

Eco Stream Conference: Asheville, NC 2018

Setting the Stage

(public buy in)

Educating the general stake holders

David Woodie, PE, CPSWQ

Charlotte-Mecklenburg Storm Water Services




How do you present a new project?


Public meetings, Maps, Pictures,
Drawings, Documents, Graphs,
etc...

The Times, they are changing...

Digital imaging, Video, Drones,
Satellite imagery, LiDar, Social
Media, 3D imagery, etc...

Charlottenc.gov/StormWater

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25 YEARS Charlotte-Mecklenburg **STORM WATER SERVICES** [STORM WATER SERVICES](#)

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SEE FLOODING?
KNOW WHAT TO DO...



turn around, don't drown.

- More than half of all flood fatalities are vehicle-related
- Flood waters may be deeper than they appear
- One foot of moving water could float and sweep your vehicle away

[Turn Around, Don't Drown](#) | [Find out more](#)

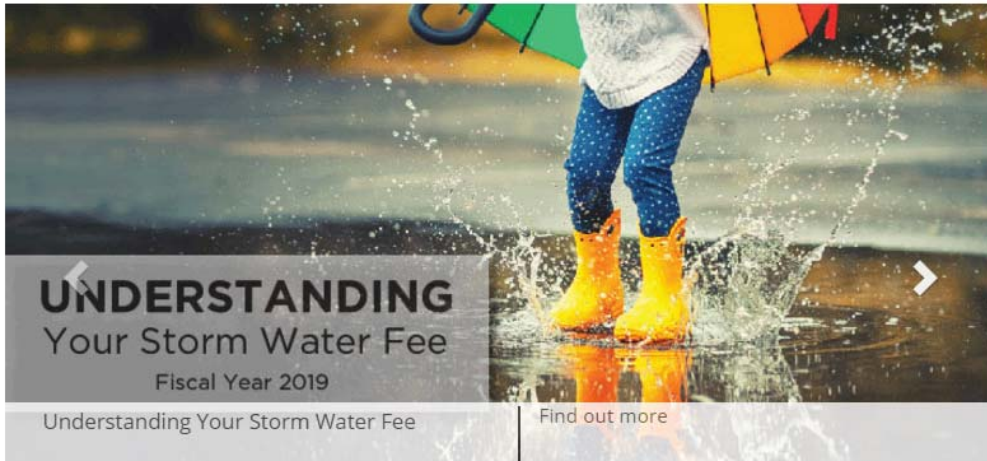
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UNDERSTANDING Your Storm Water Fee

Fiscal Year 2019

Understanding Your Storm Water Fee

Find out more



Interactive Projects
Map

Rain Data & Creek
Cams

3D Floodzone Maps

Outreach &
Publications

10 Tips for Water
Quality

WaterWatchers App

Fees FAQs

Rainy Day Activities

Data & Apps

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Tweets by @StormWaterCM



CharMeck Storm Water
@StormWaterCM



Remember to watch what and where you dump. You could be fined for illegal dumping in Mecklenburg County. These fines can reach up to thousands of dollars a day! Avoid this costly mistake: bit.ly/2vxyaUz



15h

Embed

View on Twitter

KEEP YOUR EYES OPEN AND REPORT POLLUTION TO 311.

PAINT

CONCRETE

Report Pollution to 311

Find out more





VOLUNTEER WITH US!

- AUG 11** STREAM CLEANUP
- SEPT 8** STORM DRAIN MARKING
- SEPT 22** VOLUNTEER MONITORING
- OCT 13** LAKE CLEANUP

Volunteer

Find out more



Facebook, Like Me...

Secure | <https://www.facebook.com/StormWaterCM/>



Charlotte-Mecklenburg Storm Water Services
@StormWaterCM

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CELEBRATING
25 YEARS
OF IMPROVING
OUR COMMUNITY

- Reducing Flood Risks
- Improving Surface Water Quality
- Repairing the Storm Drainage System



Like Share ...

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Posts

Charlotte-Mecklenburg Storm Water Services

Need a summer volunteering activity for the kiddos? Sign up for our
See more of Charlotte-Mecklenburg Storm Water Services on Facebook
to our streams, rivers, and lakes! <http://bit.ly/2aE3Yrw>

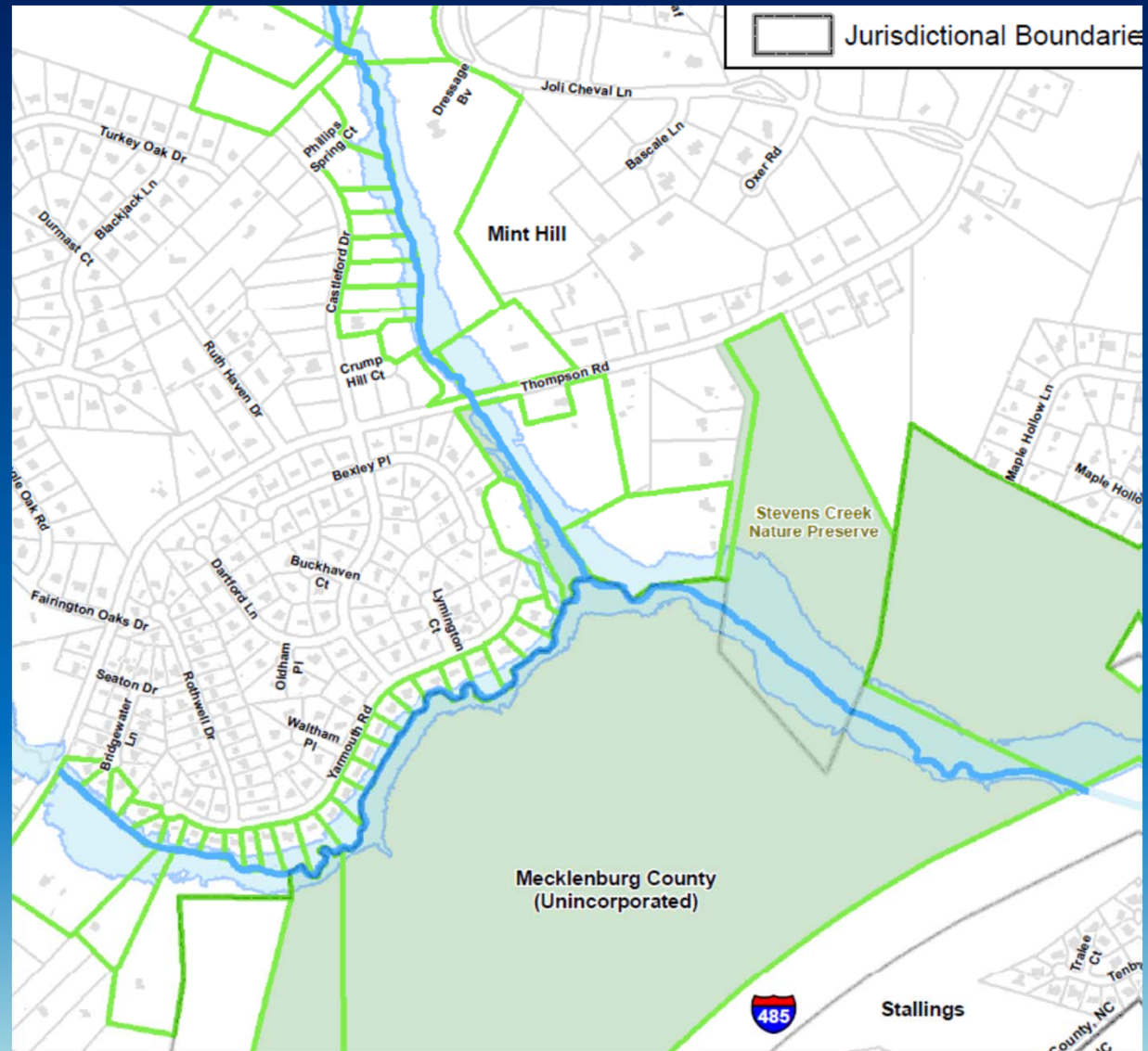
Search for posts on this Page

Government Organization in Charlotte, North Carolina

Project Planning

- Identify the project
- Develop a mailing list for initial community contact
- Host a community/public meeting to raise awareness
- Discuss objectives of the project, Project Goals
- Community concerns (Listening is key...)
- Address concerns to the best of your ability
- Move the project forward as a team
- Project websites, Facebook, YouTube, Twitter...

- Stevens Creek
- Mint Hill, NC
- Sub of Charlotte, NC
- County Property
- 59 stake holders
- 10,000 ft of Stream
- Five Major Projects
- Grant w Fish/Wildlife
- Goose Creek Watershed



Stevens Creek

- Highly erosive banks
- Vertical banks
- No vegetation
- Tree loss
- Debris
- Rock bed
- Increased lateral movement







- **Disclaimer**

- **No animals were harmed in the making of this photo...**





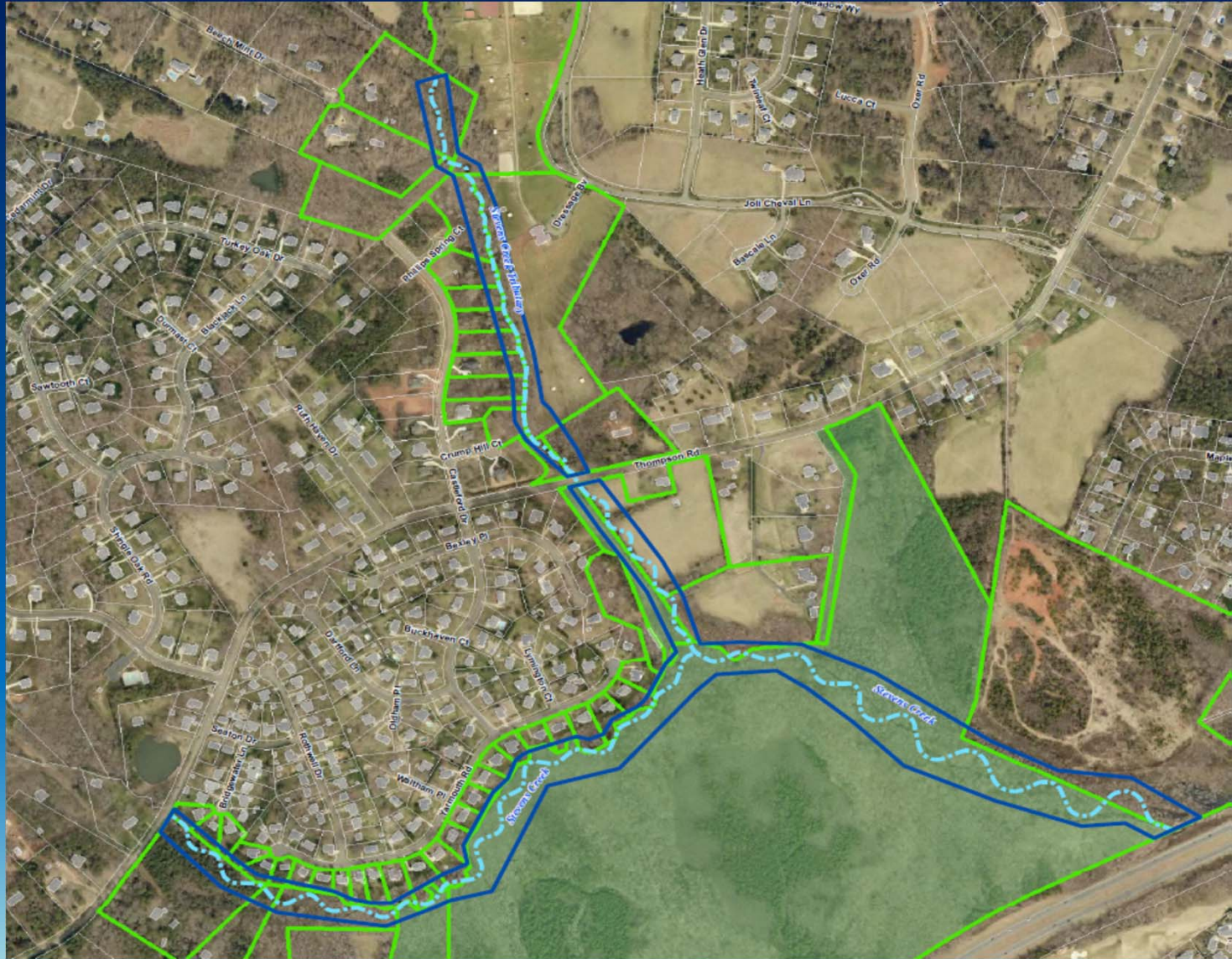
Overall Project Goals, (*Typical for most projects*)

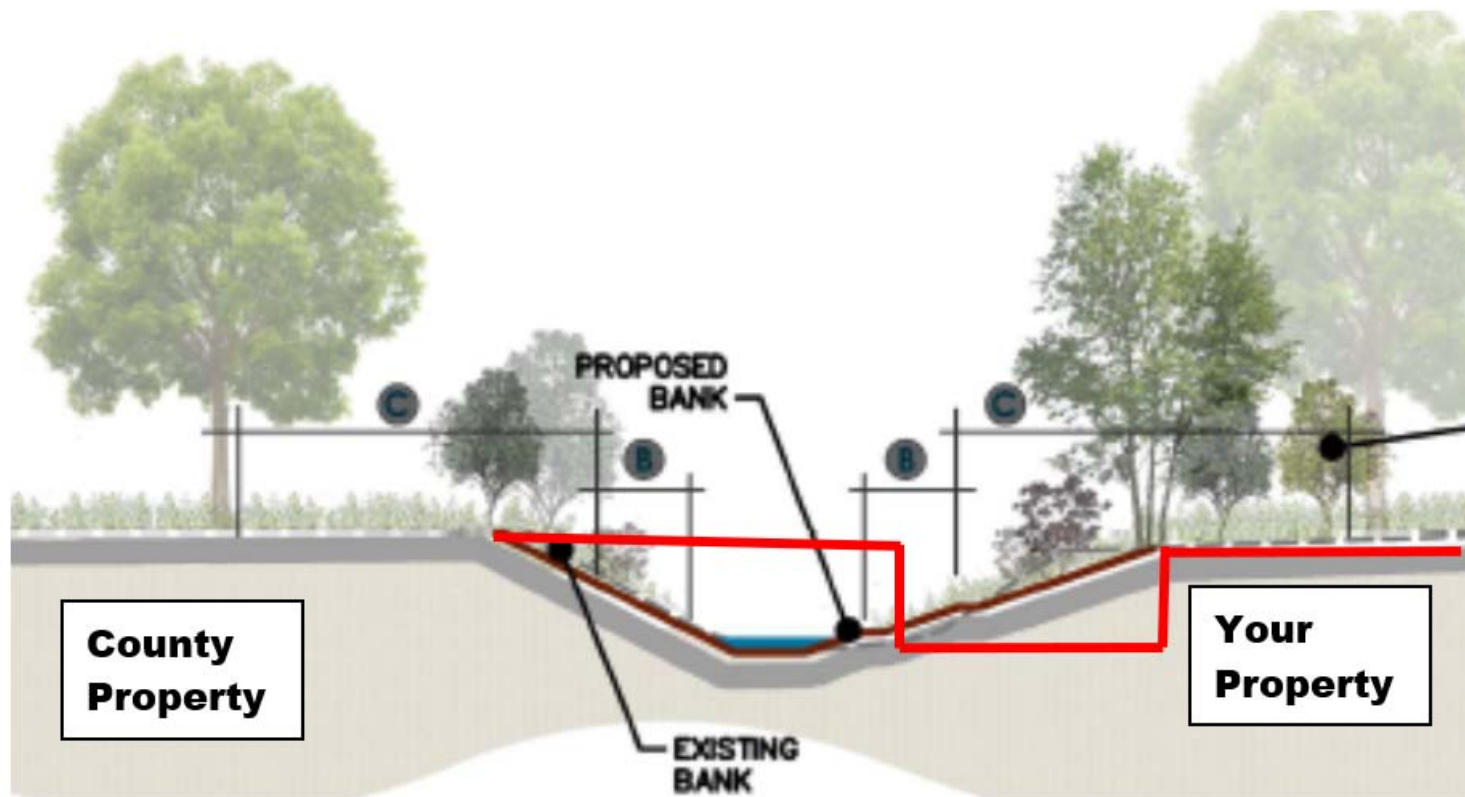
- Reduce sediment contribution from bank erosion
- Improve hydraulic and geomorphic functions
- Improve aquatic habitat
- FEMA “No-Rise”
- Incorporate greenway crossings
- Protect utilities
- Public involvement

Maximize Stream Length



Little Sugar Creek, Hidden Valley Ecological Park





**The red line represents the CURRENT creek conditions.
Looking Upstream.**

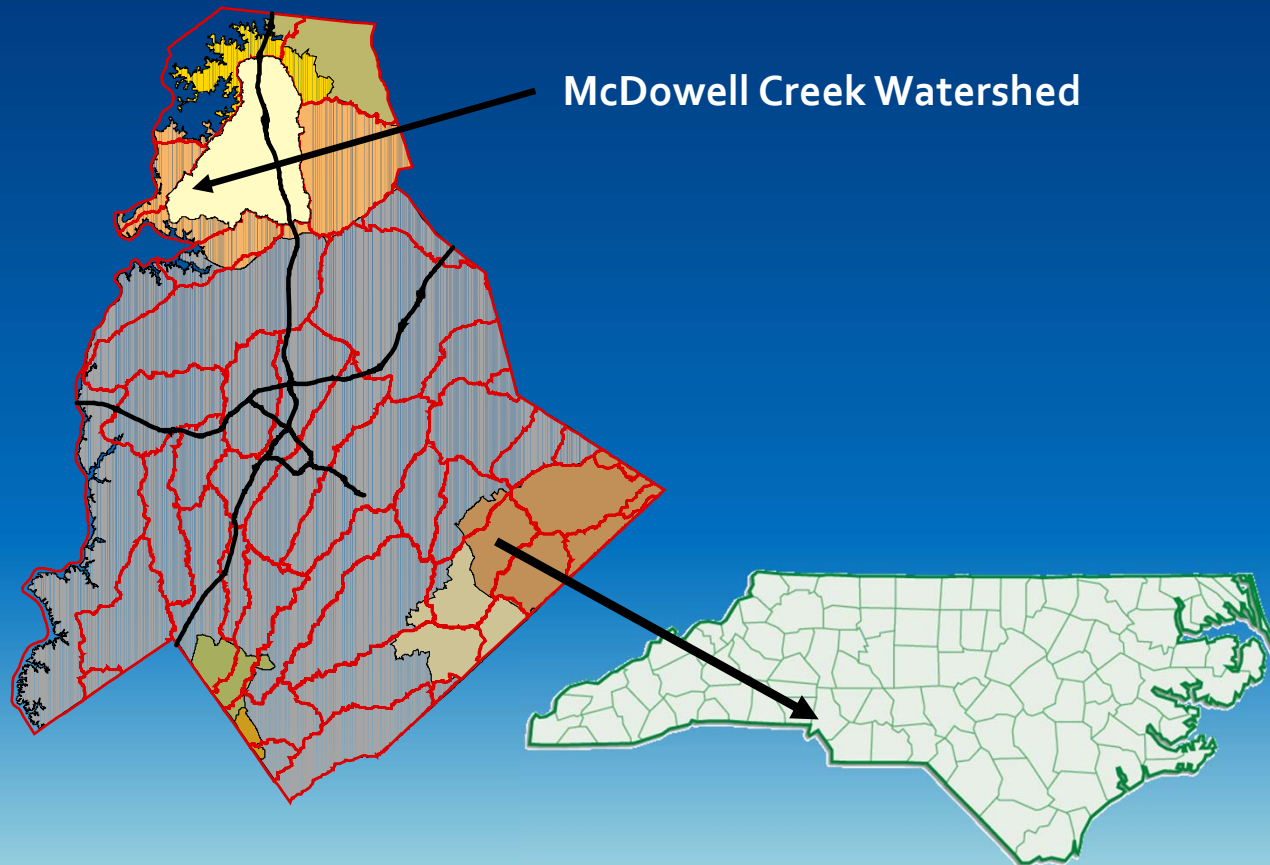




McDowell Creek Watershed

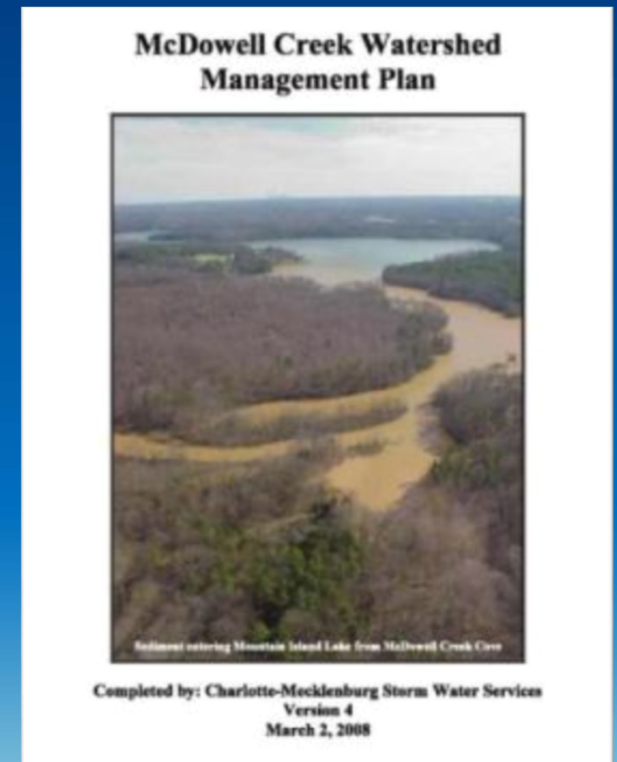
Mecklenburg County - Huntersville, NC

Example of incorporating restoration/stabilization into a watershed plan



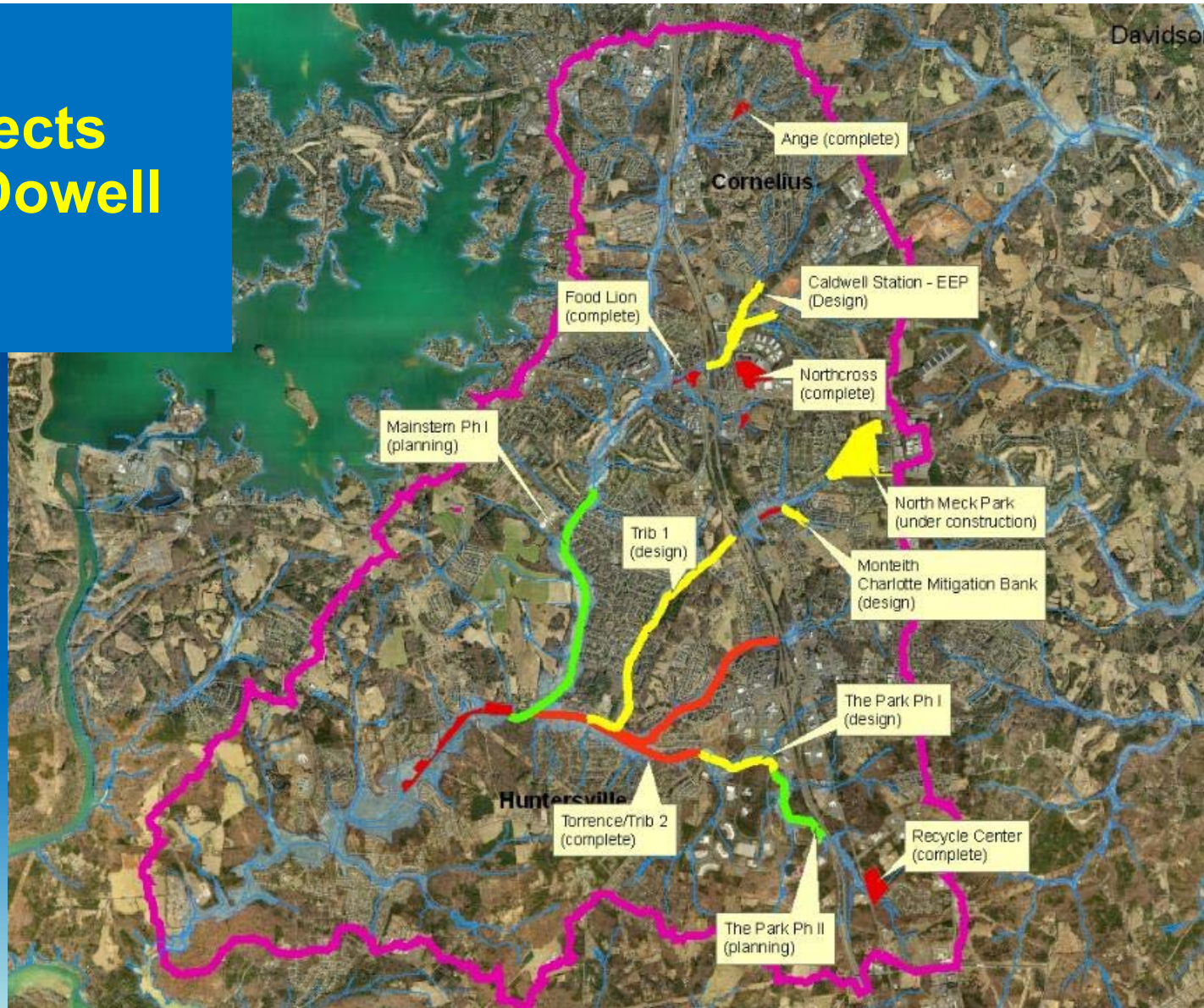
McDowell Creek Watershed History

- 1930s – Widespread straightening of McDowell Creek to prevent malaria
- 1990s – Population increases by 300% (Still rising)
- 1992 – Most of the Watershed designated as Water Supply Watershed
Local zoning ordinance capping WWTP pollutant load at 1992 levels.
- 1999 – Buffer Ordinance
- 2000s – 303d list as “Biologically Impaired”
- 2001 – Watershed Modeling
- 2002 – Huntersville Water Quality (LID) Ordinance
Ordinance–Watershed Management Plan Adopted
- 2003 -- McDowell recognized a Class 4, 305B listing, No TMDL
- 2006 -- Northcross BMP Retrofit Project
- 2009 -- Upper McDowell Stream Restoration & BMP
- 2010 -- North Mecklenburg Recycle Center BMP
- 2011 -- Torrence Creek, Tributary #2
- 2012 -- Torrence Creek, Tributary #1
- 2013 -- North Mecklenburg Park BMP & Restoration, Torrence Main
- 2015 -- McDowell Creek Restoration

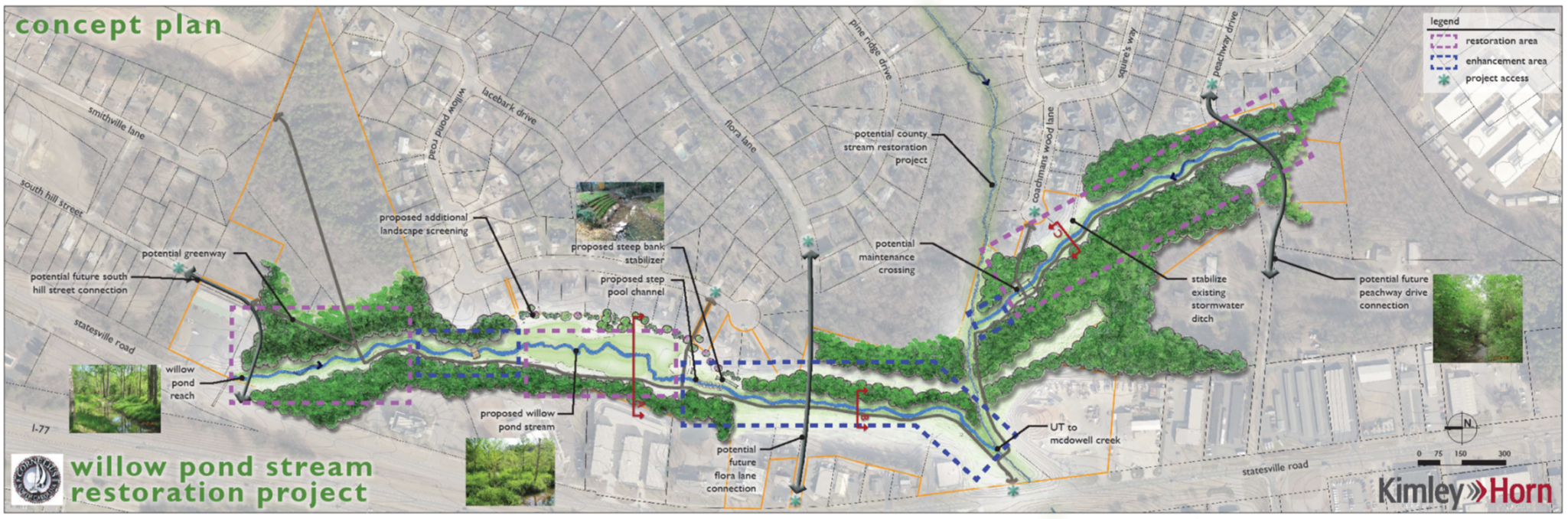




Projects in McDowell



concept plan



willow pond stream restoration project









04/25/2013

01/16/2012



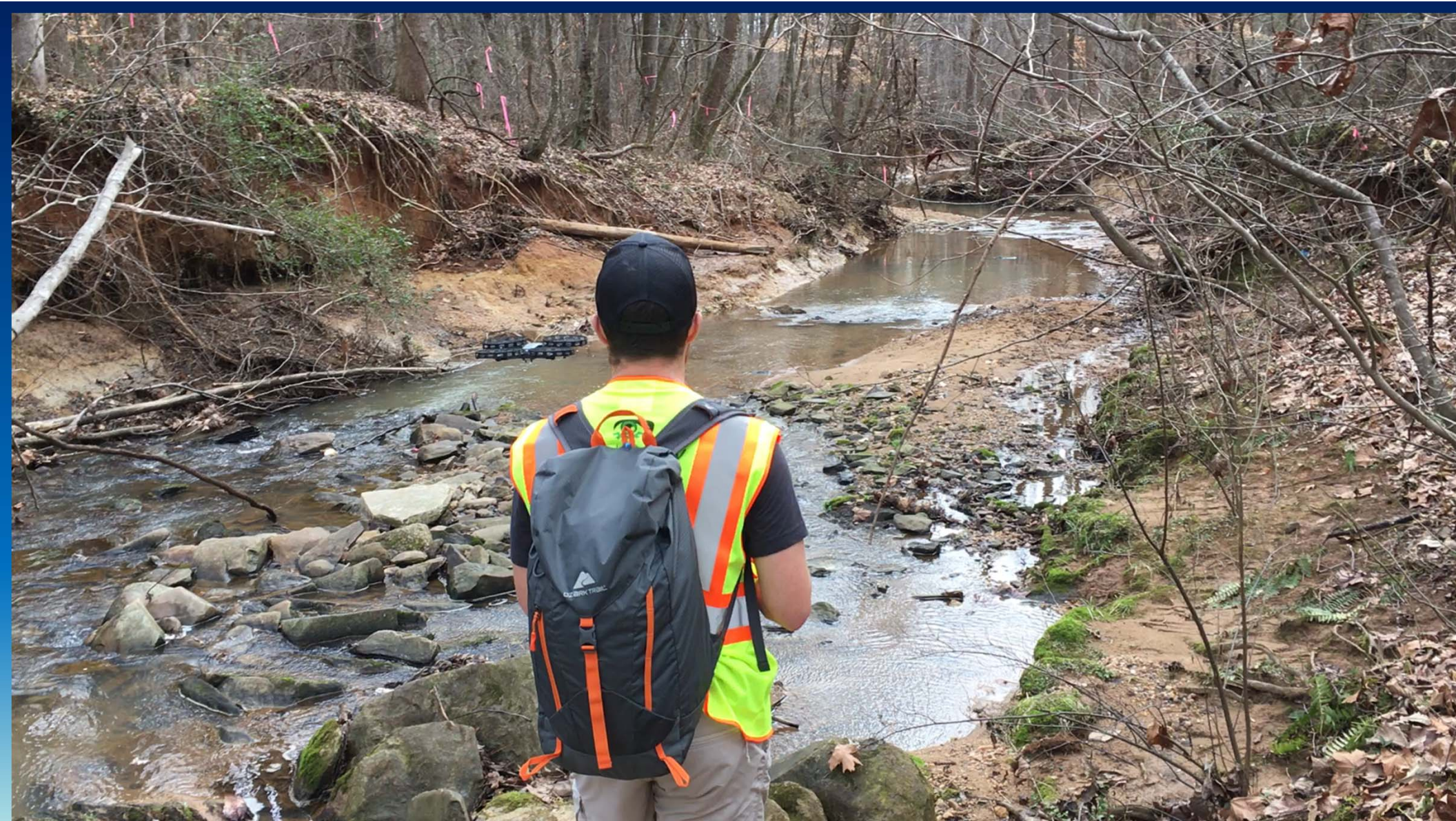


An aerial photograph of a stream restoration project. The scene shows a muddy streambed with a yellow tractor in the foreground and another yellow excavator further up the stream. A large pile of brush and debris is on the right bank. The text 'McDOWELL CREEK' is overlaid in large white letters, with 'STREAM RESTORATION PROJECT' in smaller white letters below it, separated by a thin white line.

McDOWELL CREEK
STREAM RESTORATION PROJECT









Lessons Learned

- Face to Face, Build the relationship
- Under Promise, Over deliver
- Be clear on expectations
- The real deal, use past projects when possible.
- Find the Win/Win.
- Listen, Listen, Listen...

25
YEARS

Charlotte-Mecklenburg
**STORM
WATER**
Services



Questions?

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Charlotte-Mecklenburg
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Thank You!

Visit Our Website.