Environmental PROTECTION

Sprint Takes a Rain Check

- By Laura Williams
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Sometimes doing the right thing for the environment also means doing the right thing for your bank account.

It was such a desire that motivated Sprint to create a rainwater irrigation system for the lawn at its headquarters in Overland Park, Kan.

“When we were building the campus, we realized that domestic water for the lawn would be expensive. We tried to drill wells, but we couldn’t hit the type of water you needed for irrigation,” said Darrel Carter, Sprint’s real estate service line manager. “We were motivated by a desire to conserve water as well as to limit the expense of buying water from the city.”

Fortunately, the campus had a natural slope to it, and the project managers devised a system that collects all the rain that fell on the company’s campus and channel it to irrigate the vegetation. Rainwater runs down the slope into three ponds in the southeast corner of the campus, Carter said. A pump taps into the deepest of those lakes and pumps water back up to the foliage for irrigation at night. During the day, the pump draws water through a man-made creek. According to Carter, using 17,867,835 gallons of rainwater to irrigate the campus in 2010 saved the company about $71,000 in its water bill, though the pump's electricity usage likely cuts into that figure some.

The landscaping on the kidney-shaped campus is specifically tailored to cut down water usage. A perimeter road encircles the innermost portion, a nicely manicured, highly irrigated green lawn on which the headquarters building sits. Surrounding the road is a ring of non-irrigated buffalo grass that gets mowed a few times a year, Carter said. Outside of this vegetation is 250 acres of prairie grass.

“This setup really reduces the amount of irrigation, fertilizer and insecticides we have to put on the grass,” Carter said. He added that the maintenance crew – all Sprint employees until a landscaping company took over two years ago – is very careful about the chemicals it uses on the grass, as they all drain back into the irrigation pools.

The system also collects detailed measurements on the rainfall, the amount of water that has evaporated and the dryness of plants’ roots. “We paid a lot of attention to not wasting any water,” Carter said. “It’s a very sophisticated system because all of the plant material doesn’t need the same type of water.”

For the first year of the irrigation system, the company had to supplement the rainwater. As workers have gained experience, they've begun to irrigate more efficiently, and have avoided having to draw from outside sources.

The effect of draught on the system is always a concern, especially amid the unprecedented heat wave that has been cowing the Midwest lately. Carter said that the crew has a contingency plan for water shortages. The pools hold a 30-day supply of water, and if a dry spell were to exceed that time period, the crews could open nearby fire hydrants to re-fill them.

Though the headquarters facility is the only one of the company's assets with such a rainfall-reuse system, Sprint is examining its water use across all facilities and has seen its water consumption decrease by 40 percent since 2007.

"We're working on identifying which of our facilities fall into areas are at the highest risk of water scarcity," said Darren Beck, the company's manager of resource stewardship. "We are assessing where these facilities fall, and which are the greatest consumers of water. … We are trying to determine as an overall strategy, how are we going to look for opportunities for further reduction, further efficiencies?"