

SRCA Helps Bring Life-Giving Water to a Community in Need

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In 2016, the Board of Directors of the Stonebridge Ranch Community Association (SRCA) turned to the irrigation water management experts at Smart Outdoor Services (SOS) to analyze new ways our association could save water—and consequently, save money, too. Said Tom George, the Board Vice President and liaison to the Landscape & Grounds Committee at the time: “We know water rates are going to go up each year, and unless we want to increase annual dues every year to pay for this rising cost, we need a focused plan to improve the efficiency of the irrigation system in common areas.”

That same year, the Board approved the first recommendation by SOS: the SRCA Top 10 Meters Project. The program aimed to lower water usage at the ten SRCA irrigation meters using the most water. It included updating the irrigation technology, as well as implementing best practices to help reduce water consumption: pressure regulating each meter (resulting in heavier droplets throughout a zone, less mist, and therefore less evaporation); adding flow meters to allow for quicker leak detection; adding soil moisture sensors to immediately detect when soil is wet enough (signaling sprinkler shut-off); and upgrading the sprinkler controllers to allow for remote monitoring.

In the first year, these upgrades resulted in 29% less water usage at those meters. With proof of the program’s efficacy, the Board approved updates to the next top twenty meters in 2017. The collective result was a 54% reduction in water usage and a 42.5% reduction in water cost in the upgraded areas, showing a payback of the program cost in less than two years (even better than initially projected).

The Board then began looking into whether similar updates made sense for our entire common area irrigation system—clearly a much larger project! The accounting team of our professional management company, CMA, performed an audit of SOS reports and confirmed the savings. As a result, in 2018 the Board of Directors and management staff teamed up with SOS and a new partner, Weathermatic (a Texas company which manufactures smart controllers and monitoring systems), to update all common area irrigation systems throughout Stonebridge Ranch. Using Weathermatic technology and hardware, we installed a total of more than 250 smart controllers connected to many miles of irrigation pipe.

A Promise Made

As part of the 2018 initiative, the Weathermatic team made a charitable promise. In honor of all the gallons of water we hoped to save here in Stonebridge Ranch, Weathermatic agreed to ‘give back’ by providing clean water to a community in need. In the intervening years, the company identified more than one potential recipient to receive our water aid, but global circumstances (including a political uprising in South America) thwarted earlier plans.

Today we are happy to report that Weathermatic’s charitable promise has been fulfilled! The Mwalufwekula Community, a small town in the Chibombo region of Zambia, now has access to clean water in part because of Stonebridge Ranch.

Community Details

The Mwalufwekula Community has approximately 366 residents who work primarily in agriculture and farming. Up to this point, the community has relied on three hand-dug wells for their water needs. Two of these hand-dug wells were open to the surface, which made them impossible to protect from

contaminants such as dirt, litter, and various insects. Even the protected well was unsafe because residents had to lower containers into the well, thereby introducing contaminants.

Due to their water supply, community members often suffered from waterborne diseases. Dysentery was a difficult but normal part of everyday life. Community members contracted malaria because the open wells were a breeding ground for carrier mosquitoes. Such illnesses decreased the community's quality of life. Children often missed valuable time at school, and the farmers were often unable to work.

Local leaders recognized that securing safe water would be a critical step in preventing disease among their population and improving their quality of life. A fruitful match was made when Weathermatic learned about the opportunity to support the community. Through the water management technology investment made by the Stonebridge Ranch Community Association (SRCA) and the support of our water management partner Smart Outdoor Services, the Weathermatic Foundation was able to provide funding as part of its 'Save Water | Give Life' social cause.

The field staff began work on the water source by drilling and reinforcing the pipes, applying the pump head, constructing the concrete platform and base, and installing the pump-rod suckers. After building the well, local leaders worked with community members to establish a water committee, training them to care for their new source of life.

Hygiene Promotion

The Weathermatic local partners led a hygiene and sanitation training attended by 16 key community members. During the lessons, the staff addressed how to properly transport and store water, maintain proper care of the pump, and how to make an oral re-hydration solution. They also explained the basics of disease transmission and prevention, as well as signs and symptoms of dehydration. They taught interactive lessons about hand washing by using a tippy tap, a hand-washing device constructed from convenient local materials.

The participatory method of these lessons helped community members discover their own ways to improve hygiene and sanitation choices and implement community-driven solutions. After the local team demonstrated how germs spread, the residents finished their training feeling better equipped to live healthier lives. Said Esau Fumpa, a 45-year old farmer, "We used to drink water from hand-dug wells, and it caused various waterborne diseases. Now, we have safe water to drink, which will reduce our illnesses." To comply with the community health efforts already taking effect in the community, local leaders aided in constructing pit latrines and tippy taps in homes.

With Gratitude

As we live, work and play within the boundaries of Stonebridge Ranch, may we reflect with gratitude that we have access to clean and plentiful water—not only to drink, but to fill our pools and keep our 500+ acres of common areas looking lush and green (even during the hot summer months in Texas). In part because the SRCA Board of Directors has committed for many years to improving our water irrigation systems, we can add another item to our list of things to be thankful for: today families far away on a different continent have access to a better water source than they did before!