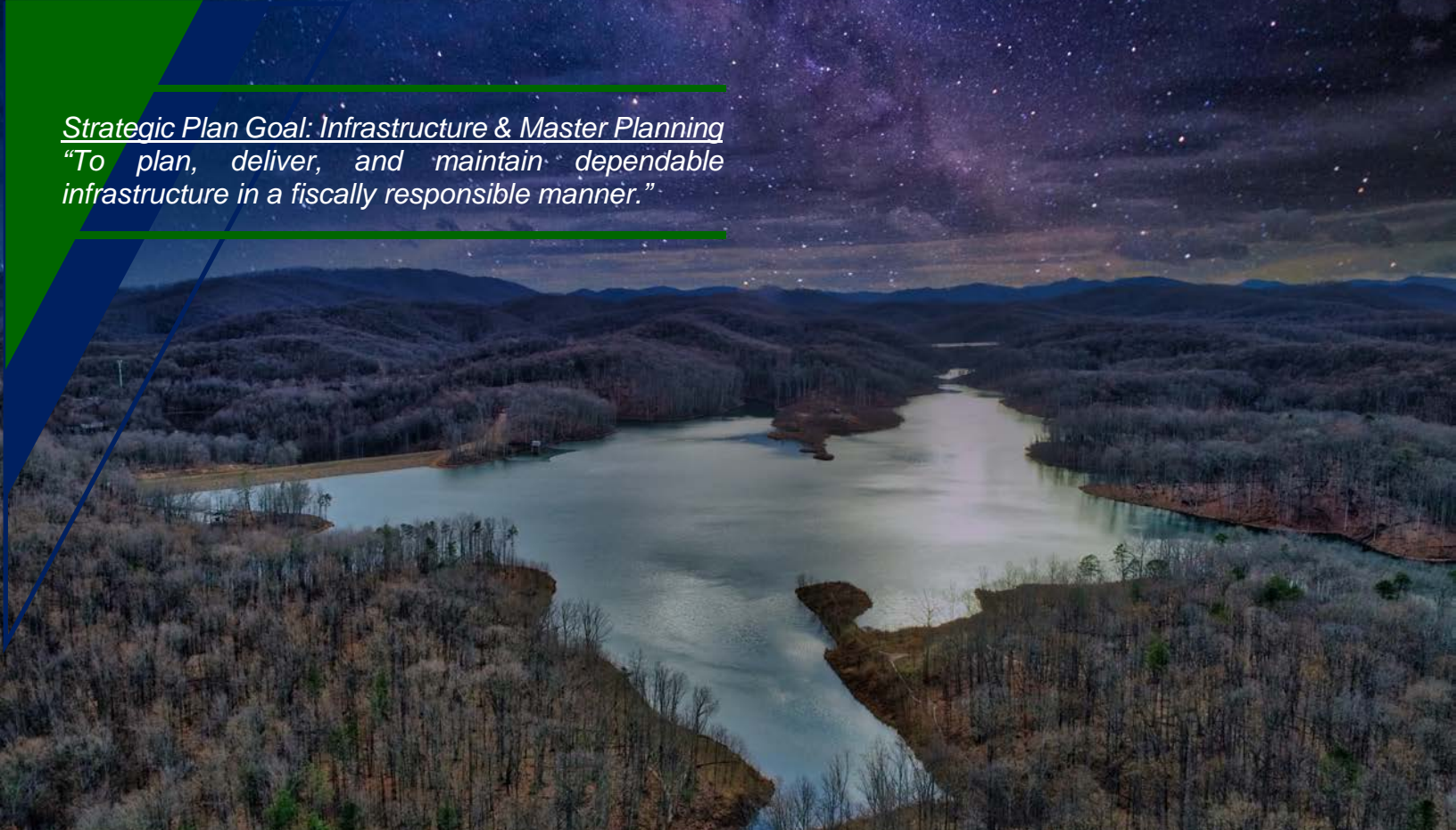


Strategic Plan Goal: Infrastructure & Master Planning
“To plan, deliver, and maintain dependable infrastructure in a fiscally responsible manner.”



Ragged Mountain Reservoir

RWSA MAJOR PROJECTS FY 2022

Rivanna is a Wholesale Water & Wastewater Utility

What Rivanna Does: We store and treat water for consumption, then deliver treated water to the City of Charlottesville and Albemarle County Service Authority (ACSA); Additionally, we collect and treat wastewater from the City of Charlottesville, ACSA, and septic service companies to safely return it to Moores Creek.

How we do it: We own or operate all major water supply reservoirs and recovery facilities (treatment plants, major piping systems). We establish wholesale rates and charges for the cost of these services, which include operating and capital construction costs. These rates and charges are then used to bill our two customers, the City of Charlottesville and the ACSA.

The Department of Utilities for the City of Charlottesville and the ACSA include our costs to calculate their total expenses and rates for their retail public water and wastewater customers.

So, what are some of the major projects that we are completing to maintain excellent drinking water and wastewater services for the Albemarle/Charlottesville community?

FY 22 – 26
Total CIP Projects: 54
\$170.1 M

Urban System

Water Treatment Plant Renovations – South Rivanna & Observatory

- These water treatment plants (WTPs) supply drinking water to the City and adjacent urban areas of Albemarle County. The plants are classified as Class I conventional surface water treatment plants with a design capacity of 12 million gallons per day (MGD) for South Rivanna and 7.7 MGD for Observatory.
- **South Rivanna:**
 - Work at the 56-year old South Rivanna WTP includes upgrades to many of the processes used to treat raw water to drinking water standards, and also includes additional office, control room, and storage space, as well as a new metal building to cover existing chemical piping and tanks.
- **Observatory:**
 - Much of the Observatory WTP is original to the 1953 construction. Renovations will fully upgrade the plant to maintain regulatory standards and increase the finished drinking water treatment capacity from 7.7 to 10 MGD.
- Cost: \$43 M
- Completion: 2023
- For more information about these projects, please visit: <https://www.rivanna.org/rwsa-projects-map/water-treatment-plant-improvements/>

Rivanna to Ragged Pipeline

- The 50-year Community Water Supply Plan approved in 2012 includes construction of a raw water line from the South Rivanna Reservoir to the Ragged Mountain Reservoir (RMR). This water line will replace the existing 100-year-old Upper Sugar Hollow Pipeline, increase raw water transfer capacity to the RMR, and improve system resilience by connecting our largest reservoirs and WTPs. This project includes installation of 9 miles of water piping, two pumping stations, and a pretreatment facility.
- Cost: \$80 M
- Completion: 2033
- For more information about this project, please visit: <https://www.rivanna.org/srr-to-rmr-water-line-project/>

Airport Road Water Pump Station Construction

- This project will improve the reliability of treated water supply to the North Rivanna area.
- Cost: \$ 7.6 M
- Completion: 2023

Urban System	
Average Daily Drinking Water Production	9.1 Million Gallons
Average Daily Wastewater Treatment	10.7 Million Gallons
Urban Reservoir Storage Capacity (South Rivanna, Ragged Mountain, & Sugar Hollow)	2.6 Billion Gallons



South Rivanna Water Treatment Plant

Crozet Systems

Crozet WTP Upgrade

- We recently completed:
 - Renovations and increased drinking water treatment capacity from 1 to 2 MGD, to meet the growing demands of the Crozet community.
- Will provide an adequate supply of drinking water to the community for the next 20 years.
- Cost: \$8.5 M
- Completion: 2021
- For more information about this project, please visit: <https://www.rivanna.org/rwsa-projects-map/water-treatment-plant-improvements/>



Crozet Flow Equalization Tank Construction

- A new 1 MG wastewater storage tank is under construction. This concrete tank will store wastewater from Crozet to prevent sewer overflows. All of the wastewater from Crozet is pumped 15 miles to the Moores Creek Treatment Plant.
- Cost: \$5.4 M
- Completion: 2022

Beaver Creek Dam, Pump Station and Piping Project

- Dam:
 - RWSA operates the Beaver Creek reservoir as the sole drinking water supply for the Crozet community. New regulations require the dam spillway to pass an increased amount of water during a storm event to protect downstream residents and businesses. A larger spillway will be constructed through the center of the dam, with a bridge for vehicle traffic on Browns Gap Turnpike.
- Pump Station:
 - A new Raw Water Pump Station and Intake is required to provide adequate raw water pumping capacity to serve the growing Crozet community for the next 50 years, and to meet new minimum instream flow release requirements.
 - The pump station will be moved out of its existing location at the toe of the dam to a new location on the west side of the reservoir.
- Piping:
 - A new waterline will be constructed between the Pump Station and the Crozet WTP
- Cost \$27 M
- Completion: 2024 - 2026
- For more information about this project, please visit: <https://www.rivanna.org/rwsa-projects-map/beaver-creek-improvements/>

Crozet System

Average Daily Drinking Water Production	600,000 Gallons
Beaver Creek Reservoir Storage Capacity	500 Million Gallons

