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

Meeting Date: June 18, 2020
Meeting Time: 1:00 — 3:00 p.m.
Meeting Location: Join Zoom Meeting
https://ctdeep.zoom.us/j/91646553444
Meeting ID # 916 4655 3444
Dial from your location
1-301-715-8592

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	
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	Ø
Robert Fahey	Assistant Professor	University of Connecticut, Natural Resources and the Environment	
Edward Faison	Senior Ecologist	Highstead	
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

Welcome and Announcements & Introductions (5 minutes)

Eric Hammerling, Executive Director, CFPA

1:03PM Chair Hammerling welcomed all to the 9th meeting of the Forests Sub-Group of the Governor's Council on Climate Change (GC3). The Chair reviewed the goals of the afternoon's meeting including review and discussion of some of the draft recommendations to make Connecticut's forests both more resilient to climate change, and better able to mitigate greenhouse gas emissions that contribute to climate change. Chair Hammerling then provided a brief review of the Sub-Group's work since January 2020 including the 20 presentations from outside experts on various topics and emphasized that today's meeting will allow Forests Sub-Group experts to share their findings from the information gathered to date. The Chair reminded all that past presentations and meeting minutes are available on the DEEP GC3 Working Group web page Meetings and Notices 2019-2015 and on The Room Where it Happens for Forests and Climate | Connecticut Forest & Park Association.

Chair Hammerling then explained the additional and considerable effort Forests Sub-Group members have invested to prepare for today's discussion. ALL members of the Sub-Group have been working in teams (ranging from 1 to 4 members) to write Draft Chapters that will be incorporated into the Final Report to the GC3. Members also prepared to present today their "Top 3-5 Priority Recommendations". Each Team presented these priorities followed by questions from other members and clarifications/general discussion with consideration for priority adjustments and additional input/considerations. The goal is to prepare a final Draft Report and presentation considering input from Sub-Group members within a few weeks for final public comments before submittal to the GC3.

Chair Hammerling then reviewed a few housekeeping items regarding best Zoom etiquette especially the use of mute, chat features, how to use a phone to raise hands and mute/unmute and a reminder that this a public recorded meeting. Roll Call of the Forests Sub-group members:

42 Participants

Agenda Items

I. Review Draft Final Report (90 minutes)

Walk through draft report recommendations

Adaptation and Resilience - Mark Ashton, Robert Fahey, Charlie Leigus, and Ed Faison
Lisa Hayden, suggests within monitoring include demonstration sites for adaptive silviculture & explementary forestry program to test different resilient strategies. **Robert Fahey** agrees and provides example of UCONN's Stormwise and other programs implementing such demo sites. Suggests replacing "schemes" with "mechanisms" and "bureaucracy" with "agency." **Mark Ashton**, Extension education and communication was dropped off due to limit in the top five but deserves recognition. **Robert Fahey,** Extension services crosses all aspects and is very important. **Lisa Hayden** asks if this could be an overall umbrella policy. **Patrick Comins** would like to see a statement about better planning. **Tim Abbott** asked about clarifying new planning agency. **Mark Ashton** observes lack of coordination and cohesive planning among municipalities. **Amy Paterson** provides specific examples for other programs and states to help explain the concept. **Mark Ashton** mentioned funding mechanisms other than State funds are important.

Mitigation - Tim Abbott, Ed Faison
Mandate core forest protection with the same authority as state goal for 21% open space protection. Need to increase forest cover. **Tim Abbott** explains 70% Public lands held in Preserves equates to larger core forest 250 acres leaving about 60% 2/3rds of state property available for active management, reserves would be minimal management, no salvage. Questions from Sub-Group members **Lisa Hayden** questions 70% how this was calculated and wonders about the impacts to local forest product markets. **Tim Abbott** reiterates the recommendation does not apply to private landowners. **Mark Ashton** emphasizes the first bullet point on avoiding conversion from forest to other uses is the most important. Questions reforestation goal, does not agree, tough sell with other conflicting values. Mitigation team should consider climate impacts beyond just carbon storage. How is the forest going to respond to storms? Upstream riparian restoration. It is not carbon mitigation it is climate mitigation. Considerable discussion ensues comparing merits of active management verse passive management with natural disturbance. Some debate regarding the merits of old forests and carbon storage. Concern expressed about statutory reserve restrictions and unpredictable changes brought about by climate change. Future conditions are unknown. Further work and clarifications required.

Climate Threats to Forests - Patrick Comins. Additional considerations should include rural underserved as well as urban underserved communities. Include in monitoring learning by doing, engaging in cross cultural activities.

Climate Threats to People - Thomas Easley, Herb Virgo. Regarding Environmental Justice, **Robert Fahey** references second bullet noting that it is critical to assure local input, support, and planning for urban tree planting. Top-down, mandated programs have failed elsewhere and community engagement is essential for success. **Lisa Hayden, Mark Ashton, Robert Fahey** in agreement. **Tim Abbott** reports many underserved communities are not able to influence urban tree removals.

Funding – Amy Paterson. More consideration on PA490 and PILOT payments including investing in Land Trusts. Lots of excellent details on Community Investment Act opportunities including supporting urban forestry projects. Additional sources of funding include State revolving fund, carbon tax, and municipal option for buyer's conveyance fee. Will need to coordinate with other working groups looking at funding and financing mechanisms. Washington State has a sales tax model to look at. Carbon tax should include forest protection. **Tim Abbott** recommends ¼ percent sales tax for land conservation. Concern about regressive tax impacts to vulnerable underserved communities**. Mark Ashton** suggested outdoor recreation equipment tax. Private lands public drinking water rate surcharge could also help to protect

upstream riparian buffer areas. State Revolving Fund for water quality projects has the ability to support more green infrastructure projects with a portion of existing funds.

Chair Hammerling again thanks Sub-Group members for all their hard work. Asks for member to take under consideration feedback from others, clarify recommendations, make additional suggestions, and consider modifying some recommendations.

Hammerling opened up the public comment period.

II. Public comments (15 minutes)

Kip Kolsinskas, resident of Manchester & Co-Chair, Working Lands Alliance. Agrees with Amy Paterson on need for funding. Very good to rank recommendations to not overwhelm readers. Final recommendations need to include adaptation and mitigation strategies. Expresses disappointment that no strategies addressed improving use of forest products in Connecticut for long term carbon storage. Would like more emphasis on riparian and groundwater recharge perspectives. Lots of opportunities to plant more trees in urban and suburban areas in the context of adaptation, mitigation, and resiliency. Big opportunity for town plans of conservation and development to address climate change. There is opportunity to improve overall regional and statewide consistency relative to forests and climate change through these municipal plans.

Susan Masino, West Simsbury, member of Simsbury Open Space Commission & Co-Chair of GC3 Science and Technology Working Group. Encourages Forests Sub-Group member to make aspirational recommendations. Mapping is necessary to target green infrastructure. Indigenous lands management techniques might be considered. Regarding Equity and Environmental Justice, would like to see recommendations for partnerships between farmers and forests for innovative use of wood waste. Noted important connections between mental health and forests.

Ralph Jones, Hamden Alliance for Trees. Encourages continue conversation on "locking things down," is most aware of Adirondack Park constitutional amendment to keep forests and forests. Concerned Hamden's big roadside trees are being cut down. Understands some may not want more big trees for public safety and crime concerns, others want more. Expressed concern about how street trees are being maintained and added that communities with healthy big trees are both medically better off and safer.

Holt Thrasher, Senco Investments, Greenwich. Explains how approaching MRB systems activities EPI index www.flintpro.com. FLINTpro is a new online software-as-a-service platform which improves organizations' ability to manage their land-sector GHG emissions.

Peter Hearn, Executive Director, Council on Environmental Quality. Discusses solar siting study that led to legislation that solar arrays 2MW and greater requires no to materially impact to CORE forest. Many new projects proposed are now 1.98 MWs. Future renewable energy RFPs need to include carbon balance lost by removing trees. Expresses concerns over the accumulative impact of these smaller projects upon core forests.

Tim Hawley, Middletown, retired South Central Regional Water Authority and former DEEP employees, CFPA member. References Society of American Foresters position paper; *Southern New England Forest Management in an Era of Climate Change* (attached) and the *Illusion of Preservation* by

Harvard Forests; A Clash Between Local Consumption and Global Protection. Mr. Hawley also submits the following written comments. (attached).

Mr. Hawley also writes;

1) One of the resources Eric Hammerling compiled for the GC3 Forests SubGroup on CFPA's web site is a 2020 paper by Ontl, et al., called Forest Management for Carbon Sequestration and Climate Adaptation. The "**Menu of adaptation strategies and approaches for forest carbon management**" on the 4th page of the article is a helpful way to think about carbon-positive recommendations to meet multiple objectives. **Table 1.** Menu of adaptation strategies and approaches for forest carbon management.

2) Thank you for all of the time that you are putting into this work. My name is Tim Hawley of Middletown, Connecticut. I've worked in forestry and natural resource management for 43 years. I have a master's degree in forest science from Yale, was a DEP service forester and state land manager for 4 years, and worked for the South Central CT Regional Water Authority for 37 years. I've been a member of CFPA for over 40 years.

The Society of American Foresters Yankee Division position statement on forest management and climate change summarizes the issue of forest carbon very well. It boils down to five things:

1. We need to do more to make our urban areas more suitable living space. Everyone benefits from green space and it needs to be accessible.
2. Keep forests as forest. I like the compensatory mitigation fund so when we lose one acre, we protect another acre.
3. We need to manage forests for resilience across the landscape, so that the forest's ecosystem services like carbon sequestration are sustained in spite of things like gypsy moth, woolly adelgid, or a Category 3 hurricane.
4. We need to harvest trees sustainably so that our trees can be used for durable wood products in place of steel or concrete, because durable wood products have a smaller carbon footprint. I don't like to see trees cut down, but I would rather see trees cut down as part of sustainable forest management than see a strip mine or an oil spill, or trees cut down unsustainably in another part of the world. Harvard Forest published an excellent essay called *The Illusion of Preservation*, which I recommend.
5. We need to research and incorporate forestry practices that emulate nature so that when we harvest trees, we foster development of complex forest conditions within stands and across landscapes.

Chris Donnelly, DEEP Urban Forestry Coordinator and soon to be a private citizen. Thanked the Forests Sub-Group for another good meeting. Identified some gaps for member's consideration; financial incentives for forestry in general, societal incentives, social interests in forests. Success requires social buy-in. Concerned about climate change and how are people going to able to live in this new environment. Trees have a role. Envisions future environment where trees are going to be one important tool.

Margaret Miner, Co-Chair Water Planning Council Advisory Group Watershed Lands Workgroup. Recommended conserved core forests acres should be higher. Wonders about need to use wood here

because other locations are not sustainable. Emailed the following comments:
I strongly support the recommendations of the urban greenery report, with the caveat offered by a group member, that goals should be set in consultation with neighbors and perhaps some education on what is involved with different kinds of trees. In the city, summer heat can be unbearable without a little shade. Also birds nest in the trees, which is exciting.

I am puzzled by the argument, which has been offered frequently, that we should cut trees and create wood products here because, if we don't, someone will go and cut the remainder of the Amazon rain forest to satisfy the public demand for wood. How do we know what people will do in other countries? Do we at least have a contract for the proposed cutting and hoped-for conservation? Let's do the right thing here, and lead by example. We can work with other countries on conservation. Probably the underlying interest in this argument lies in markets -- demand, price, supply, etc.

The goal for saving core forest seemed to me a modest ask. The default position should be: no cutting. If trees are to be cut, and the forest and wildlife disturbed, the burden should be on the forester or logger to explain why the cutting is necessary and is a net public benefit. I hope that an allocation for forest timbering will be based not just on a numerical goal (say, 30 percent of this tract can be cut) but also on the features and functions of the land. Which 40 percent can we most afford to lose? Are there headwaters, vernal pools, forest-bird mating habitat, bogs, etc.? Can we log and still save these features?

Finally, there are two advocacy positions important to forest conservation that I'll state here.

- Biomass should be removed from In the CT renewable energy-sources port.

- Approval of applications (especially petitions), to the Siting Council should require DEEP sign-off, that is, a written statement that the proposed facility will or will not do environmental harm to natural resources. Right now this requirement only applies to projects over 2mw in core forest. DEEP sign-off should be required for all proposed facilities.

Tamara Muruetagoiena, Executive Director, Great Mountain Forest and Co-Chair of Sub-Group of the Science & Technology Working Group dealing with forests. Notes lots of overlap with other Working Groups. Goal to maximize efforts. Comments on the debate on mitigation strategies, reforestation, and how prescriptive recommendations should be. Concern for displacing other economic activities.

Fred Behringer, 11-1 Stonewood Drive, Old Lyme I thank the Forests Sub-Group for an excellent series of meetings. The presentations were highly informative and provided an opportunity to learn about the resources and capability in Connecticut and nearby states for addressing CO_2 reduction and climate change. Special thanks to Eric Hammerling, the group's chair, for organizing great speakers and topics, and posting presentations for reference. As the GC3 writes its report, I suggest considering the following: 1. Include carbon sequestration by natural and working lands in the carbon budget for CT. As discussed in several presentations, CT forests both store and sequester large amounts of carbon. Using a sequestration rate of around 2 MT of CO2/acre per year x 2 million acres of forest land (60% of CT's total area) provides an estimate of 4 MMT of CO2 removed from the atmosphere in a year. CT currently emits approximately 40 MMT of CO2 annually. Experts can certainly provide more accurate numbers, but this illustrates the concept that CT forests reduce a significant portion of the state's emissions – roughly 10%. Including forest carbon sequestration in CT's carbon budget would increase understanding

of the need to maintain forests and help direct resources toward stewardship of this important component of addressing climate change. It also would provide a more accurate measurement of CT's contribution to global CO2 emissions. Though not a direct concern of the Forests Sub-Group, blue carbon sequestration should also be included. As we strive to be carbon neutral, sequestration by natural areas needs to be part of CT's carbon equation. 2. Emphasize the many other benefits of forests that are hard to quantify but have immense value. As the Forests Sub-Group meetings highlighted, forests provide other benefits. Ecosystem services help maintain the health of residents and our environment. These functions are under-appreciated because they are invisible to many. Increased research and education are needed to build strong support for forest stewardship. Forests are likely to face many stresses from climate change and invasive pests, so increased awareness of the need to maintain the health of forests is vital. 3. Address the danger of solar farms to forests and agricultural land. Several attendees raised this concern through the course of the meetings. Wind and solar power are needed for CO_2 reduction. That said, CT needs to quickly re-evaluate the siting of solar farms. Continued installation on forest and agricultural land will harm the very resources needed to address climate change and preserve a high-quality environment. It will impact many of the recommendations the Forests Sub-Group has been discussing. For example, replacing about half the electricity currently provided by natural gas would require solar panels covering 20,000 acres, an area the size of Fairfield. Demand for clean electrical energy will only increase with the transition away from fossil fuels, further increasing pressure for low-carbon electricity generation. If solar continues to be installed on forest/ag land, it may help dent climate change but at great cost to our local environment. The trade-offs need to be understood. Among them, landowners may find it more difficult to maintain forestland as clearing land for solar farms depresses timber prices and the misplaced incentives for solar farms make turning to solar development an attractive financial decision.
The image on the left is a recently installed solar farm on about 5 acres along I 95 in Westbrook. It is ironic that a parking lot with a similar area that is hardly ever used is on the opposite side of the highway. Surely there are better places to install solar panels!

III. Next Steps and Adjourn (10 minutes)

Hammerling thanked the public for comments, the Sub-Group for its excellent work, and noted that the Sub-Group would be incorporating findings into a draft report in the near future.

Meeting adjourns at 3:15PM