

On the Water Front

Rebates a Key to Water Efficiency



Tucson Water works hard to develop a water resources portfolio that will sustain this community long into the future. An integral part of managing our water supplies includes developing demand management strategies that can help ensure our existing water supplies are available to us over a longer period of time. It's sometimes much less expensive to invest in water conservation efforts that reduce overall water use than to develop and purchase additional water supplies.

With that goal then, we're building on the good work of the Community Conservation Task Force by analyzing additional cost-effective ways to reduce water use, without compromising the community's quality of life. Encouraging early replacement of older, high water use fixtures and appliances with newer, more efficient ones by offering rebates is one of the ways we can all become more water efficient.



Rebate programs provide solid and measurable water savings for the community. Water conservation programs have historically been funded through Tucson Water's operating budget, but in March 2008 a dedicated fee to pay for all water conservation programs was established by Mayor and Council. The fee is established at .05¢ per hundred cubic feet of water use, meaning the average residential water customer pays about .90¢ each month towards this fund.

All water users pay into the fund, so Tucson Water works to ensure that residential, commercial, and industrial customers can all benefit from the conservation program. Rebates for High Efficiency

On the Water Front *continued inside*

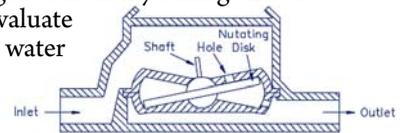
Your Water CONNECTION

News & Tips for Tucson Water Customers
August 2010 www.tucsonaz.gov/water

Water 101

Understanding the Home Water Meter

Water meters are essential to accurate tracking of individual usage for monthly billing and also to monitor and evaluate our community's water demands.



Tucson Water uses positive displacement water meters for residential use. Inside the meter housing unit, water displaces an oscillating or nutating disk in direct relation to the amount of water that passes through the meter. As the disk moves, it drives a magnet which in turn drives another meter component, the register. The meter register measures your home water usage in cubic feet of water; Tucson Water bills its customers in hundreds of cubic feet of water (100 cubic feet = 748 gallons of water).

Each water meter meets the standards established by the American Water Works Association and is factory-tested for accurate flow rates before installation in Tucson Water's system. Approximately ten percent of the meters in the system are equipped with automatic meter reading technology. This technology does not alter the way the meter records flow, but rather transmits the data from the meter to a handheld device or mobile collector via radio signal.

As water meters age, they will slowly lose accuracy, under counting the water consumed. That's why Tucson Water launched a program in 2004 to replace water meters 20 years and older. More than 58,000 aging meters have been replaced since the program started.

The most common water wasters are leaking faucets and toilets, and hoses that are turned on and forgotten. Be sure to identify and fix your leaks – a

Home Water Meter *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@tucsonaz.gov

Pima County –

Sewer Vandalism Costs Everyone

Every time someone vandalizes a sewer manhole, all of us wind up paying. When vandals throw debris and other foreign objects into manholes, raw sewage can back up onto public and private property or into buildings. When this occurs, staff is diverted from regular operation and maintenance activities to respond to the overflow



emergency. It is estimated that approximately \$1,500 is spent to repair damage caused by each act of vandalism. Costs associated with vandalism ultimately are reflected in our sewer bills.

The sanitary sewer conveyance system is comprised of over 3,400 miles of sewer lines with almost 75,000 manholes and clean outs. The Pima County Regional Wastewater Reclamation Department (PCRWRD) has a staff of 65 field personnel assigned to maintain this system. Because our system is so vast, we depend on the public to report any acts of vandalism. If you see anyone opening a manhole cover when there is no PCRWRD truck nearby, call 911 to report the incident. In some instances, a reward is offered to those who report incidents of sewer vandalism.

The PCRWRD takes reports of vandalized manholes seriously. The department employs a law enforcement officer who investigates every act of vandalism. Depending on the outcome of the investigation, charges can be filed and fines and penalties can be assessed. Suspects may be tried in civil court.

The mission of PCRWRD is to protect the public health, safety, and the environment by providing quality service, environmental stewardship and renewable resources.

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/www.

City of Tucson Environmental Services –

Right Size Your Can

On July 1, 2010, Environmental Services (ES) implemented the 'Right Size Your Can' program. Customer Service has received many calls but three questions are at the top of the list. Here are answers to your top questions.

Why will I pay more for the 'Right Size' program for less service than I received previously?

The 'Right Size' program does not reduce customers' service. The standard 95-gallon container charge was increased by \$2.25 per month; however, the 'Right Size' program enables customers to choose the container size that meets their needs and encourages recycling by offering choices which cost less than the standard 95-gallon service. Costs have risen over the past year and a fee increase was necessary. ES is a self-sustaining, enterprise fund that must generate all operating funds through fees charged.

Why can't customers with alley service have a smaller container?

ES provides alley service, which is more efficient, to about 21% of its customers. Customers with alley service have approximately 100 gallons of capacity for the same price as a curbside 65-gallon container. Residents with alley service can always call Customer Service if they have overload issues. Staff will be happy to follow up to ensure all residents have enough capacity for their trash.

Why can't I change the size of my recycling container as part of this program?

There is no additional cost to keep your current recycling container. One goal of the 'Right Size' program is encouraging customers to reduce the trash capacity needed through increased recycling. If you are an avid recycler, ES will provide an additional recycling container at no additional cost to you.

If you have questions or would like more information, please call ES at 791-3171 or visit our website at www.tucsonaz.gov/esd.

Environmental Services (ES) - Learn about how ES is protecting our groundwater and the environment at www.tucsonaz.gov/esd and (520) 791-3171.

Mosquito Protection Tips

Summer is prime mosquito season! Here are some easy ways to avoid mosquitoes and the diseases that they can carry like encephalitis and West Nile virus.

Eliminate Breeding Sites

The best way to control biting mosquitoes is to eliminate where a breeding female lays her eggs: in standing water. Whether the water comes from a monsoon downpour or a gardening hose, eliminating the source of standing water is the first step in mosquito-proofing your environment:

Get rid of old tires, buckets, or other containers where water pools.

At least twice a week, change water in outdoor flower pot saucers, pet bowls, and bird baths.

Empty and invert recycling bins and watering cans to prevent standing water.

Fill or drain standing puddles, ditches, and tree holes.

Check car, pool, boat and equipment tarps and covers for trapped water. Re-arrange covers to drain water easily.

Repair leaking outdoor faucets, swamp coolers and air conditioning units. If the cooler is not being used, treat it with an environmentally-friendly larvicide.

Opt for drip and slow irrigation – over watering can lead to stagnant puddles.

Understanding the Home Water Meter

Continued from front page

leaky toilet can waste up to 100 gallons of water a day. A free *Homeowners' Guide* from Tucson Water offers information on how to detect a leak using your meter.

If you receive a utility bill showing zero water use when you know you have used water, or notice a leak around the water meter, call Tucson Water at (520) 791-3242 and we'll schedule a follow-up.

Cool Meter Metrics –

- 235,700 residential and commercial water meters
- 21,500 automatic meters, with data sent via radio signal to a handheld or mobile collection unit
- 214,200 meters are direct read
- 28 meter-reading personnel
- One meter reader averages 475 meters a day
- 8,000-10,000 old meters replaced each year
- 58,000 old meters replaced since 2004

Repelling Adult Mosquitoes

Avoid outside activity from dusk to dawn, when mosquitoes are out in force.

Mosquito-proof your home by using screens and closing outside doors.

Wear protective clothing outside – think heavier cotton material, long sleeves, long pants, and closed toe shoes.

Trim tall grass and dense weeds, prime daytime hiding places for mosquitoes.

Use insect repellent.

Encourage natural predators – a single bat can eat up to 10,000 bugs in one night!

Contact Tucson Water for free tips and brochures on mosquitoes at www.tucsonaz.gov/water/pubs-gi.htm or by calling (520) 791-4331.

On the Water Front (Cont'd.):

Rebates a Key to Water Efficiency

Toilets (HET's) are currently available to all customers, and rebates are offered for businesses that improve irrigation systems and for commercial kitchens that want to use less water in dishwashing. Qualifying low-income homeowners can also benefit by participating in the HET Toilet Replacement Program. Other programs are in the development process.

I encourage you to take advantage of the rebates and join us in becoming more water efficient. When we're all working together, we can reduce our water use and preserve our environment and our quality of life.

*Jeff Biggs, Director
Tucson Water*

Visit the Tucson Water website at www.tucsonaz.gov/water

For accommodations; materials in accessible formats; foreign language interpreters; and/or materials in a language other than English, please contact Tucson Water at (520) 791-4331 or (520) 791-2639 for TDD.



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

More Info (520) 837-2181 www.tucsonaz.gov/water/rebate.htm

Must: • Be a Tucson Water customer • Meet income qualifications • Have a 1991 or older toilet

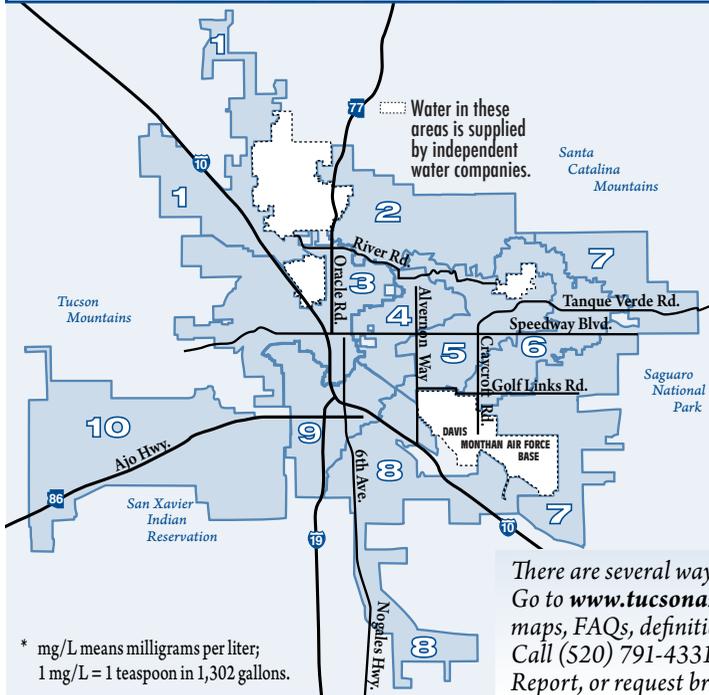


Water Quality Report - June 2010

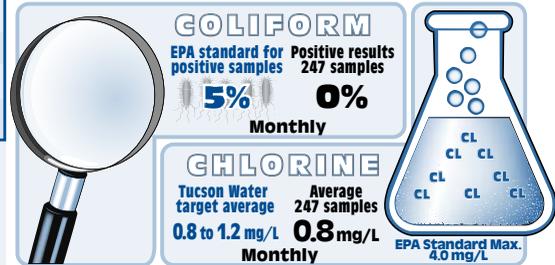
Ensuring drinking water is clean and safe from the aquifer to your tap is the top priority of Tucson Water. More than 20,000 individual tests are performed annually, focusing on the water quality from these two main sources: **ground water** and **the blend** of recharged Central Arizona Project (CAP) water and ground water from the Clearwater Recharge and Recovery Facility (CRRF).

Ground Water Source Report – Ground water comes from about 200 wells in the Tucson metropolitan area. This reporting area is divided into 10 zones:

| Elements Sampled | ZONE AVERAGE | | | | | | | | | | System Average |
|--------------------------------|--------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| Sodium (mg/L*) 86 SP | 43 | 62 | 54 | 47 | 44 | 51 | 46 | 50 | 59 | 55 | 51 |
| Mineral Content (mg/L*) 247 SP | 344 | 469 | 387 | 331 | 350 | 410 | 310 | 427 | 402 | 305 | 377 |
| Hardness (mg/L*) 86 SP | 97 | 217 | 191 | 162 | 147 | 180 | 166 | 211 | 187 | 162 | 175 |
| pH (S.U.) 247 SP | 7.7 | 7.9 | 7.9 | 7.8 | 7.8 | 7.8 | 7.8 | 7.7 | 7.9 | 7.9 | 7.8 |
| Temperature (deg F) 247 SP | 84 | 86 | 86 | 87 | 85 | 85 | 86 | 86 | 87 | 86 | 86 |



None of the water quality tests to the left have U.S. Environmental Protection Agency (USEPA) primary standards set for them. However, the USEPA has primary standards for levels of coliform bacteria and the disinfectant chlorine for ground water sources:



Clearwater Report – More than 50% of our total water supply is a blend of recharged CAP water and native ground water from the CRRF. Using this recovered blended water means that we reduce ground water pumping:

| | | |
|--------------------------|-------------------|----------------------|
| Sodium | 63 mg/L | (June 16) |
| Mineral Content | 479.7 mg/L | (June 9-July 8 avg.) |
| Hardness | 234 mg/L | (June 16) |
| pH | 8.08 S.U. | (June 9-July 8 avg.) |
| Coliform Bacteria | Negative | (June 15) |
| Chlorine Level | 1.11 mg/L | (June 9-July 8 avg.) |
| Temperature | 84.4 F | (June 9-July 8 avg.) |

There are several ways to obtain information about water quality. Go to www.tucsonaz.gov/water and click on the Water Quality Tab for maps, FAQs, definitions, reports, online monitoring station results, and more. Call (520) 791-4331 to schedule speakers, ask for an Annual Water Quality Report, or request brochures on water quality.

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