In Dallas area, high water use can be tied to affluence



Brad Loper/Staff Photographer

Sprinklers water the lawn -- with spray also going into the street gutter -- in front of a house in the 4100 block of University Boulevard in University Park last week.

By MELISSA REPKO, Staff Writer, Dallas Morning News Published: 28 July 2012 11:15 PM

On hot summer mornings in Highland Park, landscaping trucks line residential streets. Lawnmowers hum. And sprinklers send water flowing across sidewalks, into gutters and down storm drains.

As Inge Grayson walks her schnauzer-poodle, Ernie, she passes yards still dewy from the morning's automatic sprinkler cycle. And she notes the waste.

"You want a nice lawn, like everybody else. That goes without saying," said Grayson, who recently cut her watering time in half. "I don't know if people are aware of conserving water and setting the sprinkler at a certain length."

In fact, on average, her neighbors use three times more water per person than residents in adjacent Dallas. Each resident in Highland Park used an average of 364 gallons per day in 2011. Dallas residents used an average of 110 gallons per day. (It's hard to measure water use per acreage, because most public works and water departments do not keep records of their customers' property sizes.)

Other affluent cities also top the list: Sunnyvale, Southlake and University Park. The biggest drain — no matter which city — is water for landscaping. And that will come at a steep cost in the future.

State experts say that in the next 50 years, North Texas will need an estimated \$21 billion of new reservoirs and infrastructure to sustain the region's water use as the climate gets hotter and the population grows.

Those projects will take political strong-arming, major fundraising and decades of construction to complete. In the meantime, the Texas Water Development Board says Texans will have to get serious about water conservation.

That won't be easy: Well-manicured lawns are deeply ingrained in suburban culture, along with white picket fences and Frisbee-fetching dogs.

"Bright, green lawns are classically seen as the way to go for a homeowner," said Thomas La Point, a professor of biological sciences at the University of North Texas. "Everybody loves a green lawn. It's been built into our psyche. And it will take time to change that."

La Point says that water has been undervalued as a resource and thus underpriced. He advocates low prices on water for basic use and significantly high rates for anything beyond that.

"People, even affluent people, are aware of what they're spending for their bills," he said. "And right now, it is so low-priced that people just ignore the price and say, 'l'll just water my lawn."

Many cities, including Highland Park, use tiered water rates that increase in price as usage goes up. But tiered rates aren't enough, said Bill Lindley, town manager for Highland Park. Much like rising gas prices, residents quickly become desensitized. "People are willing to pay the price," he said.

There are other obstacles, too. In Highland Park, most residents hire landscaping companies to maintain their yards. Some have accountants pay their water bills or spend the peak watering months of the summer at vacation homes.

La Point says it will take outreach and education to cause a cultural shift in which native plants and water-wise landscapes catch on. But until the water situation becomes dire, it will be hard to persuade people to take action.

Crisis mode

Some communities across the country have taken action. In Las Vegas, residents and decision makers took notice when Lake Mead, a primary water source, dropped more than 100 feet in 2003.

"Conservation loves a crisis," said Doug Bennett, conservation manager at Southern Nevada Water Authority.

Facing long-term drought conditions, the city took major steps to change its culture of water use. It passed strict outdoor water restrictions and handed out thousands of violation notices, Bennett said. New homes are limited to a maximum amount of grass turf.

"When we first started asking people to change the look of their landscaping, we had a lot of people who said, 'I'm kind of interested in that, but I'm not sure if my neighbors would like that,'" he said. "We got over that barrier."

Bennett and his staff use photos of beautiful, water-wise landscaping to counter fears of ugly yards. "When we say to people, 'We'd like you to get rid of your lawn,' all they can picture is rocks and dirt," he said.

Las Vegas also offers incentives, such as rebates for pool covers, efficient irrigation systems and conversion of turf to water-efficient landscaping.

In San Antonio, high residential water users help pay for conservation efforts, including a staff of 21 part-time water cops who hand out \$120 tickets for sprinkling and run-off violations, said Karen Guz, the city's director of water conservation.

The city also contacts top residential users and offers to make house calls to consult with their landscapers.

"The question becomes how to convince them that they can be happy with their landscape while also getting them to conserve water," Guz said.

In booming North Texas suburbs, nearly every home comes with a landscaped lawn and a sprinkler system.

"That's our biggest challenge in Frisco, teaching people they don't need to water as much as they think they do," said Gary Hartwell, the city's director of public works. Frisco offers free check-ups for residents' sprinkler systems, posts weekly watering recommendations online and uses block captains to spread awareness in neighborhoods.

Highland Park and University Park ask residents not to water during the hottest hours of the day, between 10 a.m. and 6 p.m., but allow them to water every day.

Dallas is one of the strictest North Texas cities, limiting residents to twice-a-week watering. Arlington and Fort Worth pledged to pass similar ordinances but have not followed through.

The biggest users

North Texans may be less sensitive to water concerns since the region was spared from the worst of the 2011 drought and has had more rainfall this summer, said state climatologist John Nielsen-Gammon.

"Conservation is a good thing to do and eventually it will be a necessary thing to do," he said. "We could potentially have another 10 or 20 years when there is plenty of rainfall and relatively few droughts, but eventually things will cycle back again."

In 2006, Highland Park and University Park stepped up conservation efforts when the level of Grapevine Lake, their water source, dropped. Both prohibited residents from using water for birdbaths or fountains. They banned sprinkling from 10 a.m. to 6 p.m. That July, Highland Park mailed letters urging conservation to its top 20 outdoor water users.

Letter recipients included Harlan Crow, who poured more than 1.8 million gallons of water on his 7.7-acre property in a single month. The late real estate magnate Trammell Crow, oilman Edwin Cox and Cowboys owner Jerry Jones also topped the list in July 2006.

Since then, average water use has risen and some residential water users have opted for confidentiality under a state measure. In Highland Park, all of the top 10 users for 2011 chose to remain anonymous.

The town's top user of residential water in 2011 used nearly 6.2 million gallons — with about 5 million of those going toward outdoor use. In University Park, the city did not release data for the anonymous top user, but the second one used more than 4.7 million gallons that year.

Businessman Tom Hicks, who has not opted for confidentiality, used more than double that — 12.3 million gallons — to top the Dallas list for 2011.

In a statement, Hicks said he is installing equipment to collect nonpotable well water for landscaping and has a drip irrigation system for trees and flower gardens.

"We fully understand the severity of the drought situation in North Texas and the need to address that situation through water conservation," he said in the statement. "We completely comply with city's Stage 1 water restrictions now in effect. Historically, we

have always paid a higher rate based on consumption and have implemented steps to conserve water and reduce our use of city water."

Making an effort

While targeting extreme users can make a point, they are only a small part of overall consumption. In affluent areas, nearly everyone contributes to high usage.

Water-conscious residents like Paula Leone, who lives in the Dallas neighborhood of Preston Hollow, are still in the minority.

For more than a decade, Leone has worked toward an efficient landscape. "I just respect the fact that water is a resource of society," she said.

Her backyard is shaded by trees and covered with native shrubs and plants. Her four dogs jog around the perimeter on a rock-lined path. A drip irrigation system maintains the yard's many hues of green.

Leone keeps the swimming pool from auto-refilling and runs its waterfall for only an hour each day.

She is encouraged that residents have become more aware of their water-thirsty landscapes through the city's twice-a-week watering ordinance. "The lawns have always been pristine, emerald-green," she said. "And now, they have some brown around the edges."

But she still cringes when she see neighborhood runoff and wishes others would cut back on their water use.

"It's disappointing," she said. "I thought Dallas would be a little bit farther along by now."

Staff writer Steve Thompson contributed to this report.

AT A GLANCE: Watering tips

One of Highland Park's favorite plants is the azalea, a fussy, water-thirsty flowering shrub that's a challenge for North Texas' clay soil. Short of swapping your azaleas for cactus and dirt, here are some ways to cut back on outdoor water use.

SURVEY YOUR LANDSCAPE with your lawn-care employees. See if there are water-conscious changes you could make, such as replacing large beds of planted flowers with smaller beds or native plants. Limit water-guzzling plants to areas where they have the most visual impact.

REVIEW YOUR WATER BILLS to see if your usage is going up or down. If your usage has increased, try to find out why.

CHECK YOUR SIDEWALKS, driveway and gutters for pools of water after your sprinkler system runs. If there is runoff, you or your landscaping company are overdoing it and should experiment with shorter sprinkling cycles.

HIRE A COMPANY to do sprinkler check-ups or do them yourself. Look for broken sprinkler heads or other defects that lead to water waste.

UPGRADE TO BETTER TECHNOLOGY. Consider a new sprinkler system, drip irrigation, adjustable sprinkler heads, underground irrigation like soaker hoses in planting beds or smart gauges that shut off sprinklers when it rains. Consider using rain barrels to reclaim water for secondary use.

MINIMIZE EVAPORATION. Mulch garden beds to keep soil moist. Cut back on use of birdbaths, fountains and waterfalls. Keep your swimming pool from auto-refilling, and consider lowering the pool's level until time for swimming. Cover the pool when it's not in used.

Top users in Dallas, Park Cities

Below are the top 10 water users in Dallas, University Park and Highland Park for 2011. The state allows water users to request anonymity, which cities apply in different ways. Dallas provides the resident's name but keeps the address and water usage confidential. The Park Cities redact the user's name and address but gives the amount of water used.

DALLAS						
Name	Street	In-house use	Yard	Total gallons		
Tom Hicks	Walnut Hill Lane	N/A	N/A	12,315,020		
Ross Perot	Confidential	N/A	N/A	Confidential		
David Weinreb	Confidential	N/A	N/A	Confidential		
Steve Aaron	Meadowbrook Drive	N/A	N/A	8,044,750		

Name	Street		In-house use		Yard		Total gallons	
HIGHLAND PAI	RK							
Kenny Troutt		Strait	Lane	N	/A	N	/A	5,367,887
Dan Patterson		Wend	dover Road	N	/A	N	/A	5,369,072
Vinay Jain		Inwo	od Road	N	/A	N	/A	5,411,702
Harold Simmons		Deloa	ache Avenue	N	/A	N	/A	5,878,003
Nona Barrett		Meac	lowbrook Drive	N	/A	N	/A	6,563,964
Audrey Spangenberg		Inwo	od Road	N	/A	N	/Α	6,904,084

Name	Street	In-house use	Yard	Total gallons
Redacted	Redacted	1,219,000	4,967,000	6,186,000
Redacted	Redacted	321,000	5,040,000	5,361,000
Redacted	Redacted	452,000	4,096,000	4,548,000
Redacted	Redacted	2,046,000	1,253,000	3,299,000
Redacted	Redacted	1,862,000	925,000	2,787,000
Redacted	Redacted	335,000	2,315,000	2,650,000
Redacted	Redacted	252,000	2,334,000	2,586,000
Redacted	Redacted	240,000	2,188,000	2,458,000
Redacted	Redacted	92,000	2,215,000	2,307,000
Redacted	Redacted	140,000	2,059,000	2,199,000

UNIVERSITY PARK

Name	Street	In-house use	Yard	Total gallons
Redacted	Redacted	1,953,500	3,984,400	5,937,900

John Tolleson	Hunters Glen Road	164,000	4,596,800	4,760,800
Suzanne McGee	Vassar Avenue	596,000	3,395,900	3,991,900
Terry Worrell	Vassar Avenue	135,700	3,590,900	3,726,600
Mary Clare Finney	Hunters Glen Road	343,100	3,088,200	3,431,300
Nancy Marcus	Turtle Creek Boulevard	221,600	2,769,700	2,991,300
Redacted	Redacted	181,600	2,677,500	2,859,100
Redacted	Redacted	157,700	2,650,500	2,808,200
Richard Bass	Vassar Avenue	153,400	2,577,300	2,730,700
Redacted	Redacted	212,800	2,320,000	2,532,800

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