

## **Heritage Hills Metropolitan District Water Wise Landscape Improvement Project**

In 2013, this environmentally-conscious community's Metro District embarked on a major renovation project to reduce overall water usage. This project is a benchmark example of how to do a large sustainable landscape project the correct way with proven results.

To date, 516,400SF of turf has been replaced with 234,160SF of drought-tolerant Water Saver Grass (a reduction of more than 5 football fields). Every turf pop-up spray head was converted to a combination of high-efficiency rotating nozzles as well as subsurface irrigation. A comprehensive design survey and planning phase yielded newly sculpted planting beds. These new areas consist of drought tolerant plantings and drip systems (right plant, right location and correct water application). The existing planting beds were redone and the mature evergreen and deciduous trees were preserved.

The core principles of Xeriscape design were used throughout the project. These principles include planning and design, soil improvements, efficient irrigation, proper plant selection, use of organic mulches, turf alternatives and maintenance. In addition to these principles, our architectural design team created four main methods of reducing water consumption at Heritage Hills:

1. Turf square footage reduction. To reduce run off and volume of water needed.
2. Turf species selection. RTF benefits include faster repair for high traffic areas, less water needed to keep green and stronger hybrid.
3. Irrigation system design. Use of MP rotors, netafim (sub-surface) and drip where appropriate.
4. Plant selection. Xeric plants requiring less water.

These methods ensured maximum success for the project, both economically and environmentally.

## **Sprinkler System**

The District uses ET water, which is more a web based platform that takes its readings from Centennial airport. It only takes readings a few times a day from the system. Therefore, if it is not raining when it pulls the data, the system will still run even if it starts to rain. It then recalculates itself, depending on how much rain is recorded, it will then water less the next few days. In order to adequately water the annual flowers we override the system. Our annuals are delicate, don't have deep roots and need a little more care. Therefore, we have the flowers run rain or shine so that we do not run the risk of them getting dried out and dying. The District reduced water usage by 33.3% from an average of 18,465 (in thousands of gallons, 2008-2012) to 12,277 (in thousands of gallons, 2013-2017).