The Timber Harvest Summary card was designed to assist the public in providing information to the Bureau of Forestry when proposed forest management projects are in the initial planning stages.

The following are my comments about the Forest Management Project being proposed at:

**Name of Forest Management Project:** Peru State Forest, Garnet Peak

**State Forest:** Forest Regeneration & Wildlife Enhancement

**Management Forester:** Chris Massini

**Forest Health:**

We are very pleased to see something is about to happen, it's a shame the red pine wasn't salvaged sooner on Garnet Peak, better late than never I suppose!

**Recreation:**

**Long Term –** The cleanup of Garnet Peak since the ice storm will restore the area to a former time.

**Water Quality:**

The banishment of ATV's will help with unnecessary siltation of small streams in the area.

**Aesthetics:**

Garnet Peak & Airplane Crash Site will benefit from forest management. And some overdue attention.
Wildlife/Rare Species:

We are not aware of any rare species, but the wildlife will appreciate any cutting activity in the area!

Cultural Resources/Special Places:

Some cleanup & clearing around the plane crash would be nice! Maybe even some path improvements!

Other:

We are happy to see some forest management at Peru State Forest.

As abutters, our property is in chapter 41 and we try to do proper forest practices etc. We often wonder why the state seldom does what it preaches!

Name: Ken & Lana Hall
Address: 115 Curtin Rd. Ext. Peru, MA 01235
Phone Number: 413 655-8355

Public comments can be submitted by e-mail to: Timber.comments@state.ma.us or fax to: (413) 545-5995 or mailed directly to the responsible Management Forester by 5:00 p.m. prior to the completion of the 45-day public comment period which is posted on the project summary.

Please contact William Hill, State Lands Management Program Supervisor at (413) 545-3891 if you have questions about the Timber Harvesting Summary public comment process.
Ms. Jessica A. Rowcroft  
Bureau of Planning, Design & Resource Protection  
Department of Conservation and Recreation  
251 Causeway St. Suite 600  
Boston, MA 02114

April 1, 2017

Dear Ms. Rowcroft,

Below please find comments and questions for the public record. Most apply to the Garnet Hill Forest Management Project but some are more general questions.

Respectfully submitted,

Susan Masino, on behalf of Friends of Peru State Forest

General Questions from Friends:

1. Have ecological surveys been done in each season to ensure avoiding sensitive habitats and species?
2. Can the public participate in wetland and ecological mapping?
3. How many times do you expect to go out to survey the wetlands and ecology?
4. What if this is a particularly dry (or wet or cold or hot) year?
5. Has DCR contacted other organizations for input about this specific project?
6. Beech trees are a food source for people and animals. Why would we kill them – even using chemicals?  
   http://www.recorder.com/outdoor-column-8852215
7. Is there going to be monitoring on site during the project to ensure sensitive areas are protected – and restored?
8. How can we advocate for this particular area to be converted to a Reserve?

Additional comments and questions:

In a time of extinction, every tree you cut accelerates the process.

Tom Neilson, Ed.D.
37 Solar Way
Greenfield, MA 01301
1. Proposed projects provides no justification that cutting 50+ acres of forest will benefit the environment. On the contrary in a foreseeable future it will increase rather than reduce carbon footprint.
2. Peru forest as it stands now provides habitat for multiple species. Project of this size will destroy this habitat.
3. There is no need to improve roads in Peru forest – it is for passive recreational use.
4. It is totally unacceptable to use chemicals to discourage growth of beech trees.
5. There is no economic justification provided for this project.
6. I learned about this project only by chance. There were only three people attending DCR meeting. DCR needs to find a way to better inform public of their projects.
7. Ecological justification for the project is very poor – there are no scientific arguments. Project of this magnitude should be reviewed by respected and independent environmental scientists outside of DCR.

Lev Margulis
80 Wayne Road
Needham, MA 02494
Phone: 781-449-8076
Email: margulisf@gmail.com

We have seen areas that have been clear cut with buffers along roads so people won't notice. It is an obvious decimation to the wild life that make their homes in those areas. The highest areas such as Garnet Peak should not be touched especially with the rocky area to the west. It would take forever for growth to return and that would lead to erosion and more problems. Most of the forest is already 100 years old - fostering old growth in this area is a better way to go.

Ann and John Galt
Pittsfield, MA

This is a beautiful area that we share love to with the kids. How can DCR think this will improve it?

Geoff and Sarah Casey
Leeds, MA

Do not cut down our Massachusetts forests to produce energy. In a time of serious climate change we need old trees to sequester carbon. In fact more trees should be planted. DO NOT approve the cutting of trees for wood bio-mass. Farmers should be harvesting methane from cow manure in New England and solar panels should only be put up over parking lots, in vacant fields and already paved vacant lots in cities. Leave the trees standing!

Ellen Hopman
67 Munsell St, Belchertown, MA 01007
I am concerned with the decline of native plant diversity by the introduction of invasive non-native grasses and the invasion of weeds. I fear that there will be a loss of bird species, animals and reptiles, and beneficial insects particularly pollinators, that rely on mature trees for nesting and colony development. Clear cutting will adversely change the climate by decreasing the humidity that many of the current animal species depend on. I believe that clear cutting will have a negative impact on understory vegetation and previous animal diversity will not fully return to the targeted areas.

Kimberly Wetherell

Peru, MA
Dear Ms. Rowcroft,

I’m writing on behalf of the Friends of Peru State Forest (PSF) and following up on my comments at the public meeting in Pittsfield on March 16 regarding the timber sale and forestry plans presented. This document refers specifically to the Garnet Hill Lot Forest Management Proposal and related issues. Please add this full letter to public comments; more information is available at www.friendsofperustateforest.org.

We recognize that Middlefield and Peru were identified in the forest vision process a number of years ago as a matched pair – one as a Woodland and one as a Reserve. We commend the original concept behind this “pairing,” but we believe that for many reasons, including some that have come to light since the visioning process, additional regions of Peru State Forest should be converted to a Reserve - with monitoring, trail upkeep and additional intervention only as necessary. We urge that the Reserve at least include the area included in this proposal – it is literally the heart of the forest and has significant cultural and historical value and includes the only state-owned connection with the Middlefield Reserve. These areas should not be part of any timber sale. This would add value to Middlefield, align with the DCR goals of conservation and recreation, and preserve these resources for the long term.

In recent years Friends of PSF has been working to document the natural, cultural and historical aspects of the Forest. We have some of these on our website. You acknowledged that historical resources are not indicated on the logging maps provided nor delineated in the report. We note that one of the maps is mislabeled as October Mountain and is very poor quality. DCR staff noted that you don’t want divulge the locations of historical sites as a way of protecting them. With the exception of detailed locations for species of concern or endangered species, Friends of PSF respectfully suggests that delineating historical resources is an opportunity for others to learn about the Berkshires and an added benefit to the recreational value of the Forest, which is within the mission of DCR. We look forward to comparing information to ensure these resources are protected and respected.

The goal of our organization has been to host hikes and share the unique aspects of the Forest and the history of the Berkshires. We know that this area has significant history, much of it intact, as well as amazing flora and fauna. People are always particularly impressed by the moose rubbings on trees (8 ft from the ground!) and the beautiful wetland areas at such a high elevation. We have assembled a repository of historical documents and hosted and attended several fascinating hikes in the past ~4 years, some with upwards of 20 participants. Additional hikes are planned throughout the upcoming season and 2017 is the 75th Anniversary of the plane crash; there is significant interest in this among all ages and from diverse interest groups. There are never a lot of people in the Forest at any time but a lot of people care about it. The crash site provides a quiet and private place for many to reflect and has been tended carefully for decades.
As agreed during the public meeting we will be in touch throughout this season to align our information. We have compiled a repository of readily available historical information about Peru State Forest and are working to add to it. We believe that each forest should have a central repository of information about its natural, cultural and historical resources. Given the deadline of April 2nd for comments, and the adverse conditions and weather, we simply list the content of what we expect to provide once we are able to confirm our locations on the site.

1. specific homestead locations, some with known names of owners and additional information;
2. specific aspects of their arboreal setting – typically sugar maple trees, lilacs, apples etc. These plantings are a significant aspect of the historic value of these homesteads;
3. locations of stonewalls and their integrity, particularly along a double wide carriage road, and indicating a formerly major thoroughfare;
4. confirmed wetlands and vernal pools within the planned logging area; we also note that there are at least THREE known additional stream crossings not indicated (making a minimum of 6 stream crossings!);
5. CCC projects and related aspects within and near the planned logging area;
6. plane crash memorial site and path of the crash through the forest; many small pieces are still distributed through the landscape. They are regularly added to the memorial and contribute to its ongoing value;
7. notable trees and habitats and special species

Additional general comments and specific concerns unanimous among Friends of PSF:

1. We are very concerned about potential desecration of the site of the WWII military plane crash. This site has been maintained by local volunteers for years - replacing flags, collecting pieces of the crash, picking up any trash - and is highly valued for many reasons. Logging activities around it, or on the way to it, will not improve the site and diminishes it as a place of private contemplation and enduring value as a sacred site.

2. We are very concerned about unintended consequences.
   A) Logging is extremely damaging to the forest and releases a huge amount of carbon through tree removal, soil damage, equipment, transportation etc. Major publications are saying that one of the best things we can do for climate change is protect our forests. Forests do not need to be logged to be healthy, and in general older forests have the most complexity and biodiversity. These facts have become ever more clear since the forest visioning process. We suggest that plans for public forests need to be adjusted as new information comes to the fore. Climate change aside, we know our forests protect clean water and biodiversity, and both are essential. Logging impacts these negatively.
   B) Logging brings more, and more serious, invasive species. Currently this is not a major problem in Peru State Forest. The project involves multiple excursions into the interior. Unless logging equipment is cleaned and there is extensive monitoring after the project this will result in much more harm than benefit to this forest.
   C) There is no significant problem that the project is solving. Trees damaged by a storm are not harmful, trees falling over in the woods are not harmful, non-native trees that are not invasive are not inherently harmful, and a subset of trees having some sort of a pest (like the pine or beech trees) is not harmful in the big picture. Some trees will die and some will survive. Some will be blown over or damaged by a storm. None of the reasons given for this project are sufficient justification for a project of this scale on such a sensitive site.

3. Property owners nearby are concerned about their taxes and property values. PSF and its hiking, horseback riding and hunting are a major draw for this rural area and impact values. Residents have seen impacts of other logging projects in the area in recent decades and in other areas of the state and none were positive. People do not want tax dollars spent logging public lands. The forest provides more public benefit as an intact forest.
4. Executing this project means that the main area for recreation in Peru State Forest will no longer be a forest — literally for the rest of the lifetimes of all the people who engage in these activities, including relatives of crash victims, veterans, and relatives of those who died for our country. None see this project as improving the Forest.

5. We disagree strongly that this project will offer a net improvement to habitat or create a type of habitat needed in the area: there are other areas nearby that have had very large clear-cuts and other types of silviculture. State land is the only land that we have control over, and large intact forested areas are crucial for wildlife survival. Trees naturally break or get blown over - there is no need to intervene. The habitat you are creating supports common species. But the habitat you are destroying is a large forest at a cool high elevation that is much less common and even rare. It can help keep species in the southern end of their range as temperatures go up with climate change.

6. Habitat fragmentation is one of the greatest threats to biological diversity, and large undeveloped forested areas help mitigate threats to biodiversity. Corridors between important wildlife habitat areas allow animals and birds to travel from one area to the next increasing the chances of survival for those species. This project severely impacts the only state-owned corridor across Rt. 143 connecting between the Peru and Middlefield forests. Large areas will be clear cut (one is 58 acres, with many smaller clear cut areas). It was our understanding that this should/would trigger an additional level of environmental review.

7. We had planned a series of Boy Scout trips, historical documentation, film projects, and potential trail restoration projects, of course with permission, to improve access and visibility of this forest. These projects will enhance the property values in Peru and the recreational value of the forest; this logging project will decrease them. The planting of the Norway Spruce is itself a part of the history of the site. It is in a small area and there is no need to remove it.

8. Peru has the highest mean altitude in the state, which is a draw for tourism and recreation. Garnet Peak is one of the top ten highest peaks in the state. We know there is a steady stream of visitors from a wide geographic area.

9. The area is a very wet upland area. Because of the large amount of rock in the substructure of the mountain there is poor drainage and an incredible network of wetlands and vernal pools even at the highest elevations. Massachusetts has very strict laws around wetlands and we assume that that a detailed mapping of these and other ecological features (flora, fauna) will be performed during multiple seasons prior to finalizing any plans. Even if “sensitive” areas are avoided there will be a massive change in the water flow and amount of erosion to downhill water resources and into the watershed of the Wild and Scenic Westfield River. The area of the timber sale is bordered by slopes, some very steep, and leading to a brook below.

In sum, we believe that Peru State Forest is forest is a perfect showcase for the region as it is rapidly entering an old growth-like condition while retaining its extensive and unique cultural history that attracts a wide variety of visitors — recreation, hunting, history, remembrance and reflection. It is amazing to have this resource within our state. This project will damage the integrity of all of these values. We note that DCR’s mission is "To protect, promote and enhance our common wealth of natural, cultural and recreational resources for the well-being of all." We thank you for your consideration and are very committed to providing you additional information so that all goals related to the public good can be addressed.

Respectfully submitted,
Susan Masino, on behalf of Friends of Peru State Forest
April 2, 2017

Submitted via email to: Timber.Comments@state.ma.us

Jessica A. Rowcroft
Bureau of Planning, Design & Resource Protection
Department of Conservation and Recreation
251 Causeway St, Suite 600
Boston, MA 02114

RE: Garnet Hill Lot Forest Management Proposal

Dear Ms. Rowcroft:

Please accept our comments for the public record.

We are writing regarding the Garnet Hill Lot Forest Management Proposal for Peru State Forest, posted by the Department of Conservation and Recreation (DCR) on February 16, 2017.

This area of Peru State Forest has not been cut for 80 to 100 years. It is storing a huge amount of carbon and is just beginning to become mature and on the way to reaching an old-growth condition. It is in the middle of a large block of unfragmented state forest land, which provides habitat for interior plant and wildlife species. It offers public recreation in an unspoiled, natural forest landscape. Logging this tract of forest would seriously degrade these important values.

We are extremely concerned that the plan disregards carbon and climate change impacts. The plan would cut down most of the trees in the area and significantly disturb the soil. This would release huge amounts of greenhouse gas in a short period of time, including the vast majority of the carbon in the trees, vegetative understory, and soil. The plan makes no attempt to assess the amount of carbon currently in the forest and soil, how much would be lost because of logging, and how many decades — or centuries — it would take for the trees to grow back and reabsorb the lost carbon. The plan also ignores the massive amounts of carbon will be released from the fossil fuel that will be burned to cut, transport, and process the trees.

Even if some of the timber is used for long-lived wood products — and there is no assurance that this will be the case — studies have found that most of the original carbon in the forest will almost certainly be released to the atmosphere within a few weeks or months. The net impact will be to worsen climate change. For example:

"Ingerson (2009) completed one of the most comprehensive reviews on this issue, tracing the amount of the original live tree volume (and thus carbon stored) remaining after logging, primary processing, secondary processing, and construction. Compiling and calibrating estimates from a variety of sources, she concluded that these losses amount — on average — to 82% of the original live tree volume. In other words, when a site is logged and the wood converted into long-lived wood products, only 18% of the original carbon stores are preserved, and then only for a few decades at most before those longer lived wood products start to decay. The remaining 82% of the carbon stocks are released into the atmosphere in a relatively short period of time. This value is essentially 100% for short-lived wood and paper products." (John Talberth, Dominick DellaSala, and Erik Fernandez. 2015. Clearcutting our Carbon Accounts: How State and Private Forest Practices are Subverting Oregon’s Climate Agenda. Center for Sustainable Economy and GEOS Institute. November 2015 http://sustainable-economy.org/wp-content/uploads/2015/11/Clearcutting-our-Carbon-Accounts-Final-11-16.pdf and Ann L. Ingerson. 2009. Wood Products and Carbon Storage:
Can Increased Production Help Solve the Climate Crisis? The Wilderness Society, Washington, DC. 

Studies have documented that unlogged forests store more carbon per acre than forests that are logged. Therefore, there is good reason to believe that leaving the Garnet Hill Lot forest uncut would be the best way to maximize carbon storage and climate benefits. (See Jared S. Núnery and William S. Keeton. 2010. Forest Carbon Storage in the Northeastern United States: Effects of Harvesting Frequency and Intensity Including Wood Products, Forest Ecology and Management, Volume 259, Issue 8, 31 March 2010. pp. 1363 1375) 

Moreover, research has found that the biggest trees increase their growth rates and sequester more carbon as they age. (See N. L. Stephenson, A. J. Das, R. Condit, S. E. Russo et al. 2014. Rate of Tree Carbon Accumulation Increases Continuously with Tree Size. Nature: doi:10.1038/nature12914 (2014). 
http://www.nature.com/nature/journal/vaop/ncurrent/abs/nature12914.html) By intensively logging the many mature trees in project area, the Garnet Hill Lot logging plan would very likely result in a significant loss of carbon storage and worsen climate change.

On the other hand, leaving the red pine and Norway spruce plantations that are threatened with mortality from insect infestations and disease uncut, is not likely to a cause major spike in releases of carbon dioxide. In fact, studies indicate that these trees would continue to store most of their carbon for decades, releasing it slowly and gradually. This would help to mitigate climate change. (See David J. P. Moore, Nicole A. Trahan, Phil Wilkes, et al. 2013. Persistent Reduced Ecosystem Respiration After Insect Disturbance in High Elevation Forests. Ecology Letters, (2013) 16: 731–737 doi: 10.1111/ele.12097 

The importance of protecting intact forests to absorb and store carbon cannot be overstated. This is highlighted in a report recently published by Dogwood Alliance.

"Standing forests are the only proven system that can remove and store vast amounts of carbon dioxide from the atmosphere at the scale necessary to keep global temperature rise below 1.5 degrees Celsius this century. It is therefore essential to not only prevent further emissions from fossil fuels, deforestation, forest degradation, and bioenergy, but also to expand our forests' capacity to remove carbon from the atmosphere and store it long-term."

"If we halted deforestation, protected existing forests, and expanded and restored degraded forests, we could reduce annual emissions by 75 percent in the next half a century. If fossil fuels were rapidly phased out during this same time period, we could reduce the amount of carbon in the atmosphere, meet the goals of the Paris Agreement and avoid catastrophic climate change. But, we cannot solve the climate crisis without a major scale-up in forest protection and restoration across the planet. We must not only protect remnant primary, intact forests, but also conserve and restore less pristine landscapes. Yet, to date, forest protection commitments and funding are too narrowly focused on tropical forests." (Bill Moomaw and Danna Smith. 2017. The Great American Stand: US Forests and the Climate Emergency. Dogwood Alliance. https://www.dogwoodalliance.org/wp-content/uploads/2017/03/The-Great-American-Stand-Report.pdf

By increasing greenhouse gas emissions from the forest and undermining the capacity of the forest to absorb and store carbon, this plan conflicts with the goal of the Global Warming
Solution Act (GWSA) to dramatically reduce greenhouse gas emissions. DCR needs to provide an analysis as to why the benefits of this logging project would justify disregarding the critical mandate of the GWSA.

The proposed logging project would result in significant fragmentation of interior forest ecosystems. The DCR plan claims that this is a benefit, providing “the conditions for early seral or regenerating forest that will support diverse species.” In fact, there is no need to expand early successional forest acreage, which is already common in Massachusetts. On the contrary, there is a significant need for more mature and old-growth forest, especially in large, unfragmented blocks.

The Massachusetts Division of Fisheries and Wildlife’s BioMap2 report provides a strong rationale for protecting, not logging, the century-old, unfragmented forest in the Garnet Hill Lot project area.

“Forest interior habitat is widely recognized as critically important for species sensitive to forest fragmentation and is becoming increasingly scarce in highly populated regions of the country like Massachusetts. Forest interior habitats are the areas least impacted by roads, residential and commercial development, and other fragmenting features. Many bird species that breed in Massachusetts are sensitive to forest fragmentation, including Ovenbirds, Scarlet Tanagers, and many woodland warblers. Negative results of fragmentation include edge effects such as nest predation by species associated with development such as skunks, raccoons, and house cats; and nest parasitism by species such as the Brown-headed Cowbird that lay their eggs in the nests of other bird species and reduce their reproductive success. Forest interior habitats also support a wide range of native plants, animals, and ecological processes sensitive to other edge effects such as noise and light pollution from roads and development, invasive species establishment, and alterations to wind, heat, and other climate variables.” (Natural Heritage Endangered Species Program. 2010. Forest Core BioMap2 Components. Core Habitat: Forest Core Critical Natural Landscape: NA. Massachusetts Division of Fisheries & Wildlife. 

The Forest Futures Visioning Process, undertaken in 2009-2010 by the DCR as directed by the Secretary of Energy and Environmental Affairs (EEA), determined that it is critical to designate large reserves on state lands that are off-limits to logging and other industrial development. The resulting landscape designations for DCR-managed state lands included the establishment of a number of such reserves. As DCR describes them,

“The primary purpose of setting aside large areas of forest as Reserves is to allow forests to develop relatively unimpeded by human disturbance and to create late successional habitat.

"Reserves are meant to contain natural features across a landscape, ideally located across the state representing different ecological settings. Reserves are also intended to be several thousand acres in size to provide adequate protection of resources, with the potential to be increased over time (either via state or local land conservation efforts or by co-management of non-state protected forest) to reach sizes of 10,000 to 15,000 acres. [The Nature Conservancy] recommends large Reserves in the Eastern United States be a minimum of 15,000 acres; EEA recommends a minimum of 5,000 acres...." (Massachusetts Department of Conservation and Recreation. 2012. Landscape Designations for DCR Parks & Forests: Selection Criteria and Management Guidelines. (pp. 14, 16) http://www.mass.gov/eea/docs/dcr/ld/management-guidelines.pdf)
A small portion of Peru State Forest and most of the adjacent Middlefield State Forest are within the Middlefield/Peru Forest Reserve. According to DCR:

"The Forest Reserve management goal is to increase the area of late seral forest and to protect and conserve species that depend on this habitat, while allowing the effects of natural disturbances to create variation in successional trends in some areas. Only passive management is used in the Forest Reserves, mainly focusing on restoring native habitat by removing invasive species." (Avril de la Cretaz, Matthew Kelty, and Lena Fletcher. 2009. Middlefield/Peru Forest Reserve. Massachusetts Forest Reserve Long Term Ecological Monitoring Program. Department of Natural Resources Conservation, University of Massachusetts Amherst. Prepared for the Massachusetts Executive Office of Energy and Environmental Affairs.

http://www.mass.gov/eea/docs/dcr/stewardship/forestry/pdf/middlefield-perufr.pdf)

Yet the Middlefield/Peru reserve only covers 3,165 acres — less than one-half of the total of 6,532 acres that comprise the two state forests. Of this, only 595 acres are in Peru State Forest, scattered in seven isolated tracts, which greatly lessens their effectiveness and integrity. As a result, the reserve is not fully representative of the land types, geology, and ecosystems of the state forests. For example, the reserve protects significant lands in the Berkshire Massif, but virtually no lands in the Hoosac Formation or Rowe Schist bedrock.

This reserve configuration is not consistent with DCR's stated goal of a minimum reserve size of 5,000 to 15,000 acres. Middlefield and Peru State Forests constitute one of the largest tracts of public land in Massachusetts. If these two forests were entirely protected as a reserve (which could also include adjacent state Wildlife Management Area lands), it would fall within the DCR's range for minimum reserve size. This would be far more effective in promoting the stated goal of increasing late seral forest and the habitats and wildlife that depend on it.

The Garnet Hill Lot logging project would fragment and degrade the native biodiversity of the forest, thus undermining such an expansion. This is an important reason for seriously re-evaluating the project. Instead, DCR should explore the potential for expanding the Middlefield/Peru Forest Reserve to encompass this entire block of land.

One of the priorities in the plan is to cut trees before they lose their commercial value. But to say that these trees must be cut due to insect and disease threats is not a compelling reason to take this approach. The forest insect and disease threats that are described in the plan are, in our opinion, greatly overestimated. The insects and disease will kill some trees, but that is something that happens in all natural forests. Logging will do little to mitigate or stop them. Indeed, there is a strong likelihood that insect and disease problems would be exacerbated by spreading them to other areas being logged, and then throughout the whole forest.

DCR's approach to "treating" red pine scale is to cut the trees down. In our view, DCR should take into account the biological analysis of this problem, done by Acadia National Park, where logging is prohibited. According to the National Park Service:

"An invasive exotic insect, red pine scale, has been confirmed...entomologists on dying red pines [in Acadia National Park].

....

"Park managers currently have no plans to cut and remove dead or dying red pines on large areas. Although salvage harvests have occurred in other states where red pine scale has killed trees, harvests do not appear to have prevented the spread of the insect. In fact, moving trimmed or harvested materials in spring through fall can actually spread the insect.
“Park biologists note that trees in the understory will likely respond to increased light conditions with quick and vigorous growth. As dead red pines trees begin to be recycled, they may provide important habitat to bats, woodpeckers, and other cavity dwellers, and will return nutrients to the soil for the next forest that will replace the dying overstory.” (Acadia National Park. 2014. Invasive Insect Contributing to Red Pine Die-off on Mount Desert Island. National Park Service https://www.nps.gov/acad/learn/news/invasive-insect-contributing-to-red-pine-die-off-on-mount-desert-island.htm)

We believe that it makes far more sense for DCR to leave red pines in the project area standing, rather than cutting them down in a futile effort to "control" red pine scale or "salvage" the commercial value of the trees. The result of cutting them down would be a degradation of ecosystem health, as well as a release of carbon that would contribute to climate change.

Regarding the northern hardwoods in the project area, the proposed openings are larger than are currently allowed on state lands. Moreover, the logging plan would convert up to 50% of the 205 acres of forest and up to 75% of the other 102 acres to "openings." This means that up to 87.5% of the hardwood tree volume would be removed. We strongly oppose this devastation of a native, century-old forest ecosystem.

If the goal were to maximize timber value and output above all other values, then the plan to try to control beech bark disease by logging and chemical suppression would perhaps make some sense. However, this approach undermines the goal of sustaining a healthy, resilient, native forest. Characterizing the beech trees that would grow back as "undesirable" is a commercial, not an ecological classification. Beech is a native species that provides critical ecological benefits. Chemically controlling the growth of these trees on our public lands is unacceptable, from both an ecological and public health standpoint.

The forests of Pictured Rocks National Lakeshore have sustained major damage from beech bark disease. However, cutting down the beech trees in these forests is not an option, because they are protected from logging by law. The National Park Service concludes that cutting would not be appropriate, in any event. This is because in a diverse, unlogged forest, some trees will be naturally resistant, and they can serve as the basis for eventually restoring the beech tree population. (See Pictured Rocks National Lakeshore. 2014. Beech Bark Disease: A Species in Trouble. National Park Service. https://www.nps.gov/piro/learn/nature/upload/Beech-Bark-Disease-3.pdf) We request that DCR take this same approach, and refrain from using cutting and chemical herbicides to suppress beech trees in an attempt to mitigate this disease.

We value our forested public lands as trees that are growing, not trees that are waiting to be logged. In contrast, DCR is proposing a 50-year cutting rotation for most of the Garnet Hill Lot area. We strongly oppose this practice, which is typical of aggressively logged industrial timberlands, and is completely unsuitable to an ecologically diverse public forest. Moreover, the DCR plan did not provide any analysis of the alternative of simply leaving the forest alone, instead of intensively manipulating it to solve supposed problems. Research at the Harvard Forest indicates that no action may well be the best alternative for this area.

"Although intuitive support exists for the development of 'protection forests' through silvicultural approaches to increase the resistance and resilience of forests to pests, pathogens, and natural disturbances, empirical data to support the approach are lacking. Not only is there sparse evidence that such approaches achieve their goals of increasing resistance and resilience, little evidence suggests that natural disturbances yield negative functional consequences. Therefore, current management regimes aiming to increase long-term forest health and water quality are ongoing 'experiments' lacking controls. In many

We advocate allowing this forest to live in its natural cycle and eventually reach an ecologically sustainable, old-growth condition. The forest should be protected for the long-term benefit of plants, wildlife, habitats, and the people, not exploited for short-term resource extraction. The designation of the entire Middlefield and Peru State Forests as a reserve would promote this goal.

Regarding aesthetics, intensive logging in the Garnet Hill Lot has been deemed as acceptable because DCR will leave a “buffer” of uncut trees along the roads. This reminds us of clearcuts in northern Maine or western United States and Canada, where the forest looks intact from the road, but where aerial photos show that what is behind the “beauty strip” is shocking and disturbing. This is especially objectionable when it occurs on land owned by the public. Hiding a logged area is a deception, not a responsible management practice.

Regarding the integrity of recreation and cultural resources, the plan suggests that this is not a concern, because people will still be able to access the area. Yet, there are cultural and historical features of this forest that will be negatively impacted by the level of disturbance planned in the proposal. The proposed repair of minor erosion of roads is touted as a benefit of the logging project, but low-impact uses such as hiking, horseback riding, bird watching, and picnicking do not depend on developed roads. The main reason to maintain these roads is to facilitate logging access. DCR should consider the potential benefits of converting some or all of the road mileage in this area to non-motorized trails.

Regarding streams and wetlands, we know that these areas have not been carefully surveyed. No logging should take place until they have been. The only reliable method for identifying wetlands is by careful on-the-ground observation by a qualified biologist in appropriate seasons. However, the project area has been buried in snow and frozen for months, so it is not possible for the public to ground-truth DCR’s claim that there are no vernal pools in the area.

Regarding rare and endangered species, the claim that they will not be affected is unsubstantiated. The project area has not been sufficiently surveyed for these species since at least 2008, when the 13th Edition of the Massachusetts Natural Heritage Atlas was issued (see http://www.mass.gov/eea/agencies/dfg/dfw/natural-heritage/regulatory-review/regulatory-maps-priority-and-estimated-habitats/natural-heritage-atlas-book.html ). Before any logging activities proceed, DCR needs to do a full, up-to-date survey and analysis of the area, with the participation of conservation biologists trained in rare and endangered species protection.

The Garnet Hill Lot plan does not include any discussion of how the public’s money is being spent. DCR claims that there is a need to log this century-old forest and to “improve” little-used roads. However, the plan provides no estimate of the cost for staff, vehicles, fuel, and other administrative overhead to implement the project. This cost will certainly be significant. Moreover, the logging will result in considerable collateral environmental damage that will need to be mitigated — if possible — at additional cost. The plan seeks to gain some revenue by cutting trees while they have still have some commercial value. Yet, these revenues are unlikely to even come close to offsetting the cost of the logging operation. As a result, this appears to be a financially irresponsible plan.
Comments on Garnet Hill Lot Forest Management Proposal

Although DCR has failed to provide any financial information in the Garnet Hill Lot logging plan, its Central Berkshire District plan (which includes Peru State Forest), does provide some district-wide information. This information indicates that the district's logging program is likely to result in annual losses of significant amounts of taxpayer funds. (See Department of Conservation and Recreation. 2007. Central Berkshire District Draft Forest Resource Management Plan (pp. 8, 70, 71) http://www.mass.gov/eea/docs/dcr/stewardship/forestry/manage/cbk-resource-management.pdf )

Without any kind of cost-benefit analysis, the public has no way to judge whether or not the claimed benefits of the Garnet Hill Lot project justify the large taxpayer subsidies that will probably be needed to implement it. DCR needs to provide a full economic analysis of the costs and benefits of this project before taking any action beyond protecting public safety.

We urge DCR to withdraw this plan and complete a new analysis that considers the issues and concerns discussed above. If, after such an analysis, there is still a compelling ecological, social, and economic justification for the project, DCR should issue a new plan that takes all of these issues into account and is subject to full public review and participation. Until then, DCR should not proceed with project implementation.

Thank you for considering our comments.

Sincerely,

Michael Kellett
RESTORE: The North Woods
47 Graniteville Road
Westford, MA 01886

Janet Sinclair
Concerned Citizens of Franklin County
P.O. Box 653
Greenfield, MA 01302

Ellen Moyer, PhD, PE
Principal, Greenvironment, LLC
258 Main Road
Montgomery, MA 01051

Claudia Hurley
Friends of Robinson State Park
428 North, St.
Feeding Hills, MA 01030

Lucy Gionfriddo
Friends of Robinson State Park
428 North, St.
Feeding Hills, MA 01030

Meg Sheehan
EcoLaw
PO Box 3848
Plymouth MA 02361

Eric Chivian M.D.
Founder and Former Director
Center for Health and the Global Environment
Harvard Medical School
136 Carter Pond Rd.
Petersham, MA 01366

Chris Matera
71 Washington Ave.
Northampton, MA 01060

Glen A. Ayers, R.S., C.H.O.
254 Davis Street
Greenfield, MA 01301

Ray Weber
209 Main Street West
Springfield, MA 01089

Elizabeth Adams
Mass Forest Rescue
P.O. Box 502
Leverett, MA 01054

Don Ogden
The Enviro Show
WXOJ- Ip/Valley Free Radio
140 Pine Street
Florence, MA 01062
<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elizabeth Ahearn</td>
<td>Field to Table</td>
</tr>
<tr>
<td></td>
<td>177 Avenue A,</td>
</tr>
<tr>
<td></td>
<td>Turners Falls, MA 01376</td>
</tr>
<tr>
<td>Michaelann Bewsee</td>
<td>27 Mystic St.</td>
</tr>
<tr>
<td></td>
<td>Springfield MA 01104</td>
</tr>
<tr>
<td>Dave Gafney</td>
<td>P.O. Box 805</td>
</tr>
<tr>
<td></td>
<td>Great Barrington MA 01230</td>
</tr>
<tr>
<td>Carissa Sinclair</td>
<td>14A Mill Village Road</td>
</tr>
<tr>
<td></td>
<td>South Deerfield, MA 01373</td>
</tr>
<tr>
<td>Suzanne R. Carlson</td>
<td>Greenfield, MA 01301</td>
</tr>
<tr>
<td>Louise Grabroski</td>
<td>164 Crabtree Rd</td>
</tr>
<tr>
<td></td>
<td>Quincy MA 02171</td>
</tr>
<tr>
<td>Steve Ryack</td>
<td>PO Box 61</td>
</tr>
<tr>
<td></td>
<td>Heath, MA 01346</td>
</tr>
<tr>
<td>Mary Gilbert</td>
<td>55 Bow Street</td>
</tr>
<tr>
<td></td>
<td>Arlington, MA 02474</td>
</tr>
<tr>
<td>James Schilling-Cachat</td>
<td>Wuttahmishketch</td>
</tr>
<tr>
<td></td>
<td>229 Leverett Road</td>
</tr>
<tr>
<td></td>
<td>Shutesbury, MA 01072</td>
</tr>
<tr>
<td>Rolf Cachat-Schilling</td>
<td>Wuttahmishketch</td>
</tr>
<tr>
<td></td>
<td>229 Leverett Road</td>
</tr>
<tr>
<td></td>
<td>Shutesbury, MA 01072</td>
</tr>
<tr>
<td>Miles V. Tardie</td>
<td>Wuttahmishketch</td>
</tr>
<tr>
<td></td>
<td>229 Leverett Road</td>
</tr>
<tr>
<td></td>
<td>Shutesbury, MA 01072</td>
</tr>
<tr>
<td>Ellen Hopman</td>
<td>67 Munsell St</td>
</tr>
<tr>
<td></td>
<td>Belchertown, MA 01007</td>
</tr>
<tr>
<td>Tom Neilson</td>
<td>37 Solar Way</td>
</tr>
<tr>
<td></td>
<td>Greenfield, MA 01301</td>
</tr>
<tr>
<td>Dorothy McIver</td>
<td>88 Columbus Ave</td>
</tr>
<tr>
<td></td>
<td>Greenfield, MA 01301</td>
</tr>
<tr>
<td>Lynne Ballard</td>
<td>921 Bernardston Rd.</td>
</tr>
<tr>
<td></td>
<td>Greenfield MA 01301</td>
</tr>
<tr>
<td>Hazel Dawkins</td>
<td>91 Smith St.</td>
</tr>
<tr>
<td></td>
<td>Greenfield, MA 01301</td>
</tr>
<tr>
<td>Alison Bowen</td>
<td>250 So. Chesterfield Rd.</td>
</tr>
<tr>
<td></td>
<td>(res.) Goshen MA 01032</td>
</tr>
<tr>
<td></td>
<td>(mail.) Williamsburg MA 01096</td>
</tr>
<tr>
<td>Patrick Devlin</td>
<td>921 Bernardston Rd.</td>
</tr>
<tr>
<td></td>
<td>Greenfield MA 01301</td>
</tr>
<tr>
<td>Catherine T. Driscoll</td>
<td>227 Main Street</td>
</tr>
<tr>
<td></td>
<td>Greenfield, MA 01301</td>
</tr>
<tr>
<td>Meredith Bernhardt</td>
<td>71 Ashfield St.</td>
</tr>
<tr>
<td></td>
<td>Shelburne Falls, MA 01370</td>
</tr>
<tr>
<td>Audrey Ortega</td>
<td>11 Walden St.</td>
</tr>
<tr>
<td></td>
<td>Springfield, MA 01108</td>
</tr>
<tr>
<td>Lisa Turowsky</td>
<td>729 Colrain Road</td>
</tr>
<tr>
<td></td>
<td>Greenfield, MA 01301</td>
</tr>
<tr>
<td>Lee Ann and Stuart Warner</td>
<td>55 Montague Road</td>
</tr>
<tr>
<td></td>
<td>Leverett MA 01054</td>
</tr>
<tr>
<td>Ralph S. Baker, Ph.D.</td>
<td>840 Ashby West Rd.</td>
</tr>
<tr>
<td></td>
<td>Fitchburg, MA 01420</td>
</tr>
<tr>
<td>Sandy Kosterman</td>
<td>141 Barton Road</td>
</tr>
<tr>
<td></td>
<td>Greenfield, MA 01301</td>
</tr>
<tr>
<td>Richard Stafursky</td>
<td>Species' Forest, Inc.</td>
</tr>
<tr>
<td></td>
<td>Shelburne, MA 01370</td>
</tr>
</tbody>
</table>
Comments on Garnet Hill Lot Forest Management Proposal

Bill Keck
59 Haywood St.
Greenfield, MA 01301

Anna Zewinski
14A Mill Village Road
South Deerfield, MA 01373

Green Futures
P.O. Box 144
Fall River, MA 02724-0144

Arise for Social Justice
467 State St.
Springfield MA 01105

Todd Steglich
180 Chilson Road
West Springfield, MA 01089

Steve Kisiel
Peru, MA 01235

Bonny DiTomasso
Peru, MA 01235

Sarah Soffer
New York, NY and
Peru, MA 01235

James Kenney
Cambridge, MA and
Peru, MA 01235

Barbara Kenney
Cambridge, MA and
Peru, MA 01235

Peter Liberman
New York, NY and
Peru, MA 01235

Sam Liberman
New York, NY and
Peru MA 01235

Greg Moynahan
Tivoli, NY 12583

Danielle Riou
Tivoli, NY 12583

Katie Galt
West Simsbury, CT 06092

Susan A. Masino
Vernon Roosa Professor of Applied Science
Professor of Neuroscience and Psychology
Trinity College
Hartford, CT 06106
The Timber Harvest Summary card was designed to assist the public in providing information to the Bureau of Forestry when proposed forest management projects are in the initial planning stages.

The following are my comments about the Forest Management Project being proposed at:

Name of Forest Management Project: Garnet Hill Lot

State Forest: Peru State Forest

Management Forester: Kristopher Massini / Bill Hill

- The Peru State Forest has not been significantly harvested in decades and represents an opportunity to provide old-growth habitat support in the near-term future. This parcel should be allowed to return to wildlands. Selective foresting will alter the habitat to the benefit for some subpopulations of flora and fauna but at the disproportional expense of other subpopulations. It has been demonstrated that old growth forests support much higher levels of biodiversity than managed forests. See, for example A. W. D'Amato et al. “Understory Vegetation in Old-Growth and Second-Growth Tsuga canadensis Forests in Western Massachusetts”, Forest Ecology and Management 257 (2009) for a discussion of the superior plant life diversification in old-growth when compared to actively-managed forests. See D. S. Chandler and S. B. Peck, “Diversity and Seasonality of Leiodid Beetles in an Old-Growth and 40-Year-Old Forest in New Hampshire,” Environmental Entomology 21 (1992) for a similar discussion using various species of beetles. What effects to the current flora and fauna can be expected from the proposal? Will flora and fauna surveys be conducted both before and after the proposed project?

- The area of the proposed project contains many undocumented wetlands including vernal pools that support wood frog and salamander populations. A complete wetlands mapping should be conducted by a licensed soil scientist to delineate all the wetlands and intermittent water courses or this project should NOT move forward. Will a licensed soil scientist be hired to conduct a wetlands survey and subsequent mapping? If so, what mapping resolution will be required of the wetlands map?

- There are many documented and as yet undocumented historical sites within the project area. Will a survey of historical artifacts, including sample sifting of soils down to the glacial tills, be conducted? If not, how will the preservation of historical artifacts be protected?

- This project will not generate funds for the state’s coffers but will in fact operate will a loss of state tax dollars. Further transparency and disclosure of the finances of this project should be released or this project should not be allowed to move
forward. When will further financial information be released about the Garnet Hill Lot project?

- The idea that harvesting this forest will lead to better carbon sequestration than allowing the forest to become wildland is incorrect. Larger trees sequester more carbon than smaller trees and the rate of carbon sequestration increases increasingly with tree trunk diameter. See, for example N.L. Stephenson et al. “Rate of Tree Carbon Accumulation Increases Continuously with Tree Size,” Nature 507 (2014). The carbon sequestration argument for harvesting the Garnet Hill Lot should be removed from the proposal entirely as it is NOT correct. When will a new proposal be released without this fallacious argument?

Name: David Galt, PhD

Address: 41 MADISON LN, WEST SIMSBURY, CT 06092

Phone Number: (860) 651-6790

Public comments can be submitted by e-mail to: Timber.comments@state.ma.us or fax to: (413) 545-5995 or mailed directly to the responsible Management Forester by 5:00 p.m. prior to the completion of the 45-day public comment period which is posted on the project summary.

Please contact William Hill, State Lands Management Program Supervisor at (413) 545-3891 if you have questions about the Timber Harvesting Summary public comment process.
March 30, 2017

Keith DiNardo
Bureau of Forestry
Massachusetts Department of Conservation and Recreation
40 Cold Storage Drive
P.O. Box 484
Amherst, MA 01004

RE: Warwick State Forest – Bass Swamp Forest Management Proposal

Thank you for the opportunity to comment on the Department of Conservation and Recreation’s (DCR’s) Bass Swamp Forest Management Proposal. The Appalachian Mountain Club (AMC) offers these comments based on the terms of Appendix C of the Memorandum of Understanding between DCR, AMC and the AMC Berkshire Chapter for New England Trail development and management on the New England National Scenic Trail.

AMC is the oldest conservation and recreation organization in the country, with 150,000 members, supporters, and advocates from Maine to Washington, DC. Our mission is to promote the protection, enjoyment, and understanding of the mountains, waters, forests, and trails of the Appalachian region. Because successful conservation depends on active engagement with the outdoors, we encourage people to experience, learn about, and appreciate the natural world. AMC maintains over 1,800 miles of trail throughout the northeast, including the Massachusetts portions of the New England National Scenic Trail (NET), which runs through the proposed project area.

DCR and AMC have collaborated in the development of guidelines for forest management projects on DCR Division of State Park & Recreation lands, consistent with the DCR Landscape Designation Selection Criteria and Management Guidelines. The comments below, regarding the safety and aesthetic considerations for the NET, reflect those guidelines and a site visit to the project location.

Within the project area the New England Trail has been located on the ‘Fifth Massachusetts Turnpike’. AMC agrees that this road provides the least impactful access to the project site for the purpose of bringing forwarders and other necessary equipment in and out of the proposed project area. This agreement is made with the understanding that at the time of project completion, the roadway will be restored to and/or improved upon its prior condition. For the period of trail closure, AMC and DCR will determine an appropriate reroute for the NET.

AMC recommends that a 100’ aesthetic buffer be maintained along the entirety of the affected trail. Within that 100’ buffer, we recommend that within 0-50’ of the trail there be no harvesting except in the case of ‘high-risk’ trees, and where necessary due to forwarder access. Within 50-100’ of the trail we ask that no more than 50% of the total basal area be removed. AMC recommends that ‘high-risk’ trees be defined as those that meet two criteria: (1) a tree that is determined to be at a significantly increased likelihood of failure due to structural damage, decay,
or similar defect, and (2) a tree that lies within the immediate vicinity of the NET’s treadway and is at risk of falling onto the trail.

To minimize conflicts with hiker use during the harvest we recommend that this project:

- be conducted after the end of October, which is a popular hiking season.
- be conducted during weekdays if feasible.

AMC appreciates the ongoing collaboration with DCR for stewardship of the New England Trail and the attention to the guidelines we have developed. Thank you again for the opportunity to offer these comments.

Sincerely,

[Signature]

Bridget Likely
New England National Scenic Trail Coordinator
Appalachian Mountain Club
Hello Keith,
As a NEST trail maintainer in Warwick and Royalston, I want to extend appreciation for the thorough Warwick-Bass Swamp area forest management proposal. I am sure that you will uphold and adhere to the "at least 50 feet from trails" and to the picking up and distribution of slash etc. I appreciate that some trees of maturity will be left to become seed trees, as well as leaving some snags for wildlife etc. The proposal project considers many aspects of the forest life. If you need announcements to occur regarding the logging and trail use, I would be happy to post your updates on our Warwick Listserve for you. Just let me know and in that way you will reach many townspeople or consider posting a flyer at our local library.
Thank you,
Clare Green

I strongly support the goals of forest management proposal, especially the spot clear cuts to encourage species diversity and help to develop uneven aged stands. This will continue the this forest management technique that Bill Rivers used many years ago, not that far away. I support removing the red pines. My white pines also have thin tops and I hope your proposal to give them more growing room will solve the problem (I fear it is some strange disease or warming that is the cause of the thin tops).

The M&M Trail (New England Scenic Trail) is a special concern. If the AMC accepts a 50 foot buffer strip, I’ll go along with it, but a little wider might be better. In the proposal area the M&M trail follows an old, discontinued county road that is seriously eroded in spots. Page 3 of the Management Proposal states that, “All roads and trails impacted by the forest management will be restored to their prior condition.” I strongly object to that statement (even thou it is somewhat amended on page 5, with the caveat “where deemed appropriate by the forester”). If the washed out old county road is used as access to a landing, it will be upgraded to allow the trucks to pass over it. The quoted statement implies that after use the road will be DEGRADED to its previous washed out condition. That makes no sense and would destroy the upgraded road’s usefulness as a fire access road, especially for the several years following the harvest when the threat of forest fire is higher. All roads and trails should be protected by installing water bars, broad based dips and other best management practices to prevent erosion, to include seeding where appropriate. If the road is used as access to a log landing by over-the-road vehicles, it should be gated at the conclusion of the job to discourage use of the road by 4 wheel drive vehicles.

While normally it might be preferred to not allow use of the M&M Trail for skidders or trucks, in this unique case I recommend it. It is a chance to fix up a badly eroded road. Installing water bars at the completion of the work will actually reduce sedimentation to the stream while making it better for hikers and snowmobilers.

The legend of the map on Page 9 has an entry “ATV Trail.” It is my understanding that ATVs are NOT allowed on Warwick State Forest. I would prefer the entry read “Snowmobile Trail.”

The legend also notes “White Road.” The section of town road that runs north/south is now named “Bass Rd.” while the road that runs east/west is still called “White Road.”

Warwick is a rural community where many residents are familiar with logging equipment. Given the wetlands in the area, it might have been desirable to comment on the logging equipment that would be allowed to work the job, or equipment that would be inappropriate for the job.
Dear Mr DiNardo,

Thank you for the opportunity to comment on the proposal for the Bass Swamp forest.

I don't understand the need to disturb forested areas around wetlands and am uncertain about what the net gain will be for wildlife. There are already plenty of down trees and brush for animals to find cover. I am aware that wildlife need a variety of habitats and that many need deep undisturbed forest. The forest above my property (77 White Road) was logged some years ago and the slash and leave method has made for a nearly impossible travel through this area since. The company that logged here left oil containers, oil, and other trash behind. Forests can manage themselves without our constant interference.

The wildlife assessment thus far seems very incomplete. Note that we have healthy populations of otter, beaver, mink, fishers, fox, bear, weasels, flying squirrels, bob cat, turtles, salamanders, countless birds, yes moose travel these wetlands (one crossed White Rd in front of my house), coyote, deer, and mountain lion pass through. We have flocks of bluebirds that use this wetland as well as scarlet tanagers, indigo buntings, owls, many species of hawks, waterfowl, herons, etc...

I am pleased that potential vernal pools will be identified and protected. Who will be responsible for identifying these vernal pools? I feel that the Warwick Conservation Committee should be involved to help identify sensitive areas. I feel it will be beneficial to have an official liaison from the Warwick Con. Com. in communication with the person overseeing the logging operations. We value communication as we move forward with this project.

The in kind service that is being offered I believe could be best used putting gates up to protect the amazing state forests in Warwick from the four wheel atv's and dirt bikes that destroy our trails. The atv's access the trails from the corner where old Spooner Rd and White Rd meet, and also along Northfield Rd where the NET trail crosses to Mt Grace to name a couple of high trafficked spots. The Old Turnpike Road used to be fantastic to hike but from atv use it has become a rocky, root riddled torn up trail that collects run off and washes out soil to leave a mess. A mess that gets worse each year.

I would have attended the meeting you held here however I had no way of knowing about it. Please include my email in further notices.

I look forward to hearing from you regarding my concerns. Warwick is a very special town. We live here with many inconveniences because we love the woods, the air, the water, and all the flora and fauna that reside here with us.

Thank you,

Janice Starmer

77 White Road, Warwick, MA

978-544-8968
To - Keith DiMauro

Re: Warwick State Forest - Bass Swamp
Forest Management Proposal

Thank you for your thoughtful effort to manage this unit responsibly.

My wife Mary and I are concerned as neighbors on Bass Rd. abutters on the North West edge of the parcel just built a house 1,000' from the line, and moved in 2 months ago.

Most days I run around Bass Swamp including the NET and Snowmobile/ATV trail year-round, as active conservation minded folk who love the quiet and relative wilderness around us.

We are concerned for the process and outcome. M+M, aka NET, trail corridor, would love to see it have Park Status and protection, at least a good buffer for the boundary with our property and house especially, to buffer house from Bass Rd, to remove or leave certain trees, to leave it reasonably natural especially lovely Section to the north of 1/3 mile east of the culvert/crossing uphill and concern for steep uphill grade to the plateau and foundation hole west section of NET. Some folk maintain the M+M and ATV trail. I love the wild untouched feel of the wood lands around us and hope to continue to run the loop around the swamp.

We look forward to being present when you return for more detailed examination. Thank you - John Williamson
To whom it may concern:

I live at 733 Northfield Road, Warwick near the proposed DCR forest management area in the Warwick State Forest known as Bass Swamp. I am familiar with the specific area as I have hunted, hiked and cross country skied here over the last 25+ years. Although I do not object to responsible and sustainable forestry management activities and practices and am in general support of the above mentioned proposal, I have several comments and concerns specific to its implementation that I ask you to please consider.

1) What is the expected duration and time of year for the project? This would greatly influence the degree of impact on recreational activities on the M&M trail and should be considered to minimize such impact as the project moves forward. As mentioned in your proposal the trail and surrounding area is used (heavily, I might add) by skiers and snowmobilers in winter months and hikers and hunters throughout the year during appropriate times as well.

2) What is meant by infrastructure improvements to the state forest? This vagueness is concerning and should be specifically described and an opportunity for public comment offered before conducting any such activities. Infrastructure "improvements" should be minimal and only serve to preserve and/or protect the natural quality of the area at all costs.

3) Consider preserving as many legacy trees as possible rather than the minimum proposed for each stand (especially in stand #3).

4) The NET should NOT be used for skidding and hauling logs. This trail should be left undisturbed. Furthermore, the maximum buffer strip possible should be used in areas along the trail. This is an important recreational and cultural resource that is enjoyed by many people. There is essentially no "down time" for use of the trail as it is popular in all seasons. It is a significant trail in Massachusetts as it is part of the New England Trail system. It serves as a through-way for long distance hikers as well as provides pleasant hikes for day users. Culturally it is significant as it was a roadway used during colonial times connecting Warwick to Northfield and the Connecticut valley.

5) It is good that DCR proposes to treat all potential vernal pools in the area as certified vernal pools.

6) Any cellar holes encountered should be protected by an adequate buffer area. Also, any disturbance to stone walls should be kept to a minimum and any damage to these walls should be repaired to their pre-work condition after the work is complete.

7) As a hunter and hiker I have observed turkey and deer on more than a few occasions in this area. I have also seen from time to time moose and bear traversing Bass Road near the proposed management area so I disagree with DCR's assessment of "minimal" wildlife utilizing this area. In addition I am aware of a large moose wintering area very close to the western side of the proposed management area.
8) **Clearcuts within sight of the M&M trail and Bass Road should not be conducted.** Visual impact to these important recreational ways should be avoided for the reasons mentioned above (4).

Thank you for the opportunity to submit these comments. I look forward to your thoughtful consideration and response.

Sincerely,
Christine Duerring

733 Northfield Road, Warwick, MA
978-544-0979
cduerring@hotmail.com
Hill, William (DCR)

From: DiNardo, Keith (DCR)
Sent: Tuesday, April 04, 2017 8:40 AM
To: Hill, William (DCR)
Subject: FW: Forest Management Proposal: Warwick

Hello Bill,

This is the e-mail I had told you about yesterday, I intend on sending her a response sometime today. I just wanted to make sure this was included into the formal comments for review.

-Keith

From: Mary Humphries [mailto:maryhumphries328@gmail.com]
Sent: Sunday, April 02, 2017 9:05 PM
To: DiNardo, Keith (DCR)
Subject: Forest Management Proposal: Warwick

Dear Mr. DiNardo:

I am a relative newcomer to Warwick and do not know the forest land as well as do my neighbors on White Road. I have, however, in the four years I've lived here had the opportunity to hike many of the trails and have come to appreciate the seemingly untouched nature of the forest environment. As residents of Warwick, we trust that you will indeed carry out the management proposal as outlined and that the result of your work will be a continued long-term improvement in our forest land with minimal disruption of the Considerations listed.

There is mention of the project area as including Stevens Swamp. The maps do not indicate this as a designated work area, nor does the text in general. Can you please clarify; I am assuming the mention of Stevens Swamp was in error.

Regarding the aesthetic considerations, 50' does not seem like enough of a barrier for tree marking in terms of minimizing lasting visual impacts. Is there negotiation possible to increase this footage?

Concerning the improvement and subsequent preservation of recreational trails, will your work include installation of gates at appropriate entry points in order to prohibit ATVs from entry? Their improper use of our trails has caused serious erosion, rutting, and exposure of tree roots which has over time denigrated the trail quality.

The proposal made no mention of a time frame in which this work will be undertaken. Are there approximate start and end dates?

Thank you for considering our comments.

Mary Humphries
(978) 544-0126
488 White Road, Warwick, MA
The proposal for the section of Warwick state Forest near Bass Swamp is very thorough and sensible. I like the attention paid to the five-acre early successional habitat; I know that type of habitat is very important. As a hiker, I am concerned with the NET through the proposed logging and have two requests:
1. Please widen the buffer between the trail and the forested areas.
2. Please figure out a method to inform all hikers, not just through-hikers, when logging will happen. Perhaps a phone number we could call in the morning. I would hike to start out to find a day of logging.

Thanks
Joanne McGee
Northfield, MA
413-498-5022
I am commenting on the DCR Forest Management Project referred to as “The South Hawley Crossroads” that would take place at Dubuque State Forest, and is dated February 16, 2017. The management forester is Nicholas Anzuoni.

My questions and comments are the following:

- The most current, publicly available GIS data layer for Certified Vernal Pools was not referenced in the forest management Proposal. The NHESP regularly updates their data layers with new information on vernal pools and Priority Habitats. If the foresters are not referring to these data, they will miss new observations and sightings.

- Does DCR look for vernal pools or potential vernal pools before cutting occurs?

- What are the sizes of the buffers around sensitive habitats, such as rivers and streams, intermittent streams, vernal pools, marshes, swamps, and other wetlands?

- Are members of the public welcome to attend the site visit that takes place before the actual cutting occurs?

- During the King Corner Prescription that occurred in Dubuque during the last year, I noticed many trees cut down along Hallockville Road. Were these trees simply cut down because it made it easier for logging trucks to access the cutting site? If so, it was a pretty devastating sight - not all of them appeared to be diseased or ready to fall.

- There are many possible skid roads illustrated on the map of the cutting site. How does DCR prevent the logging equipment and vehicles from potentially introducing invasive plants, animals, and/or diseases into the forest?

Thanks for the opportunity to provide questions and comments on the South Hawley Crossroads management project.

Patricia Serrentino
Wildlife Ecologist
72 Hastings Street
Greenfield MA 01301
(413) 772-0520
The Timber Harvest Summary card was designed to assist the public in providing information to the Bureau of Forestry when proposed forest management projects are in the initial planning stages.

The following are my comments about the Forest Management Project being proposed at:

State Forest: __________ Florida State Forest

Management Forester: __________ Kevin Podkowka

- The idea that harvesting this forest will lead to better carbon sequestration than allowing the forest to become wildland is incorrect. Larger trees sequester more carbon than smaller trees and the rate of carbon sequestration increases increasingly with tree trunk diameter. See, for example N.L. Stephenson et al. “Rate of Tree Carbon Accumulation Increases Continuously with Tree Size,” Nature 507 (2014). The carbon sequestration argument for harvesting should be removed from the proposal entirely as it is NOT correct. When will a new proposal be released without this fallacious argument?

- The project area has not been significantly harvested in decades and represents an opportunity to provide old-growth habitat support in the near-term future. This parcel should be allowed to return to wildlands. Selective forestry will alter the habitat to the benefit for some subpopulations of flora and fauna but at the disproportional expense of other subpopulations. It has been demonstrated that old growth forests support much higher levels of biodiversity than managed forests. See, for example A. W. D’Amato et al. “Understory Vegetation in Old-Growth and Second-Growth Tsuga canadensis Forests in Western Massachusetts”, Forest Ecology and Management 257 (2009) for a discussion of the superior plant life diversification in old-growth when compared to actively-managed forests. See D. S. Chandler and S. B. Peck, “Diversity and Seasonality of Leioidid Beetles in an Old-Growth and 40-Year-Old Forest in New Hampshire,” Environmental Entomology 21 (1992) for a similar discussion using various species of beetles. What effects to the current flora and fauna can be expected from the proposal? Will flora and fauna surveys be conducted both before and after the proposed project?

- This project will not generate funds for the state’s coffers but will in fact operate will a loss of state tax dollars. Further transparency and disclosure of the finances of this project should be released or this project should not be allowed to move forward. When will further financial information be released about this project?

Name: __________ David Galt, PhD

Address: __________ 41 MADISON LN, WEST SIMSBURY, CT 06092

Phone Number: __________ (860) 651-6790
Department of Conservation and Recreation  
251 Causeway Street, Suite 900  
Boston, MA  
Attention: Kris Massini, District Forester via Timber.Comments@state.ma.us  
Re: Garnet Hill Lot Forest Management Proposal

April 1, 2017

To the Department of Conservation and Recreation,

Below please find comments and questions for the public record. These comments are related to the proposed project throughout the Berkshires with the intention to contain the Emerald Ash Borer.

Respectfully submitted,

Susan Masino  
P.O. Box 576  
Peru, MA  
41 Madison Lane  
West Simsbury, CT 06092  
Susan.masino@trincoll.edu

I have grave concerns about the ash borer project – as planned it is guaranteed to spread the ash borer throughout the Berkshires and deeper into the forest. .. and in the process we will kill (harvest) native ash trees that may survive this pest. The project will spread other invasives and bring invasive into forest areas that have no invasives right now. Unless a tree is obviously diseased and next to the road there is no issue with public safety. Any net proceeds that DCR will recoup by harvesting ash trees is not a valid justification for this project.

People in the Berkshires would feel more comfortable if this was an approach with proven success, or if there was a consensus among ecologists about this radical approach. Neither is true and the current plan has many unintended consequences.

The proposed project includes a 200 ft. strip along 176 miles of road – and even into forest roads in our forest reserves. It is unlikely to be in most remote or virgin areas but this will bring it there.
We know that _we spread invasives by mowing and logging_, and this will almost be a combination of both. . . moving infected trees is how the ash borer spread in the first place. Invasives set up shop in areas that are disturbed and the canopy is opened. One invasive is barberry – a major host of Lyme disease-carrying ticks. Another is phragmites, and we know many vistas and ecosystems in the Berkshires have been or are in the process of being destroyed by phragmites. These are just two examples.

Driving around Berkshire county roads and removing all the ash trees that are easily accessible may not be the most scientific way to proceed. The Forest Service recommends biocontrol and there has been some success: https://www.nrs.fs.fed.us/disturbance/invasive_species/eab/control_management/biological_control/

Two injections of insecticide are also effective. Furthermore, the ash borer is attracted to _stressed_ trees and in a local area any stressed ash trees should show signs of infection. If stressed trees do not show signs of infection the ash borer is likely not there.

Right now in the vast majority of cases we don’t know what trees are infected, and we do not know if all infected trees will die. We do not know if all trees will even get infected. In areas of suspected ashborer if you girdle as tree as a sentinel it will attract the ash borer, and that may be a way to determine if that area is infested. . . and it could help concentrate them and then kill them biocontrol or with insecticide the next season. Please consider this as a more reasonable way to proceed. _It may take more time, but will yield a better outcome._

From what I read it likes saplings, but these are the trees we are leaving? This is a standard “sustainable forestry” approach – where the main goal is setting up the next generation of trees for future harvesting. In this case it seems more like a way to sell large ash trees than a rational strategy to control the ask borer. This is not what the public wants. The beauty and integrity of the Berkshires is paramount to its quality of life and tourism industry.

**Bottom line:**

The proposed plan has no precedent in successfully eradicating the ash borer. It is a radical proposal with guaranteed unintended consequences. A more scientific approach will do less harm and could yield important scientific information.
April 2, 2017

Submitted via email to: Timber.Comments@state.ma.us

Jessica A. Rowcroft
Bureau of Planning, Design & Resource Protection
Department of Conservation and Recreation
251 Causeway St. Suite 600
Boston, MA 02114

RE: Berkshire Road and Trail Ash Removal Project

Dear Ms. Rowcroft:

Please accept our comments for the public record.

We are writing regarding the Berkshire Road and Trail Ash Removal Project, posted by the Department of Conservation and Recreation (DCR) on February 16, 2017. This proposal calls for the removal of ash trees in order to control emerald ash borer (EAB).

We are concerned that this DCR plan did not provide any analysis of the alternative of simply leaving the ash trees as they are. Research at the Harvard Forest suggests that this may be the best alternative.

"Although intuitive support exists for the development of 'protection forests' through silvicultural approaches to increase the resistance and resilience of forests to pests, pathogens, and natural disturbances, empirical data to support the approach are lacking. Not only is there sparse evidence that such approaches achieve their goals of increasing resistance and resilience, little evidence suggests that natural disturbances yield negative functional consequences. Therefore, current management regimes aiming to increase long-term forest health and water quality are ongoing 'experiments' lacking controls. In many situations good evidence from true experiments and 'natural experiments' suggests that the best management approach is to do nothing." (David R. Foster and David A. Orwig. 2006. Preemptive and Salvage Harvesting of New England Forests: When Doing Nothing Is a Viable Alternative. Conservation Biology. Volume 20, No. 4, (2006): 959-970. http://harvardforest.fas.harvard.edu/sites/harvardforest.fas.harvard.edu/files/publications/pdfs/Foster_ConservationBio_2006.pdf )

The removal plan does not include any analysis of the net carbon and climate change impacts of the project. Research has shown that, contrary to what was previously thought, even large-scale forest mortality from insect infestations and disease does not cause major spikes in releases of carbon dioxide. https://uanews.arizona.edu/story/dead-forests-release-less-carbon-into-atmosphere-than-expected

On the other hand, even if some of the timber is used for long-lived wood products, most of the original carbon in the forest will be lost to the atmosphere in a very short time. For example:

"Ingerson (2009) completed one of the most comprehensive reviews on this issue, tracing the amount of the original live tree volume (and thus carbon stored) remaining after logging, primary processing, secondary processing, and construction. Compiling and calibrating estimates from a variety of sources, she concluded that these losses amount — on average — to 82% of the original live tree volume. In other words, when a site is logged and the wood converted into long-lived wood products, only 18% of the original carbon stores are preserved, and then only for a few decades at most before those longer lived wood products

If, as it appears, this logging plan would result in a net loss of carbon and a continuing deficit over the next several decades, then it will help to fuel climate change. This is contrary to the goals of the Global Warming Solution Act. DCR needs to provide an analysis as to why the benefits of this logging project would justify worsening climate change.

Also, in a diverse forest, there is the potential for individual trees to be genetically resistant to the emerald ash borer. Research by the U.S. Forest Service has found that some “lingering” ash trees may be survive the ash borer and allow the preservation and propagation of ash in the future. (see Northern Research Station. 2015. “Identification, Selection and Testing of ‘Lingering Ash’ in Emerald Ash Borer Long Term Monitoring Plots in Michigan and Ohio” U.S. Forest Service https://www.nrs.fs.fed.us/disturbance/invasive_species/eab/control_management/lingering_ash/)

The DCR logging plan would cut down large numbers of ash trees that “have died or are in imminent danger of dying.” However, this could well include “lingering” individuals that are resistant to the borer. The DCR plan does not discuss this important issue, and there has apparently not been any survey or analysis of ash trees in the project area to determine possible genetic diversity and resistance to the ash borer. Until such a survey is done, cutting of trees should be limited to only dead trees that represent a public danger, such as in picnic grounds, close to roadways, etc.

The ash removal plan envisions a massive logging operation along 176 miles of public road. Yet the plan provides no estimate of the cost for staff, vehicles, fuel, and other administrative overhead to implement this project. This cost will certainly be significant. Moreover, the logging will result in large-scale collateral environmental damage that will need to be mitigated at additional cost. The plan seeks to gain some revenue by cutting trees while they have still have some commercial value. Yet, these revenues are unlikely to even come close to offsetting the cost of this huge logging operation. Because the plan fails to provide any kind of cost-benefit analysis, the public has no way to judge whether the claimed benefits of the project justify the large taxpayer subsidies that will no doubt be needed to implement it. DCR needs to provide a full economic analysis of the costs and benefits of this project before taking any action beyond protecting public safety.

The removal plan does not account for biological patterns of the infestation, including the ash borer’s inability to migrate quickly or very far. This plan seems to ignore ash borer preferences for already diseased trees and saplings, and furthermore, it has not been confirmed that the borer infestation is present in a majority of the area where the removal would take place. If ash borer mitigation was found to be necessary, smaller and less severe actions could be explored.
The impacts of going into so much forested areas as well as along the 176 miles of public road could do more harm than good, spreading the disease around to trees that are not infected, and meanwhile creating large, pervasive and unnecessary disturbances. The plan would entail going in on all the DCR forest roads, including into the interior areas, including into the reserves. This seems to us a violation of the public’s trust.

We urge DCR to withdraw this plan and complete a new analysis that considers the issues discussed above. If, after such an analysis, there is still an ecological, social, and economic justification for the project, DCR should issue a new plan that takes all of these issues into account and is subject to full public review and participation. Until then, DCR should not proceed with project implementation, except for site-specific ash removal to protect public safety.

Thank you for considering our comments.

Sincerely,

Michael Kellett
RESTORE: The North Woods
47 Graniteville Road
Westford, MA 01886

Janet Sinclair
Concerned Citizens of Franklin County
P.O. Box 653
Greenfield, MA 01302

Ellen Moyer, PhD, PE
Principal, Greenvironment, LLC
258 Main Road
Montgomery, MA 01085

Claudia Hurley
Friends of Robinson State Park
428 North, St.
Feeding Hills, MA 01030

Lucy Gionfriddo
Friends of Robinson State Park
428 North, St.
Feeding Hills, MA 01030

Meg Sheehan
EcoLaw
PO Box 3848
Plymouth MA 02361

Eric Chivian M.D.
Founder and Former Director
Center for Health and the Global Environment
Harvard Medical School
136 Carter Pond Rd.
Petersham, MA 01366

Chris Matera
71 Washington Ave.
Northampton, MA 01060

Glen A. Ayers, R.S., C.H.O.
254 Davis Street
Greenfield, MA 01301

Ray Weber
209 Main Street West
Springfield, MA 01089

Elizabeth Adams
Mass Forest Rescue
P.O. Box 502
Leverett, MA 01054

Don Ogden
The Enviro Show
WXOJ-Ip/Valley Free Radio
140 Pine Street
Florence, MA 01062

Elizabeth Ahearn
Field to Table
177 Avenue A,
Turners Falls, MA 01376

Michaelann Bewsee
27 Mystic St.
Springfield MA 01104

Dave Gafney
P.O. Box 805
Great Barrington MA 01230
Comments on Berkshire Road and Trail Ash Removal Project

Carissa Sinclair
14A Mill Village Road
South Deerfield, MA 01373

Suzanne R. Carlson
Greenfield, MA 01301

Louise Graboski
164 Crabtree Rd
Quincy MA 02171

Steve Ryack
PO Box 61
Heath, MA 01346

Mary Gilbert
55 Bow Street
Arlington, MA 02474

James Schilling-Cachat
Wuttahmineshket
229 Leverett Road
Shutesbury, MA 01072

Rolf Cachat-Schilling
Wuttahmineshket
229 Leverett Road
Shutesbury, MA 01072

Miles V. Tardie
Wuttahmineshket
229 Leverett Road
Shutesbury, MA 01072

Ellen Hopman
67 Munseil St
Belchertown, MA 01007

Tom Neilson
37 Solar Way
Greenfield, MA 01301

Dorothy McIver
88 Columbus Ave
Greenfield, MA 01301

Lynne Ballard
921 Bernardston Rd.
Greenfield MA 01301

Hazel Dawkins
91 Smith St.
Greenfield, MA 01301

Alison Bowen
250 So. Chesterfield Rd.
(res.) Goshen MA 01032
(mall.) Williamsburg MA 01096

Patrick Devlin
921 Bernardston Rd.
Greenfield MA 01301

Catherine T. Driscoll
227 Main Street
Greenfield, MA 01301

Meredith Bernhardt
71 Ashfield St.
Shelburne Falls, MA 01370

Audrey Ortega
11 Walden St.
Springfield, MA 01108

Lisa Turowsky
729 Colrain Road
Greenfield, MA 01301.

Lee Ann and Stuart Warner
55 Montague Road
Leverett MA 01054

Ralph S. Baker, Ph.D.
840 Ashby West Rd.
Fitchburg, MA 01420

Sandy Kosterman
141 Barton Road
Greenfield, MA 01301

Richard Stafursky
Species’ Forest, Inc.
Shelburne, MA 01370

Bill Keck
59 Haywood St.
Greenfield, MA 01301

Anna Zewinski
14A Mill Village Road
South Deerfield, MA 01373

Green Futures
P.O. Box 144
Fall River, MA 02724-0144
Arise for Social Justice
467 State St.
Springfield MA 01105

Todd Stegliinski
180 Chilson Road
West Springfield, MA 01089

Steve Kisiel
Peru, MA 01235

Bonny DiTomasso
Peru, MA 01235

Sarah Soffer
New York, NY and
Peru, MA 01235

James Kenney
Cambridge, MA and
Peru, MA 01235

Barbara Kenney
Cambridge, MA and
Peru, MA 01235

Peter Liberman
New York, NY and
Peru, MA 01235

Sam Liberman
New York, NY and
Peru MA 01235

Greg Moynahan
Tivoli, NY 12583

Danielle Riou
Tivoli, NY 12583

Katie Galt
West Simsbury, CT 06092

Susan A. Masino
Vernon Roosa Professor of Applied Science
Professor of Neuroscience and Psychology
Trinity College
Hartford, CT 06106
To Whom It May Concern,

As an avocational archaeologist, independent researcher of Indigenous earth and stoneworks, and human being of basic moral standards, I am appalled that appropriate time and opportunity has not been given to the Native American community, nor specifically to regional Tribal Historic Preservation Officers and their agents to identify, map and preserve Traditional Cultural Properties, including Ceremonial Stone Landscapes, that may be impacted or destroyed by the cutting and removing of forest trees.

Once disturbed or destroyed, the knowledge contained in these treasures of antiquity is diminished or lost forever.

We, as a community of concerned citizens, Native and Allies, seek to protect and preserve these last undisturbed remnants of ancestral knowledge. Even as we stand on the threshold of discovery of this complex knowledge encoded in the stone structures, we must also stand in solidarity to protect them from destruction due to ignorance, short term monetary gain and outright greed.

Thank you,

Sarah Kohler
978-544-7279
joyfarm@localnet.com
April 1, 2017

I am submitting the following comments in regards to Proposed Forest Management Projects in Massachusetts, to be managed by the Commonwealth.

State Forests are an ecosystem. Not a tree farm. The environmental value of mature trees versus younger trees is significant. Carbon needs to be pulled out of the atmosphere and put into long-term storage elsewhere. This process is called carbon sequestration, and high-technology ways to accomplish it are being explored worldwide. Trees, like other green plants, use photosynthesis to convert carbon dioxide (CO2) into sugar, cellulose and other carbon-containing carbohydrates that they use for food and growth. Trees are unique in their ability to lock up large amounts of carbon in their wood, and continue to add carbon as they grow. Although forests do release some CO2 from natural processes such as decay and respiration, a healthy forest typically stores carbon at a greater rate than it releases carbon. Significant land disturbance is a major source of CO2 emissions. Human disturbance has much more impact on forests than natural disturbances such as fires or hurricanes.

Some of the CO2 given off from forest disturbance comes from decay, but the biggest source is from the disturbed soil. For example through logging equipment and post harvest erosion and land alteration. Although they accumulate carbon much more slowly than trees, forest soils ultimately become storehouses for enormous amounts of carbon, over twice as much as is stored in the wood of the trees. When forest soils are disturbed, for example, by logging tractors and trucks and creating logging roads, they can lose carbon rapidly from the fast decay of organic material. One forest-based carbon sequestration strategy is to preserve forests in their natural state, as has been done in the Adirondack and Catskill Forest Preserve. These forests will never be actively managed or cut. Mature late succession forests hold vast amounts of carbon in their wood, and even more in their undisturbed organic soils. Undisturbed forests are also vital for water quality, biodiversity, wildlife habitat, and preservation of very old forest areas, and as genetic reservoirs for the future. For example, one silver maple planted today, in 25 years—assuming it survives—will have sequestered about 400 pounds of carbon dioxide, according to the U.S. Energy Information Administration. Elderly trees are carbon vacuums.

It is inevitable trees will die either from natural disasters, disease, human impact or insects. While dead trees may not be the most attractive part of a forest, they are essential to its health. As dead wood is decomposed (by fungi, bacteria and other life forms) it aids new plant growth by returning important nutrients to the ecosystem.
Insects, salamanders, snakes, mice, and shrews seek refuge in rotting logs. Skunks, bears, and woodpeckers repeatedly return to these cafeterias for easy pickings. The accumulation of organic material, including damp, rotting wood and leaves, favorably affects mushroom populations. Mushrooms are food for insects, turtles, birds, mice, squirrels, and deer. During critical winter periods, highly nutritious mushrooms can compensate for nutrient deficiencies in deer’s native forage. Birds and bats, for example often make their home in standing trees. These creatures can act as natural defenses of harmful creatures that can adversely impact a forest.

Logging machinery leaves the landscape scarred forever. This adversely impacts habitat. If positive, small-scale, selective harvesting is conducted on state lands, I support entertaining the idea of using horses and mules.

Horse/mule logging operations leave less deeply disturbed and rutted soil conditions when compared to mechanized equipment and they don’t pollute via diesel emissions, nor do they pollute the forest with unnecessary noise. Logging using a horse and/or mule is a slow and labor-intensive process, but the environment reaps the rewards. It is known horse logging can have adverse impact on soft ground by the impact from hooves and rutting of the ground from dragging the logs. A skidding sled for logs can solve this issue. According to one timber harvester using horses, "Six weeks after horse logging took place, he could not see a trace of the operation", according to a quote in a publication by American Tree Farm System. The pathway through the woods is as wide as the horse’s gait and the log it is hauling. The clearing through a forest for a horse is considerably less than that of a machine. A machine requires upwards of 15 to 20 feet of trail clearance to navigate through a forest and can weigh upwards of 35,000 to 40,000 pounds. In comparison a horse weights 840 to 2,200 pounds.

Although high production and maximum utilization have become conventional standards utilizing machines, they are not necessary components of successful forest management. I believe that we have become overly dependent on forestry defined solely by timber harvest and the equipment used to do it.

If we really understand forestry as being more than harvesting and growing trees for timber then we can see these ecological parameters as being paramount, and we can leave the machinery operations in the dust. If we are willing to take this philosophy beyond the so-called sensitive properties, we can show everyone that all forests have sensitive aspects that are best protected by operators who are aware of them, and committed to protecting them.
Respectfully submitted,

Todd Steglinski
180 Chilson Road
West Springfield, MA 01089
e-mail: wsgsd@comcast.net
To: Jessica A. Rowcroft  
Bureau of Planning, Design and Resource Protection  
Department of Conservation and Recreation  
251 Causeway Street, Suite 600  
Boston, Ma 02114  
April 2, 2017

To whom it may concern:

The public is coming together in a new campaign (as of today, April 2, 2017) calling upon the all associated departments within EOEEA involved with industrial logging policies and practices to construct an Interagency Climate Action Plan which includes:

1. Breaking up interagency cooperation and influence (collusion) among government agencies and their representative, such as the MA Clean Energy Center, EOEEA and its departments; (esp. DCR, DOER and Fish and Game) UMASS; federal departments, such as the U.S. Forest Service; and wood fuel industries: their investors and lobbyists, including, but not limited to the Mass. Forest Alliance.(And all others in government that put profits and personal well-being before the climate and health of future generations of humans and all species.)

2. Examination by a Federally Recognized Tribe's Tribal Historic Preservation Officer (THPO's) or designee(s) of all forests currently under state jurisdiction, beginning with the forests slated for cutting down this year and prior year's plans which will include plans for industrial logging this year and future years.


4. Assessment of the current carbon and Greenhouse Gas storage capacity within all current public forests in Massachusetts. (Watersheds and State Parks)

5. Assessment of the carbon pollution released immediately into the atmosphere during each industrial logging event since 1990 and including 2017 and future plans in reports to DEP and the public. (Estimates based upon age and tree types using established measurement protocols)

6. Assessment of effects on biodiversity of all logging since 1990, and,

7. Assessment of:
   
   A. The number of pellet and wood chip burners and boilers currently in operation in Massachusetts and the northeast region

   B. The wood supplies required monthly and annually by each, and

   C. Current manufacturing sites relied upon to supply these boilers and burners, and

   D. Whether any Environmental or Health Impact Assessment was completed prior to any boiler or burner was installed, and evaluate

   E. Whether any Environmental or Health Impact Assessment was completed prior to any forests cut since 1990,
8. Evaluate whether DCR is violating Article 97 through current “Forest Management” protocols and practices, due to the harmful effects of their actions upon biodiversity, upon dispersion of diseases and infestations, upon water quantity and quality, upon species disruption and species losses, among other possible harmful effects.

These requests (and possibly even more which we will produce after consultation with experts) are needed, as are regular reports filed with DEP, (and made available to the public) if we are to take seriously the benefits of intact forests in preventing the worst effects of climate change on our communities and upon reducing future Social Costs, for which the public will have to bear responsibility, financial and otherwise. (The most vulnerable and marginalized of all species, will undoubtedly bear the brunt of our inaction on the policy shifts needed today...)

No longer can we ignore the horrific effects on future generations of inaccurate, mythological excuses offered up by DCR for cutting down thousands of acres of trees in forests for which the public taxpayers are responsible. (Along with their representatives in the legislature and Governor’s Office.)

DCR calls their practices and plans “sustainable management” or “sustainable forestry”. This terminology is not and cannot be backed up by scientific data. It is clearly deceptive to cover up the purposes for and harmful effects of industrial logging in State Parks and Watersheds. It is furthermore unconscionable to cover up harms from these misguided policies and practices. The public has learned not to trust those whose policies are influenced by government collusion with corporate lobbyists and their investors. The public is tired of inaction and “business as usual” because climate chaos and species declines are accelerating. There is indeed “no time to waste”!

“NO TIME TO WASTE: Our climate clock is ticking, and our natural resources, public health and the future of our economy are at stake A Report of the Senate Committee on Global Warming and Climate Change January 2015”. http://www.acecm.org/acecm/file/FY2015/Senate_Global_Warming_and_Climate_Change_Comte_-_No_Time_to_Waste_1-6-15.pdf

Reliance on pellet and biomass burners must be phased out as soon as possible. Greener, cleaner solar systems are affordable and available! We need to rely upon 100% clean energy for heat, cooling and electricity supply now. We need to tighten up buildings which will help our economy. Profits from biomass boilers and burners are holding our region back from emissions reductions that are needed to help reduce the atmosphere to 350ppm, the upper limit for a reasonably balanced ecosystem, and for natural resource protection.

We have witnessed the negative effects of “business and usual” in the Department of Conservation and Recreation, Department of Energy Resources, U.S. Forest Service and others in the business of industrial wood energy production and its suppliers for decades.

The time is now for positive change, because climate, biodiversity and natural resources will not wait! The future is in our forests and our insightful actions on their behalf.

Sincerely yours,

Elizabeth L. Adams, Co-founder, Mass. Forest Rescue Campaign
Dear DCR (Department of Cut and Run) Folks,

I am writing to voice my strong opposition to your proposed destruction of my public forests. You do not have my permission to proceed. In fact, I intend to stop your deforestation efforts. Your plans are a violation of the spirit and intent of the Global Warming Solutions Act, and DCR, as an agency, has failed to inventory or plan for the required annual aggregate reductions in the greenhouse gas emissions from your destructive deforestation activities. You have failed to calculate your 1990 baseline emissions from previous clear-cutting and other deforestation practices. You have failed to honestly calculate the current levels of CO2 emissions from your past activities, and you have failed to calculate the increase in CO2 emissions that your proposed deforestation program will produce, and for how long. In short, your plans are incomplete, ignorant, in violation of the GWSA, and are significantly contributing to the destabilization of the climate.

You deserve to be sued. And you will be if you don't start taking this criticism of your illegal and immoral deforestation more seriously. Numerous individuals, besides myself, have been demanding an honest accounting of carbon debt from your past and present deforestation activities. We have been asking for this for years and years. As an agency, and as a regulated class, you are required to provide a plan that shows how your past and present activities will result in at least a 25% reduction in Greenhouse Gas reductions over your 1990 levels by 2020 (less than 3-years away). Where is this analysis? Where is the data? Where is your conscience? What makes you think that Kahn v. DEP does not apply to you? Your deforestation is a source or a category of sources that emit greenhouse gas emissions. You are making things worse. You are intentionally causing damage and harm to the Public Trust that you are supposed to be protecting. You are further damaging the carbon sequestering capacity of lands that already degraded and currently only beginning to recover the carbon dept from past deforestation. That CO2 is still in the atmosphere, so why are you planning to release even more damaging CO2 and further accelerate climate change?

"It is difficult to get a man to understand something, when his salary depends on his not understanding it." - Upton Sinclair

Please enter my strong opposition to the Garnet Hill Lot Project and the Berkshire Road and Trail Ash Removal Project, as well as the other deforestation projects that you are currently planning, into the official record or docket.

If you go forward with these deforestation projects, I hereby request that you provide me with a copy of your decision document that explains the definitive legal basis for ignoring my concerns, and those of others, and specifies the administrative process available to appeal your decisions. If you do not have an administrative process, I want you to say so in writing, so that we may proceed directly to filing a complaint in a court of competent jurisdiction. You may treat this request as a public records request, if necessary.

Sincerely,

Glen A. Ayers
254 Davis Street
Greenfield, MA 01301
Please be advised that the Executive Committee of the Springfield Area Interfaith Climate Action Network (SAICAN) recently voted to express our complete disapproval of the two logging projects scheduled for the Garnet Hill Lot and the Berkshire Road and Trail Ash Removal Project.

Representing over twenty different religious denominations, SAICAN members are committed to reversing the deleterious impact that carbon emissions and other greenhouse gases are having on our environment. The wholesale razing of forests on our state lands means the destruction of the carbon sink that these trees provide and an increase in carbon/GHG emissions resulting from the harvesting process, the pellet manufacturing process, and the burning of either unprocessed wood or wood pellets.

Wood fuel is not a renewable resource. It takes close to one hundred years for a hardwood tree to mature—and that is under ideal conditions. The wholesale razing of the Northern hardwood stand in the Garnet Hill lot will encourage the influx of invasive species of plants and animals whose presence would undoubtedly interfere with the growth of replacement hardwood trees. With respect to the Trail Ash Removal Project, it is asinine that such devastation would be considered when there is no record of Emerald Ash Borers in the area.

Thank you for your attention to this matter.

Michele Marantz
Springfield Area Interfaith Climate Action Network
Do not cut down our Massachusetts forests to produce energy. In a time of serious climate change we need old trees to sequester carbon. In fact more trees should be planted. DO NOT approve the cutting of trees for wood bio-mass. Farmers should be harvesting methane from cow manure in New England and solar panels should only be put up over parking lots, in vacant fields and already paved vacant lots in cities. Leave the trees standing!

Ellen Hopman
67 Munsell St, Belchertown, MA 01007
Ellen Evert Hopman, Herbalist and Author * visit her bookstore and blog * www.elleneverhopman.com Learn Herbalism with Ellen at The Western Massachusetts School of Herbal Studies POB 219, Amherst, MA
01004. New books; “SECRET MEDICINES FROM YOUR GARDEN” http://viewBook.at/Secret and “A LEGACY OF DRUIDS – Conversations with Druid Leaders in Britain, the USA and Canada – past and present” http://getBook.at/DruidLegacy
Hi Kris – Let me make sure I understand the PSF situation. The Department of Conservation is going to support the deforestation of Peru State Forest. That's an egregious contradiction of your departments conservation mission and an unethical and immoral abuse of power. And you would surely lose if taken to court. Apparently, you don't understand your own mission and what your department name means – Conservation. This means conserving the forest --not destroying it.

Please contact me if you need any more help.

Ed Chase