



ENVIRONMENTAL AFFAIRS BOARD MINUTES

May 4th, 2022
Virtual Meeting (Zoom)

Voting Members:

Chi Vo (chair), Juilee Malavade (vice chair), Wilson Salls (secretary), Aissa Dearing, Wafa Khalil, Matt Kopac, Chastan Swain, Sherry Taylor, Ethan Case, Jennifer Hill Carrigan

Excused Absences: Melanie Allen, Katie Barnhill-Dilling

Ex Officio Members/Staff: Amy Armbruster (General Services), Vicki Westbrook (Water Management), Michelle Woolfolk (Water Management), Summer Alston (General Services), Heidi Carter (County Commission), DeDreana Freeman (City Council)

Attendees & Panelists Total: 18

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- I. Call to Order at 6:04 PM
 - II. Approval of EAB Retreat Presentation: Approval for November Minutes 8-0
 - III. Announcements
 - a) Next EAB meeting is scheduled for June 1st, 6-8 pm. No meeting in July.
 - b) Vicki Westbrook:
 - a. Mayor proclaimed [Drinking Water Week](#).
 - b. [H2O 2 Go](#) was a big hit.
 - c. [Strawberry Festival](#), May 4, 310 Geer Street.
 - d. [Bimbé Cultural Arts Festival](#), May 21, Rock Quarry Park.
 - e. [Fridays in Central Park](#).
 - c) C. Swain: [Bioblitz](#), on iNaturalist app, is a great way to track invasive and native plants; similar to Pokemon Go.
 - d) Amy Armbruster: Open EAB seat to fill - please share [position posting](#).

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- e) Amy Armbruster: Was invited to participate in Duke Energy's Environmental Justice Stakeholder Group - investigating how carbon plan will impact low-moderate income communities of color. If you work in an organization or know of an activist, please [pass along](#).
- f) J. Malavade: Club Blvd Garden Work Day May 14 - rescheduled to July due to weather.
- g) E. Case: [Duke Energy Carbon Plan](#): Input commences May 16 through final input in December.
- h) M. Kopac: The DEC organizing committee has been working with Dr. Nicki Cagle, Organizer of the Diversity and Equity in Environmental Programs (DEEP) Collaborative at Duke's Nicholas School of the Environment, to develop a workshop series on Race, Power and Partnership. We would like to get information on how many people/organizations are interested in participating. Please review the information below, and [respond to the very brief survey](#).
Dates and time: 10am-noon, Sep 20, Oct 18, & Nov 15.

IV. **New and Continuing Business**

a) **New Topic: Falls Lake Updates**

Presenter(s): Michelle Woolfolk, City of Durham, Public Works, Stormwater & GIS Services

Overview/Problem

- Discussing nutrient management strategy and rules.
- Rules exist because of excessive algae.
- State set standard for chlorophyll-a of 40 ug/L based on blooms in Chowan River in 1970s, making NC one of first states to have a standard for nutrients or algae.
- Toxins, disinfection byproducts, and hypoxia resulting from excessive algae can all lead to fish kills.
- Nitrogen and phosphorous, and to a lesser degree silicon, are the main culprits of excessive algae.

Management Strategies

- Rules for various sources of nutrients to Falls Lake (15 NCAC 02B):
 - New Development
 - Existing Development
 - Wastewater Discharge
 - Agriculture
 - State and Federal Entities
 - Options for Offsetting Nutrient Loads
 - Fertilizer Management
- Stage I: \$605M; Stage II: \$946M. Every household \$1400/year for 30 years - big ask.
- New development rules: every community in Falls Lake watershed have implemented. However, for Jordan Lake: at least half of communities opposed and ultimately succeeded in stopping. Durham, Cary, and one other were implementing the rules, making other communities look bad, so went to legislature, who prevented the rules from being implemented.
- Falls Lake monitoring strategy is based on 2005-2007 baseline. Since then, huge decreases in nutrients (Durham, Hillsborough, Granville County [South Granville Sewer and Water Authority - SGSWA]). However, these improvements are largely due to loss of farmland - 20%.

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- Durham activities: New Development requirements, wastewater plant upgrades, Rain Catchers program: practices such as rain barrels and rain gardens in ~100 residences in first round (second round rolling out now too), largely in Ellerbe Creek watershed.
- 60% of watershed already forest (considered best case); only 26% of land could be improved.
- Improving Falls Lake water quality is also driven by an agreement to protect Raleigh's only drinking water source.
- Nutrient management evaluation strategy: Upper Neuse River basin Assn. (UNRA) - developed watershed water quality model, including the ability to create scenarios to change, land use, fertilizer application, etc. Tools being built, should be finished this Fall. Working with stakeholders to develop a revised nutrient strategy based on consensus.

Request for EAB

- Seeking guidelines to revise nutrient management strategy: UNRA needs to propose new set of strategies by end of 2023 to give to the state.

Water Quality

Cost-effective
 Protect Falls Lake
 Protect Lake Michie and Little
 River Reservoir

Social

Racial Equity & Environmental
 Justice
 Equitable
 Promotes collaboration

- Guidelines for a revised strategy:
- For example, an idea to promote collaboration: currently, there's not a way for Durham to help farmers.

Anticipated Schedule



- June – Durham is a problem. Present a summary of Falls water quality modeling, to date (Forrest Westall)
- July – off
- August – Either
 1. Continuing water quality modeling (based on June meeting), or
 2. How might we frame a new strategy? **New nutrient strategy rule concepts.**
- September – **New nutrient strategy rule concepts**, continued
- October – Equity and collaboration. How could these be considered in the rule concepts?

- Seeking ideas on the qualitative side (vs. quantitative) given short time.

Comments:

M. Kopac: Impacts of both agriculture and forests, both negative and positive.

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- **Michelle:** Nutrients are applied to land for agriculture. Many get taken up by crops or processed on their way to the lake. However, new development with stormwater control Ordinances (SCOs) are effective since they catch many nutrients. Downtown Durham doesn't have SCOs since it's older (hence importance of South Ellerbe Project, for example). Balanced by desire/need to not lose all farmland here.
- **M. Kopac:** Do we have tools to help farmers reduce nutrient runoff?
- **Michelle:** Farmers are already being quite careful, and likely can't be improved much (for cropland, at least).
- **M. Kopac:** Clarification on forests.
- **Michelle:** We are shooting for the level of functionality of a forest. Generally we can't make existing forests much better (though there may be some things we can do).

W. Salls: Is forest here used for timber? Could improvements on timber management help?

- **Michelle:** Much forest is owned by individual forest owners - tough to manage. Held nutrients are released during large weather events, which are becoming more frequent. Can take years for forest to recover.

W. Salls: Dates shown on timeline are deadlines?

- **Michelle:** Yes. Definitely very interested in EJ component and don't want that to slip away.

E. Case: Is there more publicly available data showing locations of urban areas so we can look at where mitigation could occur, while considering equity impacts? Does that seem like an effective approach?

- **Michelle:** Yes, effective. Will try to find map from another report and send.

M. Kopac: Areas where the least storm management is in place are also places with direct human impact from stormwater management. Could that be further hurting those people?

- **Michelle:** That's probably a stretch.

D. Freeman: Can you speak to the impact of urban developments throughout more of the county on this?

- **Michelle:** Urban development that is old (pre-1970) has the biggest impacts. Standards weren't in place, pipes fail. Mostly city of Durham but also downtown Hillsborough.

D. Freeman: Is there a plan for addressing the older developments?

- **Michelle:** No.

W. Salls: How about new development?

- **Michelle:** Standards are some of the strongest in the country. Whether the buy-downs are still going to be available is the question.

b) Continuing Topic: Working Group Report Outs

Presenter(s): EAB Working Group Members

Recycling Ordinance - J. Malavade

- Patrick Byker and Wall Recycling don't seem responsive to requests to change other clauses, but assuming clause to restrict waste to processors in Durham clause will be removed.

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- **M. Kopac:** Do you anticipate they'll move forward without changes? What's the path forward?
- **J. Malavade:** A meeting, possibly face to face, is likely needed. So far, recommendations have only been met with justification/rationalization rather than changes to address our concerns.
- **M. Kopac:** "We're already doing this" isn't enough for an ordinance. At a certain point, we're tasked with making a recommendation.

Community Engagement - J. Malavade

- Working to increase strategies for community engagement. Decided to create a concept map stemming from community health assessment. Thinking about how we can better engage Neighborhood Improvement Services and Keshi Satterwhite, who is in charge of the Watersheds Academy - great strategies on engagement.

Solar Schools - W. Khalil

- Another school will be solarized. Yay!
- Net metering will hurt solar, especially rooftop. Goal is 80% reduction of use fossil fuels by 2035 and 100% by 2050. Want to stop Duke Energy from implementing new proposal. How to go about doing this? Start petition to community - teachers, youth, etc. and send to commissioner.
 - **C. Vo:** Sunrise Durham may want to do a petition. Wait for Tobin and Paul next month?
- Adopting Southern High School for energy and sustainability - doesn't even have LED lights. Soliciting funding, if anyone knows of organizations that may be able to fund/grant/donate.
 - **E. Case:** The companies and entities involved with [solarizing a school in Asheville](#) may be helpful.

Comprehensive Plan - J. Hill Carrigan

- Comp Plan has entered new stage: Public input available in [English](#) and [Spanish](#). Would like EAB to use our platform to advertise this widely.
- In last 9 months, working on draft policies (227 of them). Long list of policies community has opportunity to give feedback on. Watch video and take survey, top 10 highlights, download entire Excel document - all on [website](#).
- Sustainability, waste, solar - very comprehensive and ambitious, but also realistic.
- Included: reducing housing solid waste that goes to landfill. Updating benchmarks. Several policies for landscape creating ecological function. Community gardens. Light pollution. Climate change. Implementing solutions that address pollution and waste problems at their source, including community GHG goals.
- Seeking input on technical areas to make more realistic/ambitious/better. Advertise to networks widely to give specific input.

Adjourn at 7:49 PM

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