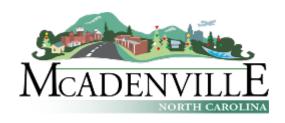


South Fork Sewer Project Phase II

STEPHANIE SCHERINGER, DIVISION MANAGER WASTEWATER TREATMENT









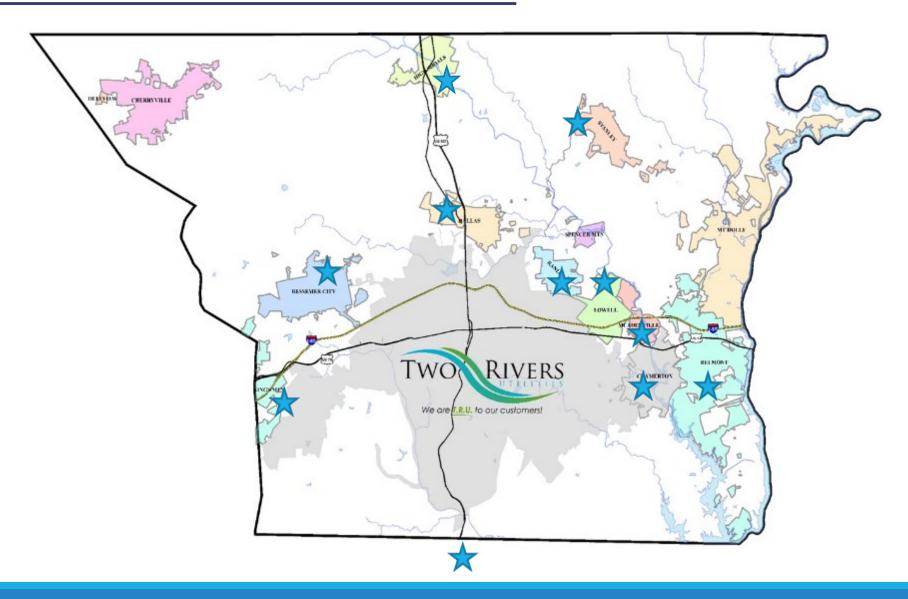


Sewer Utility

- 650 miles sewer line
- 3 Wastewater Treatment Plants
- Class B Biosolids Recycling Program
- \$40M Budget
- 30,608 direct customers
- Gastonia population 77,000
- Population served 107,000



Two Rivers Utilities Service Area

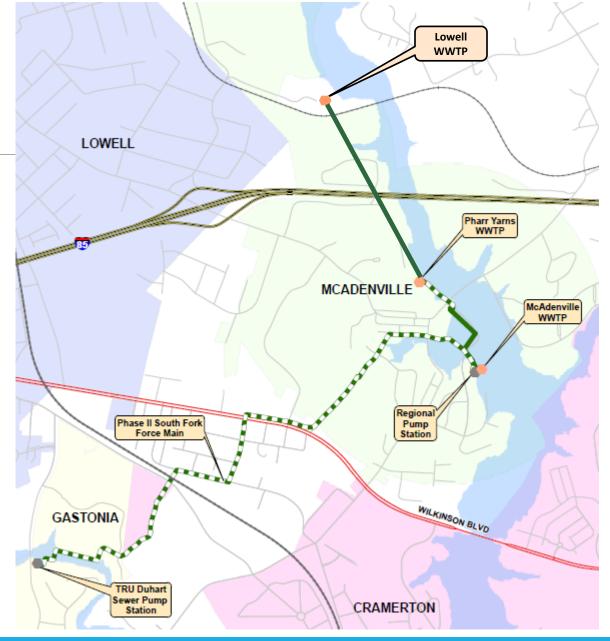


South Fork Sewer Scope

- 2007- Discussion began. Partner Goals:
 - Address antiquated wastewater infrastructure & lack of economy of scale
 - Improve environmental performance
 - Support future development
- Phase I
 - Eliminated a small wastewater treatment plant and a sewer pump station & treat at a modern wastewater plant
 - Completed in 2013
- Phase II
 - Eliminate antiquated wastewater treatment plants & treat at a modern wastewater plant
 - Completed in 2019

Original Phase II Plan

- Eliminate 3 wastewater treatment plants:
 - City of Lowell
 - Pharr Yarns
 - Town of McAdenville
- Build a regional sewer pump station & 2.4 miles of sewer line
- Convey the wastewater to the most sophisticated treatment plant in Gaston County



Project Challenges

- Design firm abruptly closed
 - Gastonia began designing in-house
 - Ultimately hired a contract engineer to finish
 - Delayed timeline & increased cost
- City of Lowell withdrew
 - Delayed timeline
 - Redesign work
- Gastonia's project manager changed
 - Become familiar, build rapport

But wait, there's more... Project Challenges

- Lowest project bid was approximately 2.5 times the available funding
 - > Bid negotiations with contractor
 - Value engineering
 - > Each partner increased funding and/or completed portion of the project
 - Seek additional funding sources
- Excessive rainfall during construction
 - Delayed timeline
 - Funding agency extensions
- Managing project funding
 - ➢ 6 funding sources, all with different rules

Partnership was the Cornerstone

Key Components:

- Regular project meetings
- Perseverance
- Commitment
- Open communication
- Cooperation
- Flexibility

Need for Additional Partners

- Gaston County
- Gaston County Economic Development Commission
- Additional funding agencies:
 - Golden LEAF
 - NC Department of Commerce
- Contractor
- Consulting engineer





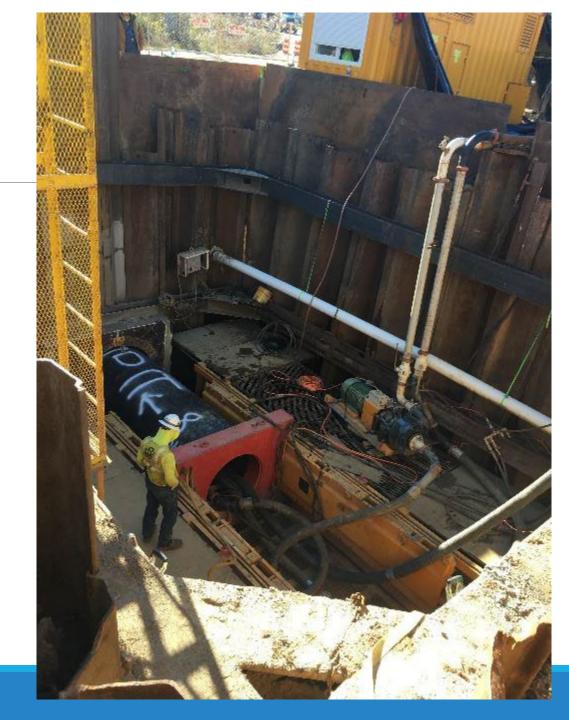


Funding Agencies

| South Fork Sewer Phase II | | |
|---|----|--------------|
| Clean Water Management Trust Fund Grant | \$ | 600,000 |
| Gaston County Grant | \$ | 500,000 |
| NC Commerce Utility Account Grant | \$ | 750,000 |
| Golden LEAF Foundation Grant | \$ | 858,000 |
| NCDEQ State Revolving Loan (Gastonia) | \$ | 3,000,000 |
| NCDEQ State Revolving Loan (McAdenville) | \$ | 320,494 |
| Pharr Yarns In-Kind Services (easement donations, decommissioning & demolition of their WWTP) | | |
| Project Total: | | \$ 6,028,494 |

Project Construction





Project Construction





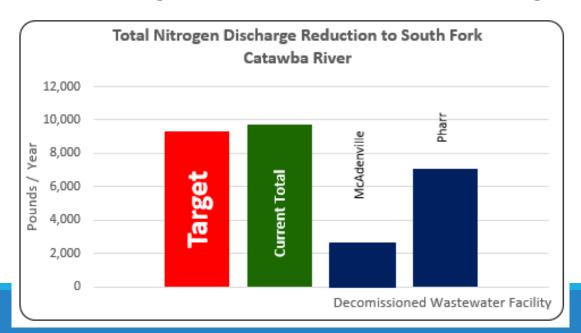
Project Benefits

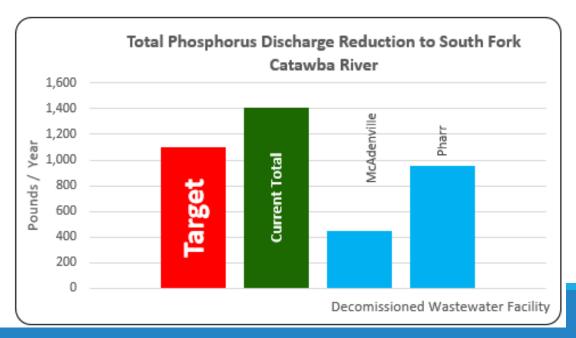
- Consolidation of wastewater treatment
 - Utilize existing capacity at Long Creek WWTP- advanced biological nutrient removal & 20 year ESI member
 - Reduce the number of NPDES permits
- Minimize water & sewer rate increases
 - McAdenville- ~\$2.5 \$3M to build a new WWTP
- Support development
 - 335 acres along the South Fork Catawba River now has access to sewer
- Set the stage for future wastewater utility consolidation
 - Easement is in place for the City of Lowell to tie-on in the future
 - Stepping stone to a full utility consolidation between Gastonia & McAdenville



Project Benefits

- Environmental benefits
 - Eliminated 2 WWTPs with a history of NPDES permit violations
 - The wastewater is now treated to higher standard
 - Significant reduction in nutrients discharged to the South Fork Catawba River









Thank You!

Questions?

Stephanie Scheringer

Two Rivers Utilities

City of Gastonia

704-866-6726

stephanies@tworiversutilities.com

