

# On The Water Front



Tucson Water serves 775,000 customers in a 350-square-mile area, with infrastructure that includes pipes, mains, wells, basins, reservoirs, connections, valves, booster stations, and meters that bring drinking water to your home. These distribution and transmission facilities represent more than \$1 billion in community investment. It is an investment that Tucson Water professionals take great care in budgeting to operate and maintain by balancing limited capital investment with operating costs in these challenging economic times.

Tucson Water's system management team includes professionals who develop forecasting models that show the future needs for new infrastructure and projected needs for maintenance. This gives us the information we need to plan in advance for improvements or replacement of portions of the water system, which are funded with a combination of water sales and water revenue bonds. The Citizens' Water Advisory Committee (CWAC), which includes members who live inside and outside the City limits, reviews Tucson Water's system, project, and financial plans prior to their submittal to the Mayor and Council for approval.

Strategic and targeted investments in manpower and funds will ensure that we maintain a system that continues to deliver safe, high-quality drinking water. Specific infrastructure projects include:

- Replacing approximately 11,000 aging water meters for accurate monitoring and collection of data that will help us to forecast future water demands.
- Construction of new Clearwater Renewable Phase II facilities that include a reservoir, pumping station and 48-inch diameter pipeline that will allow us to recover more of our annual Colorado River water allocation. These infrastructure projects are slated to be complete by 2012.

*On the Water Front continued inside*

# Your Water Connection

News & Tips for Tucson Water Customers

July 2009

[www.tucsonaz.gov/water](http://www.tucsonaz.gov/water)

## Water 101 New Water Rates Begin July 6

Tucson Water's new rates for drinking water service will go into effect on July 6, 2009. Overall, rates will rise by 10.0%. In addition, the conservation fee that is dedicated to funding the utility's water conservation programs will increase by \$0.01 per Ccf (where 1 Ccf equals 748 gallons). Different customer classes – single family, multi-family, commercial, industrial, and construction customers – have different rates for varied levels of usage.

The average residential customer will see a rate increase of 9.67%, resulting in a water bill increase of approximately \$1.80 per month for a single-family home using 10 Ccf (or 7,480 gallons) of water per month. Most of Tucson Water's customers are in this single-family class; over 80% of customers in this category use 15 Ccf or less of water, on average, a month.

Water rate changes are based on two key ideas: the ability to recover the cost of serving each distinct customer category, and the concept of encouraging water conservation by the use of a sliding price scale in which the price of water increases with higher usage.

Annual cost studies, plus policy direction from Tucson's Mayor and Council and Tucson

*New Water Rates 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](mailto:TW_Web1@ci.tucson.az.us)

## Receives Federal Stimulus Funding

The Pima County Regional Wastewater Reclamation Department (PCRWRD) recently was awarded \$2 million in American Recovery and Reinvestment Act (ARRA) program funding, more commonly known as federal stimulus funding. The money received by RWRD is being administered by the Water Infrastructure Finance Authority (WIFA) and does not have to be repaid.

WIFA is an independent agency of the State of Arizona that is authorized to offer below market interest rates on loans to finance the construction, rehabilitation and improvement of drinking water, wastewater, wastewater reclamation, and other water quality projects.

In addition to the \$2 million in ARRA funding, RWRD also received an additional \$8 million dollars in a low-interest (3.46%) rate loan from WIFA.

PCRWRD is one of the first government agencies in Arizona to obtain stimulus funding from the federal government for improvements to its wastewater system.

ARRA funding and the low interest WIFA loan will help to fund the Plant Interconnect project and will save Pima County residents nearly \$3.4 million in construction costs. The Plant Interconnect project is an important component of the Regional Optimization Master Plan (ROMP). The ROMP is the program adopted by Pima County to meet new environmental requirements aimed at reducing nitrogen and ammonia levels in effluent discharges to the Santa Cruz River from the Roger Road and Ina Road Wastewater Reclamation Facilities.

## “When Recycling... Not All Plastics Are Equal”

In Tucson’s Blue Barrel Recycling Program one material that can be confusing for recyclers is plastic. So much of what we use is made of plastic... but not all plastics are the same. Confused? Let’s try to make it easy!

Plastics have been a steadily growing segment of the solid waste stream, replacing glass and tin cans. Since 1960, plastics have increased from less than 1% to 12% of the waste stream. The Blue Barrel Recycling Program only accepts #1 PETE and #2 HDPE bottles and jugs. When trying to decide if a plastic is recyclable first make sure it is a bottle or a jug. Then, look on the bottom to find the number within the recycling triangle. If it’s a #1 or #2, it goes in the blue recycle barrel.

Why not all plastics? Tucson Recycles can only collect material that can be sorted at the materials recovery facility (MRF) and marketed. There are stable markets for #1 and #2 plastic bottles with about 25% being recovered. Each year about 2,000 tons of these plastics recycled in Tucson are sold to make other products. Some of the other rigid plastics – #3 through #7 – have limited markets and low value, if any. Due to shipping costs and market value, Tucson Recycles cannot accept these plastics in the Blue Barrel Recycling Program at this time. As markets change, and as the City is able to identify items in the waste stream that can be sorted and marketed for the long term, new materials will be added to the list of recyclables.

By recycling the right way, you help us to cut costs, reduce contamination, and send higher quality commodities to market. For more information on plastics recycling, call 791-5000 or go online to [DoMoreBlue.com](http://DoMoreBlue.com).

Your Utilities Services statement includes fees for your water, wastewater, and environmental services.

*The Pima County Regional Wastewater Reclamation Department (PCRWRD)* - For more information about the regional wastewater system, call (520) 740-6500 or visit [www.pima.gov/wwm](http://www.pima.gov/wwm).

*Environmental Services (ES)* - To ask questions, learn more about ES, or schedule a Los Reales tour, call (520) 791-3171 or visit [www.tucsonaz.gov/esd](http://www.tucsonaz.gov/esd) or [www.tucsonrecycles.org](http://www.tucsonrecycles.org).

# Water 101

New Water Rates *continued from Front*

Water's Citizens' Water Advisory Committee, help to determine proposed rate changes. The City of Tucson also continues to offer an assistance program for qualified low-income customers to help them pay their bill.

All of us are experiencing higher prices. Delivering water and operating your water system are energy intensive, and higher rates for electricity, natural gas, and fuel have a large impact on Water Department costs. Rate increases were required even after Tucson Water made significant expenditure reductions in staffing and personnel services, Central Arizona Project (CAP) water, power, computers and equipment, vehicles and large equipment.

Tucson Water delivers a reliable source of quality water to about 775,000 customers at a fair rate while working to reduce costs, improve efficiency, make infrastructure investments, and keep your \$1 billion water system in working order.

The average price of water service under the new rates, regardless of customer category or rate structure, is still much less than a penny per gallon. Tucson Water hopes that you'll agree that's a pretty good deal for a sustainable, high quality water supply in our desert community.

For a complete listing of the new water rates, please check the Tucson Water website: [www.tucsonaz.gov/water/rates.htm](http://www.tucsonaz.gov/water/rates.htm)

## Clearwater Quality Report

*Most recent water quality data (May 12 – June 7, 2009)*

61	Sodium (mg/L) (May 12)
443.6	Mineral (mg/L) (May 12 – June 7 avg.)
204	Hardness (mg/L) (May 12)
7.90	pH (S.U.) (May 12 – June 7 avg.)
Neg	Coliform Bacteria (May 12)
1.09	Chlorine level (mg/L) (May 12 – June 7 avg.)
89.0	Temp (deg F) (May 12 – June 7 avg.)

## July is Smart Irrigation Month

Summer is a great time to evaluate your irrigation or sprinkler system! Sign up for a SmartScape class to learn more about water-wise landscaping and proper irrigation techniques. Classes are free but seating is limited, so advance registration is recommended. To register or for more info, contact (520) 626-5161 or visit the Tucson Water website for more details and links: [www.tucsonaz.gov/water/conservation.htm](http://www.tucsonaz.gov/water/conservation.htm).

## On The Water Front *continued...*

- Adding a second transmission main line that will supply renewable water from Clearwater Facilities in Avra Valley to customers in southeast Tucson. This infrastructure project will provide important redundancy and is scheduled to be constructed in 2017.

Over the years, Tucson Water has replaced and rehabilitated more than 220 miles of water mains, a key component of a reliable water supply. Staff continues to gather data and run forecasting models which assists in developing a prioritized list of mains to replace and rehabilitate.

To find out more about how Tucson Water manages water system improvements, call (520) 791-4331 or click on [www.tucsonaz.gov/budget/docs/10RecBOOK-CIP.pdf](http://www.tucsonaz.gov/budget/docs/10RecBOOK-CIP.pdf) to read an overview of projected capital improvements for 2010-2014. CWAC meetings are also open to the public and you can find more information about the Committee at [www.tucsonaz.gov/water/](http://www.tucsonaz.gov/water/).

**- Jeff Biggs, Director, Tucson Water**

Visit the Tucson Water website at [www.tucsonaz.gov/water](http://www.tucsonaz.gov/water)

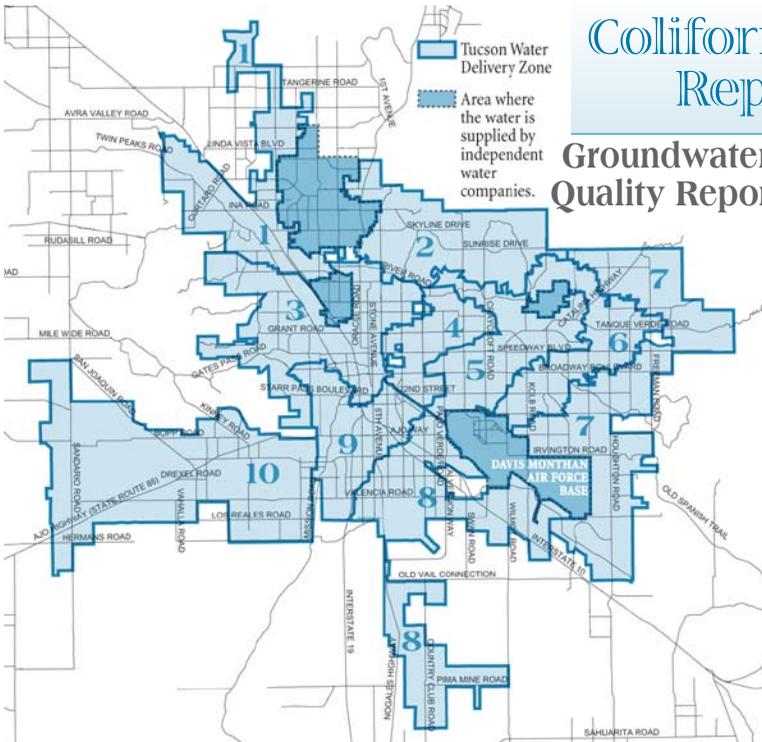
Your Water Connection is produced by Tucson Water. To receive a copy, or to receive this information in Spanish, call 791-4331 or mail your request to: Tucson Water, Customer Information, P.O. Box 27210, Tucson, AZ 85726-7210. City of Tucson TTY number: 791-2639

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



# Groundwater Quality Report - May 2009

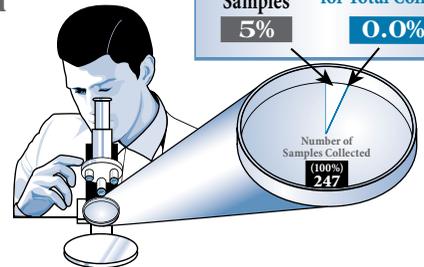
Water Quality Zone		1	2	3	4	5	6	7	8	9	10	System Wide
Sodium (mg/L)*	Average	54	60	55	53	51	58	37	44	49	43	51
84 SAMPLING POINTS	Range	44-68	50-67	20-67	32-62	41-66	37-63	22-55	41-48	34-65	40-46	20-68
Mineral Content (mg/L)*	Average	406	465	439	404	406	398	298	401	370	220	390
247 SAMPLING POINTS	Range	166-600	447-487	188-486	191-473	187-488	230-481	184-460	328-531	209-541	209-239	166-600
Hardness (mg/L)**	Average	275	198	190	172	170	203	134	196	135	80	172
84 SAMPLING POINTS	Range	229-363	164-232	91-238	86-214	92-221	111-219	64-200	153-269	60-235	76-91	60-363
pH (S.U.)	Average	7.6	7.9	7.8	7.9	7.7	7.8	7.7	7.5	7.8	7.9	7.8
247 SAMPLING POINTS	Range	7.3-7.9	7.8-8.0	7.5-8.0	7.7-8.0	7.3-8.0	7.0-8.0	7.2-7.9	7.4-7.7	7.3-7.9	7.8-7.9	7.0-8.0
Temperature (deg F)	Average	81	83	83	85	83	81	82	83	84	83	83
247 SAMPLING POINTS	Range	78-85	81-86	76-91	82-91	77-87	73-86	79-88	78-88	77-88	80-87	73-91



## Coliform Bacteria Testing Report - May 2009

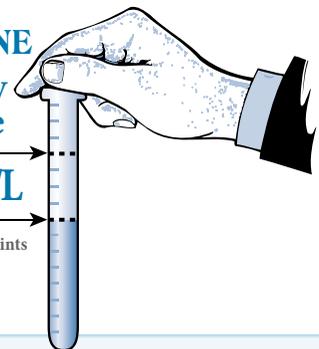
### Groundwater Quality Report COLIFORM

EPA Standard for Positive Samples	Number of Positive Samples for Total Coliform
5%	0.0%



### CHLORINE Monthly Average

Target = 0.8 to 1.2 mg/L  
**0.8 mg/L**  
 247 Sample Points



\* 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 2009: 172 mg/L divided by 17.1 = 10.06 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 website at [www.tucsonaz.gov/water](http://www.tucsonaz.gov/water).