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Skyrocketing water use may cost North Texas  
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By RANDY LEE LOFTIS / The Dallas Morning News

The sprinkler spritzing in the rain, the nonnative grass that stays pool-table green in a deep drought -- these have come to symbolize North Texas as much as the Cotton Bowl or Interstate 35.

This is where the biggest water users in Texas have learned to turn the spigot with a vengeance: 207 gallons per person per day, on an annual average. For a family of four, that means 302,220 gallons a year -- with more than half of it going onto lawns.

And with the population soaring, water use is soaring, too. Utility officials say the region can't survive without huge amounts of water -- roughly 693 billion gallons a year by 2050, almost double today's demand.

The question of how to meet that demand goes before Texas voters Nov. 6. Approve \$2 billion in new water-project bonds for Texas, water planners urge voters, to help guarantee future supplies. Vote down the bonds, environmentalists argue, to force the state -- especially North Texas -- to get serious about conserving water.

Not planning for new supplies, said Dallas Water Utilities Director Terrace Stewart, would steal prosperity from a population expected to double in 50 years.

The blueprint from a regional planning group that Mr. Stewart leads calls for a \$6.2 billion in new projects, dominated by a \$1.7 billion new reservoir on the Sulphur River 150 miles east of Dallas. It would be the first major water project for the region since the reservoir construction boom of the 1950s and '60s.

The Marvin Nichols Reservoir would provide 202 billion gallons a year. Local officials also want to buy water from southeastern Oklahoma, though prospects for that deal appear dim.

But critics say one big thing is missing from the regional plan and the state's strategy: a get-tough attitude toward water conservation.

The region's per capita water use -- water used per day, divided by the number of people using it -- outstrips the state's average of 181 gallons by 26 gallons a day.

That's so far out of sync, environmentalists contend, that the expense and ecological loss of a new reservoir can't be justified -- at least not until local habits are more compatible with a semi-arid climate that gets just 32 to 36 inches of rain a year.

"There's no water conservation going on in Dallas whatsoever, at least not that we've been able to detect," said Dave Moldal of the National Wildlife Federation, which is trying to mobilize statewide opposition to the reservoir.

## Wasteful habits

At a gathering in the Red River County community of Boxelder, population 258, Mr. Moldal told about 100 East Texas ranchers that wasteful urban habits threaten to destroy their heritage.

"With just a moderate amount of conservation, we don't need to lose these farms," he said.

Caught between the demands and money of an urban giant and the old family ties to the farm are people such as Max Shumake, whose ancestral land would vanish beneath the new reservoir's acres of water and shoreline.

"Right down there is where my great-great-great-grandfather is buried," Mr. Shumake said, standing at the lone crossroads of Boxelder and pointing toward woods and pasture.

That ancestor, Samuel Richard Kennedy, moved to the Sulphur River during the Civil War. "And you're telling me that they want to put that under water, so people in Dallas can keep watering their sidewalks?" Mr. Shumake asked.

Whether it's wasted on the sidewalk or goes for some other purpose, lots of water runs through the region's pipes -- about 379 billion gallons in 2000. That's just for homes and offices, which use 85 percent of the region's water; it doesn't count agriculture or industrial users such as power plants.

The demand for water has soared as rooftops replace wheat and sorghum in the northern suburbs. But population growth alone doesn't explain the jump in water use.

The number of people in the 16-county North Texas water-planning region rose 23 percent since 1990. But water use increased 38 percent.

That suggests that people are using lots more water, and other statistics bear that out. In 1990, the average North Texan used 186 gallons a day. By 2000, that figure was 207 gallons.

The most dramatic rise is in the new suburbs, though long-established cities also use lots of water: Richardson's summer use, 275 gallons per person per day, leads the state. Plano, Dallas, and Fort Worth also make the top 10.

Only Garland is among the state's 10 best water conservers during the summer: 161 gallons per person per day, far less thirsty than next-door-neighbor Richardson.

The farms and ranches that once dominated North Texas used virtually no municipal water supply, but memories of those days are fading fast on the former prairies.

There's no better example than Frisco. The boomtown on the Collin-Denton county line has seen its population grow by 544 percent since 1990, to about 42,000, according to census figures and city estimates. But water use grew during that period by 593 percent, to 9.93 million gallons a day.

What are all those newcomers doing with all that water? Mostly, said city public works director Gary Hartwell, they're watering lawns -- as monthly water-use trends for virtually every city show.

From July 1 to Sept. 30, 2000, when Frisco recorded no rain, city customers used 1.6 billion gallons of water -- 45 percent of the entire year's usage. This year's summer use was nearly as high.

### Overwatering lawns

"Automatic sprinklers, that's the problem," Mr. Hartwell said. Builders of new homes set sprinklers to water new lawns daily or even more often, he said, but homeowners never reset them for the once-a-week even a thirsty lawn needs in summer -- so they go on using seven or eight times as much as necessary.

Frisco has tried to turn down the faucet, posting signs along suburban streets telling people about the latest request for voluntary cutbacks. "Today's Water Conservation Status" is a standing feature on the city's website.

Some cities also charge higher rates for bigger users to encourage wise watering. Dallas' rate for the biggest users is now nearly triple the base rate.

It's not news to local water managers that much of that water goes to trying to keep alive plants that don't naturally occur here. Switching to native plants could save North Texans as much as 80 percent of the water that they're using on lawns and gardens now, experts say.

Mr. Hartwell said landscape irrigation is the region's only water-use category that needs to change. Other utility managers agree.

"If we can get people to landscape differently, we can make a large dent," said Jim Oliver, general manager of the Tarrant County Water District. "When I go out to get my paper every morning, there's water running everywhere."

State water planners acknowledge that North Texans are the state's biggest water users. The Texas Water Development Board, which coordinates planning and financing for water projects, advocates local "target goals" for per-capita use in its new draft state water plan but adds, "These target goals should not be mandates."

The board didn't insist that North Texas dramatically lower its per capita water-use projections because it doesn't think it has the legal authority to do so, executive administrator Craig Pedersen said.

Words such as "waste" don't appear in the state or regional plans, and water officials often hesitate to advocate water-use crackdowns. The regional plan relies on water-saving plumbing and other bit-by-bit improvements, not comprehensive conservation campaigns, to trim per capita use.

That's partly because what strikes one person as waste might strike another as the necessary protection of a big investment -- landscaping, for example, or a house's drought-vulnerable foundation.

"A lot of people don't consider that wasting water; they consider that taking care of their lawns," said Dale Fisseler, Fort Worth's top water official.

But some water managers say voluntary measures don't work, and they'd like more authority to order cutbacks. Mr. Hartwell said he recently told the Frisco City Council that landscape-watering cuts are like school-zone speed limits: They protect a precious resource but aren't effective if they're only voluntary.

The regional water-planning group says conservation alone won't meet future needs. It is looking to Oklahoma and East Texas.

The Oklahoma deal would pipe about 535 million gallons a day from two southeast Oklahoma river basins to urban North Texas. Officials from the region's big utilities -- Dallas and Irving, plus the North Texas, Tarrant and Upper Trinity water districts -- are talking to Oklahoma officials.

But Oklahoma officials face in-state opposition, and they haven't worked out a water-rights deal with the Choctaw and Chickasaw tribes. Unless that happens, the water stays in Oklahoma.

Marvin Nichols lake, envisioned for decades but never pursued until now, would provide urban North Texas about 553 million gallons a day.

If the bond authorization passes on Nov. 6, the water development board would sell bonds to finance big water projects statewide; Nichols' projected \$1.7 billion cost is among the biggest. Cities would pay the cost, plus interest.

The plan doesn't commit any city to take part in the reservoir, but Mr. Stewart, the Dallas water chief, said he thinks most will.

Environmentalists and ranchers along the Sulphur River, which flows eastward into Arkansas and the Red River, are pushing to kill the lake plan, though they face an uphill fight that could wind up in court. They say the state can't afford to lose more of its rich East Texas river-bottoms, especially to support what they call the Dallas-Fort Worth area's wasteful ways.

If the new projects failed, the region could look for other reservoir sites, take more from brackish Lake Texoma or use more groundwater, spurned for drinking here because it's full of minerals. Any of those choices would require multibillion-dollar pipelines or costly plants to filter out the salt and grit.

But planners and conservationists agree on one point: Water, yesterday's unlimited commodity, is tomorrow's finite resource.

"You can't produce it," Dallas' Mr. Stewart said. "It's the same water that's been on the planet since the beginning of time. It just moves around."