

Water 101

Water Quality Is Keeping Your Water Safe and Clean

Water 101 continued from front

Analysis

About 12,000 water samples a year are delivered to the Water Quality Laboratory chemists, who then analyze the water samples. They perform more than 400,000 individual tests each year, testing for more than 150 different compounds including bacteria and organic and inorganic compounds. The total number of reported test results varies from year to year depending on federal testing requirements.

Review and Reporting

Laboratory supervisors review the test results and then file reports to the ADEQ which is responsible for enforcing all federal drinking water standards set by the EPA. Tucson Water's Annual Water Quality Report to customers includes a list of compounds the lab has tested for that have been found in our drinking water system, and the levels of those compounds.

Each month in this newsletter you'll find a water quality report on the results of our testing for sodium, mineral content, bacteria and other aspects of our water that customers have told us they are interested in.

For more information about your water quality, please call Tucson Water at 791-4331 or visit our Web site – www.tucsonaz.gov/water.

October 2007

www.tucsonaz.gov/water

Your *Water* Connection

NEWS & TIPS FOR TUCSON WATER CUSTOMERS

Water 101

Water Quality Is Keeping Your Water Safe and Clean

Keeping your water clean and safe is a top priority at Tucson Water. From sampling through testing and reporting, the water quality technicians, chemists, and other professionals of our Water Quality Division are trained to make certain the water you receive meets the highest standards of quality and all federal drinking water regulations.

Sampling

Technicians collect water samples daily across the metropolitan area at locations that include wells, water mains, reservoirs, and customer taps. There are more than 250 different sampling sites. The samples go to Tucson Water's Water Quality Laboratory for testing. The lab is regularly evaluated by the U.S. Environmental Protection Agency (EPA), the Arizona Department of Environmental Quality (ADEQ), and the Arizona Department of Health Services.

Water 101 continued on back

Have a question for Water 101 or a suggestion for a topic? Call us at 791-4331 or e-mail to

TW_Web1@ci.tucson.az.us

Adjust Your Water Use for Fall Temperatures

It's finally cooling off and that means it's time to adapt your water habits to the fall season. Here are some quick tips for better outdoor water efficiency and conservation.



Reset the automatic timer on your drip irrigation system.

Generally, you should water no more than once a week during the summer and no more than every three weeks in the winter months – but that depends on the plant, root system, and soil type.



Conduct regular irrigation system maintenance.

Frequent watering combined



Add 3-4 inches of mulch under plants.

A layer of fir mulch, leaf mold, or compost retains soil moisture, protects roots from temperature extremes and provides nutrients to plants.



Pull Those Weeds. Control pesky weeds and encroaching grasses that compete for your landscape's water. Careful weeding, pruning, fertilizing, and pest control will ensure healthy plants and increase water savings.



Use a pool cover. Covering your pool from September through May can prevent up to 9,800 gallons of water from evaporating – and, it will keep your pool cleaner.

Fall & Winter Watering Guidelines for Trees, Shrubs and Groundcovers

There is no precise formula for watering plants – just strategies and observations. Keep in mind temperature changes, rainfall amount, soil composition, and plant maturity. Here are some general guidelines:

Plant type	Temperature	1st Year	2nd Year	After 2 Years
Tree	below 75°	every 2 weeks	once a month	water if no rainfall within 60 days
Shrubs/ Groundcover	below 75°	every 2 weeks	every 3 weeks	every 30 days
Tree	75°–90°	every 5-7 days	every 3 weeks	water if no rainfall within 60 days
Shrubs/ Groundcover	75°–90°	weekly	every 2 weeks	every 3 weeks



On the Water Front

One of Tucson Water's primary goals is to be a good steward of our environment – carefully managing the resources we are responsible for while meeting the needs of our customers.

We're working to accelerate the use of our renewable water supplies – Colorado River water and reclaimed water – to reduce groundwater pumping and protect the environment. The construction of Clearwater Phase II in Avra Valley will soon allow us to use even more blended water and further reduce reliance on groundwater.

Our reclaimed water system now serves more than 900 customers and we are always looking for opportunities to expand the use of treated effluent for irrigation in place of groundwater. For example, we now provide reclaimed water for golf course irrigation to the Town of Oro Valley and Davis Monthan Air Force Base. These and many other similar partnerships help us get the most out of our renewable resources and protect the environment by preserving our finite supply of groundwater.

Wastewater effluent has also been used to create Tucson Water's Sweetwater Wetlands – a restoration of the conditions that once existed along the Santa Cruz River. The wetlands also serve as a part of the reclaimed water treatment process. Now, Pima County,

the City of Tucson, and a number of other municipalities in the region have joined together to create a 'pool' of effluent to be used for habitat restoration or other projects in the region.

Through education, assistance, and legislation, water conservation efforts have been a large part of the commitment made by Tucson Water and the City of Tucson for many years. The Community Conservation Task Force worked with Tucson Water to identify additional effective conservation programs that we hope to begin implementing next year.

In the end, our work to protect the environment is a reflection of the commitment by our Mayor and Council, City leadership, and our customers to this goal. Working together, we can continue to be successful in environmental stewardship and preserve and enhance the environment we all treasure.

Dave Modeer
Director, Tucson Water

Clearwater Quality Report *Most recent water quality data (Aug. 7–Sept. 5, 2007)*

59	Sodium (mg/L) (Aug. 21)
352.4	Mineral (mg/L) (Aug. 7 – Sept. 5 avg.)
176	Hardness (mg/L) (Aug. 21)
8.09	pH (S.U.) (Aug. 7 – Sept. 5 average)
Neg	Coliform Bacteria (Aug. 16)
0.88	Chlorine level (mg/L) (Aug. 7 – Sept. 5 avg.)
90.0	Temp (deg F) (Aug. 7 – Sept. 5 avg.)

Visit the Tucson Water Web site at www.tucsonaz.gov/water

Your Water Connection is produced by Tucson Water. To receive a copy, or to receive this information in Spanish, call 791-4331 or mail your request to: Tucson Water, Customer Information, P.O. Box 27210, Tucson, AZ 85726-7210.

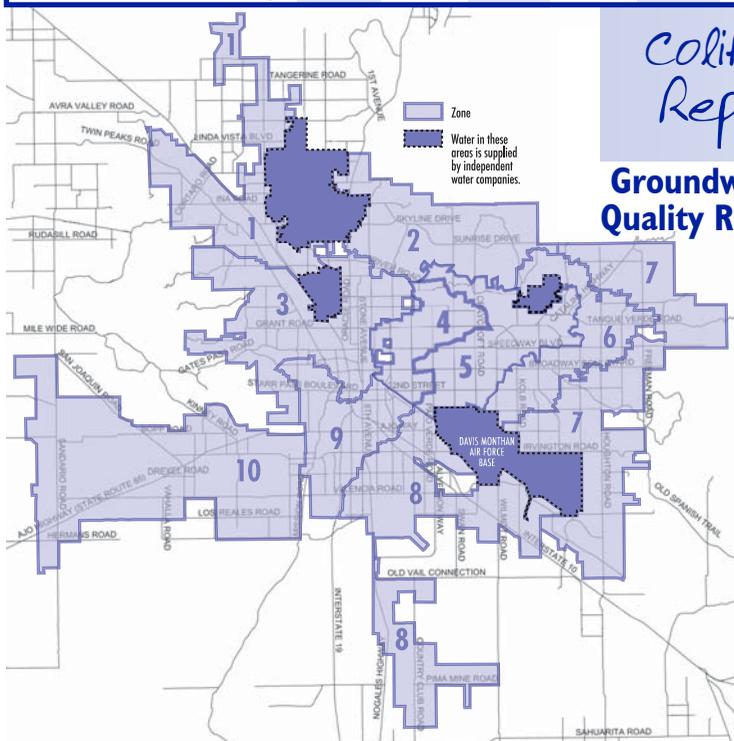
City of Tucson TTY number: 791-2639

Si usted desea este documento escrito en español, por favor, llame al 791-4331.



Groundwater Quality Report - August 2007

Water Quality Zone		1	2	3	4	5	6	7	8	9	10	System Wide
Sodium (mg/L)* 84 SAMPLING POINTS	Average	48	54	61	46	49	48	39	44	49	44	49
	Range	47-49	49-59	52-64	31-61	39-59	35-55	22-58	39-51	38-60	36-52	22-64
Mineral Content (mg/l)* 247 SAMPLING POINTS	Average	426	407	419	324	351	368	298	389	344	273	361
	Range	244-564	385-440	212-463	192-423	177-418	228-411	194-413	330-439	206-424	208-426	177-564
Hardness (mg/L)** 84 SAMPLING POINTS	Average	218	159	188	136	154	163	135	182	119	95	154
	Range	115-284	136-184	144-213	69-185	85-189	131-189	93-188	142-229	67-184	65-139	65-284
pH (S.U.) 247 SAMPLING POINTS	Average	7.6	7.9	7.9	7.8	7.7	7.8	7.8	7.5	7.8	7.9	7.8
	Range	7.3-7.9	7.8-8.1	7.7-8.1	7.7-8.0	7.5-8.0	7.7-7.9	7.6-7.9	7.4-7.7	7.4-7.9	7.5-8.1	7.3-8.1
Temperature (deg F) 247 SAMPLING POINTS	Average	87	88	87	89	87	88	88	87	89	88	88
	Range	83-92	78-93	80-96	85-96	84-92	83-92	84-92	82-95	84-94	85-91	78-96

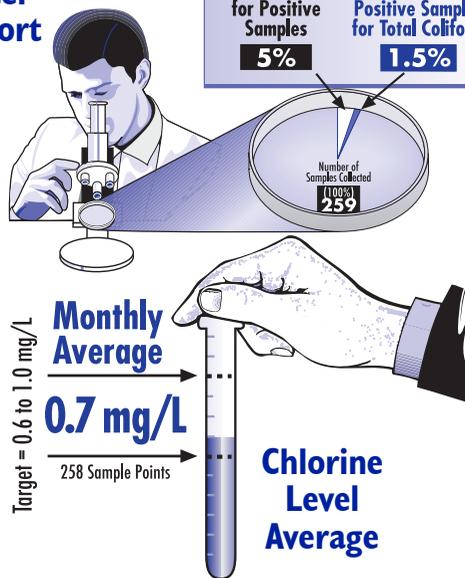


Coliform Bacteria Testing Report - August 2007

Groundwater Quality Report

EPA Standard for Positive Samples
5%

Number of Positive Samples for Total Coliform
1.5%



* mg/L means milligrams per liter; 1 mg/L = 1 teaspoon in 1,302 gallons

** 17.1 milligrams per liter (mg/L) = 1 grain per gallon; Therefore, the system-wide hardness average as reported for July 2007: 154 mg/L divided by 17.1 = 9.01 grains per gallon.

To give you a more accurate measurement of the water quality in your neighborhood, the Tucson Water service area has been divided into 10 zones based on differences in water pressure and water quality. For a detailed description of the zone boundaries, call 791-4331.

With the exception of chlorine and coliform bacteria, none of the water quality parameters reported here have U.S. Environmental Protection Agency primary standards set for them. For more information about primary and secondary water quality standards, visit Tucson Water's Web site at www.tucsonaz.gov/water.