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September 15, 2023

Secretary Rebecca Tepper
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 1020
Boston, MA 02114

Re: State guidelines for forest management for the climate

Dear Secretary Tepper:

Thank you for the opportunity to provide public input on the development of the state's guidelines for forest management informed by climate science. As you know, our state's abundant forests offer essential services, including globally significant carbon storage and sequestration, which we must protect to attain greenhouse gas emission targets set by our recent climate laws.

As we see in terrifying daily news reports, the climate crisis has arrived with devastating impacts not just in faraway countries, but across Massachusetts, including this year's destructive flooding of agricultural fields in the Connecticut River Valley where I live.

I am a home energy consultant, a long-time town Energy Committee member, chair of our town's Solar Planning Committee, and a climate advocate with Climate Action Now of Western Massachusetts. In addition, I am informed on this topic by my Master of Environmental Studies from the Yale School of the Environment.

The *Forest Degradation Sector* section of the *2022 Statewide Climate Assessment* offers excellent insights into the complexities of maintaining functioning forest ecosystems in the context of the increasing temperatures, flooding rains, droughts, invasive insects, etc. due to the climate crisis.

I support protecting our very limited and extraordinary old-growth forests from deforestation. I also believe that we need to manage our forested ecosystems to increase the resilience of native animal and plant species and habitats to help them survive these pressures, while reducing forest losses from development and large scale timber harvests.

Most of our forest lands are not old growth of over 200 years old, but rather fairly similar middle-aged forests of roughly 100 years old, that have grown in since our agricultural lands, cleared in the 1800s, have been allowed to revert back to forest. These even-aged forests lack diversity. Mass Audubon suggests that, "Forest habitat management actions can be used to diversify and build the resilience of these forests, introducing patches of young forest, mimicking the unique features of old growth forest and supporting wildlife species of conservation concern." They recommend, "Removing older trees from small areas of the forest is an effective way to recreate this type of habitat for wildlife species that depend on young forest habitat, including several bird species that are in decline regionally."

Leaving our forests to grow without monitoring and managing them for ways to address and support them in the face of mounting environmental and development pressures fails to recognize the adverse conditions in which forest ecosystems and habitats now exist. For example, if we were to leave pine barren habitats unmanaged, the rare plant and animal species in this habitat, unique to only a few locations in MA and elsewhere in the Northeast, would disappear. This ecosystem has evolved to be reliant on frequent, natural, low-intensity fires to clear more common woodland species not native to pine barrens, fires that have been suppressed with development near these habitats. Without active management, such as controlled burns and removal of densely growing large pitch pines, this habitat would be overtaken by more common New England forests, resulting in the loss of its rare species.

According to the study, *Forest Carbon, an essential natural solution for climate change*, by the University of Massachusetts and University of Vermont, old growth forests store the highest amount of forest carbon, while “a forest with equal areas of young trees and old trees will have high rates of sequestration from the younger trees while maintaining storage capacity and sequestration rates of the surviving older trees.”

While I do *not* favor large scale commercial logging that degrades and fragments forest habitat and reduces soil carbon sequestration, I do support further exploration of the potential for sustainable solutions for wood products, such as selective and sustainable tree harvesting with silviculture, for mass timber made from smaller, younger trees, instead of commercial scale logging for large trees. The 2022 *New England's Climate Imperative: Our forests as a Natural Climate Solution* report found that, “Using mass timber building materials is much less carbon intensive than steel or concrete and has the added benefit of storing carbon throughout the life of the building.”

That same report states that, “Less than 4% of our [New England] forests are currently protected as wildland reserves. We need to ensure that a minimum of 10% of New England's forests are allowed to grow and mature without the influence of any extractive land uses.” The report identifies that approach as one of the essential pathways to sequestering carbon, especially as, “Tree harvesting in New England is the largest source of carbon emissions from the forest landscape.”

Paradoxically, one of the more recent causes of deforestation has been development of ground mounted solar. Approximately 60% of ground mounted solar acreage was previously forested, according to our Climate Chief, Melissa Hoffer. In order to prevent further deforestation from solar development, the state must establish laws, regulations, best practices, model zoning for towns trying to protect their forests, and effective incentives/disincentives which shift solar development to developed and disturbed sites, rooftops and solar canopies. The Department of Energy Resource's 2022 *Technical Potential of Solar Study* has clarified that our state has more than sufficient locations for solar on developed and disturbed properties to meet our solar goals and avoid significant deforestation by solar arrays on natural and working lands. It is an essential next step that the state develop outreach plans to encourage private owners of buildings and disturbed lands to develop solar on their properties.

Thank you for considering my comments and requesting public input as you begin to develop guidelines. It is refreshing that you are asking for input before the guidelines have been drafted!

Sincerely,
Sally Pick