

Your Water CONNECTION

Progress Report

On the Reservoir Rehabilitation Program



Tucson Water's long range effort to rehabilitate its reservoirs is critical to ensuring that our community has reliable water supplies. The Reservoir Rehabilitation Program is the first comprehensive program to inspect, repair and improve the Utility's

reservoirs – 69 potable and reclaimed facilities that represent approximately \$200 million in assets and 315 million gallons of available storage.

For several years, Tucson Water engineers, engineering technicians, inspectors, designers, project managers, and water quality professionals have been working with contractors and consultant teams on this Program to make significant progress:

- In Process: Inspect and evaluate all reclaimed water storage facilities.
- In Process: Design and logistical planning for the rehabilitation of the 22nd Street Reservoir and Valley View Reservoir.
- Complete: Inspection and initial evaluation of all drinking water reservoirs and above ground tanks.
- Complete: Martin Reservoir rehabilitation.
- Complete: Craycroft Reservoir rehabilitation.
- Complete: Wilmot Reservoir rehabilitation.

In this issue of *Your Water Connection*, you'll meet Engineering Manager Mike Sanders and learn about the Plant Design team and its projects, among them the rehabilitation of the Paseo Tamayo Reservoir.

— Alan Forrest, DIRECTOR, TUCSON WATER



Tucson Water at the **Fall Home & Garden Show**

Stop by the Tucson Water booth at the 2012 Fall Home & Garden Show, Friday-Sunday, October 5-7 at the Tucson Convention Center, 260 S. Church Avenue.

Get free publications on indoor and outdoor water efficiency, plus information on rebates and incentives. Pick up pencils, sponges and rain gauges too! The Home & Garden Show is presented by the Southern Arizona Home Builders Association (SAHBA).

Go to sahbahomeshow.com or call (520) 795-3025 for hours, exhibitor list, free parking information, discounts, and more.

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



Find out more –

Take Advantage of Changes in Sewer Connection Fees

Have you thought of adding a plumbing fixture such as dishwasher or utility sink? Perhaps you have thought about adding a new bathroom or a laundry room. In the past, such additions would have required you to pay a sewer connection fee to the Regional Wastewater Reclamation Department. The Pima County Board of Supervisors recently made changes to the sewer connection fee policies. Those changes went into effect on July 1, 2012.

Under this new policy, no connection fees will be required if there is a record of your home being connected to the public sanitary sewer and there is no change to your water meter size.* In order to legally add a new plumbing fixture to your home, you still will be required to obtain a building permit and you will be responsible for any associated building permit fees required by the city or town where you live. If you live in unincorporated Pima County, you must seek a building permit from the county. Please check with your jurisdiction's development services department to determine what steps you need to take to obtain the permit. If you live in unincorporated Pima County, you can call (520) 740-6800 to learn what you need to do to get the required building permit.

The new policy replaces the former policy, which charged sewer connection fees based on fixture unit equivalents (FUE). Each plumbing fixture (i.e.: toilet, bathtub dishwasher, etc.) you added was assigned a value. In the past, the value of the FUEs added dictated what your sewer connection fee would be.

For more information, please access our webpage at http://www.pima.gov/wwm/fees/pdfs/New_Connection_Fee_Summary.pdf.

For questions and/or comments, please email us at rwr.connectionfee@pima.gov or call (520) 740-6642.

**This policy may differ if you live in certain areas of the Town of Marana or the Town of Sahuarita. Please contact those jurisdictions to determine if different rules apply to your situation.*

Team Up to Clean Up!

If you are a City of Tucson Neighborhood Association member, you probably know that your association can plan a neighborhood clean up and have a limited number of roll-offs/dumpsters delivered for your use at no charge. Environmental Services (ES) is working with Housing & Community Development (HCD) to offer roll-offs and dumpsters so that neighbors can improve their neighborhood. Beginning in September, ES and HCD are expanding the program so that Tucsonans who are part of a homeowner's association, or a group of ten or more residents who all receive ES residential services, can plan a clean up of their own.

How it works

If you are part of a registered neighborhood association, visit the HCD website at <http://cms3.tucsonaz.gov/hcd/neighborhood-clean-ups> to see information about the program or complete an application.

If you are a part of a group of residents in a formal homeowners' association, or an organized group of ten or more residents who all receive ES residential services, you can take advantage of this program. Each year, your group can request delivery of roll-off containers for your clean-up event. Call ES at 791-3171 or visit the ES website at <http://cms3.tucsonaz.gov/es/neighborhoodclean-ups> to access program information and the application form. Organize a neighborhood clean up, fill out the application, and submit it with your preferred dates. We'll review your request and work with you to locate the roll-offs in a convenient location.

Organize your neighbors and fill up containers with all the stuff that's cluttering the neighborhood, alleys, and open areas. You can use this free neighborhood clean up to get rid of yard waste without waiting until a scheduled Brush & Bulky collection. It's a great opportunity to team up with your neighbors for a good cause, and you might just have some fun working together to Team Up to Clean Up Tucson!

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 pima.gov/wwm.

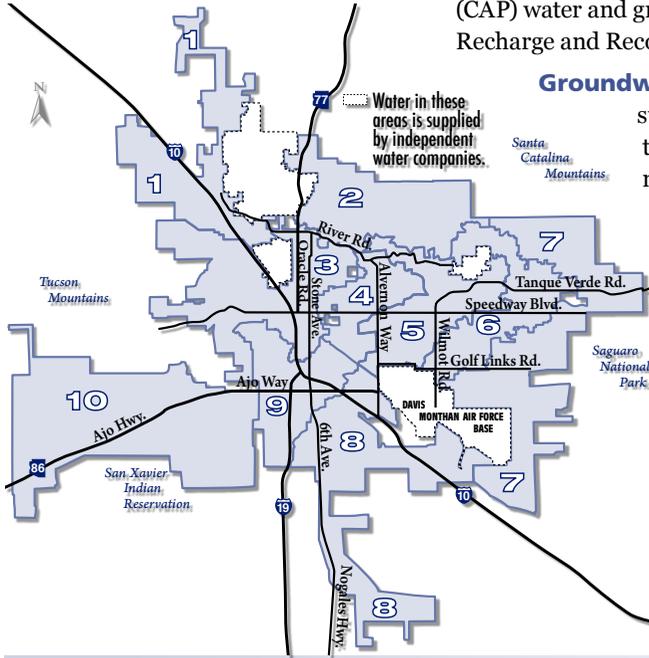
Environmental Services (ES) – Learn about how ES is protecting our groundwater and the environment at tucsonaz.gov/esd and (520) 791-3171.

Water Quality report

July 2012



More than 20,000 individual water quality tests are performed annually on the drinking water derived from two sources: 1) groundwater and 2) the blend of recharged Central Arizona Project (CAP) water and groundwater from the Clearwater Recharge and Recovery Facility (CRRF).



Groundwater Source Report – Less than 50% of our total water supply comes from pumping native groundwater wells in the Tucson metropolitan area. These test results reflect the main distribution system, divided into 10 zones:

test results

*mg/L means milligrams per liter
1 mg/L = 1 teaspoon in 1,302 gallons
SP = Sample Points

Zones	Sodium (mg/L)* 77 SP	Mineral Content (mg/L)* 247 SP	Hardness (mg/L)* 77 SP	pH Level (S.U.) 247 SP	Temperature (deg°F) 247 SP
1	65	479	228	7.9	89
2	65	482	228	8.0	88
3	61	450	202	8.0	88
4	61	454	223	7.9	88
5	57	446	199	7.9	87
6	63	477	234	7.9	88
7	51	416	189	7.9	89
8	48	405	216	7.7	89
9	62	452	220	7.9	88
10	53	402	160	7.9	89
Avg	59	448	210	7.9	88

The U.S. Environmental Protection Agency (USEPA) has primary standards for levels of coliform bacteria and the disinfectant chlorine.

coliform

EPA standards for positive samples

Positive results
247 samples



chlorine

EPA Standard
Max. 4.0 mg/L

Actual Average
247 samples 0.8 mg/L

Tucson Water target average
0.8 to 1.2 mg/L

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

Sodium	68 mg/L	(July 31, 2012)
Mineral Content	476.5 mg/L	(July 10 – August 7, 2012 avg.)
Hardness	242 mg/L	(July 31, 2012)
pH	8.05 S.U.	(July 10 – August 7, 2012 avg.)
Coliform Bacteria	Negative	(July 26, 2012)
Chlorine Level	1.06 mg/L	(July 10 – August 7, 2012 avg.)
Temperature	82.77°F	(July 10 – August 7, 2012 avg.)

To obtain water quality information, go to tucsonaz.gov/water and click on the Water Quality tab for maps, FAQs, definitions, reports, online monitoring station results, and more. Or call (520) 791-4331 to schedule speakers, ask for an Annual Water Quality Report, or to request brochures.

Ensuring Reliability of

Water Production Facilities, New & Old

Engineering Manager Mike Sanders oversees Tucson Water's Plant Design Section, 12 engineers and engineering technicians who design facilities and manage construction contracts to build the Utility's wells, booster stations, reservoirs, and more.

According to Sanders, two current projects reflect the Plant Design team's work focus – building new facilities as well as maintaining and improving existing facilities:

Adding new facilities at the Clearwater Renewable Resource Facility: Crews are currently building a new 8 million gallon reservoir and a booster station capable of moving 40 million gallons of water per day.

Rehabilitating the existing Paseo Tamayo Reservoir: This 4 million gallon reservoir serves portions of Tucson Water's northeast service area. Because this inground concrete reservoir is divided into two cells, crews can repair one reservoir cell while keeping the other operating – with no planned disruptions in water delivery to customers.

"It takes two to two and a half months to rehabilitate one cell.

Crews drain the cell, repair the existing concrete surface, and install a new watertight membrane liner. Tucson Water inspectors ensure work meets specifications and that the reservoir passes rigorous leakage testing to ensure the structure is sound and work does not impact water quality before it is placed back into service," said Sanders.

Work on Paseo Tamayo Reservoir will start this fall and be complete by spring when warmer temperatures mean increased demands on water supplies.



Mike Sanders supervises the Plant Design Section and is the Project Manager for the rehabilitation of the Paseo Tamayo Reservoir, slated to start fall 2012.

Water Reliability Program


**WATER
QUALITY**


**WATER
SUPPLY**


**UTILITY
OPERATIONS
AND SYSTEMS**


**WATER
EFFICIENCY**

Sanders, who is the Project Manager for the rehabilitation of Paseo Tamayo Reservoir, has nearly 30 years experience working

with water resources. He holds a Bachelors of Science in Engineering from The University of Arizona and has been a registered professional engineer since 1991. He joined Tucson Water 17 years ago as a civil engineer in the Distribution Design Section. Prior to that he worked with the United States Bureau of Reclamation, where he helped design and build the Central Arizona Project (CAP) – the same facilities that now bring Colorado River water to Tucson Water's customers through the Clearwater Renewable Resource project.