



City of Ruidoso Downs Municipal Water System

2007 Annual Consumer Report on the Quality of Your Drinking Water

For areas serviced by the Ruidoso Downs Municipal Water System.





Table A: Areas Serviced by the Ruidoso Downs Municipal Water System

Every service connection in City of Ruidoso

City of Ruidoso Downs Municipal

Water System Downs.

2007 Annual Consumer Report on the Quality of Your Drinking Water

For areas serviced by the Ruidoso Downs Municipal Water System.

Este noticia contiene información importante sobre la calidad del agua en su comunidad. Tradúzcalo o hable con alguien que lo entienda bien.

This is an **US EPA-required report** that is a result of an unfunded mandate added under the federal Safe Drinking Water Act amendment of 1996. The

Safe Drinking Water Act (SDWA) was signed into law on December 16, 1974. The purpose of the law is to assure that the nation's water supply systems serving the public meet minimum national standards for the protection of public health.

This brochure explains how drinking water provided by the City of Ruidoso Downs is of high quality. Included is a listing of results from water-quality tests as well as an explanation of where our water comes from and tips on how to interpret the data. Law requires this "Consumer Confidence Report". We're proud to share our results with you. Please read them carefully.

Our drinking water currently meets or surpasses all federal and state drinking water quality standards.

Overview

In the calendar year of 2006, your water department produced **135 million** gallons of water to Ruidoso Downs's area customers. Our system consists of **22.7 miles** of water distribution and transmission lines spread throughout the Ruidoso Downs area and in Lincoln County. The Water Department office is located in City Hall at 122 Downs Drive. City water main leaks should be reported to City Hall at 378-4422 (M-F, 8 AM to 5 PM) or the Police Department at 378-4421 (after hours, weekends, and holidays). Water billing is handled through the Finance Department at City Hall. Billing inquires can be directed to the Water Department Customer Service at 378-4422 (M-F, 8 AM to 5 PM).

Water Sources

Denton

The City of Ruidoso Downs is serviced by two sources – Griffith Spring and the Denton Well (see Map below). Approximately 99% of Ruidoso Downs's water is supplied by groundwater originating from a flowing spring (called Griffith Spring) located near the southern corporate boundary of Ruidoso Downs (identified as in Map below). The aquifer from which this water comes from is located in the Yeso Formation. The City of Ruidoso Downs, under the authority of its new ordinance (Ordinance 2002-06), maintains and enforces a Water Conservation Program and are working on a Wellhead Protection Program to protect your water from contamination and depletion.



Map A: Geographic Location of Griffith Spring and Wells

The Denton Well is used primarily to supplement the Griffith Spring. This well is **150 feet** in depth and pulls water from the same aquifer as the Griffith Spring. The City has also drilled a new high-capacity, deep well which will be completed and online later this year.

The SDWA covers all public water systems with piped water for human consumption with at least 15 service connections or a system that regularly serves at least 25 individuals. The

SDWA directed the U.S. Environmental Protection Agency (EPA) to establish national drinking water standards. These standards limit the amount of certain contaminants provided by public water. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water. All 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the <u>EPA Safe Drinking Water Hotline (800-426-4791)</u>.





DEFINITIONS OF WATER QUALITY TERMS

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

Gallons per minute (gpm) – Quantity of water that flows through meter in one minute.

Non-Detects (ND) - Laboratory analysis indicates that the constituent is not present.

Parts per million (ppm) or Milligrams per liter (mg/L) - One part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) - or Micrograms per liter - One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Parts per trillion (ppt) - or Nanograms per liter (nanograms/L) - One part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

Parts per quadrillion (ppq) or Picograms per liter (picogram/L) - One part per quadrillion corresponds to one minute in 2,000,000,000 years, or a single penny in \$10,000,000,000,000.

Picocuries per liter (pCi/L) - Picocuries per liter is a measure of the radioactivity in water.

Millirems per year (mrem/yr) - Measure of radiation absorbed by the body.

Million Fibers per Liter (MFL) - Million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.

Nephelometric Turbidity Unit (NTU) - Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Variances & Exemptions (V&E) - State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

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

Maximum Contaminant Level - The "Maximum Allowed" (MCL) is 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 -The "Goal" (MCLG) is 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.

How to Read This Table

This report is based upon tests conducted up to December 31, 2007 by the City of Ruidoso Downs Public Water System and the New Mexico Environment Department. The table refers to water tested from the Griffith Spring and Denton Well (see Table B). Terms used in the Water-Quality Table and in other parts of this report are defined below.

Key To Table B below:

AL = Action Level

MCL = Maximum Contaminant Level MCLG = Maximum Contaminant Level Goal

MFL = million fibers per liter

NTU = Nephelometric Turbidity Units

mrem/year = millirems per year (a measure of radiation absorbed by the body)

pci/l = picocuries per liter (a mesure of radioactivity) ppm = parts per million, or milligrams per liter (mg/l) ppt = parts per trillion, or nanograms per liter ppb = parts per billion, or micrograms per liter (µg/l) ppq = parts per quadrillion, or picograms per liter TT = Treatment Technique

Table B: Griffith Spring & Denton Well Contaminants. If you live or work in service area (see Table A above), use this table:

					Denton Woll	Griffith			
Contaminant	Date	Unit	MCL	MCLG	Detected	Detected	Detected	Major Sources	
	Tested		What's		Level	Level	Range	, , , , , , , , , , , , , , , , , , ,	Violation
			Allowed		What's in	What's in	What's in		
				Inon	your Water	your Water	your Water		
Amonio	00/20/06		0.01	Inorg	ganic Contai	minants	NI/A	Encoion of notional	NO
Arsenic	09/29/08	ррт	0.01	0	0.001	0.0018	N/A	deposits; Runoff from orchards; Runoff from glass and electronics production wastes	NO
Barium	09/29/06	ppm	2	2	0.015	0.0277	N/A	Discharge of drilling wastes; Discharge from metal refineries. Erosion of natural formations	NO
Chromium	09/29/06	ppm	0.1	0.1	0.006	0.00306	N/A	Discharge from steel and pulp mills. Erosion of natural formations	NO
Nickel	09/06/05	ppm	0.1	0.1	0.004	0	N/A	Erosion of natural deposits. Discharge from metal refineries and electroplating.	
Selenium	09/06/05	ppm	0.05	0.05	0.003	0	N/A	Erosion of natural deposits. Discharge from metal refineries.	NO
Nitrate/Nitrite as N	12/19/07	ppm	10	10	0.768	0.155	N/A	Runoff from fertilizer use; Leaching from septic tanks, sewage; Discharge from mines. Erosion of natural formations	NO
Fluoride	10/06/06	ppm	2	4	0.369	0.391	N/A	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories	NO
				D 11		•			
** .	44/04/07			Kadioa	ictive Cont	aminants			
Uranium	11/01/05	pCi/L	0.03	0	0.0033	0.0027	N/A	Erosion of natural deposits	NO
Beta/photon emitters	11/01/05	pCi/L	50	0	1.74	4.63	N/A	Decay of natural and man-made deposits	NO
Radium 226/228	11/01/05	pCi/L	5	0	0.14	0	N/A	Erosion of natural deposits	NO
				Volatile	Organic Co	ntaminants			
					Distribut	ion System			
Total Trihalomethanes	09/12/07	ppb	80	0	0.	500	N/A	Erosion of natural deposits	NO
Haloacetic Acids (HAA)	09/12/07	ppb	60	0	5	.07	N/A	By-product of drinking water disinfection	NO

Explanation of Violations

NO VIOLATIONS OCCURRED DURING THIS PERIOD. Dichloromethane was detected at the Denton Well but confirmation samples done in 2008 were reliably and consistently under the maximum contaminant level.

Lead

In December 2005, water samples were collected and analyzed to determine if the quality of your water would affect any lead and copper appurtenances in local households. The results indicated that 100% of the samples met the Federal Guidelines with 0% exceeding these standards. The highest content from all tested locations for lead was 4.89 ppb and for copper was 118.72 ppb. The action level for lead is 15 ppb and copper is 1300 ppb. As you can see, our results are well below the federal guidelines for an action level. Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4791).

Radon

Testing in 1997 showed a radon level of 334 to 479 pCi/l for Griffith Spring. The U.S. Environmental Protection Agency (EPA) is preparing a regulation, which will specify a Maximum Contaminant Level for radon. Radon is a radioactive gas that occurs naturally in ground water and is released from water into the air during household use. At high exposure levels it can cause lung cancer. The amount of radon exposure from your drinking water amounts to only a small fraction of the overall household exposure that the average person receives and should not be a cause for concern.

Required Additional Health Information

To ensure that tap water is safe to drink, EPA prescribes limits on the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled 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 (1-800-426-4791).

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 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 storm 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, stormwater runoff, and residential uses.

(D) Organic chemical contaminants, including synthetic and volatile organics, 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 can occur naturally 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. Some people may be more vulnerable to contaminants in drinking water than is 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 are available from the Safe Drinking Water Hotline (800-426-4791).

Other Important Water Characteristics

Other water characteristics, which are not categorized as contaminants, are also tested. This information can be valuable for those on very specifically restricted diets, for determining how the water would serve in special applications such as photo developing, water softeners and other chemistry sensitive areas, or in balancing chemical characteristics in sensitive environments such as aquariums. The following is a summary of the test results as of the end of 2001.

Chemical Characteristic	Average Level	Comments
pН	7.98	Normal
Total Hardness	About 20	Moderately Hard
	grains/gallon	
Chlorides	46 mg/L	Normal
Sulfates	541 mg/L	Above average for southeastern NM, high
		nationally
Fluorides	0.391 mg/L	Normal

Susceptibility Ranking for Ground Water Source

	Denton Well	Griffith Spring
Sensitivity Ranking	low	moderate
Vulnerability Ranking	high	low
Susceptibility Ranking	moderate	moderate

National Primary Drinking Water Regulation Compliance

This report is an unfunded mandate required under the federal Safe Drinking Water Act amendment of 1996. Each year, the City is now required by the United States Environmental Protection Agency to provide this information to all users of our water and publish a copy in the local newspaper. For more information, call the City of Ruidoso Downs Environmental Services Department at 887-1191.

Public Participation:

Issues dealing with the planning for and protection of your water system are posted in the Council Agenda at the Ruidoso Downs Municipal Building and decisions are made at the corresponding City Council Meetings. Check with Ruidoso Downs City Hall for City Council times and dates. If you are interested in participating in the planning and protection of Ruidoso Downs' drinking water, please plan to attend one soon.

High Water Bill? Here are some tips for lowering your water usage.

- Never use your toilet as a wastebasket.
- Do not let the water run while shaving or brushing teeth.
- Take short showers instead of tub baths.
- Keep drinking water in the refrigerator instead of letting the faucet run until the water is cool.
- Operate the dishwasher only when completely full.
- Use the appropriate water level or load size selection on the washing machine.
- Sweep driveways, sidewalks and steps rather than hosing off.
- Wash the car with water from a bucket.
- If you have a swimming pool, consider a new water-saving pool filter. Lower pool water level to reduce amount of water splashed out. Use a pool cover to reduce evaporation when pool is not being used.
- Repair all leaks. A leaky toilet can waste 200 gallons per day. To detect leaks in the toilet, add food coloring to the tank water. If the colored water appears in the bowl, the toilet is leaking.
- Install ultra-low flow toilets, or place a plastic container filled with water or gravel in the tank of your conventional toilet. Be sure it does not interfere with operation of the toilet's flush mechanisms.
- Install low-flow aerators and showerheads.
- Consider purchasing a high efficiency washing machine, which can save over 50% in water and energy use.
- Try xeriscaping. Plants, which are adapted or bred to live in arid or semi-arid areas, require less water.
- Water your lawn in the early pre-dawn or late afternoon hours. On a hot day in Ruidoso Downs, up to 50% of the water sprayed onto your lawn in the middle of the day can be lost to evaporation.

Water is Life , Help us Conserve and Protect it.

