



HERE IT IS.
THE ANSWER TO A QUESTION
THAT SELDOM
CROSSES YOUR MIND.
INFORMATION ABOUT
WHAT IS IN
YOUR **WATER.**
DATA ABOUT THE STUFF
OF LIFE.

Your
**WATER
QUALITY
REPORT
2001**

BROUGHT TO YOU BY
HUNTSVILLE UTILITIES,
BY ORDER OF THE
ENVIRONMENTAL
PROTECTION AGENCY
AND THE
ALABAMA
DEPARTMENT OF
ENVIRONMENTAL
MANAGEMENT.

YOUR AWARD-WINNING WATER

At Huntsville Utilities we continually strive to provide an abundant supply of the highest quality water at the lowest possible cost. Our efforts at achieving these goals have resulted in the Water Department winning the annual award of Best Operated Plant 12 times out of the past 13 years.

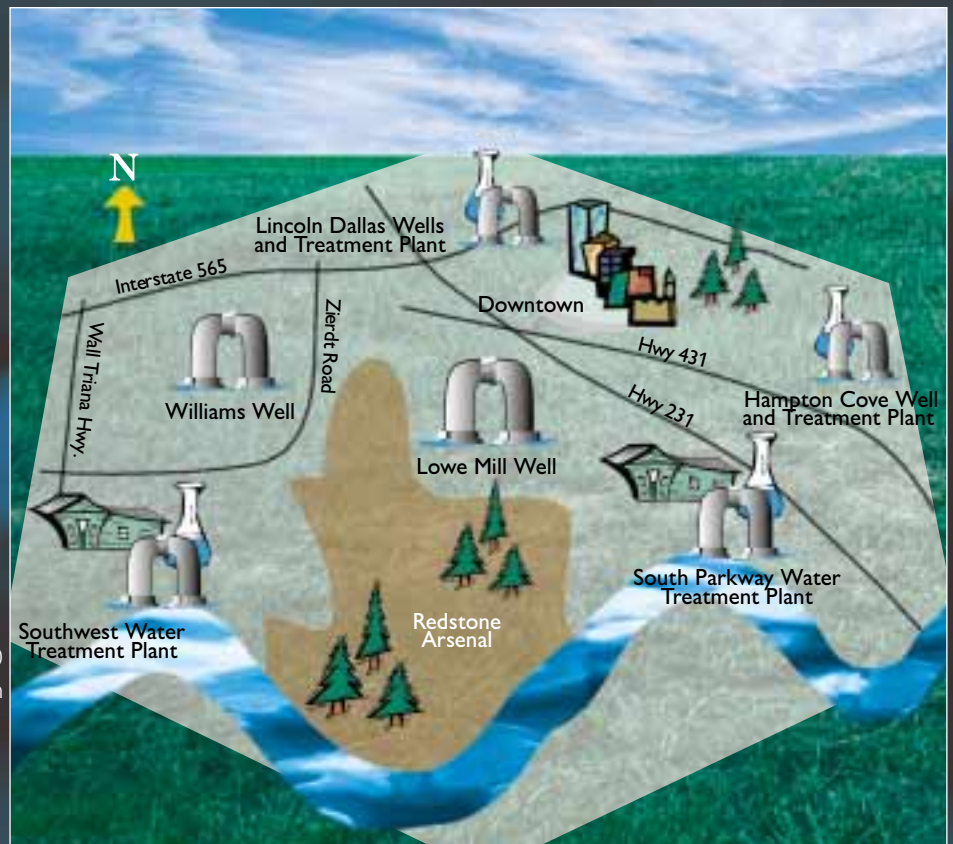
Huntsville Utilities is proud to report that the water provided by its Water Department meets or exceeds established water quality standards. This annual report is intended to illustrate Huntsville Utilities' commitment to quality by providing

detailed information to water customers about the sources and components of their water.

We encourage public interest and participation in our community's decisions affecting drinking water or any other issues. Please call the Water Quality Lab with any concerns or suggestions at 650-6374. You are invited to attend any of our regular meetings scheduled at 8 a.m. on the last Tuesday of every month at Huntsville Utilities, located at 4000 South Memorial Parkway.

THE SOURCES OF YOUR WATER

The Huntsville Utilities Water Department is supplied by both surface and groundwater sources. Surface water from the Tennessee River is processed through two conventional surface water treatment plants. The South Parkway facility is located at 14000 South Memorial Parkway and the Southwest Treatment Plant is located at 255 Wall Triana Highway. Groundwater is supplied from the Lincoln and Dallas Well Treatment Plant at 140 Neely Street, Hampton Cove Well Treatment Plant at 200 Roundbar Dr., Lowe Mill Well located off 8th Avenue at Summer Street and Williams Well located off Zierdt Road just South of Martin Road. All groundwater sources are located in limestone aquifers. We are expanding the Southwest Plant to ensure an adequate water supply in the future.



A source-water assessment is currently being performed for our area to provide baseline data about the quality of water before it is treated and distributed to customers. This identifies the origins of contaminants within our area and indicates the susceptibility of our water system to such contaminants. Information regarding this source-water assessment can be obtained from Huntsville Utilities Water Department or Alabama Department of Environmental Management.

HUNTSVILLE UTILITIES WATER DEPARTMENT WATER QUALITY REPORT 2001

HOW TO READ THE TABLES

The tables present the results of tests performed in 2000 or the most recent testing available. The following is a list of terms used in the Water Quality Data Table and other parts of this report.

DEFINITIONS

Maximum Contaminant Level (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 (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.

Detected Level: The highest level detected

a contaminant for comparison against the acceptance levels for each parameter. These levels could be the highest single measurement, or an average of values depending on the contaminant.

Action Level (AL): The concentration of a contaminant, which if exceeded, triggers treatment of other requirements that a water system must follow.

Range: The lowest to the highest values for all samples tested for each contaminant. If only one sample is tested, no range is listed for that contaminant in the table.

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

KEY TO THE TABLES

AL - Action Level
MCL - Maximum Contaminant Level
MCLG - Maximum Contaminant Level Goal
NTU - Nephelometric Turbidity Units
pCi/L - picocuries per liter (a measure of radioactivity)
ppb - parts per billion, or micrograms per liter (ug/L)
ppm - parts per million, or milligrams per liter (mg/L)
TT - Treatment Technique
na - not applicable
nd - none detected

FOOTNOTES

(1) 100% of samples were below turbidity limits. (Turbidity has no health effects. However, contaminants in water that cause turbidity can provide a medium for bacterial growth.)

WATER QUALITY DATA TABLE

CONTAMINATES	DATE TESTED	MCLG	MCL	AMOUNT DETECTED	RANGE	LIKELY SOURCE OF CONTAMINATION
BACTERIOLOGICAL						
Total Coliform Bacteria	2000	0	≥5%	2.17% ^{present or absent}	————	Naturally present in the environment
(1)Turbidity - Surface water (NTU)	2000	0	TT	0.21 NTU	————	Soil runoff
Turbidity - Ground water (NTU)	2000	0	5.0	0.81 NTU	————	Soil runoff
INORGANIC CHEMICALS						
Barium	2000	2	2	0.05 ppm	0.04 - 0.05	Discharge of drilling wastes; discharge from metals refineries; erosion of natural deposits
Copper	2000	1.3	AL=1.3	0.02 ppm	0 ^{number of sites above action level}	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride	2000	4	4	1.90 ppm	0.11 - 1.90	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate	2000	10	10	2.40 ppm	0.04 - 2.40	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite	2000	1	1	0.40 ppm	0.01 - 0.40	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
ORGANIC CHEMICALS						
Tetrachloroethylene	2000	0	5	1.76 ppb	ND - 1.76	Leaching from PVC pipes; discharge from factories and dry cleaners
Trichloroethylene	2000	0	5	1.26 ppb	ND - 1.26	Discharge from metal degreasing sites and other factories
TTHM	2000	0	80	27.46 ppb	ND - 137.00	By-product of drinking water chlorination
Total Haloacetic Acids (5)	1998	0	60	24.00 ppb	ND - 77.00	By-product of drinking water chlorination

ADDITIONAL WATER QUALITY TESTING

As required by the EPA, the table at left lists only regulated compounds detected in our finished water. We would also like to report unregulated compounds with their concentrations and ranges. Since Huntsville utilizes both ground and surface water sources, the mineral content can vary to some extent.

ANALYTE	DATE TESTED	MCL	RANGE	AVERAGE CONCENTRATION
pH	2000	N/A	6.7 - 7.9	7.35
Total Alkalinity	2000	N/A	44 - 164	110.8 ppm
Iron	2000	300	10 - 60	28 ppb
Calcium				
Carbonate	2000	N/A	50 - 170	114.7 ppm
Magnesium	2000	N/A	0 - 24	10.5 ppm
Manganese	2000	50	0 - 40	7 ppb
Hardness	2000	N/A	68 - 186	125.3 ppm
Sulfates	2000	250	15 - 72	39.2 ppm
Conductivity	2000	N/A	150 - 300	230.4 um/hos cm3
Aluminum	2000	200	0 - 46	18 ppb
Sodium	2000	N/A	1.9 - 4.8	3.4 ppm
Zinc	2000	5000	4 - 51	19 ppb
Total Organic Carbon	2000	N/A	1.0 - 2.6	1.62 ppm

We test for a significant number of contaminants that are not detected in our water. The following list identifies the compounds for which we analyzed but did not detect any concentrations of in our drinking water.

Beta/pton emitters, Alpha emitters, Combined radium, Antimony, Arsenic, Asbestos, Beryllium, Cadmium, Chromium, Cyanide, Lead, Mercury, Selenium, Thallium, 2,4-D, 2,4,5-TP (Silvex), Acrylamide, Alachlor, Atrazine, Benzo(a)pyrene[PHAs], Carbofuran, Chlordane, Dalapon, Di-(2-ethylhexyl)adipate, Di-(2-ethylhexyl)phthalates, Dinoseb, Diquat, Dioxin[2,3,7,8-TCDD], Endothall, Endrin, Epichlorohydrin, Glyphosate, Heptachlor, Heptachlor epoxide, Hexachlorobenzene, Hexachloropentadiene, Lindane, Methoxychlor, Oxamyl [Vydate], PCBs, Pentachlorophenol, Picloram, Simazine, Toxaphene, Benzene, Carbon Tetrachloride, Chlorobenzene, Dibromochloropropane, 0-Dichlorobenzene, p-Dichlorobenzene, 1,2-Dichloroethane, 1,1-Dichloroethylene, Cis-1,2-Dichloroethylene, trans-1,2-Dichloroethylene, Dichloromethane, 1,1,2-Dichloropropane, Ethylbenzene, Ethylene dibromide, Styrene, 1,2,4-Trichlorobenzene, 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, Toluene, Vinyl Chloride, Xylenes.



YOUR HEALTH AND DRINKING WATER

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 (800-426-4791).

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. Contaminants that may be present in source water include:

(A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

(B) Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

(C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses.

(D) 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

stormwater runoff and septic systems.

(E) Radioactive contaminants, which can be naturally-occurring or 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.

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/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).

