

Water authority celebrates completed upgrades and environmental dividends  
written by Newspark Team | July 10, 2012

The mood was celebratory as local officials gathered to witness the dedication ceremony for the newly improved Moores Creek Wastewater Treatment Plant.

The facility treats wastewater for all of the city of Charlottesville and for Albemarle County's urban areas, including Crozet. The event marked the Rivanna Water & Sewer Authority's completion of the first major improvement there since the mid 1980s.

"Today we're celebrating the completion of the \$48 million Capital Improvement Project that lives and breathes our environmental policy of cleaner rivers, a cleaner Chesapeake Bay and a smaller carbon footprint," said RWSA chairman Mike Gaffney at the beginning of the ribbon cutting ceremony.

The project brought improvements to almost all of the existing facilities, including modernizing aeration systems to improve the wastewater processing efficiency, as well as adding covers to existing structures to minimize the plant's odor. In addition to the refurbishments, the plant received several new structures and increased the plant's peak flow capabilities to almost 38 million gallons a day.

The additions and refurbishments will have an overall positive impact on the environment, and will assist in improving the health of the Chesapeake Bay. Key among the goals is the reduction of phosphorous and nitrogen, which contribute to algal blooms and can be disastrous to wildlife.

"A lot of times you hear that we have failed on the Chesapeake Bay cleanup," said David Paylor, director of the Virginia Department of Environmental Quality. "We have already accomplished 60 percent of the nitrogen removal that is our goal and 70 percent of the phosphorous. We've made a lot of progress; we've got some more to do."

Although Paylor was optimistic about the work completed, he warned against complacency in the face of success.

"The challenge is ... that last little bit is the part that is the most expensive, sometimes, and most challenging," he said, referring to the improvements that could still be done. "The trick is not to rest on our laurels, but to continue to move on these agricultural areas and urban storm water areas to find cost-effective ways to get where we need to be by 2025."

The plant will even generate some of its own electricity. Generators that utilize the methane biogas and recovered heat waste will be used to make it partially self-sufficient.

"The [new] co-generator is capable of producing up to 600 kilowatts of electricity and is presently reducing the total power requirements for the treatment of the facility by 20 percent," explained Albemarle County Service Authority vice chair Liz Palmer.

The environmental improvements produced by the project will generate excess pollution credits that other localities could in turn buy. The projected sale of the credits could provide the area with about \$2 million in economic activity and would serve as a model to other communities.

"The Rivanna Water & Sewer Authority chose ... to be a regional leader," Paylor said. "You have met your allocations for phosphorous and nitrogen ... which has set you up as being a steward of the

environment.”

Prior to the ceremonial starting of the new generator for the plant, Palmer noted that the improvements were only one step of a long-term process for the RWSA, and that more could be done to improve the efficiency of the process and reduce the overall footprint of the site.

“It’s the long-term goal of the RWSA to reduce electricity purchased from the power company as much as possible and to continue to harness more energy from wastewater as the technology develops,” Palmer said.