

## MEMORANDUM

**TO: RIVANNA WATER & SEWER AUTHORITY  
BOARD OF DIRECTORS**

**FROM: THOMAS L. FREDERICK, EXECUTIVE DIRECTOR**

**SUBJECT: EXECUTIVE DIRECTOR'S REPORT**

**DATE: JULY 27, 2010**

I'll begin this month's report with some recognition. While the Rivanna Water & Sewer Authority has necessarily been at the center of a long continuing debate given different interests among local community groups on how to plan for our future water needs, RWSA is continuing to receive recognition beyond our local community for its performance outside of this debate. One example was the award for excellence in operating our water treatment facilities granted last month by the Virginia Department of Health. Within the past month, RWSA received some further recognition from the American Water Works Association (AWWA). First, one of AWWA's national publications included an article recognizing our state-of-the-art risk-based drought planning program. Second, at the AWWA national conference a report of the Water Research Foundation focused on research at our South Fork and Scottsville Water Plants on innovative approaches to limit disinfection by-products in treated water. I want to thank the staff for its continued professionalism, focus, and work ethic on behalf of all citizens of this community.

Below are a few briefs regarding items not on today's agenda, for information only.

### **Dam Safety Regulatory Changes and Impact on Beaver Creek Reservoir**

RWSA has previously performed engineering analyses of the potential for downstream flooding in a simulated sudden failure of dams at the Sugar Hollow Reservoir, Ragged Mountain Reservoirs, and South Fork Rivanna Reservoir sites. The analyses prove useful in developing emergency action plans and also confirming Virginia's Hazard Classification for dams. However, until recently, Virginia Dam Safety regulations have not required such analyses for the other three reservoirs that RWSA operates: Beaver Creek Reservoir; Totier Creek Reservoir, and Lickinghole Creek Reservoir. As a result of recent regulatory changes, RWSA retained Schnabel Engineering earlier this year to perform this analysis for the Beaver Creek and Totier Creek Reservoirs. On the basis of this analysis, the Totier Creek Dam will retain its current Hazard Classification, but Schnabel is recommending that the Beaver Creek Reservoir be reclassified under the revised regulations from a "Significant" to a "High" Hazard Classification. The uprating of this classification will impose more stringent criteria for spillway capacity and may require improvements to the Beaver Creek Reservoir spillway. Schnabel will be thoroughly reviewing this and other impacts of the reclassification, and if necessary, staff may propose to the Board some capital improvements at the Beaver Creek site to remain in compliance with Dam Safety regulations.

## **EPA's Chesapeake Bay Strategy called "Total Maximum Daily Loads (TMDL)"**

The federal Clean Water Act includes a section which requires EPA or the state with primacy on water quality regulations to develop a regulatory strategy to limit the maximum daily load of specific pollutants to certain waters of the United States that are classified as impaired. The acronym used for this process is "TMDL". EPA is currently developing perhaps the largest, most complex "TMDL" ever developed, one intended to clean up the Chesapeake Bay. Six states (Virginia, Maryland, Delaware, West Virginia, Pennsylvania, and New York) and the District of Columbia are involved and numerous "sectors" have been defined (e.g., wastewater treatment plants, urban stormwater systems, industrial stormwater, agriculture, on-site systems including septic tanks, and forests) that will eventually include plans reaching to the local government level. On July 1 EPA released new nutrient (nitrogen and phosphorus) goals for each watershed tributary to the Bay broken down by states and is requiring states to submit Watershed Implementation Plans for each tributary to include measures to reach 60% of the EPA goal by 2017 and 100% by 2025.

Of importance to our community, EPA's goal for the James River tributary in Virginia is considerably more stringent compared to strategies that have been published previously, including previous strategies that were used to set waste load allocations that were approved by the State Water Control Board in 2005. Because our goals for the on-going Moores Creek Wastewater Treatment Plant Upgrade were based on the 2005 state allocations, there is some risk the current EPA process could "move the goal posts" even before all of the concrete is set on our current construction. In Virginia the wastewater treatment sector is far ahead of other sectors in reducing nutrients in surface waters, accordingly, the Governor and Virginia DEQ have called for "regulatory stability" for wastewater plants at least in the short term. However, EPA has not signed onto this idea. We will continue to monitor the progress of this development and advise the Board if it appears it could impact new and further capital improvement mandates on our wastewater facility.

### **I-64 Embankment**

Geotechnical work has been completed on the I-64 embankment and Volkert, Inc. has completed engineering evaluations associated with the effect of a new Ragged Mountain Reservoir on I-64. The results of the technical evaluations have been favorable. However, discussions with the Federal Highway Administration have taken longer than originally scheduled, and accordingly the final report from Volkert, Inc, has been delayed and will not be presented at today's meeting. Our revised goal is to present this report at the August Board meeting along with the report on the limited review of the 2004 Water Demand Analysis that the Board directed in April 2010.