

BEING WATER WISE WHILE THE **LANDSCAPE THRIVES**

How the City of Sunnyvale is Using Modern Irrigation Technology to Conserve Water and Keep Landscapes Healthy



With its abundant natural beauty and mild, sun-filled climate, the city of Sunnyvale lives up to its name and is arguably one of the best places to live in California. Much of the city's splendor revolves around Sunnyvale's park system, which features 772 acres of parks and open space nestled within its neighborhoods. A good portion of this gorgeous green space includes large athletic fields, school properties and lush landscaping along city streets — all perfect spots to play, go for a walk, enjoy a favorite sport or just relax.

Sunnyvale takes immense pride in these recreational areas, and needless to say, maintaining them and keeping them in prime condition is no easy feat. That's where Kevin

Henderson comes in. As the Parks Leader for the City of Sunnyvale Parks, he oversees a four-person crew, and together, they are responsible for the upkeep and maintenance of the athletic fields, school sites and street landscaping. This entails mowing, fertilizing and aerifying all the grass, along with managing all the irrigation controllers, irrigation valves and main lines at every site.

Overcoming Challenges

In his 21 years of taking care of turf for the city of Sunnyvale, Henderson has seen his fair share of challenges. But over the past five years, there have been several especially unique issues that he and his team have had to contend with.



“Because California has been facing unprecedented drought conditions and it rarely rains to make up for the extreme water shortages, water management has become a huge issue,” says Henderson. “Plus, the growth in population has created more demand for the city’s athletic facilities and sports fields but we haven’t gotten any additional resources, manpower or equipment to keep up with that demand. And if all that wasn’t enough, the pandemic brought its own set of problems, including supply chain issues, lack of available materials and increased costs.”

To say the past few years have been challenging would be an understatement. What’s more, the way that the parks department has been using and managing water has been very much in the public eye.

“Due to city mandates telling us to cut back on water usage by a certain percentage, it just gets to a point where some of the grass just dries up and starts to die,” says Henderson. After all, those gallons add up fast. Henderson and his crew have been

very cognizant of the water crisis and have come up with some creative ways to address the issue.

“So, for the most part, we’ve designated our athletic fields as our priority, and we try to maintain them the best we can since people are paying to use those areas for sport,” says Henderson. “We’ve let the ornamental turf and softscape areas that aren’t used for athletics show the effects of water cutbacks more than we have with the athletic fields. And we’re covering a lot of those areas with wood chips and planting them with more native plant materials, so we’re able to cut back on water by doing that.”

Precision Irrigation Control

Of course, water is a precious commodity. But Sunnyvale’s parks and athletic fields need it to stay healthy and looking their best. It’s important to only use the right amount of water at the right time and in the right areas. A central irrigation control system is the key to precise and efficient irrigation. That’s why Sunnyvale’s parks department recently upgraded its irrigation system to the Toro® DXi™ Irrigation Control System.

Designed with busy sports field, municipal and grounds crews in mind, Toro DXi is an advanced central control satellite that supports two software packages in a single controller platform. It can be powered by either Rain Master® Laguna™ Management Software or Toro® Sentinel® Water Management



Software, so users of either system can add DXi™ without having to replace their central control software. That's a significant advantage.

Sunnyvale's parks department was the first to install a Rain Master® system with Toro® nearly 30 years ago. The proven legacy of the system, and the department's solid relationship with Toro, led them recently to upgrade their 165 Rain Master® system controllers throughout the city with Toro DXi. "Everybody out in the field has been using DXi at every site now, and so far, it's been great," says Henderson. "Change is always scary with learning a new system, but we got training from Toro and we've all gotten acquainted with the new technology, which is pretty similar to what we had. There haven't been any issues and I haven't heard anything negative about it."

Convenience of Remote Operation

The DXi offers even more precision capabilities with the convenience of remote operation. DXi satellites work with the new ProMax™ Connect app, a free, cloud-based remote maintenance tool that allows users to operate stations and programs — and troubleshoot with ease — from their mobile devices.

"There are several of us that have been taking advantage of the app," says Henderson. "It's nice to be able to whip out our phones and make decisions and adjustments in real time. Instead of having to walk up to a controller and plug in a remote, we can just pull it right up on our phone and run a station to see if there's an issue. We don't even have to get out of our trucks, which is especially nice on hot days. The upgrade has definitely been worth it."

With the ProMax Connect App, users can activate single or multiple stations, monitor real-time flow rates, troubleshoot field issues to prevent significant water waste or vegetation damage, create and activate a one-time program "syringe," and much more. Users can also manage rain holds, alerts and all-station tests, in addition to viewing local weather information at each satellite.

Improved Productivity

In addition to helping conserve water and keep Sunnyvale's green spaces green, the Toro DXi has had a positive impact on Henderson and his grounds crew's productivity.

"We have a lot on our hands right now, and the DXi is definitely making life a lot easier for us," says Henderson. "Just being able to sit at our computer or look at our smartphone to make adjustments on 10 different controllers instead of having to go to 10 different sites and make those adjustments saves us so much time. The convenience is so beneficial, especially since we're short-staffed and we have so many areas to get to in a day. It's been a huge help."

