

A solution to many of our woes

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The Hampton Roads Sanitation District wants to save the Chesapeake Bay — and a lot more, if that's not enough.

An idea floated by HRSD to recharge aquifers with treated water is new locally, but it is a known and reliable technology. For Hampton Roads, it is a salve for intractable problems including the quality of the Chesapeake Bay; the lack of a sufficient and safe water inventory; land subsidence; flooding; economic stagnation; and failing infrastructure.

Instead of continuing to pump millions of gallons a day of treated water into the bay, HRSD Director Ted Henifin has proposed storing the water by redirecting it into our aquifer for later use. The water is cleaned and treated, so before we become troubled by the idea of drinking recirculated water, consider that the storage of treated water in our aquifer protects the supply from greater threats than

tainted imaginations.

Our perception is that our water comes to us in a relatively pure form in need of only minor treatment before consumption. The truth is more complex for our primary source of water.

The system of lakes and rivers from which we draw most of our water is compromised by pollution. Cities routinely spend millions drawing, testing and treating water for potential and actual pollution. Recently, we were forced to monitor our supply following the spill of tainted pond water from a retired coal-fired electric power facility along the Dan River. What is our back-up plan for future threats?

Recharging the aquifer is a hedge against a human failure or natural disaster — including those of a political nature. Recall that since the early 1980s, Virginia has maintained a moratorium on uranium mining.

But each time a new admin-

istration arrives in Richmond, uranium interests renew their effort to unearth this potential fortune. The cities of South Hampton Roads have consistently opposed the uranium interests because of the potential for radiation to find its way to Lake Gaston in the event of an engineering failure, weather or natural disaster.

Economic growth and financial savings should get everyone's attention. At this moment, the cost to construct the proposed seven recharging stations is estimated by HRSD to be \$1 billion.

So where is the savings?

Consider this: Several pending and costly federal mandates could be avoided or delayed by HRSD's project. For instance, HRSD is under a federal order to spend \$3.5 billion to beef up its network of pipes to reduce infiltration of stormwater into the wastewater system during unusually large storms.

This is an important upgrade of its infrastructure. However, infiltration is a relatively rare event and can wait. We currently pump into the bay millions of gallons of water which if redirected to the aquifer could slow or stop

land subsidence, which could, in turn, reduce flooding and combat rising sea levels, a problem for which there are few effective tools.

Our region is under a mandate to comply with a pollution diet for the bay, otherwise called the total maximum daily load. This mandate may cost billions of dollars and limit growth with increased demand for stormwater treatment to reduce nitrogen, phosphorous and sediment. HRSD's project is part of an integrated water plan to reduce costly treatment efforts or eliminate them for some locations.

On the Peninsula, cities have drawn down aquifer levels to historic lows.

This has caused the state Department of Environmental Quality to restrict and cut back groundwater permits for 14 large water users.

Localities and businesses have seen their groundwater permits dramatically restricted. When a city or business water supply is restricted, so is the potential for economic growth.

HRSD's plan to recharge the aquifer may ultimately make the permitting process less restrictive and allow significant future residential and indus-

trial growth. Finally, the experts of HRSD are ready to move. They are seeking the buy-in of the member cities, the DEQ and the EPA.

Last year the legislature created the Eastern Virginia Groundwater Management Advisory Committee to develop a strategy for affected areas. This committee is comprised of local stakeholders and officials.

While their report is not due until Aug. 1, 2017, my review of their minutes suggests the HRSD project is receiving serious consideration.

We don't have time to waste. The seas are rising and the land is sinking.

Homeowners are paying high stormwater fees and high insurance premiums while not getting a solution from the state. HRSD has proposed an answer — if only a start — to a long-term problem. Grab onto this line and hang on — as always, our future and the bay are in the same boat.

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