Crozet Water System Plan

RWSA BOARD OF DIRECTORS

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August 25, 2020
Current RWSA Facilities - Crozet Area

- Beaver Creek Dam
- Raw Water Intake & Pump Station
- Raw Water Pipeline
- Crozet Water Treatment Plant
- Finished Water Pump Station
- Finished Water Piping
- Buck’s Elbow Tank
Drinking Water Infrastructure Plan

• Master Plan completed 2019 & updated 2020
• Beaver Creek Reservoir is an adequate water supply
• Water withdrawal permits are required from the Virginia DEQ
  • Includes a downstream release from the reservoir
• WTP capacity to increase from 1 to 2.1 MGD by 2020 to serve community’s increasing maximum day demand
• Beaver Creek Dam requires significant upgrade to meet recent dam safety requirements
• A new raw water pump station is needed
• Water distribution piping projects will be required
Crozet Water Projects
Capacity & Dam Safety

1. Finished Water PS
   Completed 2018
   $2.6 M

2. Crozet WTP GAC Filters
   Completed 2018
   $3.4 M

3. WTP Expansion
   2018-2021
   $8.5 M

4. Beaver Creek Pump Station
   2024 - 2026
   $11 M

5. Beaver Creek Dam Improvements
   2024 - 2026
   $16 M

$41.5 M
Finished Water Pump Station

- Completed September 2018
- Cost: $2.6 M
Granular Activated Carbon Filters

• Remove organic material to minimize disinfection byproducts
• 2 – 20,000 lb Contactors
• 1 MGD Capacity
• Completed: April 2018
• Cost: $3.4 M
Water Treatment Facility Upgrade

• Construction: December 2018 - December 2022
• Cost: $8.5 M
Beaver Creek Dam, Pump Station & Piping Modifications

- Upgrade the spillway to meet DCR dam safety standards
- Replace the raw water pump station, intake, and pipe to the Crozet WTP
- Cost: $27 M
- Completion: 2024 - 2026
Questions?