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David Gray: Water plan can't consist just of dams

Although last summer's drought lasted more than 80 days, many of us quietly congratulated ourselves that Dallas had plenty of water.

Rain or no rain, we could keep our lawns green, our gardens flowering and our pools full. We didn't have to impose bothersome watering restrictions.

Since the 1950s, we've been building dams to impound water on area rivers. We've now got lakes Ray Hubbard, Tawakoni, Lewisville, Ray Roberts and Grapevine for current water supply. Lake Palestine and Lake Fork are in reserve for future needs.

But over the next 50 years, North Texas is expected to nearly double from 5 million to 9.5 million people. So where are we going to get water for all these people?

If area water planners have their way, we'll build more dams. The Texas Water Development Board's water plan for Dallas and 15 other North Texas counties recommends building three new reservoirs.

The largest would be the Marvin Nichols I reservoir on the Sulphur River in East Texas. Scheduled for completion by 2030, Marvin Nichols would cover 62,000 acres in Red River, Morris. and Titus counties. It would deliver 161 billion gallons of water per year to the metroplex through 172 miles of pipeline.

Pursuing the old dam-building strategy, however, ignores key pieces of the water puzzle.

First, we're acting as though money is no object. Marvin Nichols and its associated pipelines would cost \$1.7 billion to build, of which Dallas would pay \$352 million in 1999 dollars. In addition, we'd pay \$67 million for a new water treatment plant and annual operations, maintenance and pumping costs of more that \$16 million. And it may not be the cheapest way to go. In several planning regions, the cost of treated water made available through "advanced municipal conservation" was half that of water generated through large dams and pipelines.

Second, we're acting as though we're the only ones at the water trough. Per-capita water use in Dallas is by far the highest of any major Texas city. According to the Texas Water Development Board, our average daily water use for 2000 was 235 gallons per person. San Antonio used 147 gallons per person, and El Paso used 159.

Not only are we the biggest water users, we're the only big city whose per-capita usage is projected to rise in coming decades. The North Texas Regional Water Plan says we'll be at 264 gallons per day in 2050 and the City of Dallas Water Conservation Plan predicts a per-capita usage of 285 by 2030. San Antonio expects to be down to 132 gallons by then,

El Paso to 144. Here in Dallas, we seem to be forgetting that Texas is a semi-arid state with a growing population, and there are natural limits to both our surface and groundwater supplies.

Third, we're ignoring the environmental consequences of repeatedly damming and diverting our rivers. In building Marvin Nichols, 30,000 acres of increasingly rare bottomland hardwood forest and 15,000 acres of mixed post-oak forest will be destroyed. These types of forests provide habitat to a wide variety of birds and other wildlife species. In addition, any time the natural flow of a river is diverted, it affects fish and wildlife habitat downstream. Think about the Rio Grande. That once-mighty river is so depleted that it now doesn't even reach the Gulf of Mexico, and fish and wildlife are suffering as a result. We shouldn't sacrifice our natural heritage to wasteful water use.

It's time for us to start thinking and acting as Texans. Water is a shared resource. We must make more efficient use of existing supplies.

Up to 60 percent of urban water use in the summer months is for landscape irrigation, and about half of that watering is unnecessary. According to an analysis by the National Wildlife Federation's Texas office, if Dallas and other communities in the metroplex reduced consumption by just 22 percent over the next 50 years, we'd eliminate the need for Marvin Nichols altogether.

The city should encourage conservation not just by publicizing water-saving tips but by investing in programs that actually save water: plumbing and landscaping rebates; water infrastructure monitoring and repair; commercial and industrial audits and incentives; appropriate water rate structures; land use planning; and creative public education. The answers aren't all that difficult. What's at stake is the future of the place we call Texas.

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