July 7, 2023

The Honorable Charlottesville City Council P.O. Box 911 Charlottesville, VA 22902

Re: Quarterly Update – July 2023

#### Councilors:

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

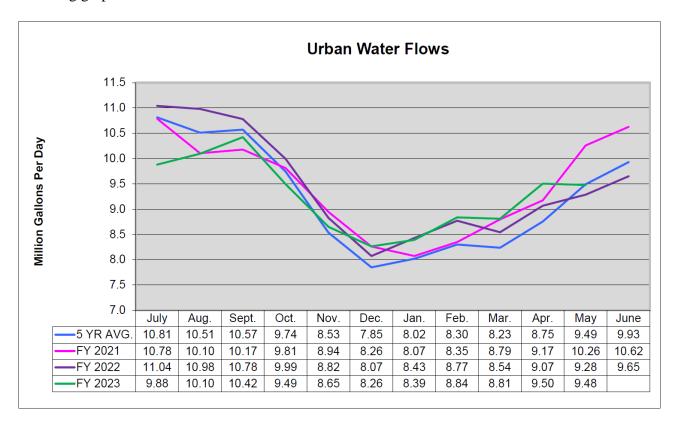
- 1. Drinking Water Supply as of July 7, 2023:
  - A. We are at optimum storage levels going into the hot summer months as the Urban reservoirs (Sugar Hollow, South Rivanna, Ragged Mountain) are 99% full.
- 2. Drought Monitoring as of July 7, 2023:
  - A. U.S. Drought Monitoring Report:
    - Indicates Charlottesville and most of Albemarle County have no drought conditions. The area along the western portion of Albemarle County is identified as being in an "Abnormally Dry" status.
  - B. VDEQ Drought Status Report:
    - Our region is in a "Watch" status for groundwater levels. Levels of severity increase from "Watch" to "Warning" to "Emergency". All other drought indicators are normal.

**Precipitation:** about 14.5 inches low (14%) over the last 30 months

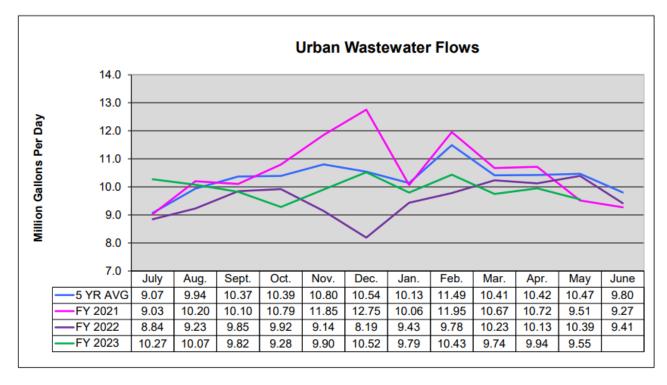
Charlottesville Precipitation							
Year	Month	Observed (in.)	Normal (in.)	Departure (in.)			
2021	Total: Jan - Dec	33.82	41.61	-7.79			
2022	Total: Jan - Dec	43.53	41.61	+1.92			
2023	Total: Jan - Jun	11.92	20.57	-8.65			

Source: National Weather Service, National Climatic Data Center.

3. The production of drinking water for the Urban area (Charlottesville and adjacent developed areas of Albemarle, not including Crozet) averaged 9.48 million gallons per day (MGD) in May 2023 (FY 2023), which was similar to the five-year average for May (9.49 MGD), as shown by the following graph:



4. Urban wastewater flow for May 2023 (9.55 MGD), including flows from Crozet, was below the five-year average for May (10.47 MGD), as shown by the following graph:



5. A general overview of significant current and future drinking water, wastewater and solid waste Capital Improvement Projects is provided below. Cost allocations, typically between the Charlottesville Department of Utilities and the Albemarle County Service Authority (ACSA), are identified for each project.

## 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 – October 2023

Cost: \$43 million; 52% ACSA / 48% City

## B. Airport Road Water Pumping Station and Piping

Scope: Provide a drinking water pumping station and piping to improve reliability in the northern area of the Urban Water System.

Completion: December 2021 – September 2024

Cost: \$10 million: 100% ACSA

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

Scope: Replace major electrical cabling and equipment installed around 1980 which have reached the end of their service lives.

Completion: May 2022 – December 2024

Cost: \$5 million; 52% ACSA / 48% City

## D. South Rivanna River Crossing

Scope: Install a second pipe (24") to convey treated drinking water under the river using trenchless technology to provide a redundant water supply to serve the northern area of the Urban Water System.

Completion: May 2024 – December 2025 Cost: \$7 million: 100% ACSA

#### E. Urban Area "Central Water Line"

Scope: Piping improvements to more efficiently convey drinking water and strengthen the Urban Area Drinking Water System for the benefit of the City and the County. This five-mile-long piping project will extend from the Stadium Road area to the Long Street / E. High Street bridge and follow a route which includes: Stadium Road, Piedmont Avenue, Price Avenue, Lewis Street, Jefferson Park Avenue, Cleveland Avenue, Cherry Avenue, Elliott Avenue, 6<sup>th</sup> Street SE, Avon Street, 10<sup>th</sup> Street NE, Little High Street, 11<sup>th</sup> Street NE, E. High Street, and a connection near Roosevelt Brown Boulevard. Detailed engineering surveys and design are underway.

Completion: June 2024 – December 2028 Cost: \$41 M: 52% ACSA / 48% City

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

Scope: Replace water pipes and pump stations which convey untreated water from the Ragged Mtn Reservoir to the Observatory WTP. These facilities have reached the end of their service lives or will require significant upgrades to adequately support the increased treatment capacity (from 7.7 to 10 mgd) of the upgraded Observatory WTP.

Completion: August 2024 – December 2028

Cost: \$44 million; 52% ACSA / 48% City

## G. Moores Creek Administration Building Renovation and Addition

Scope: Renovate the existing administration building built in the 1980's, including improvements to the Laboratory and Information Technology spaces. The project will also include an addition to provide space for staff currently in temporary trailers, as well as for future staffing.

Completion: June 2024 - 2026

Cost: \$17 million; 52% ACSA / 48% City

## H. Emmet Street Water Line Betterment

Scope: RWSA is coordinating with the City for construction of a 24-30" water main in Emmet Street from Ivy Road to Arlington Boulevard as part of the City's Emmet Streetscape Phase I project.

Completion: May 2024 - July 2026

Cost: \$3 million; 52% ACSA / 48% City

## I. Moores Creek Structural and Concrete Rehabilitation

Scope: Complete repairs to concrete basins and wastewater treatment facilities constructed in the late 1970's.

Completion: June 2024 - June 2026

Cost: \$13.5 million; 52% ACSA / 48% City

# J. Crozet Wastewater Pump Stations Rehabilitation

Scope: Replacement of pumps, valves and electrical gear in four pump stations constructed in the 1980's which convey wastewater from Crozet to the Moores Creek Treatment Plant.

Completion: January 2025 - December 2026

Cost: \$10.3 million; 52% ACSA / 48% City

## K. Beaver Creek Dam, Pump Station and Piping Improvements

Scope: Replace the spillway which protects the reservoir dam along with the water pump station and piping which convey water to the Crozet Water Treatment Plant.

Completion: April 2025 - June 2028 Cost: \$43 million; 100% ACSA

#### L. 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

## M. South Rivanna Reservoir to Ragged Mountain Reservoir Pipe

Scope: Construct a pipe to transfer untreated water between the South Rivanna and Ragged Mountain Reservoirs to increase water storage capacity, as required by the community's drinking water supply plan completed in 2012.

Completion: 2026 - 2030

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

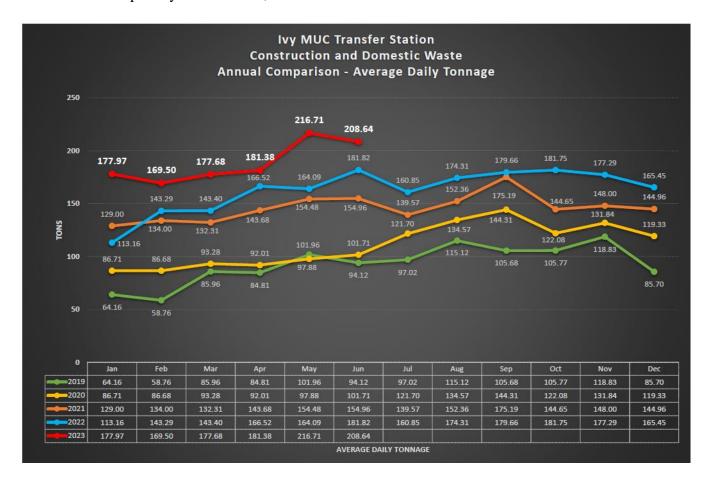
# N. Recycling Baling Facility, Ivy Material Utilization Center

Scope: Replace the existing recycling materials baling facility which is located on leased property and has exceeded its service life. A new facility is essential to have an effective recycling program. The new facility will include equipment to compress cardboard, mixed paper, and plastic products into separate bales before shipment to a receiving vendor.

Completion: June 2024 - December 2025

Cost: \$6.4 million; 70% Albemarle County / 30% City

6. Average daily refuse volume at the Ivy Transfer Station has increased from 94 tons per day in June 2019 to 209 tons per day in June 2023, as shown below:



7. Spring Refuse Special Collection Days
Spring 2023 Special Collection Days at Ivy MUC were successful with the following customers participating in the events.

			Albemarle	Charlottesville
<u>eWaste</u>	Saturday	4/15/2023		
		Customers	253	84
HHW_	Friday	4/21/2023		
		Customers	305	70
	Saturday	4/22/2023		
		Customers	347	90
Bulky Waste:	Furniture/Mattresses	- Pounds Collected	23,340	5,820
	Saturday	4/29/2023		
	Appliances	- Pounds Collected	17,980	3,420
		- Freon units Collected	121	13
	Saturday	5/6/2023		
	Tires	Participating Vehicles		22
	Saturday	5/13/2023		

# Fall Refuse Special Collection Days

The Ivy MUC will be the site for Fall 2023 eWaste, Household Hazardous Waste, and Special Collection free disposal days on the following dates:

# eWaste Collection – free disposal of electronic waste

- · Saturday, September 16
- Reservations Required. Please visit: <a href="https://www.rivanna.org/ewaste/">https://www.rivanna.org/ewaste/</a> to register after 10AM on August 16

Registrations fill up so we encourage you to register early.



#### Residential Household Hazardous Waste Collection

Friday and Saturday, September 22 and September 23

# Special Collection Days

Furniture/Mattresses: September 30

Appliances: October 7Tires: October 14





Please let me know if you have any questions.

Sincerely,

William I. Mawyer, Jr., P.E.

**Executive Director** 

cc: RSWA Board of Directors RWSA Board of Directors