

## Village of Mamaroneck Tree Committee 23 January 2020 Agenda

### Approval of the Minutes

### Comments from Residents

### Correspondence

Daffodils along Boston Post Road, Kelly Susa (*attachment 8*)

Administrative recommendations from Stuart Tiekert (*attachment 9*)

List of trained Citizen Pruners

List of trees pruned by Citizen Pruners

List of significant trees

List of Heritage trees

Response of Village Manager (*attachment 10*)

### Old Business

#### Tree Ordinance update

Proposed revision to Purpose 318-1(*attachments 1-7*)

Response to BOT objections (objections to be provided to Village Manager)

#### Tree Maintenance Issues

Elm pruning

Evergreen assessed 1533 Raleigh Road? (Con Ed pruned V cut) (old)

Leaning tree at Fairway Lane & Orienta (old)

Stuart Tiekert regarding removal of trees at Bellows and on Guion Drive & response of Village Manager (*attachments 11 & 11-A*)

Includes advice about tree assessment

Low hanging branches at 214 Delancey were pruned back". 6' clearance required

Tight collar cable on new tree (*attachment 12*)

601-699 Bloomdale Ave, severely rotted base (Gail)

427 E. BPR pollarding (*attachment 13*) and Violation Notice (*attachment 14*)

Tiekert on pollarding at two sites (*attachment 14-A*)

Tiekert on poor and unauthorized pruning on Palmer Ave (*attachment 15*)

#### NYS Grant for inventory, planting, maintenance update

#### Deferred Planting

Bishop Ave. right of way – MetroNorth

Mamaroneck Town Center – permission to plant in ROW?

#### Tree inventory update

#### Planning Board

Draft guidelines to be presented annually

Sidewalk repairs using structural soil

Tree well planting guidelines

Distances from stop signs & corners

Ongoing maintenance of trees, particularly street trees

Recommend species suited to locations

#### Citizen Pruners

Pruning has been done by

Beverley Sherrid

Sam Gieger  
Stuart Tiekert

New Business

TD Green Streets grant application (*attachment 16*)

Future protocol for hazardous tree assessments

Possible dates and locations for Spring Tree Walk (all Sundays)

April 26

May 3

May 31

June 7

Calendar Notes

Next regular meeting 27 February 2020, 7:30 p.m.

Regular meeting 5 March 2020, 7:30 pm

PROPOSED LOCAL LAW L – 2019

A Local Law amending Chapter 318 of the Code of the Village of Mamaroneck (Trees) regarding the regulation of trees in the Village of Mamaroneck.

**BE IT ENACTED BY THE BOARD OF TRUSTEES OF THE VILLAGE OF MAMARONECK AS FOLLOWS:**

Track changes indicate the changes from v.15 to v.16

*(Language in strike-through abcdefghijk to be deleted; language in bold is to be added)*

*Section 1.*

Section 296-11 of the Code of the Village of Mamaroneck is repealed.

*Section 2.*

Chapter 318 of the Code of the Village of Mamaroneck (Trees) is repealed and replaced with the following:

**Chapter 318 Trees**

**Article I Purpose and definitions**

**§ 318-1 Purpose.**

The Board of Trustees finds and determines that trees contribute to the character of a neighborhood and increase property values. Healthy trees help stabilize soil and reduce the risks of soil erosion and flooding in vulnerable zones. They temper noise, provide shade that mitigates heat, enhance privacy and provide wildlife habitat. Additionally, they provide oxygen and slow climate change by acting as a sink for carbon dioxide, and reduce other air pollution problems and their related respiratory effects. Mature trees give visual continuity to a neighborhood and make neighborhoods more welcoming in appearance. Properly situated trees can also lower heating and cooling costs.

The Board of Trustees further finds and determines that indiscriminate and uncontrolled destruction of trees, including clear cutting, causes greater municipal costs for proper drainage control, lowered value of neighboring property, barren and unsightly conditions, and adverse effects upon the health, safety, environment, ecosystems and general well-being of the residents of the Village.

The purpose of this chapter is to preserve trees and minimize damage to and removal of trees.

**§ 318-2. Definitions.**

As used in this chapter, the following terms shall have the meanings indicated:

**ANSI A300 STANDARDS**

The standards with respect to the care and treatment of trees developed by the American National Standards Institute and designated as ANSI A300, a copy of which is available for public review in the office of the Building Inspector.

**APPLICANT**

Any person who or entity which has submitted an application for a permit to remove a tree.

**CERTIFIED ARBORIST**

An arborist certified by the International Society of Arboriculture (ISA).

**CLEAR CUTTING**

The removal of 30 percent or more of the trees six inches or more in Diameter at Breast Height (DBH) from any property over any five-year period.

**CRITICAL ROOT ZONE (CRZ)**

The minimum area surrounding a tree that is considered essential to support the viability of the tree, equal to a radius of one foot per inch of trunk diameter (DBH).

**DANGEROUS TREE**

A dead or diseased tree which constitutes a hazard to life or property, including other trees, or harbors insects, fungus or diseases which constitute a potential threat to other trees by reason of death or disease.

**DESTRUCTIVE PRUNING PRACTICES**

Pruning a tree or shrub in a manner that does not comply with ANSI A300 Standards.

**DIAMETER AT BREAST HEIGHT (DBH)**

The diameter or caliper of a tree measured at a point 4 1/2 feet above ground level at the base of the tree on the uphill side.

**DRIP LINE**

The roughly circular line defined by the points extended from the maximum spread of the limbs of a tree to the ground.

**EMERGENCY CONDITION**

A condition in which severe weather, storms, natural or non-natural causes severely affect the integrity of a tree, posing an immediate threat to life, property or the general public.

**GUY WIRE**

A tensioned cable designed to add stability to a free-standing structure.

**INJURE**

Any act that may cause a tree to die within a three-year period from the date of the act, including, but not limited to, chopping into the tree, scarring the trunk of the tree, driving nails into the trunk or limbs of the tree, stripping the tree of bark, engaging in destructive pruning practices, severing the tree's roots, removing or compacting soils or changing the grade within the critical root zone or the drip line, storing materials or equipment in the critical root zone or within the drip line, setting a fire in, on or near the trunk of the tree or under its branches, applying chemicals to the tree or the soil within the critical root zone or within the drip line or pouring or depositing oil, gasoline, tar, creosote, salt or other injurious substances on the soil within the critical root zone or within the drip line.

**PERSON**

Any individual or entity and, in the case of an entity, any officer, employee or agent of the entity.

**PLANNING BOARD**

The Planning Board of the Village of Mamaroneck.

**PROTECTED TREE OR SHRUB**

Any of the following:

- A. A tree with a DBH of eight inches or more, regardless of location;
- B. A tree with a DBH of three inches or more located in a wetland or wetland adjacent area, as defined in § 192-2 of this Code;
- C. A tree with a DBH of three inches or more located on a steep slope;
- D. A tree designated as protected on a site development plan or tree preservation plan approved by the Planning Board;
- E. A significant tree or shrub; or
- F. A tree with a DBH of three inches or more designated by the New York State Department of Environmental Conservation as a protected native plant for our region.

**PRUNE**

Cutting the leaves or branches of a tree or shrub in order to remove dead or diseased foliage or branches, control or direct growth, increase quality or yield of flowers or fruit or ensure the growth position of the main branches to enhance structural strength.

**RIGHT-OF WAY**

The unpaved area owned by the village, county or state adjacent to the paved surface of a village, county or state road.

**SHRUB**

A low-growing evergreen or deciduous woody plant that is naturally smaller than a tree and produces multiple stems instead of a single trunk.

**SIGNIFICANT TREE OR SHRUB**

A tree or shrub **on public property** designated by a certified arborist as having historic or unique value because of its unique or noteworthy characteristics or intrinsic value, including, but not limited to, its species, age, location, historical significance, ecological value, or incomparable or irreplaceable aesthetic benefit to the community or environment, such as a "Champion" tree listed on an accredited tree registry, or shown to be of comparable size to a listed tree, a tree or shrub of a rare or endangered species on federal or state lists, or specimen tree or shrub exhibiting qualities such as noteworthy leaf color or shape, peeling bark, floral display, fruit, overall form or habit, unique wildlife habitat support, or rarity. **A list of trees is maintained by the Village Manager and available for public inspection in the Village Manager's office.**

**STEEP SLOPE**

Any ground area where the grade changes by one or more feet of vertical rise for each four feet of horizontal distance.

**STREET TREE**

A tree located within the Village right-of-way.

**STUMP**

The part of a tree attached to the root that remains after the trunk is cut.

**SUBSTANTIALLY WOODED LOT**

A lot more than 4,000 square feet in area containing one tree for every 500 square feet in area.

**TREE**

A living deciduous or coniferous plant with an upright perennial trunk and a definitely formed

crown of foliage.

**TREE CANOPY**

The spread of leaves, branches and stems of a tree.

**TREE COMMITTEE**

The Tree Committee established by this chapter.

**TREE CONTRACTOR**

A person or entity in the business of removing trees for a fee.

**TREE PRESERVATION PLAN**

A plan of property approved by the Planning Board showing contours of the entire plot at intervals of not more than five feet and the location, species, DBH and condition of all trees six inches DBH or greater, identifying all trees to be removed and all trees to remain and detailing the methods and practices to be used to provide protection from injury during construction for all trees that will remain.

**TREE REMOVAL PERMIT**

A permit issued under this chapter authorizing a person to remove a tree or trees.

**TREE TOPPING**

The severe cutting back to stubs of limbs larger than three inches in diameter within the tree's crown, to such a degree so as to remove the normal tree canopy and disfigure the tree.

**Article II Tree Committee**

**§ 318-3 Establishment of the Tree Committee.**

The Tree Committee created by Local Law 1 of 1988 is continued, as follows:

- A. Composition. The Tree Committee will be comprised of seven volunteer residents of the Village of Mamaroneck appointed by the Board of Trustees.
- B. Terms of office. Members of the Tree Committee will each serve for one three-year term and may be reappointed for a second consecutive three-year term. Each member may be appointed for additional terms following a one-year hiatus at the end of each six-year rotation.
- C. Chairperson and secretary. The Board of Trustees will designate a chairperson and the Tree Committee will select a secretary from among the members of the committee.
- D. Meetings. The Tree Committee will meet at such times as it deems appropriate to accomplish its purposes. All meetings will be convened and conducted in accordance with the requirements of the Open Meetings Law.

**§ 318-4 Duties and Responsibilities.**

The Tree Committee will will study, investigate, review, develop and/or update annually and administer a written plan for the care, preservation, pruning, planting, replanting, removal or disposition of trees and shrubs in parks, along streets and in other public areas, with an estimate of the costs in hours to be worked by village employees and the cost of nursery stock to be used. Such plan shall be presented annually to the Village Board.

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- (1) Follow, revise and update Village of Mamaroneck's Tree Management Plan as needed;
- (2) Make recommendations to the Board of Trustees regarding (a) the preservation and replenishing of trees, woods and landscaping in the Village so as to minimize undesirable environmental impacts and further beautify the Village in furtherance of the health, safety and welfare of present and future Village residents; (b) proposed shade tree planting, landscaping and other beautification projects to be performed by the Village throughout its various rights-of-way and Village-owned properties; and (c) such other matters as it deems appropriate for the preservation and replenishment of trees throughout the Village;
- (3) Develop and recommend a policy for replanting and restoration agreements;
- (4) Review and document violation conditions;
- (5) Provide education for Village residents about tree preservation, tree risk assessment, appropriate tree choices for given site conditions and any other aspects of tree stewardship;
- (6) Advise Village boards, committees or departments on tree-related matters;
- (7) Review site development plans and environmental impact statements upon request by the Planning Board;
- (8) Consult with the Village Engineer regarding utility vegetation management and street tree issues; and
- (9) Develop, maintain and file with the Village Clerk/Treasurer a list of species of trees which the Tree Committee recommends as suitable for planting in the Village of Mamaroneck.

### **Article III Trees on public property**

#### **§ 318-5 Protecting trees on public property.**

- A. No person, including a person employed by or acting on behalf of a public utility, may
  - (1) Remove a tree on public property without the approval of the Village Manager;
  - (2) Attach a sign or poster to a tree on public property;
  - (3) Injure or destroy any tree on public property;
  - (4) Prune, spray, treat cavities, fertilize, cable, brace or otherwise treat or cause to be treated a tree on public property, except at the direction or with the approval of the Village Manager and in accordance with ANSI A300 Standards;
  - (5) Climb a tree on public property with the aid of spurs;
  - (6) Pass any public service utility wire through the branches of a tree on public property without sufficient insulation to prevent damage to the tree;
  - (7) Attach a guy wire to a tree on public property in such a manner as to girdle or restrict the growth of the tree; or
  - (8) Attach a guy wire or cable to a tree on public property except by means of a lag hook screwed into the trunk or an eyebolt passing through the trunk.
- B. No person, including any person or entity engaged by any person to treat any tree on public

property, may treat a tree on public property without the permission of the Village Manager and without depositing with the Village Clerk/Treasurer a sum of money equal to the cost of the treatment as a guaranty that the treatment will be properly made. The Village Clerk/Treasurer will return the deposit when the Village Manager determines, upon examining and inspecting the tree, that the treatment was properly done.

- C. Any person who removes a tree on public property or causes a tree on public property to be removed, must, within six months after doing so, remove the stump and all debris from the disturbed area, backfill all holes and leave the area graded and covered in a manner acceptable to the Village Manager.
- D. The Village Manager may
  - (1) cause trees on public property to be fertilized, pruned and sprayed;
  - (2) cause trees on public property to be removed during the course of the improvement of a Village street or of other public grounds; and
  - (3) take other measures the Village Manager deems necessary to control and prevent the spread of insects or disease to trees.

**§ 318-6 Planting trees on public property.**

No person may plant a tree on public property without the approval of the Village Manager.

- A. All trees on public property must be planted in accordance with ANSI A300 Standards and such other requirements as may be determined by the Village Manager in consultation with the Tree Committee, except as may be modified by the Village Manager where the particular circumstances of the planting so require.
- B. The Village Manager may accept monetary donations for the planting of non-invasive trees on the list of suggested street tree species established by the Tree Committee to be planted on municipal property or right-of-way, in accordance with the requirements of this section. The Tree Committee may authorize the planting of trees that are not on the list of suggested street tree species.

**ARTICLE IV Trees on Private Property**

**§ 318-7 Maintenance of trees on private property.**

- A. Every owner of private property on which any tree, shrub or other planting is located must, at the property owner's expense:
  - (1) prune the branches of any tree, shrub or other plant on the owner's property obstructing or overhanging any right-of-way within the Village so that the branches do not obstruct the clear space between the surface of the street or sidewalk and eight feet above the surface of the street or sidewalk, obstruct the light from any street lamp, obstruct the view of any street intersection or any traffic control device or interfere with utilities; and
  - (2) remove, when directed by the Building Inspector, any dangerous tree located on the owner's property.
- B. If the property owner fails to satisfy the property owner's responsibility under subsection A of this section, the Village Manager may:
  - (1) cause the tree, shrub or tree to be pruned, without notice to the property owner, at the property owner's expense; or



- (2) direct the owner of the property to remove or prune the tree, shrub or other planting so that it complies with the requirements of this section.
- C. If the property owner fails to comply with the Village Manager's direction within 30 days after the date of service of notice, the Village Manager may cause the tree, shrub or other planting to be removed or trimmed or the dangerous tree to be removed and charge the cost of doing so to the property owner. If the property owner does not pay that cost within 30 days of the date on which notice of the cost is served on the property owner, the property owner must pay a penalty of five percent of the amount due. The property owner must pay a further penalty of one percent of the amount due for each succeeding month or any portion of the month during which the charge is not paid. The Village Clerk/Treasurer will cause any charges and penalties under this section that remain unpaid for 60 days to be added to the Village tax bill for the property on the next succeeding tax roll. Unpaid charges and penalties are a lien on the real property so affected. The Village Clerk/Treasurer will cause any tree removal charges and penalties that remain unpaid for 60 days to be added to the Village tax bill for the property on the next succeeding tax roll. Unpaid tree removal charges and penalties are a lien on the real property so affected.
- D. Village right to enter private property. If it reasonably appears from public property that a dangerous tree exists on private property, the Building Inspector and anyone acting under the direction of the Building Inspector may enter upon private property to determine if the tree is a dangerous tree and to treat or remove the tree.
- E. Construction damage. Any tree damaged or removed without permission during construction or the development of any property must be replaced in kind. Where it is not possible to replace an existing tree in kind due to its size or maturity, the tree must be replaced by multiple trees collectively equal in size to the tree that was damaged. Minor tree damage must be repaired in accordance with ANSI A300 Standards.
- F. The Board of Trustees may authorize the planting of a tree on private property at the expense of the Village upon obtaining the consent of the property owner and determining that the planting of the tree will serve the purposes and provide the benefits of trees identified in this chapter.

**§318-8 Removal of trees on private property.**

- A. Prohibitions. No person may, without a permit issued by the Building Inspector, either purposely or negligently, engage in clear-cutting or injure any protected tree.
- B. Removal of protected trees in accordance with a permit issued by the Building Inspector. The Building Inspector may grant a permit to remove a tree, to the extent necessary, if:
  - (1) the tree is within a distance of 10 feet around the perimeter of a building or structure; or
  - (2) a certified arborist, chosen by the Village Manager, determines that the tree is dead or so substantially diseased that the tree constitutes a potential danger to life and property, or harbors insects or diseases which constitute a potential threat to other trees within the Village. ~~or~~
  - ~~(3) the tree is not a significant tree.~~
- C. No permit is required for the removal of a tree or trees in accordance with a tree preservation plan approved by the Planning Board.
- D. No tree may be removed while an application for site development plan approval for the property on which the tree is located is pending before the Planning Board.

E. Permit procedure.

- (1) Application for permit. An application for a permit under this section must be made in writing on the form prescribed by the Building Inspector. If the tree is to be removed by a contractor, the application must identify the contractor. The Building Inspector may not grant a permit under this section for the removal of a tree by any contractor who has previously been found to have violated the provisions of this law more than once in any three-year period.
- ~~(2) An application to remove more than two trees, within a one-year period, on any property must be accompanied by a plan showing the types and sizes of the existing trees on the property, identifying the trees to be removed and specifying the reasons for their removal. The plan must also show the new tree or trees to be planted to replace the existing tree or trees that will be removed and specify their location and type. The plan must show existing and proposed contours at two-foot intervals at a scale no smaller than one inch equaling 50 feet. The Building Inspector may require additional information such as the design of walls, disposition and design of storm drainage and any other information pertinent to the individual circumstances.~~
- (3) Fee. The fee for the application will be as set forth in § A347-1 of this Code and must be paid at the time the application is submitted. ~~The application fee will be used to compensate for the certified arborist's services. Additional fees may be incurred if the Village Manager requires the services of a certified arborist to determine the health of a tree.~~
- (4) Action on tree removal permit application. The Building Inspector will either approve or deny the application within 60 days from the date of submission of a complete application, except that the Building Inspector may not grant an application made in connection with construction which requires a building permit until the building permit is issued.

F. Conditions. In granting a permit under this section:

- (1) the Building Inspector must require, as a condition of the tree removal permit, that:
  - (a) the applicant replace each tree that is removed with a non-invasive tree species of a similar mature height and of a size determined in accordance with the following schedule:

DBH of tree removed (inches)	Replanting requirement
Under 6	No replanting necessary
6 to 12	One two-inch to 2 and 1/2 inch DBH tree
13 to 25	Two two-inch to 2 and 1/2 inch DBH trees
26 to 40	Three two-inch to 2 and 1/2 inch DBH trees
41 or greater	Four two-inch to 2 and 1/2 inch DBH trees

- (b) ~~for three or more tree replacements within five years,~~ the property owner must submit a plan, prepared and sealed by a licensed landscape architect and reviewed by the Building Inspector, identifying the proper location for each replacement tree; and
- (c) the property owner, or the applicant or contractor on the property owner's behalf,

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provide a performance bond satisfactory in form to the Village Attorney. The amount of the bond must be sufficient to cover 90 percent of the cost of the planting and restoration work to be completed in accordance with the plans accompanying the application. The remaining 10 percent of the cost of planting and restoration work must be deposited with the Village Clerk/Treasurer, to be held by the Village Clerk/Treasurer in a special tree preservation escrow account. The performance bond obtained by the permit holder must continue in full force and effect during any period for which permit is extended. When all planting and restoration work is completed to the satisfaction of the Building Inspector, the performance bond will be released upon being replaced by a maintenance bond, satisfactory in form to the Village Attorney, in the same amount to run for a term of two years. The Village Clerk/Treasurer will return the deposit when the maintenance bond is released. If planting and restoration work has not been substantially completed within six months of the date the permit is issued and no permit extension has been applied for or granted, the Building Inspector may consider the site abandoned, declare the performance bond in default and apply the escrow deposit and the proceeds of the bond to perform all required planting and restoration work.

(2) the Building Inspector may require, where extensive tree cutting is planned, that the applicant pay the cost of an inspector assigned by the Building Inspector to supervise the tree removal and ensure the protection of the existing trees.

G. Notice to neighboring property owners. No person may remove a tree in accordance with a permit until 10 days have passed after the applicant has given notice of the issuance of the permit, in the manner prescribed by the Building Inspector, to the owners of all property within 250 feet of the property that is the subject of the application. Any person, firm, organization or corporation aggrieved by the determination of the Building Inspector may, within ten days after receiving the determination of the Building Inspector, appeal to the **Village Manager Board of Trustees**. When an appeal is taken, the tree may not be removed and the determination of the Building Inspector may not be enforced until the **Village Manager Board of Trustees** determines the appeal.

H. All tree planting, tree dressing and associated restoration work must be substantially completed within six months from the date the permit is issued, unless the permit is extended by the Building Inspector, in his reasonable discretion. The Building Inspector may revoke any permit if the work is not proceeding according to permit.

~~I. Any tree which fails to survive for a period of two calendar years following planting must be replaced by the person who planted it at his or her expense. The replacement must be completed within 60 days after the Building Inspector demands that the tree be replaced, or within an extended period of time reasonably satisfactory to the Building Inspector. If the person responsible to replace the tree does not do so within the time required, the Building Inspector may declare the maintenance bond in default and apply the escrow cash deposit and the proceeds of the bond to replace the required tree.~~

J. Emergency Removals. If the Building Inspector determines that a tree is hazardous to life or property, the Building Inspector may grant a permit for the immediate removal of the tree without having to follow the procedures or requirements otherwise set forth in this section. ~~But no~~ tree 18 DBH or greater may be removed on the basis of disease without submitting to the Building Inspector a detailed report by a certified arborist justifying the removal. Removal of any tree, ~~including a significant tree~~, is permitted by any person when there is an actual or ongoing emergency condition threatening life or property, the immediate

removal of a tree is necessary for the protection and preservation of life or property and there is no time to wait for granting of a tree removal permit. Within three business days of removal, documented evidence such as photographs, along with a completed tree removal application, shall be submitted to the Building Inspector setting forth the nature and extent of the immediate threat. Failure to submit the required documentation within three business days is a violation of this chapter.

- K. Certificate of occupancy. If the permit is issued in connection with construction that requires a building permit, the Building Inspector may not issue a certificate of occupancy until all tree planting and associated restoration work is completed to the satisfaction of the Building Inspector.

#### Article V - Enforcement

§ 318-9 Enforcement; penalties for offense.

- A. The Building Inspector will enforce this chapter in the same manner as the Building Inspector enforces the Uniform Code under § 126-15.
- B. Any person violating any provision of this chapter is guilty of a violation and is subject to a fine of not less than \$1050 or more than \$5,000 for the removal of one or two trees and not less than \$1500 or more than \$7,500 for each additional tree removed. In addition, any person violating any of the provisions of this article must replace each tree injured, removed, killed or destroyed in accordance with § 318-8. The owner of any property on which a violation occurs is culpable to the same extent as any tree contractor or other person, who has committed the violation at the direction of, or with the knowledge of, the property owner.
- C. Immediately upon the issuance of a notice of violation of any provision of this chapter, work under any building permit, demolition permit excavation permit previously issued to the alleged violator is suspended, and no building permit, demolition permit, excavation permit or certificate of occupancy, may be issued with respect to the property, until the notice of violation is withdrawn, dismissed or adjudicated.

#### Section 3.

Section 342-16(B) of the Code of the Village of Mamaroneck is amended by adding subsection (6), as follows:

- (6) To preserve, to the maximum extent practicable, the existing trees on the property and to require that, wherever possible, trees that are removed are replaced.**

#### Section 4.

Section 342-16(C) of the Code of the Village of Mamaroneck is amended by adding subsection (4), as follows:

- (4) Trees that do not have to be removed to facilitate the permissible development of the property may not be removed. Trees that are removed must be replaced in accordance with the requirements of chapter 318 of this Code.**

#### Section 5.

Section 342-76(B) of the Code of the Village of Mamaroneck is amended as follows:

~~Landscape. The landscape must be preserved in its natural state, insofar as practicable and environmentally desirable, by minimizing tree and soil removal. If development of the site~~

~~necessitates the removal of established trees, special attention shall be given to the planting of replacements or to other landscape treatment.~~ Any grade changes shall be in keeping with the general appearance of neighboring developed areas. **Trees that do not have to be removed to facilitate the permissible development of the property may not be removed. Trees that are removed must be replaced in accordance with the requirements of chapter 318 of this Code.**

*Section 6.*

Section 342-79 of the Code of the Village of Mamaroneck is amended as follows:

§ 342-79. Planning Board action.

The Planning Board ~~shall~~ **must** review the site development plan and act on the application within 62 days from and after the time of submission of the complete application. **As early as reasonably possible in the review process, the Planning Board must refer the applicant's tree preservation plan to the Tree Committee for review and comment.** The Board ~~shall~~ **must** comply with the provisions of the State Environmental Quality Review Act under Article 8 of the Environmental Conservation Law and its implementing regulations. The time within which the Board must render its decision may be extended by mutual consent of the applicant and the Board. In reviewing the site development plan, the Planning Board must take into consideration the public health, safety and general welfare and the comfort and convenience of the public in general and of the residents of the immediate neighborhood in particular and must set any appropriate conditions and safeguards in harmony with the general purpose and intent of this chapter and according to the general criteria and standards defined in § 342-76.

*Section 7.*

Section A347-1 of the Code of the Village of Mamaroneck is amended by adding the following fee:

Chapter 318, Trees.

Application for Tree Removal Application for Tree Removal on private property. \$ 350 for the first two trees, \$50 for each additional tree.

*Section 8.*

Section A348-11 of the Code of the Village of Mamaroneck is amended by adding subsection I, as follows:

- I. **The subdivision must be designed in a manner that avoids the removal of trees to the maximum extent practicable.**

*Section 9.*

Section A348-12 of the Code of the Village of Mamaroneck is amended by adding subsection C, as follows:

- C. **The preliminary plat must be accompanied by a tree preservation plan consistent with the requirements of this chapter. The Planning Board must include in the resolution approving the final plat a condition requiring compliance with the approved tree preservation plan.**

*Section 10.*

If any section, subsection, clause, phrase or other portion of this local law is, for any reason,

declared invalid, in whole or in part, by any court, agency, commission, legislative body or other authority of competent jurisdiction, the portion of the law declared to be invalid will be deemed a separate, distinct and independent portion and the declaration will not affect the validity of the remaining portions hereof, which will continue in full force and effect.

*Section 11.*

This law is adopted pursuant to the authority granted by Municipal Home Rule Law § 10(1)(e)(3) and will supersede the provisions of the Village Law to the extent that they are inconsistent with this local law.

*Section 12.*

This local law will take effect immediately upon its filing in the office of the Secretary of State in accordance with Municipal Home Rule Law § 27.

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**§ 318-1 Purpose.**

The Board of Trustees finds and determines that trees contribute to the character of a neighborhood and increase property values. Healthy trees help stabilize soil and reduce the risks of soil erosion and flooding in vulnerable zones. They temper noise, provide shade that mitigates heat, enhance privacy and provide wildlife habitat. Additionally, they provide oxygen and slow climate change by acting as a sink for carbon dioxide, and reduce other air pollution problems and their related respiratory effects. Mature trees give visual continuity to a neighborhood and make neighborhoods more welcoming in appearance. Properly situated trees can also lower heating and cooling costs.

The Board of Trustees further finds and determines that indiscriminate and uncontrolled destruction of trees, including clear cutting, causes greater municipal costs for proper drainage control, lowered value of neighboring property, barren and unsightly conditions, and adverse effects upon the health, safety, environment, ecosystems and general well-being of the residents of the Village.

The purpose of this chapter is to preserve trees and minimize damage to and removal of trees.

**§ 318-2. Definitions.**

As used in this chapter, the following terms shall have the meanings indicated:

**ANSI A300 STANDARDS**

The standards with respect to the care and treatment of trees developed by the American National Standards Institute and designated as ANSI A300, a copy of which is available for public review in the office of the Building Inspector.

**APPLICANT**

Any person who or entity which has submitted an application for a permit to remove a tree.

**CERTIFIED ARBORIST**

An arborist certified by the International Society of Arboriculture (ISA).

**CLEAR CUTTING**

The removal of 30 percent or more of the trees six inches or more in Diameter at Breast Height (DBH) from any property over any five-year period.

**CRITICAL ROOT ZONE (CRZ)**

The minimum area surrounding a tree that is considered essential to support the viability of the tree, equal to a radius of one foot per inch of trunk diameter (DBH).

**DANGEROUS TREE**

A dead or diseased tree which constitutes a hazard to life or property, including other trees, or harbors insects, fungus or diseases which constitute a potential threat to other trees by reason of death or disease.

**DESTRUCTIVE PRUNING PRACTICES**

Pruning a tree or shrub in a manner that does not comply with ANSI A300 Standards.

**DIAMETER AT BREAST HEIGHT (DBH)**

The diameter or caliper of a tree measured at a point 4 1/2 feet above ground level at the base of the tree on the uphill side.

**DRIP LINE**

The roughly circular line defined by the points extended from the maximum spread of the limbs of a tree to the ground.

**EMERGENCY CONDITION**

A condition in which severe weather, storms, natural or non-natural causes severely affect the integrity of a tree, posing an immediate threat to life, property or the general public.

**GUY WIRE**

A tensioned cable designed to add stability to a free-standing structure.

**INJURE**

Any act that may cause a tree to die within a three-year period from the date of the act, including, but not limited to, chopping into the tree, scarring the trunk of the tree, driving nails into the trunk or limbs of the tree, stripping the tree of bark, engaging in destructive pruning practices, severing the tree's roots, removing or compacting soils or changing the grade within the critical root zone or the drip line, storing materials or equipment in the critical root zone or within the drip line, setting a fire in, on or near the trunk of the tree or under its branches, applying chemicals to the tree or the soil within the critical root zone or within the drip line or pouring or depositing oil, gasoline, tar, creosote, salt or other injurious substances on the soil within the critical root zone or within the drip line.

**PERSON**

Any individual or entity and, in the case of an entity, any officer, employee or agent of the entity.

**PLANNING BOARD**

The Planning Board of the Village of Mamaroneck.

**PROTECTED TREE OR SHRUB**

Any of the following:



- A. A tree with a DBH of eight inches or more, regardless of location;
- B. A tree with a DBH of three inches or more located in a wetland or wetland adjacent area, as defined in § 192-2 of this Code;
- C. A tree with a DBH of three inches or more located on a steep slope;
- D. A tree designated as protected on a site development plan or tree preservation plan approved by the Planning Board;
- E. A significant tree or shrub; or
- F. A tree with a DBH of three inches or more designated by the New York State Department of Environmental Conservation as a protected native plant for our region.

**PRUNE**

Cutting the leaves or branches of a tree or shrub in order to remove dead or diseased foliage or branches, control or direct growth, increase quality or yield of flowers or fruit or ensure the growth position of the main branches to enhance structural strength.

**RIGHT-OF WAY**

The unpaved area owned by the village, county or state adjacent to the paved surface of a village, county or state road.

**SHRUB**

A low-growing evergreen or deciduous woody plant that is naturally smaller than a tree and produces multiple stems instead of a single trunk.

**SIGNIFICANT TREE OR SHRUB**

A tree or shrub **on public property** designated by a certified arborist as having historic or unique value because of its unique or noteworthy characteristics or intrinsic value, including, but not limited to, its species, age, location, historical significance, ecological value, or incomparable or irreplaceable aesthetic benefit to the community or environment, such as a "Champion" tree listed on an accredited tree registry, or shown to be of comparable size to a listed tree, a tree or shrub of a rare or endangered species on federal or state lists, or specimen tree or shrub exhibiting qualities such as noteworthy leaf color or shape, peeling bark, floral display, fruit, overall form or habit, unique wildlife habitat support, or rarity. **A list of trees is maintained by the Village Manager and available for public inspection in the Village Manager's office.**

**STEEP SLOPE**

Any ground area where the grade changes by one or more feet of vertical rise for each four feet of horizontal distance.

**STREET TREE**

A tree located within the Village right-of-way.

**STUMP**

The part of a tree attached to the root that remains after the trunk is cut.

**SUBSTANTIALLY WOODED LOT**

A lot more than 4,000 square feet in area containing one tree for every 500 square feet in area.

**TREE**

A living deciduous or coniferous plant with an upright perennial trunk and a definitely formed

crown of foliage.

**TREE CANOPY**

The spread of leaves, branches and stems of a tree.

**TREE COMMITTEE**

The Tree Committee established by this chapter.

**TREE CONTRACTOR**

A person or entity in the business of removing trees for a fee.

**TREE PRESERVATION PLAN**

A plan of property approved by the Planning Board showing contours of the entire plot at intervals of not more than five feet and the location, species, DBH and condition of all trees six inches DBH or greater, identifying all trees to be removed and all trees to remain and detailing the methods and practices to be used to provide protection from injury during construction for all trees that will remain.

**TREE REMOVAL PERMIT**

A permit issued under this chapter authorizing a person to remove a tree or trees.

**TREE TOPPING**

The severe cutting back to stubs of limbs larger than three inches in diameter within the tree's crown, to such a degree so as to remove the normal tree canopy and disfigure the tree.

**Article II Tree Committee**

**§ 318-3 Establishment of the Tree Committee.**

The Tree Committee created by Local Law 1 of 1988 is continued, as follows:

- A. Composition. The Tree Committee will be comprised of seven volunteer residents of the Village of Mamaroneck appointed by the Board of Trustees.
- B. Terms of office. Members of the Tree Committee will each serve for one three-year term and may be reappointed for a second consecutive three-year term. Each member may be appointed for additional terms following a one-year hiatus at the end of each six-year rotation.
- C. Chairperson and secretary. The Board of Trustees will designate a chairperson and the Tree Committee will select a secretary from among the members of the committee.
- D. Meetings. The Tree Committee will meet at such times as it deems appropriate to accomplish its purposes. All meetings will be convened and conducted in accordance with the requirements of the Open Meetings Law.

**§ 318-4 Duties and Responsibilities.**

The Tree Committee will study, investigate, review, develop and/or update annually and administer a written plan for the care, preservation, pruning, planting, replanting, removal or disposition of trees and shrubs in parks, along streets and in other public areas, with an estimate of the costs in hours to be worked by village employees and the cost of nursery stock to be used. Such plan shall be presented annually to the Village Board.

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- (1) Follow, revise and update Village of Mamaroneck's Tree Management Plan as needed;
- (2) Make recommendations to the Board of Trustees regarding (a) the preservation and replenishing of trees, woods and landscaping in the Village so as to minimize undesirable environmental impacts and further beautify the Village in furtherance of the health, safety and welfare of present and future Village residents; (b) proposed shade tree planting, landscaping and other beautification projects to be performed by the Village throughout its various rights-of-way and Village-owned properties; and (c) such other matters as it deems appropriate for the preservation and replenishment of trees throughout the Village;
- (3) Develop and recommend a policy for replanting and restoration agreements;
- (4) Review and document violation conditions;
- (5) Provide education for Village residents about tree preservation, tree risk assessment, appropriate tree choices for given site conditions and any other aspects of tree stewardship;
- (6) Advise Village boards, committees or departments on tree-related matters;
- (7) Review site development plans and environmental impact statements upon request by the Planning Board;
- (8) Consult with the Village Engineer regarding utility vegetation management and street tree issues; and
- (9) Develop, maintain and file with the Village Clerk/Treasurer a list of species of trees which the Tree Committee recommends as suitable for planting in the Village of Mamaroneck.

### **Article III Trees on public property**

#### **§ 318-5 Protecting trees on public property.**

- A. No person, including a person employed by or acting on behalf of a public utility, may
  - (1) Remove a tree on public property without the approval of the Village Manager;
  - (2) Attach a sign or poster to a tree on public property;
  - (3) Injure or destroy any tree on public property;
  - (4) Prune, spray, treat cavities, fertilize, cable, brace or otherwise treat or cause to be treated a tree on public property, except at the direction or with the approval of the Village Manager and in accordance with ANSI A300 Standards;
  - (5) Climb a tree on public property with the aid of spurs;
  - (6) Pass any public service utility wire through the branches of a tree on public property without sufficient insulation to prevent damage to the tree;
  - (7) Attach a guy wire to a tree on public property in such a manner as to girdle or restrict the growth of the tree; or
  - (8) Attach a guy wire or cable to a tree on public property except by means of a lag hook screwed into the trunk or an eyebolt passing through the trunk.
- B. No person, including any person or entity engaged by any person to treat any tree on public

property, may treat a tree on public property without the permission of the Village Manager and without depositing with the Village Clerk/Treasurer a sum of money equal to the cost of the treatment as a guaranty that the treatment will be properly made. The Village Clerk/Treasurer will return the deposit when the Village Manager determines, upon examining and inspecting the tree, that the treatment was properly done.

- C. Any person who removes a tree on public property or causes a tree on public property to be removed, must, within six months after doing so, remove the stump and all debris from the disturbed area, backfill all holes and leave the area graded and covered in a manner acceptable to the Village Manager.
- D. The Village Manager may
  - (1) cause trees on public property to be fertilized, pruned and sprayed;
  - (2) cause trees on public property to be removed during the course of the improvement of a Village street or of other public grounds; and
  - (3) take other measures the Village Manager deems necessary to control and prevent the spread of insects or disease to trees.

**§ 318-6 Planting trees on public property.**

No person may plant a tree on public property without the approval of the Village Manager.

- A. All trees on public property must be planted in accordance with ANSI A300 Standards and such other requirements as may be determined by the Village Manager in consultation with the Tree Committee, except as may be modified by the Village Manager where the particular circumstances of the planting so require.
- B. The Village Manager may accept monetary donations for the planting of non-invasive trees on the list of suggested street tree species established by the Tree Committee to be planted on municipal property or right-of-way, in accordance with the requirements of this section. The Tree Committee may authorize the planting of trees that are not on the list of suggested street tree species.

**ARTICLE IV Trees on Private Property**

**§ 318-7 Maintenance of trees on private property.**

- A. Every owner of private property on which any tree, shrub or other planting is located must, at the property owner's expense:
  - (1) prune the branches of any tree, shrub or other plant on the owner's property obstructing or overhanging any right-of-way within the Village so that the branches do not obstruct the clear space between the surface of the street or sidewalk and eight feet above the surface of the street or sidewalk, obstruct the light from any street lamp, obstruct the view of any street intersection or any traffic control device or interfere with utilities; and
  - (2) remove, when directed by the Building Inspector, any dangerous tree located on the owner's property.
- B. If the property owner fails to satisfy the property owner's responsibility under subsection A of this section, the Village Manager may:
  - (1) cause the tree, shrub or tree to be pruned, without notice to the property owner, at the property owner's expense; or

(2) direct the owner of the property to remove or prune the tree, shrub or other planting so that it complies with the requirements of this section.

- C. If the property owner fails to comply with the Village Manager's direction within 30 days after the date of service of notice, the Village Manager may cause the tree, shrub or other planting to be removed or trimmed or the dangerous tree to be removed and charge the cost of doing so to the property owner. If the property owner does not pay that cost within 30 days of the date on which notice of the cost is served on the property owner, the property owner must pay a penalty of five percent of the amount due. The property owner must pay a further penalty of one percent of the amount due for each succeeding month or any portion of the month during which the charge is not paid. The Village Clerk/Treasurer will cause any charges and penalties under this section that remain unpaid for 60 days to be added to the Village tax bill for the property on the next succeeding tax roll. Unpaid charges and penalties are a lien on the real property so affected. The Village Clerk/Treasurer will cause any tree removal charges and penalties that remain unpaid for 60 days to be added to the Village tax bill for the property on the next succeeding tax roll. Unpaid tree removal charges and penalties are a lien on the real property so affected.
- D. Village right to enter private property. If it reasonably appears from public property that a dangerous tree exists on private property, the Building Inspector and anyone acting under the direction of the Building Inspector may enter upon private property to determine if the tree is a dangerous tree and to treat or remove the tree.
- E. Construction damage. Any tree damaged or removed without permission during construction or the development of any property must be replaced in kind. Where it is not possible to replace an existing tree in kind due to its size or maturity, the tree must be replaced by multiple trees collectively equal in size to the tree that was damaged. Minor tree damage must be repaired in accordance with ANSI A300 Standards.
- F. The Board of Trustees may authorize the planting of a tree on private property at the expense of the Village upon obtaining the consent of the property owner and determining that the planting of the tree will serve the purposes and provide the benefits of trees identified in this chapter.

#### **§318-8 Removal of trees on private property.**

- A. Prohibitions. No person may, without a permit issued by the Building Inspector, either purposely or negligently, engage in clear-cutting or injure any protected tree.
- B. Removal of protected trees in accordance with a permit issued by the Building Inspector. The Building Inspector may grant a permit to remove a tree, to the extent necessary, if:
  - (1) the tree is within a distance of 10 feet around the perimeter of a building or structure; or
  - (2) a certified arborist, chosen by the Village Manager, determines that the tree is dead or so substantially diseased that the tree constitutes a potential danger to life and property, or harbors insects or diseases which constitute a potential threat to other trees within the Village. ~~or~~
  - ~~(3) the tree is not a significant tree.~~
- C. No permit is required for the removal of a tree or trees in accordance with a tree preservation plan approved by the Planning Board.
- D. No tree may be removed while an application for site development plan approval for the property on which the tree is located is pending before the Planning Board.

E. Permit procedure.

- (1) Application for permit. An application for a permit under this section must be made in writing on the form prescribed by the Building Inspector. If the tree is to be removed by a contractor, the application must identify the contractor. The Building Inspector may not grant a permit under this section for the removal of a tree by any contractor who has previously been found to have violated the provisions of this law more than once in any three-year period.
- ~~(2) An application to remove more than two trees, within a one-year period, on any property must be accompanied by a plan showing the types and sizes of the existing trees on the property, identifying the trees to be removed and specifying the reasons for their removal. The plan must also show the new tree or trees to be planted to replace the existing tree or trees that will be removed and specify their location and type. The plan must show existing and proposed contours at two-foot intervals at a scale no smaller than one inch equaling 50 feet. The Building Inspector may require additional information such as the design of walls, disposition and design of storm drainage and any other information pertinent to the individual circumstances.~~
- (3) Fee. The fee for the application will be as set forth in § A347-1 of this Code and must be paid at the time the application is submitted. ~~The application fee will be used to compensate for the certified arborist's services. Additional fees may be incurred if the Village Manager requires the services of a certified arborist to determine the health of a tree.~~
- (4) Action on tree removal permit application. The Building Inspector will either approve or deny the application within 60 days from the date of submission of a complete application, except that the Building Inspector may not grant an application made in connection with construction which requires a building permit until the building permit is issued.

F. Conditions. In granting a permit under this section:

- (1) the Building Inspector must require, as a condition of the tree removal permit, that:
  - (a) the applicant replace each tree that is removed with a non-invasive tree species of a similar mature height and of a size determined in accordance with the following schedule:

DBH of tree removed (inches)	Replanting requirement
Under 6	No replanting necessary
6 to 12	One two-inch to 2 and 1/2 inch DBH tree
13 to 25	Two two-inch to 2 and 1/2 inch DBH trees
26 to 40	Three two-inch to 2 and 1/2 inch DBH trees
41 or greater	Four two-inch to 2 and 1/2 inch DBH trees

- (b) for three or more tree replacements within five years, the property owner must submit a plan, prepared and sealed by a licensed landscape architect and reviewed by the Building Inspector, identifying the proper location for each replacement tree; and
- (c) the property owner, or the applicant or contractor on the property owner's behalf,

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provide a performance bond satisfactory in form to the Village Attorney. The amount of the bond must be sufficient to cover 90 percent of the cost of the planting and restoration work to be completed in accordance with the plans accompanying the application. The remaining 10 percent of the cost of planting and restoration work must be deposited with the Village Clerk/Treasurer, to be held by the Village Clerk/Treasurer in a special tree preservation escrow account. The performance bond obtained by the permit holder must continue in full force and effect during any period for which permit is extended. When all planting and restoration work is completed to the satisfaction of the Building Inspector, the performance bond will be released upon being replaced by a maintenance bond, satisfactory in form to the Village Attorney, in the same amount to run for a term of two years. The Village Clerk/Treasurer will return the deposit when the maintenance bond is released. If planting and restoration work has not been substantially completed within six months of the date the permit is issued and no permit extension has been applied for or granted, the Building Inspector may consider the site abandoned, declare the performance bond in default and apply the escrow deposit and the proceeds of the bond to perform all required planting and restoration work.

(2) the Building Inspector may require, where extensive tree cutting is planned, that the applicant pay the cost of an inspector assigned by the Building Inspector to supervise the tree removal and ensure the protection of the existing trees.

G. Notice to neighboring property owners. No person may remove a tree in accordance with a permit until 10 days have passed after the applicant has given notice of the issuance of the permit, in the manner prescribed by the Building Inspector, to the owners of all property within 250 feet of the property that is the subject of the application. Any person, firm, organization or corporation aggrieved by the determination of the Building Inspector may, within ten days after receiving the determination of the Building Inspector, appeal to the **Village Manager Board of Trustees**. When an appeal is taken, the tree may not be removed and the determination of the Building Inspector may not be enforced until the **Village Manager Board of Trustees** determines the appeal.

H. All tree planting, tree dressing and associated restoration work must be substantially completed within six months from the date the permit is issued, unless the permit is extended by the Building Inspector, in his reasonable discretion. The Building Inspector may revoke any permit if the work is not proceeding according to permit.

~~I. Any tree which fails to survive for a period of two calendar years following planting must be replaced by the person who planted it at his or her expense. The replacement must be completed within 60 days after the Building Inspector demands that the tree be replaced, or within an extended period of time reasonably satisfactory to the Building Inspector. If the person responsible to replace the tree does not do so within the time required, the Building Inspector may declare the maintenance bond in default and apply the escrow cash deposit and the proceeds of the bond to replace the required tree.~~

J. Emergency Removals. If the Building Inspector determines that a tree is hazardous to life or property, the Building Inspector may grant a permit for the immediate removal of the tree without having to follow the procedures or requirements otherwise set forth in this section. ~~But no~~ tree 18 DBH or greater may be removed on the basis of disease without submitting to the Building Inspector a detailed report by a certified arborist justifying the removal. Removal of any tree, ~~including a significant tree,~~ is permitted by any person when there is an actual or ongoing emergency condition threatening life or property, the immediate

removal of a tree is necessary for the protection and preservation of life or property and there is no time to wait for granting of a tree removal permit. Within three business days of removal, documented evidence such as photographs, along with a completed tree removal application, shall be submitted to the Building Inspector setting forth the nature and extent of the immediate threat. Failure to submit the required documentation within three business days is a violation of this chapter.

- K. Certificate of occupancy. If the permit is issued in connection with construction that requires a building permit, the Building Inspector may not issue a certificate of occupancy until all tree planting and associated restoration work is completed to the satisfaction of the Building Inspector.

#### Article V - Enforcement

§ 318-9 Enforcement; penalties for offense.

- A. The Building Inspector will enforce this chapter in the same manner as the Building Inspector enforces the Uniform Code under § 126-15.
- B. Any person violating any provision of this chapter is guilty of a violation and is subject to a fine of not less than \$1050 or more than \$5,000 for the removal of one or two trees and not less than \$1500 or more than \$7,500 for each additional tree removed. In addition, any person violating any of the provisions of this article must replace each tree injured, removed, killed or destroyed in accordance with § 318-8. The owner of any property on which a violation occurs is culpable to the same extent as any tree contractor or other person, who has committed the violation at the direction of, or with the knowledge of, the property owner.
- C. Immediately upon the issuance of a notice of violation of any provision of this chapter, work under any building permit, demolition permit excavation permit previously issued to the alleged violator is suspended, and no building permit, demolition permit, excavation permit or certificate of occupancy, may be issued with respect to the property, until the notice of violation is withdrawn, dismissed or adjudicated.

#### Section 3.

Section 342-16(B) of the Code of the Village of Mamaroneck is amended by adding subsection (6), as follows:

- (6) To preserve, to the maximum extent practicable, the existing trees on the property and to require that, wherever possible, trees that are removed are replaced.**

#### Section 4.

Section 342-16(C) of the Code of the Village of Mamaroneck is amended by adding subsection (4), as follows:

- (4) Trees that do not have to be removed to facilitate the permissible development of the property may not be removed. Trees that are removed must be replaced in accordance with the requirements of chapter 318 of this Code.**

#### Section 5.

Section 342-76(B) of the Code of the Village of Mamaroneck is amended as follows:

~~Landscape. The landscape must be preserved in its natural state, insofar as practicable and environmentally desirable, by minimizing tree and soil removal. If development of the site~~



~~necessitates the removal of established trees, special attention shall be given to the planting of replacements or to other landscape treatment. Any grade changes shall be in keeping with the general appearance of neighboring developed areas. Trees that do not have to be removed to facilitate the permissible development of the property may not be removed. Trees that are removed must be replaced in accordance with the requirements of chapter 318 of this Code.~~

*Section 6.*

Section 342-79 of the Code of the Village of Mamaroneck is amended as follows:

§ 342-79. Planning Board action.

The Planning Board shall **must** review the site development plan and act on the application within 62 days from and after the time of submission of the complete application. **As early as reasonably possible in the review process, the Planning Board must refer the applicant's tree preservation plan to the Tree Committee for review and comment.** The Board shall ~~must~~ comply with the provisions of the State Environmental Quality Review Act under Article 8 of the Environmental Conservation Law and its implementing regulations. The time within which the Board must render its decision may be extended by mutual consent of the applicant and the Board. In reviewing the site development plan, the Planning Board must take into consideration the public health, safety and general welfare and the comfort and convenience of the public in general and of the residents of the immediate neighborhood in particular and must set any appropriate conditions and safeguards in harmony with the general purpose and intent of this chapter and according to the general criteria and standards defined in § 342-76.

*Section 7.*

Section A347-1 of the Code of the Village of Mamaroneck is amended by adding the following fee:

Chapter 318, Trees.

Application for Tree Removal Application for Tree Removal on private property. \$ 350 for the first two trees, \$50 for each additional tree.

*Section 8.*

Section A348-11 of the Code of the Village of Mamaroneck is amended by adding subsection I, as follows:

- I. **The subdivision must be designed in a manner that avoids the removal of trees to the maximum extent practicable.**

*Section 9.*

Section A348-12 of the Code of the Village of Mamaroneck is amended by adding subsection C, as follows:

- C. **The preliminary plat must be accompanied by a tree preservation plan consistent with the requirements of this chapter. The Planning Board must include in the resolution approving the final plat a condition requiring compliance with the approved tree preservation plan.**

*Section 10.*

If any section, subsection, clause, phrase or other portion of this local law is, for any reason,

declared invalid, in whole or in part, by any court, agency, commission, legislative body or other authority of competent jurisdiction, the portion of the law declared to be invalid will be deemed a separate, distinct and independent portion and the declaration will not affect the validity of the remaining portions hereof, which will continue in full force and effect.

*Section 11.*

This law is adopted pursuant to the authority granted by Municipal Home Rule Law § 10(1)(e)(3) and will supersede the provisions of the Village Law to the extent that they are inconsistent with this local law.

*Section 12.*

This local law will take effect immediately upon its filing in the office of the Secretary of State in accordance with Municipal Home Rule Law § 27.

**Tree Ordinance – Revised Purpose (318-1)**

The Board of Trustees finds and determines that mature trees contribute to the character of a neighborhood and increase property values. Mature trees help stabilize soil, clean water, and reduce the risk of soil erosion and flooding by absorbing rainfall. Sufficient tree canopy provides shade that can mitigate heat by as much as ten degrees, reducing a community's cooling costs and increasing its foot traffic. Mature trees reduce air pollution and its related respiratory effects; they remove carbon dioxide from the air, create oxygen, and slow climate change. Trees also temper noise, enhance privacy and provide wildlife habitat. They give visual continuity to neighborhoods and make them more welcoming in appearance. A tree's ability to absorb carbon and provide other benefits increases as it ages, so the preservation of mature trees is requisite for achieving the full benefits of an urban forest. Studies show that a minimum canopy cover of 40 percent is the threshold for reaping the full benefits of trees.

The Board of Trustees further finds and determines that indiscriminate and uncontrolled destruction of trees, including clear cutting, causes greater municipal costs for proper drainage control and water treatment, lowers the value of neighboring property, creates barren and unsightly conditions, and has adverse effects upon the health, safety, environment, ecosystems and general well-being of the residents of the Village.

The purpose of this chapter is to preserve trees, to minimize damage to and removal of trees, and to increase the canopy cover of the Village of Mamaroneck.



[United States Department of Agriculture](#)



[U.S. Forest Service](#)

[Caring for the land and serving people](#)

# Environmental Services: Making Conservation Work

Outdoor Writers Association of America  
Spokane, WA  
— June 22, 2004

It's a pleasure to be here again and to speak before such a knowledgeable audience. Outdoor writers have a huge impact on the natural resource values that our society preserves and protects. You play an enormous role in framing issues for social and political consumption.

## Four Threats

Last year when I spoke at this convention, I talked about how critical it is for those of us who care about conservation to focus on the real threats to our nation's forests ... the real threats to biodiversity ... to clean air and water ... to wildlife habitat. I talked about four major threats facing our nation's forests—fire and fuels, invasive species, loss of open space, and unmanaged outdoor recreation. We have related material at our display in the main hall, and I encourage you to take a look at it.

We are talking about these threats because we see an urgency in addressing them. We really believe that unless we focus our time and resources on these issues, the forests we love so much will be lost.

Today, I want to focus on just one of these threats: loss of open space, specifically the loss of our forests. Let me just say this: When we lose a forest, we don't just lose the value of the wood. We lose all the values that come with a forest—clean water, stable soils, habitat for wildlife, carbon sequestration, flood control, and endless others.

To make conservation work—to keep forests from being developed—we are going to have to find ways to account for these values—to make forest values such that private forest owners are able to stay on the land and manage their forests sustainably.

What most people do not know is that the Forest Service has a role in promoting the sustainable management of *all* forests in the United States, both public and private. And most forests in the United States are in private hands. Even before the creation of the national forests, we were helping private landowners manage their forests sustainably. It continues to be a vital part of our mission. But you can't manage a forest—sustainably or otherwise—if it isn't there anymore. And you can't address the loss of open space unless you look at the full scope of this issue. That's what I'll do with you today.

## Forest Loss

Are we really losing our forests? The answer is yes. In the last four centuries, we've lost about a quarter of our original forest estate of about a billion acres. Since the early 1900s, the number of forested acres has been roughly stable, mainly because the number of acres of agricultural land stabilized. But the picture isn't all that reassuring. Since 1953, we've had a net loss of almost 10 million acres of forest land. That's an area larger than the state of Maryland. And if we project forward half a century, then we expect the loss to more than double to 23 million acres—an area larger than Maine. The rate of loss is growing.

Why is this happening? No, it's not because of timber harvest. In fact, national forest timber harvest is a mere whisper of what it once was. Where we once met 25 percent of our national timber demand, today it's less than 5 percent. And most of that is byproduct from treatments for other purposes. And it's not because of timber harvest on private lands, either.

Today, the main cause of forested acreage loss is conversion to urban use. In the last 20 years, the area of developed forested and non-forested land has grown by roughly 50 percent. The rate of development has been rising, but let's just take the 20-year average of 1.7 million acres per year. At that rate, we would have almost 200 million acres of developed land in the United States by the middle of the century. That's an area almost twice the size of California—1 acre in 10 in the Lower 48.

There's also been a decline in the value of our forests for timber production. Jim DeCosmo, a vice president at Temple-Inland Forest Products Corporation in the South, compared the recent cost of producing lumber *plus* the cost of transporting it to Baltimore, Maryland, for a number of foreign countries and for the American South. He found that cost *plus* freight to Baltimore is lower from Europe, South America, and Canada than from Atlanta, Georgia.

To me, that's stunning. DeCosmo attributed the United States' competitive weakness to lower taxes in other countries. It might also have to do with lower labor costs there and a high dollar exchange rate in recent years. Whatever the reason, it is predicted that foreign imports will continue to grow.

As foreign imports gain market share, forest land in the United States becomes less attractive to forest owners and investors. That's simple economics. Private forest owners have been selling forest land for some time, and the buyers have often been developers. That's the long-term trend we're seeing.

## Values Lost

You might ask, what's wrong with that? Why do we need so much forest land if we can import so much of the timber we need?

There are at least two problems with that. One problem has to do with the impact of our consumption on the forest resources of other nations. By importing so much of our wood, are we driving unsustainable forestry practices in other countries ... illegal logging ... deforestation?

The other problem has to do with the loss of non-timber forest values here at home, like clean water and wildlife habitat. When forest landowners, large or small, cannot reap a profit from managing forests for wood products, they are often forced to sell their land. We lose something especially dear to the hearts of many of us here—scenic beauty, a sense of naturalness, and opportunities for outdoor recreation.

Let's just focus on outdoor recreation for a moment. Most of the potential new opportunities for outdoor recreation are on private land. About 6 acres in 10 of our forest land nationwide are in private hands, and in some regions it's far higher.

In the South, the vast majority of the opportunities for outdoor recreation in forested landscapes are on private land, especially hunting and fishing opportunities. But only about 7 percent of that is open to the public. If you drive through the South, you see “No Trespassing” signs posted everywhere, and the number of them is growing. That’s because a growing number of private landowners are closing their lands to the public. For example, the number of private campgrounds is shrinking. We’re seeing the same trend nationwide.

At the same time, demand for outdoor recreation is growing nationwide. In the last 20 years, the number of Americans 12 and older participating in some form of outdoor recreation has grown from 188 million to 229 million. That’s an increase of 18 percent—almost 2 million more users per year.

### Unsustainable Pattern

Do you see a pattern emerging? Rising urbanization means that forests are being sold for development. Meanwhile, private forest owners are closing their lands to the public. So supply is shrinking at the same time that demand for recreation is growing.

You can see the same pattern for other environmental services and amenities: Rising urban development ... loss of open space ... a growing population ... and rising demand for services that only natural landscapes can provide—clean air, pure water, native wildlife, lots of trees, and more.

Let’s look at one more example—water. Forested landscapes are like a highly efficient, highly valuable water-purifying machine. They naturally filter rainwater on its way to those who will drink it. The machine worked beautifully until fairly recently, when we began to see signs of mechanical failure.

The trouble has come from relentless development—roads, subdivisions, and second homes; failed septic tanks, lawn chemicals, and irresponsible use. There is growing concern about the safety of our drinking water. In 1993, an outbreak in Milwaukee sickened 400,000 people and killed more than 100. The Centers for Disease Control now advise people with immune deficiencies to boil their drinking water, no matter where it comes from.

### Adding Value

Forests can help—but only if we truly recognize their value. The traditional way of economically valuing a forest was through timber. We need to complement the timber value with something more. Forests are like natural capital that pays daily dividends in clean water, flood protection, opportunities for outdoor recreation, and more. But we are liquidating our capital because the work that Nature does for us has failed to win the respect of the marketplace.

I believe that we can no longer afford to think of this work as free. The current approach of relying on philanthropy or limited government payments for conservation is not enough. I believe that we need to consider attaching a dollar value to the services and amenities that trees give us as part of healthy, functioning forests. Forest owners should be able to reap financial rewards from sustainable forestry beyond the commercial production of forest products. For people to work for conservation, conservation must work for people.

We’re starting to see places where this is working, where people are finding ways of making conservation pay. One example comes from New York City. A water filtration plant would have cost the city more than \$5 billion. Instead, they spent \$1.5 billion on a watershed conservation program. Money went to pay private landowners for reduced-impact logging, retiring environmentally sensitive croplands, and reforestation.

Another example is the Hancock Natural Resource Group, a division of John Hancock, the insurance giant. The Group invests internationally in newly planted forests for a long-term retirement fund. Investors receive dividends based on returns from timber harvests *and* on credits for the carbon absorbed and stored by growing forests. International markets are emerging for carbon sequestration, an environmental service that pays.

Outdoor recreation can also pay. International Paper developed a fee-based program for hunting and camping on timberlands that resembles the approaches you'll find on public lands. And just last night at the Theodore Roosevelt Conservation Partnership, I learned about some great approaches to opening private farms and woodlands to hunting and fishing through payments to farmers.

#### New Approaches

There *are* ways in which we can help private landowners realize the full value of their forests, along with the value of their timber. An incentive-based approach to preventing loss of forested land based on environmental services is really only in its infancy. Very little is written about it, apart from the emerging carbon market. But it does offer some hope in the quest to find viable economic alternatives for forest landowners.

We will continue to need some more traditional approaches, like zoning at state and local levels and tax incentives. And market incentives will continue to include income from traditional forest products if we can keep our domestic producers competitive in an ever more globalized market.

The last few years have added even more great examples of incentives:

- The Natural Resources Conservation Service has a Conservation Reserve Program and a new EQUIP program offering incentives to forest and agricultural landowners to protect and preserve biodiversity, wildlife habitat, and water quality.
- The Forest Service's Legacy Program offers landowners ways to sell a conservation easement on their property in exchange for managing the land and trees sustainably.
- Many landowners are having their lands "certified" as being managed sustainably, thereby opening niche markets for some forest products. And we can't overemphasize the incredible role that NGOs and foundations have been playing to broker the protection of critical landscapes, not just in America, but worldwide. There's The Nature Conservancy, for example, and a plethora of land trusts.

All of these ideas and approaches, whether publicly or privately funded, serve to add value to the land, allowing a landowner to continue to manage it as an open forested landscape.

It's really about finding creative new ways of translating all the values society gets from forests into income for forest owners. That includes income from a whole array of environmental services.

You outdoor writers can help. Our researchers have loads of information we can give you on loss of open space, habitat fragmentation, outdoor recreation and ways to value these environmental services, and global markets for environmental services. By pursuing these stories and framing these issues for public consumption, you can help stimulate the national dialogue we need on this immensely important topic.

Next year, we are celebrating our centennial at the Forest Service. We are using the occasion to build the national dialogue I just mentioned on this and other issues related to our mission at the Forest Service. A whole host of events are planned, from regional and national congresses to a featured event on the Washington Mall, where the Forest Service's hundred-year history is presented as part of the National Folklife Festival. Along with all of this will be our celebration of the forty-year anniversary of the Wilderness Act. I welcome you to join in these events—lots to write about!

## Future Outlook

I'll conclude by saying this.

Today, I've been talking about the challenges we face as a nation in sustaining our open forested landscapes, something that touches our very soul as a nation. As we look towards our future—towards the Forest Service bicentennial a hundred years from now—we need to do three things.

First, we need to look hard at the management of our 192 million acres of national forest land, what people want and expect from their national forests in the next century in restoration and recreation.

Second, we need to look just as hard at the management of our state and private forests—to see how we can help these lands be managed as sustainable forested landscapes. This is a key part of our Forest Service mission and a critical part of this nation's legacy.

And finally, we need to look beyond our borders to the global implications of our management and consumption choices and to the impact of those on sustainable forestry internationally. This is another critical part of the Forest Service mission. I believe that our nation's environmental legacy a hundred years from now will be determined not just by what we do inside our borders, but also by what we offer to—and learn from—the rest of the world, with the best of intentions and the greatest humility.



## Attachment 3

Science News  
from research organizations

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# Trees are crucial to the future of our cities

Date:

March 25, 2019

Source:

University of Wisconsin-Madison

Summary:

The shade of a single tree can provide welcome relief from the hot summer sun. But when that single tree is part of a small forest, it creates a profound cooling effect. Trees play a big role in keeping our towns and cities cool.

Share:

FULL STORY

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The shade of a single tree can provide welcome relief from the hot summer sun. But when that single tree is part of a small forest, it creates a profound cooling effect. According to a study published today in the *Proceedings of the National Academy of Sciences*, trees play a big role in keeping our towns and cities cool.

According to the study, the right amount of tree cover can lower summer daytime temperatures by as much as 10 degrees Fahrenheit. And the effect is quite noticeable from neighborhood to neighborhood, even down to the scale of a single city block.

"We knew that cities are warmer than the surrounding countryside, but we found that temperatures vary just as much within cities. Keeping temperatures more comfortable on hot summer days can make a big difference for those of us who live and work there," says Monica Turner, a University of Wisconsin-Madison professor in the department of Integrative Biology and a co-author of the study.

With climate change making extreme heat events more common each summer, city planners are working on how to prepare. Heat waves drive up energy demands and costs and can have big human health impacts. One potentially powerful tool, the study's authors say, are organisms that have been around long before human civilizations could appreciate their leafy benefits. And those trees may be the secret to keeping the places we live livable.

Essentially, says Turner, impervious surfaces -- like roads, sidewalks and buildings -- absorb heat from the sun during the day and slowly release that heat at night. Trees, on the other hand, not only shade those surfaces from the sun's rays, they also transpire, or release water into the air through their leaves, a process that cools things down.

To get the maximum benefit of this cooling service, the study found that tree canopy cover must exceed 40 percent. In other words, an aerial picture of a single city block would need to be nearly half-way covered by a leafy green network of branches and leaves.

Traditionally, says Carly Ziter, lead author of the paper, studies like these have tended to focus on what's known as the "urban heat island" effect. Those studies often use satellites to take ground surface temperature readings or measure air temperature within and outside the city. Studies have shown that developed, less vegetated cityscapes are much warmer than the rural lands around them. But this study, Ziter says, allowed researchers to look at temperatures on a much finer scale -- down to the spaces "where we live our daily lives within the city."

It turns out, she says, that the "heat island" effect is more like what some scientists have called a "heat archipelago" -- with smaller islands of heat in a city interspersed with cooler areas of shade.

To get data at that local scale, Ziter and her collaborators had to get creative with their sampling methods.

Satellite measurements of ground surface temperature don't really provide air temperature data, Ziter says, so they're "not getting you quite as close to what people are actually feeling."

But deploying enough air temperature sensors across town to get the fine-scale resolution they wanted was far too expensive. Research ongoing at the University of Wisconsin-Madison had temperature sensors strapped to 150 utility poles across the city and its surrounding countryside, but those sensors were often one mile or more apart -- much too far to provide real-time data on temperatures in backyards and individual boulevards.

In the end, Ziter settled on a scaled down solution to her sampling problem. All she needed was one sensor and two wheels.

In the summer of 2016, it wasn't uncommon to see Ziter biking around the city of Madison with a small weather station strapped to the back of her bike. In all, she biked ten different transects of the city multiple times during different times of day. The sensor on her bike marked her location and took an air temperature reading every single second as she rode, resulting in real-time data every five meters.

All told, she estimates that she biked 400 to 500 miles and was "in very good shape" by the end of the study. She also racked up a massive amount of data that showed just how instrumental trees are in moderating heat in cities.

"Tree canopy cover can actually do more than offset the effects of impervious surfaces," Ziter says. During the day, "an equivalent amount of canopy cover can cool the air down more than pavement will warm it up."

The data show that forty percent canopy cover is the threshold required to trigger the large cooling effects that trees have to offer. The greatest amount of cooling happens once that threshold is crossed over the scale of a city block or larger.

"It's not really enough to just kind of go out and plant trees, we really need to think about how many we're planting and where we're planting them," she says. "We're not saying planting one tree does nothing, but you're going to have a bigger effect if you plant a tree and your neighbor plants a tree and their neighbor plants a tree."

To get the biggest "bang for their buck," Ziter says city planners should focus on bumping areas that are near the forty percent threshold over that mark by planting trees. But, she warns, it should be in places where people are active and live and not just in parks. Additionally, she says, "we don't want to abandon the lowest canopy areas of our city either," as those tend to be neighborhoods with lower income and marginalized communities. "We want to avoid advocating for policies that are simply 'rich get richer,'" she says.

Her results, Ziter says, point to the importance of urban landscaping and development in making neighborhoods more livable in the future. It is also a call for stakeholders to work together when it comes to their trees. It's not uncommon for "different people to be in charge of different spaces," she says. For example, the city may be in charge of planting trees along its streets, while the parks department oversees plantings in the parks and homeowners make decisions about their own private lots.

It's important that we start to get on the same page, Ziter says, because "the trees we plant now or the areas we pave now are going to be determining the temperatures of our cities in the next century."

From the town square to Times Square, if we want the places we live to be more comfortable and resilient in future climate scenarios, the Wisconsin researchers say, then someone is going to have to speak for the trees.

This study was supported by the National Science Foundation, Long-term ecological research (DEB-1440297); the National Science Foundation, Water sustainability and climate (DEB-1038759); University of Wisconsin-Madison Vilas Trust (for MGT); National Science and Engineering Research Council of Canada doctoral fellowship (to CZ).

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## Attachment 4

- Letter [Published: 15 January 2014](https://www.nature.com/articles/nature12914) <https://www.nature.com/articles/nature12914>

### Rate of tree carbon accumulation increases continuously with tree size

- [N. L. Stephenson](#), [A. J. Das](#), [...] [M. A. Zavala](#)

[Nature](#) volume 507, pages90–93(2014)[Cite this article](#)

#### Abstract

Forests are major components of the global carbon cycle, providing substantial feedback to atmospheric greenhouse gas concentrations<sup>1</sup>. Our ability to understand and predict changes in the forest carbon cycle—particularly net primary productivity and carbon storage—increasingly relies on models that represent biological processes across several scales of biological organization, from tree leaves to forest stands<sup>2,3</sup>. Yet, despite advances in our understanding of productivity at the scales of leaves and stands, no consensus exists about the nature of productivity at the scale of the individual tree<sup>4,5,6,7</sup>, in part because we lack a broad empirical assessment of whether rates of absolute tree mass growth (and thus carbon accumulation) decrease, remain constant, or increase as trees increase in size and age. Here we present a global analysis of 403 tropical and temperate tree species, showing that for most species mass growth rate increases continuously with tree size. Thus, large, old trees do not act simply as senescent carbon reservoirs but actively fix large amounts of carbon compared to smaller trees; at the extreme, a single big tree can add the same amount of carbon to the forest within a year as is contained in an entire mid-sized tree. The apparent paradoxes of individual tree growth increasing with tree size despite declining leaf-level<sup>8,9,10</sup> and stand-level<sup>10</sup> productivity can be explained, respectively, by increases in a tree's total leaf area that outpace declines in productivity per unit of leaf area and, among other factors, age-related reductions in population density. Our results resolve conflicting assumptions about the nature of tree growth, inform efforts to understand and model forest carbon dynamics, and have additional implications for theories of resource allocation<sup>11</sup> and plant senescence<sup>12</sup>.

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## Acknowledgements

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#### Contributions

N.L.S. and A.J.D. conceived the study with feedback from R.C. and D.A.C., N.L.S., A.J.D., R.C. and S.E.R. wrote the manuscript. R.C. devised the main analytical approach and wrote the computer code. N.L.S., A.J.D., R.C., S.E.R., P.J.B., N.G.B., D.A.C., E.R.L., W.K.M., E.Á., C.B., S.B., G.C., S.J.D., Á.D., C.N.E., O.F., J.F.F., H.R.G., Z.H., M.E.H., S.P.H., D.K., Y.L., J.-R.M., A.M., L.R.M., R.J.P., N.P., S.-H.S., I-F.S., S.T., D.T., P.J.v.M., X.W., S.K.W. and M.A.Z. supplied data and sources of allometric equations appropriate to their data.

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Journal: The Conversation

## Big old trees grow faster, making them vital carbon absorbers

January 17, 2014 12.26am EST

Large trees don't slow down with age. Michelle Venter

Large, older trees have been found to grow faster and absorb carbon dioxide more rapidly than younger, smaller trees, despite the previous view that trees' growth slowed as they developed.

Research published in the journal *Nature* this week shows that in 97% of tropical and temperate tree species, growth rate increases with size. This suggests that older trees play a vital role in absorbing carbon dioxide from the atmosphere.

William Morris, a PhD candidate from the University of Melbourne involved in the study, says that prior to the study, the common assumption was that as trees aged, their growth rate and carbon absorption decreased. Morris explained that the belief came from two different lines of evidence:

“First, it has been shown that at the whole forest level, young forest acquires mass faster than old-growth forest. Second, studies have shown that the leaves of older trees are less efficient at photosynthesising than the leaves of younger trees.”

But the new study, which involved 403 tree species and was led by authors from the US Geological Survey, examined carbon storage at the level of individual trees rather than forests.

The findings highlight the value of large, older trees, which have been declining in number, as important carbon sinks.

“Previously we thought of big old trees as simply carbon stores. But now we know that not only are they storing lots of carbon, they are also sequestering more carbon and faster than smaller trees,” said Morris.

David Lindenmayer, a professor of environment at the Australian National University, described findings of the study as “immense”, with implications of global significance.

“It highlights another reason why it is really important that we grow as many areas of forest through to being old growth forests as possible,” he said.

“The more carbon we can store in forests, the more chance we have of reducing the mega-effects that are going to arise from massive climate change. Storing large amounts of carbon in forests is absolutely critical to that and the way you do that is you have big, old trees.”

Bill Laurance, a professor at James Cook University’s Centre for Tropical Environmental and Sustainability Studies, agreed that the study reinforces the importance of large, older trees for absorbing carbon.

“That underscores the importance of saving old-growth forests, which harbour most big old trees, if we want to have the maximum benefit for slowing climate change,” he said.

The findings of the study highlight the importance of older trees for forest management programs. Flickr/Ta Ann

The study is also expected to have implications for forest management plans. Morris explained that the new findings can change how individual trees are managed.

“As we now know that the biggest trees are the most valuable as both carbon stores and carbon sinks. If a manager’s goal is to maximise carbon uptake, then maintaining larger trees may be an efficient way to do so,” he said.

Lindenmayer said that the study highlights flaws in forest policy in Victoria and Tasmania, where old-growth forest is often cleared for pulp and timber purposes.

“Native forests, in terms of their value as carbon storage, significantly outweigh their value as pulp and timber. When you add that to the value of biodiversity and water, it’s pretty clear what forest policy should be,” he said.

Chicago Tribune, April 23, 2013

## Trees manage rainfall, naturally

Beth Botts, Special to Tribune Newspapers

The arrival of spring showers is an occasion to be grateful for nature's umbrellas: Trees.

One of the reasons mature trees are so valuable in cities and suburbs is that they capture rainfall to help keep storms from becoming floods, says Lydia Scott, manager of the Community Trees Program at The Morton Arboretum in Lisle.

Raindrops fall on every leaf. Some water flows off, dripping from leaf to leaf out to the end of a branch or the edge of the tree's canopy, where it drips to the soil. But some water remains on the leaves, and when the sun comes out that water evaporates without ever reaching the ground.

"The bark absorbs water too, as it flows down the trunk," Scott says.

Mature trees intercept 25 to 35 percent of the rainwater that falls on them, experts say. The U.S. Forest Service estimates that on average, 100 mature trees keep about 140,000 gallons of water a year from flowing into storm sewers. That's 140,000 gallons of water that don't have to go through a wastewater treatment plant and can't back up from the storm sewers into anybody's basement.

Much of the water that does drip to the ground will be absorbed by the tree's fine roots, which spread out mainly in the top foot or so of soil. The tree roots also help hold the soil to keep it from washing away in big storms, Scott says.

Trees are especially valuable in capturing rain since we have sealed off so much of the land that once absorbed it. All the rain that falls on buildings, streets, driveways, sidewalks, parking lots and patios runs off in to the storm sewers, where it sometimes is too much to handle. Trees can help.

It's one of many good reasons to save trees when you remodel, to cherish trees in the garden and to plant one when you get the chance. And it's one of many good reasons to hug a tree.

Beth Botts is a staff writer for The Morton Arboretum in Lisle ([mortonarb.org](http://mortonarb.org)).

## The audacious effort to reforest the planet

By [Ben Guarino](#) Photographs by Hannah Reyes Morales, *Washington Post*, Jan. 22, 2020

At age 9, Felix Finkbeiner planted his first tree.

He had just learned about Wangari Maathai, a Kenyan woman who won the Nobel Peace Prize for leading an effort to plant 30 million trees in Africa. The boy was struck by her message — that trees are powerful allies in the [fight to curb global warming](#).

Some of the more sophisticated details went over his head, Finkbeiner recalled. But, he said, he “understood the tree-planting part.” So, in 2007, he dug a hole in front of his school near Munich and inserted a crab-apple sapling. “I thought that we kids should be planting some trees, as well,” he said.

Finkbeiner’s fourth-grade awakening blossomed into a personal crusade and eventually birthed a tree-planting foundation, [Plant for the Planet](#). The organization, which is responsible for planting millions of new trees around the world, is part of a growing constellation of campaigns that seek to reforest every continent except Antarctica.

Driven by the recognition that trees suck Earth-warming carbon out of the atmosphere far more efficiently than any machine, the effort has attracted millions of dollars in support — and inspired hope that trees could become an even more potent weapon in the battle against climate change.

“We’ve been astonished to find that it is up there with all the best climate change solutions,” said ETH Zurich ecologist [Thomas Crowther](#), thesis adviser to Finkbeiner, now a 22-year-old PhD student in environmental science. Plant for the Planet inherited a massive tree-planting program, renamed the Trillion Tree Campaign, [from the United Nations in 2011](#); Crowther is its chief scientific adviser.

On Tuesday in Davos, Switzerland, President Trump said the United States would join [1t.org](#), a new project launched by the World Economic Forum to connect the Trillion Tree Campaign and other reforestation programs around the world.

“In doing so we will continue to show strong leadership in restoring, growing and better managing our trees and our forests,” said Trump, who last year suggested devastating wildfires in California could have been avoided by raking the forest floors.

Greta Thunberg, the 17-year-old climate activist who was in the audience when Trump spoke, said planting trees is good but no solution to global warming. Thunberg and others say countries and industries must stop emitting carbon now and switch to solar, wind and other clean energy.

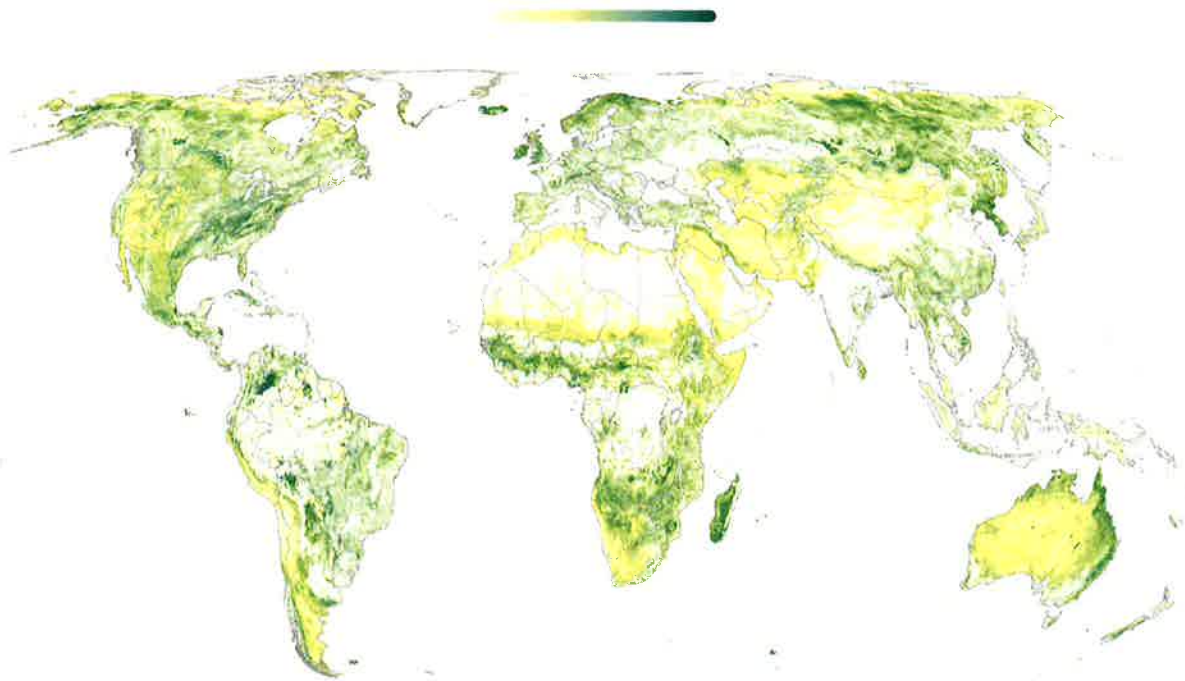
Most environmentalists, including those involved in reforestation, would agree with that sentiment. Still, [tree planting offers a simple, accessible, low-tech idea with wide appeal](#).

In October, YouTube broadcaster Jimmy Donaldson, who goes by MrBeast, [launched a campaign](#) to raise \$20 million to plant 20 million trees. Billionaire Elon Musk donated \$1 million and temporarily changed his Twitter handle to “Treelon.” In July, Ethiopia broke a world record for the most trees planted in a day, when officials said 23 million people planted 350 million trees.

[Trees are the most efficient carbon-capture machines on the planet](#). Through photosynthesis, they absorb carbon dioxide, the greenhouse gas that traps heat in the environment, and turn it into energy. That energy creates new leaves, longer stems and more mass — locking away carbon.

That makes healthy forests carbon sinks. American vegetation, according to the U.S. Environmental Protection Agency, absorbed enough carbon dioxide to offset [11 percent](#) of the nation's greenhouse gas emissions in 2017.

When it comes to climate change, however, not all trees are created equal. The right species must be planted. They must live to maturity. Location also matters: Trees planted in Germany do not have the same carbon-fighting capacity as trees planted in the tropics, where they grow more rapidly and therefore capture more carbon. While new forests in high latitudes can cause the Earth's surface to grow darker and absorb more heat, forests in the tropics are frequently covered by clouds that [reflect sunlight](#) and cool the planet.



*Reforestation potential*

*Researchers have identified the areas that have the most potential to be reforested, excluding urban areas and land used for agricultural purposes.*

*Low potential*

*High potential*

*TIM MEKO/THE WASHINGTON POST*

*Source: ETH Zurich*

But planting trees in the tropics can be hard. There, in developing regions, trees are often more valuable if they are cut down to be used as fuel or lumber — or to make way for farming. In 2017, 40 football fields of tropical forests were lost every minute, according to Global Forest Watch, a nonprofit organization that monitors the world's forests.

The reforestation landscape is dotted with small groups, many of which use corporate money given as carbon offsets that are becoming increasingly popular. “This can work but it can also be misused,” said ecologist Robin Chazdon.



She said some corporations pay tree-planting groups as a way to “wipe their hands clean” and compensate for their carbon pollution.

Even the Trillion Tree Campaign is not without flaws. Critics have raised questions about the campaign’s reliance on self-reports, causing Plant for the Planet to dial back its numbers by [more than a billion trees](#).

In the past year, nearly 1,000 reforestation organizations sought funding from [Ecosia](#), a Berlin-based search engine that uses its profits to sponsor tree planting.

“It is actually very worrying that so many campaigns are set up by organizations that say they want to plant a billion or trillion trees without obviously having any idea about what it takes,” said Pieter van Midwoud, head of Ecosia’s tree-planting operations.

Plant for the Planet focuses heavily on tropical regions. Latin America, Africa and parts of Southeast Asia, Finkbeiner said, “are the top priorities.”

The group is restoring 20,000 hectares — about 50,000 soccer fields — of degraded rainforest in Mexico’s Yucatán Peninsula, where it has planted 5 million trees since 2015 on land owned and protected by Plant for the Planet. The organization has hired local farmers to tend trees and keep bees.

“We’ve got 100 people there planting, on average, one tree every 15 seconds,” Finkbeiner said. By clearing grass and other fast-growing plants that would choke the young trees, Finkbeiner said, the foundation keeps most of them alive for at least a year, at which point “they’re almost certain to survive.” Each tree is estimated to capture 200 kilograms of carbon dioxide in its lifetime, equal to the amount released when [driving a car 500 miles](#).

**Because it takes decades for new forests to mature, the most efficient way to use trees to capture carbon is to protect them from being cut down in the first place, environmentalists say.**

In a 2014 agreement forged by the United Nations, more than 200 countries and corporations such as McDonald’s pledged to cut deforestation in half by 2020 and to stop it altogether by 2030.

The pace of deforestation has steadily risen since 2000. Logging, agriculture and other human behaviors have driven some [plants to extinction](#) and annihilated forests, hobbling nature’s carbon-capture machine. Each year between 2014 and 2018, the world lost more than 26 million hectares of trees — tree cover the size of the [United Kingdom](#), according to the United Nations

The tension between environmental and economic goals is vividly illustrated in Kawayanon, a village on a small Pacific island that is part of the Philippines.

The potential for replanting in the Philippines is great, because it is one of the most deforested countries on the planet. In 1900, tropical rainforests covered more than 70 percent of the archipelago. By 1990, that tree cover had plummeted to 19 percent.

In 2011, a presidential order created the Philippines National Greening Program with a goal of reforesting 3.7 million acres, an area about the size of Connecticut. In 2015, the plan was expanded to 5.6 million acres.

On paper, the strategy is simple: Pay poor farmers small sums to plant trees. The new forests would in turn reduce poverty, conserve biodiversity, and provide food and lumber that is sustainably harvested.

A small number of studies indicated that the idea should work. [In one experiment](#), half of 120 Ugandan villages were paid about \$28 per year for every hectare of forest they protected. After two years, 4 percent of the forest had been lost to clear cutting in the villages that were paid. In the villages that were not paid, more than twice as much forest was lost.

Considering the cost of carbon emissions, the benefits of the Uganda program far outweighed the expense, said Northwestern University economist [Seema Jayachandran](#), the study's author. "If you can get people to do it, it is a net win for carbon sequestration," she said.

The best plans provide long-term motivations to keep forests alive. Otherwise, after payments stop, locals may abandon the young trees before they mature. Or poor residents turn to the trees for cooking fuel. Some forests have even been destroyed so planters can be paid again to plant.

Over two decades, Kawayanon tried and failed four times to regrow its forest. Finally, forestry officials decided to try something new.

"There is a saying in forestry: It is not about trees, it is about people," said [Nestor Gregorio](#), a research fellow at Australia's University of the Sunshine Coast who studies low-cost forestry techniques. "If people will find trees important, then they will look after the trees."

Gregorio worked with a colleague, forestry expert John Herbohn, and several others to help the villagers see the trees as a source of future livelihood rather than an immediate resource. Fruit trees provide an ongoing supply of food. Some groves will be harvested for lumber and replanted, in keeping with sustainable practice. Stands of native trees left to grow replenish the watershed and prevent erosion, Gregorio's research has shown.

The scientists taught the farmers to identify the full and tall specimens that produce the hardiest seedlings, nicknamed "mother trees," and showed them how to transfer seedlings to recovery chambers, which rejuvenate them after the trauma of collection. During planting season, they taught the farmers to dig large holes in the soil, a foot on each side, to better trap moisture. Gregorio and Herbohn are spreading these lessons to other villages in the Philippines and in Papua New Guinea.

Two dozen members of the Kawayanon Farmers Association now run a tree nursery. Benefits from the trees supplement the \$600 a year they earn from farming — below the living wage in the Philippines. Each day they tend little seedlings; during planting season, they carry them up the side of a volcanic mountain. The farmers, many in their 50s and 60s, barely break a sweat in the 80-degree weather.

At first glance, the greenery looks like any healthy forest. Ferns curl at the base of the trees. Only upon closer inspection is it apparent that the trees are spaced in neat, unnatural rows.

"Before there were illegal cuttings the trees were large and big and beautiful," said Annabelle T. Hayahay, a leader in the Kawayanon group. The new trees, she said, will return yellow grassland "back to forest."

Now five years old, Kawayanon's 45-acre forest is a model for the National Greening Program. Nationwide, the program planted more than a billion seedlings between 2011 and 2018. The tree cover in the Philippines has begun to return — increasing to about 23 percent, according to a U.N. Food and Agriculture Organization [report](#) in 2015.

### **Green leaves, rare trees**

Kawayanon's farmers raise several different species in their tree nursery. Many are native to the Philippines. Some species — like yakal and other trees of the genus *Shorea*, valued for hard lumber and used in traditional medicine — are endangered.

Still, the Philippine forests and the greening program are threatened by politics and illegal logging.

Danilo S. Lendio, who oversees the Department of Environment and Natural Resources station in Cebu province, said his office has broken up the same tree harvesting ring three times. The first time, the man in charge of the ring was a lieutenant in the army, Lendio said. The second time, he had been promoted to captain. By the third round, the ringleader was a general, and the DENR was warned it would be too risky to continue to bust him.

Lendio said he will persist. “As long as he’s doing what he is, we will continue,” he said.

Meanwhile, president Rodrigo Duterte’s administration cut the greening program’s budget in half last year, citing poor performance. Administration officials declined to comment on the decision.

Though the Philippines produces less than 1 percent of the world’s greenhouse gas emissions, it is a nation on the edge of climate change, which underscores its need to restore its rainforests.

Global warming has probably strengthened the storms that pummel its shores. In November 2013, Typhoon Haiyan battered the country’s low-lying eastern islands with a wall of water. The hurricane’s winds, which reached up to 180 miles per hour, were some of the fastest ever recorded. More than 6,300 people died.

Had the mangrove forests been healthier, they may have absorbed some of Haiyan’s winds and surges. A lush mangrove forest was credited with saving the seaside [town named General MacArthur](#).

If such problems could be overcome, how much carbon could trees capture? [Jean-Francois Bastin](#), an ecologist and geographer at the Swiss Federal Institute of Technology, has spent the past decade trying to answer that question.

Several years ago, Finkbeiner wanted to know how many trees currently exist, a question that inspired Bastin, Crowther and others to map global tree density. In a [study published in Science](#) in 2015, they estimated that there are about 3 trillion trees on the planet. A follow-up in 2019 found room, theoretically, for about a trillion more.

Using Google Earth satellite images, Bastin, Crowther and their colleagues examined 80,000 half-hectare plots in protected areas worldwide, noting where trees should be abundant, such as rainforests, and where they don’t grow, such as grasslands. Using this knowledge, they calculated the total theoretical canopy cover in today’s climate if the planet were scrubbed of human existence.

When the needs of people were added back into the equation, the researchers calculated that an additional 0.9 billion hectares could be covered with trees, an area the size of the continental United States. When fully grown — which would take hundreds of years of effort — this forest would suck more than 200 gigatons of carbon out of the atmosphere, or 25 percent of the carbon in the atmosphere, the scientists calculated.

The study found that six countries hold more than half the potential to restore trees — the United States, Russia, Brazil, Canada, Australia and China — because they have the most land available to plant.

Few scientists dispute trees are useful. But “there are some concerns about some of the messages in the Bastin-Crowther paper,” Chazdon said, meaning the researchers didn’t fully address the real-life barriers to reforestation.

Other critics say the math was off. The journal Science has published six critiques: Some argued the model overestimates the ability of forests to capture carbon because it [ignores carbon trapped in soil](#). Another group of researchers noted that, in northern regions, transforming reflective snow into green leaves would be counterproductive.

The [lab stands by](#) its calculations, but Crowther has acknowledged that trees should not be planted everywhere the model suggests they can grow. Nor are trees a panacea for fighting climate change, he said: “Cuts to emissions” by ending humanity’s dependence on fossil fuels “are the central part” of the battle.

‘ Still, Crowther said, planting trees is “one of thousands of solutions that are absolutely critical.”

## Robert Ingenito

---

**From:** Kelly Susa <ksusa@optonline.net>  
**Sent:** Saturday, November 9, 2019 11:28 AM  
**To:** Beverly Sherrid  
**Subject:** Re: Trees along the Boston Post Road

Hello! Me AGAIN!

I just heard that White Plains is planting free daffodils somehow. I can't figure out what's happening there, but I found this link:

<https://realitycollective.com/registration-free-bulbs-daffodil-project-soon/> - I did a cursory Google search, I'm sure there's other info.

Is this something the Town & Village would do? That sure would look pretty all along the Post Road "dead zone" as we call it.

Anyway - I'm starting with you even though you're Ms. Tree. Perhaps you can pass this along?

Thanks and enjoy your weekend!

-K

P.S. Do you know how we got the Little Free Library at the Harbor? That is so wonderful! I had just been thinking it would be great to have that - exactly where someone put it! It made me so happy that someone else had the exact same idea. :) And then Did It!

On Sep 25, 2019, at 1:56 PM, Beverley Sherrid <[bsherrid@optonline.net](mailto:bsherrid@optonline.net)> wrote:

Hi Kelly,

Those are interesting suggestions for additional tree sites. I will take a look for our next round. Tom Murphy just told the Tree Committee that the Board of Trustees wants to increase our planting budget, so it's especially helpful to get new ideas right now.

Yes! Those are our watering bags! They should make a huge difference in the survival rate of newly planted trees (although the last two summers have been rainy, too), as well as their long term health.

I don't think shrubbery will work at the HS. What we need is to have the curbs built up and the soil quality improved. The Post Road is an NYS road, alas, so there may be a struggle over who will pay for it. But I am going to investigate your other locations.

Thanks for the ideas. We go over correspondence from residents every month and it's good to know people are watching and sending their thoughts.

Beverley

On Sep 23, 2019, at 11:08 AM, Kelly Susa <[ksusa@optonline.net](mailto:ksusa@optonline.net)> wrote:

Beverley!

I began an answer to you but it was so long, I put it in drafts, to edit later (now deleted) & look how the time passed!! Thank you so much for your courtesy & communication.

I understand completely. How about hardy shrubbery? :) Maybe??

Yes, those HI trees will be lovely! We walk there almost daily.

If you're responsible for the various new trees (green bags on trunks)~ then, thank you! We do notice and enjoy.

Friday we walked from Orienta Avenue to Hommocks, along the Post Road. Lots of potential spots for more trees... in front of Trader Joes? More in front of Stop and Shop? Along the side of the empty banks ... ??

No doubt you are on it and have already determined those possibilities. Anyway. Really - thanks so much. What a great job you have! (Seemingly).

All best,

K

Kelly Susa  
Professional Organizer  
[kellysusaorganizing@gmail.com](mailto:kellysusaorganizing@gmail.com)  
914.320.6219 (text/call)

On Sep 6, 2019, at 5:23 PM, Beverley Sherrid wrote:

Dear Kelly,

I'm afraid I have disappointing news about our hope of planting trees on the Boston Post Road near Mamaroneck HS. We will not be able to plant in the grass sections on the far side of the sidewalk, and we have determined that the Village Right of Way between the sidewalk and the street is too degraded (no curb, space frequently misused for parking, soil compacted and mixed with asphalt) for trees to survive. We will continue to look for other possibilities in this area.

I do have good news about another section of the Boston Post Road, however. We are going to plant 24 trees in the Right of Way along the Boston Post Road in front of Harbor Island Park, starting at the Orienta Avenue intersection. These trees will mature into tall shade trees — oak, sweet gum, and London Plane. I hope they are close enough to your daily activities to bring you some of the many pleasures that trees confer.

Best wishes,  
Beverley

On Jan 2, 2019, at 12:41 PM, Kelly Susa  
<[ksusa@optonline.net](mailto:ksusa@optonline.net)> wrote:

Happy New Year!

I can't tell you how pleased I am that you're all willing to give this a try! Thank you so much for the prompt and friendly replies.

Yes, I can see that the planting area is a bit tight and the soil, poor. But I know there are trees that are more resilient. Some even like "abusive" environments :) and I can't recall which type. The Ginkgo tree survives everything, apparently, but I understand it smells like vomit, etc. when the fruit rips. Anyhoo. You're the expert, not me! Have fun choosing, and thank you! It will be so so pleasant to walk by trees there, and perhaps there will be less trash if that section looks maintained.

Also ~ it appears that once-upon-a-time, someone planted a lovely landscape along that area - you can see the roses and various pretty plants. Do you think someone could revitalize that section? I'd volunteer if there's no poison ivy!

Thanks again,

-K

On Jan 2, 2019, at 11:50 AM, Beverley Sherrid wrote:

Dear Kelly,

We will add your request to our January agenda. The Village has, in fact, planted trees in this area in the past but they didn't survive. Possibly they would do better now that we have a summer watering program for new trees. We will be limited by where there is enough space to support them, but there is definitely some land in the right of way.

Beverley Sherrid

Co-Chairman Tree Committee

## Robert Ingenito

---

**From:** Stuart Tiekert  
**Sent:** Wednesday, January 22, 2020 6:13 AM  
**To:** TreeCom; TreeCom  
**Cc:** Jerry Barberio  
**Subject:** Tree Record Maintenance

Dear Members of the Tree Committee,

I am writing to encourage members to ask the Village to begin maintaining comprehensive records of tree planting, removals, inventories and maintenance.

Recently I received FOIL responses for the following requests for records:

- the list of folks trained to be Citizen Pruners
- the list of trees pruned by Citizen Pruners
- the list of significant trees
- the list of Heritage trees

The response to each was the same, "No records"

I thought the point of training Citizen Pruners was to be able to know who is allowed to prune trees and track the work.

I would have thought that the Village would maintain records of trees pruned, that is the only reason I reported what I pruned each time I went out. If the village is not maintaining the records I don't why I should bother providing the list of trees pruned.

The Village has applied for a grant to survey Village trees. Will the Village be making a commitment to keeping the inventory current or will it be like the last inventory, placed on a shelf to gather dust until it becomes useless? It make no sense to do inventory and not maintain it.

A sustainable tree program must be built on solid information and record keeping if it is going to be effective in managing Village trees

I hope the TC will will work toward establishing a solid system to manage our urban forest as well as a system of keeping those records current and useful.

Sincerely,

Stuart Tiekert



## Robert Ingenito

---

**From:** Jerry Barberio  
**Sent:** Wednesday, January 22, 2020 9:23 AM  
**To:** TreeCom  
**Subject:** Fw: Tree Record Maintenance

The email you received this morning from Stuart is correct. I do not maintain the following lists:

- the list of folks trained to be Citizen Pruners
- the list of trees pruned by Citizen Pruners
- the list of significant trees
- the list of Heritage trees

Other may maintain such lists, but the Village does not. We could in the future but at present, I do not have a physical list.

Have a great day. Thanks JB

**Jerry Barberio**  
*Village Manager*



*Village of Mamaroneck*  
123 Mamaroneck Avenue  
Mamaroneck, NY 10543

Phone 914-777-7706  
Fax 914-777-7760  
E-mail [jbarberio@vomny.org](mailto:jbarberio@vomny.org)

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**From:** stuart tiekert <tiekerts@yahoo.com>  
**Sent:** Wednesday, January 22, 2020 6:12 AM  
**To:** TreeCom <TreeCom@vomny.org>; TreeCom <TreeCom@vomny.org>  
**Cc:** Jerry Barberio <jbarberio@vomny.org>  
**Subject:** Tree Record Maintenance

Dear Members of the Tree Committee,

I am writing to encourage members to ask the Village to begin maintaining comprehensive records of tree planting, removals, inventories and maintenance.

Recently I received FOIL responses for the following requests for records:

- the list of folks trained to be Citizen Pruners
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I would have thought that the Village would maintain records of trees pruned, that is the only reason I reported what I pruned each time I went out. If the village is not maintaining the records I don't why I should bother providing the list of trees pruned.

The Village has applied for a grant to survey Village trees. Will the Village be making a commitment to keeping the inventory current or will it be like the last inventory, placed on a shelf to gather dust until it becomes useless? It make no sense to do inventory and not maintain it.

A sustainable tree program must be built on solid information and record keeping if it is going to be effective in managing Village trees

I hope the TC will will work toward establishing a solid system to manage our urban forest as well as a system of keeping those records current and useful.

Sincerely,

Stuart Tiekert

Attachment

Maintenance correspondence

Dear Mr. Barberio,

We may have to agree to disagree on this.

I would be interested to hear what bad experiences you have had with Silver Maples.

I truly don't understand why there is more concern about liability posed by a healthy Silver Maple, planted in an open field, approximately sixty feet from the nearest building than with a similarly sized and aged Linden, precariously rooted in a narrow planting strip between a street and sidewalk, approximately twenty five feet from the nearest building.

If the Silver Maple uproots and falls toward the building, wispy top branches will likely at most break a gutter and scrape some paint. If the Linden uproots and falls toward the building the trunk of the tree will hit the house and may well crush it as has happened with other similar Linden trees hitting houses on Carroll Avenue.

The Village will do what it is going to do with these trees. What I am looking for going forward is rational, consistent approach to evaluating trees for removal.

If the Silver Maple on Guion is a candidate for removal then the seven older, in worse condition Silver Maples on The Parkway should also be added to the removal list.

My suggestion is for the issuance of an RFP for a **Consulting Arborist** not a Certified Arborist. There is a difference. Consulting Arborists require significantly more training and knowledge than Certified Arborists. Here is link to the Association's website, there are numerous arborists listed in our area that are trained in risk assessment for trees.

Sincerely,

Stuart Tiekert

*On Wednesday, January 15, 2020, 08:19:10 AM EST, Jerry Barberio <[jbarberio@vomny.org](mailto:jbarberio@vomny.org)> wrote:*

Hi,

I responded because an appointed TC member asked me to respond to your question. I was honoring that request.

I'm not copied on the TC group email.

Bellows trees should be marked and need to come down. I agree with marking trees closer to the removal time frame. Silver maples are a major concern for me from past experience. They are massive precarious giants especially susceptible to many problems. The placement of a SM in an open field on a residential street/circle like that concerns me. Plus this opportunity is a great way to plant better stronger species to improve the aesthetic of the area.

The RFP for a Certified Arborist to assist us who is NOT associated with a tree removal company is a suggestion of the TC. It's also part of the new tree law proposal at their request. Thanks.

*On Jan 15, 2020, at 7:57 AM, stuart tiekert <[tiekerts@yahoo.com](mailto:tiekerts@yahoo.com)> wrote:*

Dear Mr. Barberio,

Thank you for the response. As a frequent flyer who has been advocating for the proper care of Village trees for over thirty years I would like to respond.

First, it was my understanding that you are copied on both the Tree Committee email addresses. If that is not true, please confirm and I will always copy you in the future.

As I believe I mentioned before, one of the first issues the TC took up when it was reformed in 2007 was how determinations to remove Village trees were made. No protocols have been established to date as far as I know.

**Veticillium Wilt** - Verticillium is a soil born pathogen. There are laboratory tests to confirm its presence in tree tissue that I believe Cornell will perform gratis or at a modest fee. It seems this tree only came to the attention of the Village in December so it is unlikely that verticillium presence was determined by visual inspection. Early stages of verticillium do not compromise the trees structural integrity.

**Limbs falling** - It happens. From the photo, I see ONE limb that has fallen, I will look took closer today to see if there are others. If the Village is removing trees because a limb falls we are either not going have many old trees left or be spending an unreasonable amount on pruning

**Split trunk and weak crotch up high** - If the presence of a split trunk and weak crotch is a reason to remove large, stately, healthy, mature Village trees, the list could be very long.

I sold tree work professionally for years. Trust me, on almost any tree as old as this one, if I wanted to, I could come with a reason of why someone should pay us to remove it.

The Village needs a coherent, consistent method of evaluating trees for removal.

We now have three wildly different reactions by the Village to three trees being reported to the Village as hazardous.

**315 Carroll Avenue** - Homeowners complained about the hazard a large Linden, precariously rooted in the planting strip adjacent, posed to their home thirty feet away. The village spent over \$600 in order to tell the homeowner that the tree is "healthy". With all due respect, the question was never "Is the tree healthy?". The question always was whether the tree was a hazard.

**Bellows Entrance Trees** - I notified the Village about these trees in October, I provided the very obvious reasons why they were a hazard especially since they were over an area where hundreds of children and parents congregate regularly. They are still not marked for removal.

**Guion Drive** - A homeowner complains that limb fell down and that their children play street sometimes. The tree is immediately marked for removal.

I would also like to address the practice of marking trees for removal. When I was on the TC I attended a Hazardous Tree Seminar. One the points made was that trees should be marked as close to removal as possible. The argument being, that once you mark a tree for removal the Village has acknowledged an issue with it and if anything happens between when it was marked and when it is removed the Village has a heightened liability. I believe the Village's tree contractor is required to respond to calls for service within a short time frame. There should no reason for trees to remain marked for very long without being removed.

My suggestion is that the Village put out an RFP for a Consulting Arborist to perform standard Hazardous Tree Evaluations for a flat fee. The service would only be used when the reasons for removal are not obvious, like they are with the Bellows School trees or their are disagreements with residents or others as with 315 Carroll and Guion Drive.

Sincerely,

Stuart Tiekert

*On Tuesday, January 14, 2020, 05:09:37 PM EST, Jerry Barberio <[jbarberio@romny.org](mailto:jbarberio@romny.org)> wrote:*

TC,

Regarding the questions asked this morning from a frequent flyer. I was not copied but a TC member asked me to respond.

The tree was marked because of residents living on Guion reporting that large limbs had fallen and many kids play nearby. I also looked at the tree Silver Maple in person and online also and realized it showed signs of verticillium wilt, weak crotch up high and it is a split trunk. All signs of possible failure in moderate winds. The reporting homeowner did agree to donate a tree to be added to the trees we will plant around that area next time. The text of the email is added below. JB

*Email of 12/17/19 -*

*Tony, resident BL on Guion asked to take a look at the last big tree (double trunk silver maple) in the circle in front of his house. I see that the tree has some issues and will need to come down at some point. Is that tree on your list? If so, thanks.*

*If not, I believe he and his neighbors are concerned of kid and other getting hurt. Lets talk when I see you next.*

*There are some large limbs on the grass area that need to be picked up. Thanks again. JB*

## Robert Ingenito

---

**From:** Stuart Tiekert  
**Sent:** Tuesday, January 14, 2020 6:38 AM  
**To:** TreeCom; TreeCom  
**Subject:** Why is this tree marked for removal?

Dear Chairs and Members of the Tree Committee,

I am writing you about the tree in the attached photo.

It is on Guion Drive and has a orange spray paint mark on it, I assume for removal.

I have looked at the tree and it appears to be both healthy and well anchored in the ground.

My question is "Why has this tree been marked for removal." Has it been evaluated and determined to be hazardous?

I have reported trees to the Village in much worse condition than this tree that the Village has decided not remove.

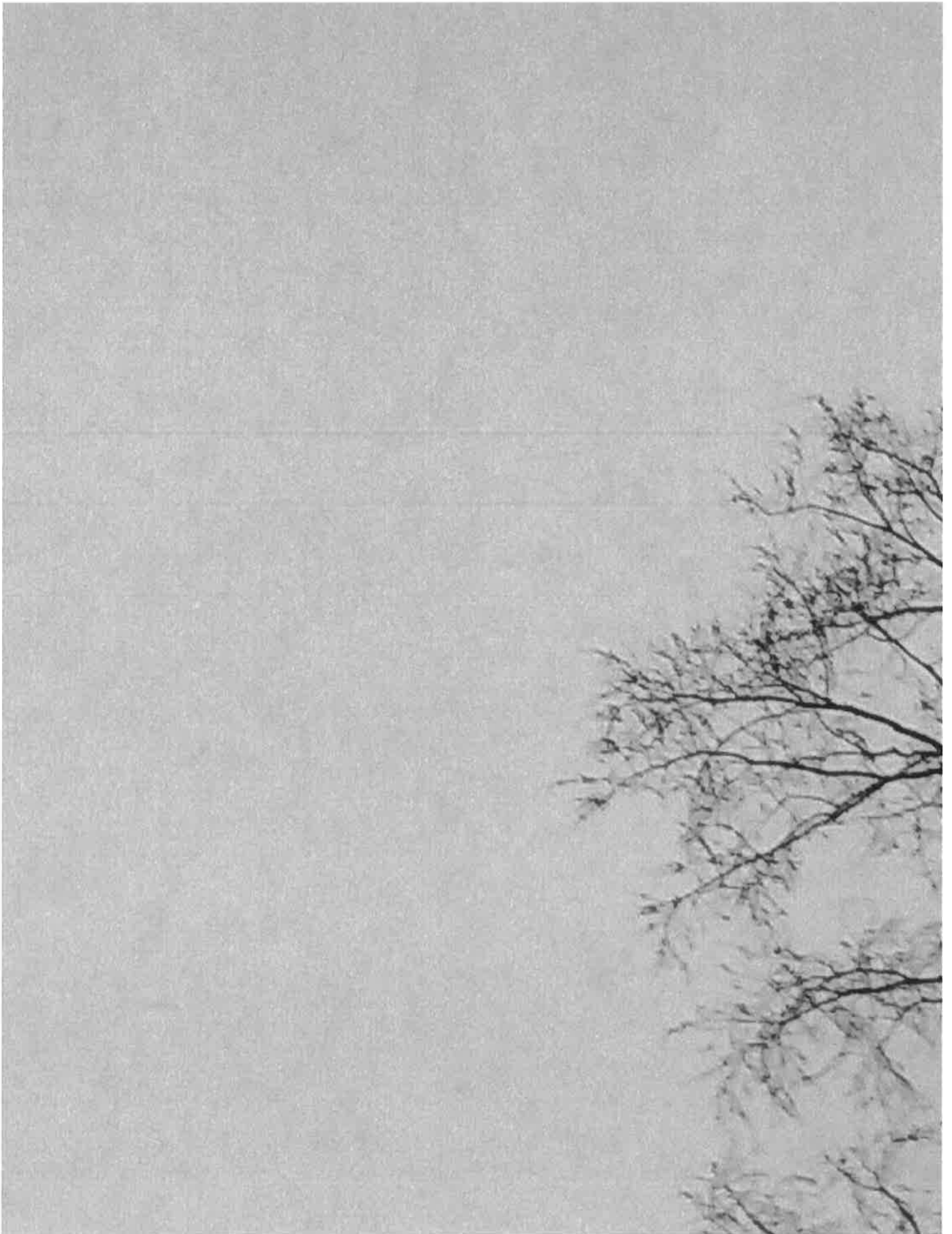
I will be asking for records of the tree's evaluation through FOIL. I hope the tree will not be removed until the Village makes available the reason.

Sincerely,

Stuart Tiekert

----- Forwarded Message -----

**From:** stuart tiekert <tiekerts@yahoo.com>  
**To:** stewart tiekert <tiekerts@yahoo.com>  
**Sent:** Monday, January 13, 2020, 03:38:24 PM EST  
**Subject:**



Sent from Yahoo Mail on Android



## Robert Ingenito

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**From:** Gail Koller  
**Sent:** Sunday, January 12, 2020 11:00 AM  
**To:** Jerry Barberio  
**Cc:** TreeCom; Nora Lucas  
**Subject:** Very tight cable collar on newly planted tree in front of blue house on Delancey  
**Attachments:** IMG-3421.JPG; IMG-3422.JPG

btwn Palmer and Prospect. Resident is concerned. Also, he asked what the regulation is for clearance height over sidewalk.

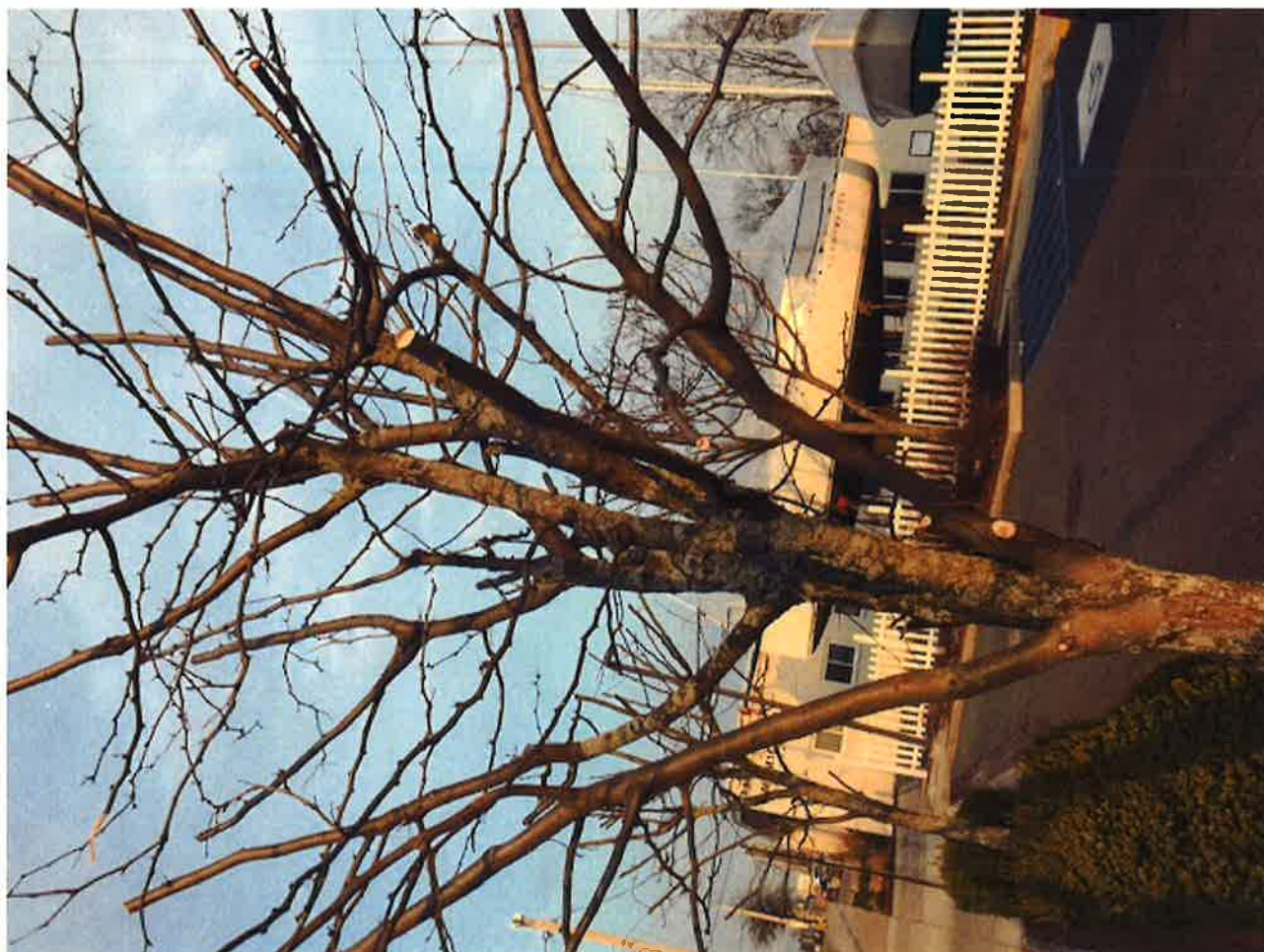
Gail

## Robert Ingenito

---

**From:** Beverly Sherrid  
**Sent:** Sunday, December 22, 2019 3:41 PM  
**To:** Jerry Barberio  
**Cc:** TreeCom; Nora Lucas  
**Subject:** Pollarded trees

Jerry,  
These pruning cuts are fresh. I thought the manager had been alerted about not pollarding the street trees any more. Would you mind sending them another notice, please? These are the three trees in front of the Dunkin' Donuts at 427 e. Boston Post Road.  
Thanks.  
Beverley









Sent from my iPhone

## Robert Ingenito

---

**From:** Stuart Tiekert  
**Sent:** Friday, January 17, 2020 10:04 AM  
**To:** Jerry Barberio  
**Cc:** TreeCom; TreeCom  
**Subject:** Damaged trees

Dear Mr. Barberio,,

I am writing to follow up on the the complaints I filed for damage to Village trees.

532 West Post Road

I filed a complaint on 10/14, subsequently you informed me you were handling it with code enforcement. On 10/24 a violation issued but has since been closed. I don't see that an Order to Remedy or other actions have been taken. I hope you can share the current status of this complaint.

Dunken Donuts

On 12/24 I filed a complaint that the three Locusts had been topped. I have the Village record of complaints for that period and there is no indication that this complaint was even logged in. I hope you can share the current status of this complaint.

Sincerely,

Stuart Tiekert

## Robert Ingenito

---

**From:** Stuart Tiekert  
**Sent:** Friday, December 6, 2019 7:45 AM  
**To:** TreeCom; TreeCom  
**Cc:** Jerry Barberio  
**Subject:** Tree Pruning

I meant to send this photo with my email about pruning the trees on Palmer.

This is a photo of one of the trees near delancey prior to pruning.

Almost all the trees had similarly bad pruning cuts made, my guess is 2-3 years ago.

I cleaned up the bad cuts that in my judgement it made sense to. Bad cuts left uncorrected are worse than no cut at all.

Sadly, many of these trees don't appear to be thriving. They were planted in a drought period and not watered. Many of them died immediately and were replaced on the following planting and a number have died since.

Thankfully the Village has a proper water program now.





Sent from Yahoo Mail on Android

Attachment \_\_\_

**Grant Application – TD Green Streets**

**From:** Caleb Duncan <[CDuncan@m-strat.com](mailto:CDuncan@m-strat.com)>  
**Date:** January 17, 2020 at 2:02:41 PM EST  
**To:** Jerry Barberio <[jbarberio@vomny.org](mailto:jbarberio@vomny.org)>  
**Subject:** RE: Your 2020 TD Green Space Submission Has Not Been Submitted Yet

Hi Jerry,

I wanted to give you the update that the application has been submitted successfully. You may or may not get a confirmation email from them, but the confirmation page said a decision would be made no later than March 2020, so not a long waiting period luckily.

Thank you

*From:* Jerry Barberio <[jbarberio@vomny.org](mailto:jbarberio@vomny.org)>  
*Sent:* Saturday, January 11, 2020 4:15 PM  
*To:* Dave Jenkins <[djenkins@m-strat.com](mailto:djenkins@m-strat.com)>  
*Cc:* Daniel Sarnoff <[dsarnoff@vomny.org](mailto:dsarnoff@vomny.org)>; Caleb Duncan <[CDuncan@m-strat.com](mailto:CDuncan@m-strat.com)>  
*Subject:* Re: TD Green Spaces

Caleb,  
Here are my thoughts.

Tree Committee will do a Tree Walk and organize two pruning workshop.

1. We can offer Felco #2 pruning tools for participants to take home.
2. I will hold a seminar on the project, its benefits, and overall benefits of a healthy tree population.
3. I will also hold the same seminar in Spanish for the large Latino community.
4. The non-tree budget can go towards pruning equipment, a pruning instructor, signage, tree walk brochures, newspaper advertisements for the community events, etc.

**Greenspace Goals**

Total estimated # of trees to be planted: **25**  
Total estimated # of shrubs to be planted (if applicable): **0**  
Size of trees to be planted (i.e. 15-gallon, 1" caliper): **2"-2.5" caliper**

**Community Event Cost**

Community/Volunteer Education and Training: **Frank Buddingh (\$600 fee) and Jerry Barberio (in kind) will hold two seminar for 12 participants at each event. The materials will include Felco #2 pruners (\$50.00 each or \$1200) fro each participant**

Community Event: **Tree City Celebration (VOM is a Tree City USA Community Since 1980) Presentation on Arbor Day in 2020 or 2021 (\$2500 max budget).**

Media/Marketing (media needs to be alerted or invited to the community event): **\$500 for print ads and \$1000 for LMC coverage/taping/editing**

Other:

**Greenspace Cost**

Tree costs: **\$10,000**  
Supplies: **\$1200**  
Maintenance: **Gator bags for the 25 trees (\$100 each or \$2500)**

Other (description needed): Advertising \$500 ads, \$1000 LMC, \$1200 instructor fee, \$600 tree walk materials, Tree City Celebration \$2500

Start with this info and I will help you fill in the blanks. Franks typical workshop fee and his resume is attached.

Our tree committee co-chairs and liaison are copied.

Thanks

JB  
**Jerry Barberio**  
*Village Manager*

---

**From:** Caleb Duncan <[CDuncan@m-strat.com](mailto:CDuncan@m-strat.com)>  
**Sent:** Friday, January 10, 2020 12:35 PM  
**To:** Daniel Sarnoff <[dsarnoff@vomny.org](mailto:dsarnoff@vomny.org)>; Jerry Barberio <[jbarberio@vomny.org](mailto:jbarberio@vomny.org)>  
**Cc:** Dave Jenkins <[djenkins@m-strat.com](mailto:djenkins@m-strat.com)>  
**Subject:** RE: TD Green Spaces

Dan,

Per our conversation earlier, here is a general outline of information we'll need to submit the Green Spaces application:

**Greenspace Goals**

Total estimated # of trees to be planted:  
Total estimated # of shrubs to be planted (if applicable):  
Size of trees to be planted (i.e. 15-gallon, 1" caliper):

**Community Event Cost**

Community/Volunteer Education and Training:  
Community Event:  
Media/Marketing (media needs to be alerted or invited to the community event):  
Other:

**Greenspace Cost**

Tree costs:  
Supplies:  
Maintenance:  
Other (description needed):

*Note: Only up to 50 percent of the award amount may be used on new trees planted.*

Since only 50% of the grant can go towards tree planting (\$10,000), the other \$10,000 would need to be used for the community event/outreach and education. You can use funding to distribute trees to residents too it seems, but they would have to be given away for private use.

I know the Tree Committee can do an Tree Walk and pruning workshop. Dan, you mentioned that in these workshops residents are provided with pruning tools to take home. I also understand Jerry will plan to hold a seminar on the project, its benefits, and overall benefits of a healthy tree population. Jerry, if you can also hold the same seminar in Spanish for the large Latino community then that will be a huge plus.

The non-tree budget can go towards pruning equipment, a pruning instructor, signage, tree walk brochures, newspaper advertisements for the community events, etc. We can use the funding in a multitude of ways, but we do want to ensure that we have a good understanding of what the grant will be used for and how much everything with cost (roughly).

Dan, you mentioned you had a quote from last year for 106 trees to be purchased and planted at \$42,000. That comes out to roughly \$396 for purchasing and planting. With this logic, you'd be able to purchase and plant an additional 25 trees with half of the grant award. Additional trees could be purchased, but only if they are being distributed to residents for their private use.

**Caleb Duncan**  
**Grant Writer**

**From:** Jerry Barberio <[jbarberio@vomny.org](mailto:jbarberio@vomny.org)>  
**Sent:** Thursday, January 2, 2020 4:47 PM  
**To:** Dave Jenkins <[djenkins@m-strat.com](mailto:djenkins@m-strat.com)>  
**Cc:** Daniel Sarnoff <[dsarnoff@vomny.org](mailto:dsarnoff@vomny.org)>; Caleb Duncan <[CDuncan@m-strat.com](mailto:CDuncan@m-strat.com)>  
**Subject:** Re: TD Green Spaces

Maybe we can package a tree planting, tree preservation and education application. We have current pricing for street tree plantings and anticipate spending approx \$100,000 in new planting next year. Dan S can provide info. We also need to reach out to the Latino community and homeowners/renters to educate them on tree hazards since our community is 26%+ Latino. So I can hold workshop and info sessions as a ISA certified arborist and I speak Spanish. That will expand our tree education component to an underserved population.

Lastly we need tree decay detection equipment which will be used by staff to determine which trees can be saved and pruned for canopy preservation. [https://www.fs.fed.us/t-d/programs/im/tree\\_decay/tree\\_decay\\_detect equip.shtml](https://www.fs.fed.us/t-d/programs/im/tree_decay/tree_decay_detect equip.shtml)

We can easily send up to \$7,000 or more on that equipment.

Thanks

On Jan 2, 2020, at 3:46 PM, Dave Jenkins <[djenkins@m-strat.com](mailto:djenkins@m-strat.com)> wrote:

Hi Jerry/Dan,

Below is a grant that may be of interest to the village, as a Tree City USA. Keeping in mind that the deadline is quickly approaching (1/18), a quick decision will need to be made in relation to applying and the desired project. Thoughts?

**Arbor Day Foundation & TD Bank – TD Green Spaces Grants Program**

**Deadline:** The following is a breakdown of important dates related to this program

- January 18, 2020 at 2:59 AM Application Deadline

**Amount:** The following is a breakdown of information related to program funding

- 10 awards expected
- \$20,000 maximum award
- 1:1 match required
- Project period to end by November 30, 2020

**Eligible Applicants:** The following entities are eligible to apply for funding through this program

- Municipalities

Please note: Applicants must be located within TD Bank's "Service Footprint" to apply for funding support. Applicants will receive priority consideration if within a low-moderate income level neighborhood

(<https://geomap.ffiec.gov/FFIECGeocMap/GeocodeMap1.aspx>) and if currently designated as Tree City USA (<https://www.arborday.org/programs/treeCityUSA/directory.cfm>).

**Overview:** Through its TD Green Streets Grant program, TD Bank has partnered with the Arbor Day Foundation to provide support for municipalities to develop green infrastructure, increase tree counts, preserve areas of forestation, and develop new forestry areas. Priority will be given to applicants whose project reflects the current year's program theme, "Beat the Heat: Using Green Infrastructure to Cool Down Urban Heat Islands." Please note applications will be evaluated for the following criteria:

- Innovative practices and tools;
- Community involvement;
- Professional development opportunities;
- Expertise on the project team;
- Plan to publicize the program;
- Project maintenance planning;
- Program evaluation metrics; and
- Responsible budgeting.

**Past Recipients:** The following is a breakdown of previous recipients

- (2019) Morristown, NJ
- (2019) Watervliet, NY
- (2018) Plainfield, NJ
- (2018) Clifton, NJ

**Website:** <https://www.arborday.org/programs/TDGreenSpaceGrants/>

#### FAQs

1. Are there any mandatory first-steps before the submission deadline?
  - a. Not stated.
2. Is there a mandatory Technical Assistance Session or Workshop?
  - a. Not stated.
3. What partnerships are required? How must the partnership be demonstrated?
  - a. Required: If the primary applicant is not the municipality, a letter of participation must come from the municipality stating their approval of the project and your ownership of its execution and long-term investment in the community.
  - b. Optional: Primary applicants are strongly encouraged to apply in partnership with community partners such as the municipality, nonprofit organizations, schools, businesses, etc. If partnering, applicants are required to provide letter(s) of participation from any main project partners that will be collaborating to complete the project.
4. How do you submit the application?
  - a. Online form: <https://app.reviewr.com/s1/site/GreenSpaceGrant20>.
5. How are funds distributed?
  - a. Reimbursement.
6. Is there a financial match requirement?
  - a. 1:1 match required.
7. When was the application open/announced?
  - a. December 23, 2019.
8. Is there a clear contact email or phone number for the program?
  - a. TD Grants Administrator  
[TDGreenSpaceGrants@arborday.org](mailto:TDGreenSpaceGrants@arborday.org)  
1-888-448-7337
  - b. Lachel Bradley-Williams  
Program Coordinator  
402-473-2102  
[tdgreenspacegrants@arborday.org](mailto:tdgreenspacegrants@arborday.org)

**Dave Jenkins**

Director of New York Operations

Millennium Strategies

445 Hamilton Avenue, Suite 1102

White Plains, NY 10601

Phone: 914-220-8392

Cell: 201-230-8545