

Water conservation is gold for Miami-Dade family

By Deborah S. Hartz-Seeley
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Richard Jones his wife Dawn, and their seven year old daughter Erin, and two year old daughter Morgan sit in the shaded yard of their home.

Although it's over 90 degrees with simmering humidity, it's relatively cool in this shady 10,000-square-foot yard. It's protected from the sun by two majestic royal poincianas, soaring coconut palms and an oversized mango tree that reminds us this area used to be covered with fruit orchards.

The yard has plenty of plants and grass too. But what really impresses us is what we don't see: an irrigation system.

It's this feature that made the Miami home of Richard and Dawn Jones "a slam dunk" for being

certified at the gold level of the Florida Water Star program, says Jesus Rodriguez, program administrator in the South Florida Water Management District.

In fact, this is the first home in Miami-Dade County to earn the top designation in this certification process that recognizes water conservation efforts.

"We're proud we did the right thing by making our house water-efficient, and we did well enough to get the highest [Water Star] certification," says Richard Jones, accepting his gold plaque from Lorna Bravo. She is president of B-D Green Integration in Miami Lakes and a Florida Water Star apprentice certifier.

Jones adds this certification to the four others his house has garnered, including being the first certified LEED Platinum house in Miami.

The Florida Water Star program is a regional program created in 2006 by the St. John's Water Management District. Its standards were designed to help Florida's homeowners save 20 percent of water usage indoors and 40 percent outdoors over that of a home built to existing codes. The program is active in 42 of the state's 67 counties in the South Florida, South West Florida and St. John's Water Management District.

But note that this water conservation program may not reduce your utility bill right away. That's because water is a reasonably priced commodity. However, it's in very short supply so water rates are bound to rise, Rodriguez says. "We are at a point that if we continue to tap our water resources at the rate we have over the last 30 years, we'll do irreparable harm to the resource,"

he adds.

To be Water Star-certified, a homeowner or builder must have a third party verify that he or she has fulfilled the program's many exacting standards for water usage indoors and out. Certification doesn't get homeowners anything other than a plaque.

Although gold is the top rating, followed by silver, a newer bronze level is an attempt to make this certification available to the motivated homeowner.

"It's an entry level rating that gets people recognition for participating in the program without breaking the bank," Rodriguez says. Most current homes can reach this level with an investment of as little as \$2,000.

About 100 homes in the South Florida Water Management District have been certified by the Florida Water Star program, including one home in Broward (silver) and three homes in Palm Beach County (two silver, one gold). The Joneses decided to go for the gold.

In 2008, the Joneses doubled the size of their home to 2,400 square feet by adding a larger kitchen, Florida room, guest bedroom and master suite.

An architect who works in the University of Miami's Design and Construction Division, Jones drew his own plans after a year of researching materials and conservation practices. "When it came to making my house green, I felt I needed to lead by example. It was the right thing to do," he says.

While the home was under construction, the family of five lived with in-laws for a year so that the house could be "gutted to the concrete and rebuilt inside and out."

When it was finished, they worked with certifier Bravo for about a month to document their water conservation efforts. "I had to be sure that whatever they reported on paper was actually installed," she says.

Indoors, they conserved water by using a front-load washing machine that requires only 3.3 gallons of water per wash as well as a water-efficient dishwasher that uses less than 5.8 gallons per cycle.

"I looked at everything I bought and put into the house to see if we could do better on water conservation," Jones says.

They replaced toilets that required 3 gallons of water per flush with those that use only 1 gallon. New shower heads flow at 1.75 gallons per minute, replacing ones that used 2.5 gallons.

Water from their new faucets flows into sinks at 1.25 gallons per minute. "The old ones that came with our house built in 1958 ran as much water as they could through wide-open spigots," Jones says.

And all indoor water connections were reinforced to prevent leaks.

Outdoors, their biggest achievement was to eliminate the irrigation system. They did this, in part, by keeping a majority of the existing trees and plants. "I had to look up every single one to be sure

it was noninvasive and drought resistant,” Bravo says.

They also planted Argentine Bahia grass that requires little watering, and they kept turf cover to a minimum.

Elsewhere, there are beds and paths of pea gravel and Crab Orchard flagstone. “They look appealing without using a lot of water,” Bravo says. They also help distribute rain water to areas where it can be absorbed so it doesn’t just run off.

Three inches of melaleuca mulch helps hold moisture in the plant beds. And a three-foot-wide stone pathway around the perimeter of the home prevents plants from growing within 2 1/2 feet of the foundation where root systems can do damage and they are difficult to water without spraying a wall.

Then, instead of irrigating with potable water, the Joneses have one 350-gallon and three 200-gallon rain barrels to catch water running off the white metal roof. A solar pump helps distribute it through hoses and a drip irrigation system to the plants that need it.

It’s this water that makes a vegetable garden possible in this Water Star-certified home. “We don’t look kindly on vegetable gardens because they require too much watering,” Bravo says. But the Jones family got points for irrigating with rain water.

The family also composts banana peels, orange rinds, coffee grounds and other kitchen scraps to make its two vegetable gardens more fertile. In return, the gardens provide enough romaine, broccoli, cauliflower, peppers, eggplants and tomatoes to feed five from December through March.

“Our experience with our home validates that houses in South Florida can conserve water and be examples for others,” Jones says.

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