

Memo / Correction:

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Headline:GEORGIA'S WATER CRISIS: DeKalb explores tapping sewage for reuse at faucet

Subhead:

Reporter:TY TAGAMI

Body Text: It has come to this: DeKalb County residents may have to drink their own sewage.

Sure, it would be purified like the drinking water the county now provides, but the thought remains --- it might travel through someone's toilet before it gets to your faucet.

As the record drought continues, officials across metro Atlanta are looking for more water sources. One possibility in DeKalb is a sewage re-use plant on the South River. It would treat effluent the county dumps there, and inject it into the drinking water system.

Sewage re-use has occurred for years in parched places. Treated wastewater usually gets used for agriculture, industry and other non-potable purposes, but some communities use it indirectly for drinking water.

Orange County, Calif., for instance, has poured treated wastewater into the aquifers that supply its water since the 1970s, and recently expanded capacity, opening one of the world's largest re-use plants.

DeKalb officials say they will explore a variety of options, even direct potable re-use, which critics derisively refer to as "toilet to tap."

"We can treat the water to drinking water quality and put it straight into the water pipes," said Francis Kung'u, who runs DeKalb's water system.

He said DeKalb needs more water to accommodate projected growth, but acknowledged one potential problem.

"People don't like the idea of drinking water that's gone through the sewers," said Kung'u, the director of DeKalb's watershed management department.

He will ask the County Commission to pay for a feasibility study this month, and said a re-use plant could be operational in five years.

Commissioner Jeff Rader, a city planner, said re-use makes sense. After all, the county's current water source, the Chattahoochee, is filled with discharge from upstream communities.

"We already informally recycle wastewater into drinking water," Rader said. "It's not as though any of the water we are using is pristine."

Conservationist Sally Bethea said there is an advantage in drawing water from the Chattahoochee. Though it contains upstream sewage, a lot of the water is fresh from Lake Lanier.

The mix dilutes pollutants present in effluent, including pharmaceuticals that are difficult to filter.

But Bethea, who is executive director of the Upper Chattahoochee Riverkeeper, said re-use makes a lot of sense.

She also likes another idea DeKalb is contemplating. The county may try to increase its allotment from the Chattahoochee by increasing the amount of used water it sends back to the river.

One major problem for DeKalb and other metro Atlanta communities is that they do not return all the water to the same river where they got it.

DeKalb pulls its water from an intake in the Chattahoochee in Sandy Springs, which is in the Chattahoochee drainage basin. More than half that water is pumped over ridges to residents in the southern part of DeKalb. They live in the neighboring Ocmulgee basin.

Rather than spend money pumping the wastewater back to the Chattahoochee, DeKalb relies on a cost-free force to move it: gravity. The sewage is allowed to flow downhill, deeper into the Ocmulgee basin. It is treated and released into the South River, which flows east toward the Atlantic Ocean.

The Chattahoochee, on the other hand, heads to Florida and the Gulf of Mexico. Atlanta must maintain flows in that direction to serve downstream users.

DeKalb will explore pumping its wastewater back to the Chattahoochee, though Kung'u said that likely will prove too expensive.

A third option, removing salt from seawater and piping it here, would cost even more.

"All the options we are looking at are very expensive," Kung'u said. "But the most attractive to me is the re-use option."

The county already has begun stretching its water supply in the cheapest way, by using less. DeKalb recently instituted a rebate program that encourages homeowners to replace wasteful, older toilets.

Kung'u estimates, however, that the \$500,000 pool of rebate money would at most subsidize enough toilets to save 133 million gallons a year --- less than 1 percent of DeKalb's annual water use.

County commissioners are expected to vote today on a companion measure. It would require people who buy older buildings to install newer, water-saving toilets and fixtures.

That initially would save about the same amount of water as the rebate program, though the savings would grow over the years as more old buildings are sold and retrofitted.

Vernon Jones, the county chief executive officer, proposed both measures. He also has said the county must do more to ensure it has enough water in the future. He cited re-use as one possibility.

Caption:

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