CASE STUDY





OVERVIEW

The Metro Reunion District is a community and housing development encompassing more than 160 acres. Reunion, Colorado is located just outside of Denver in close proximity to the international airport. The master planned community includes a dynamic blend of single family homes, pools, parks, open space, and picturesque views of the surrounding mountains.

In an effort to find the ideal blend of technologies for water conservation and management, the Metro Reunion team consulted Magnation after hearing of how Magnation had played a key role in improving water conditions for nearby Dick's Sporting Goods Stadium, the home of the Colorado Rapid's men's soccer team.



PROBLEM

The Metro Reunion Distract is faced with numerous challenges. Being such a large development in an area where rainfall is tough to come by in the summer, water prices water right costs soar, and water quality can become quite harsh.

The Parks and Irrigation staff is tasked with making sure parks and open spaces have enough water to thrive, pools and pool equipment are maintained, and all water bearing equipment (including sprinklers and water lines) are fully functional at all times. As the summer months wear on, these tasks become more difficult. The ground becomes harder and soil compacted, making it difficult to properly nourish plant life.





After observing that Dick's Sporting Goods Stadium had reaped numerous benefits with Magnation Technologies, Raul Martinez, Parks and Irrigation Manager at Reunion Metro, allocated 4-inch and 2-inch Aquabolts for a 70-acre test. The investment was roughly \$8,000, which Martinez hoped would be quickly recouped in water and maintenance cost savings.

With the Magnation Rainbolt, each water molecule falls through a magnet. This makes water more bioavailable and easier for the soil and plant life to absorb. Martinez concluded that if the test could result in a positive outcome and cost savings became clear, he could extend the technology throughout the entire community.



After the summer season, there was a **reduction of more than 2 million gallons of water used** and more than **\$40,000 in cost savings**. Instead of running sprinklers for 100% of the time allocated in the community's budget, Martinez was able to run them at 70% of the total budgeted running time.

Additionally, he noticed that the grounds were in much better shape. Plants, trees and groundcover where more luscious and vivacious than before. Also, the staff noticed much less scale on sprinklers and on pool equipment. Scale reduction had been a major issue, and much less time is spent trying to remedy the problem.

Finally, Martinez noticed a slight drop in the pH level of the water. "Any drop in pH level is a victory in today's world where harsh water conditions can wreak havoc," shared Martinez.



The Reunion Metro District was so pleased with Magnation that it invested in a 14-inch Turbulator for the remaining 100 acres of the property, resulting in more than \$60,000 in water savings for the summer season. When combined with the initial 70 acre test, this equates to **more than \$100,000 in savings**.

For the past two years, the district has saved more than \$150,000 and reduced water usage by at least 9 million gallons of water. Martinez and team are so thrilled with the results they are planning on extending their use of Magnation to water heaters and other water bearing machinery for reduced scaling and greater efficiency.

The Reunion Metro District case study is a prime example of how quickly a relatively small investment can pay off for a community. In less than a single year, cost savings easily paid for the initial \$8,000 Aquabolt investment and the \$27,000 14-inch Aquabolt purchased later, and reallocated \$115,000 for other projects.

The savings will continue to mount as the years progress, as there are no further costs associated with using and maintaining Magnation's technology.