

MEETING SUMMARY

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

Mebane Arts and Community Center
133 E. Davis Street,
Burlington, NC 27215

9:30 AM
August 6, 2019

Attendees

NAME	AGENCY	CONTACT INFO
Linda Ehrlich	Spirogyra Diversified	spirogyra@juno.com
Charlie Cocker	City of Durham	charles.cocker@durhamnc.gov
Bob Patterson	City of Burlington	bpatterson@burlingtonnc.gov
Tonja Mann	City of Graham	tmann@cityofgraham.com
Shelby Smith	City of Graham	ssmith@cityofgraham.com
Tom Duckwall	Friends of the Deep River	tomduckwall@cs.com
Bill Frazier	City of High Point	bill.frazier@highpointnc.gov
David Merritt	Meritech	david.merritt@meritechlabs.com
Jeff Adkins	Town of Cary	jeff.adkins@townofcary.org
Martie Groome	Greensboro	martie.groome@greensboronc.gov
Janet MacFall	Elon University	macfallj@elon.edu
Dennis Hodge	City of Mebane	dhodge@cityofmebane.com
Terry Houk	City of High Point	terry.houk@highpointnc.gov
Ben Bani	City of Reidsville	bbani@ci.reidsville.nc.us
Jonathan Baker	City of Durham	jonathan.baker@durhamnc.gov
Steve Tedder	Tedderfarm Consulting	tedderfarmconsulting@gmail.com

TAC Meeting

Meeting Convened after coffee/doughnuts at 9:35am

- Jen opened the meeting
- There were no additional items for the agenda

Organizational Report

- LGFCU is moving over organizational accounts to CIVIC Credit Union. This should not have any impact on the UCFRBA account, which should experience similar rates as before.
- Insurance policies were renewed for this fiscal year. No increase for general liability, slight increase (< 2%) for public official liability.
- David Merritt gave a brief update on the supplemental monitoring - no significant anomalies.
- Martie Groome gave a brief QA/QC committee update - The group met on 7/29/19 to review all 2nd Quarter data. There was 1 turbidity exceedance at Site 32 in April; none in May, two turbidity exceedances in June, plus one DO exceedance in June. Only three data notations/corrections, which is very good (some date changes, transpositions, etc.).

- Cameron gave a database update - UNC-Wilmington will be doing some updates to the format, coding structure, etc. The Board will discuss a path forward in the meeting immediately following.

Presentation on "Whole Watershed Management: Considerations for Aeration in Drinking Water Quality Management" – Bill Frazier, City of High Point

- Utilized this name to emphasize the importance of a holistic approach to watershed management, not just one metric (chlorophyll-a).
- Spoke about the inherent challenges of managing reservoirs, rather than natural lakes. They are not going to function, respond, or act like natural lakes!
- The watershed is directly north of the City of High Point, and drains to downtown (furniture market, oil refineries, etc.)
- Highly impacted by rain (turbidity, trash, exotic plants, etc.)
- Measured pollutant load per acre based on designated uses in the watershed (see graph).
 - In order to control these impacts, the City made the decision to put in regional detention ponds, by working with the Corps (total of 3 ponds, 100 acres of retention).
 - One was a conventional settling pond; second was an artificial wetland; third was a utilized wetland (force fed through overflow).
 - Evaluated the wet ponds for protection of public water supplies (1997).
 - Established that these types of structures can end up with more nutrients than what is coming in!
 - As time went on, ponds were overutilized and overnutrified - algal blooms, etc.
 - But, this means they are working! Keeps these pollutants from reaching the drinking water reservoirs.
- Immediate improvements were not apparent in the reservoir (Ocala Lake), but in recent years some improvements have been measured
 - Aerator/intake system complications
 - Need for compressor is critical - must operate on back pressure in order to avoid burning up the motor (O&M considerations high)
 - Creates extreme heat if not maintained/operated properly
 - Key feature is that the system does not sit on the bottom/disturb sediment
 - Mixing also discourages light penetration (limited algal growth).
 - Aeration encourages more uniform DO production/levels throughout water column.
 - Since 2014, there has been a marked decrease in DO overall
 - Previously, were washing filters every 8 hours or so (need to be filtered over 80% capacity or every 96 hours); now they only need to be serviced every 96 hours.
 - Five year chl-a data show a handful of peaks above the 40mg/L limit
 - When compared to nutrient levels, we see that spikes in chl-a are associated with dips in P - why?
 - Found that spikes in chl-a were associated with line or system cleaning, and/or compressor failures.
 - Presented these data to the state, and found that they were using a different monitoring point at the headwaters of the lake
 - Convinced the state that the designated use as drinking water supply means that the monitoring point should reflect that (moved the point).
 - Resulted in de-listing of chl-a for Ocala Lake.
- Questions?
 - Linda Ehrlich - did you look at Secchi depths as well when investigating bubble dispersion?
 - Bill - Yes, what we were actually seeing was a shift in algae species (overall counts may have even gone up, but different, smaller species = less chl-a). Impacted Secchi depths (cloudy), but not necessarily increased chl-a levels.

- Linda - can see a lot of beneficial organisms (diatoms, etc.) in the microscope slide, but they do produce a lot of chl-a.
- Brian Wrenn - what other measurements were taken?
 - Many other parameters. These were bench chl-a measurements confirming visual observations as well.
- Steve Tedder - over the 5 year period, would it have exceeded the 1:3 limit?
 - Bill - there were 5 violations over the five year period
 - Linda - were there speciation results from these violations?
 - Bill - Dr. Burkholder is working on this, and hopes she publishes it!
- Jen Schmitz - what is the ongoing relationship with the state/monitoring requirement now that it's been delisted?
 - Bill - we will continue monitoring it, and expect that it may be listed again in the future
- Charlie Cocker - Why didn't you use rubber diffusers? They work in WWTPs.
 - Bill - we tried them, but they deteriorated. Maybe different biota in lake than in WWTPs?

Updates from around the Basin

- Janet MacFall: Cape Fear River Forum will be on Sept 24 at Elon (see attached Save the Date)--speakers and panelists from state agencies

Next Steps, Closing Remarks and Future Meeting Schedule

- Jen will send out Bill Frazier's presentation and meeting minutes.
- The next meeting will be held in October, and will feature Julie Grzyb and Mark Vander Borgh from NCDWR (permitting, metals, MOA).

Board Meeting

Meeting Convened at 10:40am

- Charlie Cocker asks for revisions or updates to the proposed agenda
 - Cameron indicates that the most recent version of the agenda includes an update with the MOA renewal discussion. No other changes/revisions offered.
- Charlie - requests group to review the minutes from the January Board meeting.
 - Jeff Adkins moves to approve the minutes. Terry Houk seconds. The minutes are approved.
- Cameron introduces the topic of the requested additional metals sampling from DWR to the coalition. Brian Wrenn (DWR) is here to provide an overview of the requested actions.
 - DWR used to collect metals data quite rigorously until it was suspended in 2007.
 - DWR has been working internally and with the EPA to agree on an assessment protocol and associated standards for metals since then.
 - In 2018, 35 Assessment Units (AUs) were delisted as being impaired for metals.
 - 6 of these were impaired for two metals
 - 41 total delistings
 - 1 new listing
 - Hoping to get at least 10 samples by December 2020 to utilize in the 2021 Integrated Report
 - This sampling would gather dissolved metals as well as total (currently only have total metals data), to better evaluate these AUs
 - Plan of action:
 - DWR will be collecting total/dissolved data at 45 stations
 - DWR is requesting four coalitions to collect data at 26 stations (UCFRBA requested at 8 stations).
 - Chromium III and VI are requested - but there is not an approved method for Chromium III

- DWR suggests a couple of different approaches - coalition will work with Meritech to determine best path forward
- Some proposed stations showed exceedances, but not 90% confidence (confirmation sampling)

Q&A on Metals Sampling Request

- Martie asked if there were any changes to the sampling protocol
 - Brian: Expectation is to monitor as DWR does: 2 samples within an hour, no less than 15 min apart. Field-filter samples and average to get a 96 hour average. Used for acute and chronic.
- Martie: Do we only need to monitor for the metals that are listed? Monitoring may show more impairments.
 - Brian- Want to monitor for all metals to get as much data as possible.
- Brian will share videos of how to do dissolved metal methods in field and lab.
- Martie: Used to be separate standards for acute and chronic. If a site is lower than the acute level but higher than the chronic standard- is it impaired? Brian- yes.
- FYI from Jen/Cameron/Brian: One inactive station proposed for new monitoring- B33 - but Brian says if this is currently inactive, we could eliminate it
- Martie: What is our incentive to do metals monitoring? In past, when asked to do new monitoring, state let them reduce other monitoring to balance out the cost.
 - Brian: Don't think this is off the table, but haven't had this conversation with NPDES
 - Jen: These stations aren't co-located with DWR stations, right?
 - Brian: Yes--all of these would just be coalition stations
 - Jen: Because these would be the only data at these stations, want to be confident in results. May include budget for duplicate or split samples, and DWR will do training, to ensure data quality
 - Martie: other coalitions reached out to meet, get on the same page
- Cameron: Other coalitions in past have sought grant opportunities for additional monitoring--we could look into this
- Charlie asked David Merritt- do you run blanks?
 - David: Hard to explain. Meritech has experience with field filtering, have done this before, but can't remember about blanks
- Jen: Considering split/duplicate samples for data QA/QC
- Jen: If UCFRBA didn't proceed with this metals sampling, how would that affect the 303d list?
 - Brian: No opportunity for delisting
- Martie: How were these sites chosen?
 - Brian wasn't part of this decision, but believes part of it may have had to do with the level of confidence.
 - Martie: Make sure the sites are useful for us
 - Jen: How should we proceed? Should we bring this to the board in January?
 - Martie: Members of other coalitions have reached out to discuss this request. We will convene a group of Board members from each coalition to discuss before then.

MOA Renewal Updates - Cameron

- Recapped what Mark VDB provided last meeting:
 - One letter to all members
 - Waiver of instream requirements only applies to parameters as specified in individual permits
 - Metals/hardness not required by Coalition, but may be in individual permits
- MOA expires 4/30/19; see intermediate deadlines in Mark's ppt, attached
- Jen: How can we get signatures from members who don't typically attend meetings? It will nullify agreement if not signed by deadline.
 - Martie: Move dates of meetings to align with timeline.
 - Tell signatory authorities they have to attend - hope to get most people to sign there.
- Jen: When we get the station list from Mark by Sept 1, UCFRBA should review it for complete accuracy- safest, best, most representative place to collect a sample.
- Martie suggested UCFRBA have a MOA workgroup meeting in October
- Jeff Adkins mentioned that he is also part of Middle Cape Fear and the updates to the MOA are great, minimal changes needed.

PTRC/TJCOG Contract Renewal

- Cameron: No increase in fees; \$40,000 per FY to be split between PTRC and TJCOG.
- Charlie made a motion to support; Jeff Adkins seconded.
- Following discussion about the UNC-W Database update, the Board went back to finish voting on this matter. All were in favor. No dissent.

UNC-W Database Update Request

- UNCW had lost some staff and expertise; trying to get back to capacity. Proposing to contract out to Wilmington Design transitioning into a more user-friendly database where it's easier for members to pull relevant reports.
- The cost would be split between the three coalitions, would be a one-time fee for each coalition of \$1,000 to update the database, plus \$1980/year to maintain it. FYI- Middle Cape Fear is comfortable with paying this cost; Lower Cape Fear to meet soon on this.
 - FYI: Paying \$1,500 to UNC-W now; paid \$3,000 before when UNC-W had more dedicated technical staff.
- Janet MacFall: Ensure it's in contact that if Wilmington Design ever stops being contractor, data archive will remain intact and can be transferred to someone new.
- Martie: How long is the contract? Cameron: Recurring, but will clarify with UNC-W.
- Motion to approve paying for 1/3 of cost to update and maintain the Cape Fear Database. Moved by Dennis Hodges and seconded by Terry Houk. All were in favor. No dissent.

Next Steps, Closing Remarks and Future Meeting Schedule

- Cameron summarized action items going forward: PTRC/TJCOG would schedule a meeting to continue the discussion on metals sampling; Cameron will follow up with UNCW on database

The meeting adjourned at 11:45am.