

18  
million  
fewer pounds of pollutants in Chesapeake Bay

## Plan to halt sewage discharges could do much to clean the bay, but poses a quandary

### reduction in pollutants

A proposal by the Hampton Roads Sanitation District to curb treated water discharge at seven of its plants would mean 18 million pounds a year less of nitrogen, phosphorus and sediment going into the Chesapeake Bay.

### potential issues

While advocates generally support the proposal, some also worry that HRSD's success could take too much pressure off the region's cities and counties to clean up their own acts when it comes to the bay.

By Dave Mayfield  
The Virginian-Pilot

**N**EVER in the history of the Chesapeake Bay cleanup has one project promised to cut pollution by so much.

If the Hampton Roads Sanitation District all but stops discharging treated waste from seven of its plants, as it proposes, that'd mean 18 million pounds a year less of nitrogen, phosphorus and sediment going into the bay.

"How can it be a bad thing to get rid of these nutrients and sediment every year going forward?" said Peggy Sanner, who oversees legal matters in Virginia for the nonprofit Chesapeake Bay Foundation. "It's a hugely important benefit, assuming all the things work out."

But Sanner is among environmental leaders who have been scrutinizing the finer print of the HRSD proposal called SWIFT – Sustainable Water Initiative for Tomorrow. While still lavishing praise overall, she and others are tempering it with some caveats of concern.

Mostly, bay advocates are worried that HRSD's success could take too much pressure off the region's cities and counties to clean up their own acts when it comes to the bay.

The localities are facing a series of deadlines over the next decade and a half to significantly cut pollution-carrying runoff from

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## In a wardrobe not so far, far away ...

**VIRGINIA'S GARRISON** of dedicated "Star Wars" costumers brings the series' Dark Side to life.



STEVE EARLEY | THE VIRGINIAN-PILOT

By Teri Winslow  
The Virginian-Pilot

**S**HE HAS "Star Wars" dinnerware, license plates, Christmas ornaments, costumes, action figures, posters and movie paraphernalia.

She dresses as bounty hunter Aurra Sing, complete with a 6-foot-long rifle, 6-inch-long finger ex-

tensions, white makeup and a shock of bright red hair.

She drives a special Jeep decked out in honor of the sci-fi franchise and has a poster of Han Solo trapped in carbonite on her refrigerator.

But as of a few days ago, Debra Fowlkes still hadn't seen "Rogue One: A Star Wars Story."

"I had to work," she told friends who went to the

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**Debra Fowlkes, 45, dresses as bounty hunter Aurra Sing from "Star Wars." She's one of nearly 200 members of Garrison Tyranus, a Virginia branch of a worldwide organization of costumers.**



# WASTE | *Stormwater runoff still an issue, advocates say*

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streets and parking lots. If HRSD's project works out as planned, the wastewater agency will earn a massive amount of pollution credits – so many that it plans to give the localities whatever they need to take care of their own bay cleanup obligations.

That's a potential windfall that the cities and counties never saw coming, and they're eager to capitalize on it.

A study done five years ago for the Hampton Roads Planning District Commission estimated the region's localities could face spending a combined \$2 billion to retrofit their stormwater management systems in order to comply with a stricter "pollution diet" prescribed under the bay cleanup.

Virginia Beach, the region's most populous city, would be hit with the biggest slice: Its current cost estimate is \$335 million.

Under the SWIFT project, HRSD would treat effluent to drinking-water standards, then inject it underground into the Potomac aquifer. HRSD projects the cost at \$2 billion, to be passed on in the form of higher bills to its ratepayers. It plans to phase in the project over a decade ending in 2030.

Computer models have predicted that HRSD's replenishment of the aquifer, which is rapidly being depleted by groundwater users, would slow or even reverse subsidence across much of the coastal plain. Scientists say the sinking of the land is largely caused by the aquifer's drawdown and has accounted for roughly half of Hampton Roads' relative sea level rise over the past half-century.

There's even more sureness about the potential benefit from HRSD's project to the Elizabeth, James and York rivers, where the discharge of treated, but still polluted, wastewater would all but end.

"Certainly, there would be significant water-quality benefits to the habitat, to critters and so forth," Sanner said during a recent conference organized by the Virginia Coastal Policy Center, part of the College of William & Mary Law School.

With less nitrogen and phosphorus going into the bay, dead-zone-creating algal blooms would diminish.

But Sanner said improvements to stormwater management systems also have the potential to be "meaningful," among the last major steps in the comprehensive, multiyear plan to clean up the bay.

Stormwater pollution has been increasing along with development across the bay watershed, in glaring contrast to some other pollution categories where significant progress has been made. And one of the advantages in focusing on runoff is the potential to touch many creeks and smaller rivers, Sanner said. HRSD's project, on the other hand, would cut pollution along the "main stem" rivers.

Sanner said she hopes that state regulators consider the "entirely unprecedented" impact of HRSD's

proposal and tell the localities, "you can use these credits to meet some of your obligation, but you have to keep working on stormwater."

Whitney Katchmark, who oversees water resources issues for the planning district commission, called the credits a "good news, great opportunity development" for the localities. Utilizing them, she said, would save taxpayers a significant amount of money.

Even with the credits, Katchmark said, the region's cities and counties wouldn't completely end programs to better control runoff. She said they'd just pursue them more selectively. Among other reasons for such projects are to reduce bacterial pollution that causes closures of beaches and shellfish harvest areas or to address nuisance flooding and sea level rise.

"This just would give them a little more latitude" to assess the most cost-effective ways to manage stormwater, Katchmark said. "It's still such an emerging science, and there are not a lot of sure things."

She pointed to state grant documents showing it can easily cost tens of thousands of dollars per pound of phosphorus removed to build a retention pond or to plant marsh grasses – among the practices used to hold back or absorb nutrient runoff.

HRSD and planning district officials have estimated that even after localities used the credits freed by the SWIFT project to meet their own obligations, there still could be credits for more than 3 million pounds a year of nitrogen and phosphorus pollution available along the rivers of the lower bay.

That has raised the question of what would become of those credits. Could they be offered to the Navy, VDOT, Old Dominion University and dozens of other public and private entities that also have pollution diets under the bay cleanup? Could the credits be used to entice new industrial employers whose pollution could then be accommodated within the cleanup program?

Ted Henifin, HRSD's general manager, said both are possibilities. He said HRSD already has had "cursory" discussions with the Navy and VDOT about the credits.

It's also possible state lawmakers or regulators might seek to re-engineer how the credits could be used, he said.

Currently, guidelines for the state's decade-old nutrient credit trading system call for the credits to be sold or given away in the same watershed – what's earned by polluters that reduce discharges in the York stays in the York, for example. But from time to time, some legislators have expressed interest in allowing credits generated in one watershed to be swapped into another.

The scope of HRSD's project has opened up all kinds of questions, Henifin said: "In many ways, we're in uncharted territory."

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