

## MEMORANDUM

**TO:** THE HONORABLE ALBEMARLE COUNTY BOARD OF SUPERVISORS

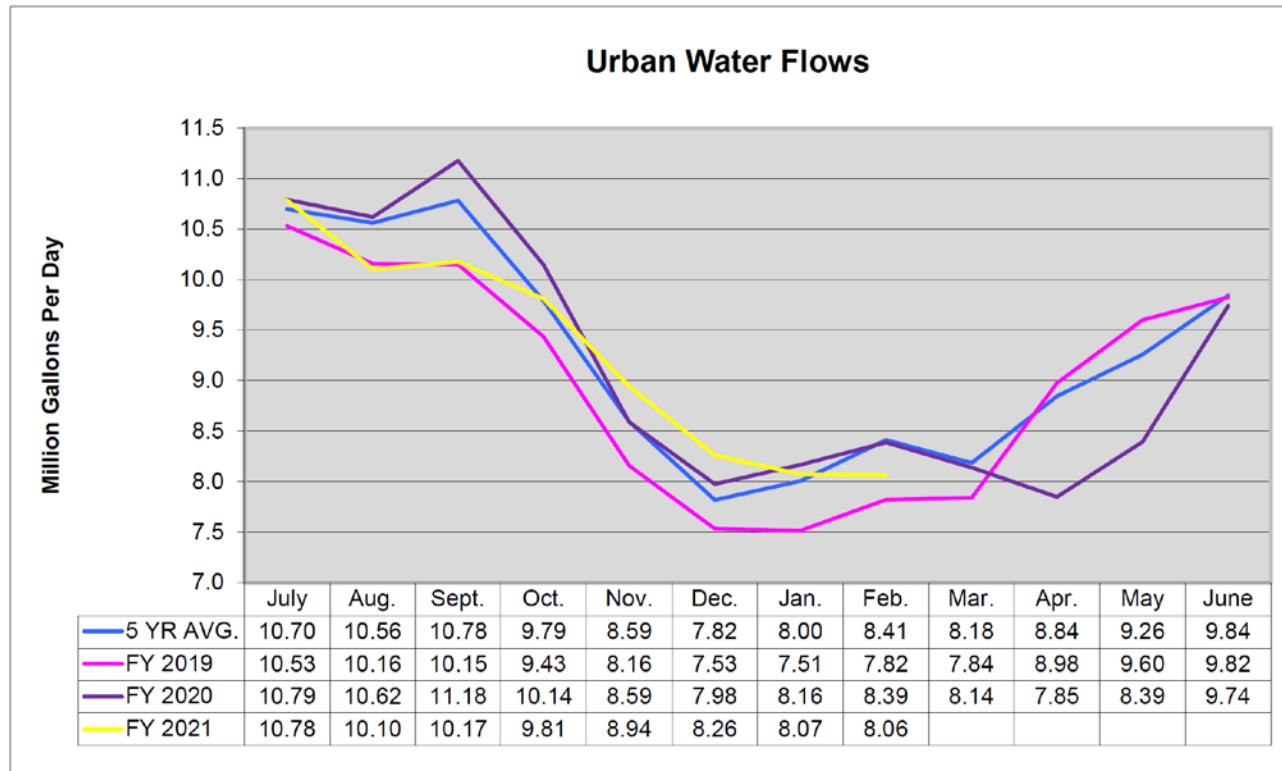
**FROM:** BILL MAWYER, EXECUTIVE DIRECTOR  
 RIVANNA WATER & SEWER AUTHORITY  
 RIVANNA SOLID WASTE AUTHORITY

**SUBJECT:** QUARTERLY UPDATE

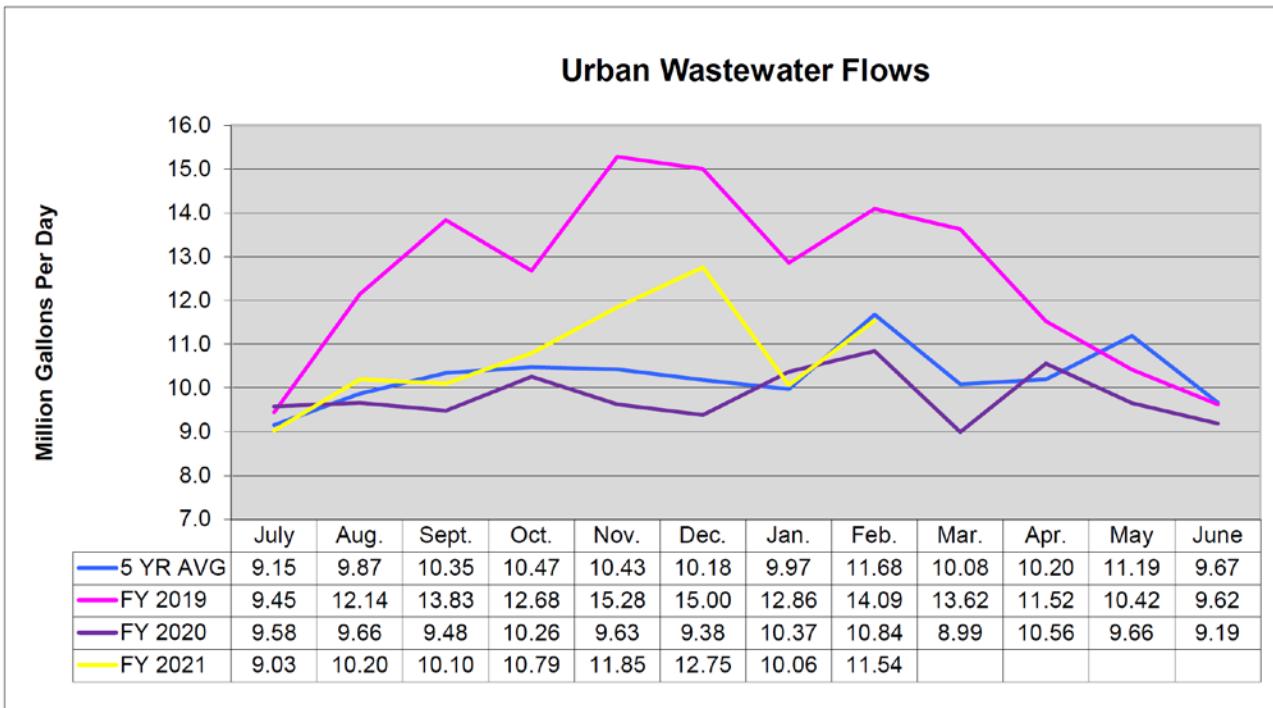
**DATE:** APRIL 2021

This quarterly update is to provide general information on the drinking water, wastewater and solid waste programs managed by the Rivanna Authorities, as follows:

1. The production of drinking water for the Urban area (Charlottesville and adjacent developed areas of Albemarle) averaged 8.06 million gallons per day (mgd) in February 2021, which was slightly below the five-year average for February (8.41 mgd), as shown by the following graph:



2. Urban wastewater flow for February 2021 (11.54 mgd), including flows from Crozet, was slightly below the five-year average for February (11.68 mgd), as shown by the following graph:



3. A general overview of significant current and upcoming Capital Improvement projects is provided below. Costs for these projects are typically shared between the City (48%) and the Albemarle County Service Authority (52%).

**A. Water Treatment Plant Improvements**

Scope: Replace equipment which has reached end-of-service life at the South Rivanna and Observatory Water Treatment Plants. Increase water treatment capacity from 7.7 to 10 million gallons per day at the Observatory Water Treatment Plant.

Completion: 2020 – 2023

Cost: \$43 million

**B. Crozet Flow Equalization Tank**

Scope: Provide a one-million-gallon wastewater tank to store peak wet weather flows which infiltrate the sewer system.

Completion: October 2020 – November 2022

Cost: \$5.4 million

**C. Sugar Hollow Dam – Rubber Crest Gate Replacement and Intake Tower Repairs**

Scope: Replace the inflatable rubber device that sits on top of the concrete dam and regulates the normal water level in the reservoir. The gate is over 20 years old, and has reached the end of its service life. Concrete repairs will be completed on the intake tower.

Completion: October 2020 – July 2021

Cost: \$1.7 million

D. Exterior Lighting Improvements, Moores Creek Wastewater Treatment Facility  
Replace exterior lighting fixtures and poles on the 80 acre facility to improve safety and compliance with Albemarle County lighting requirements.

Completion: April 2021 – February 2022  
Cost: \$0.9 million

E. South Rivanna to Ragged Mountain Reservoir Pipeline  
Scope: Acquire easements and construct a pipeline to transfer untreated water between the South Rivanna and Ragged Mountain reservoirs, as required by the Community Water Supply plan completed in 2012.

Completion: 2027 - 2033  
Cost: \$80 million: 80% ACSA / 20% City

F. Ragged Mountain Reservoir to Observatory Water Treatment Plant Raw Water Line and Raw Water Pump Station  
Scope: Replace two untreated water pipes which have been in service for more than 70 and 110 years, respectively. Replace two water pump stations which have exceeded their service lives or will require significant upgrades to adequately support the treatment capacity of the upgraded Observatory Water Treatment Plant.

Completion: 2023 - 2027  
Cost: \$24 million

G. Airport Road Water Pumping Station and Piping  
Scope: Provide a drinking water pumping station and piping to improve the reliability of the Urban Water System.

Completion: September 2021 – June 2023  
Cost: \$7.6 million

H. Beaver Creek Dam and Pump Station Modifications  
Scope: Provide modifications to the dam to control the flow of water across the spillway during major storm events, as required by Virginia Dam Safety Regulations. Replace the existing untreated water pumping station. Discussions are on-going with VDOT about construction of a temporary road to bypass the dam construction.

Completion: 2024 – 2026  
Cost: \$27 million: 100% ACSA; Federal funding will be requested (65%)

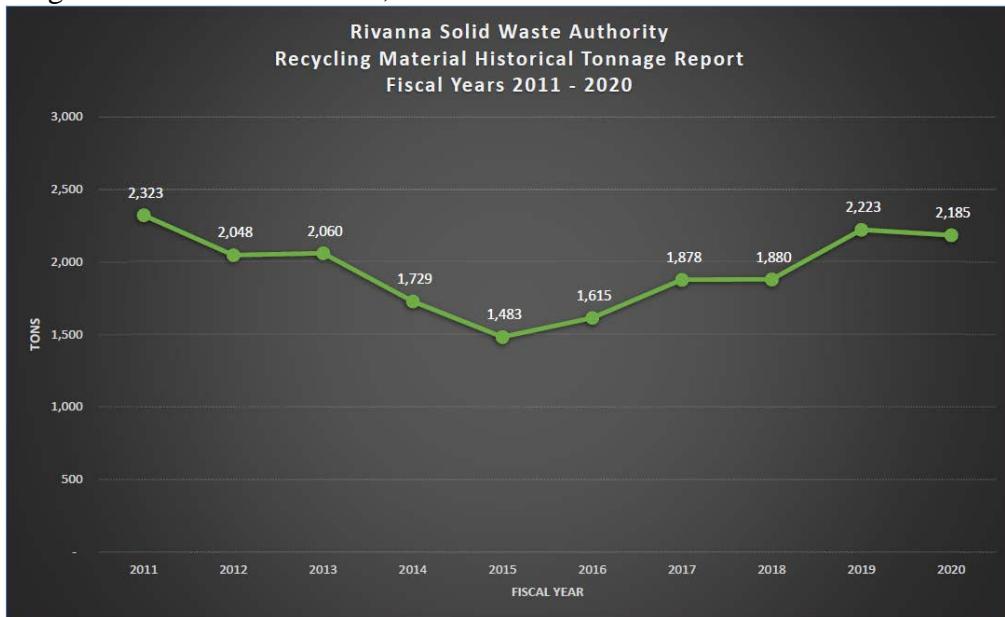
I. Urban Area “Central” Waterline  
Scope: Water piping improvements to increase capacity and maintain pressure in the urban drinking water system. Preliminary planning for this 5 mile long piping project indicates the new pipe will be located in streets south of the city’s center.

Completion: 2023 - 2027  
Cost: \$13 M

J. Upper Schenks Branch Wastewater Piping Replacement  
Scope: Replace sewer piping installed in the mid 1950’s in conjunction with the City’s sewer upgrade program to increase system capacity. The new underground piping will be located near McIntire Road.

Completion: TBD  
Cost: \$4 million: 100% City

4. The recycling program at the McIntire Recycling Center (MRC) and the Paper Sort processing facility continues to be a very popular service for our community. Tonnage from mixed paper, cardboard (including pizza boxes), glass, plastics, metals, compostable food waste and cooking oil continues to increase, as shown below:



A. Collection of oyster shells was added to our services at the MRC in 2019. As one of the Environmental Stewardship tactics in our Strategic Plan, our staff will bag oyster shells collected at the MRC and transport them to the VCU Rice Center located in Charles City, VA for reseeding with oyster larvae and placement in the Chesapeake Bay. Oysters reportedly can filter 50 gallons of water each day. Additional information about this program is available at <https://ricerivers.vcu.edu/>.

5. By increasing the number of days/week the Transfer Station is open and lowering the disposal fee from \$66/ton to \$52/ton, refuse volume at the Ivy Transfer Station has increased from 85.96 tons per day in March 2019 to 132.31 tons per day in March 2021, as shown below:



6. Southern Convenience Center

Planning is underway for a recycling and bagged residential refuse collection center to be located in southern Albemarle County.

Completion: January - August 2022

Cost: \$1.1 million: 100% County

Please let me know if you have any questions.

cc: RSWA Board of Directors

RWSA Board of Directors