

## Water 101

# Temperature

*Continued from Front*

The temperature of the water can also change as it flows through our water system and is affected by high outside temperatures. The most likely cause of an increase or decrease in water temperature is your plumbing. Pipes that are buried close to the surface of the ground or are in uninsulated walls that are exposed to the sun can be heated by high outside temperatures during Tucson's hot summers or cooled during cold winter nights. The effect this can have on the temperature of your water will vary depending on where your pipes are located.

Water temperature can affect the taste of your drinking water. Storing tap water in a clean container at room temperature or in the refrigerator will give a more refreshing taste than drinking the water when it is warm.

Have a question for *Water 101* or a suggestion for a topic?

Call us at 791-4331 or email to

[TW\\_Web1@ci.tucson.az.us](mailto:TW_Web1@ci.tucson.az.us).

Visit the Tucson Water Web Site at  
<http://www.cityoftucson.org/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.



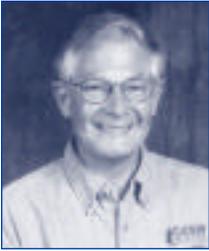
## Water 101

# Your Water at Home— Part IV: Temperature

This month, *Water 101* continues an on-going series about aspects of water quality and how they affect customers' daily lives. This month we'll talk about temperature.

The temperature of water delivered by Tucson Water can vary depending on the time of year and the location where the temperature measurement is taken. Tucson's water supply comes from almost 200 different wells as well as the Clearwater Renewable Resource Facility in Avra Valley. Multiple locations of water sources is one reason for differences in temperature. The depth of the water below the ground's surface and the geology of the area surrounding the well vary with its location and means water temperature may be different from well to well.

*Continued on Back*



# On the Water Front



The staff at Tucson Water includes some of the most dedicated and intelligent people I've ever worked with. They are led by a team of experts who work to ensure that you are provided with excellent service and water. I'd like to introduce you to some of the folks who make up your Tucson Water Leadership Team.

Deputy Director Marie Pearthree is a hydrologist and registered professional engineer who worked for private sector engineering firms before joining us in 1997. She led the team that built the Clearwater Facility that now supplies nearly half our water and is primarily involved in strategic planning and oversight for Tucson Water.

Bruce Johnson, our Assistant Director, received both his Bachelors and Masters Degrees in Hydrology at the UA. Bruce has been at Tucson Water for more than 27 years and served as Chief Hydrologist and Lead Administrator before advancing to his current position. He's leading our efforts to make Tucson Water more efficient and cost-effective and is also responsible for water system security.

Planning and Engineering Administrator Joe Babcock is a hydrologist, but more recently served as our Chief Planner. He oversees the staff that plans, designs, and builds our water system. Joe is a native Arizonan and has worked with Tucson Water since 1978. He's also a registered professional engineer and a registered land surveyor.

Jeff Biggs, our Water Quality Management Administrator, is responsible for making sure the water we deliver to you is safe, clean and meets all water quality regulations set by the U.S.EPA. He's also responsible for our 3 water treatment plants. Jeff has more than 20 years of experience at water utilities and joined Tucson Water in 2001.

Operations and Maintenance Administrator Ted Sroka oversees the staff that operates our wells, reservoirs, and pumping stations to ensure that you have water at your tap 24 hours-a-day. In addition, if there's a break in a water main, Ted's staff makes sure it's fixed quickly and water service restored to customers as soon as possible. This marks Ted's 30<sup>th</sup> year with Tucson Water.

These are just a few of the nearly 590 people who serve you at Tucson Water. I'll introduce you to more of your Leadership Team in a future Water Connection. You can count on all of us to work every day to make sure you and your family have enough quality water to meet your needs.

David V. Modeer  
Director, Tucson Water

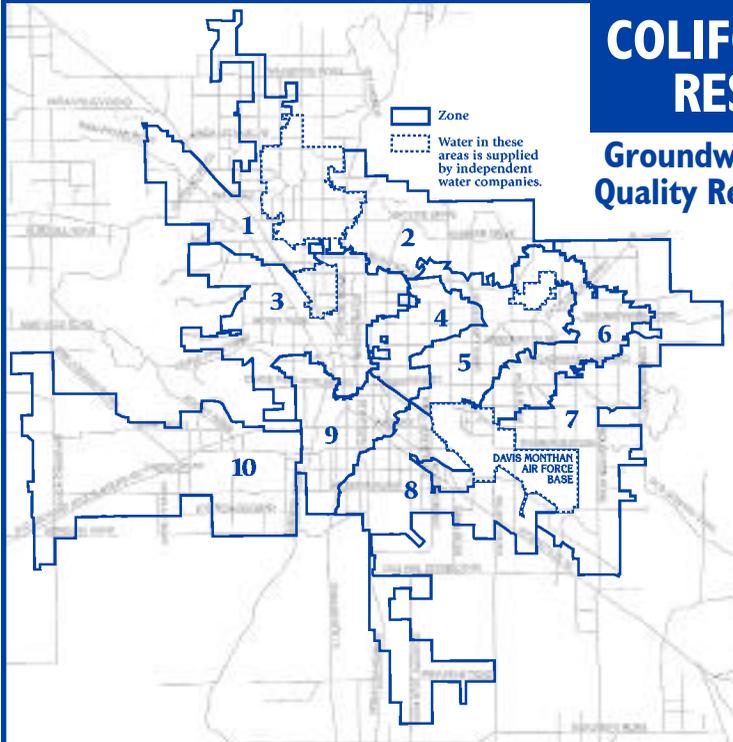
## Clearwater Quality Report - October 2003

- 48\* Sodium (ppm)
- 285.2 Mineral Content (ppm)
- 109\* Hardness (ppm)
- 8.1 pH (units)
- Neg\* Coliform Bacteria
- 0.74 Chlorine level average (ppm)
- 84.2 Temp (deg F)

*\* Values for September 2003*

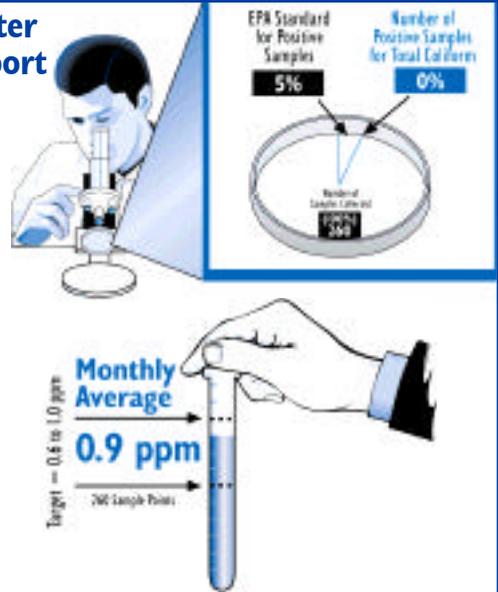
# GROUNDWATER QUALITY REPORT - August 2003

Water Quality Zone		1	2	3	4	5	6	7	8	9	10	System Wide
Sodium (ppm)	Average Range	65 47-86	45 34-48	47 28-56	40 29-50	39 32-47	40 31-47	32 21-43	43 42-45	44 41-48	43 42-48	42 21-86
Mineral Content (ppm)	Average Range	421 196-590	284 265-300	299 204-385	234 186-317	252 197-301	266 210-296	239 180-292	345 299-445	263 215-384	217 214-221	274 180-590
Hardness (ppm)	Average Range	230 152-329	113 98-122	126 75-164	99 86-132	101 86-129	118 105-130	112 105-126	173 138-268	101 76-197	82 75-107	118 75-329
pH (units)	Average Range	7.4 7.0-8.0	7.7 7.1-8.1	7.7 7.1-8.0	7.6 7.0-8.0	7.5 7.0-8.0	7.5 7.1-8.0	7.5 7.0-8.2	7.3 7.1-7.7	7.5 7.0-7.9	7.7 7.3-7.9	7.5 7.0-8.2
Temperature (deg F)	Average Range	87 82-91	89 85-92	88 81-96	89 83-95	88 79-94	87 77-93	88 83-92	88 82-98	90 84-96	91 88-95	89 77-98



## COLIFORM BACTERIA TESTING RESULTS - August 2003

### Groundwater Quality Report



**“PPM” means one part per million;  
1 ppm = 1 teaspoon in 1,302 gallons**

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.cityofucson.org/water](http://www.cityofucson.org/water).

**Conservation Corner –  
Save Water/\$ave Dollars**

# Water Conservation Tips

## Change Your Watering Habits for Winter

It takes a while for Fall to arrive in the Old Pueblo, but when the temperatures finally drop below 90 degrees and the days get shorter, it's time to make some changes in your outside watering habits.

If you haven't already done so, reduce the amount of time you spend dragging the garden hose around the yard. If you have an irrigation system, reset the timer to water less frequently.

Vegetation, grass, shrubs, and trees don't need to be watered nearly as frequently in the Fall and Winter as they do when our temperatures are soaring.

So change that watering pattern today. You'll save water, have healthier landscaping, and probably reduce your monthly water bill. If you need assistance or advice with changing your watering schedule, call Tucson Water's Zanjeros, the water conservation professionals, at 791-3242.

# Plant Now for A Glorious Spring



For color in your garden next Spring, try these low water use plants. They're all good for Fall planting and you'll be taking advantage of the Winter rains. Most native vegetation is dormant in the

Winter and doesn't need much, if any, irrigation, especially during December and January.

	<b>Common Name</b>	<b>Flower Color</b>
<b>Trees</b>	Twisted Acacia	Yellow
	Mexican Redbud	Pink
	Desert Willow	Lavender
	Desert Ironwood	Pinkish - Lavender
<b>Shrubs</b>	Chuperosa	Red, Orange
	Desert Honeysuckle	Orange
	Baja Ruellia	Blue, Purple
	Bush Dalea	Purple
<b>Groundcovers &amp; Wildflowers</b>	Desert Marigold	Yellow
	Rocky Mountain Zinnia	Yellow
	Mexican Primrose	Pink
	Firecracker Penstemon	Orange

The Arizona Department of Water Resources Tucson office can give you a Low Water Use/ Drought Tolerant Plant list and information about Xeriscape water smart landscaping. Call their office at (520) 770-3800.