Site Report

City of West Torrens, South Australia, Australia

Project Details:

LOCATION
City of West Torrens, South Australia

END USER
City of West Torrens Council
Rick Johnston, Coordinator Horticulture
David Ward, Work Group Leader Turf & Irrigation

RAIN BIRD PRODUCTS USED
- IQ-Cloud v. 3.0 Remote Water Management
- ESP-LXMEF Series Controllers
- 3G Network Communication Cartridges
- GPRS Sim Cards
- Rain Bird Global Weather
- FS150P Flow Sensors
- RSD Rain Sensors
- 1800 Series Spray Heads
- R-VAN Adjustable Rotary Nozzles
- 3500 Series SAM Rotors
- 5004 Plus SAM PRS Rotors
- Falcon® 6504 Rotors
- 8005 Series Rotors

"We have been using Central Control for over 14 years and it has improved productivity and work scheduling. Now, using IQ-Cloud and iPad minis we have reduced the time we spend visiting or testing sites."

David Ward
City of West Torrens Council
Work Group Leader Turf & Irrigation

PROJECT OVERVIEW:

The City of West Torrens Council manages more than 42 hectares of irrigated public open space. The council had been using Maxicom® Central Control and IQ v2.0 Central Control to manage 81 irrigation systems from their central office. Communication between the central control software and the satellite controllers was handled via 2G cellular network. As cellular network operators began to shut down 2G networks in 2016, the council decided to upgrade to IQ-Cloud v. 3.0, a cloud-based remote water management software.

CHALLENGE:

The council is faced with expensive water (AUD$3.24 per kilolitre), thus using water efficiently is a high priority. In addition, resources required to manage the irrigation systems must be used wisely. With IQ-Cloud, the council could eliminate the need to have software hosted on their own servers and would gain remote access to the irrigation systems from anywhere using iPad minis.

RESULTS:

As part of the council's asset management system, most of the irrigation systems have been replaced during the past ten years using standard specifications that included the ESP-LXMEF controller and flow sensors. This standardization made the upgrade to IQ-Cloud easier. In July 2016, the council upgraded the remaining controllers to the ESP-LXMEF, installed 3G Cellular Network Communication Cartridges on all controllers, and configured IQ-Cloud to manage each controller. There are now 86 controllers managed by IQ-Cloud.

The council had previously been utilizing flow monitoring, and that continues to be a critical component in achieving the council's water efficiency targets, but now the staff has mobile access to the information using iPad minis. The staff is alerted to abnormal flows immediately, and in cases in which flow rates are higher than preset parameters, IQ-Cloud can shut the system or zones down until the problem can be fixed.

Rain Bird's Global Weather service was also implemented to provide Internet-based weather data to IQ-Cloud. The weather data is used for ET-based scheduling on 95 percent of sites.
IQ-Cloud automatically adjusts the irrigation schedules based on the landscape's evapotranspiration rate. The data helped reduce water usage during the most recent season, which was wetter and cooler than average.

The council saved approximately AUD$48,000 in water costs during the first season that fully utilized all of the IQ-Cloud features, or approximately half the amount invested to upgrade to IQ-Cloud.

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