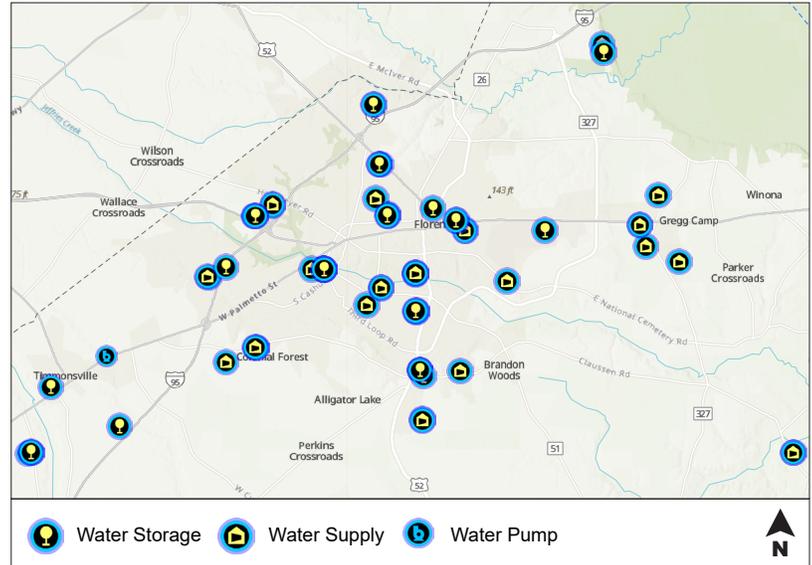


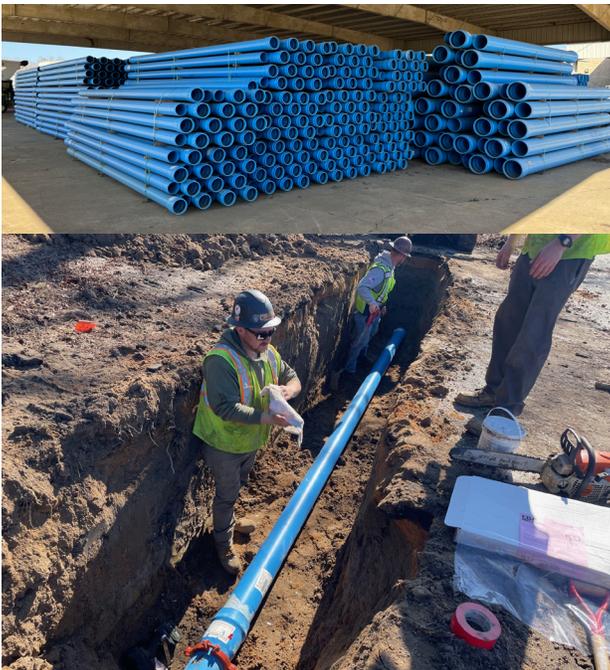
Water Quality Improvement Plan

Advancing Groundwater & Water Quality Improvements

Over the past decade, the City of Florence has endured multiple severe weather events—including hurricanes, flooding, and extreme freezing—that have challenged the resilience of its drinking water system. These conditions have led to low water pressure, service interruptions, and boil water advisories. Compounding these issues, the *Post and Courier* identified Florence in 2024 as one of the fastest growing communities in South Carolina. Given this rapid growth and the aging infrastructure within the groundwater system, the City is increasingly concerned about its ability to reliably meet future demands and withstand similar stresses moving forward.



A condition assessment of the City's groundwater system was completed to evaluate system needs and support long-term upgrades. Historically, the primary source for producing drinking water in the Pee Dee Region has been groundwater wells drawing from the McQueen Aquifer (formerly Middendorf) and the Couch Branch Aquifer (formerly Black Creek).



Construction of Short Term Improvements to the Water Distribution System

Recently City Council approved long-range master plans for water distribution, sewer collection, and stormwater, which collectively guide capital improvements over a 20-year horizon. The approved master plans for water distribution, sewer collection, and stormwater systems form a long-term strategy to modernize essential infrastructure and reduce issues affecting household water quality. These improvements aim to reduce sediment-related discoloration and respond to documented needs across drinking water, wastewater, and stormwater systems.

Residents can expect targeted replacement of older lines, upgrades to treatment systems, and a coordinated effort to improve system reliability.

A series of capital improvement projects are currently underway, including the implementation of a new SCADA monitoring system that will provide real-time operational oversight to improve responsiveness and efficiency.

Master Planning for Reliable, High-Quality Water

The City of Florence is leveraging federal and state funding—including American Rescue Plan Act (ARPA) dollars to modernize its aging water distribution and groundwater treatment systems. Within the City, 63% of its drinking water still comes from groundwater sources, underscoring the importance of continued improvements.

Launch of a **\$127 million, multiyear initiative** to enhance water infrastructure citywide.

- **\$80 million** of this investment is dedicated to water quality improvements, including major upgrades to the surface water plant—expanding capacity from 10 to 15 million gallons per day.

A recent **\$2.3 million investment**, supported by **\$10 million in grant funding**, is enabling upgrades across several key plants including the Oakdale, Pine Street, GE, and River Road facilities.

These substantial and coordinated investments reflect Florence’s continued commitment to delivering clean, reliable water to all residents. From restoring groundwater production capacity to implementing multi-million dollar treatment upgrades, the City is taking decisive action to modernize its systems, address community concerns, and create a stronger, more resilient water infrastructure that will serve residents for generations to come.

Recommended Groundwater System Improvements

Better manage groundwater resources

- Upgrade and optimize groundwater wells
- Improve water treatment plant performance
- Implement SCADA control system-wide
- Conduct Operations and Maintenance training

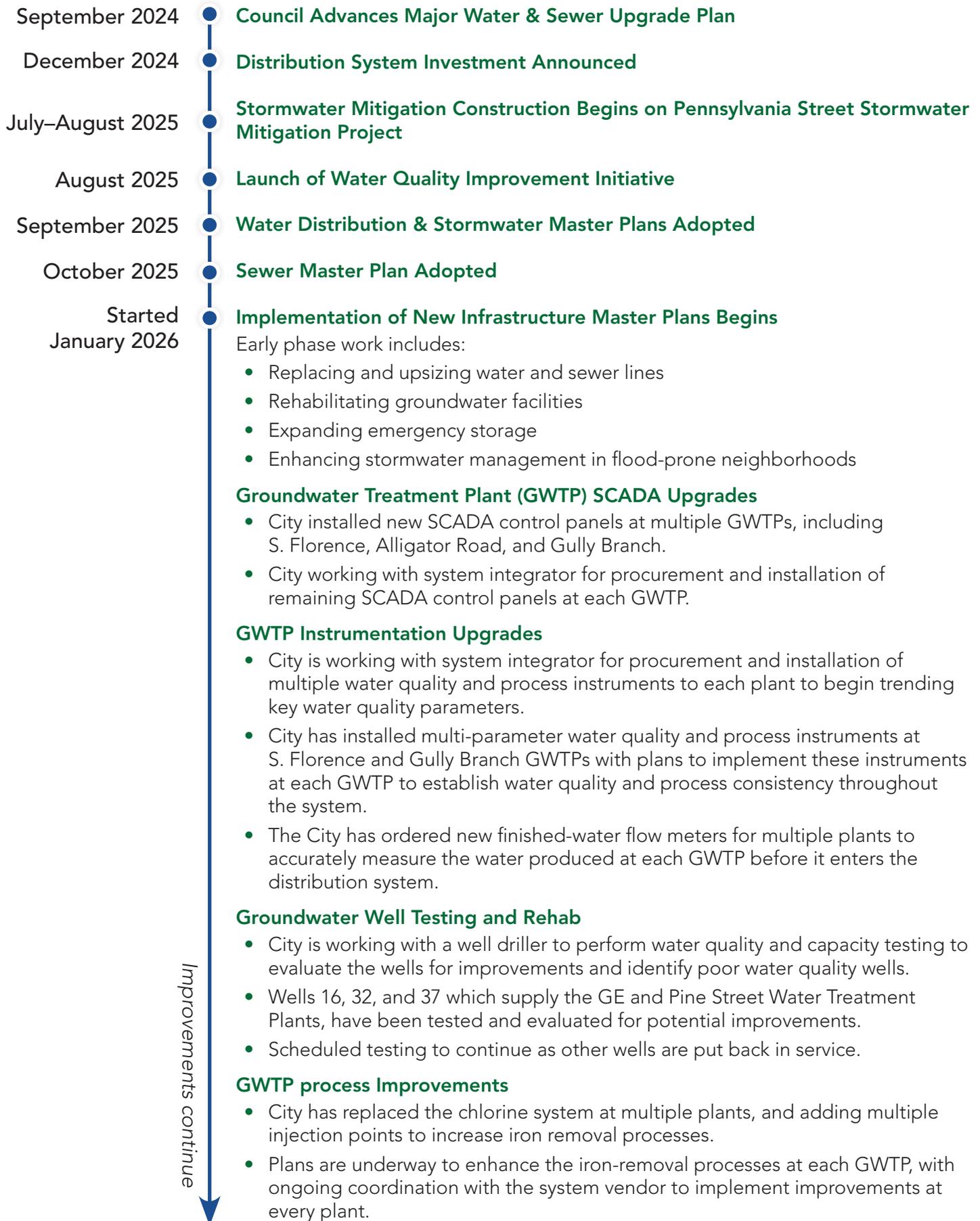


Plant 45 Alligator Road Groundwater Treatment Plant

Funding Support

 Federal	<ul style="list-style-type: none">• Community Grant Awards (federal appropriations)• Economic Development Administration• Water Infrastructure Finance and Innovation Act
 State	<ul style="list-style-type: none">• SC Rural Infrastructure Authority• SC Appropriations• SC DES (State Revolving Fund)• SC Department of Commerce (economic development)• SC Office of Resilience

Project Timeline: Groundwater & Water Quality Improvements



Upcoming Construction Projects

Enhance Production Quality

Improve Fire Flow Pressure Water Quality
Remove Scour Sediment from System
GE WTP Upgrades (Full System Upgrade)

IMMEDIATE
(next 60 days)



SHORT-TERM
(within 6 months)



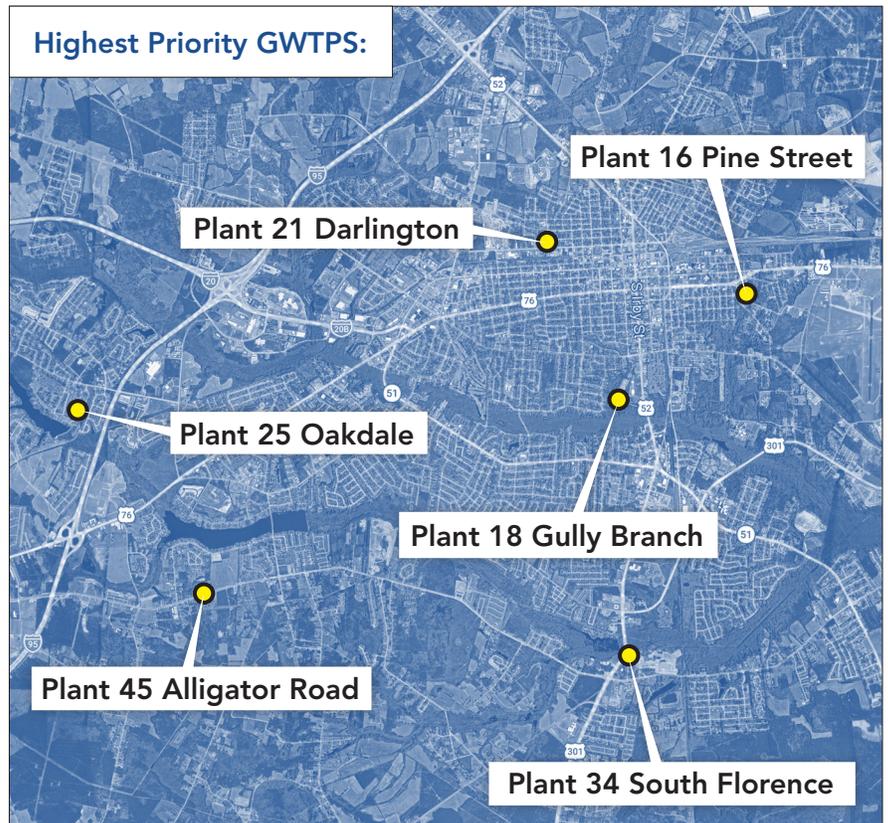
LONG-TERM
(one year or more)

Build Southern Transmission Loop Groundwater Treatment Upgrades

- Multi-phase approach to increasing water quality at the GWTPs
- Launch of Phase I: kickoff meeting, site investigations, preliminary engineering, and well testing
- Phase II will be a full design of the highest priority GWTPs to improve water quality treatment, install SCADA, and upgrade production and distribution systems
- Continued coordination with City staff for management of City performance

5-to-7 Year Water Quality Upgrade Cycle Continues

Highest Priority GWTPs:



Learn more on how we are building Florence forward:

<https://www.cityofflorencesc.gov/planning-research-and-development/capital-improvements>

