

## MEETING MINUTES

### UPPER CAPE FEAR RIVER BASIN ASSOCIATION TECHNICAL ADVISORY COMMITTEE MEETING

Remote – Microsoft Teams  
October 27, 2020  
9:30 AM – 11:00am

#### Attendees

NAME	AGENCY	CONTACT INFO
Maya Cough-Schulze	TJCOG	mcough-schulze@tjcog.org
Anna Leonard	PTRC	aleonard@ptrc.org
Williams, Elijah	City of Greensboro	elijah.williams@greensboro-nc.gov
Jonathan Baker	City of Durham- Stormwater	Jonathan.baker@durhamnc.gov
Terry Houk	City of High Point	terry.houk@highpointnc.gov
Martie Groome	City of Greensboro	Martie.Groome@greensboro-nc.gov
Maria Vanderloop	Town of Cary	Maria.vanderloop@townofcary.org
Charlie Cocker	City of Durham	charles.cocker@durhamnc.gov
Ben Bani	City of Reidsville	bbani@ci.reidsville.nc.us
Peter Raabe	American Rivers	praabe@americanrivers.org
Amanda Hancock	Meritech	amanda.hancock@meritechlabs.com
Dawn Molnar	City of High Point	dawn.molnar@highpointnc.gov
Jennifer Hunter	OWASA	jhunter@owasa.org
Alicia Goots	City of Greensboro	alicia.goots@greensboro-nc.gov
Bob Patterson	City of Burlington	bpatterson@ci.burlington.nc.us
Dennis Hodge	City of Mebane	dhodge@cityofmebane.com
Derrick Boone	City of High Point	derrick.boone@highpointnc.gov
Michael Rhoney	City of Asheboro	mrhoney@ci.asheboro.nc.us
Steve Tedder	Tedderfarm Consulting	tedderfarmconsulting@gmail.com
Mary Giorgino	USGS	giorgino@usgs.gov
Ana Maria Garcia	USGS	agarcia@usgs.gov
Martie Groome	City of Greensboro	martie.groome@greensboro-nc.gov
Julie DeMeester	The Nature Conservancy	julie.demeester@tnc.org
Taylor Rowley	USGS	trowley@usgs.gov
Tonya Mann	City of Graham	tmann@cityofgraham.com
Mark Vander Borgh	NC DWR	mark.vanderborgh@ncdenr.gov

The meeting opened at 9:30am. No changes to the agenda were requested.

## **Organizational Report, Maya Cough-Schulze, TJCOG**

- Contact with Meritech was renewed at last Board meeting; will go through August 2023
- In December, will wrap up additional sampling for DWR to support Middle Cape Fear River Basin Model
- New officers take effect at this meeting: Charlie is the new board chair; Elijah, Vice Chair; Alicia will continue as TAC chair. TAC Vice Chair position remains vacant.
- The QA/QC subcommittee will meet 10/28, so no QA/QC report today. They will send an email with updates before the next Joint meeting.

## **Interest in presenting on PFAS panel at Joint Meeting?**

- Charles Cocker likes the idea
- Jennifer Hunter: OWASA has been testing for over 2 years now, would find panel discussion useful
- Martie Groome asked what the law firm was offering. Maya: Offered to share information with municipalities about legal risk. Representing downstream municipalities against Chemours/Dupont and can also provide legal counsel if desired.
- Martie: NPDES discharges now using new application form and is now on web, now report anything the state hasn't asked for in the past, has asked state for clarification – this would be a useful topic for next meeting
- Terry Houk, already have an environmental law group that work with regularly, not sure about adding competition
- Elijah Williams, NC water quality association, also says it would be good not to blur lines between different groups

## **Julie DeMeester - Dams, Floods, Droughts - The Nature Conservancy's Work in the Cape Fear River Basin** (*refer to presentation for full details*)

Julie presented on TNC's Sustainable Rivers Program, which focuses on how to use dams as a tool to create healthier ecosystems while meeting peoples' water needs, mostly downstream of Jordan Lake but also considering in-lake ideas

- The Cape Fear is one of 25 rivers now in this program (the Roanoke was one of the first)
- Given diverse fish and human needs, they considered environmental flows for the entire river and strove to identify problems and opportunities
  - Jordan Dam has 5 purposes: flood control, drinking water, water quality, wildlife, and recreation
  - Hydrographs show minimal overbank flooding after the dam was built. This has impacts including less sediment making its way downstream
  - How far down are flows influencing downstream environment - lock and dam 1, dam has potential to influence over 100 miles downstream
- Moving Forward:
  - 2-year partnership w/ USGS
  - Updating gage info at Fayetteville to include cubic feet per second, adding water quality sensor to Lillington gage
  - Using USGS autonomous underwater vehicle to study water quality
  - Calibrating gybe sensor tech to get real-time samples of water quality
- What does this mean for above Jordan Lake? TNC wants to consider the river as a whole and obtain input from upstream users on ways to meet both human and ecological needs

## **QUESTIONS**

- Jonathan Baker: Is there any collaboration happening with Jordan Lake One Water and the Jordan Lake Policy Collaboratory?
  - Julie: We are staying in touch with them
- Hannah: Are there plans to do similar testing and modeling in other watersheds/ river basins in NC?
  - Julie: We are not currently expanding to other NC river basins, focusing on first completing Cape Fear. Other groups are doing modeling on the Neuse.
- Peter Raabe: Did the reach 0 group look at releases that would reduce the residence time?
  - Julie: No, but we can add this to our list of research questions

Julie also presented on TNC's Hurricane Risk and Resilience work:

- Hurricane impacts include WWTPs flooding, hog lagoons flooding, adding nutrients into basins, impacting fish (0-2mg oxygen yielding fish kills), many road closures, clearly impacting both humans and nature
  - TNC did remote sensing to assess where to implement solutions
    - Assessed floodplain condition
      - Sentinel satellite uses radar to see through clouds; this data was compared with USGS high water marks, NOAA aerial photography
    - Incorporated social vulnerability index
    - NCOneMap has all flood modeling – publicly available
    - Ongoing SWAT modeling needs ~6-8 more months

## QUESTIONS

- Maya: What would be helpful for you from this group? To learn more about flooding impacts to WWTP?
  - Julie: Any info you can share in that vein is helpful
- Mark: It used to be that remote sensing couldn't capture the Cape Fear because of its width--has technology improved enough to do this?
  - Julie: With the sensor we use, we have about 6 pixels to work with, minus two because of edge of river effects. Currently we are calibrating the sensor and satellite; will learn more about accuracy from that.
    - Mark: Have you heard about EPA's Cyan satellite imaging work?
      - Julie: No—I will have to check that out!
- Jonathan Baker: Have you talked to the stormwater community at all? To consider at rainfall intensity and flooding issues.
  - Julie: We have had minimal conversations with the stormwater community; we were going to have a session at WRRI, and when that was cancelled have not had chances to interface directly with a large group of stormwater professionals

## Updates from around the Upper Basin

- Charlie – We have been without a permit for 4 years now--is everyone still in same situation?
  - Elijah: Greensboro does not have new permit either
  - Michael: Asheboro is in the same situation
  - Jennifer: OWASA was overdue but it was renewed summer this year and had reduced nitrogen and phosphorus limits

## Future Meeting Dates

- Hold February 2<sup>nd</sup> for next Joint meeting
- This will give more time for QA/QC to be completed

The meeting adjourned at 10:58am.