

AGENDA
Commission for the Environment
November 9, 2015
7:30 p.m.

Orange County Solid Waste Administration Building
1207 Eubanks Road, Chapel Hill

<u>Time</u>	<u>Item</u>	<u>Title</u>
7:30	I.	Call to Order
7:32	II.	Additions or Changes to Agenda
7:35	III.	Approval of Minutes – October 12 (Attachment 1)
7:40	IV.	Green Building Incentives Neal will present a draft resolution asking the BOCC to consider directing County staff to develop green building incentives for commercial and large residential developments. (Attachment 2)
8:00	V.	Falls Lake Rules Update Davis will report on the Upper Neuse River Basin Association's ongoing efforts to improve the Falls Lake Nutrient Management Strategy (Falls Lake Rules). (Attachment 3)
8:15	VI.	Annual Report and Work Plan (2015-16) Each year the BOCC asks its advisory boards to prepare a report of their activities, accomplishments, new issues, and concerns for BOCC information. An initial draft report for 2015-16 is attached for CFE consideration. The final report is due Dec 18. (Attachment 4)
8:30	VII.	Election of Officers CFE members are scheduled to elect a new Chair and Vice-Chair for the upcoming year in accordance with the CFE policies and procedures. (Attachment 5)
8:50	VIII.	Updates and Information Items Staff and/or CFE members will provide updates on the following items: <ul style="list-style-type: none">➤ Collaboration in Energy Conservation/Management (Attachment 6)➤ Herbicides and pesticides used at County facilities (Attachment 7)➤ CFE outreach / news articles (Attachment 8)➤ Options for food waste diversion – Nov 4 public info session (Attachment 9)➤ BOCC decision on Nov 2016 bond referendum (Attachment 10)➤ McCrory signs HB 765 rules reform bill (Attachment 11)➤ Former DENR Secretary comments on legislative changes (Attachment 12)➤ OWASA biosolids management update (Attachment 13)➤ Environmental Justice panel discussion - Nov 12 (Attachment 14)➤ Industrial hemp becomes new legal crop in NC (Attachment 15)
9:15	IX.	Adjournment

Next meeting: December 14 (Hillsborough)

CFE Meeting Ground Rules (*Adopted 9/12/11*)

1. Keep to agenda topic under discussion
2. Share relevant information
3. One person speaks at a time after recognition by the Chair
4. Everyone is invited to participate in discussions / no one person should dominate discussions
5. Strive to reach consensus first before voting

Activities the CFE expects to carry out in 2015:

- Continue to update the Orange County State of the Environment 2014 report
- Convene an Energy Task Force (or equivalent work group) to improve the County's ability to foster local sustainable energy production and energy efficiency strategies
- Recommend ways to reduce the County's "carbon footprint" and implement the County's Environmental Responsibility Goal
- Help with public outreach and management efforts related to hydrilla in Eno River
- Help initiate the development of a comprehensive conservation plan for Orange Co
- Collaborate with NC Botanical Garden and others to identify significant roadside habitat for native plants; ask NCDOT and other utilities to protect those roadside habitats [authorized by BOCC June 2012]
- Co-sponsor the annual DEAPR photography contest (*The Nature of Orange*)
- Help plan for and participate in DEAPR's annual Earth Day event

Concerns or emerging issues the CFE has identified for 2015:

- The CFE will continue to advocate for an expansion of the County's commercial food waste pickup and composting services to reduce food waste in the solid waste stream
- The CFE remains interested in developing incentives for increasing energy efficiency in new construction [January 2012 memo to Planning Board]
- The CFE will strive to learn more about environmental justice matters and incorporate relevant information and considerations in the State of the Environment 2014 report
- The CFE will follow closely the Solid Waste Advisory Group's discussions of how to improve the handling and disposal of Orange County's solid waste, and will advocate for better long-term solutions
- The CFE will continue to advocate for increased efforts to gather information related to water resources in Orange County and will continue to increase public awareness and understanding of water supply sources, related concerns, and what steps can be undertaken to maintain or improve the quantity and quality of Orange County water supply resources
- The CFE will continue to address, as appropriate, the critical environmental issues for Orange County as enumerated on page 3 of the 2014 State of the Environment report, which include potential adverse effects from a) invasive, non-native, plant and animal species; b) reductions in State-led collection of water resources data; c) potential drilling for natural gas in the Deep River basin; d) urban sprawl; and CFE support for e) the responsible deployment of clean and appropriately-sited renewable energy and reductions in energy use to help fight climate change

**Orange County
Commission for the Environment**

DRAFT Meeting Summary

October 12, 2015

Richard Whitted Meeting Facility, Hillsborough

PRESENT: Jan Sassaman (Chair), May Becker, Tom Eisenhart, Lynne Gronback, David Neal, Jeanette O'Connor, Gary Saunders

ABSENT: Sheila Thomas-Ambat, Peter Cada, Loren Hintz, Bill Newby, Rebecca Ray, Lydia Wegman, David Welch

STAFF: Rich Shaw, Tom Davis, Brennan Bouma

GUESTS: David Stancil (DEAPR Director), Curt Farmer (DEAPR Parks Division)

- I. **Call to Order** – Sassaman called the meeting to order at 7:38 pm.
- II. **Additions or Changes to Agenda** – None.
- III. **Minutes** – Sassaman asked if there were any comments about the meeting summary for September 14 meeting. There were none; approved by acclamation.
- IV. **Herbicides & Pesticides Used at County Facilities** – Shaw reported that the BOCC asked the CFE to look over a list of herbicides and pesticides used by County staff to manage the grounds at Orange County buildings and facilities, and for the CFE to provide any feedback or recommendations to the staff or to the BOCC.

Shaw referred CFE members to the memo and attached list of herbicides and pesticides that was prepared by Tom Davis with input from other staff responsible for the use of those chemicals on County-owned property. Shaw introduced Curt Farmer who oversees athletic fields at the County's soccer complex (Soccer.com Center) and at other County parks. Shaw also referred members to DEAPR's sustainable landscaping policy, which states that pesticides and herbicides should be used no stronger than directed and only when no other alternative exists. He said the policy also recommends using organic fertilizers including compost.

CFE members asked questions about the list of pesticides and herbicides.

- Sassaman asked how long people are kept off the fields after herbicides are applied. Farmer said each chemical is labeled with guidance on the proper time interval for re-entry. Sassaman asked which is the most common herbicide used. Farmer said it is glyphosate ("RoundUp"); he uses 15 gallons annually.
- O'Connor asked whether the staff has used organic compost as a fertilizer. Farmer said he has tried compost, but there were problems with it containing unwanted materials, including nails and glass. He prefers using sand.
- Becker asked if the staff would be willing to use organic alternatives. Farmer said he is certainly willing as long as they perform well and not too expensive. He welcomed any information or guidance from CFE members. He intends to phase out the use of 2-4-d products as alternatives for killing weeds become available.

- Eisenhart asked how much of a role does cost play in the choice of products used. Farmer said when using public funds price matters quite a lot.
- Gronback asked if Farmer uses a mixture of turf grass. Farmer said yes, especially those that can outcompete the unwanted weeds.
- Stancil noted that many of the users of County fields—especially the Soccer.com Center—demand high-quality fields that require special maintenance. He said the center hosts many tournaments and college soccer showcase events.
- Bouma said he had performed a quick search for viable alternatives to 2-4-d, but could not find anything suitable on line.
- Sassaman said he expects there is a fairly high level of safety and control for the application of herbicides and pesticides on County sites by licensed staff. He said he is more concerned about the use of these products by homeowners in residential areas throughout the county. O'Connor and said she would like to see more guidance targeted toward residential users of these chemicals. Stancil noted that during the 2008 drought period the County held public meetings to educate people about water conservation and the proper use of fertilizers.
- Becker cautioned that just because a product is EPA-approved and regulated there may be alternatives that are better for the natural environment. O'Conner agreed, but also noted that natural compost can also pollute streams.
- Gronback asked Farmer about the use of pre-emergent weed control products. Farmer said he loves them because they often have a one-time application rate.

Bouma said he expects County staff would be welcome to a periodic review of its use of herbicides and other chemicals, including the examination of alternatives. Farmer said this discussion is helpful and timely because this is the time of year to identify product needs for the coming year.

Bouma suggested the staff of DEAPR and AMS (Asset Management Services) meet periodically to discuss potential alternatives to some of the more caustic substances. He said there are some non-profit organizations that monitor these issues and might have some helpful suggestions.

CFE members thanked Davis, Farmer and Stancil for sharing this information.

- V. **Green Building Incentives** – The CFE continued its discussion of potential incentives for energy-efficient construction. Bouma provided an update on the Town of Chapel Hill's early experience with the pilot commercial green building incentive in the Ephesus-Fordham planning district.

Bouma reported that he had spoken with Jesse Freedman who, along with John Richardson, had briefed the CFE on this program in April 2015. Bouma said the town had only received three or four building permits for this district thus far, but only one of those—an apartment building—is under construction. The town anticipates the developer of that building will be applying for some kind of green building certification; however it's unclear whether he would have done this regardless of the town's incentives. Bouma explained that developers often choose to apply for such certification as a marketing tool despite the high cost of applying and obtaining the certification.

Bouma said it may be years before the Town of Chapel Hill has enough of experience with this incentive program to determine the effectiveness of the program. He answered questions from CFE members.

- O'Connor asked if developers are required to take the incentive. Bouma said no, they are not. Neal said it may be unlawful to require that.
- Neal asked if the town staff knew how large a project needed to be to justify (or pay back) the cost of the green building features. Bouma said he did not know, but he noted he and other County staff are looking at potential green building practices for the construction of the planned new County jail in Hillsborough.
- Sassaman asked if there are any guarantees that future operators of the green buildings will maintain them properly. Neal and Bouma said they did not think so. Neal said he attended a recent conference and learned that human error accounts for many failures in the operation of green building features. He noted, however, there are new technologies for monitoring the performance of energy-saving devices in buildings.

Neal suggested the CFE inform the BOCC that although there has not been enough time to assess the effectiveness of the Town of Chapel Hill's commercial green building incentive program it may be worthwhile for Orange County to establish a similar incentive program for large commercial development projects. Bouma suggested the County may also want to include some large-scale residential development projects. Neal and other CFE members agreed with that idea.

Sassaman asked if Neal was suggesting the CFE write another memo to the BOCC. Neal said he thought it may be better to craft a CFE resolution, and that he is willing to prepare a draft resolution for CFE consideration at the November meeting.

Sassaman thanked Bouma and Neal for the report and the proposed next steps.

- VI. **Collaborative Energy Conservation/Management Projects** – Saunders and Bouma reported on the third meeting of the interagency committee working to collaborate on projects to address energy conservation and management projects of mutual interest and where there may be opportunities for collaboration among the entities, OWASA, Orange County, UNC, and the towns of Carrboro and Chapel Hill.

Saunders reported the group selected five projects, and for each one the group has identified a "champion" and some initial next steps. The five projects are as follows:

- Biogas to energy at OWASA wastewater treatment plant
- Technical evaluation of solar PV opportunities at public facilities/land tracts
- Street lighting coordination (particularly lighting under direct control of agencies)
- Fleet management opportunities
- Joint energy and carbon tracking and reporting

Saunders said the next meeting will be October 28, during which the group will discuss the five projects and determine where to go next. Bouma said the group members seem to be collaborative and the meetings have been productive thus far.

Sassaman thanked Saunders and Bouma for their report.

- VII. **CFE Outreach / News Articles** – Shaw presented an updated schedule for new articles to be prepared by staff and CFE members. Bouma said he would work with Neal on the next article summarizing the recent activities of the Solarize Orange initiative. Bouma said he would be meeting with Rob Pinder (Next Climate / Solarize Orange) the next day and would ask for summary information to include in the article. Shaw reported that the article about fracking that the CFE approved at the September meeting was submitted to the newspapers on September 19; however he heard back from Mark Schultz (Chapel Hill News) that it might not be published until after the Chapel Hill elections. Shaw said he has not yet seen the article in The News of Orange County.

Bouma reported that three ideas for public service announcements (PSAs) that CFE members offered in September have been prepared for airing on WCHL radio during the month of October. He thanked the CFE for their input on that initiative.

- VIII. **Annual Report and Work Plan (2015-16)** – Sassaman reminded CFE members that each year the BOCC asks its advisory boards to prepare a report of their activities, accomplishments, new issues, and concerns. He referred members to the 2014-15 report in the meeting materials. He noted the 2015-16 will be due December 18.

Shaw suggested he would work with Davis and Bouma to prepare a draft 2015-16 report for the CFE to discuss and revise in November. The CFE agreed with that plan.

- IX. **Updates and Information Items** – Information on the following subjects was provided in the meeting package; selected items were discussed: a) Green Restaurant Challenge, b) solid waste/recycling/food waste, c) Orange County support for small solar, d) Nov 2016 bond package, e) OWASA biosolids management, f) Forest Service advice for ash trees, g) Raleigh streetlights to be switched to LED, h) Changes to state environmental laws/rules, i) EPA's environmental justice efforts, j) NC House and Senate pass industrial hemp bill, k) Fine particles linked to early death, i) Haw River Trail

- X. **Adjournment** – Sassaman adjourned the meeting at 9:00 pm.

Summary by Rich Shaw, DEAPR Staff

DRAFT CFE Resolution – November 9, 2015

ORANGE COUNTY COMMISSION FOR THE ENVIRONMENT

RESOLUTION

Incentive Program for Energy Efficient Construction

WHEREAS, energy efficiency is the lowest cost, cleanest, and most underutilized resource for meeting our energy needs; and

WHEREAS, energy efficiency in new construction enhances comfort and saves money for the occupants of those structures for the life of the structure; and

WHEREAS, there are split incentives between builders and occupants when it comes to investments in energy efficiency in new buildings because those efficiency measures can add costs for builders that result in savings for later occupants; and

WHEREAS, saving money by using less energy would most benefit low-income residents who pay the largest percentage of their incomes on monthly power bills; and

WHEREAS, energy efficiency measures, by reducing the need to produce new electricity from burning fossil fuels, reduce air pollution and save money for all rate payers by minimizing the need for energy producers to invest in new production and transmission capacity; and

WHEREAS, state law allows county and city governments to enact incentives for energy efficient construction in the form of rebating permitting fees, but otherwise does not allow local governments to require more energy efficient construction than is already required by the state building code; and

WHEREAS, the Town of Chapel Hill adopted an incentive program for energy efficiency construction, allowing for rebates of permitting fees for energy efficient construction that meets certain objective benchmarks in the Ephesus-Fordham District.

NOW, THEREFORE, BE IT RESOLVED:

That the Orange County Commission for the Environment (CFE) recommends that the Orange County Board of County Commissioners adopt an incentive program that rebates permitting fees, modeled after the program adopted by the Town of Chapel Hill, for all new commercial and residential construction and look for creative ways to encourage low or no-cost energy efficiency upgrades to existing buildings, primarily targeted at our lowest-income neighbors to provide them with savings on their utility bills.

This the ____ day of _____, 2015.

_____, Chair
Orange County Commission for the Environment

Ephesus/Fordham District FAQs

The Ephesus Fordham Area became a new zoning district in July 2014. Our goal is to renew and transform an area characterized by strip malls, parking lots, confusing roadways and traffic congestion. The area includes some of Chapel Hill's older, suburban style shopping centers – including Eastgate Shopping Center, built in 1958; Village Plaza, built in 1974; and Rams Plaza, built in 1982.

- **Where is the Ephesus/Fordham District and what is happening there?**

The Ephesus/Fordham District is located near the intersection of Ephesus Church Road and Fordham Boulevard in northeast Chapel Hill and encompasses about 163 acres. Some notable landmarks in the District include Rams Plaza, Village Plaza, Europa Center, and Eastgate Mall.

Since 2010, the Council has been discussing policy alternatives for the Ephesus/Fordham District to facilitate positive changes to traffic patterns, stormwater management, affordable housing opportunities, land use management, and other community interests while simultaneously encouraging new reinvestment. The result has been a comprehensive package of ongoing improvements designed to renew the Ephesus/Fordham District. Some of these improvements include:

- *Implementation of a form-based code to manage private development*
- *A pilot program to incentivize energy and water conservation*
- *A pilot program to incentivize development of affordable housing throughout the District*
- *Partnering with a local non-profit affordable housing developer to provide housing for seniors & families*
- *Roadway improvements to improve connectivity and access for motorists, bicyclists, pedestrians, buses*
- *Upstream improvements to the Lower Booker Creek Watershed*
- *Identifying opportunities for new recreation facilities*
- *Implementation of a Municipal Services District*
- *Development of new design guidelines*
- *Development of new streetscape standards*

Together, these projects are intended to advance the community goals outlined in the Chapel Hill 2020 Comprehensive Plan and address interests expressed in the Chapel Hill Community Survey. A tentative [schedule of renewal actions](#) is available online.

- **What is a form-based code?**
- **What topics are addressed within the Ephesus/Fordham form-based code?**
- **How is the Town addressing affordable housing in the District?**
- **Will development and redevelopment in the District improve stormwater quality and quantity?**
- **How is the Town working to improve traffic conditions in the District?**
- **Will the Ephesus/Fordham District foster new connections for pedestrians and bicyclists?**

- **Will new buildings meet energy and water conservation standards?**

Currently, North Carolina state law does not allow municipalities to require building standards more stringent than the state building code. To support Chapel Hill's environmental stewardship goals outlined in the Town's Chapel Hill 2020 Comprehensive Plan, the Council has implemented a pilot rebate program to incentivize sustainable building design in the District. This program authorizes a 35% rebate on permitting fees associated with the construction or renovation of qualifying development proposals. Qualified proposals must achieve an ENERGY STAR 1-100 score of 75 and meet the State's water performance standard for public buildings.

- **Will the community receive regular updates about the progress of improvements in the Ephesus/Fordham District?**

<http://www.townofchapelhill.org/town-hall/departments-services/chapel-hill-2020/future-focus-areas/the-ephesus-fordham-district>

ORANGE COUNTY
BOARD OF COMMISSIONERS

WORKSESSION AGENDA ITEM ABSTRACT

Meeting Date: November 10, 2015

Action Agenda
Item No. _____

SUBJECT: Upper Neuse River Basin Association Update

DEPARTMENT: DEAPR

PUBLIC HEARING: (Y/N)

No

ATTACHMENT(S):

1. Falls Lake watershed
2. Excerpts from October 2014 Agenda Abstract
3. Water Quality Results Graph
4. Streamflow Comparison
5. UNRBA Project Schedule

INFORMATION CONTACT:

David Stancil 919-245-2510
Tom Davis 919-245-2510

PURPOSE: To inform the Board of County Commissioners on recent activities of the Upper Neuse River Basin Association (UNRBA).

BACKGROUND: The Upper Neuse River Basin Association (UNRBA), of which Orange County is a member, is working on a multi-year effort (titled "The Path Forward") to revise Stage II of the Falls Lake Nutrient Management Strategy (Falls Lake Rules). As currently written, Stage II of the Falls Lake Rules requires local governments, the NCDOT, the agricultural community, and other regulated parties located in the Falls Lake watershed (Attachment 1) to reduce nitrogen and phosphorus nutrient loading to Falls Lake by 40% and 77%, respectively. While the members of the UNRBA agree that protecting Falls Lake as the City of Raleigh's water supply is paramount, the members also agree that there are serious technical and financial impediments to meeting these nutrient reduction goals.

Additional background information concerning the Falls Lake Rules, the underlying Consensus Principles, estimated costs to comply with the Falls Lake Rules, and related information are provided in Attachment 2, excerpts from the agenda abstract prepared for the October 14, 2014 Board of County Commissioners meeting.

The UNRBA continues to make progress on several important projects, including:

1. Lake and Watershed Water Quality Monitoring
2. BMP Nutrient Credit Development
3. Development of Nutrient Credit Calculation Tool
4. Falls Lake Rules Review

1. Lake and Watershed Water Quality Monitoring

CardnoEntrix, the consultant working for the UNRBA, completed the first 12 months of water quality sampling in July 2015. The Falls Lake Rules stipulate that in order for outside data to be evaluated during the re-examination of Stage II of the Falls Lake Rules, a minimum of three years of sampling data must be collected for the data to be considered by the Environmental Management Commission (EMC). The UNRBA's water quality sampling program is producing information for the following purposes:

- ◆ Determination of sources of nutrients in the watershed and the loading of nutrients from individual jurisdictions to Falls Lake;
- ◆ Falls Lake response modeling;
- ◆ Development of data for consideration of additional regulatory options; and
- ◆ Linkage of water quality conditions in Falls Lake to the designated uses of the Lake.

Attachment 1 identifies the locations of surface water sampling stations for both the jurisdictional and lake tributary nutrient loading determination projects. All of the data collected is available for review at the web site set up for this purpose: <http://unrba-wqp.cardno.com/>

Attachment 3 is an example of the results obtained from water quality samples collected in five streams that feed into the northern end of Falls Lake. Fairly significant variations in these nutrient concentrations are seen among the five streams, as well as over the course of the time interval shown for two of the streams listed. Attachment 4 illustrates variations in the volume of stream flow in three streams in the upper portion of the Falls Lake watershed. The combination of nutrient concentration and rate of streamflow in each individual stream determines the amount (loading) of nutrients entering Falls Lake, so a stream that contains a low concentration of nutrients (such as Eno River) could actually contribute more nutrient loading if its' streamflow was significantly larger than a second stream with a higher concentration of nutrients (such as Ellerbe Creek).

CardnoEntrix is also collecting data for the following Special Studies as part of the Falls Rules re-examination process:

- ◆ Falls Lake Constriction Point Monitoring
- ◆ High Flow Monitoring
- ◆ Storm Event Sampling
- ◆ Sediment Sample Analysis
- ◆ Light Penetration Analysis
- ◆ Volatile Suspended Sediment Determination
- ◆ Survey of Recreational Use of Falls Lake
- ◆ Model Performance Evaluation
- ◆ Evaluation of Regulatory Options to Falls Lake Rules

2. BMP Nutrient Credit Development

CardnoEntrix is continuing to work on a project to develop nutrient reduction Best Management Practice (BMP) credits. The project will be beneficial to UNRBA member governments (including Orange County) by increasing the number of structural devices and other stormwater practices with known nutrient reduction values. These BMPs will then be available for affected parties to use to meet the required nutrient reduction goals under Stages I and II of the Falls Lake Rules. This is sometimes referred to as increasing the number of nutrient reduction measures available in the “BMP tool box”. Subject matter experts are developing nutrient credit values and practice standards for three “batches” of BMPs:

BMP Batch 1:	Infiltration Devices Filter Strips Soil Amendment
BMP Batch 2:	Bioretention Devices Land Conservation Pervious Area Nutrient Management
Batch 3:	Livestock Exclusion Riparian Buffers Elimination of Illicit Discharges

After CardnoEntrix develops draft nutrient credits and practice standards for each of these BMPs, the NC Division of Water Resources (DWR) will evaluate this information and determine what nutrient reduction credit is appropriate for each BMP. Once this process is completed, affected parties, including local governments, will be able to utilize these BMPs to meet required nutrient reduction targets.

3. Development of Nutrient Credit Calculation Tool

Also ongoing is the development of a spreadsheet-based tool for local governments to calculate nutrient reduction credits for specific on-site nutrient reduction measures, as well as for more regional programmatic practices such as street sweeping or fertilizer management. This tool will allow municipalities in the watershed to evaluate the impact of various nutrient reduction devices and practices at different locations in the watershed, allowing local governments to determine the most cost-effective means of meeting required nutrient reductions.

4. Falls Lake Rules Review

The Regulatory Reform Act of 2013 (HB74) mandated that all State rules expire within ten years of their effective dates, unless readopted. Currently, DWR is concluding an informal comment period for the Falls Lake Rules, which will be followed in 2016 by a public comment period. UNRBA is working to develop comments on the Falls Lake Rules that all UNRBA members can agree on. Several UNRBA local governments, including Orange County, have already submitted informal comments concerning these rules.

A tentative schedule for ongoing UNRBA tasks is included as Attachment 5. As can be seen from this schedule, the UNRBA anticipates continuing the studies discussed herein for the next several years. Stage II of the Falls Rules is the period extending from 2021 to 2036, with the overall goal of meeting nutrient related water quality standards throughout Falls Lake by 2041. This schedule may change as a result of the Rules Review process that is underway.

FINANCIAL IMPACT: There is no financial impact to the County at this time. Given the extensive process underway concerning the re-examination of Stage II of the Falls Lake Rules and the water quality analysis included in this process, it is expected that UNRBA dues will remain elevated for several years.

SOCIAL JUSTICE IMPACT: This project is consistent with *Social Justice Goal: ESTABLISH SUSTAINABLE AND EQUITABLE LAND-USE AND ENVIRONMENTAL POLICIES*

The fair treatment and meaningful involvement of people of all races, cultures, incomes and educational levels with respect to the development and enforcement of environmental laws, regulations, policies, and decisions. Fair treatment means that no group of people should bear a disproportionate share of the negative environmental consequences resulting from industrial, governmental and commercial operations or policies.

The Path Forward Project to re-examine the Falls Lake Rules is underway, at least in part, because of the cost that would be incurred by residents in the watershed to comply with the Rules.

RECOMMENDATION(S): The Manager recommends that the Board consider this information and provide feedback and guidance as desired.

Attachment 2. Excerpts from October 14, 2014 UNRBA Agenda Abstract

BACKGROUND: The Falls Lake Nutrient Management Strategy (Falls Lake Rules) require local governments, the NCDOT, the agricultural community, and other regulated parties located in the Falls Lake watershed (Attachment 1) to reduce nitrogen and phosphorus nutrient loading to the lake by 40% and 77% respectively by 2036. Regulated parties anticipate significant financial and technical difficulties with meeting the mandated nutrient reduction targets. The fiscal note prepared by the State at the time the Falls Lake Rules were developed estimated the cost of compliance with the rules to be at least \$1.5 billion. Many affected parties believe the phosphorus reduction goal of 77% is not attainable at any cost.

As a result of the challenges with meeting the goals of the Falls Lake Rules, the Upper Neuse River Basin Association (UNRBA), of which Orange County is a member, is working to revise Stage II of the Falls Lake Rules. The activities of the UNRBA are guided by the Consensus Principles, which have been adopted by nearly all of the jurisdictions in the Falls Lake watershed, including the Orange County BOCC on March 16, 2010 (Attachment 2). The Consensus Principles emphasize the protection of Falls Lake as a water supply for the City of Raleigh, while also stating the need for re-examination of Stage II of the Falls Lake Rules.

Consensus Principles

Consensus Principle #9 includes the following with regard to the development of the Falls Lake Rules: "...relied on a limited data base which will be substantially enhanced by a more rigorous program of sampling, monitoring and analysis." Furthermore: "The EMC [Environmental Management Commission] should therefore begin a re-examination of its nutrient management strategy for Falls Lake by January 1, 2018. The re-examination should consider, among other things, (i) the physical, chemical, and biological conditions of the Lake with a focus on nutrient loading impacts and the potential for achieving the Stage 1 goal by 2021 as well as the feasibility of both achieving the Stage 2 reduction goals and meeting the water quality standard for chlorophyll-a in the Upper Lake, (ii) the cost of achieving, or attempting to achieve, the Stage 2 reduction goals and meeting the water quality standard for chlorophyll-a in the Upper Lake, (iii) the existing uses in the Upper Lake and whether alternative water quality standards would be sufficient to protect those existing uses..."

Consensus Principle 10 states: "The limited resources available to DWQ [Division of Water Quality, now Division of Water Resources - DWR] and DENR [Department of Environment and Natural Resources] for the implementation of the nutrient management strategy and the need for a robust and active sampling and monitoring program, as well as additional modeling, make it desirable for the affected local governments to share resources and undertake these important activities, and other activities associated with the re-examination of the Nutrient Management Strategy, collectively. The affected local governments should share resources and assist with funding for the examination of the Nutrient Management Strategy."

Attachment 2. (Continued)

UNRBA Projects

Given the challenges with meeting Stage II of the Falls Lake Rules, as well as the guidelines outlined in the Consensus Principles document, the UNRBA is already either working on, or is planning to begin, the following projects:

- Estimation of nutrient sources and jurisdictional loading of nutrients to Falls Lake
- Modeling the response of Falls Lake to nutrient input and internal lake processes
- Monitoring of changes in the lake as a result of compliance activities in the watershed
- The linkage of water quality conditions to the designated uses of Falls Lake
- Estimation of BMP credits for measures without DWR-established credits
- Support of various options under the existing regulatory framework in North Carolina

The UNRBA has retained a consultant to help examine options for meeting the requirements of Stage II the Falls Lake Rules while incorporating the goals of the Consensus Principles.

According to the *Framework for a Re-examination of Stage II of the Falls Nutrient Strategy* prepared by the consultant, CardnoEntrix: "The re-examination should consider existing data, models, nutrient management strategies, the Consensus Principles, water quality standards (including designated uses and water quality criteria), implementation costs, and regulatory flexibility."

Water Quality Sampling

During July 2014, CardnoEntrix received approval from DWR for three required technical memoranda that had been prepared and submitted for DWR review that describe in detail the watershed sampling project that will form the foundation of the re-examination process:

- Quality Assurance Project Plan (QAPP)
- Falls Lake Watershed Monitoring Plan
- Modeling Framework

The QAPP and the Monitoring Plan describe the three to five year watershed sampling effort that was initiated in August 2014. The water quality sampling program will provide information for the following purposes:

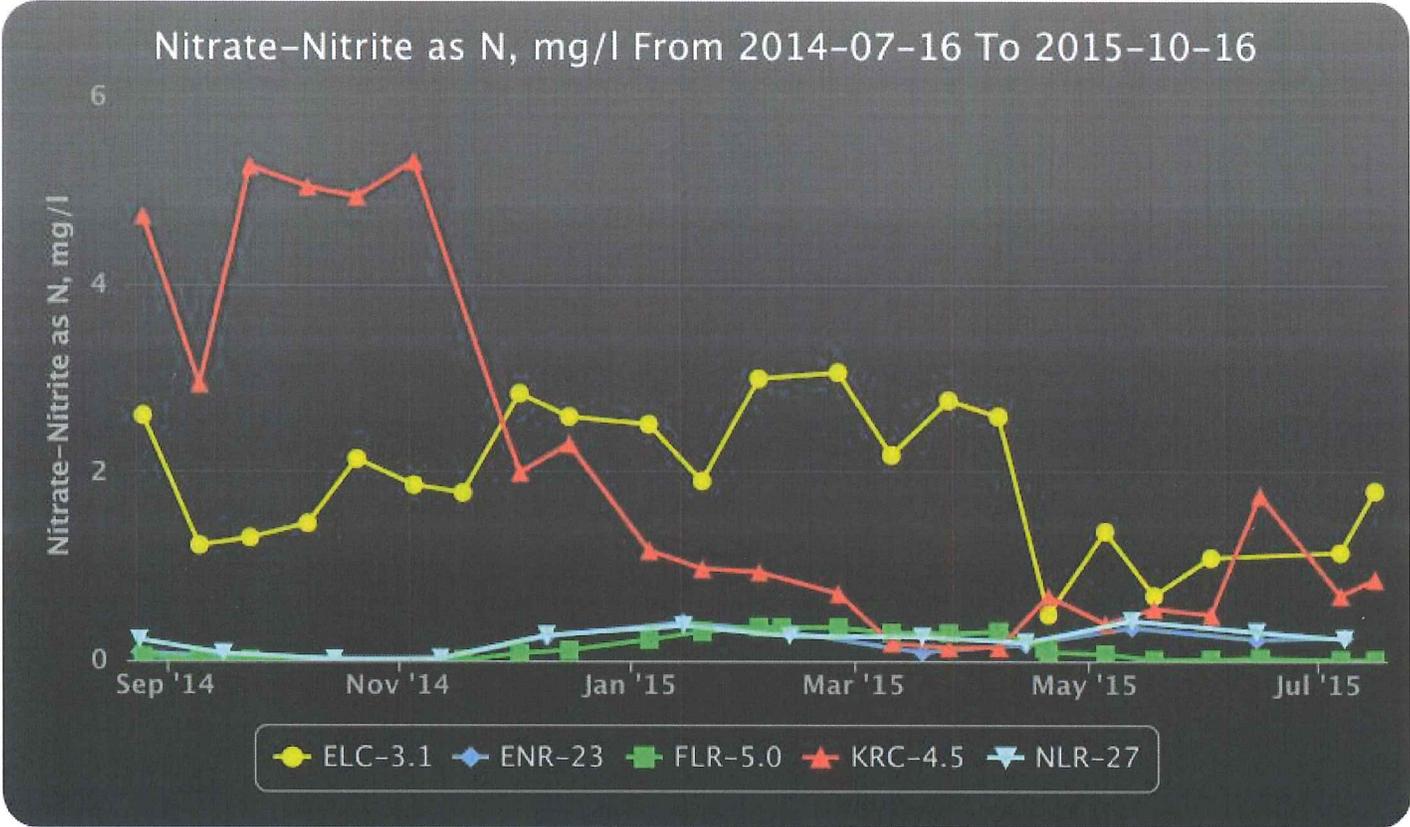
- Determination of nutrient source allocation and jurisdictional nutrient loading to Falls Lake;
- Falls Lake response modeling;
- Development of data for consideration of additional regulatory options; and
- Linkage of water quality conditions in Falls Lake to the designated uses of the Lake.

Attachment 2. (Continued)

Modeling Data Gaps

UNRBA re-modeling of Falls Lake is expected to start in approximately 2 years, and is intended to update the lake response model that DWQ utilized in the development of the Falls Lake Rules. The UNRBA contractor identified several gaps in the data used by DWQ in the modeling completed during the development of the Falls Lake Rules, including:

- DWQ held constant the total organic carbon and chlorophyll-a input values assumed for the tributaries feeding into Falls Lake. These concentrations were based on levels measured within the lake, not in the tributaries. It is probable that these concentrations were artificially high to begin with and were unable to decrease at all over the course of the modeling study.
- There are no stream gages on any of the streams that flow into Falls Lake east of I-85, thus no flow information was incorporated for any of these 12 streams.
- Atmospheric deposition of nitrogen in the lake or watershed was not accounted for by DWQ.
- Streambank erosion, possibly a significant source of phosphorus in the watershed, was not considered as a possible source by DWQ.
- Internal lake processes, such as sediment re-suspension, were also not accounted for by DWQ.

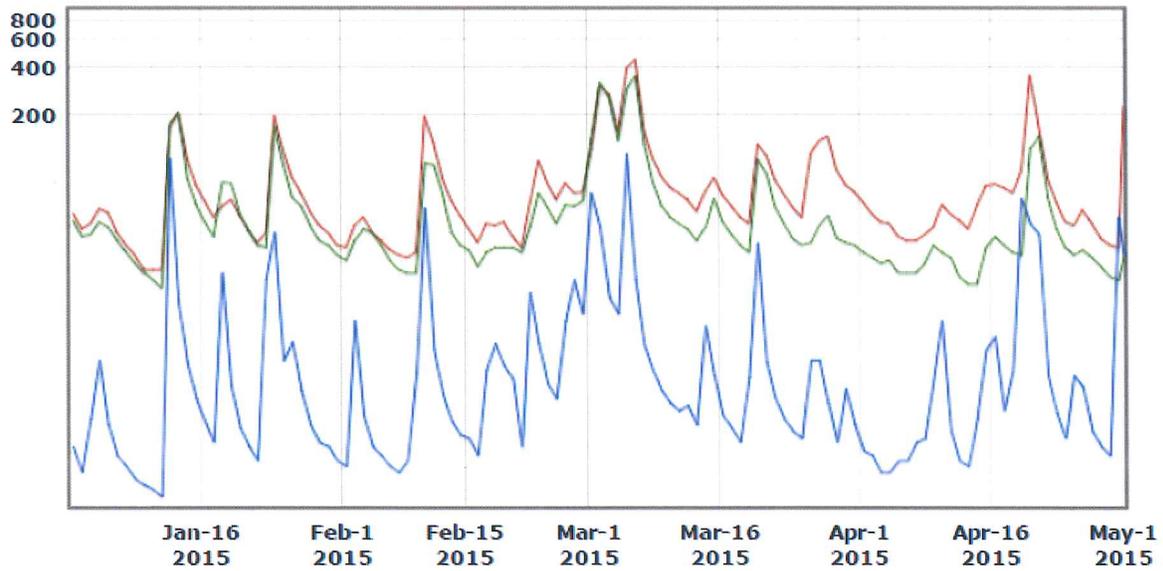


Legend:

ELC-3.1	Ellerbe Creek at Glenn Road, Durham County	yellow
ENR-23	Eno River at Cole Mill Road, Durham County	blue
FLR-5.0	Flat River at Old Oxford Highway, Durham County	green
KRC-4.5	Knap of Reeds Creek at SGWASA WWTP, Granville County	red
NLR-27	North Fork Little River at New Sharon Church Road	light blue

Attachment 3. Graph of water quality sample Nitrate (as Nitrite) concentrations.

Streamflow, cubic feet per second



Legend:

- Eno River gage at Hillsborough – red
- Knap of Reeds Creek gage near Butner - green
- Ellerbe Creek at Club Boulevard – blue

Attachment 4. Graph comparing streamflow in the Eno River, Knap of Reeds Creek and Ellerbe Creek.

Tasks	2013	2014	2015	2016	2017	2018	2019	2020
Complete Monitoring Program QAPP and DWR review and approval		█						
Conduct Monitoring		█	█	█	█	█		
Optional 5th year of Monitoring						█	█	
Preliminary Revisions to EFDC Model and inputs				█	█	█		
Develop full model framework				█				
DWR review full model framework					█			
Final Revisions to EFDC model and inputs						█	█	
Recalculate Stage II Load Reductions using Revised EFDC model					█	█	█	█
NCDWR Review of Model Revisions							█	█

Figure 3 Potential Schedule for the nutrient response model refinements and Re-examination of Stage II of the Falls Lake Rules

Attachment 5. UNRBA Falls Lake Rules Stage II re-examination process schedule.

NAME OF BOARD/COMMISSION: Commission for the Environment

Report Period: 201~~4~~5 - 201~~5~~6

**ORANGE COUNTY ADVISORY BOARDS & COMMISSIONS
ANNUAL REPORT / WORK PLAN FOR THE COUNTY COMMISSIONERS**

The Board of Commissioners welcomes input from various advisory boards and commissions in preparation for its annual planning retreat. Please complete the following information, limited to the front and back of this form. Other background materials may be provided as a supplement to, but not as a substitute for, this form.

Board/Commission Name: Commission for the Environment

Persons to address BOCC at work session and contact information:

Chair:
Vice Chair Lydia Wegman 919-886-8775 lnwegman@gmail.com

Primary County Staff Contact~~s~~:

Department of Environment, Agriculture, Parks and Recreation
Rich Shaw (Land Conservation Manager) 245-2514 rshaw@orangecountync.gov
Tom Davis (Water Resources Coordinator) 245-2513 tdavis@orangecountync.gov
Brennan Bouma (Sustainability Coordinator) 245-2626 bbouma@orangecountync.gov

How many times per month does this commission meet, including any special meetings and sub-committee meetings?

One meeting per month (2nd Monday); committees meet as needed during meeting

Brief Statement of Commission's Assigned Charge and Responsibilities.

Purpose: to advise the BOCC on matters affecting the environment, with particular emphasis on environmental protection and enhancement. Other duties include:

- Perform special studies/projects on environmental issues as requested by BOCC
- Recommend environmental initiatives to the BOCC, especially of local importance
- Study changes in environmental science and environmental regulations in the pursuit of the CFE's duties
- Educate the public and local officials on environmental issues

What are your Commission's most important accomplishments?

- Initiated a series of newspaper articles on various environmental issues (2015)
- Made recommendations to BOCC on 2016 bond package and on County's use of herbicides and pesticides at County parks and facilities (2015)
- Commented to Planning Bd on proposed changes to impervious surface rules (2015)
- Provided ideas for Public Services Announcements (PSAs) for County radio spots (2015)
- Collaborated with other entities on energy conservation and mgmt. projects (2015-16)
- Published the 2014 Orange County State of the Environment report (previous reports were completed in 2000, 2002, 2004, 2009)
- Convened Orange County Environmental Summit (2005, 2009, 2014)
- Made recommendations to BOCC on food waste and solid waste tax district (2014)
- Worked with Orange County Schools to introduce local environmental indicators/ status and trends into middle and high school science curriculum (2004, 2009, 2014)
- Hosted a Solid Waste Forum with the Chapel Hill Sustainability Committee (2013)

- Co-sponsored the annual *Nature of Orange* photography contest (2012 - [2015](#))
- Advocated for ½ cent sales tax referendum for Triangle Region public transit (2012)
- Compiled annotated bibliography of the effects of forestry on water quality (2012)
- Developed sustainable landscaping and forest management policies for the administration of County-owned facilities (2010)
- Assisted County staff in completing the Natural and Cultural Systems Element of the Orange County Comprehensive Plan (2008)

List of Specific Tasks, Events, or Functions Performed or Sponsored Annually.

- [Liaisons to Intergovernmental Parks Work Group and Orange Unified Transp. Board](#)
- Review and comment on environmental issues (e.g., fracking, biosolids application, water pollution, air quality, forest mgmt.) and other issues assigned by the BOCC
- Identify priorities for the Lands Legacy Action Plan (natural areas and wildlife habitat)
- Conduct special studies pertaining to Orange County environment (e.g., energy efficiency/sustainability, forestry effects on water quality, herbicides and native flora)
- Develop recommendations on implementation of ground water studies of the 1990s and the integration of ground water and surface water quality and quantity
- Conduct environmental education outreach at events (eg, Last Friday, [Earth Evening](#))

Describe this commission’s activities/accomplishments in carrying out BOCC goals/priorities, if applicable.

BOCC Goal Five: Create, preserve, and protect a natural environment that includes clean water, clean air, wildlife, important natural lands and sustainable energy for present and future generations.

- Presented findings and recommendations to BOCC on selected environmental issues: effects of forest mgmt. on water quality; effects of herbicides on roadside native plant habitat; potential effects of hydraulic fracturing (“fracking”) in Orange County; problems caused by hydrilla in the Eno River (BOCC Priorities #1 and #12)
- Stayed abreast of ongoing and developing env. issues of importance to the County, such as Falls & Jordan Lake nutrient mgmt. rules, reducing commercial food waste in solid waste stream, and permitting of biosolids on farmland (Priorities #12 and #16)
- Provides comments on proposed master plans for future parks/preserves

If your commission played the role of an Element Lead Advisory Board involved in the 2030 Comprehensive Plan preparation process, please indicate your activities/accomplishments as they may relate to the Comprehensive Plan’s goals or objectives. (*Element Lead Advisory Boards include: Planning Board, Commission for the Environment, Historic Preservation Commission, Agriculture Pres. Board, and Parks & Recreation Council*)

The CFE provided extensive input into DEAPR staff development of the *Natural and Cultural Systems Element* of the Comprehensive Plan—specifically the chapters on Air and Energy Resources, Water Resources, and Natural Areas and Wildlife Habitat.

Objective AE-1:

Assess and implement the current countywide greenhouse gas emissions inventory and action plan target reductions.

- The CFE helped to initiate a countywide inventory of greenhouse gas emissions (2005), and continues to advise on ways to reduce the County’s “carbon footprint.”

Objective AE-15:

Foster participation in green energy programs such as installation incentives for solar hot water/solar generation/solar tempering in residential or commercial construction. The County should develop programs that will link citizens and businesses with options for alternative and sustainable energy sources.

- The CFE's Air and Energy Resources Committee has developed proposals that address energy efficiency and renewable power issues, and will pursue further in collaboration with other advisory boards and stakeholders.

Objective NA-3:

Develop a more detailed and consistent methodology for monitoring changes in forest cover throughout the County, and specifically the extent of mature hardwood forest.

- The CFE's State of the Environment report documented significant reductions in mature hardwood forest that occurred from 2003-2008 and since 1988. DEAPR staff will update those data to include forest conversions that occurred 2009 - 2013.

Objective NA-11:

Develop a comprehensive conservation plan for achieving a network of protected open space throughout Orange County, which addresses 1) threats to important natural areas; 2) connectivity between protected areas; 3) coordination with neighboring counties; and 4) sustainable management of critical natural resources.

- The CFE's Biological Land Resources Committee is working with other conservation entities to initiate the development of a comprehensive conservation plan. prepared a draft scope of work and is considering how to proceed as follow up to the 2014 Parks & Recreation Master Plan

Objective NA-16:

Create a system of public and private open space and conservation areas, including parks, nature preserves, and scenic vistas representative of Orange County landscape.

- The CFE advises County's Lands Legacy program in its efforts to protect the most important natural and cultural resource lands through a variety of means.
- The CFE's Biological Land Resources Committee is working with other conservation entities to initiate the development of a comprehensive conservation plan. prepared a draft scope of work and is considering how to proceed as follow up to the 2014 Parks & Recreation Master Plan

Objective WR-5:

Promote and participate in regional efforts to plan for use of water supplies in the region in an equitable manner, including contingency planning for water supplies during droughts. [Also Objectives WR-9, WR-10, and WR-15]

- CFE stays abreast of Jordan Lake Partnership and advises staff as needed
- CFE advocates for full implementation of the Water Resources Initiative to ensure planning for an adequate water supply for current and anticipated future needs

Objective WR-11:

Provide incentives and educational information to landowners to increase protection of watersheds and ground water supplies and their inter-relationships.

- The CFE distributes groundwater and surface water educational materials at Festifall and Last Fridays events and as part of its State of the Environment reports

NOTE: The Orange County State of the Environment 2014 identified specific recommendations on ways to help maintain and improve Orange County's environmental quality, many of which address objectives stated in the Orange County Comprehensive Plan.

Identify any activities this commission expects to carry out in **2016** as they relate to established BOCC goals and priorities. If applicable, is there a fiscal impact (i.e., funding, staff time, other resources) associated with these proposed activities (list).

- Continue to update the Orange County State of the Environment 2014 report
- ~~Continue to explore ways~~ Convene an Energy Task Force (or equivalent work group) to improve the County's ability to foster local sustainable energy production and energy efficiency strategies, including developing incentives for increasing energy efficiency in new construction
- Recommend ways to reduce the County's "carbon footprint" and implement the County's Environmental Responsibility Goal (BOCC Priority #10)
- ~~Continue to help~~ Help with public outreach and management efforts related to hydrilla in the Eno River
- Help initiate the development of a comprehensive conservation plan for Orange Co (BOCC Priority #1)
- ~~Collaborate with NC Botanical Garden and others to identify significant roadside habitat for native plants; ask NCDOT and other utilities to protect those roadside habitats [authorized by BOCC June 2012]~~
- Co-sponsor the annual DEAPR photography contest (*The Nature of Orange*)
- Help plan for and participate in DEAPR's annual Earth Evening Day event

What are the concerns or emerging issues your board has identified for the upcoming year that it plans to address, or wishes to bring to the Commissioners' attention?

- The CFE will continue to advocate for an expansion of the County's commercial food waste pickup and composting services to reduce food waste in the solid waste stream
- The CFE remains interested in developing incentives for increasing energy efficiency in new construction [January 2012 memo to Planning Board]
- The CFE will continue strive to learn more about environmental justice matters and incorporate relevant information and considerations in the State of the Environment ~~2014~~ report
- The CFE will continue to follow ~~closely~~ the Solid Waste Advisory Group's discussions of how to improve the handling and disposal of Orange County's solid waste, and will advocate for better long-term solutions
- The CFE will continue to advocate for increased efforts to gather information related to water resources in Orange County and ~~will continue~~ to increase public awareness and understanding of water supply sources, related concerns, and what steps can be undertaken to maintain or improve the quantity and quality of Orange County water supply resources
- The CFE will continue to address, as appropriate, the critical environmental issues for Orange County as enumerated on page 3 of the 2014 State of the Environment report, which include potential adverse effects from a) invasive, non-native, plant and animal species; b) reductions in State-led collection of water resources data; c) potential drilling for natural gas in the Deep River basin; d) urban sprawl; and CFE support for e) the responsible deployment of clean and appropriately-sited renewable energy and reductions in energy use to help fight climate change

**ORANGE COUNTY
DEPARTMENT OF ENVIRONMENT, AGRICULTURE,
PARKS AND RECREATION**

MEMORANDUM

To: Commission for the Environment
From: Rich Shaw
Date: November 3, 2015
Subject: Election of Officers

The Commission for the Environment is scheduled to hold its annual election of officers (Chair and Vice Chair) as specified in the CFE policies and procedures.

Section III of the procedures is provided below for your information and guidance:

SECTION III: MEMBERSHIP

A. Authority ...

B. Composition ...

C. Officers

1. The elected officers of the Commission for the Environment shall consist of a Chair and a Vice Chair.

D. Election Procedures and Terms of Office

1. The Officers shall be elected by the Commission for the Environment from among its members at the regular meeting in November of each year. They shall take office at the following regular meeting.
2. The candidate for each office receiving a majority vote of the Commission for the Environment members present shall be declared elected.
3. The officers shall be elected for a term of one year. They shall be eligible to succeed themselves for not more than three consecutive terms.
4. Appointment to serve for any actual period of one (1) year or more will constitute a full term. Appointment for any actual period of less than one (1) year will constitute a partial or unexpired term.

**ORANGE COUNTY
COMMISSION FOR THE ENVIRONMENT**

Since February CFE members have worked with staff to develop monthly articles for the *Chapel Hill News* and *The News of Orange County*. Thus far there have been articles on hydrilla in the Eno River, electronic vehicle charging stations, the benefits of native plants, problems caused by the emerald ash borer and other invasive species, and the effects of fracking on Orange County.

Revised Calendar for Preparing/Publishing News Articles

November 9, 2015

Topic	SOE	Committee (Lead)	Completion	Publication
Hydrilla in the Eno	pp. 69-70	Water (Cada/Davis)	April	April
New electric vehicle charging stations	pp. 21-22	Air & Energy (Bouma)	April 15	May 13
Pollinator Issues	pp. 43-44	Land (O'Connor/Shaw)	June	June
Terrestrial invasives / choosing native spp.	pp. 43-44	Land Resources (Hintz/Shaw)	Aug 15	Aug 19
Potential effects of fracking in Orange Co.	pp. 71-72	Water (Davis/Sassaman)	Sept 1	Oct __
Solarize projects	N/A	Air & Energy (Neal/Bouma)	draft Oct 15	late Oct
Water conservation	pp. 47- 54	Water (Cada/Davis)	draft Nov 15	late Nov
Barriers to solar development	N/A	Air & Energy (_____/Bouma)	draft Dec 15	late Dec
Land conservation	pp. 37-42	Land (Wegman/Shaw)		
<i>Reconsider schedule for 2016 (change to quarterly?)</i>				

YOU ARE INVITED!

**Orange County Solid Waste Advisory Group
(SWAG) to host a public information session:**

Options for Food Waste Diversion

**Wednesday, November 4
6:00 p.m. to 8:00 p.m.**

**Southern Human Services
2501 Homestead Road, Chapel Hill**

**Featured speaker: *Janine Ralph*
International food waste collection expert,
from Ontario, Canada.**

Questions?

**Orange County Solid Waste Management
(919) 968-2788
recycling@orangecountync.gov
www.orangecountync.gov/recycling/**



ORANGE COUNTY BOARD OF COMMISSIONERS MEETING SUMMARY

October 6, 2015

The following is a brief summary of the Board actions.

4. Proclamations/ Resolutions/ Special Presentations

a. Arts & Humanities Month – 2015 Piedmont Laureate James Maxey

The Board was introduced to and heard a brief selection from Hillsborough resident and speculative fiction author James Maxey, the 2015 Piedmont Laureate.

b. Resolution Recognizing Evelyn Lloyd for Service

The Board voted to approve a resolution recognizing Evelyn Lloyd for her 41 continuous years of service on the Historic Hillsborough Commission.

c. Proclamation Naming Fairview Park Ballfield for James Stewart

The Board voted to approve a proclamation naming the existing baseball/softball field at the County's Fairview Park for the late Mr. James "Junebug" Stewart.

5. Public Hearings

a. Class A Special Use Permit for the Emerson Waldorf School

The Board received the Planning Board recommendation, closed the public hearing, and voted to approve a Class A Special Use Permit ('SUP') application submitted by the Emerson Waldorf School located at the intersection of New Jericho and Millhouse Roads. The applicant proposed revisions to the school's current SUP and requested approval of a Master Plan outlining the long-term expansion of the school's facilities and infrastructure in accordance with the Orange County Unified Development Ordinance.

7. Regular Agenda

a. Additional Discussion Regarding a Nov 2016 Bond Referendum

The Board continued discussion regarding a November 2016 Bond Referendum, and voted to adopt a preliminary resolution to set the bond at a total of \$125 million with \$120 million for schools and \$5 million for affordable housing. The Board also voted to designate \$1 million per year of CIP funds for schools over the next five years and \$1 million per year of operating funds for affordable housing over the next five years.

b. Affordable Housing Fund Criteria

The Board tabled establishing a process and criteria to fund affordable housing projects until during or after the Work Session on November 10, 2015.

8. Reports

a. Report on Small Business Investment Grants, Agriculture Economic Development Grants, & Small Business Loan Program

The Board received a report on the current status of 3 grant and loan programs ("Small Business Investment Grant", the "Agriculture Economic Development Grant", and the "Small Business Loan Program") that are administered by the Orange County Economic Development Department to support the retention and growth of small businesses, agriculture and food systems-related agriculture ventures throughout Orange County.

North Carolina League of Conservation Voters

NCLCV Weekly News – October 26, 2015

McCrory Signs Polluter Protection Act

Gov. Pat McCrory on Friday left no doubt where he stands. By signing HB 765, the 2015 "rules reform" bill now widely known as the Polluter Protection Act, McCrory acted to protect polluters at the cost of greatly increased danger to the health, clean water, and clean air of all North Carolinians.

"We are greatly disappointed with Governor McCrory's actions today. We had shared our concerns with the Governor, emphasizing that nothing in this bill was essential but much was harmful. We're saddened to see our leadership give a green light to such egregious, anti-environmental actions," said Carrie Clark, Executive Director of NCLCV.

McCrory acted in spite of receiving more than 8,600 emails and hundreds of phone calls from concerned citizens urging him to veto the bill. A joint letter to McCrory from 15 citizen conservation organizations (including NCLCV) explained the bill's dangers and urged a veto. Major newspapers around the state joined in editorializing against the bill.

"This bill undoes so much of the progress our state has made in the last decade to clean up our air and water, build healthier communities, and create a stronger workforce. Now, using false claims that these regulations were holding back business, our Governor and legislative leaders have allowed polluters to have their way with our natural resources and the future prosperity of our state," remarked Dan Crawford, NCLCV Director of Governmental Relations. "Governor McCrory has simply reaffirmed his position of siding with corporate polluters over the interests of North Carolinians and the future of our state."

As previously outlined in CIB, here are three of the worst problems created by this bill:

- The bill's "polluter protection" provision (known euphemistically as the "environmental self-audit") excuses permit-holders who violate environmental limits from civil penalties for their offenses, if they self-report the violations. This encourages carelessness by air and water pollution dischargers. And it lets the polluters keep evidence of the audit discovering the pollution secret from civil suits and the public.
- The bill cuts back state protections for isolated wetlands and eliminates state protections for intermittent streams (streams which flow in an established channel but only for part of the year). These waters are critical to wildlife and to protecting clean water in other streams and rivers across the state throughout the year.
- The bill will require the state's air quality protection agency to shut down about half of its air quality monitors, creating willful blind spots in our monitoring network and making effective regulation of air pollution much more difficult.

HB 765 helps to ensure that environmental protection will be a major concern in the 2016 election cycle getting underway now.

POINT OF VIEW: DAMAGING OUR ENVIRONMENTAL HERITAGE

Fingerpointing as protections are rolled back in N.C.

BY DEE FREEMAN

Oct 27, 2015
News & Observer

Over the past half century, North Carolina has been a leader on the environment through the exemplary work of many dedicated and impassioned people.

Principal among these leaders have been our governors, beginning with Jim Holshouser and his work on the Coastal Area Management Act that has protected our unique and beautiful coastline. Jim Martin was a champion of air quality and achieved the regulation of a long list of air pollutants as a result of his executive order to bring air pollution under control. Jim Hunt gave us the Million Acre Initiative and showed us that conservation matters. Mike Easley and his administration produced the acclaimed Clean Smokestacks Act that is to this day manifesting the benefits of clean air for all North Carolinians.

More recently, Beverly Perdue

provided critical leadership during the Great Recession to maintain the state's environmental mission to sustain clean air and water, protect our land and natural resources, and address climate change. She oversaw approval of the Jordan Lake and Falls Lake Rules to assure clean and safe drinking water. Gov. Perdue also worked with Attorney General Roy Cooper on his lawsuit that resulted in the "EPA/TVA Settlement," stemming the interstate transport of air pollution out of the Tennessee Valley for years to come.

I was proud to work on these particular initiatives.

Each administration to the next had its successes and saw opportunities unfulfilled for one reason or another, but common among each was the passion and desire to move North Carolina forward for the good of its people. Today, we have seen this proud heritage on the environment, conservation and natural resources regress unimaginably with the actions

of the McCrory administration. Instead of continuing leadership on the environment, there is fingerpointing and gnashing of teeth at those who have gone before, assigning blame for perceived deficiencies while long enjoyed environmental protections are rolled back, conservation is starved for resources and natural resources are put at risk.

North Carolina deserves better. A clean environment is essential to the health of our people, and it is an imperative for successful businesses in our state.

Next year our state engages in its time-honored quadrennial right of electing a governor. It is time to change our political dialogue away from churlish rhetoric to the constructive consideration of what course the Tar Heel State should pursue on the environment. The selection of a governor should respect our state's heritage and look to leadership that brings maturity back to North Carolina's disposition on the environment and offers common sense in its actions to nurture the land we know as the Old North State.

Dee Freeman of Raleigh was secretary of the N.C. Department of Environment and Natural Resources from 2009 to 2013.

UPDATE: OWASA Biosolids Management

From: Greg Feller / OWASA

Sent: Monday, October 26, 2015

Subject: OWASA Board of Directors' decision on Oct 8, 2015 regarding biosolids management

I'm writing to follow up on our earlier communication with you about the OWASA Board of Directors' consideration of biosolids management.

After receiving information from staff and comments from citizens on October 8th, the Board decided that:

- OWASA will move toward recycling about 75% of its biosolids in "liquid" form on approved farmland (when practical), and recycling about 25% in dewatered form at a private composting facility in Chatham County.

(OWASA now applies about 50% of its biosolids in liquid form on farmland and dewateres 50% for transport to the composting facility.)

- OWASA staff will give the Board of Directors a status report in January 2017 on experience with the 75%-25% approach.
-
- OWASA will fill 2 vacant biosolids staff positions to enable this change.
- OWASA will seek proposal from private companies for seasonal assistance in biosolids recycling.

We will continue to keep you informed about biosolids management items to be considered by the OWASA Board in the future, including the report planned for 2017.

If you have any questions or comments, please feel free to contact me.

Sincerely,

John Kiviniemi, Wastewater Treatment and Biosolids Recycling Manager
919-537-4352 or jkiviniemi@owasa.org

NC Sierra Club – Headwaters Group

Panel on Environmental Justice (Program Meeting)

Thursday, November 12, 2015 -- 6:30 pm to 8:30 pm

Durham JCC - Levin Jewish Community Center

1937 West Cornwallis Road, Durham, NC

Environmental justice is the fair treatment and meaningful involvement of all people with respect to environmental issues. In plain English, it asks questions about who ends up living next to the things no-one likes: stinky hog farms, polluted streams and toxic industries. These "facilities" are often concentrated in less affluent communities of color. So it's not just that you live in Durham factoring into your health; but which neighborhood of Durham.

Realizing that if we are "enlisting the planet" in the environmental challenges we face, the Sierra Club is working to discuss and explore the linkages between environmental quality and social justice, and to promote dialogue, increased understanding and appropriate action.

This panel will look at what is going on in NC. The panelists are:

- **Michelle Nowlin** is an environmental attorney who was a leader around hog industry issues in NC and continues to work on environmental justice issues in rural parts of NC.
- **Jamie Cole** is a policy advocate to the NC Conservation Network.
- **John Schelp** is a long-time Durham activist who has led fights against asphalt plants in East Durham, a cement plant on the Eno, and digital billboards along Durham roadways.
- **Jacquie Ayala** is an organizer for the NC Sierra Club, working with local groups around energy issues.

To register, go to: <http://www.meetup.com/NC-Sierra-Club-Headwaters-Group/events/225556113/>

October 30, 2015

The News and Observer



BY COLIN CAMPBELL
ccampbell@newsobserver.com

AGRICULTURE

Industrial hemp set to become new legal crop

Farmers in North Carolina are likely to wake up Saturday morning with a new option for growing crops: Industrial hemp production is expected to become legal at the stroke of midnight.

Lawmakers passed the legalization legislation in September, in the final days of the session. The proposal hadn't previously been made public, and some conservative groups worry that questions about the plant's connections to its cousin, marijuana, didn't get answered.

The bill has been on Gov. Pat McCrory's desk for weeks, and unless he vetoes it, it will become law without his signature at midnight Friday.

Lee Edwards of Sugar Hill Farms in Kinston is among the farmers eager to add industrial hemp to their fields.

"Hemp really gives us a crop during the summertime that is a viable cash crop to us," he said. "We're in a perfect geographical location for the production of hemp with our climate."

Hemp hasn't been legal in North Carolina in part because of a stigma: The plant is a relative of marijuana and looks similar. But hemp lacks much of the active ingredient that makes marijuana a recreational drug: Tetrahydrocannabinol, or THC.

To get high from industrial hemp, Edwards said, "you'd have to smoke a joint the size of a telephone pole." Consuming enough hemp to feel any THC-related buzz also results in the equivalent of taking two to three doses of a high-fiber laxative, research has shown.

The N.C. Sheriff's Association supports the legislation because industrial hemp farmers would need a permit, administered by a new state Industrial
+ Hemp Commission under

Legalization bill will become law unless McCrory vetoes

Spring Hope has one of the only hemp processing plants in the country

Supporters battle stigma: 'We're for rope, not dope'

federal rules.

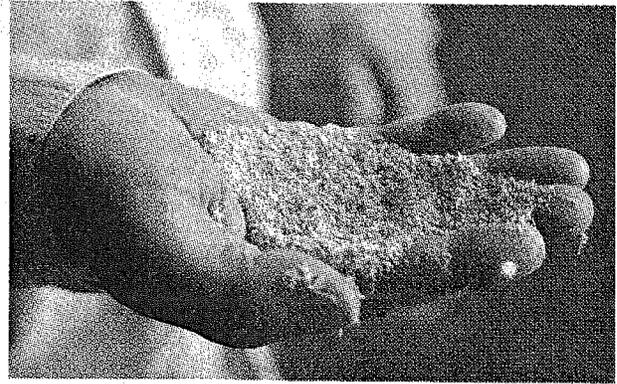
"Getting a permit would make it easy for law enforcement to know where the legitimate growers were," association director Eddie Caldwell said. "If you don't have a permit, then the assumption is going to be it's the smoking kind."

North Carolina is also home to one of the country's only decortication plants, a facility that processes hemp to sell to textile manufacturers and other users. The multimillion-dollar plant is set to start production within months at a cavernous warehouse outside the tiny Nash County town of Spring Hope.

Hemp, Inc., plans to eventually employ 200 people at the facility. It will initially process kenaf, a similar plant that's already legal, and shift to industrial hemp when farmers begin their first harvest.

"There's a lot more products that I can make" using hemp than kenaf, said David Schmitt, the company's chief operating officer. "Nobody wants to make a flag out of kenaf."

In addition to its uses in fabrics, paper and car parts, the oil extract from



David Schmitt, of the Industrial Hemp Manufacturing Company in Spring Hope, sifts the product of processed kenaf at a facility set to also process industrial hemp.

How hemp is used

More than 25,000 products can be made from industrial hemp, according to the North American Industrial Hemp Council. Among them:

- Recyclable paper
- Seeds and oil used in snack foods
- Oil and natural gas drilling fluids
- Car doors and other interior auto parts that would otherwise be made with plastics
- Oil spill absorbents
- Hemp extract oils used to treat epilepsy. A bill signed by Gov. Pat McCrory in July allows neurologists to provide the oil to patients.

industrial hemp can be used to treat epilepsy. A new North Carolina law, signed by McCrory in July, allows neurologists to dispense hemp, or CBD, oil to patients.

Schmitt says his company plans to eventually produce the oil in Spring Hope and will donate some of the product to patients who couldn't otherwise afford it.

'SIMPLY RUSHING'

But not everyone is cheering. Rev. Mark Creech of the conservative Christian Action League worries hemp could ultimately lead to marijuana legalization in the state.

"What does this mean when farmers are able to grow industrial hemp and they get used to the profits, and then they start to think of the profits they

might gain from the legalization of marijuana?" Creech asked.

Legislators showed no appetite for marijuana this year. A House committee in March unanimously rejected a proposal to legalize medical marijuana.

Creech said he didn't get a chance to voice his concerns about hemp because the bill surfaced at the end of the legislative session and passed the House and Senate days later.

"I think that we should have been asking a lot of questions rather than simply rushing that bill through," he said.

Legislators presented the hemp bill as a job-creating measure, but Creech has another theory for the near-unanimous vote. "I think that's the result of Republicans who were too tired to ask the necessary questions or too tired to fight," he said.

Even the N.C. Industrial Hemp Association, which was created less than a year ago to lobby for legalization, was surprised only two senators and seven House members voted no.

"It blew our minds," said the group's director, Thomas Shumaker. "We were expecting it to be close."

Shumaker, whose father is longtime Republican strategist Paul Shumaker, said the group deliberately planned the bill to appear late in the session because "we didn't want it to get parked" in committee.

Instead, the House Rules Committee released the hemp legislation a few days before the legislative

session ended, sticking it in a Senate bill that originally dealt with special license plates.

Thomas Shumaker noted that because the March hearing on medical marijuana resulted in a legislator getting assaulted, "we worried that anything that had to do with the cannabis plant would get thrown out because of that reaction."

Instead, the Hemp Association's team of four lobbyists quietly worked the halls of the Legislative Building for months.

"They sat down and talked to almost every single legislator and said to them, 'hemp isn't marijuana - we're for rope, not dope,'" Shumaker said.

NEW AGENCY

If the hemp bill becomes law, as expected, the association will need to raise \$200,000 to fund the creation of the N.C. Industrial Hemp Commission, to regulate the crop.

Requiring private donations to fund a new state agency is unusual, but Shumaker said "that helped get it through the legislature because we weren't asking government to put tax dollars behind it."

While dozens of farmers have voiced interest in hemp, Shumaker expects production will start small: Fewer than 50 acres are likely in the first year, and about 1,200 acres are expected in the second.

"It's hard to convince someone that growing a federally controlled substance in their fields is a good idea," he said.

Edwards, the Kinston farmer, says he thinks hemp will prove a profitable addition to his rotation of organic corn, soybeans and wheat.

"There's a strong market," he said. "We're pulling most of what Canada is growing, and they can't keep up with the demand."