

Water from the purple pipe

ReWa plans to reuse sewage water

By Charles Sowell
Staff Writer

Renewable Water Resources' plans to sell treated sewage as "purple pipe" water for use in irrigation and a variety of industrial purposes has been greeted with mixed feelings along the Reedy River.

Lines carrying the non-potable water are colored purple to make it clear the water is not for drinking. A demonstration project is underway at ReWa headquarters where lavender sprinkler heads dot the landscaping.

The devil is in the details, which are sparse, on just what uses the water will be put to and on what diverting so much of the flow of the Reedy River will be. In drought times as much as 75 percent of the river's volume is made up of ReWa discharge, said Dave Hargett, an expert on water quality issues.

John V. Boyette Jr., chairman of the ReWa board, said there will be no net loss of water in the Reedy basin since the wastewater will replace potable water, or water drawn directly from the river, now being used for the same purposes.

"How much impact this might have will depend of a lot of factors," said Jeff Beecham, executive director of the Conestee Foundation, which operates a nature preserve just downstream of ReWa's Mauldin Road facility. "We could see less water flowing over the dam here at Conestee which could have negative impacts on wetlands and reduce the dilution of pollutants."

How much water actually makes it back into the river after diversion will vary, Beecham said, but factors like evaporation and industrial uses like cement making make it unlikely all of it would return to the

riverbed.

Beecham is an adjunct professor of biology at Clemson with extensive experience as an environmental consultant as well as Conestee director.

There would be impacts, too, on things like recreational use of the river, he said. Currently plans are underway to use the Reedy as a canoeing trail from Greenville to the soon to be opened Cedar Falls Park in Southern Greenville County.

Purple pipe water is an idea long in use in other parts of the country. In Georgia purple pipe is used for watering golf courses in drought plagued Atlanta. On Hilton Head treated wastewater is used to help preserve the aquifer which has been much degraded by salt water intrusion.

Ray Orvin, executive director of ReWa, said purple pipe is part of the agency's overall Upstate Roundtable, a 20-year plan charting the agency's future which was issued in May of this year.

The roundtable plan also charts a variety of green initiatives by ReWa like capturing methane gas, a byproduct of sewage treatment and using it to generate power, or for sale to industrial users. A number of ReWa vehicles already use alternative fuels.

The methane initiative, and plans to buy and sell electricity wholesale, would require legislative action to amend ReWa's charter, which dates from 1929, Orvin said.

Sale of treated wastewater as purple pipe water is already covered under ReWa's federal (NPDES) permit to discharge wastewater, Orvin said.

Gene McCall, a Greenville attorney who specializes in water issues said a federal NPDES permit is a license to discharge wastewater that has been treated to a certain standard back into the environment, not a

right to sell water.

The issue of wastewater sales were part of the reason the state Public Service Commission rejected a license for Cogentrix, of Charlotte, to build a merchant power plant in southern Greenville County in 2002. There were fears about the impacts of flashing so much of the Reedy's flow to steam in power generation.

Tom Keith, executive director of the Friends of the Reedy River, said the ReWa purple pipe plan looks like a good thing.

"I've seen it used in Florida with good results," he said. "But Florida is a very different kind of place. Most of the drinking water there is drawn from an aquifer."

There is no real aquifer underlying the Upstate, said Beecham. "This is a very different place than the coast, or even over in Atlanta."

Brad Wyche, executive director of Upstate Forever, was part of Roundtable discussion that came up with the purple pipe plan.

He said there are issues unique to the Upstate that must be taken into consideration before the purple pipe plan goes forward beyond a demonstration project.

The difference between the Upstate and other parts of the country is a thing that Orvin acknowledges when talking about ReWa's 20-year plan.

"Every sewage system is different and their sources of revenue are, too," he said. "We've hoped to position ourselves to be greener and more efficient with this plan. It's important to remember that this is a long-range plan. These things are not going to happen overnight."

Contact Charles Sowell at 679-1208
or csowell@greenvillejournal.com.

"We've hoped to position ourselves to be greener and more efficient with this plan. It's important to remember that this is a long-range plan."

**RAY ORVIN, REWA
EXECUTIVE DIRECTOR**