Demonstration Garden, Palmdale, California

PROJECT OVERVIEW:
The City of Palmdale stands committed to The Intelligent Use of Water™ through water-efficient ordinances, sustainable landscape design standards and innovative irrigation maintenance practices. As a symbol of that commitment, the City Council decided to build a Demonstration Garden showcasing the beauty of drought-tolerant landscaping. The garden’s proposed site had originally been slated for development into a greenspace featuring turf grass and trees.

CHALLENGE:
Not intended to support drought-tolerant plants, the original irrigation system design called for large rotors and sprays. The system would need to be redesigned to utilize pressure-compensating, point-source emitters and bubblers. In addition to water-efficient application technology, the city sought to further reduce water use and costs through water-smart irrigation scheduling.

SOLUTION:
The city installed a Rain Bird® ESP-SAT Satellite Controller in the Demonstration Garden. The ESP-SAT is part of the Rain Bird® Maxicom® Central Control that the city has used at all new parks since 1995. Connected to the ESP-SAT, a Rain Bird ET Manager receives updates from the city’s weather station each hour by radio signal. The ET Manager then uses ET and rainfall data to schedule watering only when the landscape requires it. Also installed at the site, Rain Bird flow sensors allow the Palmdale maintenance department to monitor water usage and detect leaks.

COST AND WATER SAVINGS:
The conversion from 23,000 square feet of turf to 15,000 square feet of drought-tolerant plantings, allowed Palmdale to enjoy an annual water savings of approximately 977,553 gallons and annual cost savings of approximately $3,300, but the benefits of the project don’t stop there. In addition to inspiring Palmdale citizens to adopt similar design strategies at their own homes, the Demonstration Garden was named “Best Environmental Project” by the American Public Works Association and has been used as an educational tool by UCLA landscape design classes and by City Public Works engineering interns.

The garden is just one of many sites where Rain Bird technology has helped the City of Palmdale conserve valuable water and budgetary dollars. Between 2007 and 2009, Rain Bird Maxicom® Central Control, combined with ET Managers, helped the city reduce water usage on its eastern half by nearly 116 million gallons during the six hottest months of the year.

DESIGNER:
Karen Adnoff, Olea Landscape Architecture

CONTRACTOR:
Roy Anthony, America West Landscape

COMPLETION DATE:
September, 2008

RAIN BIRD SALESPERSON:
Sharon Martinez

RAIN BIRD PRODUCTS:
- ET Manager
- Maxicom® Central Control
- ESP-SAT Satellite Controller
- Flow Sensors

“The City of Palmdale is very proud of our water conservation efforts and wants to thank Rain Bird for their help. Maxicom® Central Control and ET Manager have been pivotal in helping us reach our goals.”

—Connie Brown, Senior Engineer Landscape Technician