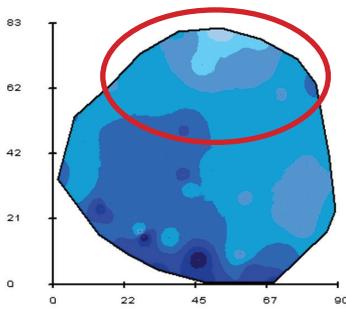
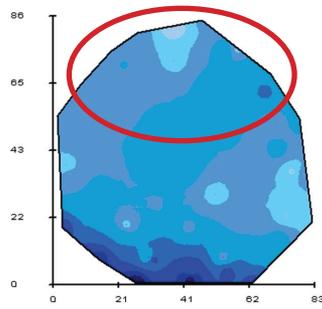


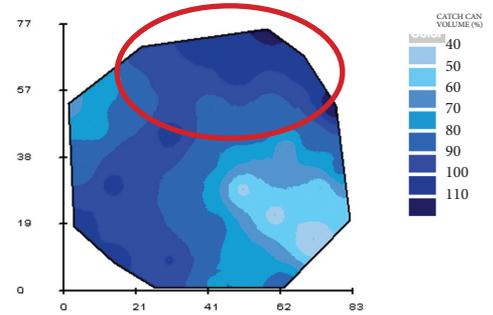
# SMARTIRRIGATION: Maximize Irrigation Audit with TDR



**1 TDR SOIL DATA BEFORE IRRIGATION**



**2 TDR SOIL DATA AFTER IRRIGATION**



**3 CATCH CAN SURFACE DATA**



All images depict the same putting green surface where all TDR and Catch Can data were collected.



This Catch Can data indicates adequate or saturated surface conditions. **However, TDR data from the soil profile shows the rootzone is much dryer.** Visual signs of stress confirm that the rootzone is not getting all the moisture collected at the surface.

## COMBINE TDR WITH CATCH CAN AUDIT FOR BOTH ROOTZONE AND SURFACE DATA

- Get real-time soil moisture data and not just surface data
- Maximize irrigation system efficiencies and potentially reduce run times without sacrificing turf quality
- Improve turf health, aesthetics, and playability
- Manage air to water ratios throughout the soil profile to reduce disease pressures

## MEASURING IRRIGATION DISTRIBUTION EFFICIENCY IS ONLY PART OF THE STORY. HEALTHY TURF REQUIRES UNIFORM MOISTURE DISTRIBUTION THROUGHOUT THE ROOTZONE.

A portion of green 18 that received the largest amount of water during the catch-can audit is shown here. This area does not have the highest soil moisture values and is susceptible to wilt.

The catch can audit works well for collecting data on the soil surface. They help find flaws in irrigation systems including leaks, damaged heads and misaligned sprinklers. This information is important, but only one part of what must be done for turf management success.

Soil Moisture audits reveal how moisture is distributed in the soil profile. The TDR accurately measures the soil moisture content throughout the rootzone.

