

New England Climate-Smart Commodities Partnership Project DRAFT Forest Practices List, 4/17/24

This list is still under development. NEFF is open to suggestions for additional climate-smart practices, and Design Phase applicants will be invited to help refine and improve this list in a collaborative process with NEFF staff and partners.

Detailed specifications for each practice will be developed in consultation with regional silvicultural experts. The practices expected to be most relevant for large landowners are shown in **bold** but other practices could be considered under appropriate conditions.

NEFF’s intention is that all practices, even those primarily aimed at increasing productivity or carbon storage, will be implemented in a way that increases **adaptation** (defined as increasing the forest’s capacity for **resistance**, **resilience**, and/or **transition** to future climate) where feasible (e.g., by favoring species adapted to future climate).

NEFF CSF Practice Name	Method(s)	Purpose(s)¹
1. Planting for restoration/adaptation	Potential methods under this practice: Direct seeding hardwood Planting conifer seedling Planting mixed hardwood and softwood Planting hardwood bareroot	Planting to improve species composition to favor adaptation and to increase timber productivity, including but not limited to current non-forested areas and forest areas clear-cut to replace unproductive or understocked stands with species best suited to the site and future climate
2. Pre-commercial thinning (PCT) —includes thinning in stands less than poletimber size and thinning in poletimber-sized stands where no wood is removed as product	Potential methods under this practice include chop and drop, girdling, and herbicide treatment (e.g., basal stem treatment)	Pre-commercial thinning (PCT) for a variety of purposes including but not limited to favoring species composition best suited to the site and future climate, improving growth rates, improving future forest health or stand conditions, etc.
3. Early commercial thinning (ECT) —includes uneconomic thinning where some wood is removed as product	Potential methods under this practice can include harvesting trees, girdling, or use of herbicides including but not limited to Basal Stem Treatment	Early commercial thinning (ECT) to improve production of CSC, or management, to improve forest adaptation to future climate conditions

¹ Many of these practices can have other benefits (e.g., benefits to wildlife), but here we focus on the climate benefits.

<p>4. Crop Tree Release</p>	<p>Potential methods under this practice can include harvesting trees, girdling, or use of herbicides including but not limited to Basal Stem Treatment</p>	<p>Crop tree release, including, but not limited to, releasing canoe-quality white birch and promoting climate adaptation</p>
<p>5. Insect and Disease Control</p>	<p>Methods can include use of insecticides, fungicides, or other recommended strategies to manage insect and/or disease outbreaks</p>	<p>Maintain carbon storage and sequestration; improve prospects for adaptation to future climate; maintain wood production; maintain seed trees threatened by insect or disease outbreaks (e.g. brown ash used by Native Americans for traditional purposes)</p>
<p>6. (A) TSI emphasizing productivity—in typical managed stands</p>	<p>Potential methods under this practice can include harvesting trees, girdling, or use of herbicides including but not limited to Basal Stem Treatment</p>	<p>While not ignoring opportunities to promote adaptation, the emphasis in this practice is to increase timber production, including uneconomic thinning in sawtimber-sized stands to remove poor quality trees. Keep scattered older trees as part of the residual stand in stands larger than those eligible for early commercial thinning to increase structural complexity.</p>
<p>(B) TSI emphasizing adaptation—in stands that haven't been actively managed in the recent past; this option is intended primarily for small landowners in southern New England where active management is less common</p>	<p>Potential methods under this practice can include harvesting trees, girdling, or use of herbicides including but not limited to Basal Stem Treatment</p>	<p>Management, including but not limited to thinning, to improve forest resilience and adaptation to future climatic conditions</p>

<p>7. Maintain heavily stocked older stands</p>	<p>Methods can include either no management or light thinning, ideally aimed at anticipating mortality.</p>	<p>Maintaining carbon storage and sequestration in heavily stocked stands, including, but not limited to old-growth including management with light harvesting using continuous cover silvicultural techniques</p>
<p>8. Retain legacy trees²</p>	<p>Do not harvest scattered patches of older, large-diameter legacy trees. Give preference to ash seed trees if they can be treated to reduce risk of mortality from emerald ash borer</p>	<p>Maintain carbon storage and sequestration in legacy trees; foster adaptation by adding structural diversity to the future stand</p>
<p>9. Implement Exemplary Forestry as laid out in the Exemplary Forestry Standards for the Acadian or Central and Transition Hardwoods forest types</p>	<p>In general, this will involve entries every 20 years to create very small patch cuts to regenerate mature stands or create complexity, with thinning between the patches</p>	<p>Mitigate climate change by maintaining or increasing carbon storage in the forest and wood production and assist stands to adapt to climate change</p>
<p>10. Implement continuous cover forestry</p>	<p>A selection system with removal of approximately 35% of standing volume every 30 years</p>	<p>Mitigate climate change by maintaining or increasing carbon storage in the forest and wood production and to assist stands to adapt to climate change</p>
<p>11. Implement the Triad system</p>	<p>Combine intensive forestry and ecological reserves in appropriate locations with some kind of light touch “ecological” forestry in the matrix landscape</p>	<p>Mitigate climate change by maintaining or increasing carbon storage in the forest and maintaining wood production and to assist stands to adapt to climate change</p>

² This practice can have biodiversity benefits, as legacy trees can provide habitat for certain rare species of mosses, lichens, and liverworts.