

Case Study: ET Manager



WITH THE EVER-PRESENT NEED to conserve water, it is necessary for us to take action to figure out ways to do so. A smart irrigation control system is a great place to start. It provides water-saving, yet efficient techniques to keep the landscape looking its best.

Southcentre Mall in Calgary, Alberta, Canada, was in dire need of new irrigation measures to be put into place. The old system was not only wasting water, but money as well.

That's when property owner Ivanhoe Cambridge turned to ExactET Systems, a local weather data provider, to help find a more efficient irrigation solution. With a high profile location and a less than adequate system, we wanted to compare an ET controller with high-quality irrigation, says Darren Kovacs, co-founder, ExactET Systems, Inc. We wanted to see what kind of cost savings there would be between the new and older system.

ExactET Systems recommended using Rain Birds ET Manager. It calculates the evapotranspiration (ET) rate and uses local precision weather stations, wireless technology and accurate scheduling software to water the landscape only when it needs it.

To start, a new system was installed on the north end. As part of the test, we put in new sprinklers with fixed pattern nozzles, adds Kovacs. A master valve, new lateral lines, and control valves were installed to run the independent systems with the ET Manager.

We measured results at the end of the test and found that there was a savings of 946,340 gallons of water, resulting in a savings of \$4,881.93 annually, or 66%, says Kovacs.

The property has four independent irrigation systems. One system irrigates around the sites business executive tower. A second irrigates the free-standing Safeway store, while a third irrigates the north side of the main mall. The fourth system irrigates the south, east and west sides. In the past, the efficiency level of each independent irrigation system was moderate, says Kovacs.

Before the ET Manager was implemented, the controller irrigation schedules were typical of most in the area; three times per week, spray heads were turned on for 20 to 25 minutes and rotors ran for 30 to 45 minutes. According to Kovacs, that length of time created puddles and runoff because the ground couldn't absorb that much moisture.

The older systems head spacing and clogged nozzles added to the problems as well. The area was over-watered to make the property green so there would be no complaints, explains Kovacs. But, if it rained, the soil had to try to absorb even more. There are no ways of controlling the weather.

All four properties used 2,296,140 gallons of water on average prior to 2006, but in comparison, just 1,349,800 gallons were used last year.

Whatever the weather may bring, the ET scheduler determines more accurate and efficient irrigation timetables, allowing time for infiltration, eliminating runoff. And with less irrigation than before, running three 10-minute segments three times per week, the landscape continues to be green and healthy.

With that product in place last year, our property never looked better, says Rob Gray, operations manager for Southcentre Mall. I was quite impressed,

Ivanhoe Cambridge is now going to install the ET Manager at all of their properties across Canada. They have committed to budget funds to completely rebuild the irrigation at Southcentre and are looking at the quality of the irrigation on their other properties, says Kraig Wilson, Rain Birds associate product manager.

Changing with the weather and monitoring it with an irrigation control system is a constructive way to save water and money, while maintaining a luscious landscape.