

Ripple Effect

Urban conservation catches on

by Kevin Robinson-Avila

Rio Rancho resident Pamela Olguin cut her water use in half this summer by installing a few simple water-saving devices in the three-bedroom, two-bathroom home she shares with her teenage son and daughter.

“We cut our water consumption from about 33,000 gallons last June to about 14,000 gallons this June,” Olguin says. “I was paying about \$100 per month all summer last year, but this month my bill was only \$46.68.”

Olguin is watering her lawn less, but she says most savings have come from low-flow shower heads, toilets and faucet filters she installed in May with help from the city’s Water Conservation Office. The city provided the shower and faucet heads free, and Olguin will get a \$200 rebate for \$350 she spent to replace two toilets.

“With the savings on my water bills, the changes will pay for themselves,” she says.

Like Olguin, thousands of residents in Rio Rancho, Santa Fe and Albuquerque are making home improvements to conserve water.

“Conservation is the easiest, quickest, most economical way to extend our water supplies,” says Lorri Skeie-Campbell, Rio Rancho water conservation manager.

The Office of the State Engineer began encouraging water conservation in the early 1990s, after rapid population growth, concerns over endangered species and recurring drought demonstrated the strain on New Mexico’s water supplies, says Alice Darilek, state water conservation coordinator. Even so, cities didn’t fully implement conservation plans until the late 1990s.

“When the current drought hit, it spiked interest in conservation, and urban planners began to take it much more seriously,” Darilek says.

In Santa Fe, the government imposed emergency water conservation measures in 2002, restricting outdoor watering to once a week that year, and to three times a week in 2003. It imposed surcharges for excess water

Tapping into water savings: Pamela Olguin, her daughter Catherine (foreground) and her son have cut monthly water use in half by installing low-flow faucet filters, shower heads and toilets.

use, prohibited new grass plantings and required businesses to install low-flow toilets. Average water demand fell from 143 gallons per capita daily in 2001 to 119 gallons per capita in 2003, says Daniel Ransom, Santa Fe water conservation specialist.



Rio Rancho began water conservation efforts in 1998, relying heavily on residential rebates and free low-flow water devices for homeowners. The city also prohibits outdoor watering between 10 a.m. and 6 p.m. and imposes fines for water waste, Skeie-Campbell says.

“The number of water utility accounts has grown 20 percent since 1998, but thanks to conservation, water production has jumped only 8 percent,” she says.

Albuquerque launched a conservation program in 1995, after studies showed its underground aquifer was being depleted much faster than anticipated. The city has paid out about \$15 million in rebates for low-flow appliances and lawns converted to Xeriscapes, says John Stomp, water resources manager.

Albuquerque water use has dropped 28 percent since 1995, representing a savings of more than 88 billion gallons. “That’s the equivalent of two full years of water use by the entire city,” Stomp says.

Most conservation plans emphasize public education, including workshops for adults, free how-to guides and lesson plans for school teachers. In Las Cruces, the city’s new water conservation strategy will hinge on education, says Joshua Rosenblatt, water conservation coordinator.

“We’re preparing a five-year program that will focus on public awareness,” Rosenblatt says. “Education and community participation are key.”

NMSU is contributing research and expertise to educational efforts across the state. Through the Rio Grande Basin Initiative, NMSU is studying water-wise technology, irrigation techniques and drought-resistant plants for urban landscapers and home gardeners, says Leeann DeMouche, an Extension specialist.



Xeriscapes gain ground: Many Albuquerque homeowners are converting yards to Xeriscapes like this one in the Northeast Heights. The city rebate program has helped residents convert more than 3.5 million square feet of grass—about 70 acres—to Xeriscapes. However, most New Mexico lawns are still irrigated with inefficient sprinkler systems, left.

“New Mexico has to take a scientific, systematic approach to exploring water conservation, and NMSU can help a lot with that,” DeMouche says.

Extension turfgrass specialist Bernd Leinauer is studying water requirements for dozens of turfgrasses. “It’s not turfgrass that wastes water; it’s people,” Leinauer says. “People don’t really know how much water our grasses need, so they overwater.”

He’s also studying drip and subsurface systems to irrigate lawns. “Despite New Mexico’s gusting winds, 99 percent of our lawns are

irrigated with sprinklers,” Leinauer says. “That’s like throwing water into the air and hoping it hits the ground.”

NMSU shares its research through frequent conferences and workshops.

“The goal is to get people thinking about conservation every day,” DeMouche says. “From now on, conservation will always be a part of urban policy in New Mexico, but education is the key that will make conservation a household habit.” **R**