

CHAPTER 6: FY 2008-09 DATA LIMITATIONS AND PROPOSED CHANGES TO THE SWMP



Lakeside Lake



Water Harvesting at Ward 3



- ❖ 6.1 New Annexations
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Chapter 6

6. FY 2009 Special Activities

6.1 New Annexations

On June 12, 2009, *The Estates at Starr Pass* were annexed into the City of Tucson limits. The area includes 14 lots, including four single family custom homes and 10 vacant lots. The Stormwater Management Section routinely evaluates newly annexed areas for new field screening locations; however, in this case there were no suitable outfalls located in the newly annexed area. For FY 2008-09, nine new outfalls were added to the list of field screen outfalls for the Illicit Discharge Detection and Elimination Program. These outfalls were in areas which have, in the last several years, been developed or annexed.

6.2 ADEQ Water Quality Improvement Grant for Lakeside Lake

In December 2007, ADEQ finalized issuance of grant funding in the amount of \$54,978 to address water quality improvement in Tucson. The grant, to the City of Tucson's Parks and Recreation Department, will improve fishing and other recreation at Lakeside Lake, located in Chuck Ford-Lakeside Park in Tucson. The lake was originally built as a stormwater retention basin and converted for recreational fishing in 1985. It receives water from stormwater runoff and groundwater. Before water quality issues arose, the lake was also supplied with reclaimed water from Tucson's reclaimed distribution system. An ADEQ water quality study completed in 2005 showed the lake has excessive levels of ammonia; high levels of phosphorus, a nutrient that causes algae growth; and low dissolved oxygen levels due to algae growth. The lake now has a TMDL that endorses alum treatment as a solution to the dissolved oxygen levels.

Currently, money from the grant is being used to repair or adjust the aeration systems in the lake to improve water quality. The City will continue to operate its aeration system and Environmental Services will continue to manage water quality monitoring and reporting under the City's AZPDES and APP permits that regulate activities at Lakeside Lake.

6.3 Continued Introduction of Water Harvesting into Tucson's "Green Infrastructure"

In FY 2008-09, the City of Tucson made significant progress with water harvesting initiatives. The following list comprises some of the milestones:

- Piloting the use of permeable pavement: The City's Reid Park Zoo built a new Conservation Learning Center. One aspect of this project's environmentally friendly features is that the parking lot is paved with pervious concrete. This is a unique concrete mixture that contains no sand and is made of gravel and crushed stone bound by cement paste. This BMP cuts down on runoff and contains much of the parking lot pollutant material. Another feature is that its light color absorbs less heat.
- Promoting "Rain Garden" features in the public right-of-way: Increasingly Tucson citizens are looking for ways to beautify their neighborhood through tree planting within the Right of Way along city streets. Water harvesting can be utilized to reduce the use of our potable water by utilizing runoff from rainwater. There is an abundance of water that flows down the gutter whenever it rains in Tucson. The Transportation Department has developed and posted on-line a standard curb cut detail to offer an opportunity for citizens to capture some of that runoff and utilize it to water trees and shrubs.

In October 2008, the Mayor and Council adopted Commercial Rainwater Harvesting Ordinance No. 10597. This ordinance will take effect June 1, 2010, and requires that 50% of the landscape water demand at a new commercial site be met with water harvested at that site. Elements of the regulation include a required landscape water budget, a rainwater harvesting plan, and separate metering of landscape irrigation. In May 2009, the Mayor and Council approved Commercial Rainwater Harvesting Development Standard 10-03.0. This development standard implements the ordinance. As with the ordinance, this development standard takes effect June 1, 2010. It specifies a number of items including components of water harvesting systems and requirements for submittals, monitoring and reporting. A copy of these documents is included in Appendix D.

- To assist with implementation of the new Commercial Rainwater Harvesting Ordinance and Development Standard, Tucson Water has allocated funding to conduct pilot studies to test elements of the ordinance and development standard, to conduct educational programs for sectors who will be subject to these regulations, and to prepare outreach materials and signage to educate the public on these efforts. Approximately \$25,000 will be allocated for facilities and materials related to this work. Staff from Tucson Water, Development Services Department, and the Office of Conservation and Sustainable Development will help plan and assist with this work.
- Water harvesting BMP outreach: In addition to the City's routine water harvesting outreach, City staff encouraged development of a grant-funded project by a local non-profit group to promote residential water harvesting. In June 2008 ADEQ announced an award of \$103,240 to the Watershed Management Group, a Tucson-based non-profit organization, for a project in the Rincon Heights neighborhood, located along High School Wash near Sixth Street and Broadway Boulevard. The project has involved local residents, including a

series of presentations, lectures, workshops, and local clean up and demonstration projects. We anticipate completion of this project during the 2009-10 FY. The City of Tucson supports this type of grass-roots effort to encourage water harvesting as a “retrofit” BMP in areas of the community that are already developed.