



Creek Coordination: Working Together to Restore Urban Streams

Erin Shanaberger, PWS

August 2, 2022

Storm Water Services Mission

PRIORITIES

MISSION-DRIVEN WORKFORCE
To ensure a diverse team that is engaged, highly skilled, and committed to excellence

ENVIRONMENTAL STEWARDSHIP
To protect and improve the quality of streams and other surface waters

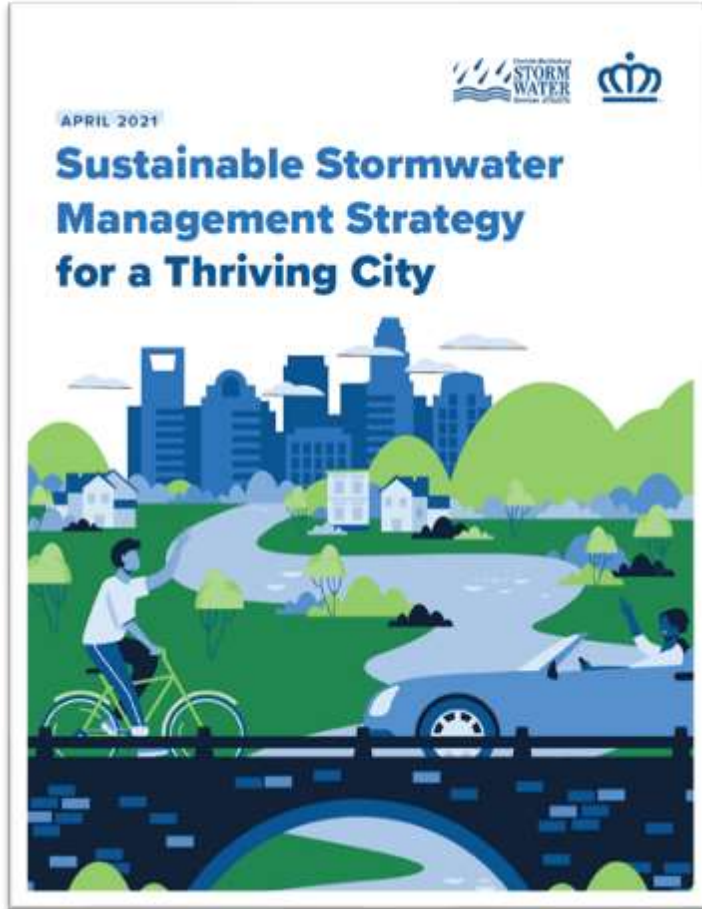
INFRASTRUCTURE MANAGEMENT
To continuously assess and improve storm drainage to protect public safety and ensure long-term sustainability

DEVELOPMENT SERVICES
To develop, implement, and enforce regulations that support the city's growth and address drainage needs

COMMUNICATION AND OUTREACH
To enhance understanding of our mission, foster credibility, and encourage community involvement

FINANCIAL STEWARDSHIP
To responsibly manage finances, fund key programs, and maintain customer affordability

ENVIRONMENTAL STEWARDSHIP
To protect and improve the quality of streams and other surface waters



Case Studies

Chantilly Ecological Sanctuary at Briar Creek

◀ Project Stats

- Completed in 2018
- Holistic watershed improvement, habitat, educational, and recreational project
- Floodplain buyout of 2 habitually flooded apartment complexes
- 24 acres of open space
- 4,500 LF of stream restoration
- 2 Stormwater Control Measures (SCMs)
- Certified as a waterfowl and butterfly sanctuary

◀ Project Partners

- Mecklenburg County Storm Water Services
- Charlotte Water
- Mecklenburg County Park & Recreation
- Charlotte-Mecklenburg Schools
- Charlotte Dept. of Transportation





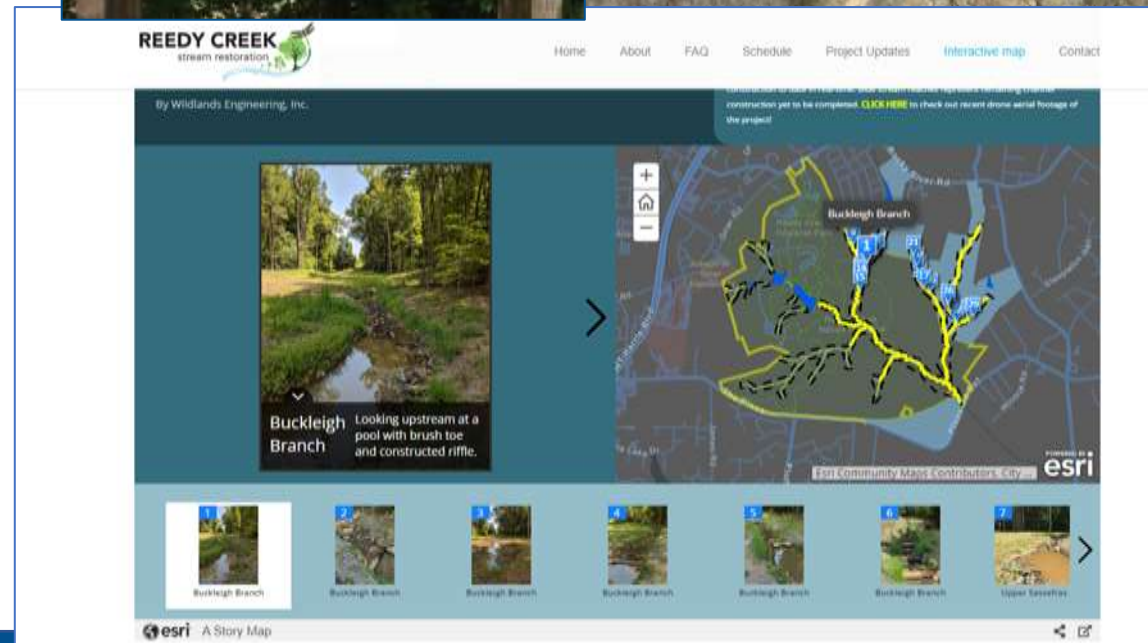
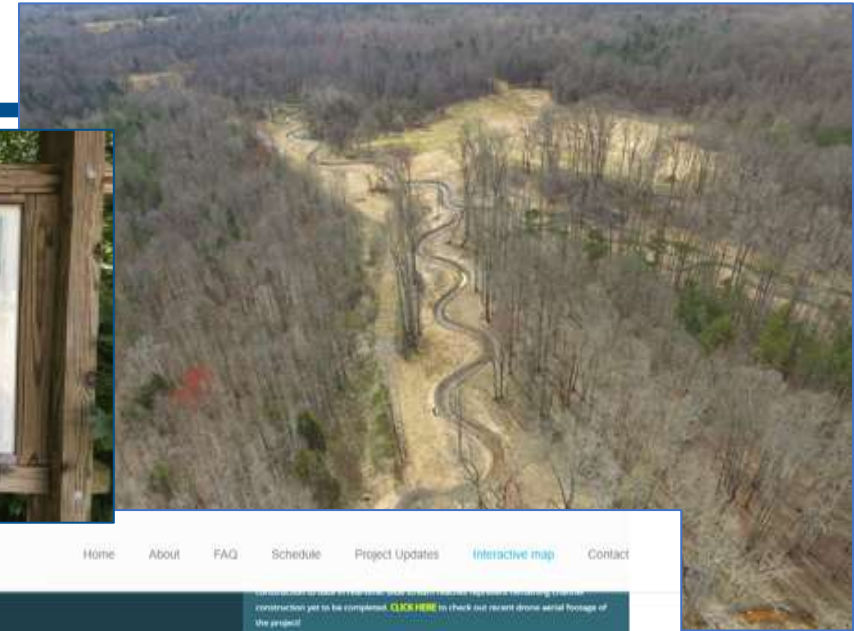
Reedy Creek

Project Stats

- Completed in 2019
- 5 miles of stream restored, 3 more preserved
- Progressive design-build approach
- Located in 927-acre Reedy Creek Park and Nature Preserve

Project Partners

- Mecklenburg County Park and Recreation
- Mecklenburg County Storm Water Services
- UNC-Charlotte
- Charlotte Water
- Private utilities (Natural Gas and Electric)
- Adjacent private property owners





137 likes

meckparkrec The Reedy Creek Stream Restoration project is helping the area thrive. Here's a look at what happens when you slow the water down:

- Erosion is reduced
- Wetlands thrive
- Water quality increases
- Wildlife becomes more diverse

Want to help track these changes? Find the yellow brackets on the bridges, snap a pic, and post on social media using #NewReedyCreek. 📸

March 18



Ribbonwalk

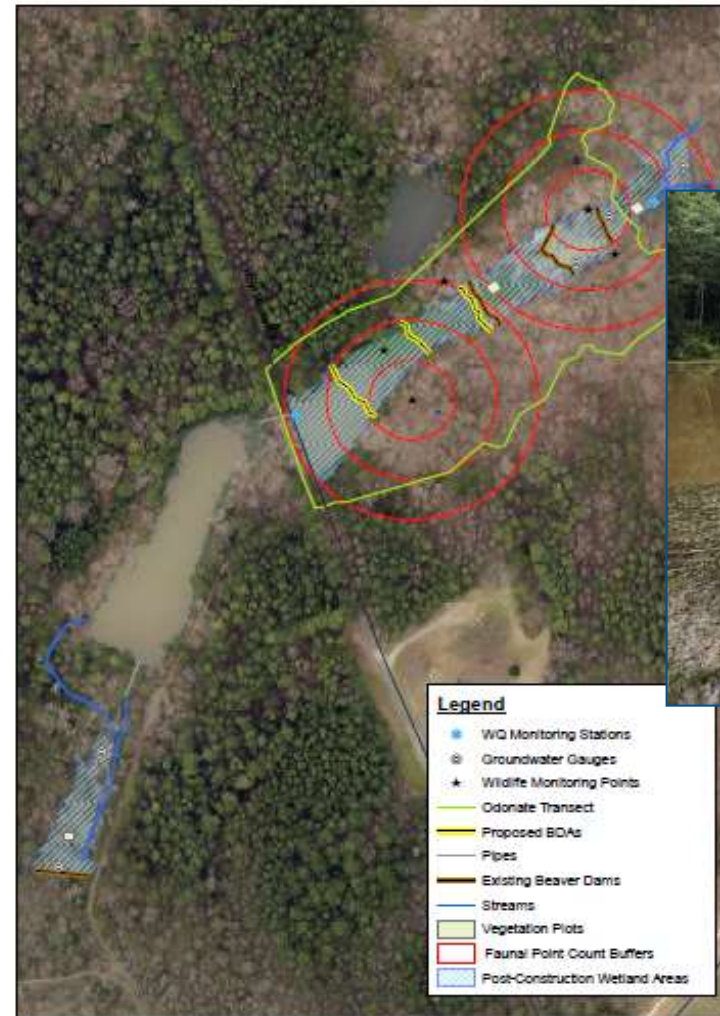
▾ Project Stats

- Pond-to-wetland conversion project
- Currently in design
 - Potential to use Beaver Dam Analogs to expand existing wetland areas
 - Preserve downstream wetland
- Potential to earn ~3 Wetland Mitigation Units (WMUs)

▾ Project Partners

- Mecklenburg County Park and Recreation
- Mecklenburg County Storm Water Services—Water Quality Group
- Charlotte Water
- Mecklenburg County Asset and Facilities Management (Real Estate)

Ribbonwalk Preliminary Pre-Construction Monitoring Map



Lakewood Water Quality Improvement Project

Project Stats

- ~2 acre constructed wetland
- Will treat 48 acres with 23% impervious area
- Currently in construction
- Originated as a stream restoration opportunity

Project Partners

- Mecklenburg County Park and Recreation
- Mecklenburg County Storm Water Services



STEWART CREEK GREENWAY *is growing!*
 State Street to Lakewood Ave Section
 January 2022 - Mid 2023

Questions?
 Call: 930-314-1000 Visit: ParkandRec.com
 Or Email: PRK-Planners@mecklenburgcountynyc.gov

Mecklenburg County is beginning construction on a new section of Stewart Creek Greenway. The Stewart Creek Greenway Trail, Storm Enhancement Project, and water quality enhancement project is a partnership between Mecklenburg County Park and Recreation and Charlotte-Mecklenburg Storm Water Services. The project will include a 5.3 mile greenway trail along Stewart Creek, a 1 mile greenway trail along Stewart Creek tributary, 0.5 mile of stream enhancements to reduce erosion and sediment, and the construction of a new stormwater control measure near the lake energy station.

www.publicinput.com/stewart

This greenway trail is also part of the Carolina Thread Trail.
<https://www.carolinathreadtrail.org/>



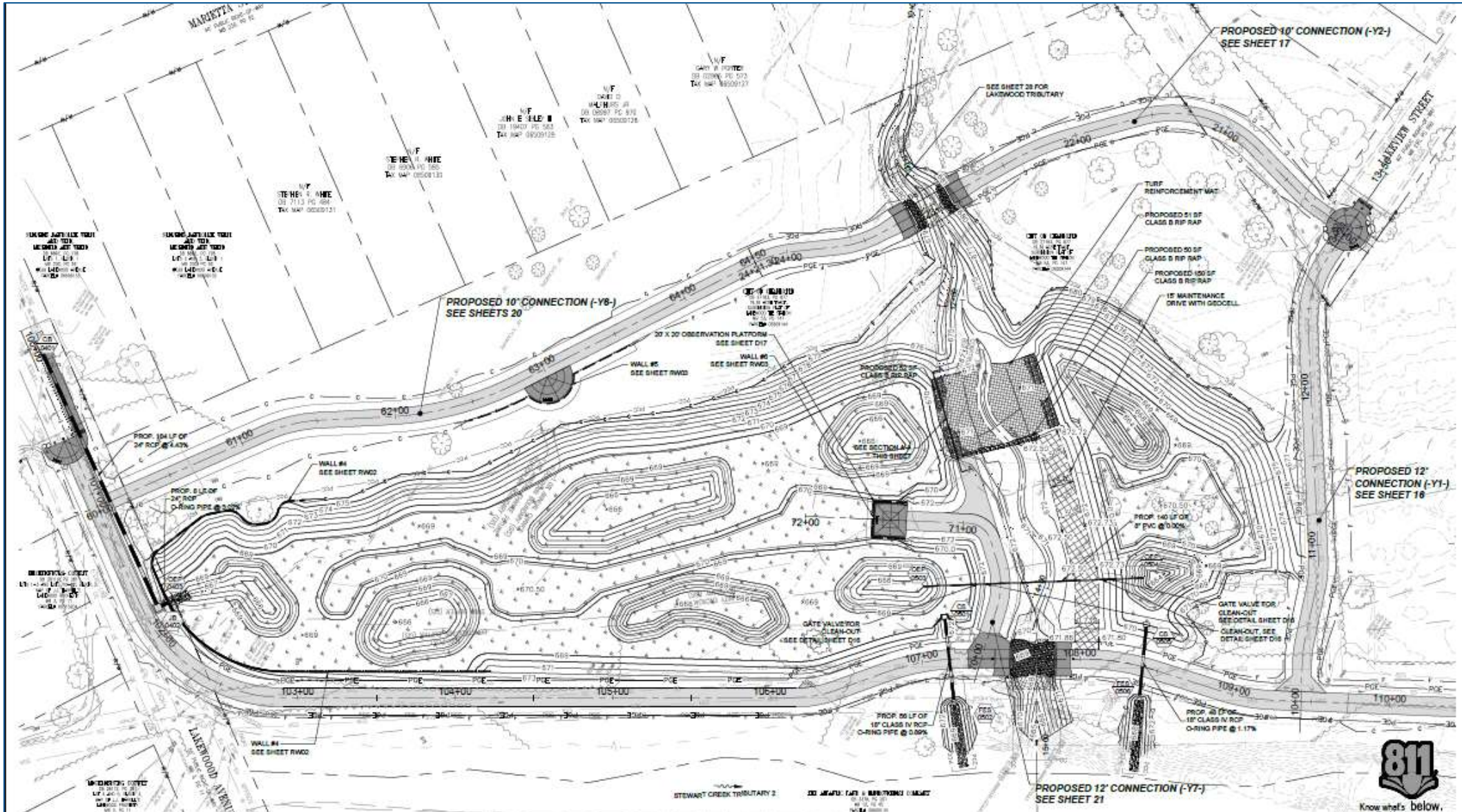

State St to Yellowstone Dr Yellowstone Dr to Lakewood Ave

General Contractors:









Long Creek Watershed Improvement Project

Project Stats

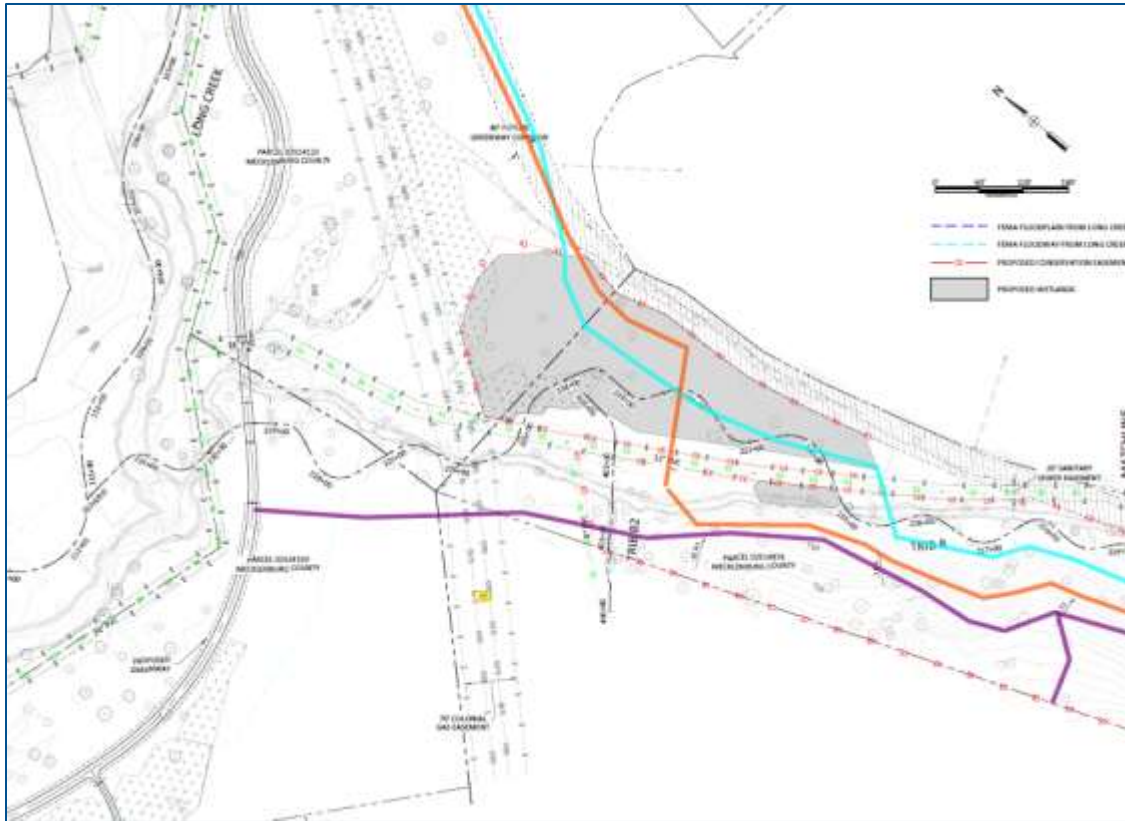
- 2+ miles of stream restoration/enhancement
- 2+ miles of greenway trail
- 14 acres of wetland restoration/enhancement/preservation
- ~2,800 Stream Mitigation Units (SMUs) and ~8 WMUs on minor system streams
- Construction complete by December 2023



Project Partners

- County Storm Water Services
- Mecklenburg County Park and Rec
- Mecklenburg County Asset and Facilities Management
- Mecklenburg County Historic Landmarks Commission
- Charlotte Water





- The City worked with our consultant to identify 3 options for a future greenway connector.



- Excluded additional areas from proposed easements that were needed by Park and Rec staff for construction access.
- Excluded an additional width on either side of the existing sewer easements to allow for future infrastructure upgrades.

Other Initiatives

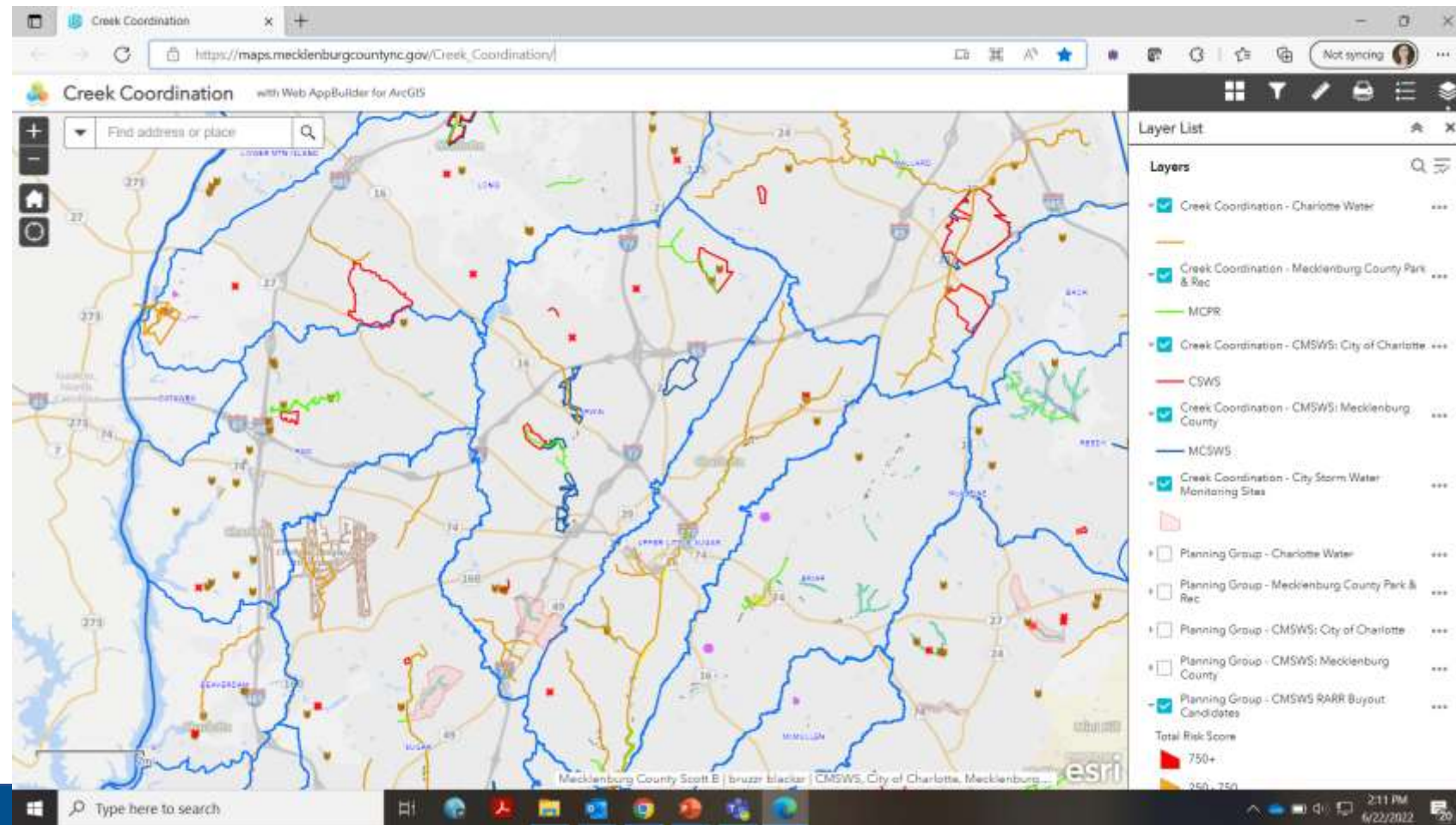
Creek Coordination Meeting (CCM)

- ◁ Quarterly meeting of local agencies working in/around Creeks
- ◁ A forum to discuss current and future projects and determine where further coordination is needed
 - Including impacts to older projects
- ◁ Each meeting we rotate the “focus agency,” which gives that agency a chance to highlight a specific project or topic of interest
- ◁ **Participants**
 - City Storm Water Services
 - City General Services-Engineering (Cross Charlotte Trail)
 - Mecklenburg County Storm Water Services (Engineering, Water Quality, and Operations)
 - Charlotte Water (Engineering and Field Operations)
 - Mecklenburg County Park and Recreation (Planning and Nature Preserves and Natural Resources)
 - Mecklenburg County Asset and Facilities Management



There's an app for that!

[Creek Coordination \(mecklenburgcountync.gov\)](https://maps.mecklenburgcountync.gov/Creek_Coordination/)



Strategic Planning

- ◁ **Smaller focus group of the CCM**
- ◁ **Main goal is to look at future planning efforts**
 - Where are we all going in the future and how can we coordinate efforts?
 - How can we shift funding or projects in time?
 - Where do all our projects line up in the long-term versus the short?
 - City Stream Restoration Ranking Protocol
 - County Stream Restoration Ranking System
 - County Park and Rec Playbook (Master Plan)
 - Charlotte Water Master Plan
- ◁ **We are working to improve the timing and flexibility pieces**

Wrap Up

- ▷ **At the end of the day, we all recognize we are serving a common purpose: improving the quality of life for the people of Charlotte, and Mecklenburg County**
- ▷ **We must look back, to move forward**
 - If we don't learn from our mistakes on past projects, we are doomed to repeat them
- ▷ **Some of the key takeaways from the projects I mentioned today:**
 - Be understanding
 - Be flexible
 - Consider timing
 - Document key project decisions and who was involved in making them
 - Be innovative
 - Give grace
 - Have trust
 - Be open to making changes and seeing other viewpoints



Questions?

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Charlotte-Mecklenburg Storm Water Services

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