



## 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: JANUARY 2022**

This quarterly update is to provide general information on the drinking water supply and treatment, wastewater collection and treatment, and solid waste programs managed by the Rivanna Authorities for the benefit of the Charlottesville/Albemarle community, as follows:

1. Drinking Water Supply as of January 3, 2022:

Urban reservoirs (Sugar Hollow, South Rivanna, Ragged Mountain) are collectively 97% full. We are transferring water from Sugar Hollow to Ragged Mountain as we work to have the urban reservoirs 100% full before drinking water demand increases this summer. Our most essential urban reservoir, South Rivanna, is 100% full and overflowing.

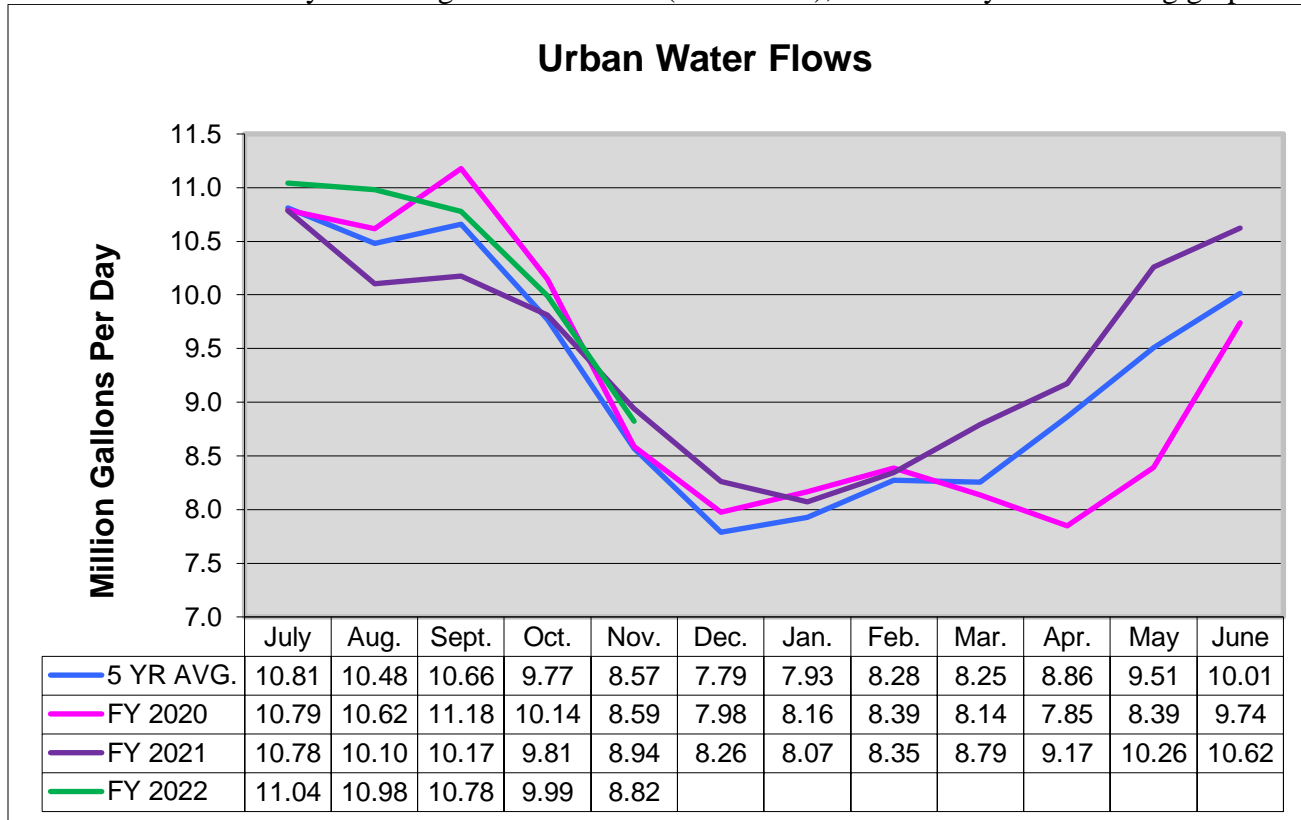
2. U.S. Drought Monitoring Report as of December 16, 2021:

Conditions are abnormally dry in central Virginia. Recent precipitation has not been included in the report.

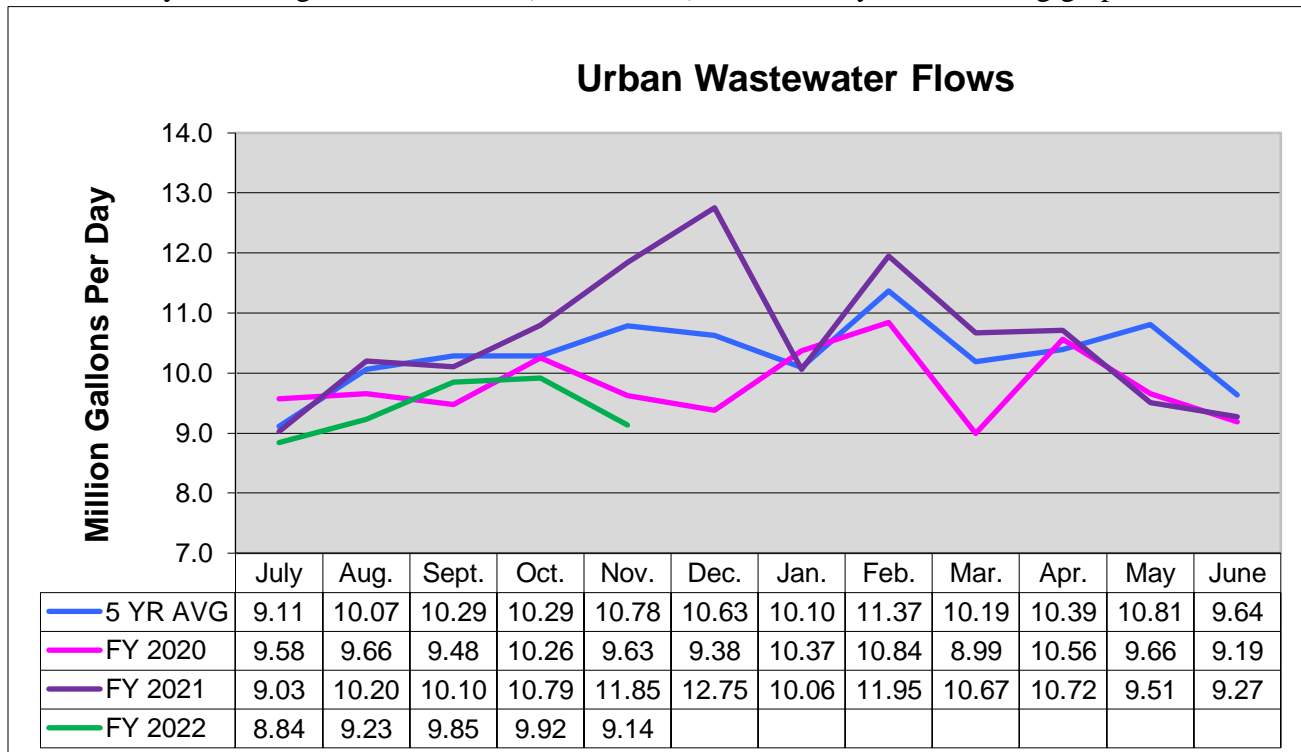
Charlottesville Precipitation (inches)	
Total For the Year 2021	33.82
Normal for Year	41.61
Departure from normal	7.79

National Weather Service, National Climatic Data Center (NCDC). Daily Climatological Report for Charlottesville, VA.

3. The production of drinking water for the Urban area (Charlottesville and adjacent developed areas of Albemarle) averaged 8.82 million gallons per day (MGD) in November 2021 (FY 2022), which was above the five-year average for November (8.57 MGD), as shown by the following graph:



4. Urban wastewater flow for November 2021 (9.14 MGD), including flows from Crozet, was below the five-year average for November (10.78 MGD), as shown by the following graph:



5. A general overview of significant current and future water and wastewater Capital Improvement Projects is provided below. Costs for these projects are typically shared between the Charlottesville Department of Utilities (48%) and the Albemarle County Service Authority (52%).

A. Water Treatment Plant Renovations

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: May 2020 – May 2023

Cost: \$43 million

B. Crozet Flow Equalization Tank

Scope: Provide a one-million-gallon wastewater tank to store wet weather infiltration of the sewer system and prevent sewer system overflows. Wastewater from Crozet is piped and pumped to the Moores Creek Treatment Plant.

Completion: October 2020 – July 2022

Cost: \$5.4 million

C. Exterior Lighting Replacement, Moores Creek Wastewater Treatment Facility

Scope: 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: \$0.6 million

D. Electrical System Replacement, Moores Creek Wastewater Treatment Facility

Scope: Replace major electrical cabling, transformers and motor control centers installed around 1980 which have reached the end of their service lives.

Completion: May 2022 – June 2024

Cost: \$5 million

E. Water Pipe and Pump Stations Replacement, Ragged Mountain Reservoir to Observatory Water Treatment Plant

Scope: Replace water pipes and two pump stations which convey untreated water and have reached the end of their service lives or will require significant upgrades to adequately support the increased treatment capacity of the upgraded Observatory Water Treatment Plant.

Completion: 2025 - 2028

Cost: \$30 million

F. 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: January 2022 – December 2023

Cost: \$10 million

G. Beaver Creek Dam Spillway, Pump Station and Piping 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 and piping to the Crozet Water Treatment Plant.

Construction of a temporary road to maintain traffic on Browns Gap Turnpike during construction of the spillway is included in the project.

Completion: 2024 – 2026

Cost: \$31 million: 100% ACSA; Federal funding (65%) will be requested

H. Urban Area “Central” Water Pipe

Scope: Piping improvements to more efficiently convey drinking water, increase redundancy, and generally strengthen the Urban Area Drinking Water System for the benefit of both the City and the County. This five-mile-long piping project will extend from the Stadium Road area to the Long Street / High Street bridge.

Completion: 2024 - 2029

Cost: \$31 M

I. Upper Schenks Branch Wastewater Piping Replacement, Phase II

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 piping will be located along McIntire Road between the McIntire Recycling Center and Preston Avenue.

Completion: TBD

Cost: \$5 million: 100% City

J. South Rivanna to Ragged Mountain Reservoir Pipe

Scope: Acquire easements and construct a pipe to transfer untreated water between the South Rivanna and Ragged Mountain reservoirs, as required by the Community Water Supply plan completed in 2012. A short section of piping will be constructed from Birdwood to Old Garth Road in 2022 – 2023.

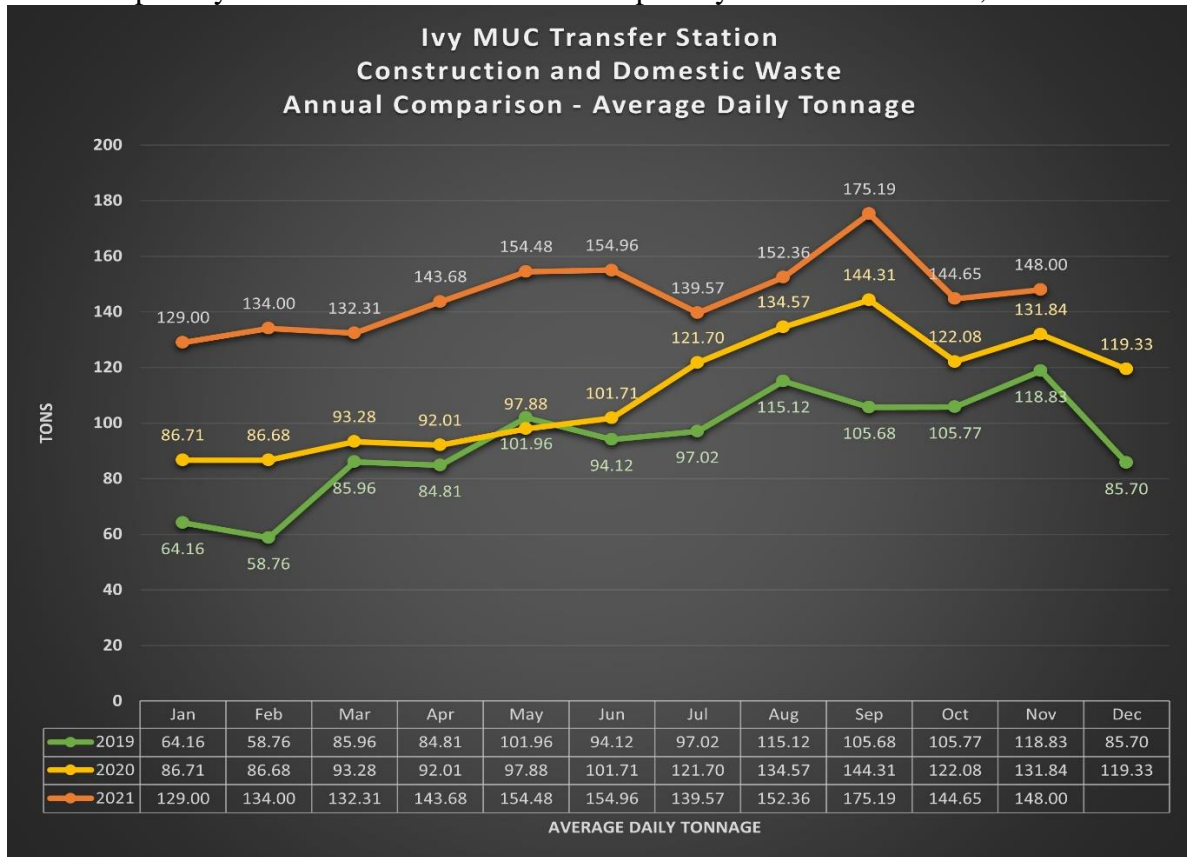
Completion: 2027 - 2033

Cost: \$80 million: 80% ACSA / 20% City

6. The recycling program at the McIntire Recycling Center and the Paper Sort processing facility continues to be a very popular service for our community. From July 2020 – June 2021, 14.2 million pounds of waste (including vegetative waste and clean fill) were diverted from disposal to reuse or recycling. Tonnage from mixed paper, cardboard (including pizza boxes), glass, plastics, metals, compostable food waste and cooking oil continues to increase, as shown below:



7. By increasing the number of days/week the Transfer Station is open, and by lowering the disposal fee from \$66/ton to \$52/ton, average refuse volume at the Ivy Transfer Station has increased from 118.83 tons per day in November 2019 to 148 tons per day in November 2021, as shown below:



8. Keene Convenience Center

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

Completion: December 2022

Cost: \$1.1 million: 100% Albemarle County

Please let me know if you have any questions.

cc: RSWA Board of Directors  
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