

High Efficiency Toilet (HET) Replacement Program for Low Income Customers

Leaky and old, inefficient toilets can be the biggest water waster inside the home.

Tucson Water is partnering with several local social service agencies to offer assistance to qualifying low-income homeowners to replace inefficient toilets with free High Efficiency Toilets (HETs). To qualify for the program, homeowners must:



- ◆ be a Tucson Water customer,
- ◆ meet income qualifications,
- ◆ have a toilet manufactured prior to 1991 that uses 3.5 gallons of water – or more – per flush.

For more information, or to obtain a listing of the participating agencies, contact Tucson Water at (520) 837-2181.

Find out more about Tucson Water conservation programs that will help you to save water and money by clicking on www.tucsonaz.gov/water/rebate.htm or by calling (520) 791-4331.

Your Water Connection

News & Tips for Tucson Water Customers
December 2009 www.tucsonaz.gov/water

On The Water Front

On behalf of all the employees at Tucson Water, I wish that you and your family enjoy a happy, safe and sustainable holiday season! This past year has been full of interesting events – here are a few of them:



- ◆ Continuing with rebate incentives and improving conservation programs:
- High Efficiency Toilet (HET) Rebate program – Continue to offer rebates to residential, commercial, and multifamily customers to replace inefficient, pre-1991 fixtures with HETs.



- Irrigation System Upgrade Rebate – Qualified commercial/industrial and multi-family users now have up to \$10,000 over two years to replace water wasting irrigation systems with more efficient equipment and components.
- Funding for rainwater/gray water demonstration projects – to promote design and installation of technologies or techniques to harvest rainwater in commercial construction or use gray water in residential construction.

On the Water Front *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

Pima County – The Avra Valley Wastewater Reclamation Facility

The Avra Valley Wastewater Reclamation Facility (WRF), located at 10000 West Snyder Hill Road, was recently expanded and upgraded. The new facility has a capacity of 4 million gallons a day (mgd) and meets higher environmental standards than the original facility. The older facility which had a capacity of 2.2 is out of service but is being preserved.

The new facility's increased capacity will meet the projected growth for the far southwest side of the Tucson metropolitan area. If future growth in the area should require even greater capacity, the Regional Wastewater Reclamation Department will investigate the benefits of retrofitting and upgrading the older facility to meet new environmental standards and increasing capacity needs.

The higher quality effluent (treated wastewater) that is now being created at the Avra Valley WRF is being recharged to the groundwater where it is replenishing the aquifer.

For many years, the Avra Valley WRF has been a favored destination for bird watchers. During the two-year construction period, the facility was off limits to the public. Since early August, birdwatchers have had access to the outside perimeter of the facility from 6:00 a.m. to 2:00 p.m. Access to the main plant area inside the high-security fence is not permitted; however, birdwatchers are allowed to enter the outer gate and walk to the large ponds west of the facility.

The reclaimed water draining into the ponds is a very high-quality effluent, but it is not of potable water quality and should not be touched or ingested.

This is the fourth article in a series that highlights the eleven wastewater reclamation facilities operated by the Regional Wastewater Reclamation Department.

Photo: Paul Berquist



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City of Tucson Environmental Services – Keep Your Holidays Green

Did you know Americans generate 25% more garbage between the Thanksgiving and New Year's Day holidays? This is about 1 million additional tons of garbage taken to our landfills **each week** during the holidays. That's a lot of garbage! But, with a little planning, we can reduce this by using products that can be recycled. Here are some ideas:

- Use gift bags which can be re-used, or better yet, wrap your gifts in a re-useable grocery bag. Buy wrapping paper that doesn't have a metallic finish or glitter so you can put it in your blue recycling barrel.
- Recycle or re-use cardboard boxes and greeting cards. Don't forget to recycle plastic and glass bottles, and tin cans after you've finished preparing the holiday feast.
- Mulch your Christmas tree! Once again, the City of Tucson will partner with Pima County, Marana, Oro Valley, Sahuarita, Tucson Clean & Beautiful, and Davis-



Monthan AFB to collect your Christmas trees. Take your tree to Rillito Park on Saturday, January 9, 2010, where we'll be grinding trees. Bring your own container to take home mulch for your yard. Save gas and

help your neighbor by tree pooling. Tree collection sites will be open beginning December 26, 2009.

For more tips and information about holiday recycling, visit the Environmental Services website at www.tucsonaz.gov/esd or call Customer Service at (520) 791-3171.

Important! Due to the Christmas and New Year's holidays, residents with Friday garbage and recycling collection will have their service delayed until the Saturday after Christmas and New Year's Day.

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.

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 or www.tucsonrecycles.org.

On The Water Front



On the Water Front *continued from front*

◆ Expanding reclaimed water facilities and users – Tucson Water added a new outlet, increased booster capacity and built an inlet for three new reclaimed water wells at the Roger Road facility. Improvements minimized mosquito habitat and created an inviting environment for wildlife at the Sweetwater Wetlands. And, the list of reclaimed users grew to include the new Central Fire Facility, the park adjacent to the Fire facility, the Sun Tran Bus Facility, six single family sites, and three homeowners' associations. Using reclaimed water for landscape irrigation conserves our drinking water and groundwater.



◆ The Colton Company and Intuit, Inc. became the area's first two businesses to be recognized as a WaterSmart Business. Both companies increased water efficiency and savings with solutions such as replacing lush landscaping with desert-adapted plants, installing motion-sensor faucets, improving irrigation systems and adding waterless urinals.

◆ Balancing a \$15.4 million revenue shortfall – Tucson Water received more than 200 suggestions from employees about cost cutting and operations improvements, left 80 positions unfilled, and reduced staffing, power, computers, vehicles and large equipment purchases.

◆ Replacing 11,000 residential and commercial meters at no cost to customers. Tucson Water also started to replace source meters at wells. New meters offer more accurate data that will help to forecast water demands.

◆ Upgrading select facilities, including adding water storage capacity at the Thornydale/Tangerine reservoir, which banks 3 million gallons of water, and upgrading Plant 9, at Sandario and Valencia, to convey more Clearwater Phase 2 blended and recharged water.

◆ Progressing on the City/County Water and Wastewater Study – A draft Phase 2 Report was presented in November, followed by a public comment period. This study is the first major step in a collaborative effort to define a sustainable water future for the Tucson Water and Pima County Wastewater service areas.

Jeff Biggs, Director, Tucson Water

3 Tips to Prevent Freezing Water Pipes

The onset of cold winter weather means additional precautions must be taken to prevent exposed water lines and fixtures from being damaged. Frozen water lines can burst and result in leaks. Follow these tips to avoid wasting water in the winter time:

- 1 Remove hoses from outdoor fixtures; wrap exposed spigots or faucets.
- 2 Disconnect and drain the water line from the swamp cooler.
- 3 Wrap or protect exposed backflow devices.

Clearwater Quality Report

Most recent water quality data

October 9, 2009 – November 8, 2009

Sodium	60 mg/L (Oct. 22)
Mineral Content	449.3 mg/L (Oct. 9–Nov. 8 avg.)
Hardness	199 mg/L (Oct. 22)
pH	8.12 standard units (10/9–11/8 avg.)
Coliform Bacteria	Negative (Oct. 22)
Chlorine Level	1.1 mg/L (Oct. 9–Nov. 8 avg.)
Temperature	78.3 F (Oct. 9–Nov. 8 avg.)

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

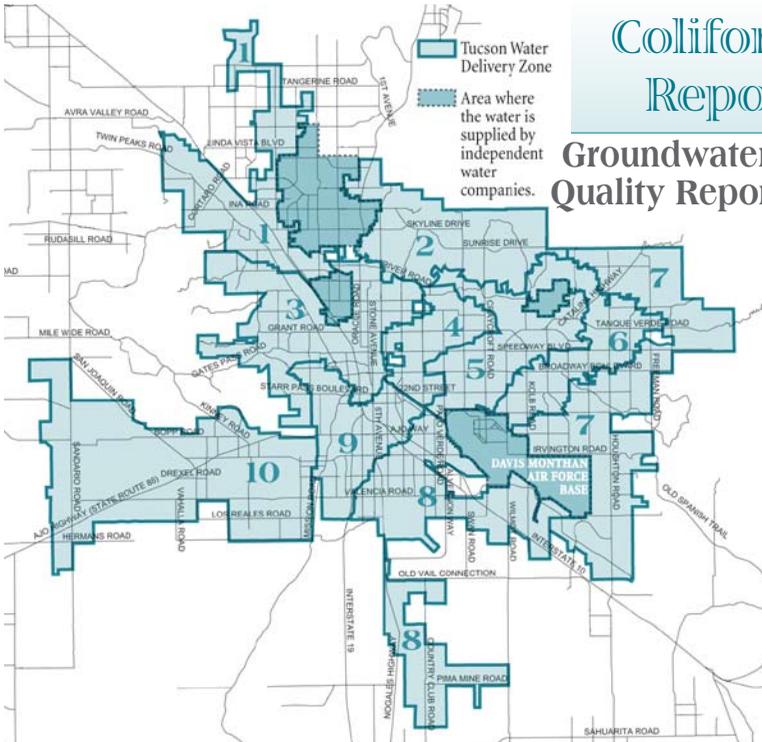
Your Water Connection is produced by Tucson Water. To receive a copy, or to receive this information in Spanish, call 791-4331 or mail your request to: Tucson Water, Customer Information, P.O. Box 27210, Tucson, AZ 85726-7210. City of Tucson TTY number: 791-2639

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



Groundwater Quality Report - October 2009

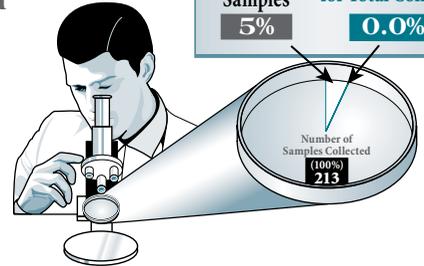
Water Quality Zone		1	2	3	4	5	6	7	8	9	10	System Wide
Sodium (mg/L)*	Average	52	60	54	55	52	51	41	46	53	46	52
68 SAMPLING POINTS	Range	43-57	57-62	48-60	45-63	41-62	46-56	22-57	42-47	36-63	38-56	22-63
Mineral Content (mg/L)*	Average	416	431	413	401	370	400	346	376	391	307	390
213 SAMPLING POINTS	Range	240-604	410-455	357-442	235-452	200-451	340-435	196-435	290-438	218-495	220-465	196-604
Hardness (mg/L)*	Average	240	197	165	176	174	175	140	212	159	109	173
68 SAMPLING POINTS	Range	177-313	185-207	152-192	144-208	132-218	152-202	89-192	179-242	65-206	72-167	65-313
pH (S.U.)	Average	7.7	8.0	8.0	7.9	7.8	7.9	7.9	7.6	7.9	7.9	7.9
213 SAMPLING POINTS	Range	7.4-8.0	7.9-8.1	7.9-8.1	7.8-8.0	7.2-8.1	7.6-8.0	7.8-8.1	7.5-7.8	7.6-8.1	7.8-8.0	7.2-8.1
Temperature (deg F)	Average	82	84	85	84	83	85	85	84	85	86	84
213 SAMPLING POINTS	Range	77-85	81-87	81-90	81-86	75-88	83-89	82-87	80-86	82-88	84-87	75-90



Coliform Bacteria Testing Report - October 2009

Groundwater Quality Report COLIFORM

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

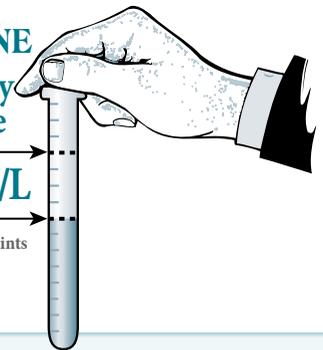


CHLORINE Monthly Average

Target = 0.8 to 1.2 mg/L

0.8 mg/L

213 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 October 2009: 173 mg/L divided by 17.1 = 10.12 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.