



Charlotte-Mecklenburg Storm Water Services



The Power of Partnerships

March 2020

Storm Water Services Just the Facts...

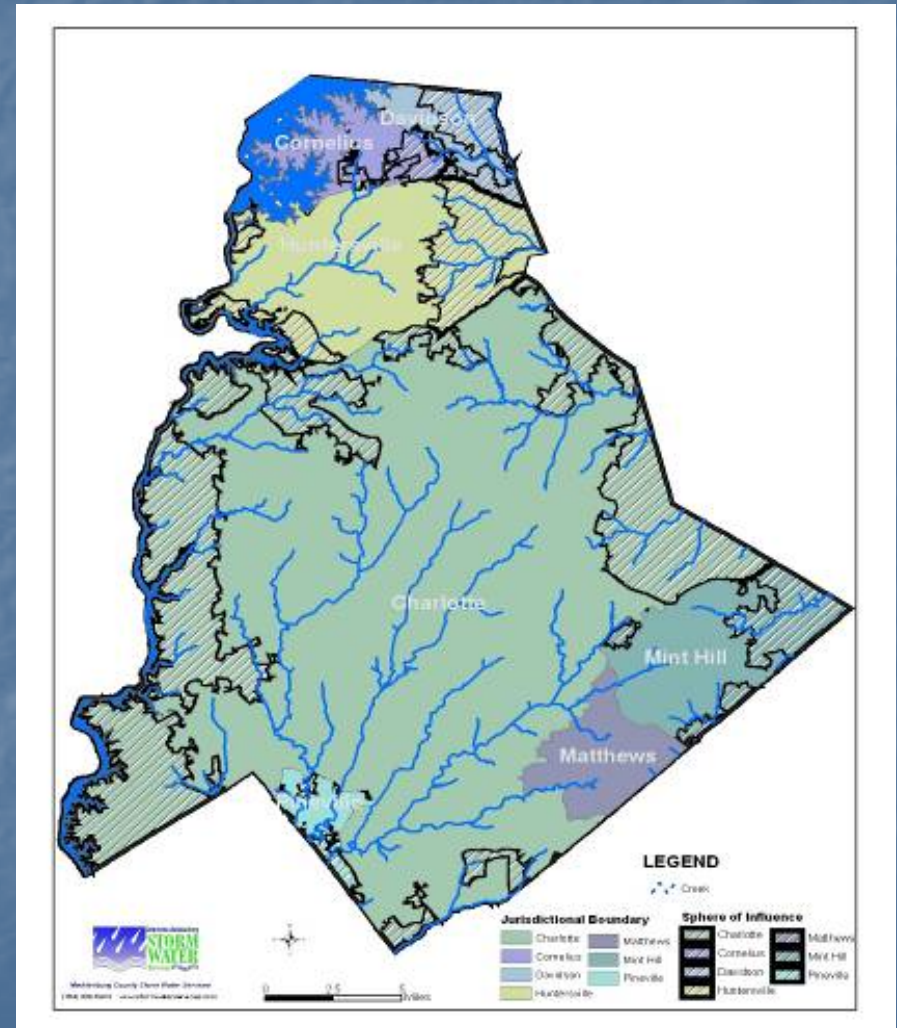
- Charlotte-Mecklenburg Storm Water Services
 - Joint City, County and Towns utility
 - First bills went out in January 1993
 - Significant changes have occurred over time
 - Partnering, collaboration have not!!!



Storm Water Services Just the Facts...

Three components of the fee:

- Fixed – billing/collection, per bill, countywide, County sets
- Major System – large creeks/FEMA streams, buyouts, retroFIT, stream restoration, countywide, County sets
- Minor System – smaller creeks/pipes/culverts, mitigation bank, roadway failures/sinkholes, municipality dependent, County sets in ETJ



High Level of Coordination

- Advisory Committee
- Fee Credit Manual
- Customer Service Call Center
- Fee Billing / Collection System
- NPDES Permits
- Capital Improvement Projects
- Communications





Fee Billing & Collection "System"



Finance Dept – Billing System



Policy, STW customer



Customer service - Tier 1



Impervious area maintenance, STW customer service – Tier 2



Water/sewer data, CLT WTR customer service – Tier 2



Fee Billing & Collection System

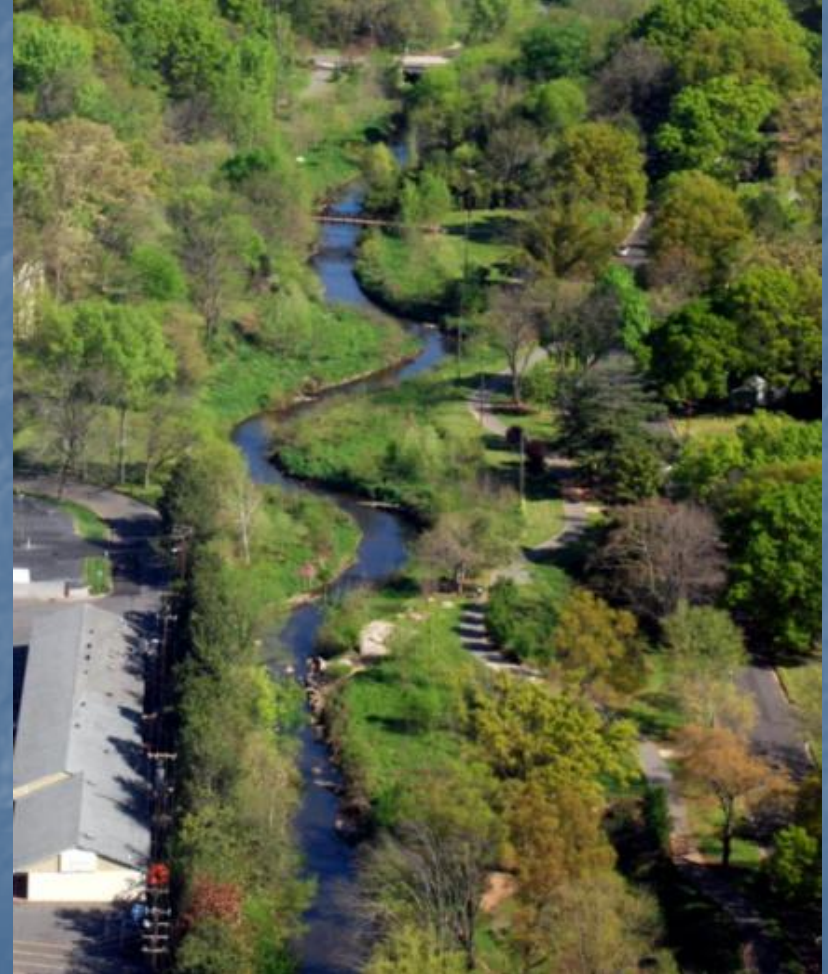
- **Account summary:**
 - Residential:
 - 89% of total accounts
 - 38% of the impervious area
 - Commercial:
 - 11% of total accounts
 - 62% of the impervious area
 - Monthly (water/sewer/storm water account):
 - 92% of residential accounts (90% of residential impervious area)
 - 90% of commercial accounts (99.5% of commercial impervious area)
 - Semi-Annual (no water/sewer account):
 - 8% of residential accounts (10% of residential impervious area)
 - 10% of commercial accounts (0.5% of commercial impervious area)
- **Secure revenue stream - Storm Water is paid first. Water service can be terminated for lack of payment.**

Fee Billing & Collection System

- **Management Structure:**
 - **Executive Team:**
 - Execution of the Charter
 - Strategic direction
 - Approve/modify budgets, staffing, etc.
 - **Management Group:**
 - Govern and tactical decisions
 - Address operational priorities
 - Division-level managers
 - **Core Team:**
 - Manage day-to-day operations
 - Functional and technical team managers

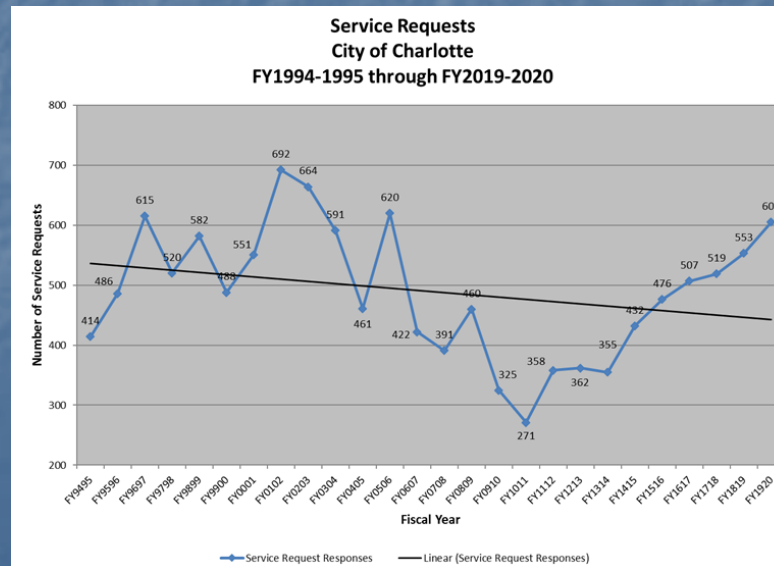
- **Major lesson learned:**
 - No surprises, if possible
 - When surprises occur, we all own it

- **Outsourcing can be a good thing**



NPDES – Ph I and II

- Charlotte – Phase I
- County, Towns, Community College and School system – Joint Phase II
- County Storm Water
 - Institutional knowledge - first, local Water Quality program in NC
 - Boots on the ground for everyone
 - 70+ task codes time and expenses are charged



NPDES – Ph I and II

- Illicit Discharge Detection & Elimination (IDDE) Program Element (FY20):
 - Responded to 728 service requests, 24/7 Emergency Response incidents
 - Walked 257 miles of stream – 250+ outfalls ID'ed/sampled, 45 stream blockages, 10+ severe stream erosion locations (sewer line concerns)
 - IDDE: investigate & monitor outfalls, business corridors and multi-family complexes – generated additional sampling, follow-ups, etc.
 - Regardless of where the incident occurred in the County





NPDES – Ph I and II

Illicit Discharge Detection & Elimination (IDDE) Program Element

Tasks	Charlotte	County	Cornelius	Davidson	Huntersville	Matthews	Mint Hill	Pineville	% of Total
Service Requests	\$526,945.73	\$20,430.07	\$7,794.94	\$3,475.28	\$18,126.71	\$10,540.27	\$10,599.44	\$4,959.02	73.96%
Stream Walks	\$84,017.35	\$9,800.15	\$3,739.17	\$1,667.07	\$8,695.26	\$5,056.10	\$5,084.49	\$2,378.81	14.78%
Illicit Discharge Detection & Elimination	\$48,920.39	\$11,543.01	\$4,404.15	\$1,963.53	\$10,241.60	\$5,955.26	\$5,988.71	\$2,801.84	11.26%
Totals	\$659,883.47	\$41,773.23	\$15,938.26	\$7,105.88	\$37,063.57	\$21,551.63	\$21,672.64	\$10,139.67	
% of Total	80.95%	5.12%	1.96%	0.87%	4.55%	2.64%	2.66%	1.24%	

Capital Improvement Projects

Chantilly Ecological Garden



Charlotte's Most Flood Prone Structures – Doral/Cavalier Apartments

Cavalier - 192 apartment units (County Purchased)

Doral - 128 apartment units (County Purchased)

- 160 apartment units (Privately Owned)

Total - 480 apartment units

- 320 apartment units purchased by the County

Flood damage in 1995, 1997, 2003, 2008, 2009

One of the most flooded properties in Mecklenburg County.

Predicted flood depths at Doral/Cavalier

FEMA BFE - 12 feet above the lowest floor

Future BFE - 16 feet above the lowest floor

Impact of Flooding

- Tenants had to be relocated to temporary housing
- Lower units were severely damaged
- Replacement of carpet, sheetrock, insulation, HVAC and electrical systems, appliances etc.
- \$11.6 million in flood insurance claim in 20 years (Building Damage only).



Doral/Cavalier

Total Acquisition Cost:

- Federal Share: \$8.5 million (59%)
- Local Share: \$5.8 million (41%)
- Total Amount: \$14.3 million



Chantilly Ecological Garden



- Restoration of County Major System: County major system revenue, NC CWMTF grant
- Restoration of City Minor System: City's minor system revenue
- Water quality features: City's Pay in Lieu of fund
- Final grading of floodplain to facilitate paving of greenway trails



City-County Partnership on Communications



Deania Russo, *County*
Ashley Smith, *County*
John Wendel, *County*



Leo Caplanides, *City*
Sharnelle G. Currence, *City*
Alyssa Dodd, *City*
Sassy Lojko, *City*

Ongoing Strategic Goals

- Educate to prevent and reduce stormwater pollution
- Host and advertise volunteer activities
- Communicate to protect lives and property from flood damage
- Promote CMSWS image, programs, services and benefits
- Comply with Community Rating System (CRS) and Federal Clean Water Act requirements

Accomplishments FY20

Volunteers

3,214 Participants

- Big Spring Clean - *cancelled*
- Adopt-A-Stream (2,384)
- Storm Drain Marking (1093 drains)
- Creek ReLeaf/Tree Maintenance (542)
- Volunteer Monitoring (121 events)
- Second Saturdays
- Clean Creeks Challenge



**2,000 trees
serviced**



**30.5 tons trash
removed**

Accomplishments FY20

Adapting for COVID-19

- Facebook Live Water Wednesday
 - 6 Live events
 - 321 viewers
- Visited Virtual Classrooms
- Promoted family volunteer activities
- Online touchless registration
- Clean Creeks Challenge
 - 6-person team challenge for summer break



Accomplishments FY20

Social Media

Followers:

- 7,342 Facebook
- 1,301 Twitter
- 985 Instagram





Activities Underway FY21

- New Good Neighbor Campaign TV & Digital
- Virtual Learning
- Public Input
- Create Infrastructure Campaign Video
- Water Quality Video and Jingle
- Communicate CRS Scores for Towns and City

Partnerships beyond the County



The Regional Stormwater Partnership of the Carolinas

Mission Statement

We seek to educate and bring awareness to the public, local businesses and education centers of our region about stormwater issues and their impact on water quality and our environment. We further aim to unite local stormwater programs by sharing information and ideas in order to discuss and address similar stormwater issues on a regional level.

Regionalstormwater.org



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OF THE CAROLINAS



STORMWATER

Working collaboratively on local
stormwater issues

The Regional Stormwater Partnership of the Carolinas (RSPC) educates and brings awareness to the public, local businesses and education centers of our region about stormwater issues and their impact on water quality and our environment. We further aim to unite local stormwater programs by sharing information and ideas in order to discuss and address similar stormwater issues on a regional level.

RSPC Members

Belmont
Bessemer City
Charlotte
China Grove
Cramerton
Dallas
Gaston County
Gastonia
Harrisburg
Lake Park
Landis
Lowell
Mecklenburg Co
Monroe
Mooresville
Mount Holly
Ranlo
Shelby
Stallings
Town of Stanley
Statesville





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OF THE CAROLINAS**

POST-CONSTRUCTION STORMWATER COMPLIANCE WORKSHOP

SAVE THE DATE
DECEMBER 8, 2020
9-11:30 AM
ZOOM WEBINAR

THE TALKS

- Post Construction Stormwater Ordinance Overview
- North Carolina Department of Environmental Quality Post Construction Stormwater Requirements
- Inspection & Maintenance of Structural Stormwater Control Measures Requirements and Common Issues
- Municipality Experiences with Post Construction Rules and Compliance
- Review of Homeowner Association Challenges

REGISTER: <http://regionalstormwater.org/post-construction-compliance>
Earn 2.5 PE PDHs

The Regional Stormwater Partnership of the Carolinas

Managing Stormwater Service Requests from Citizens

Tech Talk

Come learn protocols, procedures, prioritization processes, common problems/issues, and interesting cases from different municipalities for handling both stormwater pollution and drainage service requests from citizens.


TIME: 9AM - 11:30AM
DATE: MAY 21st

Caston College - Kimbrell Campus
7220 Wilkinson Blvd, Belmont, NC 28012

REGISTER NOW AT
<https://regionalstormwater.org/tech-talk-may-2019/>

Agenda

- 9:00-9:15 a.m. Continental Breakfast/Networking
- 9:15-9:20 a.m. Welcome and Overview of RSPC
- 9:20-9:45 a.m. Kevin Herring, Charlotte
- 9:45-10:10 a.m. Andrew DeCristofaro, Mecklenburg County
- 10:10-10:40 a.m. Chris Costner, Monroe
- 10:40-10:55 a.m. Break
- 10:55-11:25 a.m. Panel of 8 Municipalities
- 11:25-11:30 a.m. Concluding Remarks



**REGIONAL
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VIRTUAL TECH TALK 2020

October 13

9AM - 11AM

THE TALKS

- Overview: Mecklenburg's Programs for Flood Resilience and DHS Grant
David Kroening
- Sensor Technology & Deployment
Ryan Spidel & Matthew Storosh
- Application of Sensors for Dynamic Flood Monitoring & Response
Josh McSwain, Neal Bamerjee & James Scanlon

Economical Flood Sensor Deployment for Flood Monitoring & Response

Register:
<https://regionalstormwater.org/flood-sensor-tech-talk/>

The Regional Stormwater Partnership of the Carolinas presents:

Stormwater Workshop for Elected Officials

Agenda

- 8:30-9:00 Registration and Light Breakfast
- 9:00-9:15 Welcome and Introductions
- 9:15-9:45 Protecting our Water Resources
- 9:45-10:15 NCDEQ's Municipal Stormwater Permit Compliance Initiative
- 10:15-10:30 Break
- 10:30-11:00 Municipal Stormwater Fees and Importance for Stormwater Infrastructure
- 11:00-11:30 Building Stormwater Infrastructure to Serve as Community Amenities
- 11:30-12:00 North Carolina Community Conservation Assistance Program
- 12:00-12:30 Interactive Audience and Panel Discussion

FRIDAY 26TH
11-12:30PM


1000 E. 4th Floor
NC

REGISTER AT:
regionalstormwater.org/stormwater-workshop-2020/


THE TALKS

- Registration and Light Breakfast
- Welcome and Introductions
- Protecting our Water Resources
- NCDEQ's Municipal Stormwater Permit Compliance Initiative
- Break
- Municipal Stormwater Fees and Importance for Stormwater Infrastructure
- Building Stormwater Infrastructure to Serve as Community Amenities
- North Carolina Community Conservation Assistance Program
- Interactive Audience and Panel Discussion


Regional Stormwater Partnership of the Carolinas




RUSTY ROZZELLE
Mecklenburg County




JEANETTE POWELL
NCDEQ



EVAN KIRK
NC Environmental Finance Center



JONATHAN SMITH
Istre Tech



TOM HILL
NCEM CCAF

Questions??