#### **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: **JULY 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:

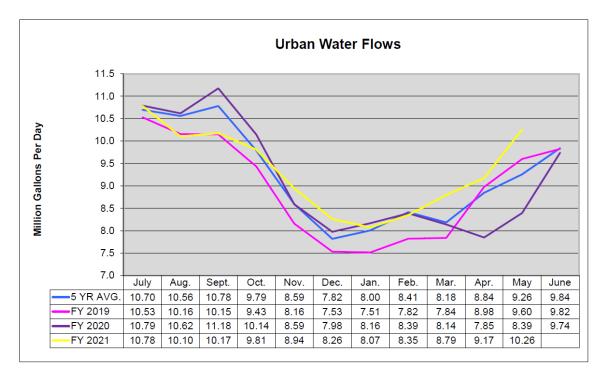
- 1. Drinking Water Supply as of July 9, 2021: Urban Reservoirs are 93% full.
- 2. VDEQ Drought Monitoring Report as of June 30, 2021: Conditions are dry, but normal in central Virginia.

#### **Precipitation**

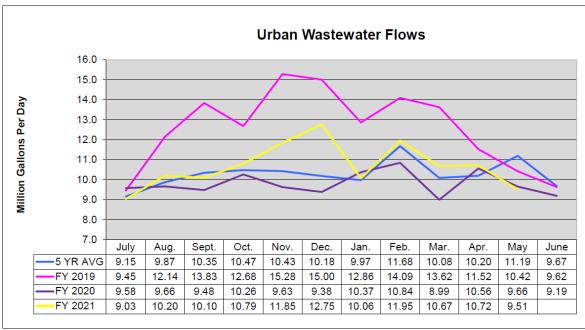
Charlottesville Precipitation (in.)	
June	3.28
June normal	4.38
Year-to-date	16.12
Normal for Year-to-date	20.57
Departure from normal	-4.45

National Weather Service, National Climatic Data Center (NCDC). Daily Climatological Report for Charlottesville, VA, June 30, 2021

3. The production of drinking water for the Urban area (Charlottesville and adjacent developed areas of Albemarle) averaged 10.26 million gallons per day (mgd) in May 2021, which was above the five-year average for May (9.26 mgd), as shown by the following graph:



4. Urban wastewater flow for May 2021 (9.51 mgd), including flows from Crozet, was below the five-year average for May (11.19 mgd), as shown by the following graph:



5. 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 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: 2020 - 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. Wastewater from Crozet is piped and pumped to the Moores Creek Treatment Plant.

Completion: October 2020 – November 2022

Cost: \$5.4 million

## C. Exterior Lighting Replacement, 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: \$0.6 million

### D. Electrical System Replacement, Moores Creek Wastewater Treatment Facility

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

Completion: March 2022 – June 2024

Cost: \$5 million

# E. <u>Raw Water Pipe and Pump Station Replacement, Ragged Mountain Reservoir to</u> Observatory Water Treatment Plant

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: \$25 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 – June 2023

Cost: \$7.6 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 bypass the dam construction remains under consideration.

Completion: 2024 - 2026

Cost: \$27 million: 100% ACSA; Federal funding (65%) will be

requested

### H. Urban Area "Central" Water Pipe

Scope: Water piping improvements to increase capacity and maintain pressure in the Urban drinking water system. This five-mile long piping project will extend from the Stadium Road area to the Long / High Street bridge.

Completion: 2023 - 2027 Cost: \$25 M

# I. <u>Upper Schenks Branch Wastewater Piping Replacement</u>

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 along McIntire Road between the McIntire Recycling Center and Preston Avenue.

Completion: TBD

Cost: \$4 million: 100% City

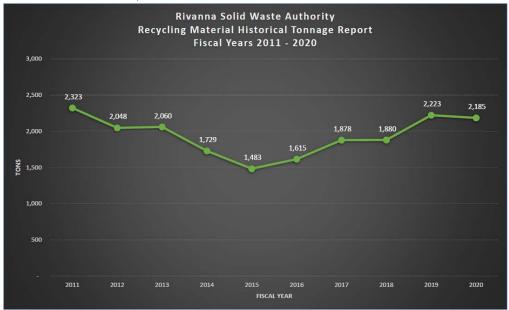
# J. South Rivanna to Ragged Mountain Reservoir Pipe

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.

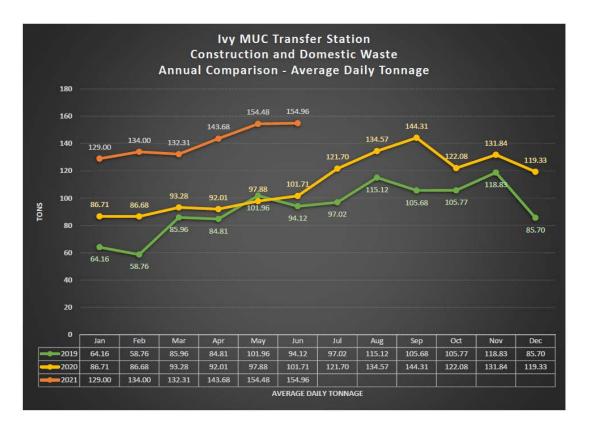
Completion: 2027 - 2033

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. 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 day refuse volume at the Ivy Transfer Station has increased from 94.12 tons per day in June 2019 to 154.96 tons per day in June 2021, as shown below:



## 8. Southern Convenience Center

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

Completion: January - August 2022

Cost: \$1.1 million: 100% Albemarle County

Please let me know if you have any questions.

cc: RSWA Board of Directors RWSA Board of Directors