

**Amy Harvey**

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**From:** Jeanette Coffin  
**Sent:** Wednesday, June 27, 2018 12:46 PM  
**To:** bberndt500@aol.com  
**Cc:** Allen Buansi; Donna Bell; Hongbin Gu; Jeanne Brown; Jess Anderson; Karen Stegman; Lindsey Bineau; Michael Parker; Nancy Oates; Pam Hemminger; Rachel Schaevitz; Town Council; Amy Harvey; Carolyn Worsley; Catherine Lazorko; Flo Miller; Laura Selmer; Mary Jane Nirdlinger; Rae Buckley; Ralph Karpinos; Roger Stancil; Ross Tompkins; Sabrina Oliver  
**Subject:** FW: Eastowne SUP --June 27, 2018 Council Meeting Comment--Agenda Item #18  
**Attachments:** Eastowne aerial photo v2.pdf; N&O Article on Trees 050418.pdf

Thank you for your correspondence with the Town of Chapel Hill. The Mayor and Town Council are interested in what you have to say. By way of this email, I am forwarding your message to the Mayor and each of the Council Members, as well as to the appropriate staff person who may be able to assist in providing additional information or otherwise addressing your concerns.

If your email is related to a development application or a particular issue being addressed by the Council, your comments will be made part of the record. If applicable, we encourage you to attend any public meetings related to the items addressed in your email.

Again, thank you for your message.

Sincerely,

Jeanette Coffin



Jeanette Coffin  
Office Assistant  
Town of Chapel Hill Manager's Office  
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Chapel Hill, NC 27514  
(o) 919-968-2743 | (f) 919-969-2063

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**From:** Bob/Chris Berndt [mailto:bberndt500@aol.com]  
**Sent:** Wednesday, June 27, 2018 12:11 PM  
**To:** Town Council <mayorandcouncil@townofchapelhill.org>  
**Cc:** Kay Pearlstein <kpearlstein@townofchapelhill.org>; Judy Johnson <jjohnson@townofchapelhill.org>; amymorrisryan@gmail.com; Ben Hitchings <bhitchings@townofchapelhill.org>; Jeanne Brown <jbrown2@townofchapelhill.org>  
**Subject:** RE: Eastowne SUP --June 27, 2018 Council Meeting Comment--Agenda Item #18

Dear Mayor and Town Council,

I am writing to follow up on my previous email below, sent to you as an individual citizen comment. I have reviewed the new plans of 6/12/18 for the 15-501 buffer, posted on the Town's Development Activity Report page. I believe the new proposal is a step forward for saving the significant tree buffer which now exists (see attached aerial photo). I agree that holding off on adding the multi-use path until after the Master Plan process is completed is a good idea. However, I have the following concerns:

- The plan still shows most of the identified trees in the 30 foot required buffer as being cut. I counted 3 trees saved. The buffer is going to be nearly devoid of trees.
- About 21 identified trees are still being cut within the right-of-way.
- In addition, the landscape plan (LS-1) dated 4/27/18 has a note on it that the understory trees will be removed in the right-of-way. This will result in a significant change to the forested buffer. This action is designed to achieve more visibility into the site. I disagree with the staff report's characterization that "cleaning up the unattractive scrub and underbrush will provide a true gateway entrance rather than a thick barrier between 15-501 and the project."

I am attaching a copy of a recent News and Observer article on the importance of trees in the urban landscape. Chapel Hill has had a rich tradition of protecting its entranceways and the visual quality of green, tree-lined streets. The staff report says that the LUMO buffer requirement was established in a different time when the goal was to screen development from view from the roadway. I believe this is still a laudable goal, one that is designed to protect the Town's heritage and special character. The article points out the other many community benefits to saving our urban forest.

The Council could go a step further and not approve the buffer modification, and stipulate that trees in the right-of way and buffer not be cut down.

Sincerely,  
Christine S. Berndt

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**From:** Bob/Chris Berndt [<mailto:bberndt500@aol.com>]  
**Sent:** Wednesday, May 23, 2018 12:06 PM  
**To:** 'mayorandcouncil@townofchapelhill.org'  
**Cc:** 'Kay Pearlstein'; 'Judy Johnson'; 'amymorrisryan@gmail.com'; 'Ben Hitchings'  
**Subject:** Eastowne SUP --May 23, 2018 Council Meeting Comment--Agenda Item #16

Dear Mayor and Town Council,

I am writing to ask that the Council not authorize the removal of the existing forested buffer along the Town's major entranceway, 15-501, at Eastowne. The current proposal would remove all of the existing trees in the existing buffer on the applicant's property. I believe the existing buffer is 70 feet, whereas the proposed buffer is only 30 feet. In addition, the proposal removes most of the trees in the NCDOT right of way. Please see the attached plan C-3 from the applicants materials.

The forested buffer is an important aspect of the visual beauty of this entranceway, and is an existing community asset that should be preserved. Our tree-lined major transportation corridors are a key component of Chapel Hill's natural and historic character.

While 26 trees are to be retained, and new landscaping is to be installed to enhance visibility, the result will be a completely different landscape and visual feel than that which exists now. The Planning Commission asked that additional canopy trees be provided on the front buffer, and the staff report says this recommendation is incorporated into the stipulations. However, I do not see how the Planning Commission recommendation is included. At a minimum, please make sure that a significant number of canopy trees are provided in the buffer and in the right of way.

The Community Design Commission voted 3-2 to recommend the project with conditions. The materials do not explain our vote, so I wanted to have the opportunity to express why I did not recommend to you this particular site plan. I am not against the project or the use in this location, but I believe the applicant could design the development in a way that saves the forested buffer.

Thank you for your consideration of these comments.

Sincerely,  
Christine S. Berndt  
Community Design Commission



Source: Town of Chapel Hill Zoning Atlas Amendment Staff Presentation for Eastowne, May 23, 2018.

# When it comes to urban areas, money can grow on trees

BY THEODORE ENDRENY  
*The Conversation*

Megacities are on the rise. There are currently 47 such areas around the globe, each housing more than 10 million residents.

More than half the global population now lives in urban areas, comprising about 3 percent of the Earth. The ecological footprint of this growth is vast and there's far more that can be done to improve life for urban residents around the world.

When it comes to natural spaces, trees are keystone species in the urban ecosystem, providing a number of services that benefit people. My research team has calculated just how much a tree matters for many urban areas, particularly megacities. Trees clean the air and water, reduce stormwater floods, improve building energy use and mitigate climate change, among other things.

For every dollar invested in planting, cities see an average US\$2.25 return on their investment each year.

## MEASURING TREES

Our team, led by Dr. David Nowak of the USDA Forest Service and Scott Maco of Davey Institute, develops the tree benefits software i-Tree Tools.

These tools simulate the relationship between trees and ecosystem services they provide. These services can include food, clean air and water, climate and flood control, pollination, recreation and noise damping. We currently don't simulate many services, so our calculations actually un-



BETH J. HARPAZ AP Photo

Trees clean the air and water, reduce stormwater floods, improve building energy use and mitigate climate change, among other things.

derestimate the value of urban trees.

Our software can simulate how a tree's structure — such as height, canopy size and leaf area — affects the services it provides. It can estimate how trees will reduce water flooding; or explore how trees will affect air quality, building energy use and air pollution levels in their community. It can also allow users to inventory trees in their own area.

Our systematic aerial surveys of 35 megacities suggest that 20 percent of the average megacity's urban core is covered by forest canopy. But this can vary greatly. Trees cover just 1 percent of Lima, Peru, versus 36 percent in New York City.

We wanted to determine how much trees contribute to human well-being in the places where humans are most concentrated, and nature perhaps most distant. In addition, we wanted to calculate how many additional trees could be planted in each megacity to improve the quality of life.

## HOW TREE DENSITY AFFECTS A CITY

We looked in detail at 10 megacities around the world, including Beijing, Cairo, Mexico City, Los Angeles and London. These megacities are distributed across five continents and represent different natural habitats. Cairo was the smallest, at 1173 square kilometers, while Tokyo measured in at a whopping 18,720.

For most cities, we looked at Google Maps aerial imagery, randomly selecting 500 points and classifying each as tree canopy, grass, shrub and so on.

We calculated that tree cover was linked to significant cost savings. Each square kilometer saved about \$0.93 million in air pollution health care costs, \$20,000 by capturing water runoff, and \$478,000 in building energy heating and cooling savings.

What's more, the median annual value of carbon dioxide sequestered by megacity tree cover was \$7.9 million.

That comes out to about \$17,000 per square kilometer. The total CO<sub>2</sub> stored was valued at \$242 million, using a measure called the social cost of carbon.

The sum of all annual services provided by the megacity trees had a median annual value of \$505 million. That provides a median value of \$967,000 per square kilometer of tree cover.

## TREES IN YOUR CITY

An entire urban forest can provide services for a good life.

All of the cities we studied had the potential to add additional trees, with about 18 percent of the metropolitan area on average available. Potential spots included areas with sidewalks, parking lots and plaza areas. The tree's canopy could extend above the human-occupied area, with the trunk positioned to allow for pedestrian passage or parking.

Want to conserve forests and plant more trees in your area? Everyone can take action. City and regional planners can continue to incorporate the planning for urban forests. Those who are elected to office can continue to share a vision that the urban forest is an important part of the community, and they can advocate and support groups that are looking to increase it.

Individuals who cannot plant a tree might add a potted shrub, which is smaller than a tree but has a leafy canopy that can contribute similar benefits. For the property owner wanting to take charge, our i-Tree software can assist with selecting a tree type and location. A local arborist or urban forester could also help.

*Theodore Endreny is a Professor of Water Resources & Ecological Engineering at the State University of New York College of Environmental Science and Forestry.*