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South Rivanna Reservoir to Ragged Mountain Reservoir Water Line Project
Community Meeting – June 19, 2018

Agenda

Welcome and Introductions, RWSA Overview, and Project Background
Bill Mawyer, RWSA Executive Director

Preliminary Route Review, Budget and Schedule
Jennifer Whitaker, RWSA Director of Engineering and Maintenance

Questions

Project Contacts

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- Bill Mawyer – Executive Director, bmawyer@rivanna.org

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South Rivanna Reservoir to Ragged Mountain Reservoir Water Line Project Summary

History

Drought in Central Virginia in 2001 - 2002 sparked a ten-year long water supply planning process. The community evaluated many alternatives, including taking water from the James River, but decided to "drink local" and stay within our watershed. A Community Water Supply Plan was ultimately completed and approved in 2012, which required the Rivanna Water & Sewer Authority (RWSA) to construct and operate:

- a new earthen dam at the Ragged Mountain Reservoir (completed in 2014).
- a water line from the South Rivanna Reservoir to the Ragged Mountain Reservoir.
- modifications to raise the Ragged Mountain Reservoir water level an additional 12 feet when community water demand equals 85% of the available water capacity.

Details

The water line will be a 9-mile-long, 36-inch diameter pipe with the capacity to transfer 25 million gallons per day of untreated water from the South Rivanna Reservoir to Ragged Mountain Reservoir, or transfer 16 million gallons per day of untreated water from the Ragged Mountain Reservoir to the South Rivanna Water Treatment Plant. In addition to the water line, the project will include an intake structure at the South Rivanna Reservoir, two raw water pump stations, and a pretreatment facility at the South Rivanna Water Treatment Plant to remove sediment and nutrients. This project is estimated to cost $80 million (in 2017 dollars).

Benefits and Timing

- ***Enhanced Dependability of Our Drinking Water System***: By connecting the South Rivanna Reservoir and the Ragged Mountain Reservoir, as well as the South Rivanna and Observatory Water Treatment Plants, our system will be capable of providing drinking water to the urban area from multiple facilities if there is a natural occurrence (earthquake, hurricane, drought, etc.) or incident (plane crash, fuel spill, equipment malfunction, etc.) which impacts our water storage or treatment facilities. The new water line will replace the 100+ year old water line which currently supplies water to Ragged Mountain Reservoir from the Sugar Hollow Reservoir.
- ***Increased Water Supply***: Completion of the water line and raising the Ragged Mountain Reservoir water level an additional 12 feet will provide an adequate water supply in the urban area for at least 50 years.
- ***Better for the Environment:*** With the new, bigger water line in place we can provide more water for people, fish, and other wildlife, by rapidly filling the Ragged Mountain Reservoir during times of high rainfall and leaving water in the rivers during dry times/droughts.
- ***Less Impact to Water Costs***: Existing RWSA construction loan payments will decrease in about 2032. New loans in about 2032 will have less impact on water costs and maintain the affordability for water customers when existing loans have been reduced.
- ***Lower State and Federal Environmental Permit Costs***: Compliance with environmental regulations may become more costly with each passing decade.

Schedule

The preliminary engineering, route determination, and easement acquisition process began in 2017. Completion of this initial phase of the project is anticipated by 2021. Completion of the final design and construction of the project is anticipated between 2027 and 2040. The RWSA Board of Directors will review the schedule after it receives updated water demand and water storage data by 2020.

Revised: April 25, 2018