

Your *Water* Connection

NEWS & TIPS FOR TUCSON WATER CUSTOMERS

Water 101

Milky or Sparkling – That's Probably Air in Your Water

Have you ever held up a glass of newly-poured tap water and noticed a “milky” or “cloudy” appearance? You are probably seeing millions of tiny, harmless air bubbles.

Whether it's moved by gravity or booster pumps, the water in Tucson Water's distribution system is under pressure. Any air trapped in the water is pressurized until it's released by opening a tap.

If the amount of trapped air is low, your water could have a few small bubbles and appear to sparkle.

But a *greater amount* of trapped air will create millions of tiny bubbles as air pressure is released at the tap, giving the water a cloudy or white, milky appearance.

Typically air bubbles will rise to the water's surface. The easiest way to test if your “milky” water is the result of trapped air is to fill a clear glass with tap water and set it on the counter. If the milky appearance is due to air bubbles, the water will begin to clear within minutes, from the bottom

Water 101 continued inside

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

Milky or Sparkling

– That’s Probably Air in Your Water

Water 101 continued from front

of the glass up to the top, as the air escapes.

If you have milky water that does not clear from the bottom of the glass within several minutes, it may not be the result of trapped air. In that case, you should contact Tucson Water by calling 791-3242 or by email at TW_Web1@tucsonaz.gov.

Some common causes of air bubbles that could cause water to appear milky include:

- **Faucet Aerators** – Aerators that add air to the water are often found on kitchen faucets. If the water from an inside faucet shows a milky appearance, but water from an outside hose bib does not, then the faucet aerator is creating the tiny bubbles. Remove and clean the faucet aerator with white vinegar to clear away any sediment blockages that may be increasing the air, and the bubbles, in the water.
- **Hot Water Heaters** – Hot water is more likely to have a milky look than cold water because trapped air can be released more readily from hot water.
- **Well Pumping** – All of our drinking water, even the blended water from the Clearwater Facility in Avra Valley, is pumped from wells in the ground. Trapped air exists in varying amounts in about 90% of Tucson Water’s wells.
- **A water main break or fire hydrant use** can allow large amounts of air to enter our drinking water system. This can cause your faucet to release air and water in spurts. Leave your faucet open for a minute or two to remove the trapped air from plumbing to see if that clears up the problem. (Remember to catch and use this water, rather than allowing it to go down the drain!) If the condition doesn’t clear after a short time, please contact Tucson Water at 791-3242.

Tohono Chul & ADWR Announce 2007 Xeriscape Contest Winners

Each year Tohono Chul Park and the Arizona Department of Water Resources (ADWR) present the Tucson Community Xeriscape



Homeowner Landscape – Kelly Frink and Tag Merrick

Contest that recognizes innovative use of native and low-water-use plants, water harvesting, use of gray water, and efficient irrigation

systems in residences and businesses. The use of xeriscape principles and native plants is an important part of promoting water conservation, especially in the summer when more than half of the water Tucson Water delivers to residents is used outside the home on landscaping.

Six distinguished judges reviewed entries and conducted site visits on landscapes at least two years old, judging homeowner and professional entries separately. Recipients of the Xeriscaping Awards are recognized for adhering to water conservation concepts in combination with smart design and choice of plants.

Homeowner Awards

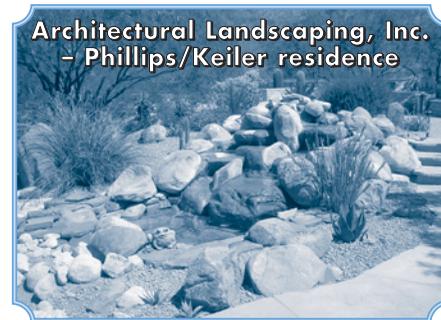
- First place – “Homeowner Designed Landscape” – Kelly Frink and Tag Merrick
- Second place – “Water Harvesting and Hillside Erosion Control” – Wayne/Marken residence
- Honorable mention – Jim and Linda Weiss residence

Professional Residential Awards

- First place – Joseph J. Prchal, Architectural Landscaping, Inc., for the Phillips/Keiler residence
- Second place – Elizabeth A. Przygoda, Boxhill Landscape, for the Lunt residence
- Honorable mention – Roberta Braegelmann, Sonoran Gardens, Inc., for the Kilgore residence

Judges’ Awards

Professional category – “Best Use of Sonoran and Chihuahuan Natives to Attract Wildlife” –



Architectural Landscaping, Inc. – Phillips/Keiler residence

- Greg Corman and Debra Huffman, Gardening Insights, Inc./Debra Huffman Landscape Design for the Stach residence
- Public Works category – “Public Education, Archaeological Preservation and Use of Native Plants” – The City of Tucson Parks and Recreation Department for Vista Del Rio Park
- Public Works category – “Best Neighborhood Park” – The City of Tucson Parks and Recreation Department for Keeling Park
- Water Harvesting Residential – Greg Corman, Gardening Insights, Inc. and Debra Huffman, Debra Huffman Landscape Design for the Stach residence
- Water Harvesting Public Works – City of Tucson Parks and Recreation Department for Sunset Park
- J.D. Di Meglio Artistry in Landscaping Award – Kelly Frink and Tag Merrick



On the Water Front

We're using less water. Those are words rarely seen in the Tucson region, especially during the height of the summer.

But it's a fact. Between 2002 and 2006 the average household customer's water use dropped from 12.5 Ccf (9,300 gallons) to 11.1 Ccf (8,300 gallons) per month.

Why this significant change? As with most complex social and environmental issues, there is more than one reason.

First, our customers are good environmentalists. You understand how precious water is in the desert and you use it wisely. Another reason is Tucson and Pima County's low-flow plumbing fixture code that mandates these water saving features in all new residential and commercial construction. The City's xeriscape ordinance is still another water saver. This requires new construction to limit their use of high-water-use trees and plants, and encourages the use of desert-adapted landscaping.

One would suppose that climate plays a part in lower water use, but during the past five years, when we've been in the midst of a long-term drought, average water use has steadily declined.

Certainly there are additional reasons for this dramatic reduction in water use. Some programs that will be significant factors in the future are relatively new.

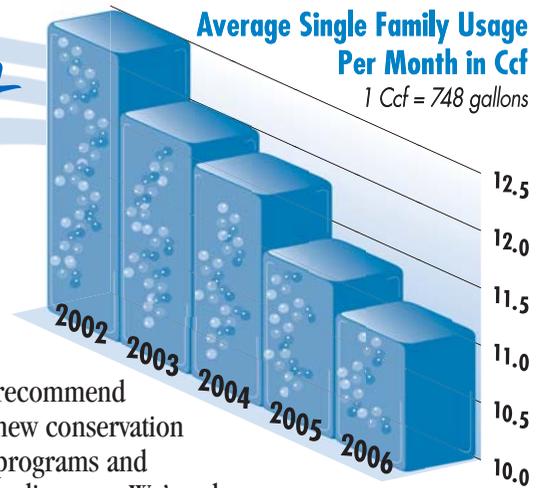
For example, last year Tucson Water convened the Community Conservation Task Force to investigate and

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

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City of Tucson TTY number: 791-2639

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



recommend new conservation programs and ordinances. We've also increased our water conservation education and assistance programs, and have recently enhanced our enforcement of the Water Waste Ordinance looking for water waste and cracking down on repeat water wasters.

The steady decline in average water use is a very positive step toward sustainability for our region. Combined with the work Tucson Water is doing to ensure water reliability and drought resistance, it's another fine example of all of us working together to make sure we have enough water for the future.

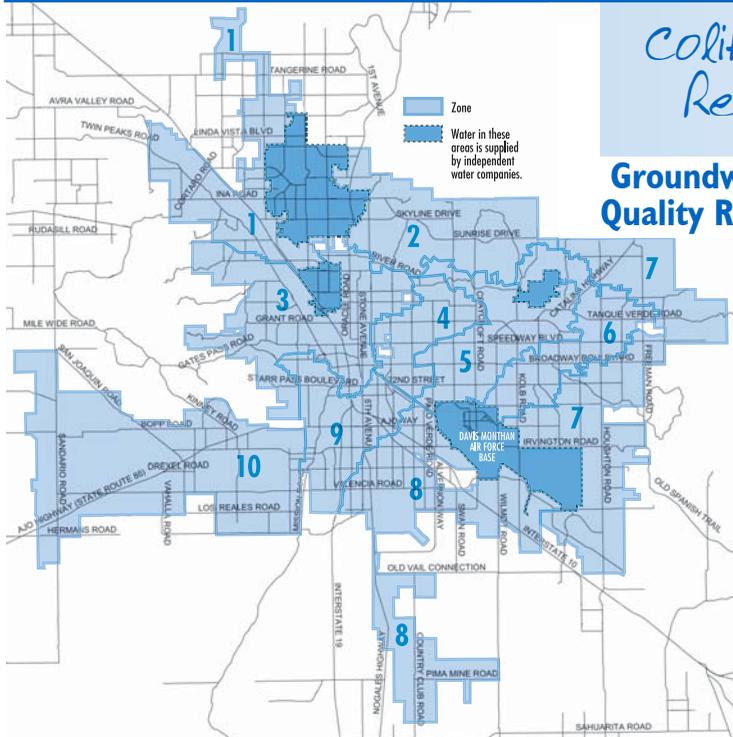
Dave Modeer
Director, Tucson Water

Clearwater Quality Report - Most recent water quality data (June 11 - July 11, 2007)

59	Sodium (mg/L) (June 15)
32.4	Mineral (mg/L) (June 11 - July 11 avg.)
154	Hardness (mg/L) (June 15)
8.02	pH (S.U.) (June 11 - July 11 average)
Neg	Coliform Bacteria (June 6)
0.90	Chlorine level (mg/L) (June 11 - July 11 avg.)
84.7	Temp (deg F) (June 11 - July 11 avg.)

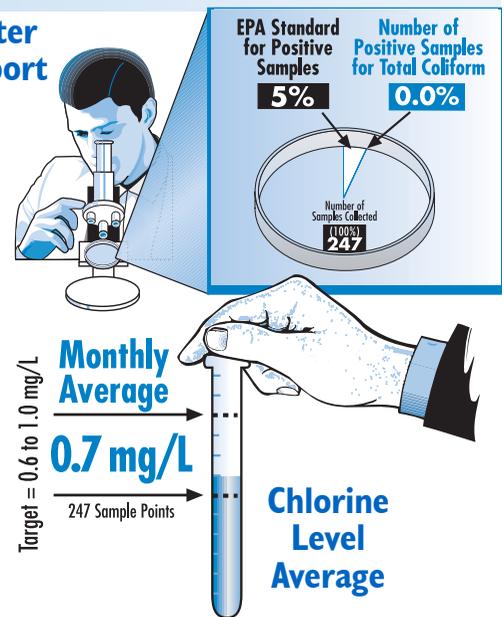
Groundwater Quality Report - June 2007

Water Quality Zone		1	2	3	4	5	6	7	8	9	10	System Wide
Sodium (mg/L)* 86 SAMPLING POINTS	Average	57	55	52	48	47	52	42	43	52	54	49
	Range	40-93	52-57	21-61	30-58	31-57	37-64	28-57	41-45	40-60	40-60	21-93
Mineral Content (mg/l)* 247 SAMPLING POINTS	Average	400	386	361	304	326	347	290	355	341	292	339
	Range	179-609	351-408	177-472	188-407	184-407	223-404	180-395	255-444	205-479	204-408	177-609
Hardness (mg/L)** 86 SAMPLING POINTS	Average	148	168	165	148	153	166	145	190	203	154	165
	Range	80-223	158-186	98-202	100-177	77-184	90-193	94-180	108-268	75-283	76-182	75-283
pH (S.U.) 247 SAMPLING POINTS	Average	7.6	7.9	7.8	7.8	7.6	7.7	7.7	7.5	7.7	7.7	7.7
	Range	7.2-7.9	7.8-8.0	7.6-8.0	7.6-8.0	6.9-8.0	7.1-7.9	7.6-7.9	7.2-7.7	7.4-7.9	7.4-7.9	6.9-8.0
Temperature (deg F) 247 SAMPLING POINTS	Average	83	87	86	88	87	87	87	86	88	88	87
	Range	76-90	83-91	77-96	83-94	82-92	81-90	82-91	81-91	82-97	85-91	76-97



Coliform Bacteria Testing Results - June 2007

Groundwater Quality Report



* 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 May 2007: 165 mg/L divided by 17.1 = 9.65 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.