AGENDA

Commission for the Environment
September 8, 2014
7:30 p.m.

Orange County West Campus Office Building (Room 004)
131 West Margaret Lane, Hillsborough

Time	Item	Title
7:30	**I.**	**Call to Order**
7:32	**II.**	**Additions or Changes to Agenda**
7:35	**III.**	**Approval of Minutes – August 11** (Attachment 1)
7:40	**IV.**	**Introduction of New Member** The CFE will welcome Judy Miller to the board. A current roster is provided (Attachment 2)
7:50	**V.**	**Solarize Hillsborough** Rob Pinder (Solarize Hillsborough) will provide an overview of an opportunity to bring solar power to homes and businesses in the Hillsborough area at a reduced cost. Similar initiatives have occurred recently in Carrboro, Durham, and Chatham County. (Attachments 3-4)
8:15	**VI.**	**State of the Environment 2014** Staff will review the status of the State of the Environment report. Final comments from CFE may be provided at the meeting or emailed to staff by September 15. (Attachment 5)
8:30	**VII.**	**Environmental Summit planning** The CFE will discuss final preparations for the Environmental Summit to be held on October 11 at the Maple View Farm Agricultural Education Center (Attachments 6-8)
9:20	**VIII.**	**Updates and Information Items** Staff and/or CFE members will provide updates on the following items: ➢ The Nature of Orange photography contest (Attachment 9) ➢ County announces new transit service to Durham (Attachment 10) ➢ Changes to State rules to protect riparian buffers (Attachment 11) ➢ Changes to State rules to protect wetlands (Attachment 12) ➢ The likelihood of shale gas in NC (Attachment 13) ➢ Attorney General warns company to stop fracking orders (Attachment 14) ➢ Jordan Lake water circulators begin operation (Attachment 15) ➢ Board of Adjustment approves PSNC natural gas pipeline (Attachment 16)
9:30	**IX.**	**Adjournment**

Next meeting: October 13 (Solid Waste Management - Chapel Hill)

Adopted 9/12/11

CFE Meeting Ground Rules

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

Attachment 1

Orange County
Commission for the Environment

DRAFT Meeting Summary

August 11, 2014
Orange County Solid Waste Management Office Building, Chapel Hill

---

PRESENT: Jan Sassaman (Chair), May Becker, Peter Cada, Loren Hintz, Donna Lee Jones, Cliff Leath, David Neal, Jeanette O'Connor, Rebecca Ray, David Welch

ABSENT: Judy Miller, William Newby, Steve Niezgoda, Gary Saunders, Lydia Wegman

STAFF: Tom Davis

I. **Call to Order** – Sassaman called the meeting to order at 7:33 pm.

II. **Additions or Changes to Agenda** – There were no changes or additions.

III. **Approval of Minutes** – Sassaman asked for comments on the June 9 meeting minutes. Neal motioned to approve as written; Hintz seconded. Approved unanimously.

IV. **Introduction of New Members** – Sassaman welcomed Leath to the CFE. Leath introduced himself to the group. Judy Miller was not in attendance.

V. **Environmental Summit Planning** – Davis showed members a revised draft of the flier and program for the Environmental Summit, which is scheduled for October 11 at the Maple View Agricultural Education Center. CFE members then reviewed a list of potential speakers, including Norm Christensen (Duke/climate change), Don Francisco (UNC Chapel Hill/water issues), Avner Vengosh (Duke/fracking), Mike Kunz (NC Botanical Garden/invasive plant species), and Judd Edeburn (Duke/forest management).

CFE members decided to limit the program to three speakers: Christensen (keynote) possibly speaking on climate change, and two others—one to present on invasive species and Don Francisco to speak about a water-related issue, with the topics for both speakers of local relevance that citizens would be able do something about. CFE members discussed having one Question and Answer session following the keynote address, and a second following the other two speakers. The program will begin with refreshments and mingling from 9:30 – 10:00, and then the keynote address beginning around 10:00 am.

Leath asked about ways to publicize the event and suggested Orange County Voice and Preserve Rural Orange as possible outlets. He also suggested contacting The Independent for additional publicity.

VI. **State of the Environment 2014** – Sassaman and Davis reviewed the status of the report. Leath asked about target audience and how rural, elderly residents might access the document. He suggested using churches to help publicize the report, as well as the Orange County Department of Aging and the Senior Times publication.

CFE members expressed interest in developing a "What You Can Do" summary similar to what was included in the 2009 edition of the report. Hard copies of this summary should be available at the Environmental Summit as well as afterwards.

CFE members discussed the need to check the numbers used on the demographics page of the Introduction. Staff will review and update the language as needed.

It was decided that CFE members would provide final comments to staff by the morning of August 18th. Staff will incorporate those changes by noon on Friday, August 22nd. An updated draft SOE will be sent out by Friday at noon to CFE members.

VII. **Committee Meetings** – The committees met from 8:15 until 9:20 to continue working on the State of the Environment report.

VIII. **Adjournment** – Sassaman adjourned the meeting at 9:30 pm.

Summary by Tom Davis and Rich Shaw, DEAPR Staff

Orange County
COMMISSION FOR THE ENVIRONMENT
(updated August 2014)

NAME OF MEMBER HOME ADDRESS/TELEPHONE	POS #	DATE OF APPOINTMENT COMMITTEE (Representation)	TERM ENDS	BUSINESS TELEPHONE E-MAIL	TOWNSHIP OF RESIDENCE
May Becker 511 Cotton Street Chapel Hill, NC 27516	#1	9/21/2010 Air & Energy Resources (At Large)	12/31/14	919-969-7439 tomatocutter@yahoo.com	Chapel Hill
Peter Cada 420 Coach House Lane Hillsborough, NC 27278	#10	9/21/2010 Water Resources (At Large)	12/31/14	919-485-2071 peter.cada@tetratech.com	Hillsborough
Loren Hintz (Vice Chair) 804 Kings Mill Rd. Chapel Hill, NC 27517	#4	1/27/2009 Land Resources (Biological Resources)	12/31/16	919-933-8987 ldhintz@bellsouth.net	Chapel Hill
Donna Lee Jones 3035 Carriage Trail Hillsborough, NC 27278	#5	5/21/2013 Water Resources (Water Resources)	12/31/15	919-541-5251 donnaleejones13@hotmail.com	Eno
Clifford Leath 6600 Maynard Farm Road Chapel Hill, NC 27516	#6	5/20/2014 Water Resources (At Large)	12/31/16	919-968-0708 cliffleath@earthlink.net	Bingham
Judy Miller 403 Jericho Road Hillsborough, NC 27278	#2	5/20/2014 TBD (Air Quality)	12/31/14	919-732-9969 Jmiller221@hotmail.com	Cedar Grove
David Neal 323 West Queen Street Hillsborough, NC 27278	#13	9/21/2010 Air & Energy Resources (At Large)	12/31/15	919-732-2156 David.L.Neal@gmail.com	Hillsborough
William Newby 2821 Becketts Ridge Road Hillsborough, NC 27278	#8	5/20/2014 TBD (At Large)	12/31/16	919-541-5296 newby.william@epa.gov	Hillsborough
Steven Niezgoda 524 Patriot's Pointe Dr. Hillsborough, NC 27278	#14	5/21/2013 Land Resources (At Large)	12/31/15	716-998-1490 steve.niezgoda@gmail.com	Hillsborough
Jeanette O'Connor 117 S Peak Dr. Carrboro, NC 27510	#9	5/21/2013 Land Resources (At Large)	12/31/14	703-678-6893 jeanette.oconnor@gmail.com	Chapel Hill
Rebecca Ray 5617 Jomali Drive Durham, NC 27705	#15	11/19/2013 Water Resources (Land Resources)	12/31/15	919-383-0685 rebecca.ray@nc.rr.com	Eno
Jan Sassaman (Chair) 201 Bolinwood Drive Chapel Hill, NC 27514	#7	12/13/2011 Air & Energy Resources (At Large)	12/31/16	919-933-1609 jan.sassaman@gmail.com	Chapel Hill
Gary Saunders 103 Woodshire Lane Chapel Hill, NC 27514	#12	1/27/2009 Air & Energy Resources (Engineer)	12/31/15	919-707-8413 gary.saunders@ncdenr.gov	Chapel Hill
Lydia Wegman 5704 Cascade Drive Chapel Hill, NC 27514	#3	11/19/2013 Land Resources (At Large)	12/31/14	919-886-8775 lnwegman@gmail.com	Chapel Hill
David Welch 20 East Drive Chapel Hill, NC 27516	#11	9/21/2010 Land Resources (At Large)	12/31/14	919-406-2101 davwelch@hotmail.com	Chapel Hill
David Stancil 245-2522 Rich Shaw 245-2514 Tom Davis 245-2513 Lynn Hecht 245-2510		Director, Dept. of Environment, Agriculture, Parks & Rec. Land Conservation Manager Water Resources Coordinator Administrative Assistant		dstancil@orangecountync.gov rshaw@orangecountync.gov tdavis@orangecountync.gov lhecht@orangecountync.gov	

Together we can make solar simple and affordable.

FIND OUT HOW:

SOLARIZE
HILLSBOROUGH

KICKOFF: SEPT 10 @ 7PM

DURHAM TECH ORANGE COUNTY CAMPUS

SolarizeHillsborough.org

Together we can make solar simple and affordable.

Find out how:

SolarizeHillsborough.org

Homeowners and businesses in Orange County are eligible.

1 Free Solar Assesssment

After you sign up, a representative from Southern Energy Management or Yes! Solar Solutions will contact you for your free solar assessment.

Our vetted installer partners were selected using a competative proposal process. They provide a complete solution, from the initial assessment to the final quality check and lasting warranty.

2 Grow Your Savings

State and Federal tax credits are worth up to 65% of your installation costs. Here's how it works for a typical home (4 kW):

Average retail price:	**$ 19,000**
Solarize price:	$ 16,080
35% NC tax credit:	$ 5,628
Est. Federal tax credit:	$ 3,586
Net cost:	**$ 6,870**

This example system would decrease your electricity costs by $**560** per year. Compared to continuing to buy power from your utility, you would **be better off after about 6 years, much sooner than the 25 year lifetime of your panels**. And as more people go solar, the discounts grow for everyone.

3 Go Solar Today!

You don't have to wait. Our financing partners have developed loans custom fit for solar.

800-715-8472

919-956-4644

You also may qualify for a home equity line of credit. Consider contacting your home mortgage banker.

Spread the word!

The enthusiasm in Hillsborough for local, clean, and independent solar power is strong. But to ensure a sustainable future and get the greatest discounts, we need everyone to be involved. To find out what you can do to help, email info@solarizenc.org

Solarize Hillsborough is a grassroots initiative organized by NextClimate, a North Carolina-based non-profit. To promote solar energy, the Town of Hillsborough is providing non-monetary support to the initiative by offering the use of town meeting space for public solar education events and the use of staff time to spread the word to homeowners and businesses. The Hillsborough Board of Commissioners adopted a resolution of support at its June 2014 meeting.

TOWN OF HILLSBOROUGH

Board of Commissioners

Agenda Abstract Form

Meeting Date: June 9, 2014
Department: Administration
Public Hearing: ☐ Yes ☒ No
Date of Public Hearing: _____

For Clerk's Use Only
AGENDA ITEM#

	11.C	
Consent Agenda	*Regular Agenda*	*Closed Session*

PRESENTER/INFORMATION CONTACT: Rob Pinder, Executive Director of NextClimate

ITEM TO BE CONSIDERED

Subject:

Solarize Hillsborough Presentation and Request for Non-Monetary Support

Attachment(s):

None

Brief Summary:

Solarize is a grassroots initiative to bring simple and affordable solar power to local businesses and homes. Solarize Carrboro recently completed with 310 participants. Given the surge of interest from our neighbors in Hillsborough, we'd like to start Solarize Hillsborough, which we hope the Town of Hillsborough will support.

Solarize Hillsborough would work by bringing neighbors together to earn group discounts, which reduces solar marketing costs. Rather than traditional marketing, volunteers engage with the community, and when enough people join, these savings are passed to the participants.

Now is a great time to go solar. Solar panel prices have dropped considerably while electricity rates continue to rise. Recognizing that state and federal tax incentives start expiring in 2015, Solarize Hillsborough would conduct outreach to help people take advantage of these tax incentives.

Going solar has never been easier. Solarize Hillsborough would allow interested homeowners to enjoy a free solar assessment from vetted solar installers, selected by a competitive bid process to be evaluated by community leaders and solar experts. Custom design, permitting, construction, connection with the utility, and warranty are all included in the program. NextClimate has identified three options for homeowners, if necessary, to borrow money for the installation of solar panels. Options are available for homeowners with or without equity in their homes and borrowers with low credit scores.

Solarize programs have lowered costs and increased home solar in many towns across the US, most recently in Asheville, Durham, Carrboro and Chatham County.

While fossil fuel energy causes air pollution, poisons our streams, and exacerbates climate change, solar power is clean, sustainable, and safe. Rooftop solar keeps our energy dollars recirculating in the community and contributes to construction and installation jobs.

Rob Pinder is the Executive Director of NextClimate, a North Carolina-based 501(c)(3) nonprofit with a mission to help people act on climate change. More information about our Carrboro program is available at SolarizeCarrboro.org

Action Requested:
Support from the Town of Hillsborough (i) to use Town meeting space for public solar education events and (ii) for a small amount of Staff time to help get the word out to homeowners and businesses.

ISSUE OVERVIEW

Background Information & Issue Summary:
None

Financial Impacts:
None

Staff Recommendations/Comments:
Staff is willing to coordinate use of meeting space and provide support via public information efforts.

Attachment 6

Orange County
Department of Environment, Agriculture, Parks and recreation

Memorandum

To: Commission for the Environment

From: Rich Shaw

Date: September 3, 2014

Subject: Environmental Summit 2014

The 2014 Environmental Summit will be held on Saturday, October 11 (9:30am – 12 noon) at the Maple View Agricultural Environmental Center on Dairyland Road.

Staff will lead a discussion of the following logistics during your meeting. We welcome your input!!

Program – a draft program for the summit is provided for your final review and approval. Please note that I had to shorten the critical issues from how they appeared in front of the actual report.

Refreshments – coffee (cream/sugar), juice (apple/orange), bagels and cream cheese, fruit (bananas, grapes, apples, oranges), and water (large container, pitchers, ice). Plates, cups, napkins [Lynn/DEAPR]

Displays – DEAPR displays on groundwater, impaired streams, hydrilla in the Eno River, land conservation. What organizations should the CFE invite to participate?

> Potential organizations include Solarize Hillsborough, Sierra Club, New Hope Audubon, Triangle Land Conservancy, Friends of Bolin Creek, Eno River Association, NC Botanical Garden, Sierra Club, others?

Publicity – Save the Date flyer (& pdf), news release, newspaper calendars, County web site,

Invitations – BOCC, town boards, OWASA, land trusts, other NGOs, other advisory boards, etc.

Other Needs:

Sign-In Table with name tags, pens, sign-up sheet w/email, SOE display copies
Handouts: summit agenda, cards with SOE2014 web address [SOE on CD?]
Signs, tent cards
Bin signs to identify what goes where for disposal (food, napkins, cups, plates)
Educational / awareness poster re compostables [Rebecca]
Small signs about local sourcing (Rebecca)
Floor easels / table-top displays [DEAPR]
Giant 4' earth beach ball [Rebecca]
iPod and speaker for music (9:30-10:00am) [Rebecca]
Laptop & Projector
Gifts for speakers (framed photos)
Talking points for Jacobs, Sassaman, Hintz, Gordon

Environment, Agriculture, Parks and Recreation
PO Box 8181 / 306-A Revere Road
Hillsborough, NC 27278
(919) 245-2510

Commission for the Environment

The Commission for the Environment advises the Orange County Board of County Commissioners on matters affecting the natural environment. This responsibility generally includes the following:

- advising on environmental policy,
- making recommendations on environmental initiatives,
- promoting education of the public and local officials on environmental issues, and
- conducting special environmental studies and projects.

The Commission for the Environment is a citizen advisory board comprised of 15 members, appointed by the Board of County Commissioners.
To apply go to: www.co.orange.nc.us/boards/apply.asp

Members:

May Becker, Peter Cada, Loren Hintz, Donna Lee Jones, Cliff Leath, Judy Miller, David Neal, William Newby, Steven Niezgoda, Jeanette O'Connor, Rebecca Ray, Jan Sassaman, Gary Saunders, Lydia Wegman, David Welch

Membership:

- Members of the Commission for the Environment must be Orange County residents.
- Members are appointed by the Board of County Commissioners and serve at the pleasure of the board.
- The CFE has 15 appointed members with specific expertise in:
  - Air Quality
  - Biological Sciences
  - Water Resources
  - Engineering
  - Land Conservation
  - Environmental Education

Meetings:

When: 2nd Monday of each month at 7:30 p.m. [No July meeting]
Where: Two rotating locations:

- *Orange County Solid Waste Management Department Offices,* 1207 Eubanks Road, Chapel Hill
- *Environment and Agricultural Center,* 306 Revere Road, Hillsborough

Contact the DEAPR office for more information: 919-245-2510

Orange County Environmental Summit

Maple View Agricultural Education Center
October 11, 2014—9:30 am to Noon

State of the Environment 2014

The 2014 State of the Environment report provides information and recommendations intended to facilitate policy decisions that affect Orange County's natural resources.

The purpose is to:

- Describe the current status of Orange County's natural environment
- Provide measures to monitor and evaluate progress toward a cleaner, healthier environment
- Highlight the major environmental challenges facing the County
- Recommend actions to confront these challenges

The report uses 20 environmental indicators to measure progress toward environmental goals in the topical areas of air and energy resources, land resources, and water resources. Recommendations for each environmental indicator were developed along with critical issues faced by the County.

Critical Issues:

1. **Air and Energy Resources**—We need to improve air quality, chiefly by reducing our reliance on cars. Reducing energy use is the first step in fighting climate change. The County has improved the energy efficiency of its buildings; we can build on this by investing more in energy-efficiency programs for residential and commercial buildings.

2. **Land Resources**—Invasive, non-native, plant and animal species threaten the biological diversity of Orange County's aquatic and terrestrial ecosystems. Non-native species replace natives, threatening critical ecosystem services such as plant pollination and posing risks to livestock, land, and public health.

3. **Water Resources**—Important data on our surface water and groundwater will be unknown due to reductions in State-led data collection efforts. Also, if drilling for natural gas occurs in the Deep River basin, nearby Orange County residents could experience negative impacts to air quality, water quality and supply, and infrastructure.

See the full report at http://www.co.orange.nc.us/ercd/2014_SOE_index.asp

Orange County Environmental Summit

Agenda

9:30am Gathering and Refreshments

10:00 Welcome
Jan Sassaman, Chair, Commission for the Environment

10:05 Introductions & Recognition of Special Guests
Barry Jacobs, Chair, Orange County Board of Commissioners

10:10 Presentation of the *State of the Environment 2014*
Rich Shaw, Orange County DEAPR*

10:25 Keynote: _____
_____, Dr. Norm Christensen, Nicholas School of the Environment, Duke University
Introduction by **Jan Sassaman**
Questions and Answers

11:00 Additional Speakers:
Johnny Randall, NC Botanical Garden
Donald Francisco, UNC-Chapel Hill (retired)
Moderator— **Loren Hintz**, CFE** Vice-Chair
Questions and Answers

11:50 Closing Remarks
Alice Gordon, Orange County Board of Commissioners

12:00 Adjourn

12:15pm Tour of Agricultural Education Center (optional / fee required)

* DEAPR = Dept. of Environment, Agriculture, Parks and Recreation
** CFE = Commission for the Environment

Orange County Commission for the Environment
presents the

2014 Environmental Summit

Saturday, October 11, 2014 (9:30 am—12 noon)
Maple View Agricultural Education Center
(see reverse for directions)

Featuring:

- Keynote Speaker — **Norm Christensen PhD,**
The Effects of Climate Change on Orange County, NC
- Presentation of Orange County's
2014 State of the Environment report
- Additional presentations of local interest:
The Future of Jordan Lake, Donald Francisco PhD
Invasive Plant Species, Johnny Randall PhD
- Tour of the Maple View Agricultural Education Center
(Optional / Fee required)
- Refreshments

For more information contact Orange County's Department of Environment, Agriculture, Parks and Recreation (DEAPR) at 919-245-2510 or http://www.co.orange.nc.us/deapr/index.asp

Directions to Maple View Agricultural Education Center:

3501 Dairyland Rd
Hillsborough, NC 27278

From south Chapel Hill, Carrboro or Pittsboro area:

Take NC 54 Bypass West. Just past Carrboro Plaza, turn right at the stop light onto Old Fayetteville Road. At the first stop light, continue straight onto Old NC 86.
In approximately 1 mile turn left at stop light onto Dairyland Road. The entrance to the Maple View Agricultural Education Center is a little over 4 miles on the right, approximately one half mile past the Maple View Farm Country Store.

From north Chapel Hill area:

Follow Martin Luther King Jr. Blvd (Historic Airport Road / NC 86) to the intersection with Homestead Road (near Orange United Methodist Church). Turn west on Homestead Road and follow to the intersection of Homestead Road and Old NC 86 at Calvander. Go straight through the intersection. The road becomes Dairyland Road. The entrance to Maple View Agricultural Education Center is a little over 4 miles on the right, approximately one half mile past the Maple View Farm Country Store.

From Hillsborough area:

Take Old NC 86 south toward Carrboro and Chapel Hill. Go under I-85 and I-40. At the next crossroads, turn right onto Arthur Minnis Road. Just before the road turns to gravel, turn left onto Rocky Ridge Road. Follow for less than 1 mile. At the first stop sign, turn right onto Dairyland Rd. The entrance to the Maple View Agricultural Education Center is approximately one half mile on the right.

Please carpool to conserve our natural resources
and parking spaces.

Orange County
Department of Environment, Agriculture, Parks and recreation

Memorandum

To: Commission for the Environment

From: Rich Shaw and Tom Davis

Date: August 6, 2014

Subject: The Nature of Orange photography contest 2014

The 3rd annual photography contest, *The Nature of Orange*, is complete. Once again this year, photographers helped document the beauty and diversity of our natural resources, and showed residents enjoying our parks and natural environment. Photo entries were submitted in May and all photos were taken in Orange County.

There were 157 entries (42 Youth and 115 Adult)—our most ever! The photos were judged by three volunteers who evaluated all photos based on the following areas: relevancy; composition/ arrangement; focus/sharpness; lighting and creativity. Our judges this year were Laura Branan (photographer), Chris Graebner (artist), and Joe Tello (photographer).

Copies of the winning photos are attached.

The photos are currently displayed at the Orange County and Chapel Hill Visitor's Centers and at the Orange County Library in Hillsborough. They are also on video feeds in many of the Orange County office buildings.

The contest winners and judges will be honored by the Orange County Board of Commissioners at the September 4 meeting in Hillsborough.

Environment, Agriculture, Parks and Recreation
PO Box 8181 / 306-A Revere Road
Hillsborough, NC 27278
(919) 245-2510

THE NATURE OF ORANGE Photography Contest Winners (Youth)

1st Place: "Balance" by Kirby Lau

2nd Place: "Feather Friend" by Joseph Mohler

3rd Place: "Blow A Kiss" by Caroline Mohler

THANKS TO OUR JUDGES:

CHRIS GRAEBNER

JOE TELLO

LAURA BRANAN

Honorable Mention: "Pollen Porter" Jack Mohler

Honorable Mention: "Perched" Joseph Mohler

THE NATURE OF ORANGE Photography Contest Winners (Adults)

1st Place: "Cedar Falls Park"
by Barbara Driscoll

2nd Place: "Copperhead" by Catherine Stevens

3rd Place: "Fueling Up"
By Robert Leadbetter

Honorable Mention: "Barred Owl"
By Mary Parker Sonis

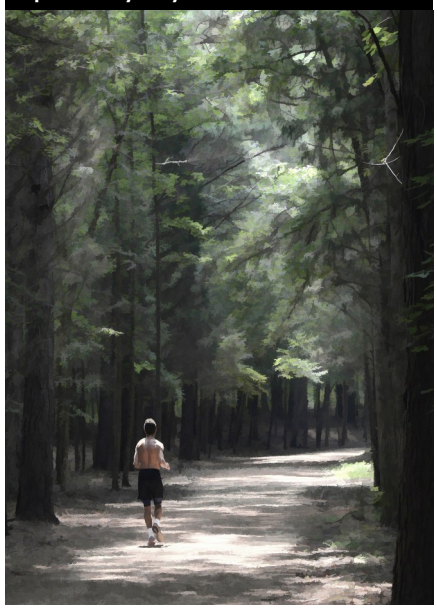
THANKS TO OUR JUDGES:

CHRIS GRAEBNER

JOE TELLO

LAURA BRANAN

Honorable Mention: "Jogging the Speedway" by Alan Clark



Rich Shaw

From: Carla Banks
Sent: Tuesday, August 26, 2014 4:20 PM
To: Carla Banks
Subject: Press Release- ORANGE COUNTY INTRODUCES NEW TRANSIT SERVICE TO DURHAM

Media Contact
Peter Murphy, Transportation Administrator
Orange Public Transportation
Phone: 919.245.2002
pmurphy@orangecountync.gov

FOR IMMEDIATE RELEASE

ORANGE COUNTY INTRODUCES NEW TRANSIT SERVICE TO DURHAM

ORANGE COUNTY, NC (August 26, 2014)—The Orange County Planning & Inspections Department is announcing a new weekday express service available to residents and commuters.

The Orange-Durham Express (ODX) is free to customers through Friday, September 19, and then the one-way fare will cost $3.00, beginning on Monday, September 22.

The ODX will serve Hillsborough, Duke University Hospital and Durham VA Medical Center, and the downtown Durham Station. There will be three pick-ups and drop offs, during the morning and afternoon commute.

In Hillsborough, the ODX park-and-ride location will be at the North Hills Shopping Center, located at Highway 70 and North Churton Street.

Triangle Transit begins seven-day service on these routes:

Route 100 - serving RDU International Airport
Route 400 - serving Durham, New Hope Commons and Chapel Hill
Route 700 - serving Durham and the Regional Transit Center on Slater Road
Route 800 - serving Chapel Hill, Southpoint and the Regional Transit Center

Sunday service will run from 7:00 a.m. – 7:00 p.m. Saturday service is being extended to 11:00 p.m. Other routes are being adjusted to improve on-time performance.

The expanded service in Durham and Orange Counties is paid for in part by the voter approved one-half cent sales tax for transit.

Schedules for the ODX and expanded routes are available online at www.triangletransit.org Customers can also call the GoTriangle Regional Transit Information Center at 919.485.RIDE (7433).

For more information, please contact Peter Murphy at 919.245.2002 or Brad Schulz at Triangle Transit at 919.485.7434 or bschulz@triangletransit.org

###

Regards,

Carla Banks

Director of Public Affairs
Orange County Government
200 S. Cameron Street
Hillsborough, NC 27278

Office: 919.245.2302
Mobile: 919.475.6650
www.orangecountync.gov

ORANGE COUNTY
NORTH CAROLINA

July 29 2014
News and Observer

Rules rewrite worries groups

7/29/14

Few had input on new river regulations

By Craig Jarvis
cjarvis@newsobserver.com

RALEIGH A plan to update regulations that protect streams and rivers was adopted last year after a nearly five-year process that incorporated input from a wide range of interests.

In just five months this winter, the McCrory administration rewrote those rules with the help of private companies that had a financial stake in the outcome – including the company where state Department of Environment and Natural Resources Secretary John Skvarla once worked.

In addition, the complaints about the rules that led to the rewrite were made by both the industry and DENR employees.

State regulators say the rewrite was only technical, but advocates are still trying to decipher what it means for the forested buffers that protect rivers and streams.

Some environmental organizations say the changes could harm water quality in North Carolina, although they cannot say that for certain. DENR, meanwhile, says all the rewrite did was clarify an unwieldy set of rules, while giving the mitigation banking industry more options, which also helps protect the environment.

Environmental groups that

SEE **RULES,** PAGE 6A

RULES

CONTINUED FROM PAGE 1A

had been following the development of the new rules for years were surprised to find out the rules had been rewritten at all. They didn't find out about it until this month, when a low-profile bill surfaced in the General Assembly that would authorize replacing the rules with the version written by the seven-member group.

"I didn't even know they had met or issued a report," said Heather Jacobs Deck, riverkeeper with the Pamlico-Tar River Foundation, who was involved with the original rules. "That was a shock. We had no idea. It was a little frustrating to know at the end of the process there were tweaks and other changes. We weren't part of it."

Industry involved

The stakeholders who were involved were representatives of three mitigation banking firms – companies that help developers offset environmental damage by restoring or enhancing land elsewhere through the use of credits: Restoration Systems, Wildlands Engineering and Environmental Banc & Exchange.

Skvarla was CEO at Restoration Systems until McCrory named him to lead DENR last year. He has said his interest in the company is in a blind trust.

Also in the group was PCS Phosphate, a mining company, two representatives from DENR and an official with the state Department of Transportation.

Michael Ellison of DENR, who was part the group, says the original process included a wide variety of stakeholders but not anyone from the companies actually doing the mitigation. He said this smaller group simply took the results of the multiyear effort and came up with more focused, practical improvements to apply to those rules.

"What we came up with will result in net environmental benefits," Ellison said.

Part of the suspicion over how the rules rewrite was handled stems from environmentalists' fear that the McCrory administration is hostile to safeguards against pollution in favor of making regulations more business-friendly, amid a time of cuts to budgets and regulations.

Since Republicans took control of the legislature, rules meant to clean up Jordan Lake have been put on hold while they try an experimental product instead. And DENR has found itself on the defensive over its regulation of Duke Energy's coal ash storage, in the wake of a massive spill in February followed by an ongoing federal investigation.

But the zeal for cutting out cumbersome regulations was underway in Democratic Gov. Bev Perdue's administration and in the legislature before the Republican takeover of 2011. In 2010, Perdue issued an executive order directing state agencies to stop making new rules and to identify unnecessary and outdated ones.

By then, legislators had already directed the Environmental Management Commission to take another look at riparian buffer mitigation, which had developed in North Carolina over the 1990s in a haphazard way. Rules had been written around the needs of individual river basins and watersheds, and didn't add up to a cohesive whole, Ellison said.

Letters from DENR

New rules also needed to incorporate the latest science and practices, including new alternatives for how to go about mitigation projects. Years of study and input led to the commission adopting new regulations in May 2013, and the state Rules Review Commission signed off on them that July.

Under state law, if 10 or more people object to a Rules Review Commission decision, the legislature has to make the final call or let the rules go into effect.

A homebuilders association in Wake County, a real estate and building coalition in the Triad, a mitigation banking company, an engineer who does wetlands projects and at least three DENR officials writing as private citizens – including Ellison – were among those who wrote letters objecting to the rules.

Ellison said he wasn't involved in writing the first set of rules and never saw them until early last year. In his letter, he wrote that the proposed rules "intentionally ignore sound science in order to achieve a political objective."

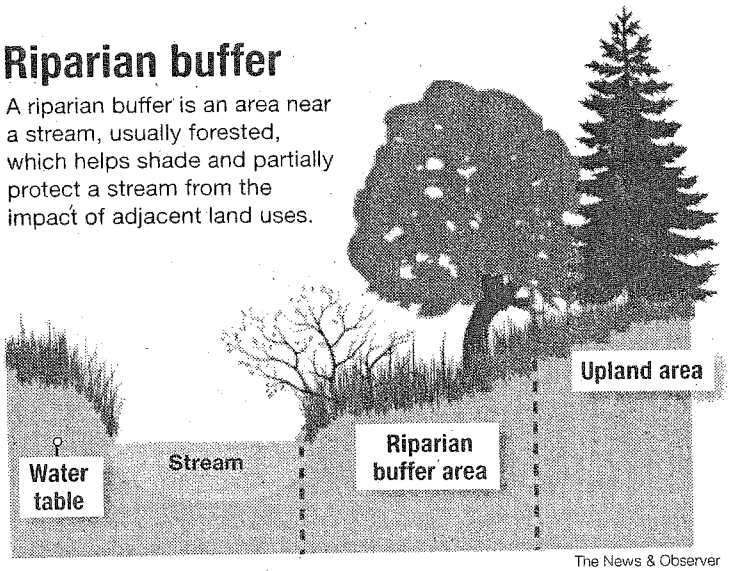
Another letter claimed there is a "not so well hidden agenda of a faction within NCDENR to prevent growth." That is just the kind of supposed agenda that Skvarla said he took office to combat.

But DENR spokesman Drew Elliot said Skvarla was not involved in setting up the smaller stakeholder group that began meeting in October. Skvarla's company was selected to participate by an industry association and not DENR, Ellison said.

"He's supportive of having rules that are common sense and are supported by science and experience, and are not unnecessarily burdensome to economic develop-

Riparian buffer

A riparian buffer is an area near a stream, usually forested, which helps shade and partially protect a stream from the impact of adjacent land uses.



The News & Observer

ment," Elliot said of Skvarla. "Everybody who works for Secretary Skvarla knows that."

Disagreement over impact

Ellison said environmental interests in the smaller group were represented by DENR, rather than advocacy organizations, in order to work out technical issues.

"I don't think there's anything to fight over, that advocacy groups wouldn't support," he said. "... This isn't a radical rewrite."

But some environmentalists still have concerns. The new rules give mitigation companies new ways to make money through buffer mitigation projects in stream beds that are mostly dry and in drainage ditches. They also reduce the ratio of land that has to be enhanced to offset damage under some circumstances.

And they allow a smaller buffer area to be developed in some cases. They elminate the requirement that annual reports be submitted for engineered structures such as stormwater ponds and pipes.

Some of these changes "could result in weaker mitigation requirements that may, indeed, impact water quality," Deck, the riverkeeper, said.

The bill that has been filed to enact the rewrite was approved in a House subcommittee last week, and is presumably headed to the floor for a vote before the short session ends.

Mary Mclean Asbill of the Southern Poverty Law Center, spoke against SB883 at the meeting, citing those concerns as well as the way the new rules were written.

"That's a messed-up process," she said. "That's not the way rules are done in North Carolina."

If the bill is enacted into law, the rewritten rules would take effect on a temporary basis, and then the job of writing permanent rules would return to the Environmental Management Commission. Its membership has changed since it approved the old rules: Legislation last year swept them all out of office, ending their terms in July and reducing members from 19 to 15, five of whom were reappointed.

The governor and General Assembly make the appointments.

Jarvis: 919-829-4576;
Twitter: @CraigJ_NandO

THE WAR ON WETLANDS

Regulatory Reform bill is a goodie bag for polluters and coastal developers

BY AARON LAKE SMITH

You've probably seen them on your way to the beach: the marshy bogs, micro-ecosystems for frogs, snakes and native coastal fauna, hidden behind the interstate tree line. These are isolated wetlands, and the majority of them are less than an acre in size. And now they are in danger.

Last week state Republicans passed an eleventh-hour regulatory reform bill removing environmental protections from isolated wetlands that are under one acre in size. That equates to 94 percent of them in the eastern part of the state.

This is significant, given the larger environmental context. More than half of North Carolina's wetlands have already been destroyed, according to the Environmental Protection Agency, placing it on the list of the top six states where these crucial habitats have been systematically bulldozed, developed and paved over in the past 40 years.

Wetlands are a vital part of Eastern North Carolina's ecosystem.

"They store a lot of water and reduce flooding during tropical storms. They provide habitat for endangered species. They recharge the groundwater for drinking water," said John Dorney, a 28-year veteran of North Carolina's Division of Water Quality, and now a scientist for Moffatt and Nichol.

In 2001, Dorney helped establish a DENR rule that protected eastern wetlands over a third of an acre. It required developers who wanted to fill in the wetlands to get a permit from the N.C. Department of Environment and Natural Resources and mitigate the damage, often financially.

To developers (and the lawmakers who cater to them) wetlands on their coastal property were an expensive nuisance. Under Dorney's rule, now undone by the recent legislative action, developers had to mitigate wetlands: Preserving or creating two acres of wetlands for every one that was destroyed. That's expensive. Wetland mitigation can run $50,000 an acre.

This recent change is part of the McCrory administration's campaign to make exploiting natural resources hassle-free for utilities, large corporations and good old boy developers. Last September, the Division of Water Resources rejected more than $600,000 in federal grants that could have been used to study the effects of fracking on wetlands ecosystems. This March, DENR eliminated 14 staff positions in the Division of Water Quality streams and wetlands restoration program.

The regulatory reform bill relaxed regulations for polluters. Buried among the casual provisions about permitting community colleges to teach classes on beer brewing are adjustments that rig the game in favor of developers at the expense of environmentalists and citizens:

- A provision that allows groups to petition for speed-limit waivers in North Carolina's state parks. This seems benign, but is the gateway drug toward opening the parks for business—we all know how McCrory loves a good *public-private partnership*—the back-door way to privatization. This tidbit was inserted as a gift to McCrory campaign donors who want to have a vintage car event on Pilot Mountain without having to drive 25 mph.

- Stormwater pollution is a direct result of development. It is also the primary cause of pollution in North Carolina's waterways. Under the previous rules, older coastal developments were grandfathered in, and not expected to have stormwater mitigation systems.

But a provision in last week's bill further erodes the regulation. Now new developments *adjacent* to these older developments don't have to manage their runoff. Once again, this allows coastal developers to cut costs at the expense of the environment. When runoff is uncontrolled, more fertilizers, pesticides, toxic sediments, and slurry can flow into the rivers, creeks and lakes that we swim in and drink from.

"This defeats the whole purpose of having stormwater protections for new development," said Derb Carter, director of the Southern Environmental Law Center.

- North Carolina's 1973 Coastal Area Management Act tried to organize development in line with environmental preservation. Developers are expected to file for CAMA permits before beginning construction. If an organization or an individual files a legal challenge alleging the development could harm the environment, under the previous rule, construction halted until the issue was resolved.

However, the new rule shifts the burden

Carver's Creek cypress wetlands, Spring Lake, N.C. PHOTO COURTESY OF CREATIVE COMMONS

of proof to the person or organization filing the CAMA challenge. Meanwhile, development can proceed as planned.

• The Rose Acre Farm lawsuits: Buried inside the bill, which Gov. McCrory could sign in the next few weeks, is a two-line clarification on "discharge of waste" with serious implications for industrial farms in North Carolina.

In 2012, as a gift to big ag that defied the federal Clean Water Act, North Carolina decided that airborne pollution would not be considered "discharge" or "waste." The poultry industry lobbied for the bill as a way to avoid lawsuits against their Concentrated Animal Feeding Operations, CAFOs for short.

This relaxation of airborne pollution rules leads back to Rose Acre Farms in Hyde County. A self-described "family-owned" farm "with small-town values" Rose Acre is the largest CAFO in North Carolina, a massive industrial egg-laying facility housing 3.5 million hens.

Rose Acre's pit fans discharge the feathers, feed and pollutants from these 3.5 million birds into nearby streams and rivers. Lawsuits over this airborne discharge have been ongoing in several courts since 2010, but this buried provision gives polluters a G-pass.

There are a couple of upsides to the bill. It does establish a 10,000-acre marine shellfish sanctuary on the Pamlico Sound. It makes poaching rare Venus flytraps a felony and eases oyster and mussel permitting.

But it's hardly a fair trade.

"The public shouldn't have to swallow the poison pill to get the good things in this bill," Cassie Gavin, director of Government Affairs at the Sierra Club, said. "There's no need to repeal decades worth of protections to get these things through." ▲

Aaron Lake Smith is the INDY*'s Raleigh Bureau chief. Reach him at asmith@indyweek.com*

ENVIRONMENT & ENERGY DAILY
THE BEST WAY TO TRACK CONGRESS

NATURAL GAS: A rush before the proof of shale gold *(Tues., July 22, 2014)*

Elana Schor, E&E reporter

In the classic film "Field of Dreams," a farmer builds a baseball diamond after hearing a premonition that "If you build it, he will come." In North Carolina, the same spirit has inspired two laws and more than 100 pages of regulations clearing the way for shale gas rigs that may never arrive.

The state began to embrace hydraulic fracturing after Republicans took over the Legislature in 2010 and pushed to end a six-decade ban on horizontal drilling, fracking's partner in the technological upheaval that shook loose eye-popping volumes of natural gas in the nearby Marcellus Shale. The U.S. Geological Survey increased its projection of recoverable resources in the Marcellus by a factor of 40 after fracking swept the nation, and many in the GOP hope that North Carolina's Triassic shale basins could prove similarly underestimated.

In a concession to fracking foes, the Legislature agreed in its 2012 fracking law to require a second vote on starting to drill after a 12-member panel, the Mining and Energy Commission, finished work on regulations. That proviso perished last month when Gov. Pat McCrory (R) signed a plan that paves the way for permits by spring.

But even as they vow that "thousands of jobs will be created" by opening the state to drilling, as shale-region Rep. Renee Ellmers (R-N.C.) put it in an interview, shale gas backers are uncertain about how many industry suitors will materialize and how quickly -- not to mention the true size of the Tar Heel State's recoverable reserves.

A 2012 state projection based on only two test wells placed North Carolina's total shale gas potential at about 2 trillion cubic feet (tcf), or slightly more than USGS offered weeks later in a separate report. That estimate is equivalent to about seven months of natural gas production last year in Pennsylvania and close to a 2002 USGS estimate for the entire eight-state Marcellus that rocketed up to 84 tcf almost a decade later.

State Geologist Kenneth Taylor sought to temper expectations in an interview this month.

"I never expected Exxon to come here," Taylor said. "I expect a regional company to come here. The majors deal with countries, not states."

Exxon Mobil Corp. and Royal Dutch Shell PLC own two of the biggest natural gas producers in the Marcellus. But the likelihood of even smaller companies drilling in North Carolina early next year when permits are set to become available is "not that high," said Mining and Energy Commission Chairman James Womack, whose panel will hold public hearings next month on its still-pending fracking rules.

Despite the Legislature's "strong will to see North Carolina get into the energy business," Womack added in an interview, industry might hold off "because the size of the play in North Carolina is very small and the majority of the infrastructure here is generally immature."

But size doesn't matter to Dallas Woodhouse, formerly North Carolina director for the conservative advocacy group Americans for Prosperity.

"North Carolina has a burgeoning wine industry, and people who do it make some money out of it," said Woodhouse, who this year founded a conservative nonprofit dubbed Carolina Rising to help support McCrory's agenda. "We're never going to be California, but we don't have to be California in wine to make it worth doing."

When it comes to fossil fuels, he finished, "we don't have to be North Dakota to make it worth doing."

Environmentalists are more confident in contending that Republicans overreached in their rush to reap the riches of a boomlet that could prove elusive. The Natural Resources Defense Council (NRDC) and the Southern Environmental Law Center (SELC) are leading a $1 million-plus campaign to make the fracking law a liability for four GOP state senators who embraced it, and greens cheered May polling that showed favorable ratings for three of those four tilting negatively by more than 25 percentage points after six weeks of advertising.

Ed Yoon, NRDC's associate policy advocacy director, pointed to ongoing budget battles within the GOP majority in the North Carolina Statehouse over teacher salary increases as a ripe area for conservationists to draw contrasts ahead of Election Day.

"You don't have money to pay teachers, but you do have money to spend on sweetheart deals for gas companies?" Yoon asked of North Carolina Republicans. "Regular people will understand that and say, 'That makes no sense.'"

The state's embattled first-term Democratic U.S. senator, Kay Hagan, in May hammered re-election challenger Thom Tillis (R) over language in the original fracking bill that would have made disclosure of chemicals used in the practice a felony. The state Senate later downgraded disclosure to a misdemeanor before sending the measure to the House, where Tillis leads the chamber.

Yet the potential risks and rewards of drilling in shale gas deposits thought to lie largely beneath three central North Carolina counties might not make a top 10 list of controversial issues in a state riven by combat over cuts to unemployment benefits, a voter identification law that alarmed minorities and a massive spill of toxic coal ash from a dump owned by Duke Energy Corp.

The political potency of the fracking push also may depend on how closely the public remains attuned as Womack's Mining and Energy Commission finishes work on more than 100 individual rules for shale extraction, touching on everything from bonding requirements to tree cover over well sites to "forced pooling" laws that could push landowners into taking a driller's leasing offer if a large majority of their neighbors consent.

"North Carolinians are focused on environmental issues more than ever in the past," state Rep. Pricey Harrison (D), a conservationist who tangled with Woodhouse in a televised debate over the fracking bill. "I think it could have consequences at the ballot box with the right pressure."

Even with enough pressure to power a horizontal drill, however, Democrats are likely to end the year outgunned in the Legislature. Most are looking to an anticipated 2016 gubernatorial race between McCrory and state Attorney General Roy Cooper (D), known for his environmental record. Whether

drilling will have begun in earnest by then or merely propelled land leasing and profit-making fantasies in central North Carolina remains an open question.

Harrison predicted that no serious industry commitment would arrive until natural gas prices at least double from their current level of under $4 per cubic foot. The North Carolina Department of Environment and Natural Resources (DENR), where McCrory drew consternation for appointing a leader who has suggested that oil is a renewable resource, made much the same prediction in April 2012.

"It is not likely that North Carolina's shale play will be developed in the near term," DENR wrote. "Low prices make it less likely that the industry will move from areas already in production to a new and unproven area."

DENR also predicted that opening the state to fracking would create an average of 387 jobs annually and boost North Carolina's gross domestic product by $292 million over a hypothetical seven-year drilling period. The state's GDP reached $456 billion in 2012, according to the Federal Reserve, with the financial industry contributing more than one-fifth of that total.

Republican legislators who clamored to pass the fracking bill scoff at the suggestion that the economic benefit of possible fracking might prove too tenuous to proceed.

"We have every reason to think the USGS estimate is low and inadequate," state Sen. Buck Newton (R) told a radio interviewer in May, touting "a lot of interest from companies wanting to know when we're ready to go."

In an industry where the most inexperienced workers can earn $75,000 per year, Newton added, "wouldn't 100 jobs be good?" Echoing an argument made often by fellow Republicans on the national level, he offered that "I'd much rather buy my energy from a fellow North Carolinian in Lee County or elsewhere than Venezuela or Saudi Arabia" -- both of which supply the United States with oil but not natural gas.

'They're going to do this'

Newton's conflation of oil and gas harks back to the first Republican attempt to open the state to fracking. Proposed in 2011, that bill told DENR to begin studying "the commercial potential of onshore shale gas resources within the state" while also committing then-Gov. Bev Perdue (D) to an offshore drilling compact with neighboring GOP-controlled states.

Perdue vetoed that energy bill, and though the state Senate overrode her, the House declined to act. When fracking returned to the Legislature's agenda in mid-2012, via the shale gas measure that created the Mining and Energy Commission and what environmentalists still lament as a broken promise to vote affirmatively again before drilling could start, Perdue had no such luck.

The House joined the Senate in overriding the ex-governor's veto by a one-vote margin, the deciding die cast mistakenly by an anti-fracking legislator who cried after realizing her error. Tillis, the state House speaker who is now the GOP's Senate nominee, declined to change the rules so the legislator could correct her vote.

"She was just devastated, because she was one of our environmental champions," said Nina Szlosberg-

Landis, a veteran conservationist and board member of the state's League of Conservation Voters (LCV).

Another Democratic legislator stunned greens in that late-night fracking vote by overriding Perdue's veto after signing a letter that urged the governor to reject the bill. A "deeply saddened" Szlosberg-Landis, then LCV's president, withdrew the "Rising Star" award her group had bestowed on that Democrat just two weeks earlier.

Months before the Legislature took up the fracking bill she would later veto, Perdue visited Pennsylvania at the invitation of its chief environmental regulator under ex-Democratic Gov. Ed Rendell, a stalwart supporter of shale gas. Perdue later spoke in favor of drilling so long as safety regulations and community support were in place, putting some distance between herself and environmental groups that have long warned of risks to groundwater and public health.

But one of those conservationists, Szlosberg-Landis, accompanied the governor on the trip. The LCV member recalled a Chesapeake Energy Corp. representative calling North Carolina's shale gas potential "cute" in a conversation with her and Perdue.

"When the [then-]governor and I were talking, it was very clear that this had very little to do with wanting to extract gas and create jobs, energy independence, all those buzzwords," Szlosberg-Landis said in an interview. "It was really clear that this was all about campaign money."

Perdue left office after one term at the end of 2012 and gave way to McCrory, a former Duke Energy executive with fuel production on his mind. The GOP governor said last summer that he hoped to see the Legislature move faster on fracking this year.

"But in the meantime, I'm going to be recruiting energy companies to North Carolina," McCrory told Raleigh TV station WNCN in August. "And I'm going to be setting up a process where we can possibly do both natural gas exploration inland and exploration offshore."

The fracking bill that he ultimately signed, in addition to criminalizing the disclosure of chemicals used in the gas extraction process and asking the state Commerce Department to study the prospects for a liquefied natural gas (LNG) export terminal in North Carolina, prevents local governments from setting zoning rules that would specifically limit oil and gas activity.

Another purple state riven by conflict over energy, Colorado, is playing host this year to a battle over ballot initiatives that would allow communities to constrain fracking within their borders.

North Carolina's lack of a home-rule tradition means "cities and counties are creations of the Legislature and they can be disbanded tomorrow by the Legislature," said Woodhouse, the conservative advocate who helped whip votes to override fracking vetoes under Perdue.

"If it's the Legislature's will to do this -- and it is -- and it's also the governor's -- and it is -- they're going to do this," Woodhouse said.

The suitors and the prize

Republicans' march to shale development drew interest from a handful of smaller companies, including some that had leased land before the fracking moratorium ended. One of them, Triassic Energy

Resources, engaged two Statehouse lobbyists this year: D. Bowen Heath of McGuire Woods, who also represents Halliburton Co., and Chris Emanuel, a close friend of McCrory's who served as the governor's senior political director during the 2008 and 2012 campaigns.

Emanuel said Triassic, a subsidiary of Texas-based Industry Petroleum, would begin with seismic studies and vertical drilling to gauge the potential of the state's shale basins and proceed to horizontal wells "if they need to," adding that "it's less expensive if you just go straight down."

Industry's president, Phil Barnett, founded the company while still working at First Liberty Energy, according to his LinkedIn profile. Barnett envisions natural gas eclipsing agriculture in importance to the North Carolina economy and wants to set up a community college program to train locals in energy extraction, Emanuel added in an interview.

"He's not just a taker," Triassic's lobbyist said of Barnett. "Of course he wants to make money from it, but he wants to provide jobs for this state."

Environmentalists fighting the fracking push, such as Southern Environmental Law Center senior attorney Mary Maclean Asbill, see the minimal interest from drillers as a signal that the Republican effort is propelled more by ideology than geology.

"There's nobody down here from a real oil or gas company pushing or drafting this legislation," Asbill said, "which makes us worried that it's just going to be one guy with one drill who's going to come down and mess up the aquifers."

Emanuel, however, said he had "worked very hard personally to make sure the General Assembly passes this bill in 2014" instead of waiting until next year. Asked why the fracking measure cried out for urgent passage, the former U.S. Airways pilot said legislators had "pontificated" about shale gas since 2010.

Womack, chairman of the MEC, vowed that his panel's final rules for shale gas development would effectively protect local residents. Any concern that smaller companies would prove more difficult to police, he said, tars smaller producers without proof they have poorer safety records.

"Most of the major environmental disasters" in America in recent years, Womack observed, "were from companies you can name off the tip of your tongue: the Exxon Valdez, British Petroleum."

A microcosm of Shale Nation

That infamous oil spill imagery plays a key role in influencing the state's search for shale gas is unexpectedly appropriate. The tension between economic promise and environmental risk that now strains North Carolina's fracking law mimics battles also raging in states with much larger fossil fuel prospects, from California to New York.

Despite the air of futility that now shrouds resistance to the already-passed fracking law in North Carolina, greens still hope to spotlight opposition to drilling at the MEC's three public hearings. Mining and Energy panel member Amy Pickle, also a program director at Duke University's environmental policy institute, said she hopes to see strong participation from the public "and, frankly, from industry" at those events.

The validity of the USGS projection that North Carolina has enough gas to feed its own demand for only about six years, making any gas extraction difficult to justify financially, "is really outside of our jurisdiction," Pickle said.

"That doesn't in any way diminish folks' overall concerns, their distrust of industry, their sense that it's not appropriate for North Carolina -- either for groundwater reasons, or for air emissions, or any other public health or environmental impact."

The MEC expects to receive upward of 10,000 comments on its draft fracking rules before a 60-day public comment period ends Sept. 15. Contentious topics at the panel's hearings could include the illegality of disclosing fracking chemicals, the current setback rules for gas wells -- 650 feet away from homes and wells, 200 feet from bodies of water -- and requirements to test water supplies between six months and a year after drilling begins.

Forced pooling for landowners who decline to sign leases, an issue so divisive that the state environment department now has its own study group after a separate MEC study group failed to reach agreement, is all but assured to come up.

"If you don't lease your land, then you're not going to be in the game, but when we're all finished and everyone's made money around you ... don't cry to us about the fact that you didn't get to make any money on these rocks," said Taylor, the state geologist who also sits on the MEC.

The next step for statewide shale gas rules will be a hearing at the Rules Review Commission, a once obscure state agency that McCrory's administration vested with new regulatory oversight powers, followed by a return to the Legislature.

North Carolina's fractious legislators, whose approval rating fell to 18 percent last month, may attempt to amend the MEC's rules before the start of a 60-day waiting period for official drilling permits. Still, given the recent removal of the required affirmative vote to frack that legislators agreed to in 2012, few on either side of the shale gas battle expect Raleigh to stand in the way.

Politicians and pundits will write the next chapter in the North Carolina fracking drama, perhaps long before its true shale gas reserves are definitively known. Drilling lobbyist Emanuel's vision of copious spinoff jobs from fracking at "steakhouses" and "shopping centers" already resonates with Ellmers, the Republican congresswoman who represents much of the state's shale gas zone in the U.S. House.

"You'll see such major economic growth that it really is hard to turn away from the possibility of being able to frack," Ellmers said in a recent interview.

Her long-shot Democratic challenger, "American Idol" runner-up Clay Aiken, is against fracking but has yet to turn the issue into a campaign-trail cudgel despite votes against the shale gas bill from 11 Republican state legislators.

The fracking law is more likely to haunt those state lawmakers in the near term as green groups continue their on-air assault on the credibility of promised profits from shale.

"They turned an issue with very limited economic benefit to North Carolinians into a hugely toxic political issue," NRDC's Yoon said of Republicans.

But the fracking saga could prove little more than a prelude to a fight over coastal drilling ahead of the possible McCrory-Cooper race in 2016. The Democratic governor of neighboring Virginia aligns with McCrory in support of offshore exploration, and the Interior Department soon plans to begin planning seismic tests for oil and gas in the Atlantic.

MEC Chairman Womack predicted: "We're going to find the richest hydrocarbon deposits" off the state's coast in the form of methane hydrates, ocean-bound natural gas deposits encased in ice.

Woodhouse, the conservative activist, also eyed a return of the offshore drilling provisions that Republicans married to fracking four years ago in their first failed attempt to start looking for shale gas.

"One of the larger points in all this," he said of the fracking debate, "is to develop an onshore energy industry that can develop into an offshore energy industry."

ABOUT E&E DAILY

Environment & Energy Daily (E&E Daily) is written and produced by the staff of E&E Publishing, LLC. Designed for policy players who need to know what's happening to their issues on Capitol Hill, from federal agency appropriations to comprehensive energy legislation, E&E Daily is the place insiders go to track their environmental and energy issues in Congress. E&E Daily publishes daily by 7:30 a.m. while Congress is in session.

E&E PUBLISHING, LLC
www.eenews.net

E&E Publishing, LLC
122 C St., Ste. 722, NW, Wash., D.C. 20001.
Phone: 202-628-6500. Fax: 202-737-5299.
www.eenews.net

July 30, 2014

July 30, 2014
News + Observer

AG warns company to stop fracking offers

By John Murawski
jmurawski@newsobserver.com

The state's imminent legalization of fracking is spawning a new round of concerns as the state Attorney General's Office warned a Pennsylvania company this week to stop offering North Carolina landowners money in exchange for fracking rights.

The attorney general's cease-and-desist notice, sent Monday to Pittsburgh-based Crimson Holdings, alleges the company's solicitations are illegal because its land agent is not registered in North Carolina, among a host of other reasons.

Crimson's lease offers appear to be a foretaste of rising interest in the state's energy potential in advance of the expected legalization of fracking sometime next year.

Womack

The latest drilling leases are also an example of potential abuses that fracking critics have predicted and fracking supporters hope to prevent. James Womack, the outgoing chairman of the N.C. Mining and Energy Commission, was quick to point out Tuesday that profiteering is inevitable, but it isn't limited to energy exploration.

SEE **FRACKING,** PAGE 5A

FRACKING

CONTINUED FROM PAGE 1A

"There will be all kinds of speculative activity," Womack said. "There are all sorts of unscrupulous people out there."

Crimson's regional agent listed on the lease document, Frank Sides, did not return calls or respond to emails. Crimson does not have a website, but its Pittsburgh address is home of Campbell Development, a land services solutions company whose website features a photo of Frank L. Sides Jr., director of land development.

The Attorney General's Office directed its warning letter to Sides and to Anna Campbell, a partner at Campbell Development. The letter cites a number of concerns about Crimson's activities – lack of information about the company, to begin with.

The leases violate North Carolina law because they lack cancellation rights, lack other disclosures, and include lease terms for 12 years when state law limits leases to 10 years, the AG's letter says.

"We have serious concerns that North Carolina landowners will be unable to conduct any due diligence research or to obtain information on the ostensible company to which they are being asked to lease their oil and gas rights," special Deputy Attorney General Lynne Weaver wrote in the letter.

The Attorney General's Office demands that Crimson and Campbell stop doing business in North Carolina, that they cancel any signed leases and supply the office with a list of names of all landowners who have sold drilling rights to the Pennsylvania company.

Unusual tactics

It's not clear if anyone has sold fracking rights to Crimson at its offer price of $5 per acre because the company appears not to have filed any leases with local registers of deeds offices. Leases that modify land ownership records are public records, but filings with local officials can lag by several months after the documents are executed.

Crimson's tactics are anything but ordinary. Rather than approaching landowners in Lee County, the epicenter of North Carolian's natural gas deposits, the Pennsylvania company is soliciting landowners in Durham County, on the periphery of the natural gas region.

Crimson is also soliciting landowners who are no fans of fracking. The company was cited in a 2010 Associated Press article for soliciting drilling rights under cemeteries.

In North Carolina, the company has pitched its leases to the Town of Chapel Hill and the Ellerbe Creek Watershed Association, seeking to frack for natural gas under the 118-acre Veasey Farm Preserve, the 83-acre Glennstone Nature Preserve and 51.6 acres of parkland near Chapel Hill's Meadowmont community.

Chapel Hill officials and the land conservancy group say they have no interest in leasing their land for shale gas drilling to Crimson Holdings or anyone else.

"That tells me they're not too serious about doing business here," said James Robinson, a research and policy associate at the Rural Advancement Foundation International-USA, a landowners rights group in Pittsboro.

"It seems they're throwing a bunch of things at the wall and seeing what sticks," Robinson said.

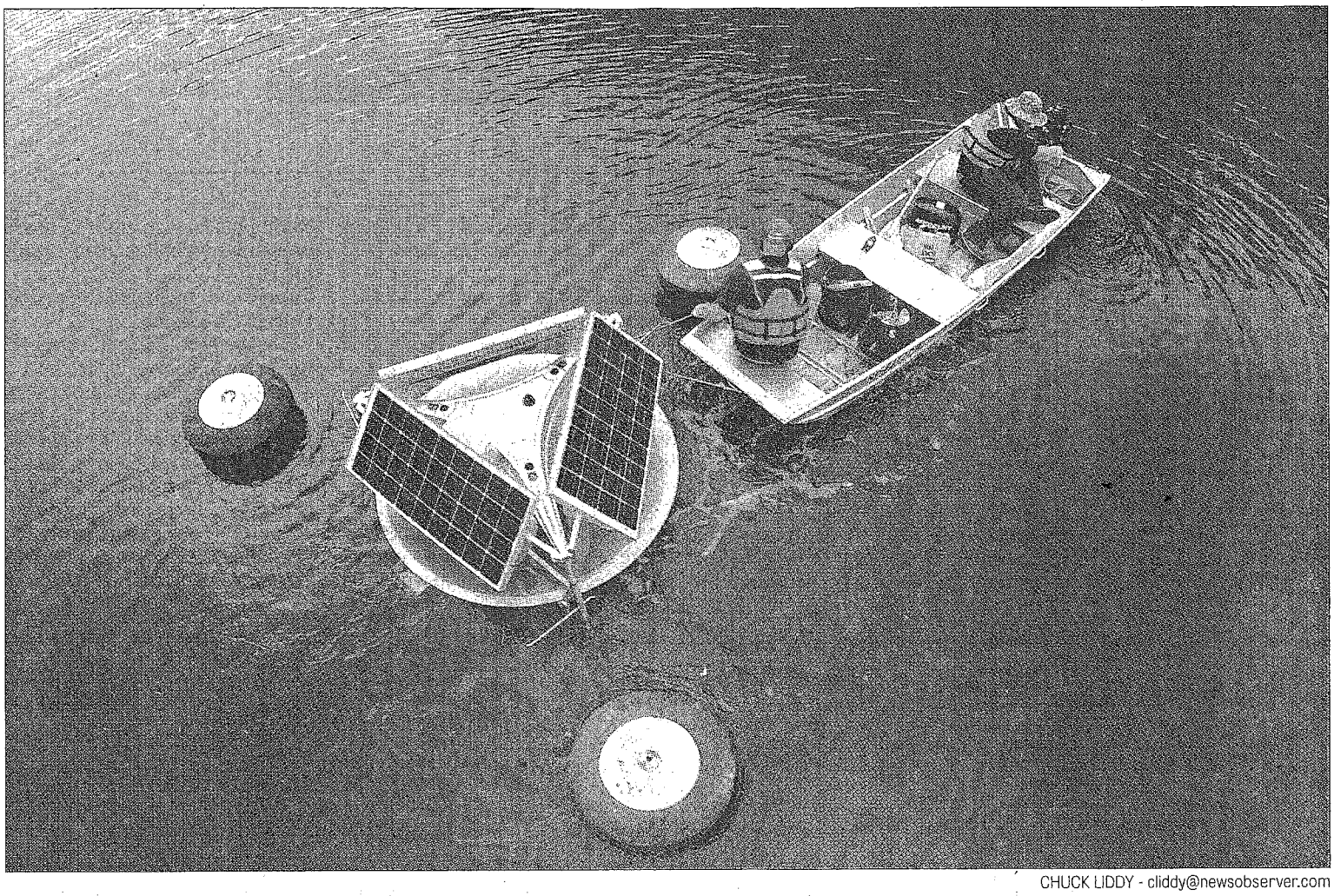
Murawski: 919-829-8932

» Online

Stay informed: Find more state and local business news at **nando.com/business.**

July 23, 2014
News and Observer

Jordan Lake experiment begins



CHUCK LIDDY - cliddy@newsobserver.com

Jonny Dilworth, left, and Jon Walter head out from the Robeson Creek boat ramp Tuesday with a SolarBee unit headed for Jordan Lake. Thirty-six of the SolarBee units will be placed over the next few days in the Morgan Creek and Haw River inlets. See map, Page 7A.

SOLARBEE WATER CIRCULATORS PLACED IN LAKE IN HOPES OF KILLING ALGAE

1/23/14

By Andrew Kenney
akenney@newsobserver.com

CHATHAM COUNTY Men lowered the bulky, spacecraft-looking machines into Jordan Lake one by one, first winching them from a truck, then dragging them slowly behind a johnboat to their positions on the huge reservoir.

Ken Hudnell, the suntanned scientist who engineered the controversial project, watched cross-legged from the dock.

This was the enactment on Tuesday of North Carolina's unprecedented experiment in water management – and, Hudnell hopes, the test case that will show water regulators' errors of omission of the past 20 years.

Over this week and the next, Medora Corp. and the state of North Carolina will deploy a $1.4 million fleet of 36 solar-powered water circulators across the lake that supplies water to roughly 300,000 people in the Triangle.

For decades, the EPA and many water-quality scientists have swept their focus and funding away from in-lake "technological" fixes, such as the SolarBee circulators, which try to physically kill off algae and other unwanted growths.

"It's a very big milestone to me," said Hudnell, a Medora vice president. "This is actually putting into action what I've been proselytizing and trying to make converts for, for years."

The project's skeptics argue that there's little proof that the SolarBee project will improve water quality or reduce the need for expensive upstream stormwater ponds and other pollution prevention. (Hudnell says both prevention and treat-

SEE **SOLARBEE,** PAGE 7A

SOLARBEE

CONTINUED FROM PAGE 1A

ment are necessary.)

Underlying the criticism is a philosophical concern: If the Jordan Lake project works, some worry, it may tempt North Carolina to rely further on new technological fixes instead of proven pollution controls.

"The benefit of some technology ... is it can help reduce the problem and buy some time," said Ben Grumbles, president of the U.S. Water Alliance and a former federal water leader.

"But if it's used to indefinitely postpone the upstream (pollution) prevention strategies," he said, "then from an environmental and water-quality perspective, that's a slippery slope. That's a dangerous path to go down."

Objects of curiosity

The SolarBees won't finish their trial run for two years, but the beacon-lit buoys already are objects of curiosity.

From a distance, they look like angular silver mounds. Up close, they're whisper-quiet machines, a pulsing current gently but visibly spreading from their centers.

Each is marked by yellow signs with warnings in English, plus exclamation points and large triangles.

Four men are doing the bulk of the installation, anchoring the 850-pound, North Dakota-built machines along the Haw River's inlet and the Morgan Creek arm of the huge lake.

They were flanked Tuesday by kayak-paddling representatives of the N.C. Sierra Club and motorboat-driving employees of the state Department of Environment and Natural Resources.

The state employees were collecting a round of the baseline data that will show whether the SolarBees are cleaning the water, including measurements of the lake's clarity, oxygen content and temperature.

"The best we can tell you is we've got to collect the information," said Jason Green, a branch supervisor for DENR. He's been asked to take a boatload of legislators out on the lake, and perhaps even DENR Secretary John Skvarla.

It won't be easy for the untrained eye to spot any improvements in the lake, he said. Jordan Lake generally isn't home to the soupy green algae that swimmers know best, according to Hudnell.

"If you've never been out here, you might not (be able to) tell anything was happening," Green said.

Jason Green, left, of the N.C. Division of Water Resources speaks with Medora workers Tuesday as they deploy one of the SolarBee units on Jordan Lake.

The next debate

The way Hudnell tells it, this experiment was the result of a happy accident.

DENR had rebuffed the former EPA toxicologist's plans in earlier years. Hudnell decided he'd try again late last spring, after he read in The News & Observer that legislators in Greensboro and Burlington wanted to change the rules protecting Jordan Lake.

The upstream legislators first had moved to kill the long-debated environmental program. Then, led by the office of Senate President Pro Tem Phil Berger, they fast-tracked the SolarBee project while they delayed the watershed rules.

The debate pitted the Triangle legislators whose communities drink from the lake against the Triad legislators who live upstream from it.

It's not clear when the legislature will again take up the argument. A committee on Jordan Lake, stacked with upstream representatives, met four times this year, but no immediate plans have emerged.

Hudnell says that state officials have asked him to weigh in as they take up the rules again this fall, though legislative staffers couldn't immediately confirm that claim.

SolarBees have been deployed in hundreds of other lakes, though never on this scale. The results have been mixed. In Lake Houston, 20 circulators significantly lowered water-treatment costs by clearing water near an intake.

A smaller deployment in Cabarrus County's Lake Howell found "subtle" results with "minimal improvements," according to an assessment by the UNC Charlotte Environmental Assistance Office

That report led state Rep. Tom Murry, a Republican from Cary, to raised questions about the SolarBee earlier this year. "I don't like to waste taxpayers' money," he said.

The state's Sierra Club has been a frequent critic of the technology

"It's disappointing that this water mixing project will be moving forward, rather than reinstating the science-based Jordan Lake Rules that would stem pollution from entering the lake in the first place," said Cassie Gavin, director of government relations for the organization, in a written release.

Berger's office on Tuesday said that the senator would support an expansion of the project if it works.

"We are pleased to see the pilot project to help clean Jordan Lake begin this week. We look forward to reviewing the progress over the next 12 to 18 months, which will help us determine next steps," Berger said, according to a written release from his office.

Meanwhile, other technological experiments may come online across the state. The town of Cary has been preparing its own large water circulator to improve the quality of the water it draws from Jordan Lake, and the city of Durham has weighed a plan to remove polluting nutrients from Falls Lake.

Hudnell also has made strides in a push to restore federal funding for in-lake fixes – and as he fights to put his technique on the national agenda, it won't just be North Carolina watching Jordan Lake.

Kenney: 919-829-4870;
Twitter: @KenneyNC

The need for 'therapy' in water-quality plans

July 23, 2014

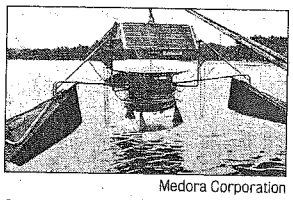
By H. Kenneth Hudnell

Point of View

Jordan Lake has always been impaired. As a reservoir built on low-lying, nutrient-rich farmland and filled with water that can take more than a year to traverse it, the lake has high nutrient levels and stagnant water that enable detrimental blue-green algae to dominate the beneficial algae at the base of the aquatic food web.

Reservoirs such as the 14,000-acre Jordan Lake are built to control water quantity, not quality. Developing a cost-effective plan to improve Jordan's water quality requires addressing these questions: What is federal policy? Is it working well? If not, how can we do better?

Federal freshwater policy requires implementing the Clean Water Act's watershed management programs, which reduce pollutants such as phosphorus that promote the algae "blooms" that stress water, reduce biodiversity and deplete dissolved oxygen during die-offs, causing fish kills. Current policy does not, however, require implementing the act's waterbody management program to improve quality by treating the reservoir itself. In fact, the EPA de-emphasized waterbody treatments – such as the use of SolarBees that began in Jordan Lake this week – to focus on watershed management without scientific and economic justification. Current policy prescribes "preventive medicine" but not "supportive therapy."



Medora Corporation

SolarBee circulators are being put into Jordan Lake this week

Nationally, 64 percent of lake and reservoir acres are impaired, and only 7.9 percent of about 55,000 freshwater bodies listed as impaired prior to 2003 are restored, mainly small waters fed by pipes (point source) rather than runoff (nonpoint source). And the problem is increasing. Whereas the EPA estimated in 1972 that 10 to 20 percent of lakes and reservoirs were eutrophic, the agency now estimates that about half are. EPA river-and-stream data indicate those with excessive phosphorus increased from 47 percent to 66 percent between 2004 and 2009.

No eutrophic waterbody of at least 1,000 acres and with 90 percent of its nutrient input from runoff has ever attained water quality standards. Jordan and other large, impaired waterbodies will stay impaired as long as policy focuses on watershed management only.

Current "preventive medicine" policy fails because it lacks a sound scientific and economic basis. Point-source pollutants are now only 5 to 10 percent of total inputs nationally, and runoff inputs are increasing. The "best management practices" for runoff are difficult and expensive to implement over large areas, and many are only marginally effective.

The Jordan Lake watershed is about 1,700 square miles, 77 times larger than the lake itself. The nutrient-strategy rules that the N.C. General Assembly recently suspended were designed to reduce phosphorus inputs by only 5 percent at a cost estimate of $2 billion. The rules do not address nutrient inputs from groundwater or atmospheric deposition or the huge internal nutrient load that will cycle between sediment and the water column, stimulating "blooms" for decades. No scientific assessment indicates that implementing the rules would restore Jordan Lake.

Current policy is not based on cost-benefit analyses, and accountability is lacking. Current policy also does not address the second factor that promotes algae blooms: quiescent, stagnant water. Scientific literature and more than 300 U.S. lake applications indicate that artificial circulation, such as with SolarBees, suppresses cyanobacteria and stimulates beneficial algae, channeling nutrients up the food web. Circulation also helps oxidize some pollutants, prevent mercury methylation, deactivate pathogens and boost other technologies that remove nutrients and degrade toxic substances in lakes and inlets where they are more accessible and concentrated. Like human bodies, waterbodies require continual circulation and viable biochemical processes to maintain good health.

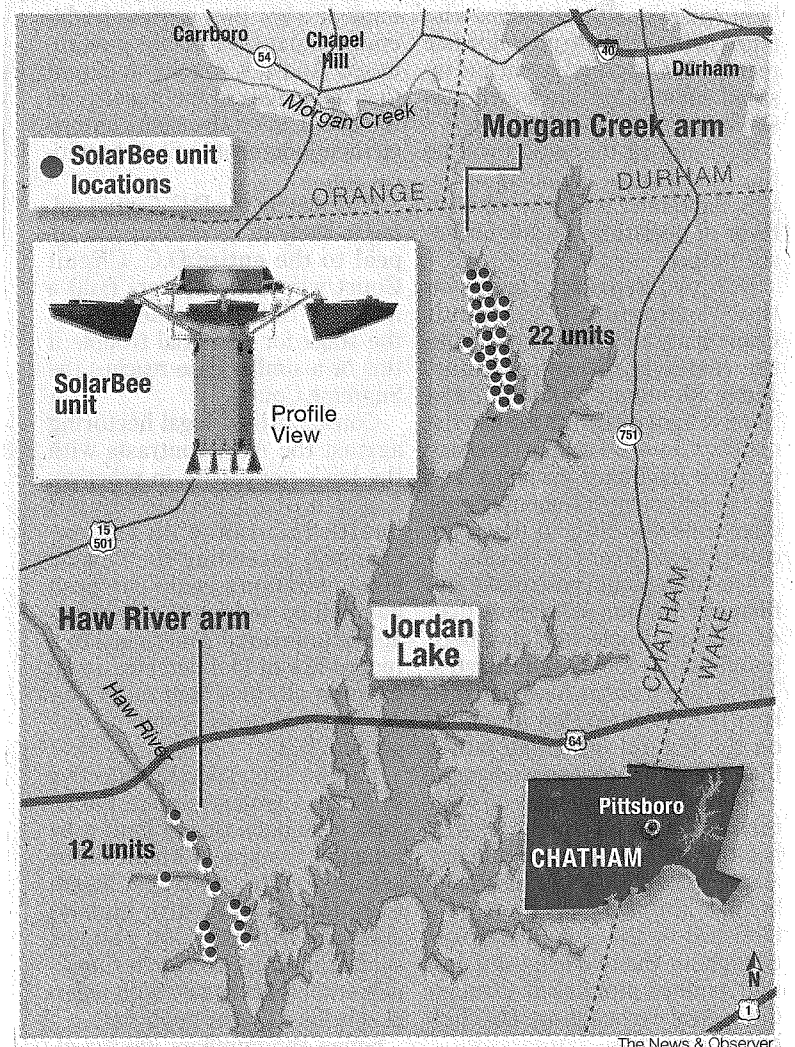
Cost-effective freshwater management requires an adaptive systems approach that identifies the optimal set of processes to create the functionality the system's users require. An optimal strategy for Jordan Lake would combine cost-effective watershed management with waterbody management to form an adaptive system that provides a relatively high likelihood of success, a short time to restoration and downstream protection. Deploying SolarBee circulators in Jordan Lake is a good first step, but implementation of a full adaptive systems approach is needed.

It's time we complement preventive medicine with supportive therapy to save reservoirs like Jordan.

H. Keith Hudnell, Ph.D., of New Bern is vice president and director of science for Medora Corp., maker of SolarBees.

On Jordan Lake, an experiment

After years of debate and planning, a $1.44 million fleet of SolarBee water circulators hit the waters of Jordan Lake this week. If they work, the state could deploy up to 130 more.



The News & Observer

» Online

See how it works: Watch video and see more photos of the SolarBee devices in action with this article at **nando.com/local.**

Board OKs PSNC's Alamance-Orange gas pipeline

By Tammy Grubb tgrubb@newsobserver.com

September 1, 2014

HILLSBOROUGH — Members of Orange County's Board of Adjustment say they sympathize with worried residents, but their hands are tied in approving a contentious application for a 9.1-mile natural gas pipeline.

PSNC wants to install the new, 16-inch pipe parallel to an older 10-inch line. The project is part of a 16-mile transmission pipeline from the Haw River in Alamance County to a regulator station on Old N.C. 86, just south of Eubanks Road. There, it will tie into a line delivering more natural gas to Duke University.

The plan will affect more than 75 properties, most of which provided easements in 1952 for the original pipeline. Roughly a dozen residents pleaded with the board to protect the environment, property values, public safety and their quality of life.

Chairman Larry Wright reminded the crowd at Wednesday's meeting several times that the "quasi-judicial" board can only consider the county's development rules, physical evidence and sworn testimony from experts. PSNC attorney Matt Rhoad raised repeated objections when residents' testimony strayed from the facts.

The board approved PSNC's special-use permit with nine conditions. Since the gas distribution company failed to include an above-ground valve and tie-in station on Nicks Road in its application, officials will have to apply later to modify the permit.

Jerry Raines, whose family farms land on Nicks Road, told the board not to trust PSNC officials to do what they say.

The company offered him $232 instead of fair compensation to expand the easement on his land, Raines said. In May, he was surprised to find surveyors marking his land, without giving him notice, he said. The last straw was when he found Rhoad handing his elderly parents an easement deal to sign. The last paragraph of the deal states that it could be unenforceable, Raines said.

"What he says, he doesn't have to stand by, the company doesn't have to stand by," Raines said. "He could sit there and promise me the moon, but unless he has already written it in his paperwork, he can sit there and negotiate all day long, twist somebody's arms or lead them on, to get them to sign this."

The company is paying landowners $1 per "rod," or every 16 feet, to expand easements for which the company paid the appraised value in the 1950s. The extra $200 was added to sweeten the pot, Rhoad said. New easements will be fairly compensated, he said.

PSNC officials are still negotiating, but they also filed eminent domain lawsuits against some property owners to avoid potential delays. The state and federal constitutions usually require agencies to pay the market-appraised value for land seized using the eminent domain law.

The pipeline will serve mostly commercial and industrial customers, while meeting a growing demand in the Triangle, PSNC spokeswoman Angie Townsend said. Residents along the line won't be able to tap it, she said.

Once the permits are in hand, the work could be done in a few months, PSNC officials said.

Mebane Oaks Road resident Joseph Zaragoza said he's not opposed to the new pipeline, but he wants to be sure it will be installed and operated safely. He also doesn't want it to affect his new driveway, landscaping or the full use of his property, he said.

Others worried this might be the first of many new pipelines. District Court Judge Jay Bryan, who lives along the route, reminded the board that one of the county's standards for approval is a planned use that will "maintain or enhance the value of contiguous property."

"Ten years from now, the way I interpret it, (PSNC) can come in and put in another line," Bryan said. "Basically, their easement encumbers our whole property, and if that doesn't affect the value, I don't know what does."

The county's rules say that standard doesn't apply if the use serves a public need.

Safety is always the top priority, said Rob Priester, an engineer with PSNC parent company SCANA Energy. The new pipe is planned for the existing easement to limit the effects on property owners and property values, he said.

"It requires less space for working, less space for maintenance," Priester said. "It's not really changing the land use."

Natural gas facts

The gas distribution company PSNC gets most of its gas via the Transco pipeline network, which crosses 12 states from south Texas to New York City. Transco is expected to reverse the flow of natural gas through the pipeline by December 2015, to move gas being produced in Pennsylvania's Marcellus shale formation.

PSNC's service area covers 28 counties, with about two-thirds of its 505,000 customers in the Triangle.

The North Carolina Utilities Commission regulates and inspects gas pipelines under rules set by the U.S. Department of Transportation and federal Pipeline and Hazardous Materials Safety Administration. PHMSA reports that North Carolina has roughly 4,000 miles of gas transmission pipelines, and Gastonia-based PSNC operates 589 of those miles.

North Carolina reported five gas transmission pipeline incidents from 2004 to 2013. This year, damage from a 2003 excavation project caused an explosion near Asheville and lightning caused another one in Mill Spring, according to PHMSA. No injuries or fatalities were reported since 2004, but the property damage was estimated at $2.5 million.