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L.A. is sprinkling less, but gushing more

Some experts look to Los Angeles' new water rationing system as a possible culprit behind the surge in bursting pipes.

By Jessica Garrison

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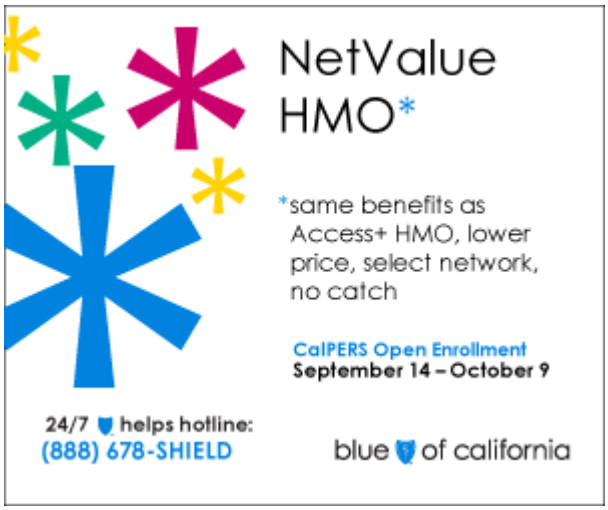
L.A. officials revealed Friday a significant increase in the number of damaging water main breaks so far this month and said they are investigating whether the city's new water rationing system could be a factor in the pipe bursts.



The Department of Water and Power, since Sept. 1, has recorded 34 "major blowouts" in L.A.'s water system in which streets have flooded and pavement has buckled -- in some cases damaging homes and businesses. By contrast, the city had only 21 such ruptures in all of September 2008, 17 in September 2007 and 13 in September 2006.

City engineers are trying to determine what's causing the water main bursts and have been taking soil samples, sending pipe pieces to labs for testing and performing a statistical analysis on each break.

But some experts said a prime suspect should be the city's recent decision to allow sprinklers to run only on Mondays and Thursdays.

They say that if more water flows through the system on those two days when people water their lawns and then pressure suddenly changes on other days, it could put added stress on already aging pipes.

"As Sherlock Holmes used to say, when you eliminate everything, whatever is left is the reason. . . . If the pipe wasn't bad, and it [wasn't seismic activity] and it wasn't a funky contractor, well, what you've changed is this twice-a-week surge flow because of watering restrictions," said Richard Little, director of the Keston Institute for Public Finance and Infrastructure Policy at USC.

Jean-Pierre Bardet, chairman of USC's civil engineering department, who began informally consulting with DWP officials Thursday, concurred that water rationing should be thoroughly investigated, noting that the system's age makes it susceptible to problems.

DWP officials said they are looking into the rationing, among numerous other causes. The rationing began in June, shortly before they noticed an uptick in major blowouts. There were 24 blowouts in July and 31 in August, increases from the same months last year.

Jim McDaniel, head of city water operations, refused to speculate on the cause, saying the inquiry is not complete.

Engineers also stressed that the city's 7,200 miles of pipe aren't actually leaking more than usual -- in fact, the number of leaks, about 1,400 a year, is down from the past and represents a lower rate per mile of pipe than in other cities. The problem is with bigger, more destructive leaks that send water shooting through streets.

"We have more breaks which actually have created major destruction," Bardet said.

The problem came to the DWP's attention Sept. 5, after a 5-foot-wide trunk line underneath Coldwater Canyon Avenue in Studio City exploded, sending a 10-foot gusher of water and mud into the air.

Homes and businesses were flooded, and the street, a major thoroughfare connecting the San Fernando Valley and the Westside, was closed for a week. That pipe was 95 years old, and officials suspected that age may have been a factor in its failure.

Less than 72 hours later, another, newer main burst in Valley Village, creating a sinkhole that swallowed half the firetruck that responded to the call about flooding. Firefighters crawled out the window and escaped to safety.

As officials analyzed those problems, they realized they had been seeing an increase in "major blowouts."

In the following days, there was at least one and often two or three major breaks, snarling traffic, flooding streets and attracting media attention. On Thursday, a break temporarily closed Topanga Canyon Boulevard in Canoga Park. On Friday afternoon, a blowout was reported in Silver Lake.

At first, officials believed one culprit was the age of the system. The DWP has a $1.3-billion program to replace old pipe, funded by a water rate increase of about $2 per customer that the council authorized last year.

But as the blowouts continued, department officials began reaching out for help, sending data to universities and other experts.

Officials said it remains possible that the blowouts are a statistical anomaly. But experts like Little are somewhat more skeptical. He said the timing of the blowouts -- coming soon after the city imposed a major change in water usage with the restrictions -- is highly curious. This marks the first time the city has restricted water use to two days a week.

"To me that is an 'aha' moment," he said.

Little doubts that seismic activity is to blame and said that if he were investigating, he would study the way the shifting pressure from the rationing is hitting the water mains.

But his USC colleague Bardet raised a question investigators will have to answer: If rationing is to blame, wouldn't other cities like Long Beach with similar programs be seeing a surge in blowouts?

Some City Council members said the DWP needs to figure it out -- fast.

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Times staff writer Rich Connell contributed to this report.

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