the feces of infected individuals or animals (such as changing diapers without washing hands afterward), or exposure to contaminated surfaces. Not everyone exposed to the organism becomes ill.

To request more information on cryptosporidium, please call the U.S. EPA's Safe Drinking Water Hotline (1/800/426-4791).

## Unregulated Characteristics*

| Contaminant | Amount Detected Average | Amount Detected Range | Possible Source |
|---|---|---|---|
| **Detected Inorganic Contaminants** | | | |
| Sodium (ppm) | 28 | 9 - 39 | Natural contaminant |
| Total Hardness (ppm) | 131 | 106 - 179 | Natural contaminants |
| Total Alkalinity (ppm) | 77 | 48 - 106 | Natural contaminant |
| **Detected Volatile Organic Contaminants** | | | |
| Chloromethane (ppb) | 0.6 | ND - 3.4 | Chlorine reaction with untreated water |
| Acetone (ppb) | 5.4 | ND - 18.0 | Ozone reaction with untreated water |
| Cyanogen Chloride (ppb) | 0.4 | ND - 2.1 | Ozone reaction with untreated water |
| **Detected Disinfection By-Products (DBPs)** | | | |
| Total Haloacetic Acid (HAA5) Annual Running Average (ppb) in Distribution System | 16.3 | 6.0 - 34.0 | By-product of drinking water chlorination |
| Bromate (ppb) | 2.52 | ND - 5.6 | Ozonation by-product |

** Unregulated characteristics do not have MCL or MCLG.*

## All drinking water may contain contaminants

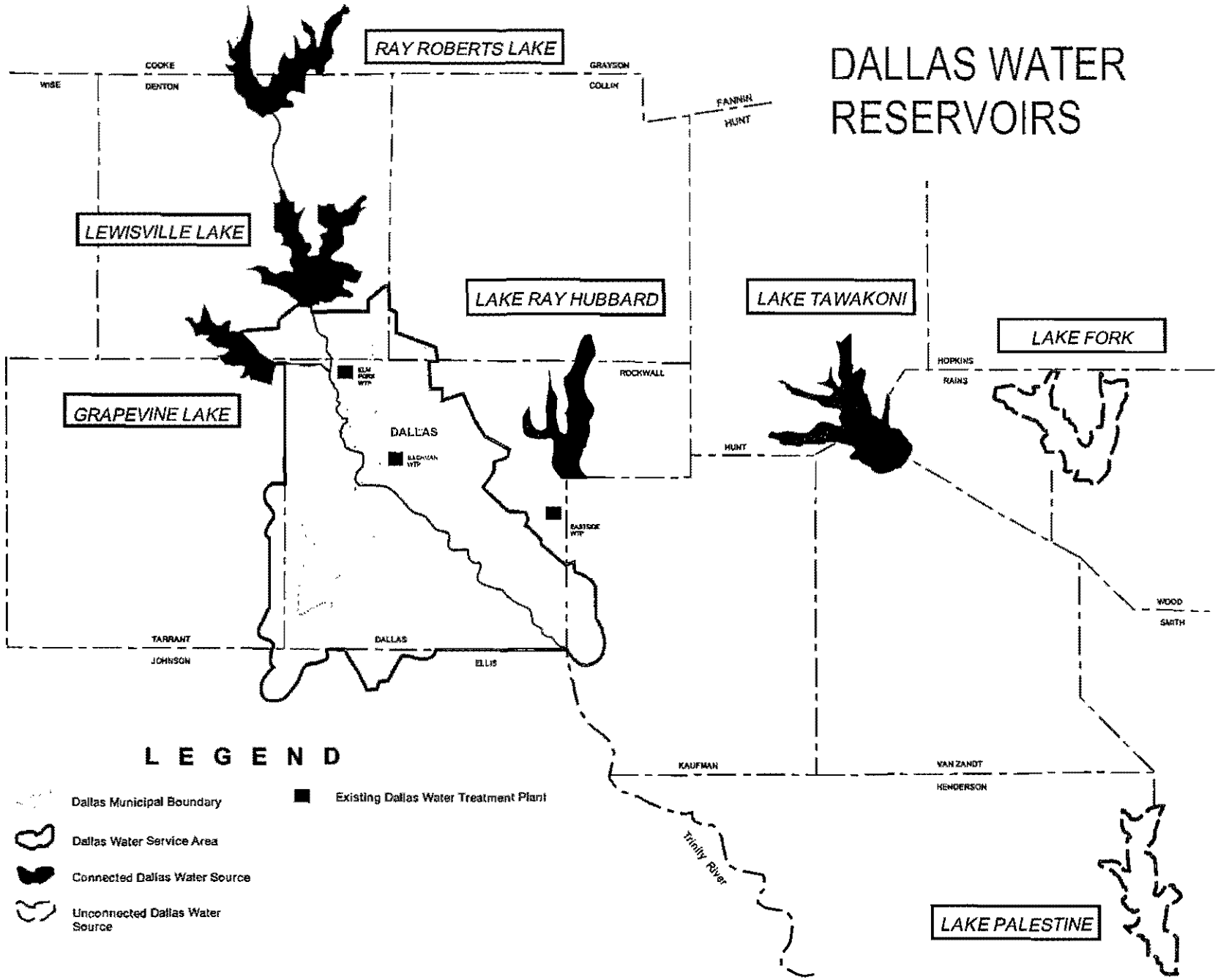
Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline (1/800/426-4791).

In order to ensure that tap water is safe to drink, U.S. EPA prescribes regulations which limit the amount of certain contaminants 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.

## Dallas water sources

Dallas uses surface water from six sources: the Elm Fork of the Trinity River and Lakes Ray Roberts, Lewisville, Grapevine, Ray Hubbard and Tawakoni. In addition, Dallas has water rights in Lakes Fork and Palestine to meet future needs. Pipelines will need to be constructed to connect these two lakes to the Dallas system. The city of Dallas regularly reviews its Long Range Water Supply Plan to address issues such as future sources of water. This planning, along with wise water use, will ensure an adequate supply of water for future needs.

DWU has an active Watershed Management Program that performed more than 8,000 tests on the water quality in the rivers, streams and reservoirs in 2001. In addition, the city of Dallas' storm water quality and industrial pretreatment programs help prevent pollution. As water travels over the surface of the land, it dissolves naturally occurring minerals and can be polluted by animals or human activity. The presence of any of these pollutants in the untreated water does not necessarily pose a health risk in your drinking water. The Texas Natural Resource Conservation Commission will be reviewing all of Texas' drinking water sources. The city of Dallas will continue to commit the resources needed to ensure proper treatment and delivery of high quality water to its customers.


DALLAS WATER RESERVOIRS
RAY ROBERTS LAKE
LEWISVILLE LAKE
LAKE RAY HUBBARD
LAKE TAWAKONI
LAKE FORK
GRAPEVINE LAKE
LAKE PALESTINE
COOKE
DENTON
GRAYSON
COLLIN
FANNIN
HUNT
ROCKWALL
HOPKINS
RAINS
WOOD
SMITH
VAN ZANDT
KAUFMAN
HENDERSON
TARRANT
JOHNSON
ELLIS
DALLAS
Trinity River
LEGEND
Dallas Municipal Boundary
Dallas Water Service Area
Connected Dallas Water Source
Unconnected Dallas Water Source
Existing Dallas Water Treatment Plant

WATER TASTE & ODOR

## Michael Murphy

**From:** Michael Murphy
**Sent:** Thursday, August 02, 2001 10:53 AM
**To:** Ron Whitehead; Chris Terry; Lea Dunn; Bill Shipp
**Cc:** Sue Ellen Fairley; Jim Pierce; Steve Chutchian; Luke Jalbert; Jerry Davis; Keith Thompson
**Subject:** Addison Water Quality

For Your Information,

We are currently experiencing poor taste and bad odor in our drinking water. This is similar to the taste and odor problem we had with our water last year.

We are also beginning to receive complaints from citizens and restaurants. Therefore, if you receive a water quality complaint please forward to Public Works at extension 2871 and we will make sure all complaints are taken care of.

We have contacted Dallas Water Utilities and they assure us they are working the problem by adding additional carbon to their treatment process. However, there has been a large slug of water released into the system and we will be experiencing the problem until the foul water has been eliminated.

The reason for the poor taste and odor is a result the heat wave promoting algae growth in the form of "Blue Algae", **the water is perfectly safe to use** but there will be a time (approximately a couple of weeks) that we will have taste and odor problems.

Please call me if you have any questions.

Mike

Michael E. Murphy, P.E.
Director of Public Works
Town of Addison
(972)450-2878

**Tracking:**

| Recipient | Delivery | Read |
|---|---|---|
| Ron Whitehead | Delivered: 08/02/2001 10:53 AM | |
| Chris Terry | Delivered: 08/02/2001 10:53 AM | Read: 08/02/2001 11:11 AM |
| Lea Dunn | Delivered: 08/02/2001 10:53 AM | Read: 08/02/2001 11:42 AM |
| Bill Shipp | Delivered: 08/02/2001 10:53 AM | Read: 08/02/2001 11:31 AM |
| Sue Ellen Fairley | Delivered: 08/02/2001 10:53 AM | Read: 08/02/2001 11:14 AM |
| Jim Pierce | Delivered: 08/02/2001 10:53 AM | |
| Steve Chutchian | Delivered: 08/02/2001 10:53 AM | Read: 08/02/2001 10:54 AM |
| Luke Jalbert | Delivered: 08/02/2001 10:53 AM | |
| Jerry Davis | Delivered: 08/02/2001 10:53 AM | Read: 08/02/2001 11:26 AM |
| Keith Thompson | Delivered: 08/02/2001 10:53 AM | Read: 08/02/2001 11:16 AM |

TOWN OF ADDISON

**PUBLIC WORKS DEPARTMENT** (972) 450-2871

Post Office Box 9010 Addison, Texas 75001-9010 16801 Westgrove

August 3, 2001

Attention Addison Restaurant Manager:

We are currently experiencing odor and taste problems with our drinking water. This is similar to the problems we experienced last summer. Be assured, your water is safe to drink.

As you may know, the Town of Addison receives its water supply from Dallas Water Utilities (DWU). Officials with DWU have advised the Town that the reason for the odor and taste change is a result of the excessive heat we have experienced which promotes algae growth in the lakes and reservoirs from which we receive our drinking water. Dallas Water Utilities assures us they are working to resolve the issue at their Treatment Facilities and hope to minimize the impact of the unpleasant water. However, a large volume of water is working its way through the main line system of which the Town of Addison is a part. We will be experiencing the problem until this water has been eliminated.

The water is perfectly safe to drink but in the interim we will continue to experience taste and odor problems until this volume of water works its way out of our system.

If you have any questions please contact the Town of Addison Public Works Department at 972-450-2871.

Thank you for your understanding and attention to this situation.

Michael E. Murphy

Michael E. Murphy, PE
Director of Public Works