

Moores Creek Advanced Water Resource Recovery Facility Rivanna Pump Station Update



The Moores Creek Advanced Water Resource Recovery Facility (MCAWRRF) is the facility which processes the wastewater received from approximately 130,000 public wastewater customers in Charlottesville and the adjacent developed areas of Albemarle County, including Crozet.

What happened at the Rivanna Pump Station?

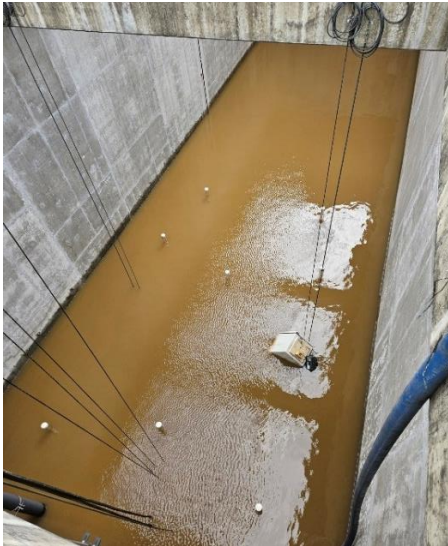
On January 9, 2024, high rain and wastewater flows may have damaged equipment in the Rivanna Pump Station causing it to malfunction, become submerged, and discontinue operations. This resulted in several wastewater overflows from manholes in and around Riverview and Darden Towe parks.



Riverview Park



Riverview Park



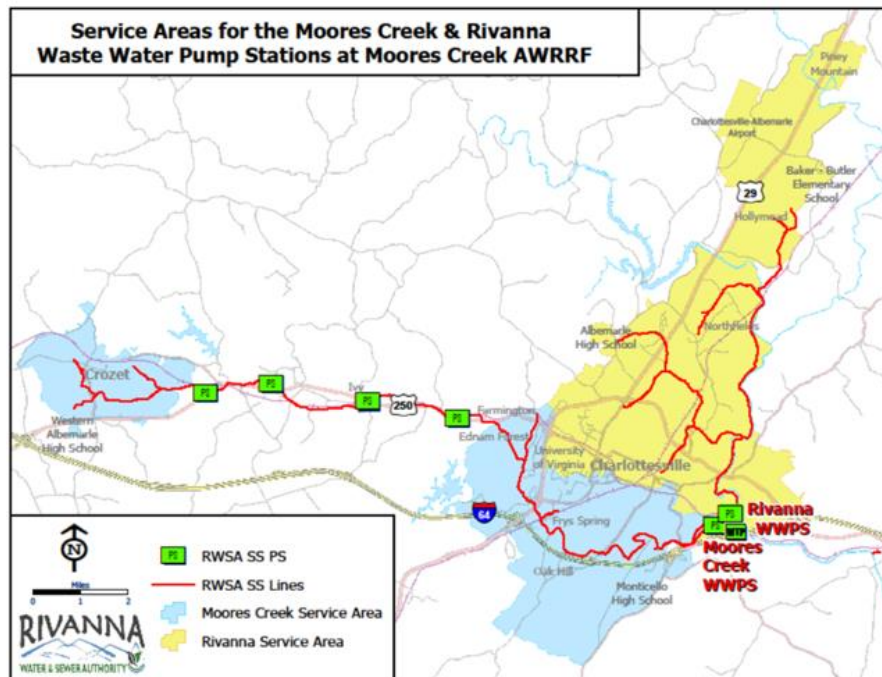
Submerged pump station wet well



Submerged pump station pump room

What is the Rivanna Pump Station?

The Rivanna Pump Station is located at the MCAWRRF in Charlottesville. Wastewater comes to this facility primarily through gravity driven flows from the northern parts of Charlottesville and Albemarle County each day. This facility pumps between 5 and 50 million gallons of wastewater daily. It is the largest pump station in the wastewater system and serves approximately 60% of the public utility customers in our community. The pump station lifts wastewater received at Moores Creek vertically about 100 feet so that it can be treated and eventually, once treatment is completed, released into Moores Creek.



What was RWSA's response?

In coordination with our contractors and the Virginia Department of Environmental Quality, the Rivanna Water & Sewer Authority's team responded immediately to continue service and minimize any impacts on the environment. A temporary pumping system was put into place to convey normal wastewater flows around the damaged Rivanna Pump Station for treatment. Unfortunately, for one 26-hour period, it was necessary to discharge untreated wastewater into Moores Creek to get the water out of the lower levels of the pump station. We coordinated this discharge with Virginia DEQ prior to the wastewater discharge, and the agency notified users down river from the discharge. Areas in the parks where the overflows occurred have been raked, cleaned, and sanitized and the manholes have been restored. There have been no overflows in the parks since January 18, 2024.

Our teams and contractors continue to work around the clock to put a second bypass system with a capacity of approximately 50 million gallons of wastewater per day, which will be able to handle increased wastewater flows from heavy rain events. This second bypass is expected to be completed by February 23.



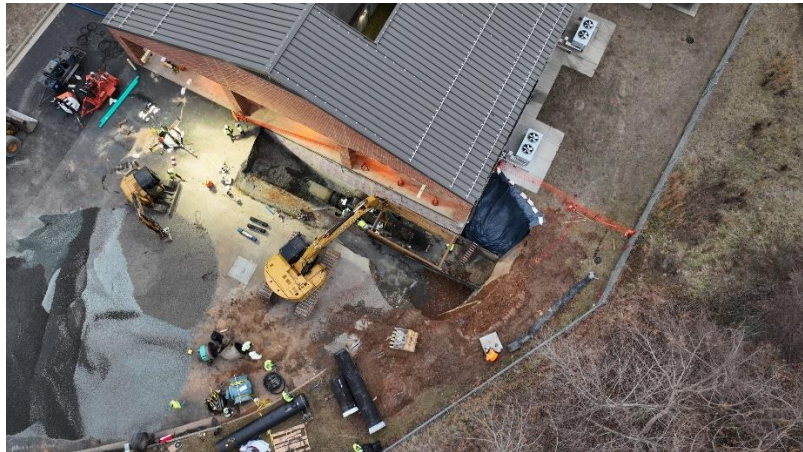
The Rivanna Maintenance team and contractors working on piping connections for the pumping bypass system.



The Rivanna Maintenance team and contractors working on piping connections for the pumping bypass system.



Temporary Pumps



Excavating to construct bypass connection



Setting up the 50 million gallon per day bypass system

What is going on now with the Rivanna Pump Station?

After a significant amount of work by the Rivanna team and our contractors, the water that was in the pump station has been pumped out. We are investigating and testing all of the equipment and pipes to determine what sequence of events led to the malfunction. Once the investigation is completed, work will begin to restore the pump station. Procedures will be established to prevent this type of situation from happening in the future. We will update this page as our progress continues.

Daily Photos

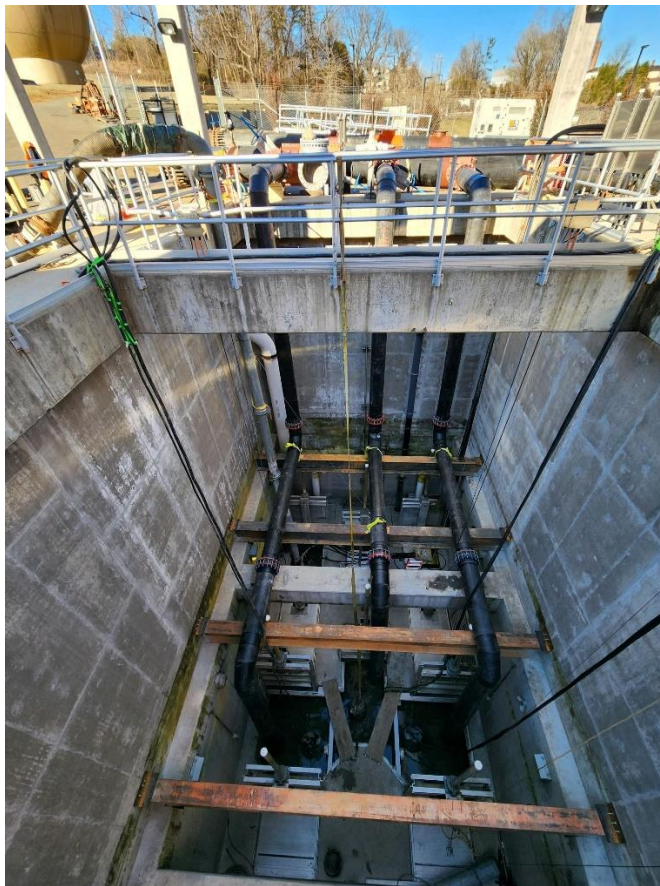
February 5, 2024





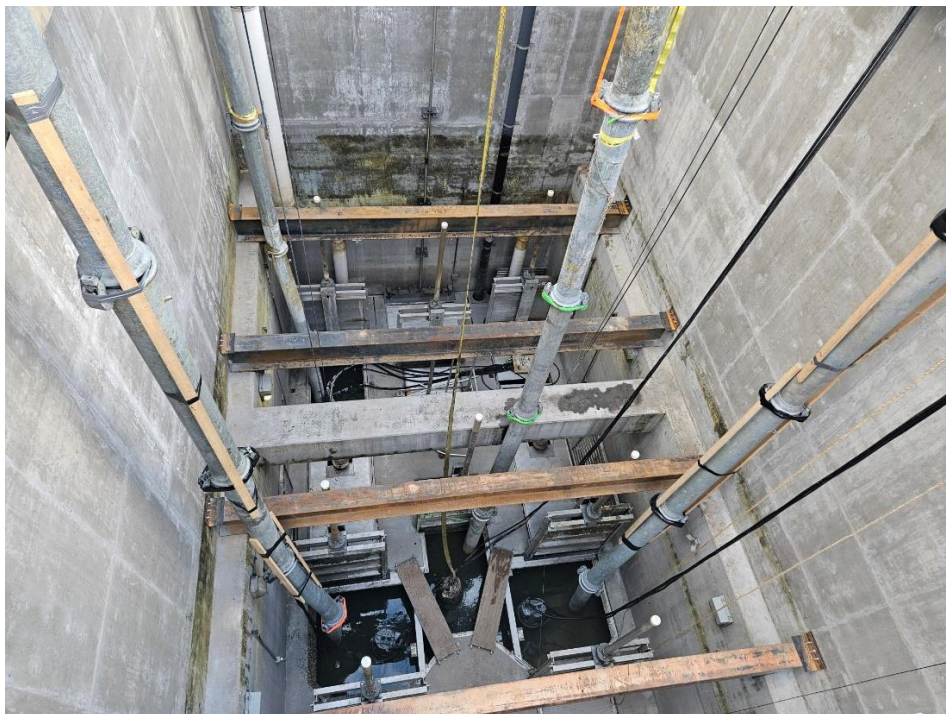
50 million gallon per day bypass

February 3, 2024



50 million gallons per day bypass

February 2, 2024



10 million gallons per day bypass

February 1, 2024



Bypass system pipes



Bypass system pipes

January 29, 2024



A crane lifting pipes for the bypass system