

## **Project I: Chandler Heights Community Facilities**

The Chandler Heights Community Facilities are aptly named as the multiple facilities placed on this 113-acre site serve the greater community good in a variety of ways. The entire lifecycle of this \$27 million project is filled with examples of interdepartmental cooperation and innovation that enabled the City of Chandler to address several community needs, including water conservation, public safety, environmental education, and parks and recreation.

The project originated with one City department – Municipal Utilities – but eventually evolved to include two others – Police and Community Services. The original purpose was simple and clear; to create a surface and subsurface water recharge facility to place reclaimed water that had been piped to the site from the City’s Airport Water Reclamation Facility located several miles away.

Chandler, like most Arizona cities, requires re-use of all effluent produced by its wastewater treatment plants. Seasonal changes in supply necessitates that this reclaimed water be held someplace for storage and recovery as part of the City’s comprehensive reclaimed water management plan. In 2001, the Municipal Utilities Department acquired 113 acres of undeveloped farmland in southeast Chandler to build the Chandler Heights Recharge Facility for the purpose of effectively managing these seasonal demand variations in the reclaimed water supply.

When Municipal Utilities staff determined the recharge project would not require all 113 acres, they looked for other uses that could benefit the residents in this rapidly growing section of the community. At the same time, the Community Services Department was seeking land in the area for a new park and recreation amenity and the Police Department was looking for space for a substation that would provide improved response times and added security for this part of the City. Despite the seemingly disparate objectives of the three departments, their common needs and the opportunity to share this land resource resulted in a partnership in the project that became collectively known as the Chandler Heights Community Facilities.

The project rapidly evolved and grew in complexity. A master plan was created in 2003 and unveiled to the public in October 2004 for input. The plan included four acres allocated for a 20,000-square-foot police substation that includes community meeting space, a 31-acre park, which would include a 5-acre urban fishing lake and a 11,000-square-foot, multi-generational Environmental Education Center. The remaining 78 acres would go toward water recharge basins. After another public meeting and discussion in December 2005, designs were finalized. The project was completed in April 2008.

Nearly the entire project was funded through system development fees (SDF). The City began charging SDF in 1997 to help offset the cost of growth and the

subsequent expansion of resident services. In addition, these fees, charged for all new private development, allow the City to build projects like this to serve the community and environment. The remaining funding was obtained through a bond and a generous contribution from a private developer.

The Police Substation opened in January 2008 making a significant impact as response times to Priority 1 calls have decreased from 6:21 to 5:34 in just two years. That statistic, and an increased presence of officers has made for a safer, more welcoming area of the community.

The Wetlands are a hit as well. Recharge basins have created lush surface with streams and vegetation establishing an ecosystem that attracts many types of migratory birds and provides a sanctuary for other wildlife. Each basin has an area that is continuously submerged providing a wetland habitat. These submerged areas create a network of ponds connected by a system of small streams. The continuous flow of reclaimed water to the ponds helps to maintain a healthy wetlands ecosystem.

In addition, each basin has habitat islands that are not subject to flooding during recharge. The habitat islands maintain a level of isolation and encourage wildlife use when other areas that are more accessible to the public are occupied. Miles of walking trails surround the basins and wildlife-viewing blinds have been strategically placed to accommodate bird watching, enhancing the educational opportunities of the habitat.

Adjacent to the wetlands is the more actively used part of the facility – Veterans Oasis Park, which includes a fishing lake that is stocked several times each year through the Urban Fishing Program of the Arizona Game & Fish Department.

The lake uses water that was recharged into the aquifer through the wetlands and then recovered by an onsite well. Filling the lake from the recovery well, circulating and oxygenating the water through an aeration system, and emptying the lake through evaporation and irrigation demand all contribute to maintaining a healthy lake environment.

The unique combination of a recharge facility, wetlands, urban fishing lake, and park also serve as a fertile learning environment for educating the public and demonstrating the importance of water recycling and reuse, conservation, and respect for nature. The 4.5 miles of trails that wind throughout the facility are equipped with interpretive signage to explain the ecosystem and water resource management behind the lake and the wetlands. There are also habitats for butterflies and hummingbirds, an outdoor amphitheatre, a learning-oriented playground for kids, and multiple picnic ramadas and shade structures.

The park was designed for passive recreation, which includes hiking, stargazing, bird watching and other non-competitive activities. The aim is to get people outside to enjoy nature and learn about the ecosystem they live in.

That is what makes the Environmental Education Center (EEC) so critical to the project's success. The EEC serves as the gateway to the park and a welcome place for visitors. It provides year-round recreational and educational opportunities for residents of all ages. The center has an information desk, nature discovery room, exhibit areas and classrooms that have specialized glass doors that can be opened to allow instant access to the park's true classroom – nature. Just as the wetlands attracts wildlife to this spot, people are flocking as well – coming together to form new groups to interact with nature. About 12,000 people utilize the EEC each year, and more than 430 volunteers donate about 1,800 hours annually to the center. They include Green Teens, Desert Rivers Audubon, Arizona Herpetological Association, Mother Nature's Storytime – all initiated and driven by residents like you Mr. And Mrs. Chandler.