

Point of View:

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Let price signals flow to water bills

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RALEIGH - This summer's unrelenting heat and drought remind us that water is a scarce and valuable resource. As with all of our resources, we must make difficult choices concerning how best to allocate water across competing uses.

Given our recent experience, most Raleigh residents and public officials would agree that our current allocation mechanisms -- watering restrictions, frequent exhortations by public officials to conserve and low per-unit prices -- are not working. Water use remains strong as our reserves decline, and although much water is used for essential tasks, significant quantities apparently go to non-essential, relatively low-value uses such as lawn watering.

Unfortunately, officials have proposed additional policies that are more of the same -- more stringent watering restrictions, more calls for conservation and more low prices (although Raleigh Mayor Charles Meeker this week did indicate a willingness to make some changes)

In all likelihood, continuing on the same course will produce more of the same disappointing results.

A fundamentally different approach to water rationing is necessary.

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When deciding how to allocate scarce resources, many economists advocate market-based approaches. The reason is simple -- with markets, prices adjust to allocate resources to their most productive uses. Such allocations generate the greatest good for the greatest number.

In the context of our current water shortage, a market-based solution would involve raising the per-unit price of water above its current level. Higher water prices would signal water's scarcity and give consumers strong financial incentives to conserve, just as higher prices at the pump encourage people to reduce gasoline consumption.

Moreover, those individuals who value water the most can obtain it, albeit at a higher price. As circumstances evolve, water prices can be adjusted to maintain supplies at sustainable levels.

Market-based approaches to water rationing have been around for decades, but skepticism among public officials persists. Their reasons include:

1) CONSUMERS ARE NOT RESPONSIVE TO WATER PRICES.

Some consumers are no doubt insensitive to price. Many renters, for example, have their water bills rolled into their rents and therefore face no additional cost when turning on the tap. Homeowners too may simply ignore their water usage when it represents such a small share of their total expenses.

However, several economic studies suggest that consumers are price-sensitive on average. In particular, the best available estimates suggest that a doubling of water prices reduces aggregate water consumption by about one-third. And the behavioral response may be more pronounced if more consumers begin to bear the full cost of their water consumption, or are motivated to pay attention by higher prices.

2) HIGHER PRICES WOULD GENERATE EXCESSIVE PROFITS FOR WATER SUPPLIERS.

Most water suppliers (including Raleigh's) are publicly owned, and due to political or legal constraints

can only recover their costs plus a modest profit. If higher uniform water prices were implemented, suppliers could earn substantial profits. But a non-uniform pricing schedule, where households purchase their initial units at low rates and additional units at progressively higher rates, would still give consumers strong incentives to conserve while preventing water suppliers from reaping excessive profits.

Such "block-rate" pricing schedules are increasingly common, with Cary, Chapel Hill and Carrboro residents, and over one third of U.S. urban dwellers, now facing them.

3) THE POOR WOULD BE DISPROPORTIONATELY HURT BY higher water prices.

Such equity considerations are no doubt real, but they can be alleviated in part through block-rate pricing. Because low-income households generally consume less water (many do not water lawns or fill pools), a block-rate schedule could be structured so that water bills for the poor remain unchanged or even fall. Means-tested rebates are another policy option.

The combination of record heat, drought and water scarcity has made this summer difficult to endure for many Raleigh residents. As we approach fall's cooler (and hopefully rainier) weather, let us take the opportunity to reconsider our current approach to water rationing. By adopting a market-based approach, we can avoid the shortages and restrictions we currently experience.

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