PROJECT OVERVIEW:
At LEGOLAND®, a family theme park in California, 90% of the landscaping is irrigated using reclaimed water from the City of Carlsbad. In early 2011, Rain Bird asked Chris Bruchez, Landscaping Supervisor at the park, to field test a new spray head, the RD1800™, which is constructed of material designed to withstand the harsh chemicals used in reclaimed water. Mr. Bruchez was eager to try out the new spray head since he had success with another reclaimed product, the PESB-R valve, which uses the same material in its diaphragm.

CHALLENGE:
Reclaimed water is treated with chlorine and other chemicals to make it safe for use in public areas, but these chemicals rapidly deteriorate valve diaphragms and individual parts in sprinklers. A few years ago, Mr. Bruchez was changing out at least one valve diaphragm a month because they were “being eaten away” by chlorine. Since, replacing the old valves with the PESB-R valve, Mr. Bruchez has not replaced a diaphragm. The same chlorine- and chemical-resistant materials used in the PESB-R are found in parts of the new RD1800 Spray Head.

Mr. Bruchez’s team routinely changed out several spray heads a day because parts within the spray are destroyed due to high levels of chlorine in the water. His team only has four hours before the park opens to make sure the irrigation system is running smoothly, and Mr. Bruchez was hoping that the new RD1800 would save time. In addition, the RD1800 features Flow-Shield™ Technology, which delivers a low-flow service indication stream when a nozzle is removed, helping the team spot problems more easily.

RESULTS:
Mr. Bruchez installed more than 200 sprays in a couple of zones for the field test. Since early 2011, he has not replaced an RD1800 due to components breaking down because of the chemically treated reclaimed water saving him replacement cost and maintenance time. “I really liked the way the spray has performed during this (field test) time,” Bruchez said, “Now it’s just a matter of replacing 10,000 more sprays with RD1800s.”