## Environmental Marcel Anticipation of the second sec

## EPA's new WaterSense program brings new water-saving features to N.C. homes

Experts say reducing household water use is a relatively painless way to combat environmental pollution and a growing global shortage of safe drinking water. At least 36 states, including North Carolina, expect to face water shortages in the next five years, drought or not.

With that in mind, the Environmental Protection Agency launched a program called WaterSense, which recognizes water-efficient products and homes that meet new water conservation standards. The nation's first neighborhood of WaterSense homes recently began welcoming new residents here in the Tar Heel state, just outside Chapel Hill.

Jennifer Bowman's family was the first to move in to a certified WaterSense home, in Chatham County's Briar Chapel community. More should be completed later this spring.

Inside Bowman's home are Moen faucets and shower heads, which use aerators to send fewer gallons down the drain when the family washes their hands and brushes their teeth.

By Erin Lee Martin Photos by Jason E. Miczek There are Mansfield dual-flush toilets, which use less water to flush liquids and consume a small fraction of the water swallowed up by their older and conventional cousins.

Then, there is Bowman's favorite feature: the Metlund D'Mand buttons in her kitchen and bathrooms that recirculate lukewarm water from the pipes to the water heater, guaranteeing hot water, anywhere in the house, as soon as they hit the tap.

"It's a huge lifestyle convenience," says Bowman, 30. "You think saving water is going to take a lot of sacrifices, but who doesn't want to skip that minute in a cold shower?"

Similar to its popular predecessor, the ENERGY STAR rating, WaterSense was created to help consumers find new, highefficiency replacements for older toilets, showerheads, faucets and appliances. Swapping out a single bathroom faucet for a WaterSense model saves enough water in a year to wash 14 loads of laundry, the EPA says. When applied to an entire home, WaterSense technology is expected to reduce water use by 20 percent, or roughly 10,000 gallons per year for an average family.

## Saving water helps drinking supplies

Heavy water use strains rivers, lakes and aquifers by increasing the amount of water pulled out for drinking supplies. Shrinking our water-thirsty lawns and reducing the proportion of land covered by asphalt, concrete and roofs would substantially reduce the amount of water consumed and polluted each year, activists say. So would limiting construction in areas where ground water supplies are depleted or vulnerable to pollution.

WaterSense homes could help by introducing more Americans to the perils facing our rivers, lakes and aquifers, and the changes needed to protect them, Haw Riverkeeper Elaine Chiosso says. "You have to support anything that's going to encourage people to care about drought and water conservation," says Chiosso, whose central N.C. watershed includes Bowman's Briar Chapel neighborhood.

Bowman's home was built by Vanguard Homes of Cary, one of a handful of builders around the nation that signed on to build WaterSense homes according to the EPA's draft specifications. Others are in Hendersonville, N.C., Colorado, Massachusetts, Arizona, and Wisconsin. (No plans are yet in the works for the Charlotte area.)

Together, the builders hope to build at least 10 WaterSense homes this year. The EPA will use their feedback to finalize WaterSense specifications and create a certification process for use by builders nationwide later this year.

Vanguard has been using ENERGY STAR standards in its homes for six years, more

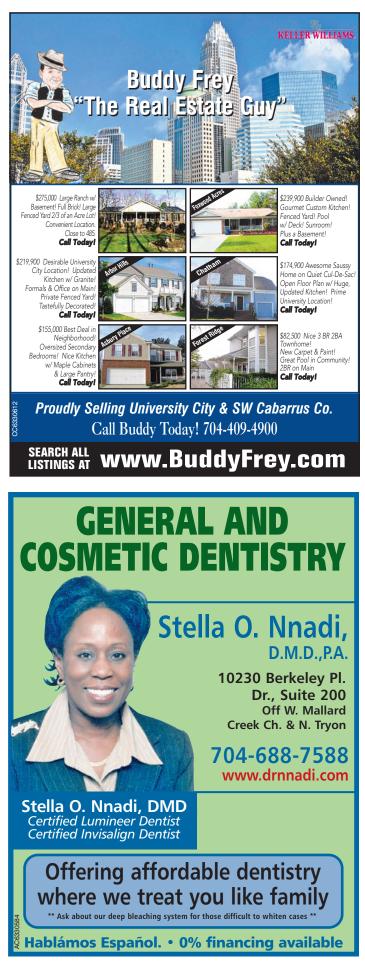








The Bowman family owns the first home in America to be certified by the EPA as a WaterSense home.



and now certifies its homes through Green Home Builders of the Triangle, a project of the Home Builders Association.

The company has turned its Briar Chapel model home into an exhibit space for green technologies. Curious visitors can eyeball the insulation through Plexiglas viewing windows, flush the double-flush commodes, even stick an arm in the shower to check the water pressure.

"A lot of it is just taking the time to think differently," Vanguard sales manager Kelli Lennox says of the new technologies. "When you do that, it's amazing what you'll come up with."

Vanguard's standard floor plans in Briar Chapel range from \$250,000 for 1,800 square feet to \$350,000 for 2,800 square feet. The company is also building an ENERGY STAR and WaterSense condominium community at Blount Street Commons in downtown Raleigh.

Despite the recent cachet of all things green, Lennox says most buyers she speaks with at Briar Chapel are drawn by the community's amenities and location. Once they're inside, though, she says they're excited to find traditional comforts and green technologies. "It's that extra oomph – the thing they remember about the house," Lennox says.

## Learning easy lifestyle changes

Bowman is the first to admit that water conservation was not her highest priority when she moved to Briar Chapel from Durham County. A mother and part-time real estate agent, Bowman and her husband Lee, 34, were first attracted to Briar Chapel's plan for a community pool, walking trails and natural spaces.

But when it came time to select a house, they picked their threebedroom transitional for the same reasons most families select a new home: they liked the floor plan, the square footage and the yard where their 18-month-old daughter, Caroline, could play.

Now, a few months after moving in, Bowman says she was pleased to find out that her first water bill was for less than 1,000 gallons, as compared to an average of 2,500 gallons per month in Durham County.

When it's time for a shower or Caroline's bath, Bowman, who is due with her second child in June, presses a small button, like a doorbell, next to the tub. About 30 seconds later – just enough time to undress or corral a squirming child – hot water is at the ready. "I'm a busy mom, so I need it to be easy," she says. "This is the easiest right thing I've ever done."

It's the home's toilet that gets the most stares.

The double-flush technology reduces water use by flushing with extra pressure – sounding something like an airplane lavatory. It also allows users to make a choice: handle up for liquids, down for the rest.

Bowman says she stopped noticing the noise after a few days, but it's a perfect opportunity to flaunt the home's green features to friends interested in minimizing their own environmental impact. "Once they learn about it, they think it's really cool," Bowman says.

Bowman has started using less water in the tub, taking shorter showers and turning the water off when she brushes her teeth – small steps she said she thinks about now because her home led the way.

"I think you just start to understand how precious water is," she says. | ucm

SAVING WATER AT HOME
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Water conservation facts, including a calculator to estimate how much water a home might save, are available at the EPA's WaterSense Web site: www.epa.gov/WaterSense.