

## City of Phoenix and ASU Test Water Conservation Technology with Hydrogels



Soccer Fields – ASU and Phoenix



ASU CAMPUS



CITY OF PHOENIX

### Challenge

City of Phoenix and Arizona State University (ASU) both recognized that living in a desert city makes it essential to explore innovative ways to conserve water for the future. Understanding that about 60% of water consumption in the arid Southwest occurs during exterior landscaping, they collaborated to identify technology that could help address the ongoing drought in Arizona.

Both entities have adjoining soccer fields (4 fields – approx. 12 acres of turf) that were identified as a potential “pilot” for water savings. As a benchmark, just the 2 ASU soccer fields were consuming 11 million gallons (34 acre feet) of water per year, at a cost of approximately \$63,500. A 40% reduction, 4.4 million gallons (13.5 acre feet) of water and \$25,400 dollars per year could potentially be saved.

### Solution

With support of the Phoenix City Council, ASU and the City applied for a “matching fund” grant through the U.S. Bureau of Reclamation’s Lower Colorado Water Conservation Field Service Grant program (WCFSP). A grant to invest \$100,000 was approved, and this was matched with funding shared by ASU and City of Phoenix. These funds were used to inject Aqua Cents water savings hydrogels into all 4 soccer fields.

### Contact

Aqua Cents Water Management  
5213 East Pine Avenue - Fresno, CA 93727  
844-400-AQUA [www.aquacents.com](http://www.aquacents.com)

### RESULTS

The fields (12 acres) were injected with Aqua Cents hydrogels mid-December, through mid-January, 2019. The grounds management for both entities are currently managing turf irrigation, post Aqua Cents installation, with the goal of reducing overall irrigation by 40%-50% compared with recommended ETc irrigation requirements.

### KEY BENEFITS

Water and cost savings resulting from the reduced need for irrigation for a sustained life of 5-7 years

*“When you live in a desert city, it’s essential to explore innovative ways to conserve water for future generations. With the successful completion of this pilot project, there is potential to extend the technology to other areas within the City of Phoenix.”*

Kathryn Sorensen,

City of Phoenix

Water Services Director

[kathryn.sorensen@phoenix.gov](mailto:kathryn.sorensen@phoenix.gov) – Sept. 2019

*“You’re saving water because it doesn’t just seep into the ground. It’s held there for the turf to utilize. You don’t lose the irrigation or rain water to deep seepage.” We believe there are other benefits in terms of allowing turf to access water at the root zone but allowing the fields to be dry on the surface for competition and play.”*

JoEllen Albehasky

Project Manager, Water Sustainability

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