

AGENDA

Commission for the Environment May 11, 2015 7:30 p.m.

Richard Whitted Meeting Facility (Room 250)
300 West Tryon Street, Hillsborough

| <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 – April 13 (Attachment 1) |
| 7:40 | IV. | Proposed Amendments to Impervious Surface Rules The CFE will review the April presentation and discussion of draft amendments to the County's rules that limit the amount of impervious surfaces on a property, and consider submitting comments to the Planning Board and BOCC. (Attachments 2-3) |
| 8:15 | V. | Environmental Justice Sharon Beard and Chip Hughes (both with National Institute of Environmental Health Sciences) will provide an overview of environmental justice issues for CFE consideration and for potential future inclusion in the State of the Environment report. (Attachments 4-5) |
| 9:00 | VI. | Updates and Information Items Staff and/or CFE members will provide updates on the following items: <ul style="list-style-type: none">➤ Earth Evening (Attachment 6)➤ CFE news article – Hydrilla in the Eno River (Attachment 7)➤ Hydrilla management in the Eno River (Attachment 8)➤ Solid waste recycling program funding plan (Attachment 9)➤ Orange County solar development initiative (Attachment 10)➤ Potential County bond referendum (Attachment 11)➤ Chapel Hill-Carrboro City Schools awarded a Green Ribbon (Attachment 12)➤ Regulatory Reform Act of 2015 – HB 760 (Attachment 13)➤ <i>The Nature of Orange</i> photo contest (Attachment 14)➤ Environmental Summit Keynote Presentation by Norm Christensen (Attachment 15) |
| 9:20 | VII. | Adjournment |

Next meeting: June 8 (Solid Waste Admin. Building – Chapel Hill)
- Green building incentives
July (No Meeting)

CFE Charge: to advise the Board of County Commissioners (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 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

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

April 13, 2015

Orange County Solid Waste Administration Building, Chapel Hill

PRESENT: Jan Sassaman (Chair), May Becker, Peter Cada, Tom Eisenhart, Lynne Gronback, Loren Hintz, David Neal, Bill Newby, Jeanette O'Connor, Rebecca Ray, Gary Saunders, Sheila Thomas, Lydia Wegman and David Welch

ABSENT: Donna Lee Jones

STAFF: Tom Davis, Rich Shaw, Brennan Bouma

GUESTS: John Richardson, Jesse Freedman, Michael Harvey, Craig Benedict

- I. **Call to Order** – Sassaman called the meeting to order at 7:34 pm.
- II. **Additions or Changes to Agenda** – None.
- III. **Minutes** – Sassaman asked for comments on the March 9 meeting summary. Saunders motioned to approve as written; seconded by Welch. Approved unanimously.
- IV. **Welcome New Member** – Sassaman introduced Lynn Gronback, noting that she is a candidate for appointment to the CFE.
- V. **Chapel Hill's Green Building Incentives** – John Richardson (Planning Manager for Sustainability) and Jesse Freedman (Energy Management Specialist) presented an overview of the Town of Chapel Hill's pilot program of providing financial incentives for sustainable (or "green building") design. Richardson noted that this pilot program applies only for development within the Ephesus Church / Fordham Renewal District.

Freedman said the Town's objective is to incentivize developers to build high-performance buildings with better energy and water conservation performance than the 75th percentile of similar buildings. He noted that prior to this program the incentive was to build the worst energy and water efficient buildings allowed by law.

Freedman described the Town's process of choosing a green building standard for energy use from among many options, including LEED certification, Energy Star, 2030 Challenge, and others. The Town chose the Energy Star program, which the staff considers a neutral standard. The Town chose the State water performance standard. Freedman said the intent was to create standard that are rigorous and achievable.

Freedman said in this pilot phase the financial incentive for builders is up to a 35% reduction in their development permit fees. He reviewed the benefits of green building versus conventional building in terms of energy use and water consumption. He noted the tendencies for higher rental rates (+ 2% – 17%), greater resale value (+ 5.8% - 35%), higher market value (+ 13.5%), and lower operating expenses (- 30%) for green buildings on average.

Richardson said the rebate could result in a potential total maximum reduction in revenue from permit fees of about \$600,000; however that level of activity is highly unlikely. He said there have been only two applicants to date. Richardson said Town staff will try to verify performance measures, likely through periodic field inspections.

Freedman and Richardson responded to questions from CFE members:

- O'Connor asked if there were incentives for sustainable design of the outside portions of the buildings, such as green roofs, xeriscaping, onsite water retention. Richardson said yes, there are standards for the outside as well.
- Neal asked if Chapel Hill had looked at examples of like programs in other jurisdictions, such as Catawba County. Richardson said they consulted NC State's DESIRE database for suitable examples and found that Charlotte's program was most effective. The others reported low levels of effectiveness.
- Sassaman asked if the Town used other incentives in addition to the permit fee rebate. Richardson said the State has authorized the rebate incentive. For buildings and development outside of the Ephesus Church / Fordham district the Town uses other standards and requirements for approving special use permits.
- Sassaman asked if the Town applies these standards to its public buildings. Richardson said the Town has, by ordinance, a LEED Silver minimum for all buildings. For example, the Chapel Hill Library was built to LEED Silver standard.
- Neal asked if these standards applied to single-family residential development, and might the Town consider expanding the incentives to other parts of the town. Richardson said it is only intended for commercial and multifamily residential, and said the council has not discussed imposing these standards elsewhere.
- Hintz asked how much less might the cost of utilities be for buildings in the Ephesus Church / Fordham district than in other parts of the town. Richardson said it would depend on the building type; the staff has run some calculations.

Richardson said the Town of Chapel Hill will reassess the pilot program at the end of the first year and the staff will work with the town council on making adjustments if needed.

Neal noted the CFE has recommended to the BOCC and the Planning Board that Orange County consider adopting similar incentives for sustainable development, but thus far nothing has resulted from those discussions.

The CFE thanked Richardson and Freedman for their presentation.

- VI. **Proposed Amendment to Impervious Surface Rules** – Michael Harvey (Current Planning Supervisor, Orange County Planning and Inspections Department) provided an overview of proposed amendments to Orange County's rules that limit the amount of impervious surfaces for new development. Harvey said he was directed to initiate a process to amend the ordinance to include additional opportunities for residents to modify established impervious surface limits.

Harvey said under the current rules there are two processes for allowing impervious surface thresholds to be modified: 1) approval of a variance request (only one has been approved in the past 10 years), or 2) transferring the allowable impervious surface area from an adjacent property by way of a conservation easement.

Harvey said under certain circumstances the State of North Carolina allows a larger area of impervious surfaces on a property through the installation and continued maintenance of on-site stormwater retention measures, such as permeable pavement. Such a device would be designed to capture runoff and allow it to infiltrate the soil. Harvey said permeable pavement is not counted as totally impervious, which translates to an allowance for installing additional “impervious surface area.”

Harvey said the board of county commissioners has directed Planning staff to evaluate how the County might incorporate language similar to what the State uses for the treatment of permeable pavement in its impervious surface calculations. He said the County considers gravel, asphalt, and concrete, along with more impenetrable building surfaces (roofs, etc.), within its current definition of impervious surfaces.

Harvey said the proposed amendment to County rules would allow permeable concrete and some other permeable surfaces to be counted as 50 percent toward the impervious surface area. The County would require an engineer to certify there would be no net increase in the stormwater runoff leaving the property. The County would also require an operations agreement be signed and recorded at the Orange County Registry. The County would also require there be annual inspections and reporting of maintenance. Finally, Harvey said the County would obtain a permanent access easement to the property in order for staff to monitor and enforce the UDO standards.

Harvey said it is his impression that a property with 8% impervious cover that includes certain best management practices would result in less stormwater runoff than a property with 6% impervious cover.

Craig Benedict (Orange County Planning Director) noted that the current watershed overlay districts were established in 1994 and in many areas of the county the standards are more stringent than the State guidelines for watershed protection areas. He agreed with Harvey that the intent of the rule change was for there to be no net increase in stormwater runoff from any permitted site.

Harvey and Benedict responded to questions from CFE members:

- Hintz noted that such devices always fail at some point. Harvey said the County would require a binding operations and maintenance agreement, and possibly also a letter of credit with no expiration date.
- Davis asked what would happen if a device failed after 10 years. Harvey said the County would issue a notice of violation. If the landowner did not take corrective action the County would remediate the site at the owners' expense.
- Welch asked what difference do 6% and 12% impervious limits have on water quality. Harvey said he feels the proposed allowance of increased impervious surfaces in the form of permeable concrete would not harm water quality. Benedict added that Orange County is the most restrictive in the state in terms of watershed protection.
- Becker asked what motivated the County is pursuing this amendment. Benedict said many residents had complained that the rules are too stringent in some watersheds, notably the University Lake, Little River, and Cane Creek overlay districts. He explained how quickly 6% of a property could be covered with impervious surfaces—especially if roads and driveways are included. Benedict said he did not expect a lot of extra staff time would be required to implement the proposed rule change.

- Neal asked if the rule applies to commercial developments, such as shopping centers. Harvey said such developments are allowed up to 70% impervious surfaces as long as there are stormwater BMPs installed to hold the runoff.

Benedict noted that his staff is also considering developing some variation of a transfer of development rights program—or in this case a transfer of impervious surfaces.

- Sassaman said he is aware of a product (“Ecoraster”) used for construction of roads and driveways that requires little maintenance over 20 years. He showed a small prototype model of the product. Harvey said he is familiar with “GeoWeb” and other products that could be used if they were certified by an engineer.
- Gronback asked what incentive would landowners and developers have to use pervious concrete or similar products. Harvey said they would be permitted to develop more parts of their property than would otherwise be allowed. He said this rule change would provide landowners with more options. Harvey said the intent is not to provide incentives to do the right thing for protecting water quality.

Harvey said Planning staff would be making similar presentations to OWASA and the towns of Carrboro and Chapel Hill. They plan to take the draft rule change to the May 26 quarterly public hearing, then back to the Planning Board in June or July, and finally back to the board of county commissioners for consideration and potential approval.

Harvey said he and the Planning staff would welcome comments from the CFE. Sassaman asked staff to prepare a summary of this presentation and discussion for CFE consideration and development of potential comments at the May meeting.

The CFE thanked Harvey and Benedict for their presentation.

- VII. **Public Outreach** – CFE members reviewed plans to share information from State of Environment report with the general public. Shaw reported that he had sent the initial article about hydrilla in the Eno River to the *Chapel Hill News* and to *The News of Orange County*. Shaw noted that the calendar (Attachment 10) was incorrect because CFE had decided to change the subject of the May article from solar energy projects to the County’s new electric vehicle fast charger stations. Sassaman asked staff to update the calendar. Bouma said he will provide a draft of the article for review and approval.
- VIII. **Updates and Information Items** – Information on the following subjects was provided in the meeting package; selected items were highlighted for discussion: a) BOCC response to CFE annual report and work plan, b) Earth Evening (April 24, Hillsborough), c) hydrilla in the Eno River public meeting (April), d) The Nature of Orange photo contest, e) solid waste recycling program fee options, f) Governor McCrory’s budget request for NCDENR, and g) new research on nutrient pollution damage to streams.
- IX. **Adjournment** – Sassaman adjourned at approximately 9:20 pm.

Summary by Rich Shaw, DEAPR Staff

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

MEMORANDUM

To: Commission for the Environment
From: Rich Shaw
Date: May 6, 2015
Subject: Proposed Changes to Orange County Rules that Limit Impervious Surfaces

At your April 13 meeting the CFE received a presentation on proposed changes to the County's rules that limit construction of impervious surfaces on properties in water supply watersheds. CFE asked many questions as part of its discussion with the Planning staff (Michael Harvey and Craig Benedict). The CFE decided to reconsider the matter in May and decide whether to formulate comments for the Planning Board and BOCC consideration.

On April 23, 2015 the OWASA Board of Directors received a similar presentation from the Orange County Planning staff. According to the OWASA's meeting summary, OWASA's comments on the proposed changes will be submitted by letter to the County, and they will include the need for the County to have adequate technical resources and enforcement.

The following is a summary of the discussion at the CFE April 13 meeting:

Michael Harvey (Current Planning Supervisor, Orange Co. Planning & Inspections Dept.) provided an overview of proposed amendments to Orange County's rules that limit the amount of impervious surfaces for new development. Harvey said staff was directed to initiate a process to amend the ordinance to include additional opportunities for residents to modify established impervious surface limits.

Harvey said under the current rules there are two processes for allowing changes to impervious surface thresholds: 1) approval of a variance request (*only one approved in the past 10 years*), or 2) transferring the allowable impervious surface area from an adjacent property by way of a conservation easement.

Harvey said under certain circumstances the State of North Carolina allows a larger area of impervious surfaces on a property through the installation and continued maintenance of on-site stormwater retention measures, such as permeable pavement. Such a device would be designed to capture runoff and allow it to infiltrate the soil. Harvey said permeable pavement is not counted as totally impervious, which translates to an allowance for installing additional "impervious surface area."

Harvey said the board of county commissioners has directed Planning staff to evaluate how the County might incorporate language similar to what the State uses for the treatment of permeable pavement in its impervious surface calculations. He said the County considers gravel, asphalt, and concrete, along with more impenetrable building surfaces (roofs, etc.), within its current definition of impervious surfaces.

Harvey said the proposed amendment to County rules would allow permeable concrete and some other permeable surfaces to be counted as 50 percent toward the impervious surface area. The County would require an engineer to certify there would be no net increase in the stormwater runoff leaving the property. The County would also require an operations agreement be signed and recorded at the Orange County Registry. The County would also require there be annual inspections and reporting of maintenance. Finally, Harvey said the County would obtain a permanent access easement to the property in order for staff to monitor and enforce the UDO standards.

Harvey said it is his impression that a property with 8% impervious cover that includes certain best management practices would result in less stormwater runoff than a property with 6% impervious cover.

Craig Benedict (Orange County Planning Director) noted that the current watershed overlay districts were established in 1994 and in many areas of the county the standards are more stringent than the State guidelines for watershed protection areas. He agreed with Harvey that the intent of the rule change was for there to be no net increase in stormwater runoff from any permitted site.

Harvey and Benedict responded to questions from CFE members:

- Hintz noted that such devices always fail at some point. Harvey said the County would require a binding operations and maintenance agreement, and possibly also a letter of credit with no expiration date.
- Davis asked what would happen if a device failed after 10 years. Harvey said the County would issue a notice of violation. If the landowner did not take corrective action the County would remediate the site at the owners' expense.
- Welch asked what difference do 6% and 12% impervious limits have on water quality. Harvey said he feels the proposed allowance of increased impervious surfaces in the form of permeable concrete would not harm water quality. Benedict added that Orange County is the most restrictive in the state in terms of watershed protection.
- Becker asked what's motivating the County to change the rules. Benedict said many residents had complained that the rules are too stringent in some watersheds, notably the University Lake, Little River, and Cane Creek districts. He explained how quickly 6% of a property could be covered with impervious surfaces—especially if roads and driveways are included. Benedict said he did not expect a lot of extra staff time would be required to implement the proposed rule change.
- Neal asked if the rule applies to commercial developments, such as shopping centers. Harvey said such developments are allowed up to 70% impervious surfaces as long as there are stormwater BMPs installed to hold the runoff.

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- Sassaman said he is aware of a product (“Ecoraster”) used for construction of roads and driveways that requires little maintenance over 20 years. He showed a small prototype model of the product. Harvey said he is familiar with “GeoWeb” and other products that could be used if they were certified by an engineer.
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Harvey said the Planning staff would be making similar presentations to OWASA and the towns of Carrboro and Chapel Hill. They plan to take the draft rule change to the May 26 quarterly public hearing, then back to the Planning Board in June or July, and finally back to the board of county commissioners for consideration and potential approval.

Harvey said he and the Planning staff would welcome comments from the CFE. Sassaman asked staff to prepare a summary of this presentation and discussion for CFE consideration and development of potential comments at the May meeting.

The CFE thanked Harvey and Benedict for their presentation.



ORANGE WATER AND SEWER AUTHORITY

*A public, non-profit agency providing water, sewer and reclaimed water services
to the Carrboro-Chapel Hill community.*

May 6, 2015

Chair Earl McKee
Board of County Commissioners
County of Orange
Post Office Box 8181
Hillsborough, NC 27278

**SUBJECT: OWASA Comments on Orange County's Draft Changes to the Unified
Development Ordinance Regarding Impervious Surface Limits in Water
Supply Watersheds**

Dear Chair McKee:

Michael Harvey presented Orange County's draft changes to its unified development ordinance (UDO) to modify the impervious surface thresholds in water supply watersheds at the April 23, 2015 OWASA Board of Directors meeting. Thank you for the opportunity to comment on this consideration to amend the UDO. OWASA and its customers have long benefitted from the progressive watershed protection requirements implemented by Orange County and Carrboro in the University Lake and Cane Creek Reservoir watersheds. Those efforts have been guided by the technical evaluations and recommendations from local watershed management studies funded by OWASA. Orange County has planning and zoning control over about 90% of the University Lake and Cane Creek watersheds; therefore, the County's requirements will be a primary factor affecting the long-term quality of our community's existing drinking water supplies.

We commend the County's protection standards for our two watersheds as set forth in the County's UDO, as we recognize those include some of the most restrictive development densities, riparian buffer requirements, and impervious surface limits in the State. They far exceed the State's minimum statewide watershed protection requirements established under North Carolina General Statute 143-214.5 and the North Carolina Department of Environment and Natural Resources' (DENR) regulations at 15A NCAC 02B .0214.

It is our understanding that the County's UDO allows landowners to exceed their impervious surface requirements through a variance process or by transferring allowable impervious surface requirements from a neighboring property through the establishment of a conservation easement. The County is proposing to add a third option to modify the impervious surface limits in response to citizen requests to allow modest increases in the allowable limits.

As we understand it, this third potential process – if approved – would generally increase the allowable impervious surface limit for the University Lake and Cane Creek Reservoir watersheds from the current 6% limit to as much as 9%, provided that the property owner:

- a) implement an infiltration best management practice (BMP) approved by DENR;
- b) hire an engineer to evaluate the infiltration capacity of the soil and design the BMP in accordance with the State's stormwater manual;
- c) complete a stormwater operation and maintenance agreement and have the document recorded with the Register of Deeds; and
- d) assume all financial and legal responsibility for the BMP.

The County staff's draft amendments also include an increase in the allowable impervious surface limit for non-residential development within the Protected Watershed area in the University Lake watershed, which would make such requirements uniform for both the Cane Creek Reservoir and University Lake watersheds.

COMMENTS ON THE PROPOSED MODIFICATIONS TO THE UDO

1. OWASA does not believe the County's consideration to amend the UDO as currently drafted will result in "backsliding" from current water supply protection efforts. We believe the draft changes are consistent with early recommendations from watershed management studies for the University Lake and Cane Creek Reservoir watersheds, and meet the Cane Creek Watershed Management Study's two highest goals which are protecting public health, and minimizing impacts on County residents who are not OWASA customers. This conclusion is predicated on the assumption that development densities and riparian buffer requirements are not relaxed. The draft amendments would limit impervious surface at thresholds higher than currently allowed only with an infiltration BMP that would mimic the existing hydrology of the land. This combination of strategies could be as protective of water quality in the water supply reservoirs as current requirements assuming the BMP is properly designed, constructed, and maintained. Since the draft ordinance revision requires an engineer to design the BMP, it is likely that the associated BMP would be designed properly.
2. While the draft UDO requires the landowner to develop a maintenance agreement and record it with the Register of Deeds, it is critical to ensure that the required annual inspections occur. We strongly recommend that Orange County implement an ongoing program and provide the funding and staff resources necessary to ensure that the mandatory inspections and maintenance of such BMPs will occur. The program should include a process that would occur if a BMP no longer functioned properly and the owner decided not to repair or replace the BMP. We also recommend that the County evaluate staffing and funding periodically to possibly include a landowner-funded inspection program; more landowners may enroll in the program over time, and more BMPs may require repairs or replacement.
3. We recommend that 4.2.8(C)(3) clarify that a licensed engineer be required to design the BMP. This would help ensure that a professional engineer with expertise in stormwater management would design the BMP and sign and seal the design.
4. We commend Orange County for including both a protective density requirement and stringent impervious surface requirement, and believe both should remain. The density/minimum lot size provisions are the foundation of our successful local water supply protection program.

OWASA's Comments on Orange County's Draft Changes to the UDO Regarding Impervious Surface Limits in Water Supply Watersheds

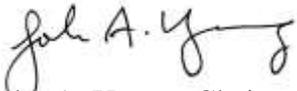
May 6, 2015

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5. We agree that if the County moves forward with this proposal, it should credit only infiltration BMPs, as proposed, that mimic the existing hydrology of the site.
6. We strongly support Orange County's approach that allows only low-density development options in our water supply watersheds. We believe this helps protect water quality as well as maintain the rural character of the County. We oppose the high-density options allowed by state regulations, other than those currently allowed for fire stations and the solid waste collection center.
7. We support the proposal to make the University Lake impervious surface limitation for non-residential development consistent with that for the Cane Creek Reservoir watershed.

Again, we appreciate the opportunity to comment on the proposed UDO changes as well as the County's ongoing efforts to protect our drinking water supplies. Please let me know if OWASA can provide additional information. If you have any questions about our comments, please contact Ruth Rouse, OWASA's Planning and Development Manager, at 919-537-4214 or at rrouse@owasa.org.

Sincerely,



John A. Young, Chair
OWASA Board of Directors

- c: Ms. Bonnie Hammersley, Orange County Manager
Mr. Craig Benedict, Orange County Planning Director
Mr. Michael Harvey, Orange County Current Planning Supervisor
Ms. Lydia Lavelle, Mayor, Town of Carrboro
Mr. David Andrews, Manager, Town of Carrboro
Mr. Mark Kleinschmidt, Mayor, Town of Chapel Hill
Mr. Roger Stancil, Manager, Town of Chapel Hill
Mr. Tom Stevens, Mayor, Town of Hillsborough
Mr. Eric Peterson, Manager, Town of Hillsborough
OWASA Board of Directors
Ed Kerwin, OWASA Executive Director
Robert Epting, OWASA General Counsel

Environmental Justice

Basic Information

Background

Environmental Justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. **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. **Meaningful involvement** means that: (1) people have an opportunity to participate in decisions about activities that may affect their environment and/or health; (2) the public's contribution can influence the regulatory agency's decision; (3) their concerns will be considered in the decision making process; and (4) the decision makers seek out and facilitate the involvement of those potentially affected.

How Did the Environmental Justice Movement Arise? The environmental justice movement was started by individuals, primarily people of color, who sought to address the inequity of environmental protection in their communities. Grounded in the struggles of the 1960's Civil Rights Movement, this movement sounded the alarm about the public health dangers for their families, their communities and themselves.

Early in 1990, the Congressional Black Caucus, a bipartisan coalition of academic, social scientists and political activists met with EPA officials to discuss their findings that environmental risk was higher for minority and low-income populations. They alleged that EPA's inspections were not addressing their communities' needs. In response, the EPA Administrator created the Environmental Equity Workgroup in July 1990 to address the allegation that "racial minority and low-income populations bear a higher environmental risk burden than the general population."

The Workgroup produced a report, "Reducing Risk in All Communities", in June 1992 that supported the allegation and made ten recommendations for addressing the problem. One of the recommendations was to create an office to address these inequities. Thus, the Office of Environmental Equity was established November 1992. The name was changed to Office of Environmental Justice (OEJ) in 1994.

On Feb 11, 1994, President Bill Clinton signed *Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations"*, to focus federal attention on the environmental and human health conditions of minority and low-income populations with the goal of achieving environmental protection for all communities. The Order directed federal agencies to develop environmental justice strategies to help federal agencies address disproportionately high and adverse human health or environmental effects of their programs on minority and low-income populations. The order is also intended to promote nondiscrimination in federal programs that affect human health and the environment. It aims to provide minority and low-income

communities access to public information and public participation in matters relating to human health and the environment. The Presidential Memorandum accompanying the order underscores certain provisions of existing law that can help ensure that all communities and persons across the nation live in a safe and healthy environment.

The executive order established an Interagency Working Group (IWG) on environmental justice chaired by the EPA Administrator and comprised of the heads of 11 departments or agencies and several White House offices. These include the EPA, the Departments of Justice, Defense, Energy, Labor, Interior, Transportation, Agriculture, Housing and Urban Development, Commerce, and Health and Human Services, the Council on Environmental Quality, the Office of Management and Budget, the Office of Science and Technology Policy, the Domestic Policy Council, and the Council of Economic Advisors. The IWG meets on a monthly basis to continue the collaborative projects. Fifteen demonstration projects, along with additional projects to be selected each year, have been chosen to depict the provision.

The statutes that EPA implements provide the Agency with authority to consider and address environmental justice concerns. These laws encompass the breadth of the Agency's activities including setting standards, permitting facilities, making grants, issuing licenses or regulations, and reviewing proposed actions of other federal agencies. These laws often require the Agency to consider a variety of factors that generally include one or more of the following: public health; cumulative impacts; social costs; and welfare impacts. Moreover, some statutory provisions, such as under the Toxics Substances Control Act (TSCA), explicitly direct the Agency to target low-income populations for assistance. Other statutes direct the Agency to consider vulnerable populations in setting standards. In all cases, the way in which the Agency chooses to implement and enforce its authority can have substantial effects on the achievement of environmental justice for all communities.

Since OEJ was created, there have been significant efforts across EPA to integrate environmental justice into the Agency's day-to-day operations. Information on these activities can be found throughout the Agency. Every regional and headquarter office has an environmental justice coordinator to serve as a focal point within the organization. This network of individuals provides outreach and educational opportunities to external as well as internal individuals and organizations.

Equitable Growth Profile of the Research Triangle Region

Summary



Foreword

The Research Triangle Region has a long tradition of growth and change, as its research universities and technologically sophisticated businesses have served markets and attracted people from across the United States and around the world. From the city cores of Raleigh and Durham to small towns and rural areas throughout the region, the communities that make up the Research Triangle have a common goal of seeing that all its people have pathways to success.

The Research Triangle Region is undergoing a profound demographic transformation. How the region responds will significantly influence future prosperity. People of color increasingly drive the region's population growth. Today, a quarter of the region's seniors are people of color, as compared to nearly half of the region's youth.

Ensuring that communities of color are full and active participants in the region's economy is critical to the next generation of growth and economic development. The region's economy could have been about \$21.8 billion stronger in 2012 if there were no economic differences by race. By developing good jobs and paths to financial security for all, creating opportunity across the region and strengthening education from cradle to career, Research Triangle leaders can put all residents on the path toward reaching their full potential, securing a brighter future for the entire region.

Over the past two years, both the Triangle J Council of Governments and the Kerr-Tar Council of Governments – the regional councils serving the greater Triangle region – have worked with diverse groups of stakeholders to identify and prioritize strategies we can pursue to sustain the region's prosperity and address its economic challenges. These Comprehensive Economic Development Strategies (CEDs) are blueprints for cooperative action to improve economic outcomes for all of our citizens.

For these strategies to succeed, we know we need to prepare for the region we will be, not the region we are today. That is why we partnered with PolicyLink and the USC Program for Environmental and Regional Equity (PERE) to produce this Equitable Growth Profile. It provides an excellent evidence-based foundation for understanding the challenges and opportunities of our region's shifting demographics. It can help our region's diverse communities focus on the resources and opportunities they need to participate and prosper. We hope that this profile is widely used by business, government, academic, philanthropic and civic leaders working to create a stronger, more engaged, and more resilient region.

Jennifer Robinson
 Jennifer Robinson
 Chair
 Triangle J COG

Elic A. Senter
 Elic Senter
 Chair
 Kerr-Tar COG

Overview

Across the country, communities are striving to put plans, policies, and programs in place that build healthier, more prosperous regions that provide opportunities for all of their residents to participate and thrive.

Equity – full inclusion of all residents in the economic, social, and political life of the region, regardless of race, ethnicity, age, gender, neighborhood of residence, or other characteristics – is essential for regional prosperity. As the nation undergoes a profound demographic transformation in which people of color are quickly becoming the majority, ensuring that people of all races and ethnicities can participate and reach their full potential is more than just the right thing to do, it is an economic imperative.

In the past, equity and growth have often been pursued on separate paths, now it is becoming increasingly clear that they must be pursued together. The latest research on national and regional economic growth, from economists working at institutions including the International Monetary Fund and Standard and Poor's, finds that inequality hinders economic growth and prosperity, while greater economic and racial inclusion fosters greater economic mobility and more robust and sustained growth.¹

Embedding equity into local and regional development strategies is particularly important given the history of metropolitan development in the United States. America's regions are highly segregated by race and income, and these patterns of exclusion were created and maintained by public policies at the federal, state, regional, and local levels. In the decades after World War II, housing and transportation policies incentivized the growth of suburbs while redlining practices and racially restrictive covenants systematically prevented African Americans and other people of color from buying homes in new developments while starving older urban neighborhoods of needed reinvestment. Many other factors – continued racial discrimination in housing and employment, exclusionary land use practices that prevent construction of affordable multifamily homes in more affluent neighborhoods, and political fragmentation – have reinforced geographic, racial, and class inequities.

Today, America's regions are patchworks of concentrated advantage and disadvantage, with some neighborhoods home to good schools, bustling commercial districts, services, parks, and other crucial ingredients for economic success, and other

neighborhoods providing few of those elements. The goal of regional equity is to ensure that all neighborhoods throughout the region are communities of opportunity that provide their residents with the tools they need to thrive.

The Equitable Growth Profile of the Research Triangle Region examines demographic trends and indicators of equitable growth, highlighting strengths and areas of vulnerability in relation to the goal of building a strong, resilient economy. It was developed by PolicyLink and the Program for Environmental and Regional Equity (PERE) to help the Triangle J and Kerr-Tar councils of governments, advocacy groups, elected officials, planners, business leaders, funders, and others working to build a stronger region.

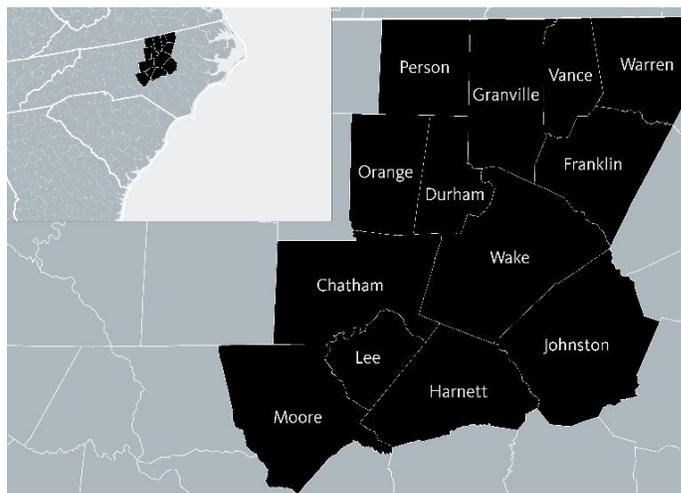
This summary document highlights key findings from the profile along with policy and planning implications.

Equitable Growth Indicators

This profile draws from a unique Equitable Growth Indicators Database developed by PolicyLink and PERE. This database incorporates hundreds of data points from public and private data sources such as the U.S. Census Bureau, the U.S. Bureau of Labor Statistics, and Woods & Poole Economics, Inc. The database includes data for the 150 largest metropolitan regions and all 50 states, and includes historical data going back to 1980 for many economic indicators as well as demographic projections through 2040. It enables comparative regional and state analyses as well as tracking change over time.

Defining the Research Triangle Region

For the purposes of this profile, we define the region as the 13-county area shown below. All data in the profile use this regional boundary, exceptions where lack of data are noted in the "Data and methods" section of the full profile.



Profile Highlights

The region is undergoing a major demographic shift

The Research Triangle is a growing region whose demographics are quickly diversifying. Since 1980, its population has more than doubled, from 900,000 to over 2 million. During the same time period, the share of residents who are people of color has risen from 29 to 39 percent. By 2044, when the nation is projected to become majority people of color, more than 50 percent of the region’s population will be people of color.

Communities of color – especially Latinos, Asians, and people of mixed racial backgrounds – are driving population growth and contributed 56 percent of net population growth over the last decade. Latinos were the fastest growing group, increasing 127 percent and gaining nearly 120,000 residents, followed by Asians, with a 107 percent growth rate and net gain of more than 38,000 residents. The region’s large Black population will remain about a fourth of the population for the foreseeable future.

The region’s demographic shift is taking place throughout all of its 13 counties. By 2040, five counties will be majority people of

color, and every county except for Moore County will be at least one-third people of color.

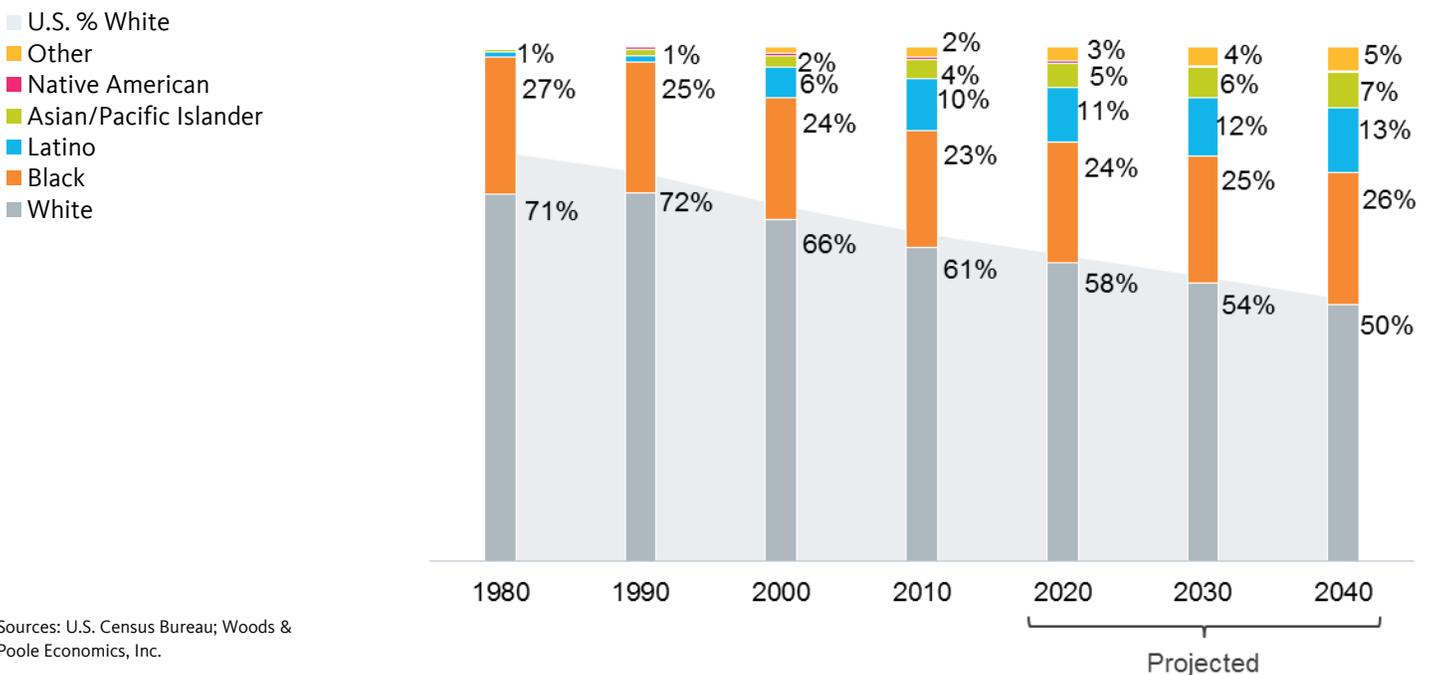
Youth are at the forefront of the region’s changing demographics, and the Research Triangle’s young residents are much more diverse than its seniors. Today, 48 percent of youth are people of color, compared with 23 percent of seniors. This 25 percentage point racial generation gap between young and old has risen very quickly, nearly tripling since 1980. This gap presents a potential economic risk for the region because a large racial generation gap often corresponds with lower investments in the educational systems and community infrastructure needed to support the economic participation of youth.²

Stronger and more inclusive growth is the key to the region’s future prosperity

The Research Triangle region has struggled to recover from the Great Recession, and while its GDP and job growth are comparable to national averages, it is growing at less than half its pre-recession rate. Additionally, growth seems to be occurring unequally throughout the region and has been concentrated in the metropolitan areas of Raleigh-Cary and

The share of people of color is projected to increase through 2040

Racial/Ethnic Composition, 1980-2040



Durham (to a lesser extent). From 2009 to 2012, jobs and GDP in Wake County grew at a rate more than double the average for the rest of the region.

In addition to these trends of slow and geographically asymmetrical growth in jobs and economic activity, the region faces several other challenges to long-term growth and prosperity. The region’s middle class is shrinking, as the economy is becoming bifurcated into low- and high-wage jobs. Inequality is on the rise and racial gaps in education, employment, income, and opportunity are wide and persistent. As the region grows more diverse, these inequities become even more serious threats to economic strength and competitiveness. Below are several key challenges the region will need to address to ensure a strong economy and a better shot at returning to the high growth seen prior to the recession.

Lower levels of higher education for communities of color

A strong education is central to labor market competitiveness in today’s knowledge- and technology-driven economy, but a growing segment of the Research Triangle’s workforce lacks the education needed for the jobs of the future. According to the Georgetown Center for Education and the Workforce, 42 percent of all jobs in North Carolina will require an associate’s degree or higher by 2020. Today, only 33 percent of Blacks and 37 percent of U.S.-born Latinos – the region’s fastest-growing group – have that level of education. The achievement gap has deep roots in public education systems, and looking at the share of working-age adults without a high school diploma in the region, we see that African American, Native American, and all

Latinos (but especially immigrants), are much less likely to have high school degrees than Whites.

The middle class is being squeezed

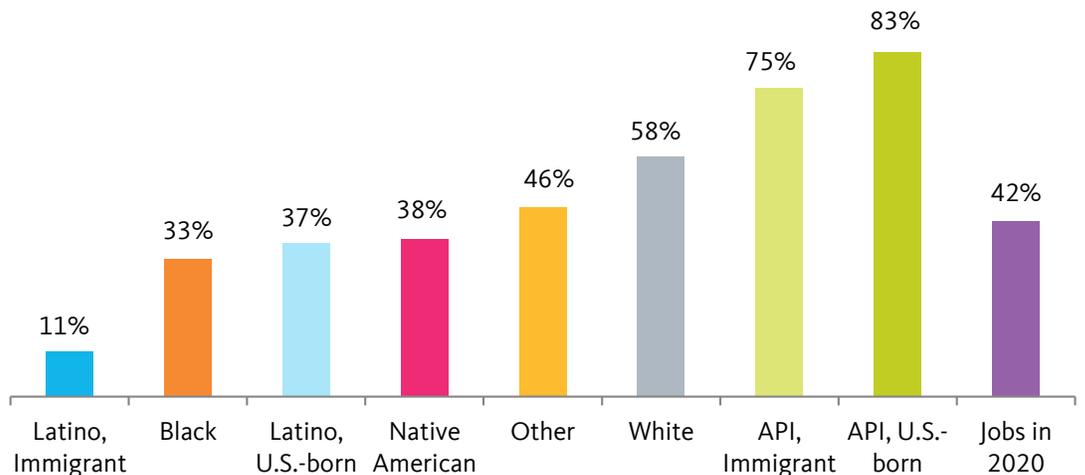
A strong middle class is the foundation for a strong regional economy, but the Research Triangle region’s middle class is being squeezed while inequality is on the rise. Since 1990, middle-wage jobs in the region have not kept pace with population growth, and grew less than half the rate of low- and high-wage jobs. Additionally, a disproportionate share of middle-class job gains have been concentrated in urban areas, with Durham County contributing 37 percent of the increase in middle-class jobs but only 10 percent of the increase in the region’s population. And while wages for low-wage jobs have increased 17 percent over the past two decades, that is less than half the rate of increase for high- and middle-class jobs in the same time period. This also has a disproportionately negative impact on people of color since they are more likely to work in low-wage jobs. The increasing diversity of the middle class is a more promising indicator. Though the middle class does not yet fully represent the region’s demographic diversity, its diversification does provide some evidence for the economic inclusion of emerging Latino and Asian populations.

Racial economic gaps

Across a host of indicators including employment, wages, poverty, working poor rates, and access to “high-opportunity” occupations, people of color fare worse in the Research Triangle labor market than their White counterparts. These racial economic gaps remain even after controlling for education,

Raising educational attainment among the region’s communities of color is critical to building a prepared workforce

Share of Working-Age Population with an Associate’s Degree or Higher by Race/Ethnicity and Nativity, 2012, and Projected Share of Jobs that Require an Associate’s Degree or Higher, 2020



Sources: Georgetown Center for Education and the Workforce; IPUMS. Universe for education levels of workers includes all persons ages 25 through 64. Note: Data for 2012 by race/ethnicity/nativity represent a 2008 through 2012 average and are at the regional level; data on jobs in 2020 is at the state level for North Carolina. API refers to Asians and Pacific Islanders.

which reveals the persistence of racial barriers to economic opportunity – including overt discrimination as well as more subtle forms of exclusion that are embedded into institutions and systems. However, not all people of color are equally affected, and many barriers seem to disproportionately affect Blacks and Latinos.

While overall unemployment in the Research Triangle region is lower than the national average, Latinos, people of other and mixed races, and especially African Americans have much higher rates of unemployment. The region’s African American workers face higher unemployment rates than their White and Latino counterparts at every education level, and both Black and Latino residents earn lower wages than Whites at every education level. Wage disparities persist even among highly educated workers, with college-educated Blacks and Latinos earning \$7/hour and \$11/hour less than their White and Asian counterparts, respectively.

Poverty and the challenge of a growing number of people who are among the working poor (defined here as working full-time for an income below 200 percent of the poverty level) are both on the rise in the region and are most severe for communities of color. One in three Latinos and one in five African Americans

now live below the poverty level, compared to less than one in ten Whites. Latinos in the region are more than six times as likely to be working poor than Whites. Poverty is also becoming entrenched in rural and inner city areas, leaving those at the fringes and the heart of the region most vulnerable.

Disconnected youth

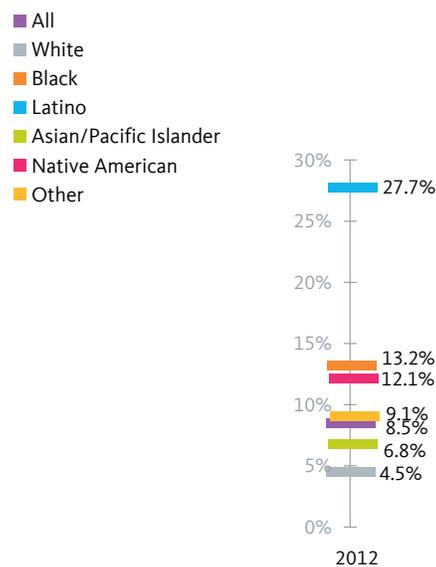
The region’s future quite literally depends on the ability of its youth to power its economy in the years to come. Although the fact that more of the region’s youth are getting high school degrees than in the past is a positive sign, the number of “disconnected youth” who are neither in school nor working is also on the rise. In the region, 30,000 youth are currently disconnected, nearly 60 percent of whom are Black and Latino. On the positive side, dropout rates have improved significantly over the past decade for Blacks and Latinos, although nearly half of Latino immigrant youth still drop out of high school.

An uneven geography of opportunity and prosperity

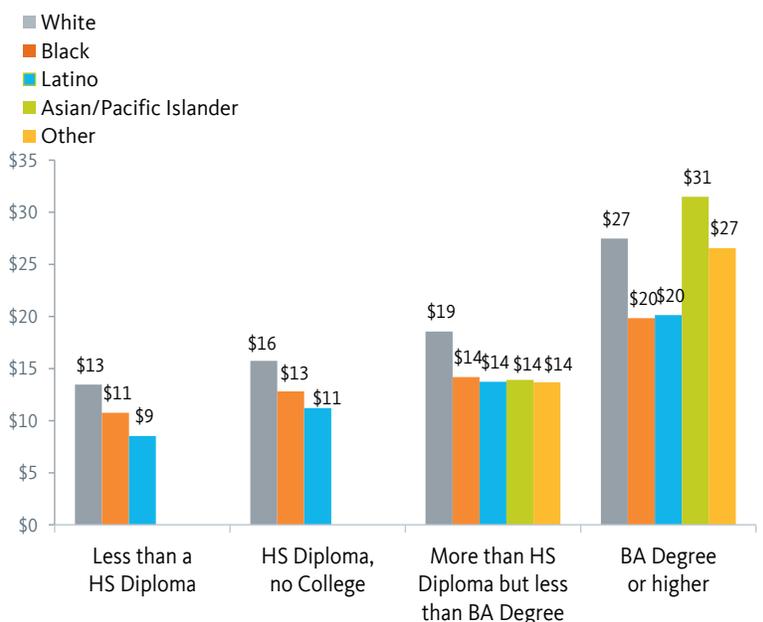
While the Research Triangle is experiencing renewed growth, prosperity is not distributed evenly in the region. Many rural and inner city areas suffer from a lack of car access and limited transportation choices, with Warren and Vance counties having at least 10 percent of households without a vehicle. Poverty is

The region’s African Americans and Latinos earn disproportionately low wages and are more likely to be working and poor

Working Poor Rate by Race/Ethnicity, 2012



Median Hourly Wage by Educational Attainment and Race/Ethnicity, 2012



Source: IPUMS. Universe includes the civilian non-institutional population ages 25 through 64. Note: Data represent a 2008 through 2012 average.

Source: IPUMS. Universe includes civilian noninstitutional full-time wage and salary workers ages 25 through 64. Note: Wages for Asians and Others with a HS diploma or less are excluded due to small sample size. Data represent a 2008 through 2012 average. Dollar values are in 2010 dollars.

also highest in major cities and on the outer northeast edges of the region. And while rent burden (households spending 30 percent or more of income on rent) is persistent throughout the region, it is more prevalent in these same areas. Not coincidentally, communities of color are highly concentrated in these same outer fringes and inner boroughs. Blacks and Latinos stand out as having significant obstacles to economic success, even once adjusted for education. Among those with a bachelor’s degree, only 59 percent of Blacks and 46 percent of Latino immigrants have access to “high-opportunity” jobs that offer good prospects for future growth, while nearly three-quarters of Whites and over 80 percent of Asians have access to those same jobs.

Racial economic inclusion would strengthen the economy

Rising inequality and racial gaps in the region are not only bad for communities of color – they also hinder the whole region’s economic growth and prosperity. According to our analysis, if there were no racial disparities in income, the region’s GDP would have been \$21.8 billion higher in 2012. Unless racial gaps are closed, the costs of inequity will grow as the Research Triangle becomes more diverse.

Implications

The Research Triangle region’s growing, diverse population is a major economic asset that will help the region compete in the

global economy – if its leaders invest in ensuring all residents can connect to good jobs and contribute their talent and creativity to building a strong next economy. Our data analysis suggests focusing on the following goals to spur more equitable growth in the region. Below we describe each goal and share strategies that regional leaders might pursue to advance them.

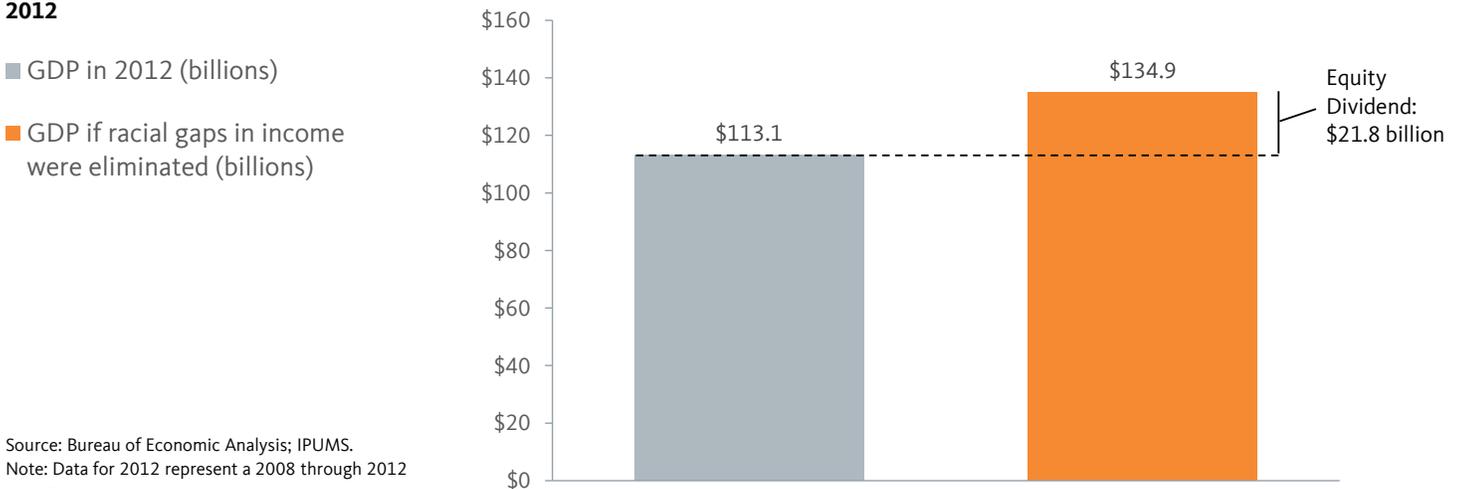
Grow good jobs and create pathways into them for workers facing barriers to employment

The region’s higher levels of unemployment and lower levels of educational attainment for many members of its communities of color call for a strong focus on creating on-ramps to good, family-supporting careers for these populations. A robust strategy for growing new good jobs and connecting workers to them is critical for the region’s future economic prosperity. Local economic and workforce development efforts should be focused on the sectors and occupations that show signs of strength and pay living wages. This can help create the “high-opportunity” jobs that anchor a broad middle class. There are several promising approaches to building pathways, including the following:

- Implement sectoral workforce strategies that connect workers with low education levels to high-quality training programs that lead to gainful employment in growing sectors of the economy. Such approaches are a win-win for employers who need access to skilled workers as well as workers seeking employment.³

The Research Triangle Region’s GDP would have been \$21.8 billion higher in 2012 if there were no racial disparities in income.

Actual GDP and Estimated GDP without Racial Gaps in Income, 2012



- Target spending and investments to support regional equity initiatives of local governments, school districts, nonprofits, and businesses. Focus on providing affordable housing and well-connected transit systems to link residents – particularly in rural counties – to employment centers. Take measures to prevent better-connected low-income households in central cities from displacement.
- Connect underrepresented workers to good jobs and careers through targeted local hiring strategies, apprenticeship programs, and post-secondary job-training programs.
- Remove barriers and implement strategies to help minority-owned businesses expand. This can create employment pathways for people who are jobless because these firms tend to hire more employees of color and people living in the in the community.
- Leverage the economic power of large anchor institutions, like hospitals and universities, for community economic development. These anchors can develop intentional strategies to hire jobseekers facing barriers to employment, create on-the-job training opportunities, and purchase more goods and services from local- and minority-owned businesses who provide local jobs, as Cleveland’s anchor effort has done.
- Support policies that expand job opportunities for formerly incarcerated individuals, such as Durham’s successful campaign to Ban the Box (see below). These policies remove questions about criminal convictions and incarceration at initial stages of the hiring process, so that employers first get an opportunity to learn about a candidate’s experience rather than automatically ruling the person out.

Durham removes barriers to employment for people with records.

Since the City of Durham, North Carolina, passed a “Ban the Box” policy in 2011, the proportion of new hires with a criminal record has increased from 2 percent to more than 15 percent, with no increase in workplace crimes. The policy removes questions about prior convictions from job applications, allowing an applicant to present his or her qualifications first. Nationally, more than 10 states, 60 cities and counties, and major employers like Walmart and Target have “banned the box.” Read more at <http://www.ncjustice.org/?q=second-chance-alliance/ban-box-second-chance-fair-employment>.

Raise wages and increase financial security

Policies that ensure strong and rising wages, especially for low-wage earners, can reduce working poverty and increase financial security, while bolstering the economy by increasing

household incomes and spending. At \$7.25 per hour, North Carolina’s minimum wage is the same as the federal minimum, and conservative estimates suggest that North Carolina families need more than twice that much to make ends meet. North Carolina’s local governments have passed living wage laws to ensure that city and county governments pay their employees enough to cover their basic expenses, and seven localities have done so.⁴ Durham’s law, for example, sets the minimum wage at 7.5 percent above the poverty level, currently \$12.17 per hour.⁵ Certification is another approach: Just Economics runs a Living Wage Certification Program that has identified and promoted more than 300 companies that pay at least \$12.50 an hour. Portland, Oregon, has promoted the growth of Certified B Corporations: companies that meet standards of social and environmental performance, accountability, and transparency.⁶ Outside of North Carolina, some jurisdictions have incentivized living wages in their criteria for government contracts or economic development subsidies.

Municipalities in the region should consider these tools to raise the floor for its low-wage workers and ensure employers it does business with are providing good jobs. Additionally, there are several other tools to boost financial security, such as providing children’s savings accounts that give low-income children a way to save for college or retirement, or ensuring all families have access to a mainstream bank account. Municipalities should also make strides in addressing wealth gaps by creating programs to save or invest their earned income tax credits (EITC), similar to the Save USA program in New York City, which allows qualifying recipients the opportunity to save and earn returns on their savings.⁷ Finally, tax policies should be reformed to shift away from reliance on regressive sales tax and more toward progressive income taxes.

Build communities of opportunity throughout the region

All neighborhoods throughout the region should provide their residents with the ingredients they need to thrive, and also open up opportunities for low-income people and people of color to live in neighborhoods that are rich in opportunity (and from which they’ve historically been excluded). Coordinating transportation, housing, and economic development investments in ways that expand opportunity for struggling urban neighborhoods and rural areas is an important strategy to address geographic disparities in the region. Counties throughout the region – particularly those facing the highest rates of rent burden – need to provide much more affordable rental housing in order to provide low-wage workers with an opportunity to live near work and reduce their commute time

and associated costs. Similarly, making transportation investments that increase mobility and access to jobs for low-income, transit-dependent residents addresses a critical barrier to employment for workers and expands employers' access to workers. Addressing lingering racially discriminatory housing and lending practices and enforcing fair housing laws are also critical to expanding opportunity for all.

Denver invests in affordable homes near transit. In 2004, voters in the Denver metro approved a sales tax increase to fund and expand its regional transit system to include 122 miles of new commuter and light rail, 57 new transit stations, 18 miles of bus rapid transit, and more bus connections across suburbs. To leverage the transit investment to connect low-income residents to jobs and economic opportunities, the City and County of Denver launched a Transit-Oriented Development Fund in 2010 to preserve and build housing near the new transit stops. In 2014, the fund was expanded to six counties in the region with a goal of adding 2,000 affordable homes near transit. Learn more at <http://www.enterprisecommunity.com/denver-tod-fund>.

Ensure education and career pathways for all youth

Ensuring that all youth in the region, including African Americans, Latinos, Asians, Native Americans, and youth with mixed racial backgrounds can access a good education that leads to a career is critical to developing the human capital to power the Research Triangle's economy in the future. Policies and investments to strengthen public preK-12 education are particularly important given the region's quickly growing racial generation gap and the need for a productive, healthy workforce to support the growing senior population. In addition, the Triangle's rising number of disconnected youth and high share of immigrant youth without high school degrees signal the need for intentional strategies to ensure all youth can successfully complete high school and enter college or another job-training program. Key strategies include the following:

- Strengthen the preK-12 public school system by ensuring sufficient and equitable funding for schools attended by lower-income students.
- Implement universal preschool for all three- and four-year-olds. Studies show that high-quality preschool increases lifetime earnings, boosts high school graduation rates, and decreases incarceration.⁸
- Invest in "cradle-to-career" efforts (such as Promise Neighborhoods) that provide children and families living in low-income neighborhoods with education, health, and

social supports from birth to college to career.⁹

- Replace overly harsh "zero tolerance" school discipline policies with strategies focused on positive behavior support and restorative justice to lower suspension and expulsion rates and reduce the number of disconnected youth.
- Create high-quality after school and youth development activities that provide learning opportunities outside of the school day.
- Increase the availability of apprenticeships, career academies, college scholarships, and other education and training supports that provide work experience and connections to keep more youth on the track to graduation, college, and careers.

Promise Neighborhoods help youth beat the odds. Promise Neighborhoods is an interdisciplinary, place-based initiative modeled after the Harlem Children's Zone that works with more than 50 communities to ensure that all children receive the educational, health, and community supports needed to successfully transition from cradle to college and career. Using a disciplined approach, Promise Neighborhoods critically assess how to use cross-sector partnerships to not only build programs, but also rebuild systems. The Northside Achievement Zone, for example, is focusing on 2,250 children living in a one-square-mile area in north Minneapolis where 90 percent of children live in poverty. An analysis found that 60 percent of the children in the program were prepared for school, compared with 35 percent in the broader community.¹⁰ Learn more at promiseneighborhoodsinstitute.org.

Bridge the racial generation gap

Bridging the racial generation gap between youth of color and a predominantly White senior population will be critical to the region's future success. In addition to ensuring a strong public education system, the region will need to prepare for a growing aging population (both from aging and migration) in ways that advance the shared interests and needs of both generations.

Opportunities include the following:

- Strengthen the elder care sector and ensure seniors can age with dignity by securing living wages, benefits, and adequate training and standards for care workers.
- Plan for multigenerational communities that allow the elderly to age in place while providing safe and healthy environments for families to raise children.
- Invest in multigenerational community facilities and public spaces (for example, schools that include facilities for seniors) to encourage social interactions across generations.

- Build intergenerational alliances, coalitions, and campaigns (like the Caring Across Generations campaign) to move forward these efforts.
- Support measures that ensure that employees have the opportunity to take time off from work to care for themselves or their families without the risk of losing their jobs, so that they can balance work and family obligations.

Caring Across Generations Campaign advocates for the rights of seniors and their care workers.

The Caring Across Generations campaign is a national movement to bring together families, workers, and others to transform the care industry and ensure seniors and care workers can live with dignity. In Illinois, Missouri, Ohio, and elsewhere, the campaign builds broad coalitions to make care work visible, highlighting its value to the overall economy and the support it provides families. Caring Across Generations' policy reforms include increasing access to in-home care for Medicaid recipients and ensuring care jobs pay a living wage and provide benefits, training opportunities, and a pathway to citizenship. Learn more at www.caringacross.org.

Ensure diverse civic participation and leadership

Given the region's rapid demographic shifts that are being driven by the increasing diversity of the youth population, it is important for regional leaders in every sector to proactively take steps to ensure opportunities for communities of color to participate in decision making and leadership. Strategies to build diverse leadership include the following:

- Create a durable regional equity network or collaborative of leaders across race, age, issue areas, and geography to advance equitable growth strategies and policies.
- Facilitate active engagement by all racial and ethnic communities in local and regional planning processes by implementing best practices for multicultural engagement (e.g., translation services, provision of child care during meetings, etc.).
- Support leadership development programs (such as the Boards and Commissions Leadership Institute), including youth-focused programs, to help neighborhood, organizational, and civic leaders build their leadership and capacity to serve in government and on decision-making bodies.

Boards and Commissions Leadership Institute trains the next generation of leaders. Since 2010, Urban Habitat's Boards and Commissions Leadership Institute has been training leaders from underrepresented San Francisco Bay Area communities to serve on decision-making bodies. The Institute empowers residents to become leaders on the issues that have the most direct impact on their neighborhoods: transportation, housing, jobs, and more. Graduates have won 35 seats on priority boards and commissions, including planning commissions, housing authorities, and rent boards. The program is being replicated in the Twin Cities, Sacramento, and elsewhere. Learn more at urbanhabitat.org/leadership/bcli.

Conclusion

Across the region, leaders in the public, private, and nonprofit sectors are already taking steps to connect its more vulnerable communities to educational and economic opportunities. To secure a bright future, the Research Triangle region needs to implement a growth model that is driven by equity – just and fair inclusion into a society in which everyone can participate and prosper. Through concerted investments and proactive policies, the region can leverage its rising diversity as an economic asset, and prepare all of its workers to lead it into the next economy.

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Equitable Growth Profiles are products of a partnership between PolicyLink and PERE, the Program for Environmental and Regional Equity at the University of Southern California.

The views expressed in this document are those of PolicyLink and PERE, and do not necessarily represent those of Triangle J Council of Governments and Kerr Tar Regional Council of Governments.

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

MEMORANDUM

To: Commission for the Environment
From: Rich Shaw
Date: May 6, 2015
Subject: Earth Evening 2015

The Commission for the Environment participated in the annual Earth Evening event at River Park in downtown Hillsborough this past Sunday (April 24).

This was the third year that DEAPR has organized this event, but the first CFE booth to help educate citizens about such things as land conservation, surface and ground water protection, air quality, and *Things You Can Do to Improve* the natural environment in our community. There were display copies of the CFE's State of the Environment report along with cards listing the web address for accessing the report.

Thanks to Lydia Wegman and Lynne Gronback and her Cedar Ridge High School students for volunteering their time to engage the public and communicate this information.



One of many hands-on activities for children



A young boy navigates through the Hydrilla "Tunnel of Terror"

April 29, 2015

Hydrilla in the river

Environment
Rich Shaw

Editor's note: *This is the first in a series by the Orange County Commission for the Environment, a volunteer advisory board to the Board of County Commissioners. For more information see the Orange County State of the Environment 2014 report at nando.com/17s*

Problems caused by non-native, invasive aquatic plant species that flourish in many rivers and lakes in the southern United States are increasing.

Many invasive plants were originally brought to the United States for use in household aquariums or ornamental ponds; they were then introduced to the environment when the aquariums were cleaned, or when flooding occurred at aquatic plant nurseries, ornamental ponds, or water gardens. In some cases, aquatic invasive plants have been intentionally introduced in a mistaken attempt to improve fish habitat. They can spread via boats, wind, aquatic birds, and through the natural movement of water.

Hydrilla (*Hydrilla verticillata*) is an invasive, submerged aquatic weed that is native to Asia. It reproduces and spreads through a variety of methods including the rooting of vegetative fragments, tubers (formed at the end of root masses), winter buds, and seeds. Tubers can remain viable for seven years or longer. It is illegal to transport, grow, or sell hydrilla in North Carolina.

Invasive aquatic plants in Orange County include hydrilla, parrot feather, creeping water primrose, brittle naiad, and alligator weed. The presence of hydrilla in the Eno River is the first documented occurrence of this invasive plant in a free-flowing river system within North Carolina. The Eno is considered one of the most important rivers in the state, with at least 16 special-status aquatic plant and animal species. Many of those species are now threatened.

Hydrilla was first noted in the Eno River State Park in 2005. Since then, it has spread so dramatically that park staff considers it the main management problem in the park. Hydrilla can impair fish communities, out-compete native aquatic vegetation, and impede swimming, boating and fishing. Hydrilla has also been linked to Avian Vacuolar Myelinopathy, a syndrome that is fatal for waterfowl, including birds of prey such as bald eagles that feed on AVM-affected waterfowl.

Hydrilla was detected in the West Fork Eno Reservoir in 2008 and even earlier in Lake Orange along the East Fork Eno River. Repeated management efforts have been undertaken to control this plant. The Orange Alamance Water System has found both hydrilla and parrot feather in Corporation Lake, and has also taken steps to control the spread of these plants. The Orange Water and Sewer Authority has detected alligator weed and brittle naiad in Cane Creek Reservoir, as well as creeping water primrose in University Lake.

What can be done

The Eno River Hydrilla Management Task Force has been working since 2007 to evaluate and address this situation.

The task force will conduct a two-year pilot study to test the efficacy of using an EPA-approved herbicide to manage hydrilla within a section of the Eno River.

A public information open house will be held at 6 p.m. tonight, April 29, at the Whitted Building, 300 West Tryon Street in Hillsborough.

Rich Shaw is Orange County's land conservation manager.

Project will take on invasive river plant

Hydrilla is a nuisance for boaters, swimmers and fishermen

By RICHARD STRADLING
rstradling@newsobserver.com

HILLSBOROUGH A task force of federal, state and local officials will hold a public information meeting in Hillsborough on Wednesday to describe a two-year project to use an herbicide to kill the invasive plant hydrilla in a section of the Eno River.

Hydrilla is a submerged spiny plant from Asia that grows in tight mats, becoming a nuisance for boaters, swimmers and recreational fishermen. It often suffocates native vegetation and animals such as mussels, snails and fish and can clog intake pipes for drinking water and irrigation.

The Eno River Hydrilla Management Task Force plans to begin using a federally approved herbicide within Eno River State Park this summer and to monitor its effectiveness against hydrilla. The plant

Hydrilla meeting

The Eno River Hydrilla Management Task Force will hold an informal, open house-style meeting at 6 p.m. on Wednesday in Conference Room 230 in the Whitted Building at 300 West Tryon Street in Hillsborough.

was first discovered in the park in 2005, and the task force was formed to study and combat it two years later.

Removing the plants by hand doesn't work well, because hydrilla grows so fast, Rob Emens, manager of the aquatic weed control program with the N.C. Department of Environment and Natural Resources, said last fall. Emens noted that Eno River State Park organized a volunteer project to weed out a section of the Eno in 2011 but that a month later the river was inundated again.

Hydrilla was initially brought to the United States as an aquarium plant and was first discovered in the wild in North Carolina in Wake

SEE **HYDRILLA**, PAGE 6A

April 25, 2015

News + Observer

Chapel Hill News

HYDRILLA

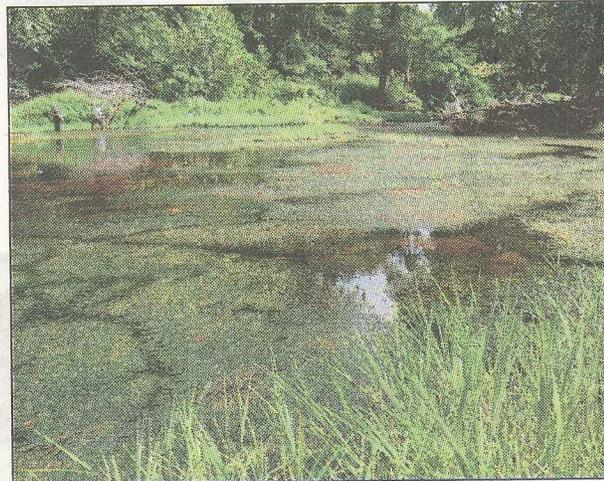
CONTINUED FROM PAGE 2A

County's Umstead State Park in 1980. It later appeared in Lake Orange and West Fork Eno Reservoir before moving downstream into the Eno River as far as U.S. 501.

The plant spreads from one body of water to another primarily when fragments get caught on boats and trailers and moved.

Researchers at N.C. State University and the N.C. Division of Parks and Recreation estimated last fall that the Eno hydrilla infestation is spreading downriver at a rate of up to one mile per year and that the plant could begin to hamper boating and other recreational activities in Falls Lake in about 12 years.

The city of Raleigh is watching hydrilla's movement toward Falls Lake,



SUBMITTED PHOTO

Hydrilla in the Eno River in Durham.

which is Wake County's largest source of drinking water. City officials say their intake pipes are 40 feet deep, below where the plant flourishes, and shouldn't get clogged.

Before settling on herbicides, the task force has considered other remedies, in-

cluding introducing grass carp, which have helped in West Fork Eno Reservoir. Herbicides have been used to control hydrilla in many lakes in the state but have not been used in a river like the Eno, according to an environmental assessment done for the task force.

**ORANGE COUNTY
BOARD OF COMMISSIONERS**

ACTION AGENDA ITEM ABSTRACT

Meeting Date: April 21, 2015

**Action Agenda
Item No.** 7-a

SUBJECT: Solid Waste Program Fee Recommendation - Solid Waste Advisory Group

DEPARTMENT: Solid Waste Management

PUBLIC HEARING: (Y/N)

No

ATTACHMENT(S):

- 1) Memorandum from Town and County Staff
- 2) Funding Option Detail Sheets
- 3) Solid Waste Funding Options Spreadsheet

INFORMATION CONTACT:

Bonnie Hammersley, 919-245-2300
Gayle Wilson, 919-968-2885
John Roberts, 919-245-2318

PURPOSE: To receive the Solid Waste Advisory Group (SWAG) recommendation on the funding mechanism for solid waste/recycling programs and consider endorsing the fee, to then be communicated to the Towns of Carrboro, Chapel Hill and Hillsborough.

BACKGROUND: The Board of County Commissioners created a Solid Waste Advisory Group at its June 3, 2014 meeting. This multi-jurisdictional Group held its first meeting on August 25, 2014 and has been meeting regularly from that time forward. Subsequently, one representative each from UNC-CH and UNC-Healthcare were added to the Group.

The SWAG has been focusing on a new interlocal agreement for Solid Waste Management, with most of the meetings addressing recycling/convenience center funding options that will represent a major component of any subsequent interlocal agreement. Another area of discussion has been how and when to establish a citizens advisory role to the solid waste planning function. Additional focus has been on how to incorporate UNC-CH and UNC-Healthcare into an agreement and exploring opportunities for cooperation. Staffs from the towns and County have also conducted several meetings and communications throughout with regard to SWAG funding options and processes.

The County Attorney has spoken to the SWAG and has indicated that the options under consideration are consistent with state statutes. Each Town would be required to authorize the County to impose the fee within the municipalities.

A preliminary progress report by the SWAG was made at the November 20, 2014 Assembly of Governments meeting. At the SWAG's March 6, 2015 meeting, a consensus was reached to forward two funding alternatives for discussion by each of the Town elected boards and the

Board of County Commissioners. The SWAG requested that each of the Town and County governing boards discuss the two SWAG funding options and be prepared to discuss making a final decision from among the two options at the March 26, 2015 Assembly of Governments meeting. The Carrboro Board of Aldermen and Orange County Board of Commissioners discussed the issue at their March 17, 2015 meetings. The Chapel Hill Town Council discussed the issue at its March 18, 2015 meeting, and the Hillsborough Board of Commissioners is scheduled to discuss the issue at its March 23, 2015 meeting.

The Towns and County conducted substantive discussion of the options at the March 26, 2015 Assembly of Governments meeting. It was agreed that the individual governing boards would discuss the two options further among their boards and attempt to reach a consensus on one option by the end of April 2015.

At the Solid Waste Advisory Group's April 1, 2015 meeting, the SWAG endorsed Option #2 – Single County-wide Solid Waste Programs Fee. Each jurisdiction member agreed to deliver this recommendation to their respective governing board for consideration within the month of April, seeking endorsement of Option #2. If all four governing boards endorse Option #2, the Orange County Manager will proceed to incorporate this revenue mechanism into the County's Fiscal 2015/16 Budget Recommendation. The Towns of Hillsborough Board of Commissioners and Chapel Hill Town Council approved Option #2 earlier this month. The Town of Carrboro Board of Aldermen is scheduled to address the item at its April 21, 2015 meeting.

Approval of the fee will also allow County Tax Administration and Solid Waste Management Departments to complete the various preparations necessary to meet the 2015 tax billing schedule. Approval of the fee will also allow Solid Waste Management to proceed with planning for the three year phased implementation of the rural curbside recycling program.

The attached memorandum and attachments provide additional detail regarding the two proposed funding options.

FINANCIAL IMPACT: Adoption of Option #2 – Single County-wide Solid Waste Programs Fee will result in a fee rate being proposed in the Manager's proposed Fiscal 2015/16 annual budget. It is expected that the total annual revenue generated by this fee will exceed \$6,200,000. The fee will be assessed via the annual property tax bill to all improved properties in Orange County, including those properties within the Town of Mebane located in Orange County and those properties within the Town of Chapel Hill located in Durham County.

RECOMMENDATION(S): The Manager recommends that the Board:

- 1) receive the Solid Waste Advisory Group funding recommendation - Solid Waste Programs Fee (single county-wide annual fee);
- 2) endorse the fee recommendation and direct the County Manager to incorporate the fee into the proposed Fiscal 2015/16 Annual Budget; and
- 3) direct the County Manager to communicate the BOCC decision to the Carrboro, Chapel Hill and Hillsborough Town Managers and request that the Towns prepare to incorporate County authorization to assess the Solid Waste Programs Fee into their Fiscal 2015/16 Budget Ordinances.

Memorandum

To: Carrboro Board of Aldermen
Chapel Hill Town Council
Hillsborough Board of Commissioners
Orange County Board of Commissioners

From: George Seiz, Carrboro Public Works Director
Lance Norris, Chapel Hill Public Works Director
Ken Hines, Hillsborough Public Works Director
Gayle Wilson, Orange County Solid Waste Director

Subject: Solid Waste Advisory Group – Recycling Fee Recommendations

Date: March 6, 2015

The Board of County Commissioners created a Solid Waste Advisory Group at its June 3, 2014 meeting. The Group is comprised of two members each from the elected boards of the Towns and County. Additionally, there are one representative each from UNC-CH and UNC-Healthcare. This multi-jurisdictional Group held its first meeting on August 25, 2014 and has been meeting regularly from that time forward.

The SWAG has been focusing on a new interlocal agreement for recycling and solid waste services currently provided by Orange County, with most of the meetings addressing recycling/convenience center funding options. Another area of discussion has been the future role of the SWAG. Additional focus has been on how to incorporate UNC-CH and UNC-Healthcare into an agreement and exploring opportunities for cooperation. Town's and county staffs have also conducted several meetings and discussions with regard to SWAG funding options and processes.

The County Attorney has spoken to the SWAG and has indicated that the options under consideration are consistent with state statutes. Each Town would be required to authorize the county to impose the fee within the municipality.

A preliminary progress report by the SWAG was made at the November 20, 2014, Assembly of Governments meeting. At the SWAG's March 6 meeting a consensus was reached to forward two funding alternatives for discussion by each of the Town elected boards and the Board of County Commissioners. The SWAG requested that each of the Town and County boards discuss the two SWAG funding options and be prepared to discuss making a final decision among the two options at a joint meeting of the Towns and County scheduled for March 26.

Option 1 is a two part annual fee; One Comprehensive Solid Waste Program Fee for all Municipal Units - \$94/year (based on FY 14/15 budget revenue requirement), and One

Comprehensive Solid Waste Program Fee for all Rural units - \$118/year (based on FY 14/15 budget revenue requirement).

Option 1 would establish an urban fee and a rural fee that would be applied to each developed property and multi-family units throughout the county, including tax exempt properties, except for UNC-CH properties that are served by the University's separate recycling program. Option 1 would incorporate an approximate 33% solid waste convenience center costs into the Urban fee component and an approximate 66% solid waste convenience center costs into the Rural fee component.

Option 2 is a Single Comprehensive Fee - \$103/year (based on FY-14/15 budget revenue requirement) that would be applied equally to all developed properties and multi-family units throughout the county, including tax exempt properties, except for UNC-CH properties that are served by the University's separate recycling program. Option 2 would evenly distribute solid waste convenience center costs across all sectors.

Further details of the two options are provided in the attachments.

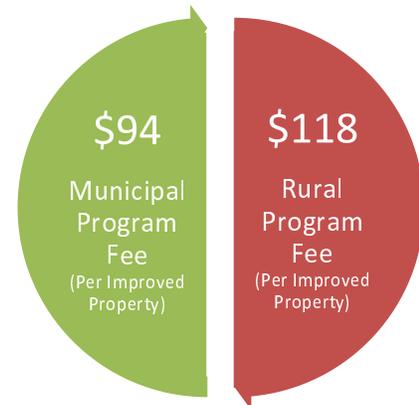
It is important that a funding decision be made in a timely manner given that such funding would have to be incorporated into the Fiscal 2015/16 budget currently being crafted, and in order for County Tax Administration and Solid Waste Management Departments to complete the various preparations necessary to meet the 2015 tax billing schedule. The SWAG, based on recommendations by staff, has indicated that a final decision should be reached by the end of April to allow time for implementation into the budget process and for the fee to be ready for billing on the 2015 property tax bills.

Town and County SWAG representatives requested that each elected board discuss and fully consider each option prior to the March 26 joint meeting. Town and County staffs are available to explain the fee options and to respond to questions.

Attachment 2

FUNDING OPTION 1

| OPPORTUNITIES |
|--|
| <ul style="list-style-type: none"> • Simplified fee structure • Easy to administer, manage, and explain • Includes phased expansion of rural curbside service, increasing recycling and waste reduction rate • Flexibility in providing services without being constrained by rigid categories <ul style="list-style-type: none"> ○ Example: If a business is located on a residential route (urban or rural) and generates recyclables in quantities similar to a residence, it can be assigned to a residential route without concern that there is not an appropriate fee category. |

**Key Factors**

- Rural curbside service is proposed to be phased in to entire unincorporated area over three year period, equalizing services by the fourth year.
 - The rural fee will increase incrementally over phasing period.
- Efforts to provide more equitable services among all the program users could be implemented over time by improving service efficiencies and availability of services.
- Single family, multi-family and developed non-residential property owners in the rural sector pay \$24 more than property owners in the urban sector.

Universal Elements for Both Options

- Undeveloped properties do not pay a fee.
- All developed properties including tax-exempt properties pay a fee.
- The fee structure is stable and predictable.
- Fee impacts for potential service expansions, improvements, and changes can be easily determined and made available for elected boards to consider.
- Some property owners may consider the proposed fee rates a significant increase because no fee for rural or urban curbside service or multi-family service has been assessed for the past two years.
- Failure of elected boards to approve a funding mechanism for the FY 2015-16 Budget may lead to suspension of services or further debiting of the solid waste landfill closure and post-closure reserves account.
- Orange County will continue to provide financial assistance for qualifying low-income residents who are unable to pay for solid waste program fees. In 2014, approximately 700 parcels were provided assistance through the County's 3R Fee Financial Assistance program.
- Funding option proposals are based on FY 2014-15 budget revenue requirements. For FY 2015-16, minor fee adjustments may be implemented to align with the actual FY 2015-16 budget revenue requirements.

FUNDING OPTION 2

OPPORTUNITIES

- Most simplified fee structure
- Easiest option to administer, manage, and explain
- Includes phased expansion of rural curbside service, increasing recycling and waste reduction rate
- Flexibility in providing services without being constrained by rigid categories is maximized.
 - Example: If a business is located on a residential route (urban or rural) and generates recyclables in quantities similar to a residence, it can be assigned to a residential route without regard to changing categories or fee rates.



Key Factors

- Rural curbside service is proposed to be phased in to entire unincorporated area over three year period, equalizing services by the fourth year.
 - The program fee will increase incrementally over phasing period.
- All developed properties pay the same amount, although eligibility for services may vary between jurisdictions and sectors.
- Efforts to provide more equitable services among all the program users could be implemented over time by improving service efficiencies and availability of services.
- This option presents a new funding paradigm and new way of viewing solid waste program funding by offering a singular fee. This holistic approach to funding eliminates any division between rural and urban boundaries, creating a truly integrated and comprehensive approach to program funding county-wide.

Universal Elements for Both Options

- Undeveloped properties do not pay a fee.
- All developed properties including tax-exempt properties pay a fee.
- The fee structure is stable and predictable.
- Fee impacts for potential service expansions, improvements, and changes can be easily determined and made available for elected boards to consider.
- Some property owners may consider the proposed fee rates a significant increase because no fee for rural or urban curbside service or multi-family service has been assessed for the past two years.
- Failure of elected boards to approve a funding mechanism for the FY 2015-16 Budget may lead to suspension of services or further debiting of the solid waste landfill closure and post-closure reserves account.
- Orange County will continue to provide financial assistance for qualifying low-income residents who are unable to pay for solid waste program fees. In 2014, approximately 700 parcels were provided assistance through the County's 3R Fee Financial Assistance program.
- Funding option proposals are based on FY 2014-15 budget revenue requirements. For FY 2015-16, minor fee adjustments may be implemented to align with the actual FY 2015-16 budget revenue requirements.

**ORANGE COUNTY
BOARD OF COMMISSIONERS**

ACTION AGENDA ITEM ABSTRACT

Meeting Date: May 5, 2015

**Action Agenda
Item No.** 7-b

SUBJECT: Orange County Solar Development Initiatives Update

DEPARTMENT: Asset Management Services,
Department of Environment,
Agriculture, Parks &
Recreation

PUBLIC HEARING: (Y/N)

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|----|
| No |
|----|

ATTACHMENT(S):
Solar Development Model Illustration

INFORMATION CONTACT:
Brennan Bouma, 919-245-2626
Jeff Thompson, 919-245-2658
David Stancil, 919-245-2522

PURPOSE: To:

- 1) receive an update and provide feedback on the County's discussions to further educate and develop solar energy initiatives (rooftop photovoltaic, ground-mounted solar arrays, solar power storage technology, etc.) within Orange County in alignment with the 2015 "Solarize" Campaigns organized by NextClimate (Orange County, Carrboro, Chapel Hill, and Hillsborough);
- 2) endorse the development of a pilot solar photovoltaic system within County facilities, beginning with the Rogers Road Community Center; and
- 3) include this proposed pilot within the 2015 Orange County "Solarize" campaigns.

BACKGROUND: Orange County is a leader in North Carolina (among both the public and private sectors) in successfully developing and delivering alternative and more sustainable energy for County facilities and assets. The success of the geothermal ground source heat pump technology within the Hillsborough east campus of public facilities is a prime example.

The Board may recall that Asset Management Services has been studying the economics of solar energy for several years and has reserved recommendation to the Board for solar photovoltaic ("PV") alternative energy investment until the economics of this technology made sense as more reasonable material and development cost structures emerged. After an initial County facility solar energy assessment and the market acceptance of new financing models, staff recommends the Board endorse pilot phase of solar energy development within County facilities. The attachment, "Solar Development Model Illustration", provides a basic guide to a solar development project using these market-accepted models.

Staff analysis has identified principles to help guide County solar infrastructure deployment. Staff recommends that the development model be piloted with County facilities with new or recently replaced roofing, adequate structural integrity to carry the panels, little or no shade, and good exposure to the South where incoming solar energy is the strongest. Pilot projects should be kept to a smaller scale for management, learning, and in order to be facilitated through Board appropriated "Energy Bank" funds. Staff has employed the "PVWatts" calculator from the National Renewable Energy Laboratory to assist in modeling, sizing, and prioritizing solar photovoltaic infrastructure investments (<http://pvwatts.nrel.gov/pvwatts.php>).

In parallel with this analysis, a team of interested residents and solar experts approached Orange County about the feasibility of installing solar panels on the Rogers Road Community Center for the benefit of the Rogers-Eubanks community. Brennan Bouma, Orange County Sustainability Coordinator, has been working closely with this group to assess the feasibility and benefits of this project as a potential pilot solar project for Orange County.

After specifically considering this location, staff recommends the Rogers Road Community Center to benefit from being the County's first pilot solar photovoltaic supported facility. Together with Rob Pinder, Executive Director of NextClimate, Brennan will present an update of the solar initiative collaboration for the Board's comment and feedback.

Background on local "Solarize" campaigns (<http://www.solarizenc.org/>)

The intent of these "Solarize" campaigns is to lower the cost of rooftop photovoltaic systems through pulling together interested households and commercial users into a group-purchasing deal. NextClimate, a local 501c (3) non-profit organizes the four Solarize campaigns that are active in Orange County (Orange County, Hillsborough, Chapel Hill, and Carrboro).

In 2014, NextClimate brought together two solar installation companies (Yes! Solar Solutions and Southern Energy Management), and two financing organizations (Admiral's Bank and Self Help Credit Union) with the mission to bring affordable solar power to the people of Orange County, Carrboro, Chapel Hill, and Hillsborough. Their efforts resulted in new solar installations on 90 homes and small businesses across Orange County in 2014.

In 2015, NextClimate is expanding its reach to create Solarize Research Triangle, bringing solar investment and benefits to RTP workplaces.

NC WARN is also running a series of "Solarize" campaigns in the Triad, Western Wake, Chatham, and Durham Counties, and there are other organizations running similar "Solarize" programs in the city of Charlotte as well as the Sandhills and Western NC regions.

Next Steps

Should the Board agree with the Manager's recommendation, staff will move forward with the solar pilot project as a part of the 2015 Orange County "Solarize" campaigns, pursue both solar investors and development partners through the appropriate statutory procurement processes, and provide ongoing progress reports to the Board. Staff projects that the initial pilot project will be completed and operational no later than December of 2015, and that this could be the first of

many facility photovoltaic solar systems providing renewable energy in lieu of less sustainable energy sources.

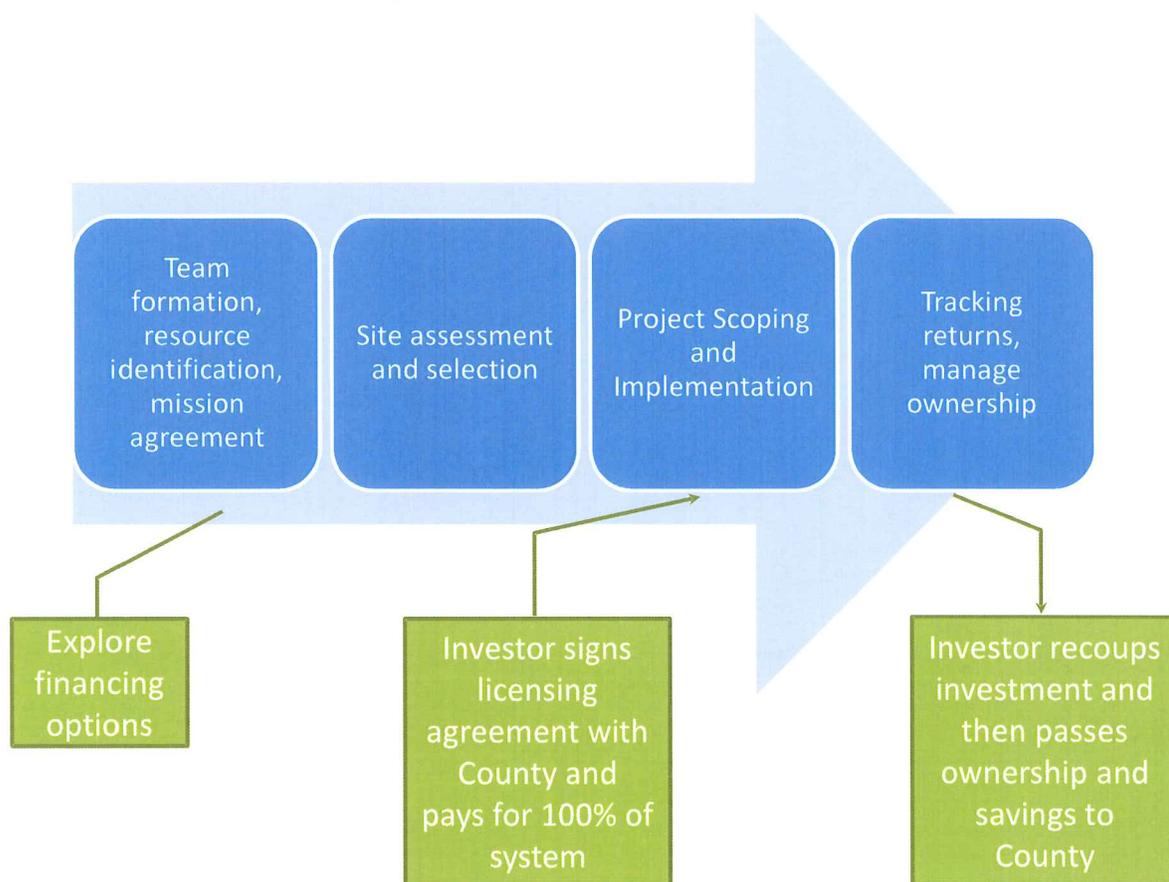
FINANCIAL IMPACT: The development model contemplates an investor development partner to contribute the entire installation cost for the system (see attachment, "Solar Development Model Illustration") after acquiring the leasehold/licensing property right to install on County property. Once the initial investment has been recouped by the investor partner, the significant utility savings provided by the system would be passed on to the County to be distributed according to a Board-adopted operating budget.

At such time that the development tax credits and other financial incentives are exhausted by the development partner(s), the County may choose to purchase the depreciated asset at its negotiated fair market value with appropriated Energy Bank funds.

RECOMMENDATION(S): The Manager recommends the Board:

- 1) receive an update and provide feedback on the County's discussions to further educate and develop solar energy initiatives (rooftop photovoltaic, ground-mounted solar arrays, solar power storage technology, etc.) within Orange County in alignment with the 2015 "Solarize" Campaigns organized by NextClimate (Orange County, Carrboro, Chapel Hill, and Hillsborough);
- 2) endorse the development of a pilot solar photovoltaic system within its County facilities, beginning with the Rogers Road Community Center; and
- 3) include this proposed pilot within the 2015 Orange County "Solarize" campaigns.

Solar Development Model Illustration



**ORANGE COUNTY
BOARD OF COMMISSIONERS**

ACTION AGENDA ITEM ABSTRACT

Meeting Date: April 21, 2015

**Action Agenda
Item No.** 7-d

SUBJECT: Additional Discussion on Funding School and County Capital Needs with a Potential November 2016 Bond Referendum

DEPARTMENT: County Manager

PUBLIC HEARING: (Y/N)

No

ATTACHMENT(S):

- 1) Decision Points
- 2) February 17, 2015 Agenda Abstract and Attachments

INFORMATION CONTACT:

Bonnie Hammersley, 245-2300
Greg Wilder, 245-2300

PURPOSE: To further discuss potentially addressing County and School capital needs with a November 2016 Bond Referendum and provide direction to staff on next steps.

BACKGROUND: In several meetings during the past year, the Board of Commissioners has discussed the possible scheduling of a bond referendum to address County and School capital needs. At the Board's January 30, 2015 Retreat, the Board directed staff to develop materials for Board consideration regarding the Board formally expressing its intent to schedule a November 2016 Bond Referendum, including a total bond amount of approximately \$125 million. The Board also directed staff to move forward with development of a process for a November 2016 Bond Referendum similar to the process utilized during the County's 2001 Bond Referendum.

At the Board's February 17, 2015 regular meeting, staff shared information from the 2001 Bond Referendum. One of the first actions taken by the Board of Commissioners for the 2001 Bond Referendum occurred in late 2000/early 2001 with the establishment and appointment of members to a Capital Needs Advisory Task Force. The purpose of the Task Force was to review County and School capital needs and provide advice to the Board concerning the elements of a proposed November 2001 Orange County bond referendum.

In preparation for a November 2016 Bond Referendum, staff proposed that the Board consider approving the creation of a 2015 Capital Needs Advisory Task Force. Items recommended to the County for inclusion in a 2016 Bond Referendum would be referred to the Task Force for review and prioritization along with other proposed recommendations.

Staff drafted 1) a possible plan for the size and membership of the 2015 Capital Needs Advisory Task Force, and 2) a proposed charge to the proposed Task Force.

A suggested composition of the Task Force was:

- Two members nominated by the Orange County Schools Board of Education;
- Two members nominated by the Chapel Hill-Carrboro City Schools Board of Education;
- One member nominated by the Orange County Parks & Recreation Council;
- One member nominated by the Commission for the Environment;
- One member nominated by the Affordable Housing Advisory Board
- One non-elected member nominated by the Partnership to End Homelessness;
- One member nominated by the Advisory Board on Aging; and
- Six-Eight members appointed at-large by the Board of Commissioners.

In addition, staff suggested the Board of Commissioners 1) consider the appointment of one elected official each from the Town of Chapel Hill, the Town of Carrboro, the Town of Hillsborough, and (possibly) the City of Mebane and 2) select the Chair (or Co-Chairs) for the Task Force.

As part of the Task Force's activities, the Board would direct that the Task Force focus on specific criteria and utilize current policies and documents to guide its work. These parameters for Task Force work were detailed in the proposed charge (attached). Staff suggested the Board also add to, or otherwise modify the suggested elements of the charge.

The Board discussed the information from staff and ultimately determined to not take any action pending the submission of priority older school renovation projects by Orange County Schools, which is expected in May 2015.

The Chair and Vice Chair recently discussed this issue again with the Manager and suggested staff bring this item forward at this time, without the OCS priority information, to allow for further Board discussion and consideration.

Staff is proposing that the Board of Commissioners discuss the attached Decision Points and determine the Board's interests in a potential November 2016 Bond Referendum, its component(s), and the County's next steps.

FINANCIAL IMPACT: There is no immediate financial impact related to the Board determining a direction regarding a potential November 2016 Bond Referendum, its component(s), and the County's next steps. It should be noted that bonds approved by voters receive more favorable interest rates if tax funds are dedicated to the payments.

RECOMMENDATION(S): The Manager recommends that the Board further discuss potentially addressing County and School capital needs with a November 2016 Bond Referendum and provide direction to staff on next steps.

ORANGE COUNTY BOARD OF COMMISSIONERS (BOCC)

DECISION POINTS

| |
|---|
| HOW SHOULD ORANGE COUNTY FUND SCHOOL AND COUNTY CAPITAL PROJECTS? |
| POTENTIAL NOVEMBER 2016 BOND REFERENDUM??? |
| Does the Board want to schedule a bond referendum? |
| If there is a bond referendum, when should the bond referendum occur? <ul style="list-style-type: none"> ▪ May 2016 or November 2016 |
| If there is a bond referendum, should it address one need, or multiple needs? |
| If there is a bond referendum, what process will be followed? And does the number of needs on the referendum affect the process? |
| Will there be a Bond Referendum Advisory Committee/Capital Needs Advisory Task Force? Does this change if there is only one need addressed via the referendum? |
| <p>If YES, what will be the:</p> <ul style="list-style-type: none"> ▪ Composition ▪ Appointment process for Advisory Committee members ▪ Process for interest groups to request funds ▪ Process for Community Input ▪ Public outreach responsibilities <p>If NO, what will be the process the County pursues?</p> |
| <p>If there is a bond referendum, will there be a Bond Education Committee? Does this change if there is only one need addressed via the referendum?</p> <p>If YES, what will be the:</p> <ul style="list-style-type: none"> ▪ Composition ▪ Appointment process for Education Committee members ▪ Public outreach responsibilities <p>If NO, what will be the process the County pursues?</p> |
| |
| |

**ORANGE COUNTY
BOARD OF COMMISSIONERS**

ACTION AGENDA ITEM ABSTRACT

Meeting Date: February 17, 2015

Action Agenda

Item No. 7-e

SUBJECT: Potential Notice of Board's Intent to Schedule a November 2016 Bond Referendum and Discussion on Proposed Creation of a Capital Needs Advisory Task Force

DEPARTMENT: County Manager

PUBLIC HEARING: (Y/N)

No

ATTACHMENT(S):

- 1) Proposed Task Force Charge
- 2) Draft General Task Force Schedule
- 3) Draft Recruitment Notice for Potential Task Force Appointees

INFORMATION CONTACT:

Bonnie Hammersley, 245-2300
Greg Wilder, 245-2300

PURPOSE: To:

- 1) Consider formally expressing the Board's intent to schedule a November 2016 Bond Referendum to address County and School capital needs;
- 2) Discuss the proposed creation of, structure, and charge for a proposed 2015 Capital Needs Advisory Task Force that would provide recommendations to the Board regarding the elements to be included in the referendum and consider approval; and
- 3) Direct the County Manager to arrange for the services of a qualified facilitator for the Task Force.

BACKGROUND: In several meetings during the past year, the Board of Commissioners has discussed the possible scheduling of a bond referendum to address County and School capital needs. At the Board's January 30, 2015 Retreat, the Board directed staff to develop materials for Board consideration regarding the Board formally expressing its intent to schedule a November 2016 Bond Referendum, including a total bond amount of approximately \$125 million. The Board also directed staff to move forward with development of a process for a November 2016 Bond Referendum similar to the process utilized during the County's 2001 Bond Referendum.

One of the first actions taken by the Board of Commissioners for the 2001 Bond Referendum occurred in late 2000/early 2001 with the establishment and appointment of members to a Capital Needs Advisory Task Force. The purpose of the Task Force was to review County and School capital needs and provide advice to the Board concerning the elements of a proposed November 2001 Orange County bond referendum.

In preparation for a November 2016 Bond Referendum, staff proposes that the Board discuss and consider approving the creation of a 2015 Capital Needs Advisory Task Force. Items

recommended to the County for inclusion in a 2016 Bond Referendum would be referred to the Task Force for review and prioritization along with other proposed recommendations.

Staff has drafted 1) a possible plan for the size and membership of the 2015 Capital Needs Advisory Task Force, and 2) a proposed charge to the proposed Task Force.

A suggested composition of the Task Force is:

- Two members nominated by the Orange County Schools Board of Education;
- Two members nominated by the Chapel Hill-Carrboro City Schools Board of Education;
- One member nominated by the Orange County Parks & Recreation Council;
- One member nominated by the Commission for the Environment;
- One member nominated by the Affordable Housing Advisory Board
- One non-elected member nominated by the Partnership to End Homelessness;
- One member nominated by the Advisory Board on Aging; and
- Six-Eight members appointed at-large by the Board of Commissioners.

In addition, the Board of Commissioners may want to consider the appointment of one elected official each from the Town of Chapel Hill, the Town of Carrboro, the Town of Hillsborough, and (possibly) the City of Mebane.

The Board of Commissioners will select the Chair (or Co-Chairs) for the Task Force.

As part of the Task Force's activities, the Board would direct that the Task Force focus on specific criteria and utilize current policies and documents to guide its work. These parameters for Task Force work are detailed in the proposed charge, which is attached. The Board may wish to add to, or otherwise modify the suggested elements of the charge.

Upon approval of the charge and appointment of the Task Force members, the charge would be delivered to the members so that they can begin reviewing the necessary information, applying the criteria, and formulating proposed recommendations to the Board of Commissioners. The Task Force would consider all recommendations and submit a prioritized list to the Board of Commissioners for consideration for bond issue.

Staff proposes that the Board of Commissioners discuss and consider approval of the proposed composition and charge for the Task Force. The Board could also provide feedback to staff and staff could subsequently present updated materials for Board approval at the March 3, 2015 regular meeting. Upon approval, the Clerk to the Board would 1) move forward with contacting the groups represented on the Task Force to solicit nominations; and 2) begin advertising for potential appointees to serve in the at large and any other positions established by the Board. All potential nominees/appointees from groups, at large or otherwise would be required to submit an application to the Clerk's Office to be eligible for appointment, with the application period being open for approximately 30 days.

Base on the timeframe outlined above, the Board could likely appoint Task Force members at its April 7 and/or April 21, 2015 Board meetings. This would permit the Task Force to hold its initial meeting in May and continue meeting in May, June and through the summer break. Staff's initial proposal is that the Task Force be directed to complete its work and provide its

recommendations to the Board of Commissioners by October 6, 2015, if not before. The Board of Commissioners would then consider establishing potential bond categories and amounts and consider the County Finance and Administrative Service Department's initial estimate of the potential tax rate impacts from the debt service of approximately \$125 million for the total bond package.

Although not pursued in 2001, the Board of County Commissioners may also want to consider creating sub-Committees of the Task Force to review specific areas associated with a bond issue. The sub-Committees could be classified into the areas such as Schools, Public Buildings, and Parks and Open Space Facilities. The sub-Committees could be limited to twelve (12) each plus staff.

As was the case in 2001, the Board may also wish to consider retaining the services of an external facilitator to assist the Capital Needs Advisory Task Force. The Task Force could receive assistance from the Dispute Settlement Center, the UNC School of Government or other resources that may be worthwhile again for the 2016 process.

Two related documents are attached for informational purposes only. They are: 1) a general schedule for the Capital Needs Advisory Task Force; 2) a copy of the draft recruitment notice for potential Capital Needs Advisory Task Force appointees.

FINANCIAL IMPACT: There is no immediate financial impact related to this item. Costs for administrative, logistical, and facilitator support for the Task Force would likely not exceed \$20,000 and could be substantially less depending on the size and structure of the Task Force and the number of meetings required.

RECOMMENDATION(S): The Manager recommends that the Board:

- 1) Express its intent to schedule a November 2016 Bond Referendum to address County and School capital needs;
- 2) Discuss the proposed creation of, structure, and charge for a proposed Capital Needs Advisory Task Force that would provide recommendations to the Board regarding the elements to be included in the referendum and consider approval; and
- 3) Direct the County Manager to arrange for the services of a qualified facilitator for the Task Force.

DRAFT

Attachment 1

ORANGE COUNTY NOVEMBER 2016 BOND REFERENDUM**ORANGE COUNTY BOARD OF COMMISSIONERS CHARGE TO
THE CAPITAL NEEDS ADVISORY TASK FORCE**

The Orange County Board of Commissioners has initially indicated its intention to appoint a Capital Needs Advisory Task Force to review school and County capital needs and provide advice to the Board concerning the composition of a proposed November 2016 Orange County bond referendum. Items recommended to the County for inclusion in this possible bond issue will be referred to the Task Force for review and prioritization along with other proposed recommendations. As part of the Task Force's appointment and its efforts, the Board directs that the Task Force focus on specific criteria and utilize current policies and documents to guide its work. These parameters for Task Force work are detailed in the charge below.

Upon approval of the charge, it will be delivered to the Task Force so that the members can begin reviewing the necessary information, applying the criteria, and formulating proposed recommendations to the Board of Commissioners. The Task Force will consider all recommendations and submit a prioritized list to the Board of Commissioners for consideration for bond issue. In its deliberations, the Board of Commissioners will consider the County's Finance and Administrative Services Department's initial estimate of the potential tax rate impacts from the debt service of approximately \$125 million for the total bond package.

The Capital Needs Advisory Task Force will be charged with the following:

- Review the capital needs for new and older schools as identified by the Orange County and Chapel Hill-Carrboro City Schools
- Review the capital needs identified by County departments in requests submitted for the 2015-2020 Capital Investment Plan

- Familiarize itself with long range school capital funding policies as adopted by the Board of Commissioners
- Familiarize itself with the Lands Legacy Program and future recommendations and plans
- Confirm the need for, and timing of, new school construction projects, considering current and projected student populations
- Provide recommendations on the possible elements of a November 2016 bond referendum with the items listed in order of importance from most important to less important
- Provide recommended sizes and estimated costs for each bond referendum element recommended by the Task Force as well as any portion of the costs shared by the proposing/recommending entities
- Ensure that each recommended element complies with the appropriate adopted policies of Orange County for Joint Capital Facilities Development, the Orange County Debt Management Policy, and the Orange County Capital Funding Policy as well as all other relevant adopted policies of the County
- Ensure that all elements are accessible to and serve residents throughout Orange County
- Complete its work by October 2015

The Board of Commissioners will consider creation of the Capital Needs Advisory Task Force in February/March 2015. The Board will consider appointment of Task Force members at regular Board meetings in April and possibly May 2015. This will permit the Task Force to hold its initial meeting in May and provide adequate time for the meetings that may be necessary for the Task Force to complete its work by October 2015.

A suggested composition of the Task Force is: two members nominated by the Orange County Schools Board of Education; two members nominated by the Chapel Hill-Carrboro City Schools Board

of Education; one member nominated by the Orange County Parks & Recreation Advisory Council; one member nominated by the Commission for the Environment; one member nominated by the Advisory Board on Aging; one non-elected member nominated by the Partnership to End Homelessness; one member nominated by Affordable Housing Advisory Board; and 6-8 members appointed at-large by the Board of Commissioners.

In addition, the Board of Commissioners may consider the appointment of one elected official each from the Town of Chapel Hill, the Town of Carrboro, the Town of Hillsborough, and (possibly) the City of Mebane.

The Board of Commissioners will select the Chair (or Co-Chairs) for the Task Force.

The Board of County Commissioners may also create sub-Committees of the Task Force to review specific areas associated with a bond issue. The sub-Committees proposed are: Schools, Public Buildings, and Parks and Open Space Facilities. The sub-Committees will be limited to twelve (12) each plus staff.

All potential nominees/appointees from groups, at large or otherwise would be required to submit an application to the Clerk's Office to be eligible for appointment.

ORANGE COUNTY NOVEMBER 2016 BOND REFERENDUM**Schedule for Capital Needs Advisory Task Force**

| | |
|--|--|
| a) BOCC Advertises for Task Force Volunteers | March 2015 |
| b) BOCC reviews applications, appoints volunteers to Task Force, and designates Chair/Co-Chairs for the Task Force | April to Early May 2015 |
| c) Organizational Meeting of Task Force | Mid to late May 2015 |
| d) Task Force & Subcommittee Meetings | May-September 2015 |
| e) Task Force Recommendations to BOCC | First Board of Commissioners Regular Meeting in October 2015 (October 6, 2015) or Before |
| f) BOCC Discussion of Task Force Recommendations | October and November 2015 |

VOLUNTEERS NEEDED

CAPITAL NEEDS ADVISORY TASK FORCE

PROPOSED NOVEMBER 2016 BOND REFERENDUM

THE ORANGE COUNTY BOARD OF COMMISSIONERS IS RECRUITING RESIDENTS TO SERVE ON A TASK FORCE WHICH WILL BE CHARGED WITH, BUT NOT LIMITED TO, THE FOLLOWING ITEMS:

- Review the capital needs for new and older schools as identified by the Orange County and Chapel Hill-Carrboro City Schools
- Review the capital needs identified by County departments in requests submitted for the 2015-2020 Capital Investment Plan
- Familiarize itself with long-range school capital funding policies as adopted by the Board of Commissioners
- Familiarize itself with the Lands Legacy Program and future recommendations and plans
- The Task Force will be divided into subcommittees to address specific areas associated with the bond issue
- Confirm the need for, and timing of, new school construction projects, considering current and projected student populations
- Provide recommendations on the possible elements of a November 2016 bond referendum with the items listed in order of importance from most important to less important
- Provide recommended sizes and estimated costs for each bond referendum element recommended by the Task Force as well as any portion of the costs shared by the proposing/recommending entities
- Ensure that each recommended element complies with the appropriate adopted policies of Orange County for Joint Capital Facilities Development, the Orange County Debt Management Policy, and the Orange County Capital Funding Policy as well as all other relevant adopted policies of the County
- Ensure that all elements are accessible to and serve residents throughout Orange County
- Complete this work by October 2015

The Board of Commissioners will consider creation of the Capital Needs Advisory Task Force in February/March 2015. The Board will consider appointment of Task Force members at regular Board meetings in April and possibly May 2015.

Therefore, please submit applications for the Task Force by 12:00 noon, March 27,¹² 2015.

The Task Force will hold its initial meeting in May and provide adequate time for the meetings that may be necessary for the Task Force to complete its work by October 2015.

You may complete or download an application online at the Orange County web site at www.orangecountync.gov. You can also contact the office of the Clerk to the Board at (919) 245-2125 or 245-2130 or by email tfreeman@orangecountync.gov for more information or to request an application.



Jeff Nash
Office of Community Relations
Chapel Hill-Carrboro City Schools
jnash@chccs.k12.nc.us
919-412-7947

April 22, 2015
For Immediate Release

U.S. Secretary of Education Names CHCCS a 2015 Green Ribbon School District

“Green Ribbon schools are an inspiration,” says Arne Duncan

Chapel Hill, NC – Managing Director of the White House Council on Environmental Quality Christy Goldfuss joined U.S. Secretary of Education Arne Duncan to announce that Chapel Hill-Carrboro City Schools is among the 2015 U.S. Department of Education Green Ribbon Schools District Sustainability Awardees.

CHCCS was nominated by the North Carolina Department of Public Instruction. The entire application can be found [here](#). The district was selected due in large part to its waste reduction, energy conservation and sustainability education integration.

“We are very pleased to be awarded the Green Ribbon as a school district,” said Superintendent Tom Forcella. “It is the direct result of much creativity, collaboration and hard work of many people – all under the leadership of Dan Schnitzer, our Sustainability Coordinator.”

In total, across the country, 58 schools and 14 districts were honored for their exemplary efforts to reduce environmental impact and utility costs, promote better health, and ensure effective environmental education, including civics and green career pathways. In addition, nine colleges and universities were honored for the Postsecondary Sustainability Award. One other North Carolina school district, Cherokee County Schools, was selected as a Green Ribbon school district. Duncan and Goldfuss made the announcement at the U.S. Department of Education, in Washington, DC.

“These honorees are compelling examples of the ways schools can help children build real-world skillsets, cut school costs, and provide healthy learning environments,” Duncan said. “U.S. Department of Education Green Ribbon Schools are an inspiration and deserve the spotlight for embodying strong examples of innovative learning and civic engagement. We also are thrilled to add institutions of higher education to the list of honorees this year for the first time in the award’s history.”

Regarding the local efforts of Chapel Hill-Carrboro City Schools, Sustainability Coordinator Dan Schnitzer commented that while the school district has seen a significant reduction in energy costs, from day one it has been about much more than saving money. “Our goal is to help students create a sustainable paradigm that includes healthy habits and lifelong sustainability skills that benefit their health, their community and the environment.”

The schools, districts, and postsecondary institutions were confirmed from a pool of candidates voluntarily nominated by 30 state education agencies, with honorees selected from 28 jurisdictions. Forty-seven percent of the 2015 honorees serve a disadvantaged student body, 22 percent are rural, and one-third of the postsecondary institutions are community colleges.

For more information about sustainability efforts in Chapel Hill-Carrboro City Schools, please contact Dan Schnitzer at dschnitzer@chccs.k12.nc.us or by phone at 919-967-8211 (ext. 28322).

###

**GENERAL ASSEMBLY OF NORTH CAROLINA
SESSION 2015**

H

1

HOUSE BILL 760

Short Title: Regulatory Reform Act of 2015. (Public)

Sponsors: Representatives Millis, J. Bell, and Riddell (Primary Sponsors).
For a complete list of Sponsors, refer to the North Carolina General Assembly Web Site.

Referred to: Environment, if favorable, Regulatory Reform.

April 15, 2015

A BILL TO BE ENTITLED

AN ACT TO PROVIDE FURTHER REGULATORY RELIEF TO THE CITIZENS OF NORTH CAROLINA BY PROVIDING FOR VARIOUS ADMINISTRATIVE REFORMS, BY ELIMINATING CERTAIN UNNECESSARY OR OUTDATED STATUTES AND REGULATIONS AND MODERNIZING OR SIMPLIFYING CUMBERSOME OR OUTDATED REGULATIONS, AND BY MAKING VARIOUS OTHER STATUTORY CHANGES.

The General Assembly of North Carolina enacts:

PART I. BUSINESS REGULATION

MANUFACTURED HOME LICENSE/CRIMINAL HISTORY CHECK

SECTION 1.1. G.S. 143-143.10A(b) reads as rewritten:

"§ 143-143.10A. Criminal history checks of applicants for licensure.

(a) Definitions. – The following definitions shall apply in this section:

(1) Applicant. – A person applying for initial licensure as a manufactured home ~~manufacturer, dealer, salesperson, salesperson~~ or set-up contractor.

...

(b) All applicants for initial licensure shall consent to a criminal history record check. Refusal to consent to a criminal history record check may constitute grounds for the Board to deny licensure to an applicant. The Board shall ensure that the State and national criminal history of an applicant is checked. Applicants shall obtain criminal record reports from one or more reporting services designated by the Board to provide criminal record reports. Each applicant is required to pay the designated service for the cost of the criminal record report. In the alternative, the Board may provide to the North Carolina Department of Public Safety the fingerprints of the applicant to be checked, a form signed by the applicant consenting to the criminal record check and the use of fingerprints and other identifying information required by the State or National Repositories of Criminal Histories, and any additional information required by the Department of Public Safety. The Board shall keep all information obtained pursuant to this section confidential.

...."

AMEND FOOD PUSHCART REQUIREMENT

SECTION 1.2. G.S. 130A-248(c1) reads as rewritten:

"(c1) The Commission shall adopt rules governing the sanitation of pushcarts and mobile food units. ~~A permitted restaurant or commissary shall serve as a base of operations for a~~



1 ~~pushcart~~. A pushcart or mobile food unit shall meet all of the sanitation requirements of a
2 permitted commissary or shall have a permitted restaurant or commissary that serves as its base
3 of operation."
4

5 **PART II. STATE AND LOCAL GOVERNMENT REGULATION** 6 **ZONING DENSITY CREDITS**

7 **SECTION 2.1.** G.S. 160A-381(a) reads as rewritten:

8 "(a) For the purpose of promoting health, safety, morals, or the general welfare of the
9 community, any city may adopt zoning and development regulation ordinances. These
10 ordinances may be adopted as part of a unified development ordinance or as a separate
11 ordinance. A zoning ordinance may regulate and restrict the height, number of stories and size
12 of buildings and other structures, the percentage of lots that may be occupied, the size of yards,
13 courts and other open spaces, the density of population, the location and use of buildings,
14 structures and land. The ordinance ~~may~~shall provide density credits or severable development
15 rights for dedicated rights-of-way pursuant to G.S. 136-66.10 or G.S. 136-66.11."
16

17 **NO FISCAL NOTE REQUIRED FOR LESS STRINGENT RULES**

18 **SECTION 2.2.(a)** G.S. 150B-21.3A(d) reads as rewritten:

19 "(d) Timetable. – The Commission shall establish a schedule for the review and
20 readoption of existing rules in accordance with this section on a decennial basis as follows:

21 ...

- 22 (2) With regard to the readoption of rules as required by sub-subdivision (c)(2)g.
23 of this section, once the final determination report becomes effective, the
24 Commission shall establish a date by which the agency must readopt the
25 rules. The Commission shall consult with the agency and shall consider the
26 agency's rule-making priorities in establishing the readoption date. The
27 agency may amend a rule as part of the readoption process. If a rule is
28 readopted without substantive ~~change~~change or if the rule is amended to
29 impose a less stringent burden on regulated persons, the agency is not
30 required to prepare a fiscal note as provided by G.S. 150B-21.4."

31 **SECTION 2.2.(b)** This section is effective when it becomes law and applies to
32 periodic review of existing rules occurring pursuant to G.S. 150B-21.3A on or after that date.
33

34 **APO TO MAKE RECOMMENDATIONS ON OCCUPATIONAL LICENSING BOARD** 35 **CHANGES**

36 **SECTION 2.3.** Pursuant to G.S. 120-70.101(3a), the Joint Legislative
37 Administrative Procedure Oversight Committee (APO) shall review the recommendations
38 contained in the Joint Legislative Program Evaluation Oversight Committee's report, entitled
39 "Occupational Licensing Agencies Should Not be Centralized, but Stronger Oversight is
40 Needed" to determine the best way to accomplish the recommendations contained in the report
41 and to improve oversight of occupational licensing boards. In conducting the review, APO shall
42 consult with occupational licensing boards, licensees, associations representing licensees, the
43 Department of Commerce, and other interested parties. The APO cochairs may establish
44 subcommittees to assist with various parts of the review, including determining whether
45 licensing authority should be continued for the 12 boards identified in the report. The APO
46 shall propose legislation to the 2016 Session of the 2015 General Assembly.
47

48 **PART III. ENVIRONMENTAL AND NATURAL RESOURCE REGULATION** 49 **AMEND ISOLATED WETLANDS LAW**

50 **SECTION 3.1.(a)** For the purposes of implementing Section .1300 of Subchapter
51 2H of Chapter 2 of Title 15A of the North Carolina Administrative Code (Discharges to

1 Isolated Wetlands and Isolated Waters), the isolated wetlands provisions of Section .1300 shall
2 apply only to a Basin Wetland or Bog and no other wetland types as described in the North
3 Carolina Wetland Assessment User Manual prepared by the North Carolina Wetland
4 Functional Assessment Team, version 4.1 October, 2010, that are not jurisdictional wetlands
5 under the federal Clean Water Act. The isolated wetlands provisions of Section .1300 shall not
6 apply to an isolated man-made ditch or pond constructed for stormwater management purposes,
7 any other man-made isolated pond, or any other type of isolated wetland, and the Department
8 of Environment and Natural Resources shall not regulate such water bodies under Section
9 .1300.

10 **SECTION 3.1.(b)** The Environmental Management Commission may adopt rules
11 to amend Section .1300 of Subchapter 2H of Chapter 2 of Title 15A of the North Carolina
12 Administrative Code consistent with Section 3.1(a).

13 **SECTION 3.1.(c)** Section 54 of S.L. 2014-120 reads as rewritten:

14 **"SECTION 54.(a)** Until the effective date of the revised permanent rule that the
15 Environmental Management Commission is required to adopt pursuant to Section 54(c) of this
16 act, the Commission and the Department of Environment and Natural Resources shall
17 implement 15A NCAC 02H .1305 (Review of Applications) as provided in Section 54(b) of
18 this act.

19 **"SECTION 54.(b)** Notwithstanding 15A NCAC 02H .1305 (Review of Applications), all
20 of the following shall apply to the implementation of 15A NCAC 02H .1305:

21 (1) The amount of impacts of isolated wetlands under 15A NCAC 02H
22 .1305(d)(2) shall be less than or equal to one acre of isolated wetlands east
23 of I-95 for the entire project and less than or equal to 1/3 acre of isolated
24 wetlands west of I-95 for the entire project.

25 (2) Mitigation requirements for impacts to isolated wetlands shall only apply to
26 the amount of impact that exceeds the thresholds set out in subdivision (1) of
27 this section. ~~The mitigation ratio for impacts of greater than one~~
28 ~~acre exceeding the thresholds for the entire project under 15A NCAC 02H~~
29 ~~.1305(g)(6) shall be 1:1 and may be located on the same parcel.~~

30 (3) ~~For purposes of Section 54(b) of this section, "isolated wetlands" means a~~
31 ~~Basin Wetland or Bog as described in the North Carolina Wetland~~
32 ~~Assessment User Manual prepared by the North Carolina Wetland~~
33 ~~Functional Assessment Team, version 4.1 October, 2010, that are not~~
34 ~~jurisdictional wetlands under the federal Clean Water Act. An "isolated~~
35 ~~wetland" does not include an isolated man-made ditch or pond constructed~~
36 ~~for stormwater management purposes or any other man-made isolated pond.~~

37 (4) Impacts to isolated wetlands shall not be combined with the project impacts
38 to 404 jurisdictional wetlands or streams for the purpose of determining
39 when impact thresholds that trigger a mitigation requirement are met.

40 **"SECTION 54.(c)** The Environmental Management Commission shall adopt rules to
41 amend 15A NCAC 02H .1300 through 15A NCAC 02H .1305 consistent with Section 54(b) of
42 this act. Notwithstanding G.S. 150B-19(4), the rule adopted by the Commission pursuant to this
43 subsection shall be substantively identical to the provisions of Section 54(b) of this act. Rules
44 adopted pursuant to this subsection are not subject to Part 3 of Article 2A of Chapter 150B of
45 the General Statutes. Rules adopted pursuant to this subsection shall become effective as
46 provided in G.S. 150B-21.3(b1) as though 10 or more written objections had been received as
47 provided by G.S. 150B-21.3(b2).

48 **"SECTION 54.(d)** The Department of Environment and Natural Resources shall study (i)
49 how the term "isolated wetland" has been previously defined in State law and whether the term
50 should be clarified in order to provide greater certainty in identifying isolated wetlands; (ii) the
51 surface area thresholds for the regulation of mountain bog isolated wetlands, including whether

1 mountain bog isolated wetlands should have surface area regulatory thresholds different from
 2 other types of isolated wetlands; and (iii) whether impacts to isolated wetlands should be
 3 combined with the project impacts to jurisdictional wetlands or streams for the purpose of
 4 determining when impact thresholds that trigger a mitigation requirement are met. The
 5 Department shall report its findings and recommendations to the Environmental Review
 6 Commission on or before November 1, 2014.

7 "SECTION 54.(e) This section is effective when it becomes law. Section 54(b) of this act
 8 expires on the date that rules adopted pursuant to Section 54(c) of this act become effective."
 9

10 AMEND STORMWATER MANAGEMENT LAW

11 SECTION 3.2.(a) Section 3 of S.L. 2013-82 reads as rewritten:

12 "SECTION 3. The Environmental Management Commission shall adopt rules
 13 implementing Section 2 of this act no later than ~~July 1, 2016~~ November 1, 2016."

14 SECTION 3.2.(b) G.S. 143-214.7 reads as rewritten:

15 "§ 143-214.7. Stormwater runoff rules and programs.

16 ...

17 (b2) For purposes of implementing ~~stormwater programs~~, State stormwater programs and
 18 local stormwater programs approved pursuant to subsection (d) of this section, all of the
 19 following shall apply:

20 (1) ~~"built-upon area"~~ "Built-upon area" means impervious surface and partially
 21 impervious surface to the extent that the partially impervious surface does
 22 not allow water to infiltrate through the surface and into the subsoil.
 23 "Built-upon area" does not include a slatted deck or the water area of a
 24 swimming pool.

25 (2) Vegetative buffers adjacent to intermittent streams shall be measured from
 26 the center of the stream bed.

27 (3) The volume, velocity, and discharge rates of water associated with the
 28 one-year, 24-hour storm and the difference in stormwater runoff from the
 29 predevelopment and postdevelopment conditions for the one-year, 24-hour
 30 storm shall be calculated using any acceptable engineering hydrologic and
 31 hydraulic methods.

32 (4) Development may occur within a vegetative buffer if the stormwater runoff
 33 from the development is discharged outside of the vegetative buffer and is
 34 managed so that it otherwise complies with all applicable State and federal
 35 stormwater management requirements.

36 (5) The requirements that apply to development activities within one-half mile
 37 of and draining to Class SA waters or within one-half mile of Class SA
 38 waters and draining to unnamed freshwater tributaries shall not apply to
 39 development activities and associated stormwater discharges that do not
 40 occur within one-half mile of and draining to Class SA waters or are not
 41 within one-half mile of Class SA waters and draining to unnamed freshwater
 42 tributaries."

43 ...

44 (d) The Commission shall review each stormwater management program submitted by
 45 a State agency or unit of local government and shall notify the State agency or unit of local
 46 government that submitted the program that the program has been approved, approved with
 47 modifications, or disapproved. The Commission shall approve a program only if it finds that
 48 the standards of the program equal ~~or exceed~~ those of the model program adopted by the
 49 Commission pursuant to this section.

50"

1 **SECTION 3.2.(c)** No later than January 1, 2016, a State agency or local
2 government that implements a stormwater management program approved pursuant to
3 subsection (d) of G.S. 143-214.7 shall submit its current stormwater management program or a
4 revised stormwater management program to the Environmental Management Commission. No
5 later than July 1, 2016, the Environmental Management Commission shall review and act on
6 each of the submitted stormwater management programs in accordance with subsection (d) of
7 G.S. 143-214.7, as amended by this section.

8 **SECTION 3.2.(d)** The Environmental Review Commission, with the assistance of
9 the Department of Environment and Natural Resources, shall review the current status of State
10 statutes, session laws, rules, and guidance documents related to the management of stormwater
11 in the State. The Commission shall specifically examine whether State statutes, session laws,
12 rules, and guidance documents related to the management of stormwater in the State should be
13 recodified or reorganized in order to clarify State law for the management of stormwater. The
14 Commission shall submit legislative recommendations, if any, to the 2016 Regular Session of
15 the 2015 General Assembly.

16 17 **RIPARIAN BUFFER REFORM**

18 **SECTION 3.3.(a)** G.S. 143-214.23 reads as rewritten:

19 "**§ 143-214.23. Riparian Buffer Protection Program: Delegation of riparian buffer**
20 **protection requirements to local governments.**

21 (a) Delegation Permitted. – The Commission may delegate responsibility for the
22 implementation and enforcement of the State's riparian buffer protection requirements to units
23 of local government that have the power to regulate land use. A delegation under this section
24 shall not affect the jurisdiction of the Commission over State agencies and units of local
25 government. Any unit of local government that has the power to regulate land use may request
26 that responsibility for the implementation and enforcement of the State's riparian buffer
27 protection requirements be delegated to the unit of local government. To this end, units of local
28 government may adopt ordinances and regulations necessary to establish and enforce the State's
29 riparian buffer protection requirements.

30 (b) Procedures. – Within 90 days after the Commission receives a complete application
31 requesting delegation of responsibility for the implementation and enforcement of the State's
32 riparian buffer protection requirement, the Commission shall review the application and notify
33 the unit of local government that submitted the application whether the application has been
34 approved, approved with modifications, or disapproved. The Commission shall not approve a
35 delegation unless the Commission finds that local implementation and enforcement of the
36 State's riparian buffer protection requirements will equal implementation and enforcement by
37 the State.

38 (b1) Deviations from Minimum State Requirements. – The Commission may approve a
39 delegation application proposing a riparian buffer width that deviates from that required by the
40 State for the type of surface body of water and the river basin or basins in which the unit of
41 local government is located only in accordance with the procedures of this section:

42 (1) Units of local government may request deviations in riparian buffer widths
43 from the Commission when submitting an application under subsection (b)
44 of this section. Deviations in buffer width enforced by units of local
45 government under an existing local ordinance may not be enforced after
46 February 1, 2016, unless the unit of local government has either received
47 approval for a deviation under the procedures set forth in this subsection or
48 has an application for deviation pending with the Commission. Under no
49 circumstances shall any existing local ordinance be enforced after June 1,
50 2016, unless the Commission has approved the deviation. For purposes of
51 this subdivision, an "existing local ordinance" is a local ordinance approved

1 prior to August 1, 2015, that includes a deviation in riparian buffer width
2 from that required by the State.

3 (2) The Commission may consider a request for a deviation in riparian buffer
4 width only if the request is accompanied by a scientific study prepared by or
5 on behalf of the unit of local government that provides a justification for the
6 deviation based on the topography, soils, hydrology, and environmental
7 impacts within the jurisdiction of the unit of local government. The
8 Commission may also require that the study include any other information it
9 finds necessary to evaluate the request for deviation.

10 (3) The Commission shall grant the request for deviation only if it finds that the
11 need for a deviation in riparian buffer width is established by the scientific
12 evidence presented by the unit of local government requesting the deviation
13 in order to meet the nutrient reduction goal set by the Commission for the
14 basin subject to the riparian buffer rule.

15 (c) Local Program Deficiencies. – If the Commission determines that a unit of local
16 government is failing to implement or enforce the State's riparian buffer protection
17 requirements, the Commission shall notify the unit of local government in writing and shall
18 specify the deficiencies in implementation and enforcement. If the local government has not
19 corrected the deficiencies within 90 days after the unit of local government receives the
20 notification, the Commission shall rescind delegation and shall implement and enforce the
21 State's riparian buffer protection program. If the unit of local government indicates that it is
22 willing and able to resume implementation and enforcement of the State's riparian buffer
23 protection requirements, the unit of local government may reapply for delegation under this
24 section.

25 (d) Technical Assistance. – The Department shall provide technical assistance to units
26 of local government in the development, implementation, and enforcement of the State's
27 riparian buffer protection requirements.

28 (e) Training. – The Department shall provide a stream identification training program to
29 train individuals to determine the existence of surface water for purposes of rules adopted by
30 the Commission for the protection and maintenance of riparian buffers. The Department may
31 charge a fee to cover the full cost of the training program. No fee shall be charged to an
32 employee of the State who attends the training program in connection with the employee's
33 official duties.

34 (e1) Restriction on Treatment of Buffer by State and Local Governments. – Units of
35 local government shall not treat the land within a riparian buffer as if the land is the property of
36 the State or any of its subdivisions unless the land or an interest therein has been acquired by
37 the State or its subdivisions by a conveyance or by eminent domain. Land within a riparian
38 buffer in which neither the State nor its subdivisions holds any property interest may be used to
39 satisfy any other development-related regulatory requirements based on property size.

40 (e2) Recordation of Common Area Buffers. – When riparian buffers are included within
41 a lot, units of local governments shall require that the buffer area be denominated on the
42 recorded plat. When riparian buffers are (i) placed outside of lots in portions of a subdivision
43 that are designated as common areas or open space, and (ii) neither the State nor its
44 subdivisions holds any property interest in that riparian buffer area, the unit of local
45 government shall attribute to each lot abutting the riparian buffer area a proportionate share
46 based on the area of all lots abutting the riparian buffer area for purposes of
47 development-related regulatory requirements based on property size.

48 (e3) Limitation on Local Government Riparian Area Restrictions. – Units of local
49 government may impose restrictions upon the use of riparian areas as defined in 15A NCAC
50 02B .0202 only within river basins where riparian buffers are required by the State. Units of
51 local government may impose restrictions upon riparian areas to satisfy State riparian buffer

1 requirements by means of: a zoning district, subdivision or development regulation;
2 comprehensive plan; policy; resolution; or any other act carrying the effect of law. The width of
3 the restricted area and the body of water to which the restrictions apply shall not deviate from
4 State requirements unless the deviation has been approved under subsection (b1) of this section.
5 For purposes of this subsection, the terms "riparian areas" and "riparian buffer areas" shall have
6 the same meaning.

7 (e4) Exception. – Neither the restrictions in subsection (e3) of this section nor the
8 riparian buffer deviation approval procedures of subsection (b1) of this section shall apply to
9 any local ordinance initially adopted prior to July 22, 1997, and any subsequent modifications
10 that have the following characteristics:

11 (1) The ordinance includes findings that the setbacks from surface water bodies
12 are imposed for purposes that include the protection of aesthetics, fish and
13 wildlife habitat and recreational use by maintaining water temperature,
14 healthy tree canopy and understory, and the protection of the natural
15 shoreline through minimization of erosion and potential chemical pollution
16 in addition to the protection of water quality and the prevention of excess
17 nutrient runoff.

18 (2) The ordinance includes provisions to permit under certain circumstances (i)
19 small or temporary structures within 50 feet of the water body and (ii) docks
20 and piers within and along the edge of the water body.

21 (e5) Definition. – For purposes of this section, "development-related regulatory
22 requirements based on property size" means requirements that forbid or require particular uses,
23 activities, or practices for some percentage of the area of a lot or for lots above or below a
24 particular size, including, but not limited to, perimeter buffers, maximum residential density,
25 tree conservation ordinances, minimum lot size requirements, or nonresidential floor area ratio
26 requirements.

27 (f) Rules. – The Commission may adopt rules to implement this section."

28 **SECTION 3.3.(b)** Part 1 of Article 21 of Chapter 143 of the General Statutes is
29 amended by adding two new sections to read:

30 **"§ 143-214.18. Exemption to riparian buffer requirements for certain private properties.**

31 (a) Definition. – For purposes of this section, "applicable buffer rule" refers to any of
32 the following rules that are applicable to a tract of land:

33 (1) Neuse River Basin. – 15A NCAC 02B .0233, effective August 1, 2000.

34 (2) Tar-Pamlico River Basin. – 15A NCAC 02B .0259, effective August 1,
35 2000.

36 (3) Randleman Lake Water Supply Watershed. – 15A NCAC 02B .0250,
37 effective June 1, 2010.

38 (4) Catawba River Basin. – 15A NCAC 02B .0243, effective August 1, 2004.

39 (5) Jordan Water Supply Nutrient Strategy. – 15A NCAC 02B .0268, effective
40 September 1, 2011.

41 (6) Goose Creek Watershed of the Yadkin Pee-Dee River Basin. – 15A NCAC
42 02B .0605 and 02B .0607, effective February 1, 2009.

43 (b) Exemption. – Absent a requirement of federal law or an imminent threat to public
44 health or safety, an applicable buffer rule shall not apply to any tract of land that meets all of
45 the following criteria:

46 (1) With the exception set forth in subsection (c) of this section, the tract was
47 platted and recorded in the register of deeds in the county where the tract is
48 located prior to the effective date of the applicable buffer rule.

49 (2) Other than the applicable buffer rule, the use of the tract complies with either
50 of the following:

1 a. The rules and other laws regulating and applicable to that tract on the
2 effective date for the applicable buffer rule set out in subsection (a)
3 of this section.

4 b. The current rules, if the application of those rules to the tract was
5 initiated after the effective date for the applicable buffer rule by the
6 unit of local government with jurisdiction over the tract and not at the
7 request of the property owner.

8 (c) If a tract of land described in subsection (b) of this section is converted to a use that
9 does not comply with subdivision (b)(2) of this section, then the applicable buffer rule shall
10 apply.

11 (d) The tract of land shall retain an exemption under subsection (b) of this section if
12 either of the following applies:

13 (1) The tract has been replatted and rerecorded after the effective date for the
14 applicable buffer rule as a result of an eminent domain action and the tract
15 continues to comply with subdivision (b)(2) of this section.

16 (2) The tract is a recombination exempt from the definition of subdivision under
17 G.S. 160A-376 or G.S. 153A-33 and recorded after the effective date of the
18 applicable buffer rule, and the recombination consists of all, or portions of,
19 parcels meeting the requirements for exemption from the applicable buffer
20 rule set forth in subsection (b) of this section.

21 (e) For purposes of meeting the requirements of subdivision (b)(2) of this section, the
22 following shall be interpreted to be "complying with the rules and other laws regulating and
23 applicable to that property on the effective date for the applicable buffer rule":

24 (1) The conversion of a tract of land that was undeveloped prior to the effective
25 date of the applicable buffer rule to a use that was permitted under
26 applicable local ordinances in effect prior to the effective date of the
27 applicable buffer rule, even if the conversion is approved after the effective
28 date of the applicable buffer rule.

29 (2) The conversion of the tract of land to a use permitted under applicable local
30 rules or ordinances that have been applied to the property since the effective
31 date of the applicable buffer rule as a result of either (i) a change in
32 regulations applied by the unit of local government with jurisdiction over the
33 tract; or (ii) a change in the unit of local government having jurisdiction over
34 the tract which results in the application of regulations to the tract after the
35 effective date of the applicable buffer rule.

36 (f) An exemption to an applicable buffer rule under this section runs with the land, if
37 notice of the exemption is recorded with the register of deeds at or prior to the next conveyance
38 of the tract or portion of the tract."

39 **§ 143-214.19. Delineation of protective riparian buffers for coastal wetlands in the Neuse**
40 **River and Tar-Pamlico River Basins.**

41 (a) The following definitions apply in this section:

42 (1) Coastal wetlands. – Any salt marsh or other marsh subject to regular or
43 occasional flooding by tides, including wind tides (whether or not the
44 tidewaters reach the marshland areas through natural or artificial
45 watercourses), provided this shall not include hurricane or tropical storm
46 tides.

47 (2) Marshlands. – The term has the same meaning as G.S. 113-229(n).

48 (b) If State law requires a protective riparian buffer for coastal wetlands in either the
49 Neuse River Basin or the Tar-Pamlico River Basin, the coastal wetlands and marshlands shall
50 not be treated as part of the surface waters but instead shall be included in the measurement of
51 the protective riparian buffer. The protective riparian buffer for any of the coastal wetlands or

1 marshlands in the Neuse River Basin or the Tar-Pamlico River Basin shall be delineated as
2 follows:

- 3 (1) If the coastal wetlands or marshlands extend less than 50 feet from the high
4 normal water level or normal water level, as appropriate, and therefore
5 would not encompass a 50-foot area beyond the appropriate water level, then
6 the protective riparian buffer shall include all of the coastal wetlands and
7 marshlands and enough of the upland footage to equal a total of 50 feet from
8 the appropriate normal high water level or the normal water level measured
9 horizontally on a line perpendicular to the surface water.
- 10 (2) If the coastal wetlands or marshlands extend 50 feet or more from the
11 normal high water level or normal water level, as appropriate, then the
12 protective riparian buffer shall be the full width of the marshlands or coastal
13 wetlands up to the landward limit of the marshlands or coastal wetlands but
14 shall not extend beyond the landward limit of the marshlands or coastal
15 wetlands."

16 **SECTION 3.3.(c)** Article 21 of Chapter 143 of the General Statutes is amended by
17 adding a new section to read:

18 **§ 143-214.27 Riparian Buffer Conditions in Environmental Permits.**

19 (a) Except as set forth in subsection (b) of this section, the Department may not impose
20 as a condition of any permit issued under this Article riparian buffer requirements that exceed
21 established standards for the river basin within which the activity or facility receiving the
22 permit is located. If no riparian buffer standards have been established for the river basin within
23 which the activity or facility receiving the permit is located, then the Department shall not
24 impose a buffer standard as a condition for a permit that exceeds the standard for the Neuse
25 River Basin set forth in 15A NCAC 02B .0233.

26 (b) The Department may impose as a condition of any permit issued under this Article a
27 more restrictive riparian buffer requirement than that established for the river basin within
28 which the activity or facility receiving the permit is located, or a riparian buffer requirement in
29 a river basin where no riparian buffer standards have been established as set forth in this
30 subsection. Prior to imposing the riparian buffer permit condition, the Commission must make
31 a finding that the condition is necessary in order to meet the nutrient reduction goals for the
32 river basin within which the activity or facility receiving the permit is located, based on
33 basin-specific evidence compiled through a scientific study prepared by or on behalf of the
34 Department that provides a justification for the permit condition based on the topography, soils,
35 or hydrology of the river basin, the environmental impacts of the activity or facility, and any
36 other information the Commission finds necessary to evaluate the need for the riparian buffer
37 permit condition."

38 **SECTION 3.3.(d)** This section becomes effective August 1, 2015.

39
40 **WILDLIFE SEARCH AND SEIZURE**

41 **SECTION 3.4.(a)** G.S. 113-136(k) reads as rewritten:

42 "(k) It is unlawful to refuse to exhibit upon request by any inspector, protector, or other
43 law enforcement officer any item required to be carried by any law or rule as to which
44 inspectors or protectors have enforcement jurisdiction. The items that must be exhibited include
45 boating safety or other equipment or any license, permit, tax receipt, certificate, or
46 identification. It is unlawful to refuse to allow inspectors, protectors, or other law enforcement
47 officers to inspect weapons, equipment, fish, or wildlife ~~that~~ if the officer reasonably believes
48 them to be possessed incident to an activity regulated by any law or rule as to which inspectors
49 and protectors have enforcement jurisdiction. ~~jurisdiction and the officer has a reasonable~~
50 suspicion that a violation has been committed. Except as authorized by G.S. 113-137, nothing
51 in this section gives an inspector, protector, or other law enforcement officer the authority to

1 inspect weapons, equipment, fish, or wildlife in the absence of a person in apparent control of
2 the item to be inspected."

3 **SECTION 3.4.(b)** The Wildlife Resources Commission shall report to the Joint
4 Legislative Oversight Committee on Justice and Public Safety by March 1, 2017, and annually
5 thereafter, on the number of complaints received against Commission law enforcement officers,
6 the subject matter of the complaints, and the geographic areas in which the complaints were
7 filed.

8 **SECTION 3.4.(c)** Section 3.4(a) of this section becomes effective December 1,
9 2015, and applies to offenses committed on or after that date. The remainder of this section is
10 effective when it becomes law.

11 **STUDY FLOOD ELEVATIONS AND BUILDING HEIGHT REQUIREMENTS**

12 **SECTION 3.5.** The Department of Insurance, the Building Code Council, and the
13 Coastal Resources Commission shall jointly study how flood elevations and building heights
14 for structures are established and measured in the coastal region of the State. The Department,
15 Council, and Commission shall specifically consider how flood elevations and coastal building
16 height requirements affect flood insurance rates and how height calculation methods might be
17 made more consistent and uniform in order to provide flood insurance rate relief. In conducting
18 this study, the Department, Council, and Commission shall engage a broad group of
19 stakeholders, including property owners, local governments, and representatives of the
20 development industry. No later than January 1, 2016, the Department, Council, and
21 Commission shall jointly submit the results of their study, including any legislative
22 recommendations, to the 2015 General Assembly.
23

24 **PART IV. SEVERABILITY CLAUSE AND EFFECTIVE DATE**

25 **SECTION 4.1.** If any section or provision of this act is declared unconstitutional or
26 invalid by the courts, it does not affect the validity of this act as a whole or any part other than
27 the part declared to be unconstitutional or invalid.

28 **SECTION 4.2.** Except as otherwise provided, this act is effective when it becomes
29 law.
30



2014 3rd Place Adult Winner, Robert Leadbetter

Contest Rules:

- 1) Photographs should feature Orange County wildlife, natural resources, landscapes, or people enjoying the parks and other outdoor environments.
- 2) All photos must be taken in a natural setting (no staged photos).
- 3) Photos must be taken in Orange County.
- 4) Orange County employees are eligible with the exception of DEAPR staff. Contest judges are ineligible.
- 5) Entries per person: Maximum of five (5) total photos.
- 6) Complete and submit a Contest Entry Form for each photo entered, form found under "Breaking News" at: <http://orangecountync.gov/deapr/>. Complete the Orange County Photo Release form for any third party appearing in your photos.
- 1) Photos must be high resolution .gif or .jpg files. Photos may also be submitted on a DVD or CD, in the proper format, and mailed or emailed to: Orange County DEAPR, 306-A Revere Rd., PO Box 8181, Hillsborough, NC 27278; email: lthecht@orangecountync.gov
- 2) **DEADLINE TO ENTER: May 15, 2015.** Orange County DEAPR, 306-A Revere Rd., PO Box 8181, Hillsborough, NC 27278.

The Department of Environment, Agriculture, Parks & Recreation

(DEAPR) works to conserve and manage the natural and cultural resources of Orange County. Included within this "green infrastructure" are natural areas and nature preserves, open spaces, parks and recreation facilities, water resources, and agricultural and cultural resource lands.

Consistent with the strong environmental ethic of the community, DEAPR also strives to bring environmental education, recreation, athletics and other programs to residents of the County — with a goal of promoting cultural, physical and natural stewardship and well being.

ORANGE COUNTY



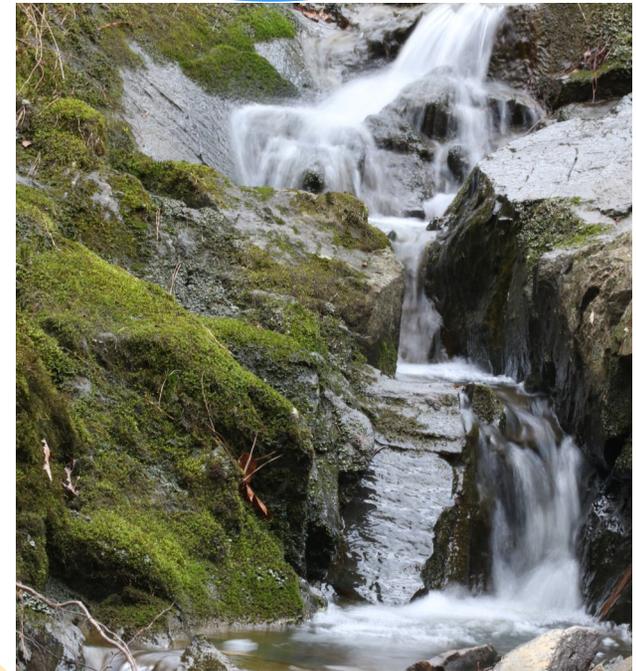
Department of Environment, Agriculture, Parks & Recreation

Orange County DEAPR
306-A Revere Rd.
PO Box 8181
Hillsborough, NC 27278

Phone: 919-245-2510
Fax: 919-644-3351
<http://orangecountync.gov/deapr>
E-mail: lthecht@orangecountync.gov

DEPARTMENT OF ENVIRONMENT, AGRICULTURE, PARKS & RECREATION

"The Nature of Orange" Photography Contest



2014 Adult Winner, Barbara Driscoll

919-245-2510
<http://orangecountync.gov/deapr/>

"The Nature of Orange" Photography Contest

The Department of Environment, Agriculture, Parks and Recreation (DEAPR) is proud to present its 4th Annual photography contest. The goal is to inspire exploration, celebration and appreciation of Orange County's diverse landscapes and outdoor experiences. Through photography we want you to document the beauty of our wildlife, waterways, natural resources, and people connecting with their environment.

Deadline: All entries must be received by May 15, 2015

Age Divisions:

- Youth (age 18 and younger)
- Adult



2014 1st Place Youth, Kirby Lau

Photographs should feature:

Orange County wildlife, natural resources, landscapes, or people enjoying the parks and outdoor environments.

How to Submit Your Photo:

See the Contest Rules on the reverse page.

Prizes: \$100 First, \$75 Second, and \$50 Third Place cash prizes will be awarded for photos in both divisions; divisions will be judged separately. In addition, participants will receive a certificate and winning photographs will be displayed in prominent, public locations.

For more information about parks and natural settings in Orange County visit: <http://orangecountync.gov/deapr/>

2014 2nd Place Adult,
Catherine Stevens



Owner/Use Rights:

Contestants retain the copyright to their photographs, and all rights thereto, except as follows. Orange County and DEAPR shall have the right to use the likeness, name, and/or images photographed by contestants in any and all publications, including web site entries without compensation in perpetuity.

Photos will be credited to the contestant named in the entry form. Descriptions or titles, if any, used with the photos are in DEAPR's sole discretion (see Photo Release and Agreement on the required Entry Form under "Breaking News" at <http://orangecountync.gov/deapr/>)

Judging Criteria:

Relevancy to Featured Topics - Is the photo an obvious illustration of the focus of the contest?

Composition / Arrangement - Are the objects in the photo arranged in a meaningful, pleasing manner or are they "haphazard"? Did the photographer use the best angle or otherwise interesting perspective?

Focus / Sharpness - Is the object of the photo in focus? If not in sharp focus, does it appear to be an intentional effect to enhance the image in some "artistic" way?

Lighting - Did the photographer use proper lighting of the subject matter? Do any extremes of darkness or brightness lend to or detract from the image content?

Creativity - Does the photographer show some creative thought or original idea in the making of this image?

Sponsors

- Orange County Department of Environment, Agriculture, Parks and Recreation
- Orange County Commission for the Environment
- Orange County Parks and Recreation Council



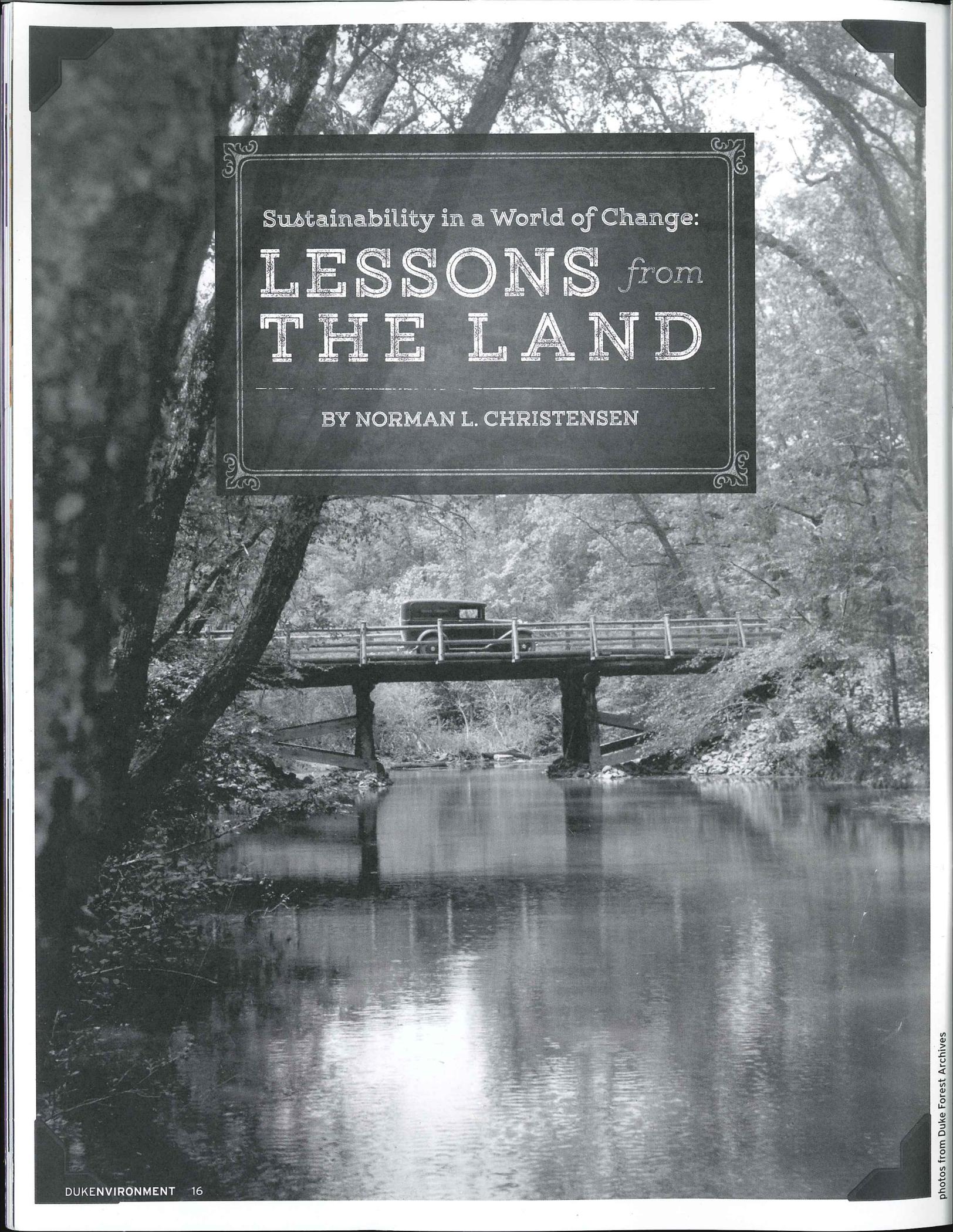
2014 3rd Place Youth, Caroline Mohler

DEPARTMENT OF ENVIRONMENT, AGRICULTURE, PARKS & RECREATION

Orange County DEAPR
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Sustainability in a World of Change:

LESSONS *from*
THE LAND

BY NORMAN L. CHRISTENSEN

My favorite Duke Forest walk begins at Gate 23 on Mt. Sinai Road and descends to the wooden bridge that crosses New Hope Creek. Seeing the large oaks and pines, many who walk this heavily traveled trail probably assume that the woods that surround them are truly ancient, maybe even primeval. But travelers on this road 150 years ago were surrounded by abandoned and eroded farm fields—a landscape reminiscent of some of the most deforested and impoverished places on our planet.

The history of change that produced that 1865 landscape and the one we see today has much to teach us about sustainable land stewardship.

A Mr. John Patterson was the first person to have formal title to this land (more than 1,000 acres), having received it as a grant from the colonial governor in 1758. But he was by no means the first person to manage this land. Native Americans were already hunting and gathering here 10,000 years ago, in the midst of post-Ice Age climate change. Their numbers may have been sparse, but they had already hunted many large mammals to extinction and altered much forest land with their deliberate use of fire.

Five thousand years later, larger populations of semi-nomadic people were hunting elk, woodland bison and deer in the uplands and cultivating crops such as squash and tomatoes in the floodplains along nearby creeks and rivers. The first Europeans explored this region nearly 500 years ago, and they encountered large numbers of Native Americans. Tens of thousands farmed land near permanent villages. Others hunted and gathered in large expanses of fire-maintained oak

savanna. What Patterson and his kin saw when they first traversed their estate were forests and bottomlands shaped by the actions of hundreds of human generations.

Early on, Patterson and most of his neighbors employed a form of shifting agriculture in the context of a subsistence economy. They grew enough to meet their needs, with surplus to trade in nearby towns for the things they could not grow themselves. Small tracts, 3-5 acres perhaps, were cleared—an arduous process given limited human and technological resources. Crop production would be robust for a few years, but would decline after that as soil nutrients were depleted by erosion and harvest. That tract would then be abandoned, and another one cleared and put into production.

In this region fallow land is very quickly re-vegetated naturally by a succession of plant species. Over 2 to 3 years, annual weeds give way to perennial grasses and herbs and the seedlings of shrubs and trees. After 4 to 5 years, those shrubs and trees form a diverse and impenetrable thicket. During these 4 to 5 years, soil organic matter and stores of essential nutrients are restored. Left to its own devices, this thicket will soon develop into a young forest. But at this point in the succession, farmers intervened and re-plowed fallow land to begin another cycle of growth. Fallow farming systems of this kind were sustainable so long as the total amount of land in production was small and fallow cycles were sufficiently long to ensure restoration of soil fertility.

The Patterson family sold this property to William Robson in about 1790 during a major transition in land use in this region. Worldwide demand for agricultural

products—most particularly cotton, tobacco and dye stuffs like indigo—was rapidly growing. Technologies such as the cotton gin and mechanized looms allowed the processing of these crops on very large scales. Farm families like the Robsons were likely selling their produce and buying their necessities in fully monetized markets.

These developments vastly altered incentives for land use and stewardship, and they set in motion economic, social and ecological changes that would prove to be truly unsustainable. The fallow farming system was abandoned and declining productivity was countered by putting ever more land into production. The uncertainties associated with regional and global markets reinforced this pattern of deforestation. By 1830, many hundreds of acres of the Robson property were in cultivation. Given available technology, a single family, no matter how large, could not by itself farm that much land.

As we know too well, they accomplished this with slave labor. Slavery had been on the decline in the late 18th century, but this transition to market agriculture greatly increased the demand for and dependence on slave labor. We don't know the specifics of the Robson's holdings, but other ownerships of this size depended on the labor of scores of slaves.

By 1860, only 30 percent of the region's forests remained, and these forest fragments had been severely degraded by livestock grazing and high-graded for fuel wood. An average of 1 to 2 feet of topsoil had been transported from exposed cropland to nearby streams and per-acre productivity was severely reduced. Deep erosion gullies still scar the hillsides in many places along the path to the

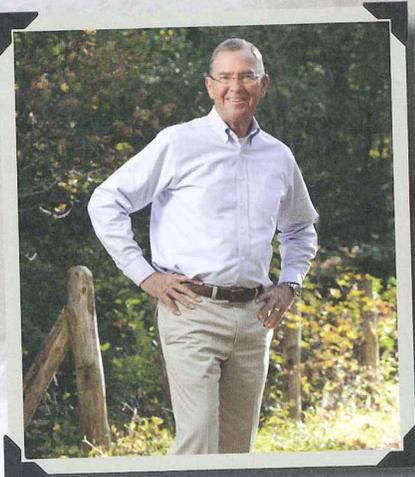


Photo by Chris Hildreth

I BELIEVE our future will hinge much more on two other traits—the empathy to care for the well-being of others living now and in the future, and the humility to understand our proper place in the world and our dependence on the health and diversity of its ecosystems.
-Norm Christensen

Wooden Bridge. The effects of this erosion extended well beyond individual farm fields as sediment polluted creeks and rivers, filled in mill ponds and caused the closure of water-driven mills on all but the largest streams.

Sustainability is often likened to a three-legged stool, with the legs representing social, economic and environmental systems and the seat representing the inescapable linkages among these systems. Surely, the changes for the Robsons and their contemporaries, the inexorable downward spiral of dependence on slavery, the diminished production and polluted waterways, and the ever increasing fragility of the economic system validate this tripartite metaphor.

The Civil War and the Reconstruction that followed brought new changes to the land and inaugurated a period of regional economic depression that would extend up to World War II. The Robson land, like that of so many neighbors, was put into foreclosure. Although tenant farming and sharecropping continued in some places, much land was simply abandoned.

Most of the land along the Wooden Bridge trail was abandoned between 1870 and 1910, and that fallow succession was repeated once again. Old field weeds were soon replaced with dog-hair thickets of pines. Through time, these pine thickets thinned to respectable forests. When Duke Forest was formally established in 1931, pine stands were about 40 to 60 years old and broadleaved trees—oaks, sweetgums, maples and hickories—were prominent beneath them.

The waters of New Hope Creek that flowed beneath the Wooden Bridge in 1870 were red with sediment, and flash floods were common. But within a couple decades, the roots of regrowing forest trees and shrubs stabilized fragile soils and mitigated flows. Today, at least at that location, New Hope Creek runs clear and supports a diverse array of aquatic life. The fact that ecosystem change has repaired some of the impacts of those many years of unsustainable land use is reason for hope; but it is also true that no vestige of old-growth forest remains and that it will take many more decades, even centuries, to restore soils to their former productivity.

Rapid change continues on this landscape. Once-rural land is rapidly becoming urban. Forest is being replaced by complex, impervious surfaces like roof tops, parking lots and roads that greatly alter local climate, the quality, quantity and timing of water flows, and wildlife habitat. Is all of this change sustainable?

The word "sustainability" is tricky. "To sustain" is defined in many dictionaries as "to keep in existence, to maintain." To some this implies an idealistic sustainable endpoint—a destination. But if history tells us anything, it is that sustainability is a journey, not a destination, and that journey always occurs in the context of three kinds of change.

First, the world is changing. The capacity for ecosystems to change is essential to their persistence. Forested landscapes and watersheds are constantly being disturbed and constantly undergoing change. Over the long term, change is essential to adaptation and survival.

Second, we are changing. Each generation of human beings brings new technologies and values to the land. My interests and values are very different from those of my parents and grandparents, and the interests and values of my children and grandchildren are no less different from mine. And third, we are changing the world. This has always been true, but today there are more than 7 billion of us, and our individual effects on Earth's ecosystems are disproportionately magnified by the power of the technologies we employ to garner the things we need or think we need.

We are today agents of unprecedented change. And we are hopeful that nature's change processes will mitigate our impacts, too. But history provides no guarantee that that will be the case. Our human population has increased over eightfold since the Robsons abandoned their land, and each of us individually consumes 10 times more energy and resources than did the Robsons and their peers. Furthermore, many of our insults to our planet's ecosystems have no precedent in either historic or prehistoric times.

Sustainability, I would argue, is an inherently anthropocentric concept. For millions and millions of years,

Earth's myriad ecosystems functioned wonderfully in our absence. It may be humbling, but it is good to remember that we are not an essential element to any of Earth's ecosystems. No other single organism has changed our planet to the extent that we have. But, were we to disappear tomorrow, ecosystems would continue to change and life would continue to evolve. Eventually, our portion of Earth's history would be reduced to a thin, albeit messy, layer in its geologic strata.

I have a favorite Gary Larson cartoon. A stegosaurus stands at a lectern before an audience of other dinosaurs and says, "Friends the picture is bleak; climates are changing, mammals are on the rise, and here we sit with brains the size of a walnut." Dinosaurs are, unfairly I think, often depicted as the exemplar of unsustainability—unable to adapt, they were a *cul de sac* in the history of life. But, these remarkable beasts dominated Earth's ecosystems for a remarkable span of time—150 million years.

Humankind has been around for about 1/1,000th of that amount of time, yet many seem to think that the entire history of life that preceded us occurred solely for our benefit. That view has encouraged the widespread belief that we cannot severely damage Earth's capacity to sustain us or our children. But the history of our interactions with the land tells us otherwise.

We are fond of calling attention to two human features, intelligence and self-awareness, that set us apart from all the rest of creation; we have, after all, brains the size of a grapefruit. We are hopeful that these traits will lead us on a more sustainable path, although there is not much evidence in our history to support that hope. But I believe our future will hinge much more on two other traits—the empathy to care for the well-being of others living now and in the future, and the humility to understand our proper place in the world and our dependence on the health and diversity of its ecosystems.

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