

Attachment B
Needham Wetlands Regulations
Tree Removal and Protection Policy

The Needham Conservation Commission is frequently asked to allow the removal of trees which are dead or damaged/diseased and pose a threat to private or public property (hazard trees), or which are within the footprint of proposed construction. The Commission primarily reviews such requests under the Wetlands Protection Act and Needham Wetlands Protection Bylaw and Wetlands Protection Regulations in the context of Requests for Determination of Applicability (RFD) and Notices of Intent (NOI). An exception to this is Regulations Section 1.02(4)(f) which states that “individual tree removals when evidence is provided by a Certified Arborist showing that the tree is in poor health and/or poses an imminent danger to persons or property” is a minor activity, that can be approved administratively, when the tree is within a Buffer Zone. This Policy has been developed to provide a consistent approach to tree removal and protection that protects the wetland functions and values provided by trees within wetlands, floodplains, Buffer Zones, or Riverfront Area.

Needham is designated a “Tree City USA” by the Arbor Day Foundation, a designation that shows that the community cares about its environment and the quality of life. Trees are an important part of Needham’s visual landscape, as well as providing cleaner air, shadier streets, and habitat for birds and other wildlife. The shade produced by trees in summer reduces temperatures and can reduce energy usage and air conditioning costs, important factors to a Green Community. Trees help slow climate change by removing carbon dioxide from the air, storing carbon in the trees and soil, and releasing oxygen into the atmosphere. With respect to wetland functions and values, trees provide shade that maintains a favorable microclimate for wetland plants, reptiles and amphibians, and insects. Trees provide wildlife habitat features which include food, shelter, nesting habitat, migratory habitat, and perching habitat (for predatory and insect-eating birds). Dead limbs and hollow trunks provide cavities which may be used by small mammals and birds for nests, dens, or shelter. The leaves shed by deciduous trees in the fall provide a valuable source of nutrients and organic matter that supports the texture and fertility of wetland soils.

Tree Removal Policy

It is the Needham Conservation Commission’s Policy that no trees may be removed in jurisdictional areas or their Buffer Zones unless permission has been granted by the Commission and/or its Agent. This Policy applies to all areas jurisdictional to the Commission, whether natural or landscaped. Natural areas are those areas comprised predominantly of naturally occurring vegetation. Landscaped areas are those areas comprised predominantly of lawn or landscaping shrubs.

Trees subject to this policy are those at least 6 inches in diameter, measured 4.5 feet off the ground (DBH).

Note: This policy is intended to cover the removal of trees only. Other requests for removal of vegetation within the Commission’s jurisdiction such as removing trees less than 6” in diameter, removal of shrubs,

native groundcover and native vegetation must be reviewed and approved by the Commission and/or Agent Tree Removal Request, Review and Approval Process.

Tree removal requests may be granted conditional on the replacement of one or more trees. (See replacement standards below). The Commission may also require further review through the filing of a RFD or NOI permit.

Requests should be made in writing to the Conservation Department at 500 Dedham Avenue Needham, MA 02492 or via email at conservation@needhamma.gov. If the homeowner contends that the tree is dead or diseased and therefore compromised, a letter from a Certified Arborist, retained by the Applicant, attesting to this may be required prior to approval.

A duly authorized member of the Commission and/or its Agent may conduct a site visit. In some cases, requests can be administratively approved at that time with submittal of required documentation. (For example, if a tree shows obvious signs of disease and decay or is dead). Otherwise, requests are reviewed at the Commission's regularly scheduled public hearings. Once the review is complete, a letter or email of approval or denial will be issued to the homeowner. The Commission may also require further review through the filing of a RFD or NOI permit.

If the Commission requires filing of an RFD or NOI, identification of the species and size of trees to be removed should be shown on the existing conditions plot plan. Also, a description, photos and condition assessment of trees proposed to be removed, along with the reason for the tree removal request (e.g., poses a safety threat or interferes substantially with the landowner's use of property) should be provided. Any tree determined to be a Hazard Tree should be so certified by a Massachusetts Certified Arborist.

Tree Removal Policy

General – The Commission requires that all tree removal equipment remain on landscaped or paved areas and outside natural areas. Also, to minimize disturbance, the only stumps that may be ground below the surface are those in landscaped areas or outside the 25-Foot No-Disturb Zone.

Snags – A "snag" is a dead tree left upright to decompose naturally and provide valuable wildlife habitat. The Commission requires that wherever feasible, a snag at least 6 feet high be retained when a diseased, dead, or hazardous tree, 6-inches or greater DBH is removed.

Replacement Ratio – The Commission requires that all trees, that have a 6-inch DBH or greater, removed within its jurisdictional areas or their Buffer Zones, be replaced within the Buffer Zone and/or 200-foot Riverfront Area, at a minimum 2:1 ratio (two new trees for each tree removed), with native tree species (see attached Replacement Tree List). The replacement trees must be a minimum of 2 1/2-inch caliper or for evergreen trees, at least 8 feet in height. When more than 4 replacement trees are proposed, they shall

be of diverse species appropriate to the site. Although replacement trees are preferred, in certain circumstances, such as when space is limited, an Applicant may propose habitat replacement with high wildlife value native shrub species in addition to trees. Shrubs shall be proposed at no less than a 4:1 ratio (four shrubs for each tree removed). Shrubs shall be at least 36 inches in height. The proposed shrub ratio shall not exceed 50% of the required tree replacement. (For example, if 3 trees are removed, 6 trees or a combination of 4 trees and 4 shrubs could be proposed as mitigation). The attached list provides guidance on what tree and shrub species are acceptable. Other native plants may be proposed beyond those listed in this document. Final approval is subject to review by the Conservation Commission or their designee.

Significant Trees – A “significant tree” is one which has a DBH of 32-inches (thirty-two inches) or more, or one that is considered by the Commission to of unique and intrinsic value to the wetlands because of its size, age, or ecological value. The Commission requires replacement of a “significant tree” to be at a 3:1 ratio (three new trees for each significant tree removed).

Planting Requirements, Schedule, and Follow-up

Replacement trees should be planted in season preferably in the early spring before bud break or in early to mid-November after leaf drop if not designated a fall dig hazard. Trees are to be planted at least as close to the resource area as the cut tree as feasible. A proposed planting plan and plant list shall be submitted to the Commission and/or its Agent for approval prior to purchase and installation. If the appropriate replacement ratio cannot be achieved on site, then the scope of the project should be scaled back, and trees retained.

Trees and shrubs shall not be planted within 6 feet of a structure, whether for tree replacement or Riverfront or other mitigation.

Staff do not conduct site visits to check on the health of replacement trees. The applicant must hire a professional to conduct site visits and submit a monitoring report, including photographs, after 6 months, 1 year and 2 years post-planting. Replacement plantings that do not survive for at least two growing seasons must be replaced.

Tree Protection Policy

Even though trees may not be removed during a proposed project they can be damaged during construction if proper precautions are procedures are not followed. This may result in a hazardous or dead tree. Accordingly, the Commission requires that adequate protection be provided for all trees potentially impacted by proposed construction in its jurisdictional areas. Protective measures should follow Best Practical Measures and include protection of critical root zones, bark, and changes in grade. Detailed information of tree protection can be found at:

<https://www.mass.gov/doc/protecting-our-community-trees-fact-sheet/download>

<https://www.mass.gov/doc/protecting-our-community-trees-fact-sheet/download>

and

<https://www.arboday.org/programs/graphics/conservation-trees/save-trees-during-construction.pdf>

Permit Application Requirements

Applications requesting the removal of 2 or more trees shall include the following:

- Show the location of the trees to be removed, each with a unique ID on a Plot Plan
- Provide a table listing the species, size (DBH) , condition and reason for removal for each tree identified to be removed
- Show the location of the required replacement trees on a Plot Plan
- Provide a table listing the species, size (caliper of height), for each replacement tree or shrub.

Applications where one or more trees may be impacted by construction activities shall include the following:

- Show the location of the potentially impacted tree(s) on a Plot Plan
- Provide a narrative describing the protective measures to be taken.

Replacement Trees – Native to New England

Wetter Areas	Drier Areas
<i>Acer rubrum</i> (red maple)	<i>Acer saccharum</i> (sugar maple)
<i>Acer saccharinum</i> (silver maple)	<i>Betula papyrifera</i> (paper birch)
<i>Betula lenta</i> (sweet/black birch)	<i>Fagus grandifolia</i> (American beech)
<i>Betula nigra</i> (river birch)	<i>Fraxinus pennsylvanica</i> (green ash)
<i>Betula populifolia</i> (gray birch)	<i>Juniperus virginiana</i> (eastern red cedar)
<i>Chamaecyparis thyoides</i> (Atlantic white cedar)	<i>Liriodendron tulipifera</i> (tulip tree)
<i>Nyssa sylvatica</i> (tupelo, black gum)	<i>Pinus strobus</i> (white pine)
<i>Quercus bicolor</i> (swamp white oak)	<i>Platanus occidentalis</i> (sycamore)
<i>Tsuga canadensis</i> (Canada hemlock)*	<i>Prunus serotina</i> (black cherry)
	<i>Quercus alba</i> (white oak)
	<i>Quercus coccinea</i> (scarlet oak)
	<i>Quercus palustris</i> (pin oak)
	<i>Quercus rubra</i> (red oak)
* <i>Tsuga canadensis</i> should only be planted if a long-term monitoring plan (approved by the Conservation Commission) is in place to control woolly adelgid.	<i>Quercus velutina</i> (black oak)
	<i>Tilia americana</i> (basswood)

High Wildlife Value Shrubs – Native to New England

Wetter Areas	Drier Areas
<i>Alnus incana</i> (<i>rugosa</i>) (Speckled Alder)	<i>Amelanchier</i> spp. (serviceberry)
<i>Clethra alnifolia</i> (Sweet Pepperbush)	<i>Cornus alternifolia</i> (alternate-leaved dogwood)
<i>Cornus amomum</i> (Silky Dogwood)	<i>Cornus racemosa</i> (gray dogwood)
<i>Ilex verticillata</i> (Winterberry Holly)	<i>Corylus americana</i> (American hazelnut)
<i>Salix discolor</i> (Pussy Willow)	<i>Hamamelis virginiana</i> (witch hazel)
<i>Vaccinium corymbosum</i> (Highbush Blueberry)	<i>Photinia melanocarpa</i> (black chokeberry)
<i>Viburnum dentatum</i> (Northern Arrowwood)	<i>Viburnum trilobum</i> (American cranberrybush)

Also see: <https://ag.umass.edu/landscape/fact-sheets/north-american-plants-for-new-england-gardens>