






RIVANNA SOLID WASTE AUTHORITY
RIVANNA WATER & SEWER AUTHORITY



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MEMORANDUM

TO: THE HONORABLE ALBEMARLE COUNTY BOARD OF SUPERVISORS

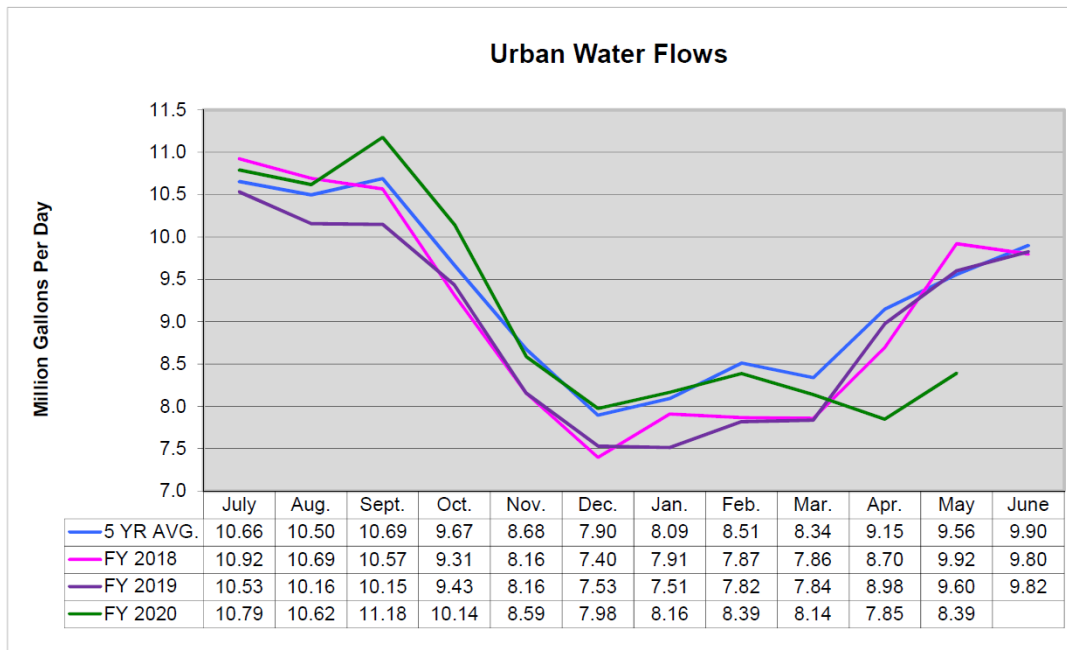
**FROM: BILL MAWYER, EXECUTIVE DIRECTOR
RIVANNA WATER & SEWER AUTHORITY
RIVANNA SOLID WASTE AUTHORITY**

SUBJECT: QUARTERLY UPDATE

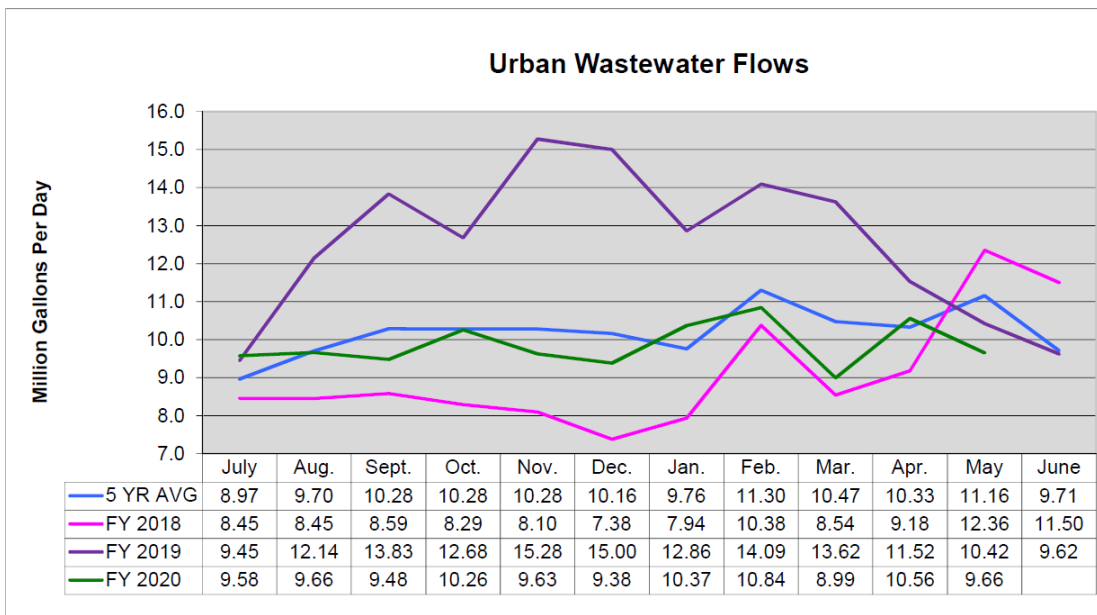
DATE: JULY 2020

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. As we move into the hot and dry summer months, we are pleased to report that our water supply reservoirs are full, and our public drinking water and wastewater treatment systems are doing a great job for our community. We continue to receive significant drinking water quality benefits from the Granular Activated Carbon filtration systems installed in 2018. We recently completed the 2020 Urban Water Demand and Safe Yield Study. The study assessed the capacity of the Urban area's available water supply, as well as the community's future water demand, to ensure our long-term water supply is adequate. The results of the study indicate additional water supply will be required to serve the estimated population (162,000) and water demand (13.7 million gallons per day) in the Urban area by 2060.
2. Refuse transfer services at the Ivy Material Utilization Center (IMUC), as well as recycling services at the McIntire Road Center, continue to be used by many residents and businesses in the community. Construction of the new Recycling Convenience Center at the IMUC has been substantially completed, and the facility will open later this month.
3. The production of drinking water for the Urban area (Charlottesville and adjacent developed areas of Albemarle) averaged 8.39 million gallons per day (mgd) in May 2020, which was below the five-year average for May (9.56 mgd), as shown by the following graph:



4. Urban wastewater flow for May 2020 (9.66 mgd), including flows from Crozet, was below the five-year average for May (11.16 mgd), as shown by the following graph:



5. A general overview of significant current and upcoming Capital Improvement projects includes:

A. Crozet Water Treatment Plant Improvements

Scope: Replace equipment which has reached end-of-service life, and increase water treatment capacity from 1 to 2 million gallons per day. Construction is underway.

Completion: May 2021

Cost: \$8.5 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: September 2020 – December 2021

Cost: \$4.9 million

C. 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. Construction is underway.

Completion: 2020 – 2023

Cost: \$43 million

D. Albemarle-Berkley Basin Demolition

Scope: Demolish the concrete basin located near Lambs Road and Albemarle High School. The excavation will be filled with compacted soil and seeded.

Completion: July - August 2020

Cost: \$120,000

E. South Rivanna Dam – Gate Repairs

Scope: Repair original gates installed in 1966. These gates are located near the bottom of the dam, and are used to release water from the reservoir.

Completion: December 2020

Cost: \$900,000

F. 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: Fall 2021

Cost: \$1.1 million

G. South Rivanna to Ragged Mountain Reservoir Pipeline Easements

Scope: Determine alignment and acquire easements for a pipeline and pumping station to transfer raw (untreated) water between the South Rivanna Reservoir and the Ragged Mountain Reservoir, as required by the Community Water Supply plan. Acquisition offers have been made to nine of 11 private property owners, with seven acceptances. Documents are also being prepared to acquire rights from three public property owners (VDOT, City Council, County School Board).

Completion: 2021

Cost: \$2.3 million

H. Airport Road Water Pumping Station and Piping

Scope: Provide a water pumping station and piping to improve the connectivity and reliability of the Urban Water System.

Completion: 2021 – 2022

Cost: \$5.8 million

I. Ragged Mountain Reservoir to Observatory Water Treatment Plant Raw Water Line and Raw Water Pump Station

Scope: Replace two 18-inch cast iron raw water pipes, which have been in service for more than 70 and 110 years, respectively. Replace the existing Stadium Road and Royal raw water pump stations, which have exceeded their service lives or will require significant upgrades, to support the Observatory Water Treatment Plant expansion.

Completion: 2023 - 2027

Cost: \$18 million

J. 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 raw water pumping station.

Completion: 2023 – 2027

Cost: \$27 million

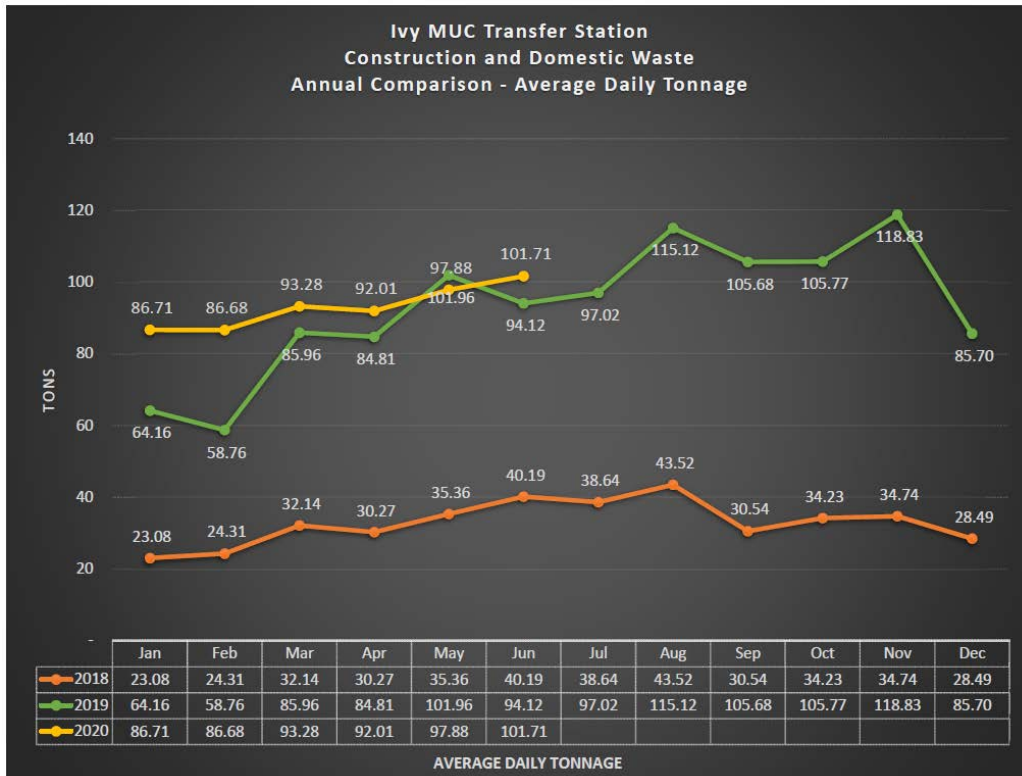
K. Upper Schenks Branch Wastewater Piping Replacement

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

6. Refuse volume at the Ivy Transfer Station has increased from 40.19 tons per day in June 2018 to 101.71 tons per day in June 2020, as shown below:



Please let me know if you have any questions.

cc: RSWA Board of Directors
RWSA Board of Directors