

The University of Toronto, Toronto, Canada

U of T St. George Campus Reduces Water Waste with Rain Bird® Products

Located in downtown Toronto, the University of Toronto's St. George campus is one of the city's best green spaces. Over the years, U of T St. George has taken many initiatives to reduce water use on campus to meet the requirements of a university-wide water conservation initiative.

THE CHALLENGE

From the 49-acre Queen's Park to a number of gardens, greenhouses, and public areas, the St. George grounds maintenance staff manually operate over 80 individual irrigation controllers. They are in desperate need of an intelligent control system that can streamline and simplify the management of so many controllers across such a large campus.



THE SOLUTION:

Ground services manager, Stan Szwagiel and his team, partnered with D.J. Rain & Co. Ltd. to upgrade the irrigation system with innovative Rain Bird products. The new system will be specifically designed to save the University of Toronto St. George water, time, and money.

IQ[™] Central Control

Core Products Used:

- IQ[™] Central Control
- ESP-LX Series Controllers
- <u>ESP-LXD Series 2-Wire</u>
 <u>Decoder Controllers</u>
- <u>1800[®] Series PRS Sprays</u>
- 5000+ Series Rotors
- PGA Series Valves
- DVF Series Valves

KEY OBJECTIVES

- ✓ Centralize Irrigation Control
- ✓ Conserve Water
- ✓ Protect the Landscape
- Defend Against Leaks



APPROACH:

Communicate Seamlessly

D.J. Rain will install eighty-six (86) ESP-LX Series Controllers and an additional ESP-LXD Controller to establish satellite communication with a new IQ[™] Central Control platform. The radio communication between the controllers and IQ will be seamless and secure without requiring an internet connection.

Centralize Monitoring and Oversight

IQ will allow the ground services team to monitor flow rates, analyze run times, and adjustschedules from anywhere—without having to visit each controller individually. Controllers will also be equipped with a Flow Smart Module so that IQ's Flow Watch™ can automatically turn off the master valve if excessive flows are detected. This proactive approach ensures that broken pipes or leaks are caught before water is wasted or landscape is damaged.

Conserve Resources

Rain Bird's pressure-regulating (PRS) **5000+ Series Rotors** and **1800[®] Series PRS Sprays** will minimize water waste by maintaining optimal pressure at the emission device. This reduces misting and fogging, and produces larger water droplets which are less prone to evaporation and wind drift. **PRS is known to save around one gallon of water per minute over non-PRS models.** Plus, should a spray head nozzle ever become removed or damaged, 1800 Series PRS Sprays will automatically restrict water flow and **reduce water loss by up to 70%**.





I firmly believe that we can save even more water as we expand the features we are using.

> STAN SZWAGIEL MANAGER, GROUNDS SERVICES, FACILITIES AND SERVICES, UNIVERSITY OF TORONTO

RESULTS:

Award-Winning Water Savings

In the two years following the campus's irrigation system overhaul, the University of Toronto has saved over 10 million gallons of water.

The implementation of the IQ system has received industry and University recognition, with Szwagiel's team being awarded the University's Excellence Through Innovation Award for Smart Irrigation and D.J. Rain receiving the Landscape Ontario's Award of Excellence, Water Conservation Award for Potable Water.