Governor's Council on Climate Change (GC3)
MEETING MINUTES
Working and Natural Lands Working Group
Forests Sub-Group

Meeting Date: April 21, 2020
Meeting Time: 6:00 — 8:00 p.m.
Meeting Location: Join Zoom Meeting
https://ctdeep.zoom.us/j/372518987
Meeting ID: 372 518 987
Dial by your location
1-646-876-9923

ATTENDENCE

Sub-Group Member	Title	Organization	Present
Eric Hammerling, **Chair**	Executive Director	Connecticut Forest and Park Association	
Tim Abbott	Regional Conservation and Greenprint Director	Housatonic Valley Association	Ø
Mark Ashton	Director of School Forests	Yale School of Forestry and Environmental Studies	
Patrick Comins	Executive Director	Connecticut Audubon Society	
Thomas Easley	Assistant Dean of Community & Inclusion	Yale School of Forestry & Environmental Studies	
Robert Fahey	Assistant Professor	University of Connecticut, Natural Resources and the Environment	Ø
Edward Faison	Senior Ecologist	Highstead	Ø
David Gumbart	Director of Land Management	The Nature Conservancy, CT	
Lisa Hayden	Landowner Outreach Coordinator	New England Forestry Foundation	
Charles Leigus	General Manager	Supreme Forest Products, Inc.	
Amy Paterson	Executive Director	Connecticut Land Conservation Council	
Herb Virgo	Executive Director	Keney Park Sustainability Project	Ø

Associated Staff	Title	Organization	Present
Christopher Martin, Sub-Group Staff Assistant	Director/State Forester	Department of Energy and Environmental Protection	
Jaimeson Sinclair, Sub-Group Staff Assistant	Director, DEEP Air Bureau, Engineering Division	Department of Energy and Environmental Protection	
Cary Lynch, Staff Lead, WNLWG	Research Analyst, Office of Climate Change Technology & Research	Department of Energy and Environmental Protection	

AGENDA & NOTES

Eric Hammerling, Executive Director, CFPA

Introductions Chair Hammerling welcomes all to the 6th meeting of the Forests Sub Group of the Governor's Council on Climate Change (GC3). The Chair provides a brief background on the Forests Sub Group and reviews accomplishments including the technical information and focused topics covered to date:

- Reviewed recommendations of CT's 2011 Climate Adaptation Plan;
- Discussed changes in scientific understanding since 2011;
- Looked at models to use as baselines for Carbon storage/Climate mitigation;
- Received information on equity, green infrastructure, air quality, and related urban forestry issues; &
- Analyzed different forest management approaches to achieve increased carbon storage and sequestration.

The Chair then explained the purpose of the meeting's focus as it relates to Governor Lamont's Executive Order #3 -"review strategies to prioritize climate change adaptation efforts to protect vulnerable communities that may be disproportionately impacted by the effects of climate change." The Forests Sub group members agreed earlier that the charge should pertain to human and natural communities hence presenters will be covering both.

Chair Hammerling reviewed upcoming meetings and reemphasized that all meeting proceedings, presentations and other relevant information are posted on GC3 Subcommittee and working groups and Climate Change Forest Resources - Forests SubGroup |CFPA. The Chair reviewed the Forests Sub Group overall goal which is to propose recommendations in June on forests related to climate change adaptation, resilience, and mitigation and that the Forests Sub Group will ensure recommendations are both based on good science and are as inclusive as they should be.

A few housekeeping items were reviewed including proper Zoom etiquette, using the "Chat" or "Raise Hand" features of Zoom, and keeping individual audio on mute. Each member of the public will have up to 3 minutes to provide input after the presentations.

Roll Call of Members of the Forests Sub Group:

Up to 47 participants on Zoom

Agenda Items

I. Vulnerable communities (human and natural) that may be disproportionately impacted by climate change. (90 minutes)

1. Thomas Easley, Assistant Dean of Community & Inclusion, Yale School of Forestry & Environmental Studies - *What I learned Working with Comminutes Facing Disadvantages*
2. Robert A. Askins, Katharine Blunt Professor Emeritus of Biology, Department of Biology, Connecticut College - *Importance of our forests for biodiversity*
3. Gerald Torres, Professor of Environmental Justice, Yale University – *Informal remarks on Climate Change and Vulnerable Communities*

II. Public comments (10 minutes)

Chris Donnelly, Urban Forestry Coordinator, CT DEEP Forestry. Refers to chat box and recognizes many successful Connecticut programs promoting social justice and urban tree health. Chris submits the following written comments April 22, 2020:

Let me start with providing the reference to the statistics I mentioned at the end of the meeting during the public comments. They came from a paper by David Nowak and Jeffrey Walton entitled "Projected Urban Growth (2000 – 2050) and its Estimated Impact of the US Forest Resource." This paper was published in the Journal of Forestry in December 2005.
The numbers the Nowak and Walton put forward for Connecticut are:

1. Non-urban forestland (1992) subsumed by urban (areas) (2000-2050): 35.8% or 2,094 sq. km (517,440 acres). This is area of land that was rural forest in 1992 and is projected to be within the boundaries of urban areas in 2050.

2. 1992 Forestland in urban areas: in 1990 – 17.5%
   in 2000 – 22.9%
   in 2050 – 50.5%
   These numbers are different from the first numbers because they include both lands that were and were not within the bounds of urban areas in 1992. In other words, then 50.5% figure for 2050 is not all from forestland that was in rural areas in 1992. Some was already in urban areas.

3. Total urban land in CT in 2050 – 60.9%

Basically, the authors got these numbers by overlaying present and projected urban areas over the 1992 NLCD map of forest cover. Urban areas are considered those census blocks with population densities greater than 500 people per square mile.

It should note be taken that the authors are assuming that the 1992 forestland will remain as forest. It might be expected that much of that forestland land will be converted to other uses. However, it is just as reasonable to consider that considerable percentage of that forestland will remain as urban woodland in one form or another.

I should note that this is a relatively old paper and that we are half-way through the period of time being considered. As well, remote sensing capabilities have improved, giving us the ability to produce more exact numbers on forestland. I have not, however, investigated an update of these numbers.

Why am I bringing these numbers up?

The first point is that the changes in our forests due to increasing urbanization are happening at the same time as the effects of climate change are occurring. If nothing else, this makes predicting the changes to forests from climate change that much more difficult to identify or predict. Population growth and population density are apt to have their own impacts on the forest, expressed in such outcomes as increased parcelization, fragmentation, intrusions into the forest (e.g. motorized vehicle trails), increased numbers of invasive plants, and so on.

There is a second set of points that I also like to raise relating to the role of urban forests and to the notion of how the effects of climate change on our forests are apt to affect urban populations.
One consideration I draw from this paper is that it encourages us to think more broadly about what we might consider to be 'urban forests'. What might be called urban forests are an actually fairly heterogeneous grouping. Certainly, street trees, tree-filled town greens and backyards with trees would be included in any list of examples of the urban forest.

So too should be areas that might best identified as urban woodlands. There are many examples of the sorts of areas. These include large set-aside areas such as water company lands and institution lands like the Yale-owned forest in the north end of New Haven. They also include urban parks such as Svirha Park in Bridgeport and Fulton Park in Waterbury. Also included are large, privately-owned tracts, such as Remington Woods in Bridgeport. Many of the properties in this last group are at risk of development. The article can be interpreted as at least suggesting the possibility that these various sorts of urban woodlands might become more numerous over time, as our urban areas absorb what were once wooded rural areas. This is probably a topic worthy of its own consideration as we think about what the forests of the future will be in our state, and how we make use of them. For example, what role do these wooded urban areas play in terms of providing connectivity in the landscape – perhaps has oases for migrating song birds.

But, I want to get to another point, relating to the people who live Connecticut and the issue of the urban / rural divide. As I have listened to many discussions regarding this topic over the years, I often hear a tendency to identify urban people with urban forests and rural people with rural forests, and then treat them as somehow different (both the people and the forests). While of course there are distinctions and differences to be made, including the sorts of trends to be noted, I also worry about the limitations of this approach. Does it run the risk of simplifying the discussion?

I say that with two key ideas in mind. There first is that there is a lot of nature in cities. Urban woodlots are just one example of where the natural world is apparent and at hand for an eager observer to investigate. Most rivers also bring the natural world into the heart of even highly built-up areas. For example, I have seen beaver-gnawed trees in the most urbanized parts of Waterbury, such as where the Mad River flows into the Naugatuck.

At the same time, there is a great deal of the city in the surrounding forestlands. This could include everything from roads to light pollution, and from the organization laid over the forest through property

ownership and property rights, to the influence history and adjoining properties have on the plants that grow in the forest.

So, what happens when we start encouraging the idea that there are certain things in nature that belong in one place and that other things belong elsewhere, as opposed to the idea that the same principles of nature are in play everywhere, it is just that their expression varies to differing degrees? Especially as urban areas expand, placing emphasis on the connectivity of different places becomes increasingly valuable.

This leads into something that might be referred to as the sociology of the forest. When we start going to simple classifications, it is easy to overlook things. Important diversities as well as commonalities can often be found with a closer look. To put that in people-terms, examples might include the African-American family with a history rooted in sawmills down South; the woman of French-Canadian descent who was taught to hunt by her uncle but now works in Hartford or the Vietnamese immigrants who once practiced communal farming before coming to the US and so share that close bond with nature. Any one of these people are apt to have a vibrant sense of the forest. There is a richness in this diversity that should not be overlooked. It points up the risk of using categories to put to assumed borders around a group's set of shared experiences.

At the same time, we should not ignore the reality of such things as that the licensed arborist and forest practitioner communities of Connecticut are overwhelmingly white, or that the recreational structure within our system of parks and forests in the state was largely built up with the automobile in mind. Nowak and Walton let us know that, in the future, the population of urban areas in Connecticut will be much larger, as will the be the extent of the urban areas themselves. As we move forward, the nature of these urban areas, as biophysical geographies within their own right, will need to be given greater consideration, including in the light of climate change. However, these urban ecosystems should not be considered as divided from the forested ecosystem, nor should the surrounding forested ecosystems be viewed as not being significantly influenced by the urban ecosystems they are strongly connected to. Much of this bridging must start with people, many of whom probably already intuitively understand these connections. That should be encouraged, with one of the better ways to do so likely being jobs. As one example, if urban-based workers can be drawn into traditionally rural activities such as logging, and traditionally rural ventures such as sawmilling can be brought into the urban setting, much progress could be made.

With appreciation for your time,
Chris Donnelly

> **Mary Pelletier from Park River Watershed**. Suburbs are important contributor to water quality. Different dynamics change for conservation from urban to suburban. People connect to nature along the urban suburban rural gradient, Need to emphasize riparian corridors as the natural last landscapes in urban areas. Need to protect these landscapes. Opportunities exist near the rivers and streams riparian area that are protected from development yet these riparian corridors are often overlooked. They may be small yet they are considerable.
>
> **Susan Masino**. Appreciated the presentations as she just completed a Harvard fellowship on forests and mental health intersections. Interested in the urban tree food forest connection. Finding common solutions to urban tree challenges. Appreciated Robert

Askins talk especially about assisted tree migration. Some studies show trees evolving systematic mutations to deal with changing climates.

Star Childs. Thanks to presenters, echoing the importance of riparian forests and their ecosystem service contribution to urban areas. Trees and riparian areas clean the air in the cities as well as introducing natural landscapes to urban dwellers.

III. Final Report Table of Contents Discussion (10 minutes)
Eric asked members to send thought s on the final report contents

IV. Next Steps and Adjourn (5 minutes)

Next Zoom meeting info:
May 7, 2020 01:00 PM to 03:00 PM
Join Zoom Meeting
https://ctdeep.zoom.us/j/99900594476

Meeting ID: 999 0059 4476
One tap mobile
+16468769923,,99900594476# US (New York)

Meeting adjourns 8:04 PM