



Apr 17

# April 2025 - Durham Engineers Club Meeting

Please join us for our monthly meeting.



Mayflower XVI Seafood Restaurant  
3742 Durham-Chapel Hill Blvd, Durham, NC 27707  
[View on map](#)



Apr 17, 2025 05:00pm - Apr 17, 2025 08:30pm  
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## Decline

### Upcoming Meetings:

#### **May 16, 2025**

Annual Scholarship Awards Banquet and Panel Discussion

#### **June 19, 2025**

Doing Business with the NC DOT  
Post-Helene; Daniel Lieberman

#### **July 2025 - TBD**

#### **September 18, 2025**

Engineering Ethics; David Evans, PE

#### **October 2025**

Annual Fundraising Golf Tournament

### DUES ARE DUE!

Annual dues are \$40, and are payable:

- Via meeting registration
- Via cash or check at a meeting
- Via check mailed to  
Durham Engineers Club,  
P.O. Box 1964, Durham  
27702

**Starting in 2026, dues will be \$50/year**

### Job Opportunities



*Cross Creek during Tropical Storm Debby - where's the creek?*

## **Fayetteville, NC Watershed Program: Where We've Been and Where We're Going!**

by

**Alicia Lanier, PE**

The combination of pluvial and fluvial flooding in the rapidly developing city of Fayetteville creates many challenges in flood mitigation during extreme events and smaller, more frequent rainfall events. In 2019, city leaders embarked on an ambitious \$13M Watershed Master Plan program to better understand the magnitude and severity of stormwater flooding city-wide and proactively develop mitigation projects. City leaders understood that a comprehensive evaluation would support resiliency by providing a pool of prioritized projects for both short- and long-term implementation and help leverage resources. This future-forward thinking has proven invaluable as several grants have been awarded, essentially offsetting program costs.

The program foundation was established over four years, including a rebuild of the stormwater geodatabase, a city-wide stormwater asset field survey, guidance for modeling and data visualization, parallel modeling efforts, and methods for prioritizing

projects. Master plans for eight of the 15 watersheds have been completed, with ten flood mitigation projects under various stages of design and construction. Other aspects of a comprehensive program are now being developed, including the installation of stream and precipitation gages, plans for future model updates, strategies for updating the GDB, scoping of a multi-year channel improvement project, and more. Success is due to the unwavering support by city leaders and the community, continuous collaboration among team members and city leaders, and the courage to consider unique opportunities at a scale beyond the typical flood mitigation projects of the past. Oh yes, and a lot of hard work by city and consultant team members!

**In 2024, the City of Fayetteville, NC, Watershed Master Plan program won the prestigious James Lee Witt Award for Local Excellence in Flood Mitigation from the Association of State Floodplain Managers.**

Alicia Lanier serves as the internal program manager for the city of Fayetteville, NC, Watershed Master Plan program. She has over 25 years of experience in project management and engineering, focusing on stormwater quality and quantity, green infrastructure, MS4 permitting, wastewater reuse, water supply and demand studies, and water treatment. She holds an MS in Biological & Agricultural Engineering (minor in Civil Engineering) from NCSU and is a member of Tau Beta Pi. Fun fact: Dr. Rooney Malcolm was on her graduate committee!

Dear Fellow Professional:

Please consider this special invitation to attend our regular monthly meeting on Thursday, April 17, 2025 from 5:00 to 8:30 PM. **Please note that we will be starting a half-hour earlier than usual due to the fact that The Mayflower does not have a buffet.**

Social time is from 5:00-5:30 PM, and dinner is from 5:30 to about 6:30 PM, followed by the speaker presentation.

One (1.0) PDH will be provided, a terrific bargain! Please click on the "Register" link above, or decline if you are not able to attend. Feel free to

forward this invitation to as many others as you would like using the link at the bottom of this e-mail.

If you do not wish to continue to receive event invitations from the Durham Engineers Club, please unsubscribe using the link at the bottom of this e-mail.

Please click on the link above to register. We look forward to seeing you at the meeting!

Sincerely,  
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Secretary, Durham Engineers Club  
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