

MEETING MINUTES

UPPER CAPE FEAR RIVER BASIN ASSOCIATION BOARD OF DIRECTORS/TECHNICAL ADVISORY COMMITTEE JOINT MEETING

Remote - Webex
July 28, 2020
9:30 AM – 11:30am

TAC MEETING

Attendees

NAME	AGENCY	CONTACT INFO
Cameron Colvin	PTRC	ccolvin@ptrc.org
Maya Cough-Schulze	TJCOG	mcough-schulze@tjcog.org
Jen Schmitz	TJCOG	jschmitz@tjcog.org
Madelyn Polera	NCSU	mpolera2@ncsu.edu
Dawn York	Cape Fear River Partnership/ Moffat and Nichol	dyork@moffatnichol.com
Scott Belcher	NCSU	smbelch2@ncsu.edu
Jeff Crump	Moffat and Nichol	jcrump@moffatnichol.com
Patrick Beggs	NC DWR	patrick.beggs@ncdenr.gov
Nora Deamer	NC DWR	nora.deamer@ncdenr.gov
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
Bob Patterson	City of Burlington	bpatterson@ci.burlington.nc.us
Martie Groome	City of Greensboro	Martie.Groome@greensboro-nc.gov
Gary Perlmutter	NC DWR	gary.perlmutter@ncdenr.gov
David Huffman	NC DWR	David.huffman@ncdenr.gov
David Hill	NC DWR	David.hill@ncdenr.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
Kathleen Mason	American Rivers	kmason@americanrivers.org
Kim Nimmer	NC DWR	Kim.nimmer@ncdeq.gov
Bowman Harvey	Arclin	bowman.harvey@arclin.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

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

Organizational Report, Cameron Colvin, PTRC

- The UCFRBA's new MOA with DWR was approved and executed and is available for viewing on UCFRBA's website: www.ptrc.org/ucfrba.
- 2019 data is all now available on the Cape Fear database
- UCFRBA's liability insurance has been renewed; there was no increase on general liability and only a small increase in public official liability
- QAQC: Conducted an abbreviated review of Q1 data, including all field data and all parameters for four stations near the Rocky River. All Q2 data was reviewed normally. There was only one transcription error and several turbidity violations, which were most likely due to heavy rain in April.
- Cameron emailed all about the several data requests received for the stations on the Rocky River. All appropriate parties have been sent finalized data for Q1 & Q2.

Update on Nutrient Issues in the Rocky River, Nora Deamer, NCDEQ Basinwide Planning

Nora thanked the UCFRBA for sharing their data, which has helped DWR investigate potential pollution sources observed in the Rocky River over the last several months.

A Wildlife Resources Commission (WRC) mussel survey on May 14th near the former Woody Dam site found few mussels or fish, which prompted WRC to investigate why, as they had been working to reconnect habitat upstream and downstream of dam and things had been going well. WRC found high pH (9.4), conductivity (342.4) and ammonia (0.67 mg/L) at the site (exceeding acute and chronic toxicity levels due to the high pH and temperature), and also reported seeing debris on rocks that smelled like poultry waste.

At the Pittsboro-Goldston Road crossing upstream, WRC also found high pH (8.6), conductivity (383.9) and ammonia (0.12 mg/L). WRC contacted DWR's Nora Deamer on May 15th, and she forwarded the complaint to the Raleigh regional office (RRO); storms came through so the RRO could not get out to sample right away again. RRO was able to sample on June 10th and recently got results back, which did not show any ammonia issue occurring at the time.

On May 15th, Nora asked Mark Vander Borgh for any coalition data available. Mark shared preliminary data for January-March, which included an ammonia spike on March 30th of 7.11 mg/L downstream of Loves Creek (Station B5920000) and a 0.51 mg/L spike of ammonia at B5980000 (Rives Chapel Church Rd), potentially coming from the Siler City WWTP. DWR BIMS DMR data confirmed high concentrations of WWTP effluent discharged during this time frame.

DWR pulled data from the Siler City WWTP which also showed some spikes in ammonia. The WWTP has had to turn off aerators and their oxidation ditches during high flow events, to prevent releasing sludge, resulting in the nitrification process not working right, in turn resulting in higher ammonia in effluent. DWR is working with Siler City to correct this issue.

DWR was also recently contacted by a group representing Tim Sweeney, a large landowner in the watershed, who is working with several consultants to try to identify potential pollutant sources. DWR is coordinating their monitoring with these consultants.

The DWR intensive survey branch also just purchased probe that can sample in-situ ammonia. They plan to further investigate sources in the watershed. DWR biologist are also planning to sample for benthic macroinvertebrates again this summer (last sampled in 2018.)

Overview of the Cape Fear River Partnership, Dawn York, Moffat & Nichol

Refer to presentation for full details

Dawn York is the Coordinator for the Cape Fear River Partnership as well as serving as a Senior Coastal Scientist for Moffat and Nichol. In her role at Cape Fear River Partnership, she has worked to cross-connect watershed stakeholders, build partnerships and secure funding for monitoring, modeling and permitting in the Cape Fear watershed.

The Cape Fear River Partnership's mission is to restore and demonstrate the value of robust, productive and self-sustaining stocks of migratory fish in the Cape Fear River. CFRP is a coalition of more than 35 (federal, state, local, private) partners working to improve habitat for fish passage, share data and lessons learned. Committees focus on fish passage, habitat, water quality and socioeconomics. Selected accomplishments include a Cape Fear river basin action plan, fisheries enhancement and fish passage projects, and implementing a NFWF Resiliency study

If there is interest in resiliency planning efforts in the upper basin, contact Dawn! She would love to discuss as most resiliency planning projects to date have occurred in the lower Cape Fear River basin.

Over 1500 barriers to fish passage exist on the Cape Fear River; removing two in the Little River by Fort Bragg would open up 134 miles of habitat. CFRP would like to restore access to historic migratory fish habitat via a comprehensive watershed-based strategy, without compromising navigational purpose of dam. Counties are primary partners in this effort.

Update on Lock and Dam 3 Design for Fish Passage, Jeff Crump, Moffatt & Nichol

There is a 12-foot difference between above and below the dam which prevents fish passage. It is a complex problem to maintain upstream water surface levels and adequate water velocity, while allowing even the smallest fish species to swim upstream. Solution: wavy rock weir "beds" that make a lower slope and break up velocity for fish.

PFAS Study Results for Striped Bass in the Cape Fear, Madi Polera/Scott Belcher, NCSU

Refer to presentation for further information

Research questions:

1. Are PFAS present and accumulating in NC wildlife?
 - a. Which ones, and how much?
 - b. Do "replacement" PFAS bioaccumulate?
2. Public/environmental health implications

Goals: Characterize levels of PFAS in blood/serum, tissue and water; focused on primarily on striped bass. Started as a community project; visit www.safewaternc.org for public-facing information about alligator and fish exposure

Definitions:

- Bioaccumulation: PFAS levels in fish greater than in water
- Bioconcentration: increase PFAS concentration over time
- Biomagnification: increased PFAS levels higher on the food chain

Background/Focus

NCSU researchers focused on striped bass because it is one of the most important commercial and recreational fisheries in the US, especially on the East Coast; and can live in fresh and salt water.

The Cape Fear River striped bass population do not migrate, and all are hatchery progeny based on genetics.

Results

- Researchers found legacy PFOS, PFNA, and PFDA in all wild-caught fish. GenX was present in half of all samples.
- They found an association between PFOS and Nafion byproduct and immune and liver function.
- They observed bioaccumulation but did not observe bioconcentration of PFOS. Smaller fish had higher concentration.

Future Research

- The CFR striped bass spawning stock is in complete collapse; a total harvest moratorium was implemented in 2008. Spawning, but no reproduction was observed at Lock and Dam 1. Thus, researchers are investigating the hypothesis that egg quality may be impacted by contaminants.
 - Eggs need to be neutrally buoyant in the water column to reproduce. If they are too dense or not dense enough, they will be preyed upon, degraded by UV, or sink and be covered up by silt.
 - Cape Fear River eggs are too buoyant to be adapted well to the river's salinity. This will be an area for future NCSU research once they can get back into the lab.
- Other future research will include fish consumption impacts, since human studies suggest PFAS exposure may carry various health risks.
- NCSU is also working with Heather Stapleton at Duke to study the movement of PFAS through biota (between species, within a fish's body, and across the food chain)
- Other states have recommended fish consumption advisories based on levels similar to or lower than found in the Cape Fear. NCSU will share with DEQ any data/recommendations based on future studies that could inform such advisories.

Summary

To date, the highest concentrations of PFAS in North America have been found in fish in the Cape Fear River. Most of the PFAS found is legacy PFOS.

Next Steps/Action Items

Expect the next meeting in October; reach out to Maya and Cameron with any conflicts, or with TAC speaker suggestions (currently plan to pursue a speaker from the Nature Conservancy on the Sustainable Rivers Program)

Contact Dawn York with any resiliency planning projects!

Reach out to Scott Belcher at smbelch2@ncsu with any follow up questions about his and Madi Polera's ongoing research on PFAS in striped bass.

The meeting adjourned at 10:55AM.

BOARD MEETING

Attendees

NAME	AGENCY	CONTACT INFO
Cameron Colvin	PTRC	ccolvin@ptrc.org
Maya Cough-Schulze	TJCOG	mcough-schulze@tjcog.org
Jen Schmitz	TJCOG	jschmitz@tjcog.org
Terry Houk	City of High Point	terry.houk@highpointnc.gov
Bob Patterson	City of Graham	bpatterson@ci.burlington.nc.us
Martie Groome	City of Greensboro	Martie.Groome@greensboro-nc.gov
Charlie Cocker	City of Durham	charles.cocker@durhamnc.gov
Ben Bani	City of Reidsville	bbani@ci.reidsville.nc.us
Elijah Williams	City of Greensboro	elijah.williams@greensboro-nc.gov
Jonathan Baker	City of Durham- Stormwater	Jonathan.baker@durhamnc.gov

Charlie Cocker opened the Board meeting at 11:17am. It was noted that the Board did not have a quorum (1/3 of members represented). Maya asked whether a reminder email the morning of Board meetings would be beneficial and Terry Houk confirmed that it would.

No revisions or comments were noted on February Board Meeting minutes or today's agenda; Charlie moved to approve both, and Terry seconded.

Officer Nominations

- Charlie shared the suggestion for the Vice Chair to become the Chair, and, in turn, appoint a new Vice Chair.
- Elijah volunteered for Board Vice Chair position, and Alicia opted to remain as TAC chair.
- Due to being one representative short of quorum, Cameron will email the Board to confirm these officers' election.

Meritech Contract Renewal

Refer to presentation for full details

Cameron shared updates to the new Meritech contract, to include:

- Updated budget projections for FY20-21 and FY21-22, which include a slight (2%) increase in cost over the next 3 years
- "New" Durham station B3300000 re-added
- Special study ongoing through December 2020; additional \$560/month, invoiced separately, for September-December only

David Merritt was unable to attend the Board meeting but is available for any questions.

Next Steps, Closing Remarks and Future Meeting Schedule

Action items that Cameron will email to the Board for a vote include:

- Charlie's moving to Board Chair, Elijah's election to Vice Chair and Alicia continuing as TAC Chair
- Approval of proposed Meritech contract for next 3 years

The meeting adjourned at 11:39am.