Conservation key to accommodating growth

By JOHN JACOB
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It is as hot and dry as it has ever been in the Houston region. Mandatory water conservation is already in place in most areas. But our current situation is far from the worst it has ever been, and we have an additional 4 million people forecast to join us in the next three to four decades. How can we possibly accommodate that many more people and still have enough water to support this region?

Our state-mandated Region H water-planning group reckons we have more than enough water to accommodate our expected growth, and they base that very conservatively on the amount of water available during the much more severe extended "drought of record" that occurred during the mid-1950s. The idea is to never plan for any more growth or water usage than could be supported by the amount of water available during that period, about 20 percent of the average annual river flows. With that kind of conservative buffer, there should be nothing to worry about, right?

There are actually a couple of reasons we should worry. First is that the drought of record is based on a limited record of less than 200 years. We really don't know that the 1950s drought is the worst that nature can throw at us. And we certainly don't know what climate change might throw at us. Perhaps the only thing we can be certain of is increasing uncertainty in terms of reliable water supplies in the future.

A much bigger issue in terms of future water use is the need for freshwater inflow into Galveston Bay. Many area scientists do not believe that the Region H forecasts properly take into account just how much freshwater Galveston Bay needs. This is an unsettled question for the moment, and is sure to be one of the major environment battlegrounds of the coming decades.

But why not plan for the bay's health as conservatively as we plan for future growth? After all, isn't a healthy Galveston Bay essential to who we are? Commercial and recreational fishing provide at least $3 billion annually to our economy. That's just what we can measure. There are also intangible values like natural beauty that we want to be here for our children.

The Region H planning numbers assume that at best we can achieve only a paltry conservation rate of 6 percent. Six percent is within the margin of error of the entire Region H forecast. We can do so much better than this.

One half of our municipal water supply is used to water lawns. One half! This is the low hanging fruit of conservation. Even a moderate attempt at conservation here could provide 10 percent to 15 percent in water savings. We know what to do: mow high, water only when grass starts to wilt, add plenty of

compost, etc. We could also convert many of our landscapes to water-conserving and beautiful native and adapted plants. Managing landscapes for water conservation will have the additional benefit of reducing if not eliminating the need for pesticides and fertilizers. Polluted runoff from lawns is a major contributor to our degraded urban waterways.

In addition, there is an important urbanizing trend that has a lot to do with how much water we use. Many more people now want to move into "walkable" communities - places where everything from the dry cleaners to the local café are within walking distance. Houses in these communities have very little or no lawn at all. For that reason alone we should consider encouraging or incentivizing this kind of urban pattern as a primary matter of water-supply policy.

What is needed is known, but not everyone knows it. Significant conservation will require a significant investment. About $13 billion will be needed to put all the infrastructure into place required to supply the water needed for future populations, according to Region H. Two to 3 percent of that amount invested in conservation could fund an army of conservation-extension agents with several million dollars left over for advertising. I suggest that investment would have a much better return on investment than pipes and dams. A conservation corps could be built on the land grant model of university extension that had a lasting influence in transforming American agriculture 100 years ago. A conservation corps of this magnitude would cost less than the proposed Allen's Creek reservoir, and would provide more in water savings than what the reservoir would hold.

Such a conservation effort, including not only landscaping but also all facets of water conservation, could yield major water savings. Think of the success of the Don't Mess with Texas advertising campaign. That campaign yields savings annually in trash pickup that far exceed the cost of the advertising. Why can't we do that with water? Add to that a comprehensive education and demonstration program, along with a proper conservation-rate structure (pay much more per gallon if you are a quantity user), and we could easily achieve 20 percent to 40 percent water savings.

We can build a city that can accommodate an additional 4 million people. With a little imagination and foresight we can do that and ensure enough water for a healthy Galveston Bay. We are fully prepared to spend the $13 billion needed for water infrastructure to support the 4 million more people. Can we spend $400 million over the next 20 years for the bay? Our future and that of the bay depend on it. Now more than ever.

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