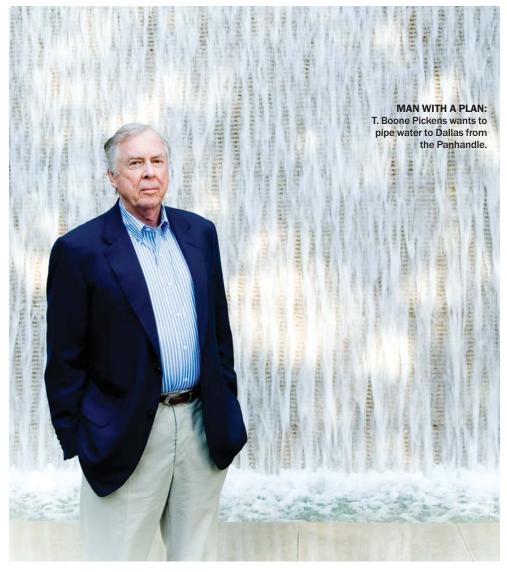


# Dry Times

Why Dallas has to drown Northeast Texas or die of thirst in 50 years.

By ROD DAVIS Photography by ELIZABETH LAVIN





IF T. BOONE PICKENS IS RIGHT, AND HE USUALLY IS, "LAKE Lavon will be sucking mud" in 16 months. It's already well on the way, 10 feet below normal and losing girth daily under the withering, rainless skies of Collin County.

On the northern reaches of the 21,400-acre reservoir, cows lie on the cracked earthen shoreline, and egrets pick along the trash-laden scum line. Weeds and scrub grow across hundreds of yards where waves once lapped. The worst is around Sister Grove Creek, where the U.S. 380 bridge spans a fetid wasteland of bleached tree stumps, stagnant brown pools, and mud far too baked to be sucked by anything.

Appearances can be deceiving, but at Lake Lavon it's full frontal: what you don't see is what you don't get. The lake is as imperiled as Pickens says—although most people have no idea why that could be a slow death sentence for Frisco, Plano, Allen, Wylie, Garland, and the other suburbs that have taken root on the tenuous, semi-arid soil north and east of Dallas. Even those who live there are only now dimly grasping the reality that Lake Lavon, their primary source of water, could be vapor by Christmas after next. Because most people have become so disconnected from the basic infrastructure of urban life that they think water is just something that comes out of the faucet and has to be paid for every month along with the garbage bill.

Wake-up is going to be a bitch. If, or perhaps when, the spigots cough out nothing more than air and the clatter of slackened flush chains echoes in toilets across exurbia and suburbia, the sounds will reverberate throughout Dallas, Fort Worth, and the rest of the heavily populated hub of commerce that is North Texas. You won't ever need to watch another disaster movie, because you'll be living in one. It will hurt. A lot.

So interdependent are the economies of the area that the collapse of even one of the three major municipal water suppliers—Dallas Water Utilities, North Texas Municipal Water District, and Tarrant Regional Water District—would set off a chain of emergency water-borrowing and desperation not unlike the frenzy of energy purchases in California after Enron's collapse.

Too dire? Last year was the driest in Dallas in more than five decades, and this one, already the warmest on record, isn't over by a long shot. The current drought is in its second year (the most common drought definition—there are three kinds—is a period in which rainfall decreases from one year to the next). Which is where Pickens comes in. In 1999, he set up Mesa Water as a subsidiary of BP Capital, of which he is CEO. He's richer than God these days, but he grew up in Oklahoma and remembers both the Depression and the Dust Bowl. When he realized that much of the water in the Ogallala Aquifer under his farm in the Panhandle was going unused, he started thinking the way a lot of oil men do these days—that it could be drilled, and it could be sold. When Pickens looks at what's left of Lake Lavon, or any of the other stressed reservoirs from which North Texas

gets its H<sub>2</sub>O, he sees opportunity.

But it's more complicated than that. Hell, opportunity is what drives global forces in engineering, construction, and land speculation in the new era of water marketing. It's what fuels immense political pressures. Opportunity is the incentive to keep us all from evaporating, even if nothing more than as a byproduct of profit. What Pickens sees is more like necessity. Like a recurring nightmare.

The Drought, as it's generally known, began to settle across parts of Texas as early as 1949, but it started bearing down here in 1950, as precipitation tapered off to little more than brow sweat. For seven Dust Bowl-like years, it clung like cracked leather, including 1956, the driest in Texas history. In those parched, soul-grinding days, when swamp coolers were more widespread than air conditioners, you could walk across the ghost beds of rivers, stock tanks, creeks, and lakes. White Rock Lake, itself badly depleted, was pressed into service as a drinking water reservoir, ending its use for public swimming forever. Artesian wells in the streets of Oak Cliff were opened so that desperate people could fill their milk jugs and garden pails. Water was piped down from the Red River, and in the sinks and bathtubs of Dallas, it came out as red as the name implied. Lawns disappeared.

Dust storms scoured homes, cars, anything outside. A cloud seeder was hired, unsuccessfully, to bring on rains. Signs in Fort Worth quipped, "Flush your toilet—Dallas needs water."

Those who lived through it have never forgotten. "I recall that sandstorm [1953] very well," wrote Fred Ragsdale, whose remembrance is one of many found on the web site of the Dallas Historical Society. "It occurred on a Friday afternoon, and we could see it approaching from the west, like a huge red wall." Another survivor of the time recalled "water rationing, dead grass, cracks in the ground so wide and hard you could break your leg by stepping in one."

Vivian Skinner said she had lived through it as a young girl: "Mother and Daddy said they were pumping water from the Red River, and it was okay to bathe in, but not okay to drink. We didn't want to bathe in it, either! My par-

ents were from Tennessee, and I think Daddy really dreaded the summers deeply, and probably scarred us all with his annual 'It's going to be a long, hot summer' lectures, warning us to conserve water, etc. I think we all grew up afraid that we would really and truly just run out one day and ... well, that would be our tragic end. Death under the scorching sun in the parched land of Texas!"

Now, of course, the city always has water—855 million gallons a day of capacity, so far never outstripped. But each drought summer threatens to do so. Out in the suburbs, it's not uncommon for a house to bill 12,000 gallons a month. Give it up for our lawns, which in the summers, throughout North Texas, account for 60 percent of

Last year was the driest in Dallas in more than five decades. and this one. already the warmest on record. isn't over by a long shot.

all residential use. Half of that is wasted—evaporating or trickling down the street.

Amid such extravagance, it seems inconceivable that a day of reckoning could arrive. That residents again might line up, buckets in hand, or hope a passing convoy of relief troops had some extra pallets of Ozarka. That's what they thought in New Orleans, too, after Katrina shut down the municipal water system. But Katrina came and went. A drought hangs on for years. It can't be predicted with any degree of certainty, complicated by mega-factors such as La Niña, global warming, climate shifts, and random environmental catastrophes—chaos theory.

Believe it can happen. Pickens does. So do the other generals and soldiers in the early skirmishes of the war. On our side, they're out to dam up the bounty of the water-rich basins of the Sulphur, Neches, and Sabine rivers to the north and east. On the other side—the one whose homes and forests will be drowned—they're out to stop us. It's not right, the Country Cousins say, that Big City Wastrels should have the muscle to impound what they need to stay alive.

But we do, and therein lies this tale.

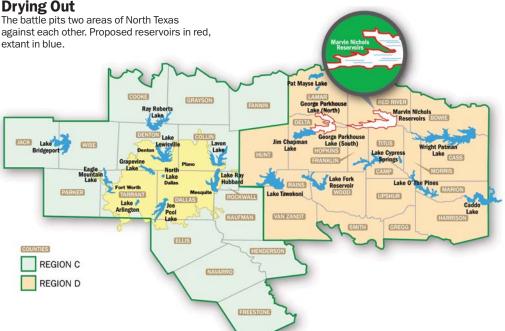
## The Urban Imperative

CITIES NEED WATER AND THEY WILL HAVE IT. APART FROM PROTRACTED discussions about evolution, the advances of civilization, and the relative merits of rural versus urban, there is the law. By statute, the rivers of the state belong to all Texans, not just those who live on their banks. How the water from those rivers is channeled, diverted, or impounded and for what uses becomes a matter of state regulation, politics, and economics.

Since 1997, when the Legislature passed Senate Bill One, the template for all subsequent water regulation, the extremely complex process of water allotment has been overseen by a quietly powerful public body, the Texas Water Development Board (TWDB). As was Gaul riven by the Romans, so Texas was divided up—in our case into 15 alphabetized water planning regions, each supervised and coordi-

> nated by the TWDB. Each region, in turn, develops five-year plans showing how the water needs of its area will be met. All 15 plans are merged by the board after dozens of hearings and studies, and sent on to the Legislature for approval. The first statewide plan was issued in 2001. The second, now under final consideration, is due January 5, 2007.

> As worlds may collide, so do the regional plans. The mother of the battles in the current round pits Region C (the 16-county sector anchored by Dallas, Fort Worth, and the suburbs) against Region D (the 19 counties covering all of northeast Texas). For clarity's sake, we'll call Region C "DALLAS," and Region D



"NORTHEAST TEXAS." It is the former that in effect wants to drown parts of the latter.

Having already tapped heavily into the Trinity River basin in response to the '50s Drought, DALLAS has been forced by time, population, and geography to look outside of its own resources. The closest are found in NORTHEAST TEXAS. Obtaining them means building several new reservoirs over the next 50 years, the most controversial of which, Marvin Nichols, would flood 72,000 acres when completed in 2040. The lake would yield about 489,840 acre-feet per year for the Dallas-Fort Worth area. (An acre-foot of water equals

325,851 gallons—the volume needed to cover an acre of land one foot deep.) When combined with the other elements in the complex DALLAS package, it would create about 20 percent more than the 4.05 million acre-feet per year estimated to match demand in 2060, the far end of the planning range. And it would solve the problem. Except in NORTHEAST TEXAS, where the scheme has all the appeal of TVA hydroelectric dams in Tennessee after the Depression, or Three Gorges in China.

But there is little choice. By 2060, the DALLAS population is expected to more than triple to 18.6 million, from its current level of 5.9 million. Water demands in turn will more than double, to 3.3 million acre-feet per year, up from about 1.4 million acre-feet per year today, which is also approximately the current level of supply. With no further supplies created, that's a projected shortfall of 1.9 million The tragedy is acre-feet per year at about the time the kid you watched graduate from high school last June becomes eligible for social security.

Or worse. The TWDB has recently suggested that because of revised population figures, which have added 5.5 million to previous predictions, water demands might exceed current estimates by 50 percent.

"That's what keeps you awake at night," says Jim Parks, chair of the DALLAS group and also executive director of the North Texas Municipal Water District, supplier to 60 municipal customers, including Frisco and most of the northeastern suburbs. "Supply and demand have got to kiss up out there somewhere or we've got a problem." In June, when total system capacity was 63 percent and dropping, and mainstay Lake Lavon was only at 58 percent capacity, the North Texas Municipal Water District started buying extra water from other systems as part of its drought contingency plan. It issued a Stage 3 water restriction recommendation limiting yard watering to one day a week. From Wylie to Allen to Plano, city councils implemented the drought restrictions, often to howls from residents.

Dallas Water Utilities, which also supplies 21 client cities, including Carrollton, gets its water principally from five area reservoirs-



The downward spiral cannot and will not play itself out again. Cities will survive. that there will be sacrifice.

Ray Roberts, Lewisville, Grapevine, Ray Hubbard, and Tawakoni. It is in better shape. Spring showers had graced its lakes, while bypassing Lavon entirely. But Dallas Water Utilities was down to 74 percent of capacity in July, and Lewisville and Grapevine were below normal. The Dallas City Council enacted its annual summer restriction plans, but for the time being only limiting watering lawns to mornings and evenings. Fort Worth did the same, as did most of the 29 municipal and commercial entities served by the Tarrant Regional Water District, which was down to 79 percent of capacity (50 percent is emergency level).

The downward spiral cannot and will not play itself out again. Cities will survive. The tragedy is that there will be sacrifice. No one underplays that on either side. But the play is where it lays. "No one has ever built a lake without controversy," says Jo M. "Jody" Puckett, director of Dallas Water Utilities, referring to the conflict with NORTHEAST TEXAS. "But that's where the water is."

Specifically where it is, is in the fertile bottomland where the Sulphur River winds eastward through Titus and Red River counties, near the U.S. 259 bridge just north of I-30, about an hour west of Texarkana. It's the place where the dam for Marvin Nichols would be built. It is a place of sublime beauty, where blue buntings that might have been painted by Rousseau dart through the dense forest-jungles, and the river hacks out a primordial channel. It is a place where the songs of the mockingbirds are lost amid the gnashing of teeth and the howls of the righteous.

#### Northeast Texas Under Water

LIKE MANY IN NORTHEAST TEXAS, SEABY LOVE'S PEOPLE CAME IN FROM Alabama in the 1830s and 1840s. They settled along the Sulphur River, a little south of present-day Dekalb and northeast of Mt. Pleasant. Seaby, now 77, and his brother Olen, 83, have been known as the "Love Boys" most of their lives. They work about 1,100 acres that still support cattle, timber, and a few crops, and harbor unknown amounts of wealth in mineral and gas and oil rights. Lignite coal has been mined here. It is land on which anything can grow, and its impossibly green, dense woods of oak, hickory, mulberry, and cedar are undisturbed, except for a few hunters' camps, scattered houses and trailers, and cemeteries dating back to the earliest arrival of the Alabamans.

The Marvin Nichols dam—named after one of the founders of the powerful Fort Worth engineering firm Freese and Nichols, which has recommended its construction and is all but certain to receive the design contract—would put all of that under more than 200 feet of water.

The projected dam would become the third reservoir on the Sulphur River—Jim Chapman Lake to the west, and the much larger Wright Patman Lake downstream near Texarkana. There are serious questions about whether the river can handle another impoundment.

Proponents say Marvin Nichols would catch some of the untapped flow that just empties into the Red River in Louisiana. But for those opposed, like rancher Shirley Shumake, whose family roots go deep as the Love Boys', the Sulphur River has done about all it can. Indeed, Shumake, taking an afternoon off from helping her brothers bale hay, can guide visitors to the verdant fields of Holloway Crossing, where the family land hits the river and the trunk of a prize bottomland post oak tree measures 16 feet in circumference. The Sulphur in this flat



bottom country can rise quickly during floods, but its general flow, especially in dry times, is but a muddy coil not even as wide as the Trinity trickling through Dallas County.

Shumake started fighting Marvin Nichols as early as 2001, after a visit from Janice Bezanson, executive director of the Austin-based Texas Committee on Natural Resources, to help organize resistance to the dam, which, at that time, was supported by NORTHEAST TEXAS. "We had a meeting at the Hubbard School," Shumake

amount of land—perhaps more than 200,000 acres—for what is called mitigation, basically a replacement of unique hardwood forest and wildlife-sensitive areas. More than the impoundment itself, the fear of losing land to mitigation (even though it would be compensated by the state) is the source of most of the regional opposition. That and a marked distrust of the politics and financial deals behind the scenes.

"Dallas ought to get its water somewhere else," Seaby says, sitting

in his rocking chair. "They've been offered plenty of water someplace else. But what they want to do is steal money. That's what it's all about." Although land-rich, he and Olen share a plain brown frame house full of the clutter of the life of two bachelors, a TV on in the front room mostly to compensate for the silences. Outside, the deep-woods yard is pure country, decorated with farm equipment and feed supplies.

Seaby thinks he'll finally prevail in what shapes up to be a decades-long fight. "It ain't got that far along yet," he says. "Or I might be dead when that happens, or it may just kill me."

In truth, he will be dead. Olen, too. We may all be, because there is at least a 50-50 chance the Marvin Nichols reservoir never will be built. Not because anyone really feels sorry enough to die of thirst for the Love Boys, nor spare the nearby Roberts and Cedar Creek cemeteries, many of whose 19th-century graves will be buried all over again at the foot of any dam. That would be traumatic but not a deal-breaker. The end of the road might be the cost, in both dollars and years. Now figured at \$2.1 billion (already an increase from an

earlier estimate), Marvin Nichols might ultimately get even more expensive, and the litigation over permits and mitigation could take on a life of its own. The Texas Commission on Environmental Quality (TCEQ), which issues construction permits, hasn't even weighed in yet, nor has the Corps of Engineers nor so many other agencies and authorities that it can take 30 years or more to finally get a dam built. Between now and 2060, the Big Three, and the various city councils and state-level politicians who finally determine policy, might decide it's smarter to buy water from existent lakes in the region at the best rates possible.

That's basically the position of the NORTHEAST TEXAS group, and its chair, Jim Thompson, a savvy attorney with a Steve Martin-

#### From Whence the Water Might Flow

These sources are from the current plan approved by the Texas Water Development Board for the Region C Water Planning Group, which includes Dallas, Fort Worth, and nearby suburbs. One acre-foot=325,851 gallons.

Marvin Nichols Reservoir (new) 489,840 a-f/y

Toledo Bend Reservoir (connecting existing supplies) 400,000 acre-feet/year

Tarrant Regional Water District 3rd Pipeline & Reuse Project (reuse) 188,765 a-f/y

Lower Bois d'Arc Creek Reservoir (new) 123,000 a-f/y

Lake Fork Reservoir (connecting exiting supply) 120,000 a-f/y

Oklahoma Water (connecting existing supply) 115,000 a-f/y

Lake Palestine (connecting existing supply) 111,460 a-f/y

New Lake Texoma blending (connecting existing supply) 113,000 a-f/y

Lake Fastrill (new) 112,100 a-f/y

Wright Patman Lake (conversions and connections) 112,100 a-f/y

East Fork Reuse Project (reuse) 102,000 a-f/y

Return Flows Above Dallas Water Utilities Lakes (reuse) 79,605 a-f/y

Southside/Lake Ray Hubbard Reuse Project (reuse) 67,253 a-f/y

Lake Lewisville Reuse (reuse) 67,253 a-f/y

Lake Ralph Hall and Reuse (new and reuse) 50,740 a-f/y

Other strategies (various) each less than 50,000 a-f/y

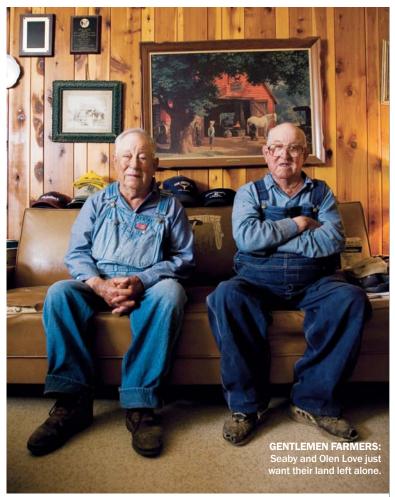
Total additional supplies: **2.7 million a-f/y**Total all supplies by 2060: **4.07 million a-f/y** 

recalls. "She said it would be a frustrating process but yet it could be stopped. We decided to give it a go." Joining with other environmentalists such as the National Wildlife Federation and Sierra Club, as well as strange bedfellows Ward Timber Co. in Linden and International Paper at Domino, the grassroots movement—if it could still be called that—eventually pushed Marvin Nichols off the NORTH-EAST TEXAS plan completely, as a new board was seated.

Seaby Love, a veteran whose long life of hard work has left his hands almost blackened by the sun, started fighting Marvin Nichols about the same time. He says the dam doesn't need to be built in the

first place. And if built, he says Marvin Nichols would destroy far more than it saves, including an unknown

DRINK UP! Average daily water use per capita in Dallas is 198 gallons. In the summer, 60 percent of that goes on our control of the control o



like demeanor who is also CFO of Ward Timber. The 300 or so direct or indirect jobs that Ward Timber supports would be lost, sooner or later, if Marvin Nichols is built, he says. Ditto some or all of the 3,000 to 4,000 jobs related to the nearby International Paper mill, which depends on the Sulphur River both to run its operations and to provide an outlet for industrial discharges.

Like Seaby Love, Thompson sees the entire scheme as propelled by power-seeking bureaucrats and big engineering firms. NORTH-EAST TEXAS hired its own consultants for its own study and, not surprisingly, reached different conclusions, ones that flatly oppose any new dams anywhere in the region.

He is particularly testy about the role of Freese and Nichols in creating the data bank for the state and the regions to use for evaluation. He says it's "skewed" to prove that the dam is needed, so that Freese and Nichols and an array of other economic interests would make money off construction and land speculation. "It's not 'potentially' a conflict," Thompson says before leading a visitor on a tour of Ward's new sawmill and timber-storage facility. "It's definitely a conflict. This is the most obscene thing I've ever heard of in my life. They say

there's only a few firms that can do this? If there were only two, then use one for consulting and one for design."

The City of Dallas, which so far has not endorsed Marvin Nichols, but almost certainly will at some point, looked at the alleged conflict of interest but took no action. Former Dallas city councilmember Lois Finkelman, chair of the council's environmental committee, said she wished there were a "greater disconnect" between consulting and design contracts, such as Freese and Nichols. The problem is that there are only a handful of water engineering firms, and very often they do both the studies and the design.

Which carries no water at Ward Timber at all. "Hell, this is a nobrainer," says president Bill Ward, whose father started the company in the '50s. "I say let the sun shine on this. If people find how slanted this information is, why, people will see it's all bulls---."

## The Lesser of Multiple Evils

NOT EXACTLY THE LINE OF SIGHT FOR JIM PARKS BACK IN THE NORTH Texas Municipal Water District offices in Wylie. "Why do we have to do everything in a crisis mode?" he asks, his face reddening with frustration. "You'd think we'd learn that it's not a good way for a civilized group to progress." For Parks, an engineer himself, the no-brainer is spearheading a conservation effort to get as much water as possible in the most timely and efficient manner in a world of shrinking resources and expanding population. "We have a plan that meets our needs. If we don't implement the plan, all bets are off."

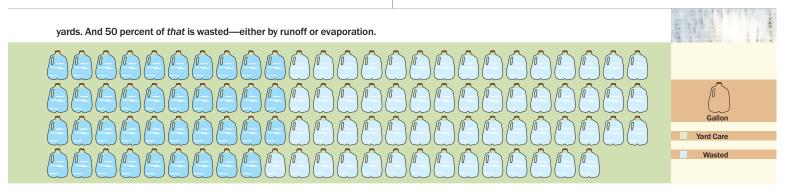
As usual, the devil is in the details.

The DALLAS plan to not only cover the projected shortfall of 1.9 million acre-feet/year but also produce a surplus to total 2.7 million acre feet/year by 2060 breaks down into four major components. The first takes account of water in current supplies, but that only would amount to about 30 percent of what's needed. The rest would come this way: 25 percent by increasing the output from the existing reservoirs; 25 percent from increased conservation and reuse; and another 20 percent from building the controversial new reservoirs. (See "From Whence the Water Might Flow.")

It's not all just Marvin Nichols. One idea is to run a pipeline to the huge Toledo Bend Reservoir at the Louisiana border. Another is—or was—building the so-called Lake Fastrill off the Neches River, below Lake Palestine. Fastrill is probably moot, though, following a June ruling by the U.S. Fish and Wildlife Service declaring the land around the proposed site a new wildlife refuge.

The heavily stressed North Texas Municipal Water District has two projects ready to go online in two years. One brings in water

see WATER on p. 169



## WATER continued from p. 75

from Lake Fork, via the Sabine River Authority, one of numerous water regulatory agencies that clutter any play. The showpiece, though, is the East Fork Reuse Project, still under construction. It would take water from the East Fork of the Trinity River, near Crandall, and pump it through a nearby 1,840-acre natural wetlands that will act as a filter. The water then would be pumped north to the top end of Lake Lavon. It will further settle and filter before being extracted almost a year later from the lower end of the lake, blended with waters from sources including Jim Chapman Lake and Lake Texoma, before final destination at municipal water treatment plants.

Many in NORTHEAST TEXAS actually favor the DALLAS plan, because it would also mean long-range water sources for their own towns and industries. In Clarksville, the city's only reservoir, Langford Lake, dropped so low earlier this year that now the town is building a \$400,000 back-up well. "People need the water," says Mayor Ann Rushing, who testified in favor of the DALLAS plan, as did officials from nearby Mt. Pleasant. "You can sympathize with the people losing their land, but we have to work together."

But in NORTHEAST TEXAS, the opponents are far more active. And they favor prioritizing other options, secondary in the DALLAS plan, such as raising the impoundment level of Wright Patman to catch more water, which would produce as much as 30 percent of the Marvin Nichols yield. They also say that the cost of the Toledo Bend pipeline is overstated and would be no more expensive than Marvin Nichols. Also suggested is bringing in more water from Lake Texoma, even though desalination would be required because of the lake's high sediment.

Mostly what they say is that none of these dams needs building if the people in Dallas would stop being so damnably profligate.

## The Righteous Purity of Conservation

STATE REP. LON BURHAM OF FORT WORTH, who ironically commutes to Dallas as director of the Dallas Peace Center, says "water hustlers" are behind the push for the DALLAS water plan, much as in the movie *Chinatown*, the story of high-level water scheming in Los Angeles. But his main argument is that people in Dallas and Fort Worth are

themselves morally adrift. "There's always going to be drought periods," Burham says. "But my opposition with the present 'planning process' is in the inattention to conservation, the assumption that our conservation pattern is okay. But the people in North Texas consume more water than any other people in the world." The biggest culprit: "We consume too much watering St. Augustine lawns."

The criticism has the emotional appeal of a sermon at a tent revival. Ward Timber president Bill Ward says it makes him angry

## **Top 10 Water Customers,** by volume, in Dallas

- 1. Texas Instruments
- 2. UT Southwestern Medical Center
- 3. Lincoln Properties
- 4. Pilgrim's Pride Corp.
- 5. Quaker Oats, Inc.
- 6. Veterans Administration
- 7. Coca-Cola Bottling
- 8. Camden Property Trust
- 9. Quality Sausage
- 10. CNC-SWAGAT 6 Limited Partnership

Source: Dallas Water Utilities

#### **Top 10 in Fort Worth**

- 1. Miller Brewing
- 2. Lockheed Martin Tactical
- 3. Alcon Laboratories
- 4. Fort Worth ISD
- 5. Naval Air Station Fort Worth JRB
- 6. Harris Methodist Hospital
- 7. American Airlines
- 8. Texas Christian University
- 9. Tarrant County
- 10. Fort Worth Zoological Association

Source: Tarrant County Regional Water District

"to take away our timberland so Dallas can fill its swimming pools and water its yards." He says the push now shifts the debate from conserving. "It's playing on people's fears. In the '50s, they almost ran out of water and got it straight out of the Red River. But it's not the same."

NORTHEAST TEXAS chair Jim Thompson, who spoke against the DALLAS plan at the state water board hearings last spring, says that "North Texas has failed miserably to come up with a strong conservation plan regarding drought conditions."

Seaby Love, who insists he has nothing against the people of Dallas, says it's not about hoarding or denying other people their fair share. "If they couldn't get water nowhere else, hell, I'd give 'em the land. But

they can get it somewhere else. That's the whole thing."

Austin-based activists also have weighed in. Dr. Norman Johns of the National Wildlife Federation told the state water board that DALLAS could conserve much more than planned, and that it was fudging some of its numbers by counting reuse (recycling) in with conservation. "A good start, but a long way to go," he said.

The Internet is filled with web sites opposing new reservoirs and pipelines. One of the most shrill is www.stopmarvinnichols.com, maintained by the Texas Committee on Natural Resources.

"They want a whole lot more water than even they show the demand for," says TCONR executive director Bezanson of the DALLAS plan. "Even if planning for a high population, they're still not putting any reasonable conservation in there." She says that the projected numbers for demand and supply are skewed and that the various public hearings have been little more than "smoke and mirrors."

Like many of the other opponents, Bezanson thinks that a 25-percent reduction in per capita use in the DALLAS region over the 50-year time frame would be possible. Achieving that, combined with more efficient reuse and connection with existent reservoirs would obviate the need for any new dams, she says. She also thinks the cost of the projects will eventually doom them. "You're spending money you have no demand for," she says. That's why, she says, the anger of those opposed to the plan "is not aimed at the people of Dallas. It is aimed at water developers using the process to promote reservoirs."

Nobody quarrels with the need to conserve. And nobody honest would dispute that North Texans have little sense of the worth of their water. But to be fair, Dallas is wrongly tagged as a water hog. The city's use of 198 gallons per capita daily (gpcd) is down from 260 gpcd in 1998. If residential is separated from commercial use, it's only about 100 gcpd, according to DWU estimates. Dallas thus compares increasingly favorably to San Antonio's 132 gcpd and El Paso's 140 both dramatically lowered in recent years, too. El Paso most dramatically lowered its usage after major public education initiatives from the city water utility and giveaways such as low-flow shower heads and toilets.

The three main suppliers here are launching new public water conservation education programs, and the North Texas Munic-

ipal Water District began running scare ads on television this summer trying to alert its member cities to reduce water use while they still have some to use. New building codes require low-flow home devices, and that's about all you can find in do-it-your-self hardware stores. At least some effort is being made to educate people that Bermuda grass or other types are less water-needy than St. Augustine.

On the other hand, none of the cities in this area has taken any truly decisive steps, such as sharp increases in rates for high-volume users or permanent, mandatory one-day-a-week watering. Nor are such environment-adaptive policies likely until councilmembers think they can stop pretending we live in a rain forest and still get reelected. No matter what the water suppliers decide, it's finally up to the politicians to pass the ordinances.

As for conservation, unquestionable as a goal, there is a fair argument to be made in favor of grass and trees in making urban life more decent. Those who waste water deserve fines and steep rates, but families who want grass in their yards, flowers in their gardens, and trees to provide shade (and oxygen) have no less claim to a way of life than do rural folks who also profess a love for nature. Or pulp mills that need rivers full enough to discharge at a level that can meet their state permitting agreements. Much can be overstated about the purity of the country and the defilements of the city. Much is overstated. And building dams is not the same as building coal-burning power plants or nuclear reactors or even shopping malls.

The question about whether Dallas should join Fort Worth and the burbs in building new dams and pipelines, versus just becoming better at not wasting water, is appealing, but it's not real. "Can you conserve your way to prosperity? I personally think the data indicate you can't," says DWU's Puckett. "Water is necessary to provide economic fuel." Even with optimal conservation, she says, the water needs of the area overtake the line that connects supply and demand. It's her job to carry the bucket of water to the city's residents, she says, so "the question for me is 'How am I going to fill that bucket?""

Fifty years ago, Dallas built reservoirs so it would not die of thirst. That 50 years is up. If prudent planning for the needs of all of Texans requires projects for the next half-century that please some, not others, then perhaps the greatest good for the greatest number must

come into play. But not the greatest good for all. "I'm not happy about property being condemned and flooding people's land," Puckett says. "But how do I have water long term? It's not for me. It's for grandkids. As a citizen of the state, I'd like water supply to be looked at holistically, instead of piecemeal."

## The Patience of T. Boone Pickens

In the Western-Themed Boardroom of BP Capital at Preston Center, in North Dallas, a wall-size monitor streams a video display of the world's markets. Pickens studies it periodically. Another wall in the room is less high-tech, mostly a clump of topographic maps showing water fields in the Panhandle. He studies them, too, and doesn't hesitate to have one taken down to help him to prove his point. Pickens is a legendary salesman, but in this case he seems to be almost obsessed with what he clearly believes to be a deal that no one could refuse. And yet, so far, they have. Pickens' Mesa Water is trying to sell water to San Antonio, too, and no luck there, either.

Part of the problem is that the idea of pumping water from a portion of the vast Ogallala Aquifer in Roberts County, in the Panhandle, and pipelining it some 328 miles to Dallas seemed crazy when Pickens thought it up in the late '90s—and in a way it still does.

But not if you look at the numbers. According to Freese and Nichols data, the Mesa plan ranks among the most expensive of all the options for DALLAS, at just more than \$2.50 per 1,000 gallons. The most expensive, desalinating water from the Gulf of Mexico, is figured at \$5.57 per 1,000 gallons. The least expensive are for some of the reuse plans, at less than \$1. Connecting to existing lakes Palestine and Lake Fork, around \$1 each. Marvin Nichols is pegged at about \$1.25, more or less the same estimate for bringing in water from Toledo Bend.

But Mesa doesn't agree with the Freese and Nichols numbers any more than do the folks in NORTHEAST TEXAS. According to Mesa attorney Robert Stillwell, Mesa's water would cost much less when you factor in its marketing edge: Texas water law distinguishes between ground and surface water.

Surface water basically means what comes from rivers and lakes; it is owned by the state. Groundwater, or what comes from wells and aquifers (think of it as "underground" water), is based on the rule of the pump, which says that an owner can extract as much as he can

pump. It's archaic, and recently subject to certain new regulations from increasingly active groundwater districts (separate from the regional water planning groups), but it's still the law of the land.

The Mesa argument is that its price is dramatically reduced because it sells groundwater outright. Any such water can be reused, or recycled, by a municipal customer, down to the last molecule. Surface water, in contrast, is subject to continuing permitting and other restrictions. It can and is reused, but Mesa says not as cost effectively, a point that the NORTHEAST TEXAS planners dispute. But Stillwell and Pickens say that because of reuse, Mesa's cost is "competitive" with any surface sources.

And there are other incentives. All the pumps, pipelines, right-of-way rights, and construction costs (about \$1.5 billion total) are on Mesa's dime. Dallas (or Tarrant or North Texas) simply buys the water it wants—probably about 400,000 acre-feet per year, according to Mesa's projections.

And it can be delivered here in five years, Pickens says, faster than any other plan on the table for new projects, in some cases by decades. But while Mesa is listed as a "feasible" option in the DALLAS plan, it is not recommended. Pickens thinks that's because water planners are addicted to reservoirs—
"They like lakes"—and can't conceive of getting water from anywhere else.

The quagmires and quandaries baffle him. And everyone else, too, except the relative handful of bureaucrats, specialized attorneys, engineers, and water masters who themselves have trouble keeping track of the angles, deals, and loopholes in pursuit of an ad hoc public policy.

Pickens says he doesn't oppose any of the other projects, from Marvin Nichols to Toledo Bend. And he favors conservation and reuse to help reduce demand. He just thinks the Mesa plan should be higher up in the mix. And he sees it like an oilman would. "I don't think you should cut off any water," he says. "Everything should be prospected."

So the question has to be asked: "You're a big player. Why can't you just talk some of these water districts into making a deal?"

He doesn't exactly shake his head and roll his blue eyes, but he might as well have. "It's frustrating," he says.

It is. But not nearly as much as it will be trying to explain to a dehydrated metropolis a generation from now why we didn't save the water when we still had it. **D**