

BOT Presentation

Scarsdale Tree Ordinance Revisited

Scarsdale Conservation Advisory Council

October 2013





**Trees Are
Integral To
Scarsdale's
Identity**

Trees Provide Benefit In Proportion To Their Number & Size





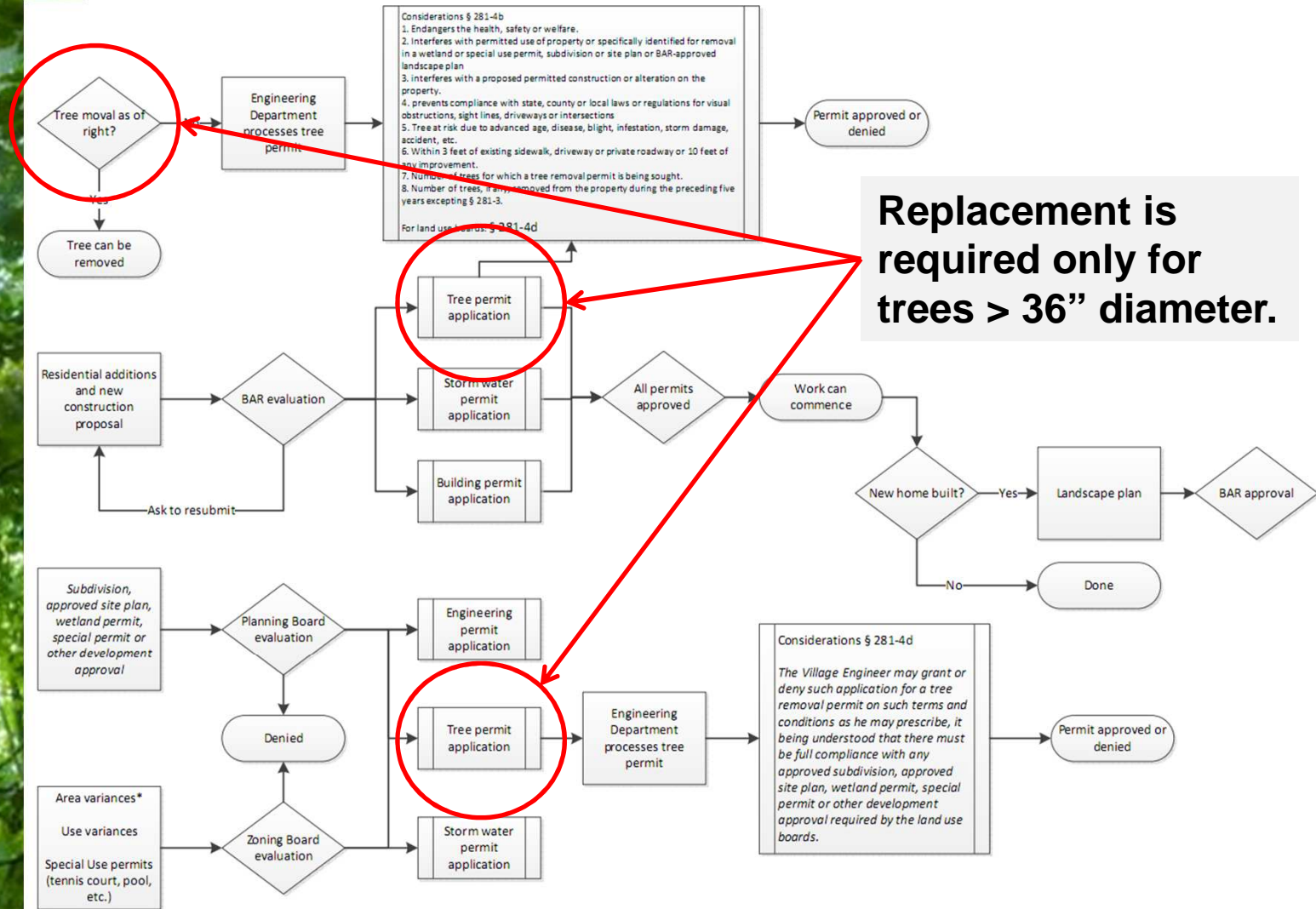
The Challenge

Increasing threat of storm damage



Development and homeowner rights

The Tree Ordinance: Basically A Rubber Stamp



* Requests to modify the zoning code's requirements for minimum setbacks from lot lines, maximum lot coverage, minimum lot area or lot frontages, maximum fence and wall height, maximum sign size, etc.



Tree Ordinances: All Ineffectual

- **Larchmont**
- **Mamaroneck**
- **Rye**
- **Rye Brook**
- **Irvington**
- **Bronxville**
- **Greenburgh**
- **Tuckahoe**
- **Scarsdale**

Small lot exemptions

Codes are almost useless due to exemptions.

Details don't matter

Various definitions of controlled trees do not have much relevance in saving trees.



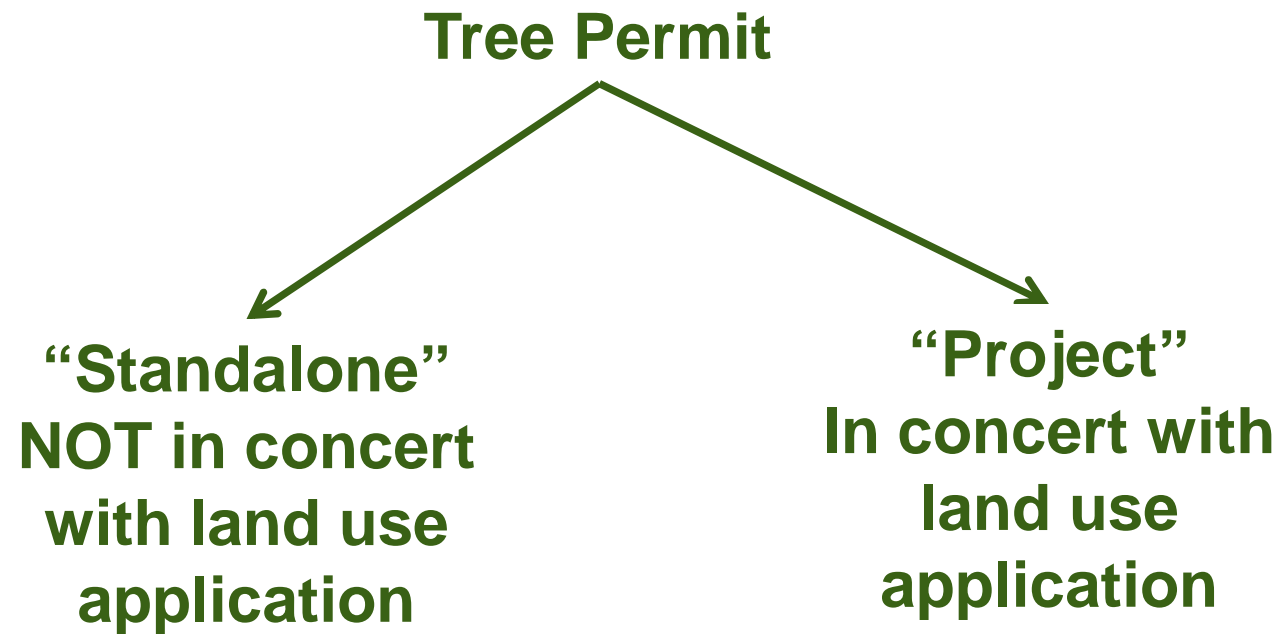
Tree Ordinance Challenges

- **Landowner rights must be respected**
- **Neighbors' rights must be respected**
- **Specific replacement and mitigation standards may be arbitrary or ill-adapted to specific sites and contexts**
- **The permit process needs to work in practice**
- **Workload on strained staff and boards can't be increased**





Towards A Solution: Context-Sensitive Permitting



"Standalone" Permit Considerations

**Respect for
property rights**



**Acknowledge that
landowners don't
usually dislike trees**

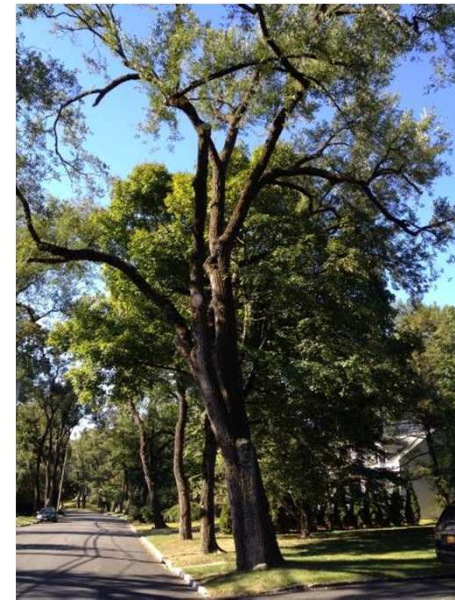
**Reduce friction
and misunderstanding
between neighbors**





"Standalone" Permitting Considerations

*A mature tree contributes to
the entire neighborhood*



Neighbors care



"Standalone" Permit Recommendation



NOTIFICATION (and just that!)

- Mitigates neighbors' alarm over sudden removals
- Provides opportunity for discussion and negotiation

Projects Requiring Land Use Permits...

...cause the greatest disturbance to land



**8 Kent Road
BEFORE DEMOLITION**



AFTER



Projects Requiring Land Use Permits...

...affect green space and habitat



**BEFORE Spruce Lane
(1994)**

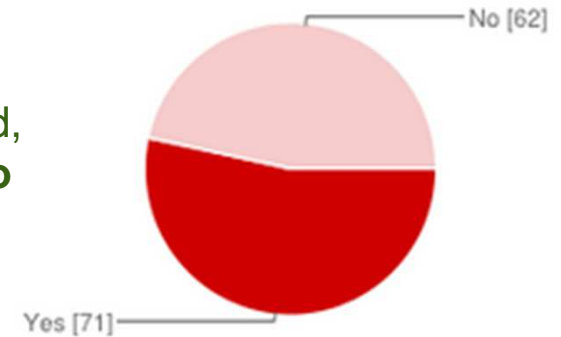


**Spruce Lane
(2011-2013)**

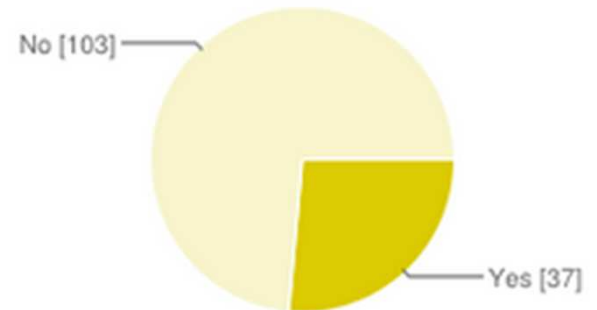


The Community Shares The Concern

“When a healthy mature tree is removed, **should the homeowner be required to replace it?**”



“During new home construction and major renovation, **should the property owner be permitted to “clear cut”** (remove all or nearly all) trees from the property?”



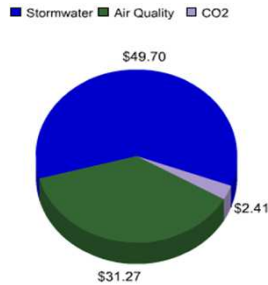


“Project” Related Permit Recommendation: A Flexible Standards-Based Approach

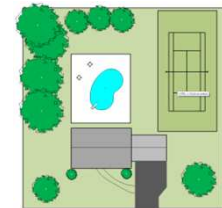
Monetary



Benefits



Canopy



Unit

Tree Density Table

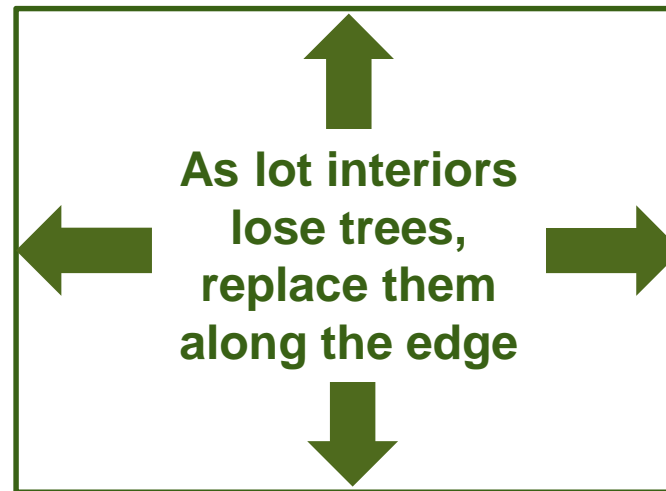
Site Area (sq. ft.)	Minimum Number of Tree Units
Less than 5,000	3
5,000 to 7,500	5
7,501 to 10,000	7
10,001 to 15,000	10
15,001 to 20,000	14
20,001 to 25,000	18

- Standards *in addition* to landscaping approvals
- Landowners' responsibility





Trend: Fewer and Smaller Trees

To maintain Village canopy, focus on the periphery.



Recommendations:

-  Require planting of right-of-way trees for lot redevelopment.
-  Expand Village right-of-way tree planting.



Major Recommendations

- 🌲 Add notifications to the current permit process
- 🌲 For permits associated with land use applications, require satisfaction of one of a set of replacement standards
- 🌲 Require planting of right-of-way trees during lot redevelopment
- 🌲 Expand Village right-of-way tree planting

Additional recommendations are in our main report

Full Report

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October 2013





Ground Rules & Assumptions

- **Recommendations will be based on data (whenever available).**
- **The tree ordinance is part of a larger set of codes and processes, therefore, recommendations may be made to codes and/or processes.**
- **Homeowners and other property owners generally recognize the value of trees.**
- **Trees are subject to a continual replacement process, natural or otherwise.**
- **Many of Scarsdale's large trees were planted about 80 years ago. Management of village tree stock therefore must include tree replacement.**

"If we value our town for its leafy, green, stately character we have to do a better job of preserving our trees, our green space, especially in the wake of new "development" going on around town."

Look for public comments from the CAC survey



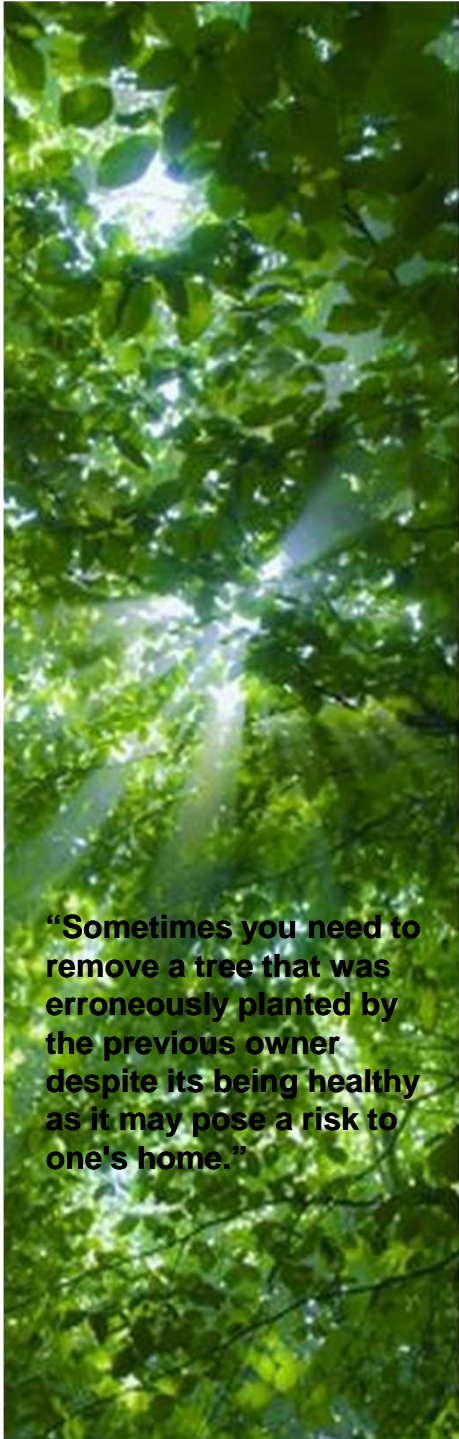
"I love the trees in our neighborhood and in Scarsdale. But when we bought our house, I had no idea about the damage these trees might cause."

Executive Summary

In reviewing Scarsdale's tree ordinance, the CAC has evaluated multiple perspectives, the experience of neighboring communities, and diverse data. The CAC has found that Scarsdale's tree ordinance in fact offers little if no protection for trees.

The CAC believes that its recommendations will improve the balance between all stakeholders - Residents, Developers, Village boards, Staff - while better protecting Scarsdale's natural environment.

Recommendations that the CAC has put forward recognize a difference between significant activities which transform a property and the ongoing landscaping needs of residents. The tree ordinance also must be taken in context and so CAC recommendations go beyond it, addressing other aspects of the Village's relation with trees.



“Sometimes you need to remove a tree that was erroneously planted by the previous owner despite its being healthy as it may pose a risk to one's home.”

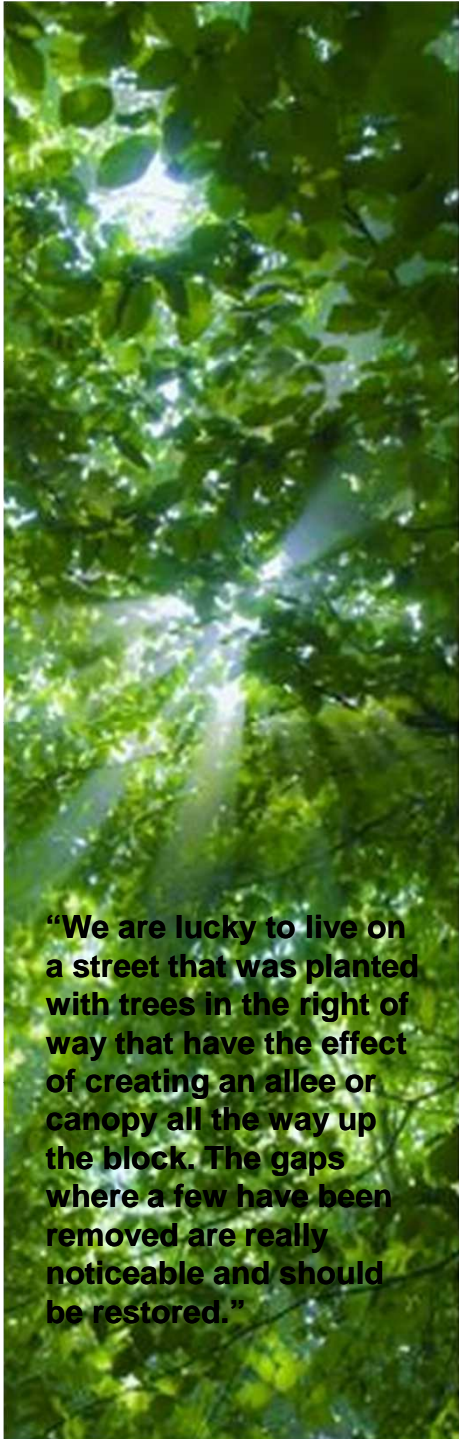
Sections

- **Why are trees important?**
- **Review of the current ordinance**
- **Village tree maintenance**
- **Additional data:**
 - **Scarsdale's tree canopy**
 - **Survey of neighboring ordinances**
 - **Survey of Village residents**
- **Primary recommendation**
- **Recommendations beyond the tree ordinance**
- **Sources**



“Trees that pose a threat to structures or power lines should be permitted to be removed. However, the landowner should be required, to the extent practicable, to replace the tree in some other area that would not pose the same detriment.”

Why Are Trees Important?



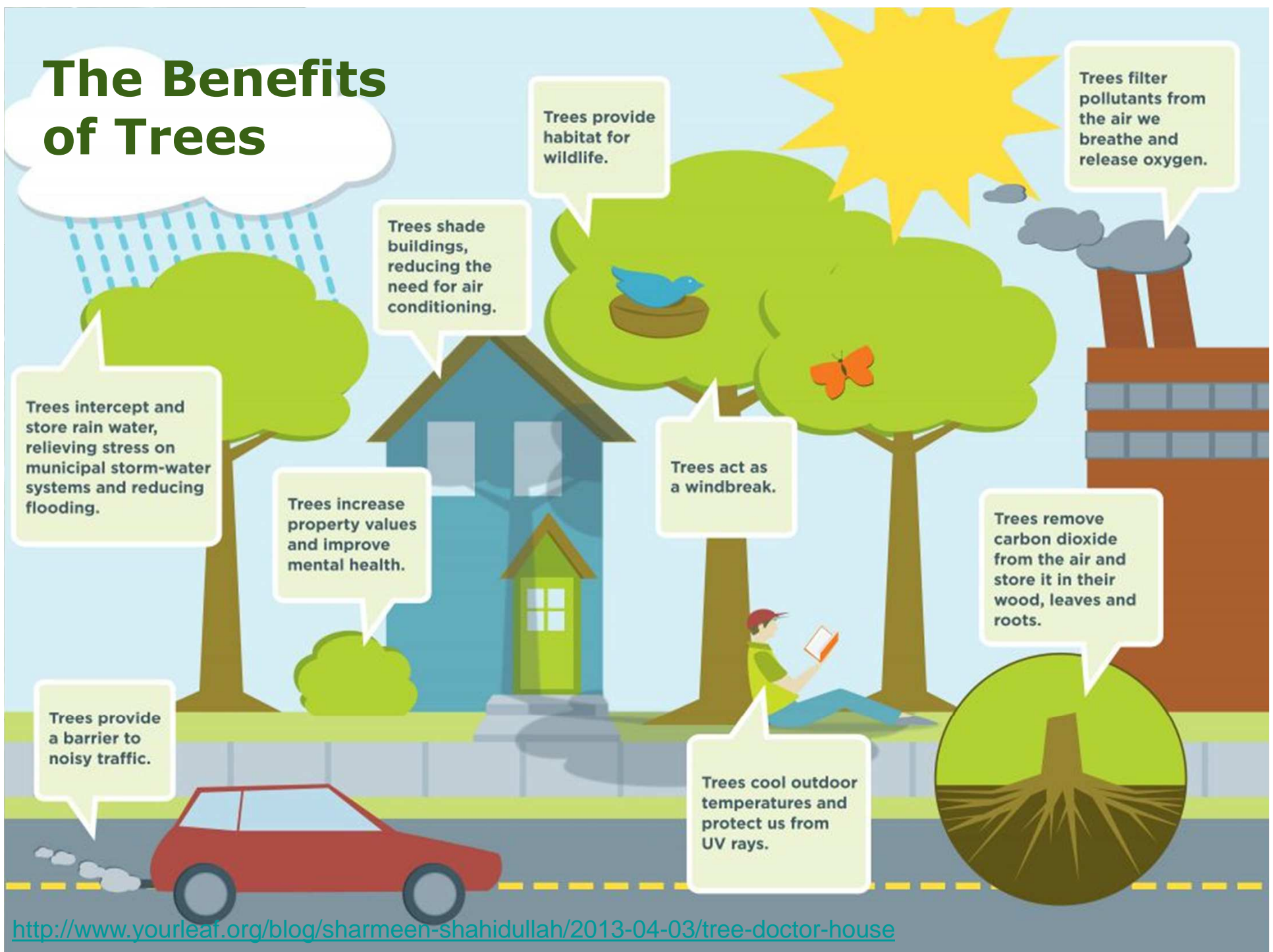
“We are lucky to live on a street that was planted with trees in the right of way that have the effect of creating an allee or canopy all the way up the block. The gaps where a few have been removed are really noticeable and should be restored.”

We’ve Said It, But Do We Respect It?

“The preservation and maintenance of trees is necessary to protect the health, safety, environment, ecosystems and general welfare of the inhabitants of the Village of Scarsdale. Trees provide necessary shade, green space and aesthetic appeal, impede soil erosion, aid water absorption and provide other environmental benefits and generally enhance the quality of life within the Village. The destruction and damage of trees and the indiscriminate and excessive cutting of trees cause barren and unsightly conditions, create surface drainage problems, increase municipal costs to control drainage, impair the value of real property and adversely affect the character of the community.”

- Scarsdale Tree Ordinance

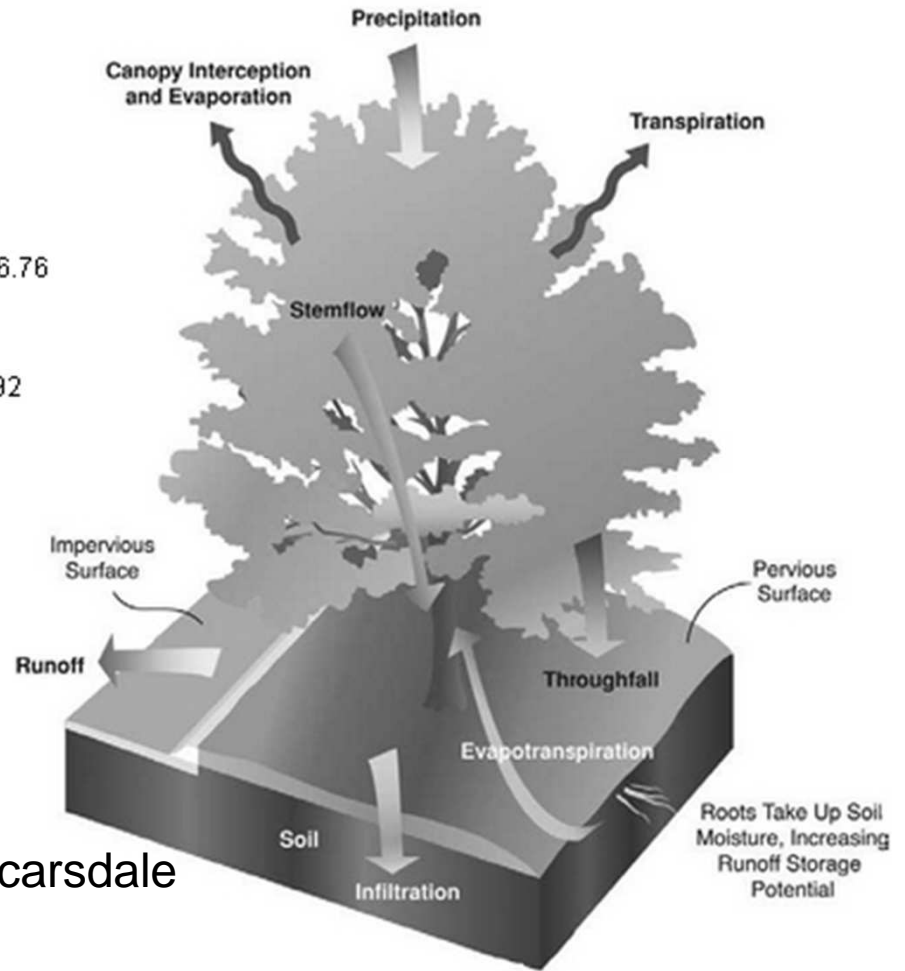
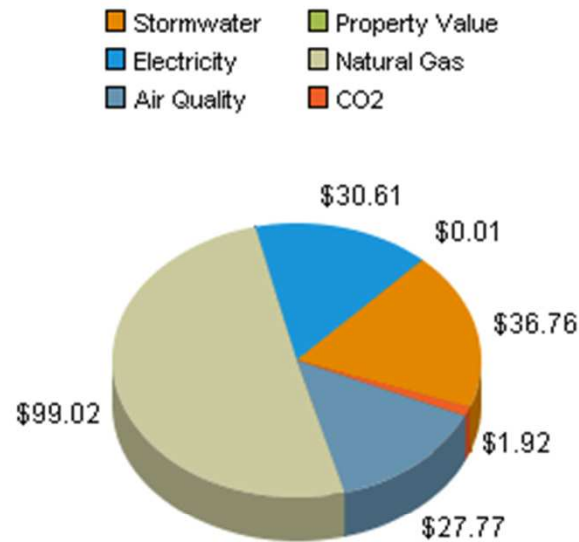
The Benefits of Trees





“I don't see how a one-size-fits-all tree ordinance can work - there are about as many different circumstances requiring tree work to be done as there are trees, or at least properties”

The Yearly Benefit of a Single Tree (Example)



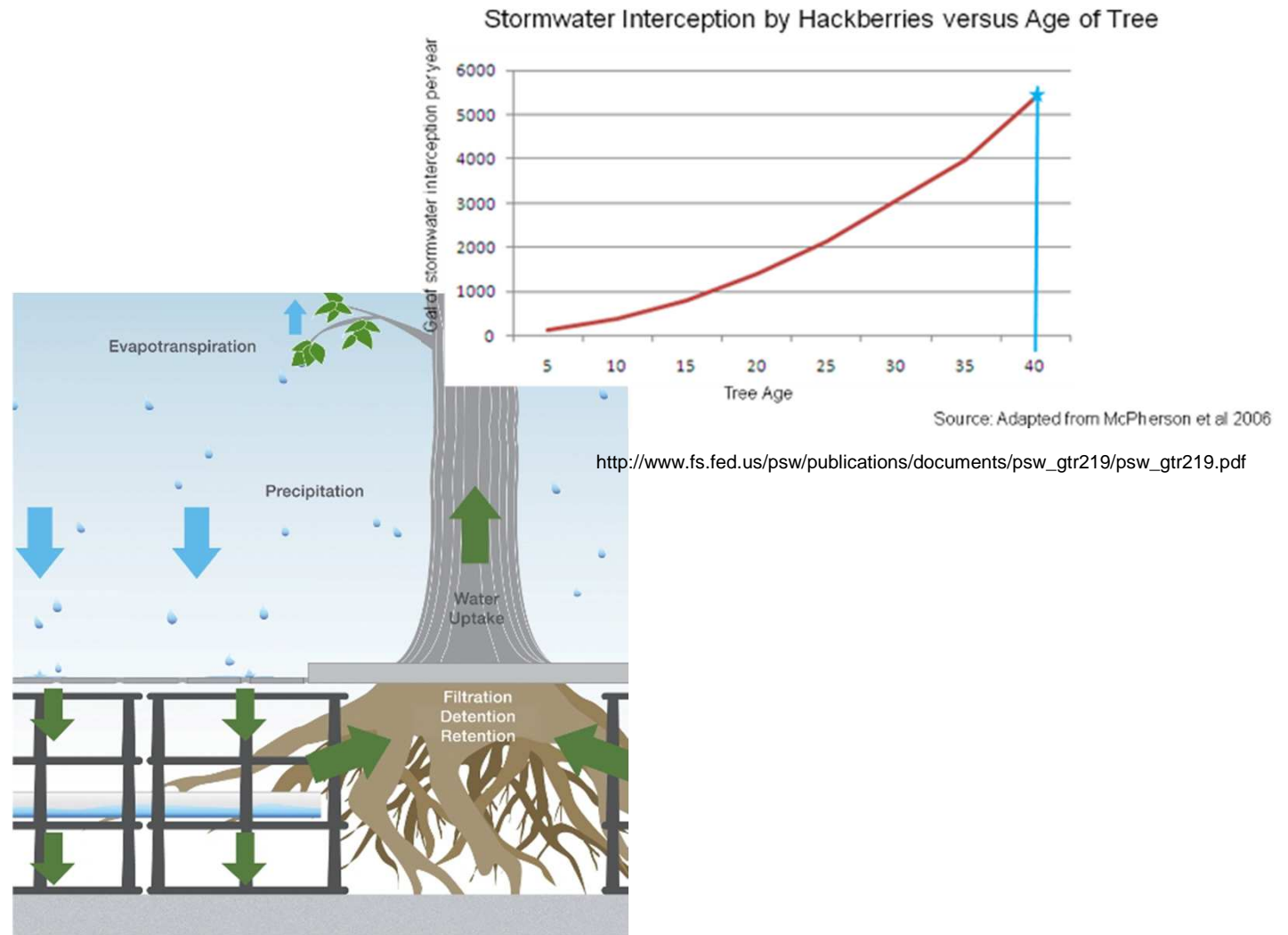
Calculation for a 36 inch Honeylocust specifically located in Scarsdale

Source:
<http://www.treebenefits.com>

Large Trees, Properly Integrated, Mitigate Stormwater



“Trees are a renewable resource that should be continually replanted when trees are removed, but should be wisely positioned to minimize damage to the utility lines when they break or fall in storms.”



<http://www.deeproot.com/blog/blog-entries/stormwater-quantity-and-rate-control-benefits-of-trees-in-uncompacted-soil>



"I'm disgusted with the rows of shrubs between new construction. There should be a requirement to include at least one of two large to medium size trees depending upon the sight. We're going to become a "Village in a Shrubbery!""

Review of Current Ordinance

Summary of Current Ordinance

Activities that require a tree removal permit from the Village Engineer:

- 1) Removal of > 2 trees exceeding 6 inches DBH (diameter of a tree trunk measured at 54 inches above the ground) per lot per 12 month period.
- 2) Trees identified to be removed/protected as a result of a Land Use Board determination.
- 3) Removal of replacement trees 6 inches or less DBH that are planted as a result of a Land Use Board determination or pursuant to Section 281-10.
- 4) Removal of tree(s) determined to be preserved by a Land Use Board for at least 2 growing seasons after issuance of a Certificate of Occupancy or Land Use Board approval.


Also requiring a permit from the Village Engineer:

- American Elm, American Beech Tree, designated Heritage Trees
- Any tree in a wetland or wetland buffer area - in accordance with Chapter 171

Tree(s) on private property may be removed as-of-right provided any of the following:

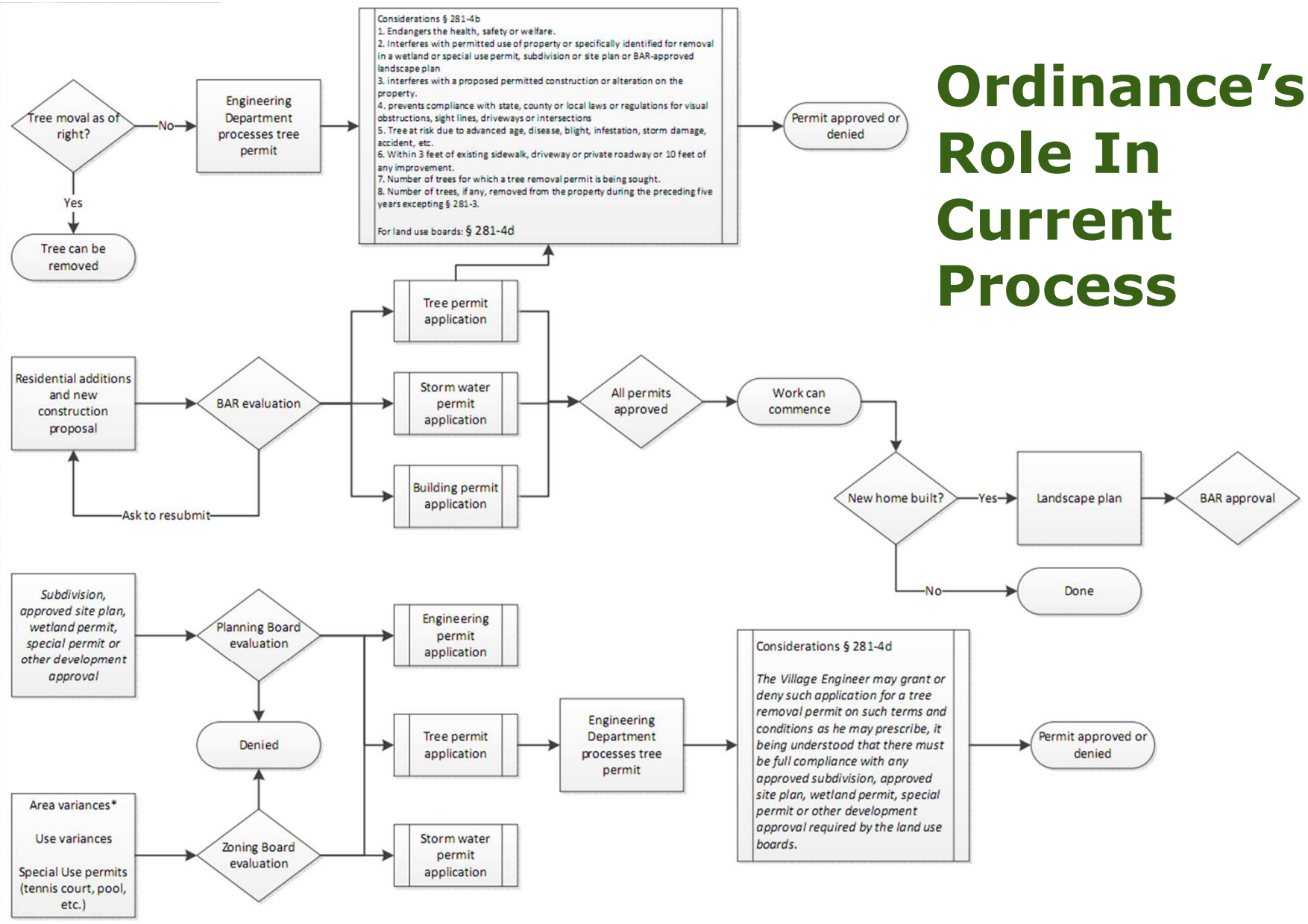
- Trees 6 inches DBH or less can be removed with no restrictions.
- Removal of up to 2 trees exceeding 6 inches DBH per lot per 12 month period.
- A tree removed that is > 36 inches DBH must be replaced with a replacement tree.
- Actual or ongoing emergency for the protection of life or property.

For a tree determined to be dead, dying, hazardous or diseased, a report from a Tree Expert must be submitted to the Village Engineer. A tree may also be removed if considered an invasive species (listed in the Invasive Plant Atlas of New England).



“Seems unreasonable to say every healthy tree has to be replaced. For example, we had a row of incredibly ugly little trees right in the middle of our yard. This house was a rental before so no one cared. They were all very small, we removed them and opened up our yard so the kids can actually use the whole yard.”

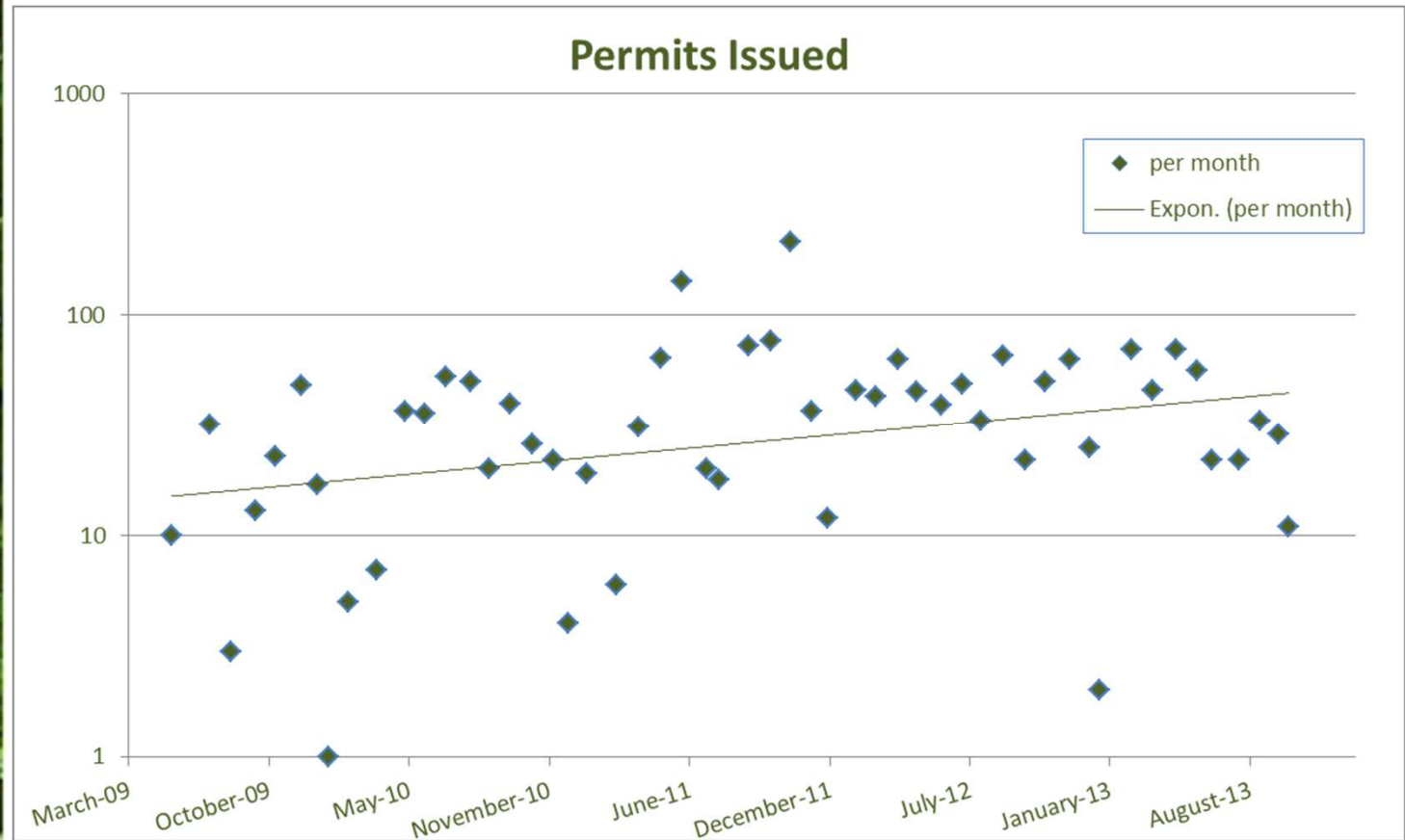
Ordinance's Role In Current Process



* Requests to modify the zoning code's requirements for minimum setbacks from lot lines, maximum lot coverage, minimum lot area or lot frontages, maximum fence and wall height, maximum sign size, etc.

Permitted Tree Removals Over Time

“I love my neighbor's trees! I look at them every day and I enjoy those in my neighborhood when I go on walks. Some parts of town, however, are looking too much like Queens”



Permits per year: 40-50
Compared to: Rye Brook (high end), 80-100

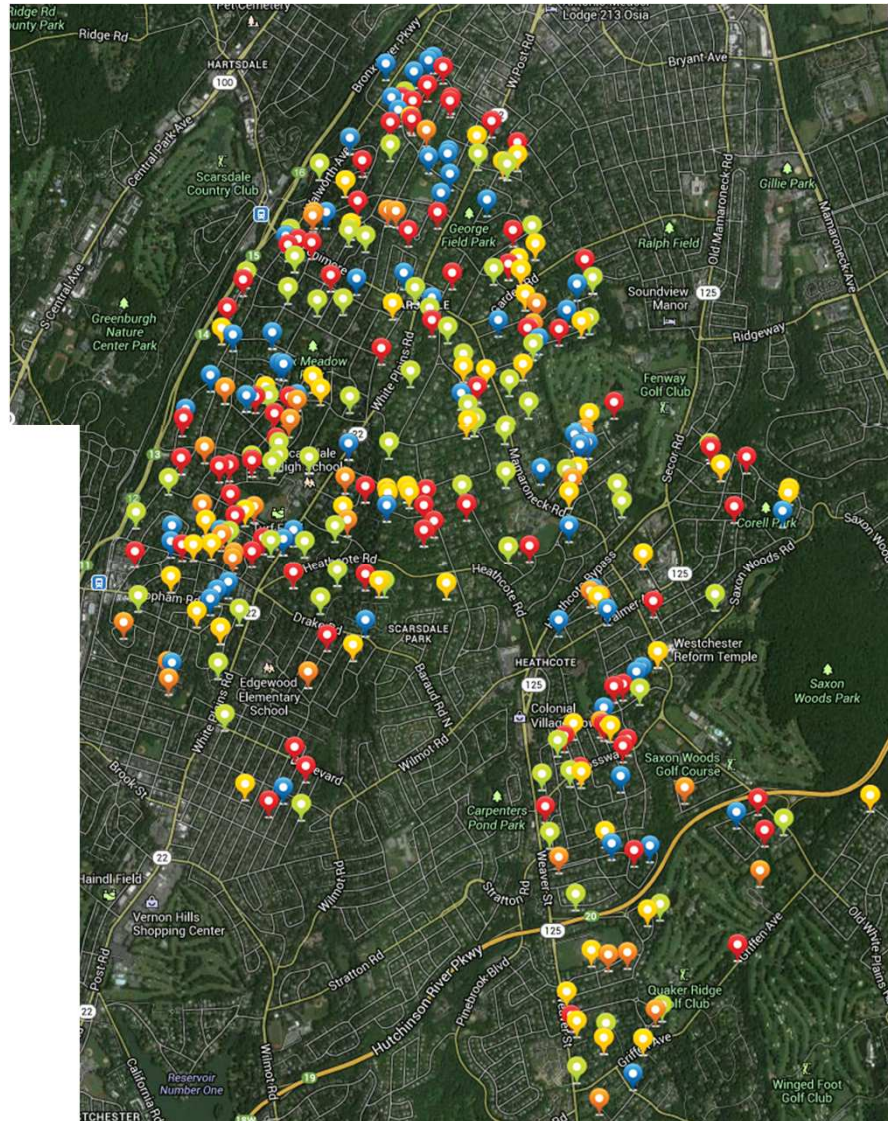
Sample of Actual Permits



“Scarsdale should develop incentives to encourage homeowners to better maintain already existing properly-located, size-appropriate trees ”

PERMIT NO	ADDRESS	FEE	QTY	DESCRIPTION	DATE
2289-T	46 FOX MEADOW RD.	\$100	3	PINES	11/8/2012
2290-T	24 FRANKLIN RD.	\$100	9	MAPLE, HEMLOCK	11/19/2012
2291-T	118 SPIER RD.	\$100	7	ASSORTED	11/21/2012
2292-T	8 KENT RD.	\$100	14	ASSORTED	11/28/2012
2293-T	27 COOPER RD.	\$100	12	ASSORTED	11/28/2012
2294-T	60 FRANKLIN RD.	\$100	4	WHITE PINES	11/29/2012
2272-T	2 LAKIN RD.	\$100	9	VARIOUS	11/30/2012
2295-T	133 JOHNSON RD.	\$100	4	LOCUST, MAPLE	11/30/2012
2296-T	12 BLACKHAWK RD.	\$100	6	(5) WHITE PINE (1) NORWAY MAPLE	12/3/2012
2297-T	146 GRIFFEN AVE	\$100	8	(6) MAPLE (2) OAK	12/4/2012
2298-T	172 WHITE RD.	\$50	1	RED OAK	12/13/2012
2299-T	6A CARSTEWSEN RD.	\$100	5	ASH	12/18/2012
2300-T	35 BRITE AVE.	\$100	5	(4) RED OAK (1) NORWAY MAPLE	12/28/2012
2301-T	55 GARDEN RD.	\$50	2	ELM, OAK	1/11/2013
2302-T	114 BRITE AVENUE	\$50	1	RED OAK	2/15/2013
2303-T	61 FAYETTE RD.	\$100	7	WHITE PINES	2/16/2013
2304-T	2 NORMANDY LA.	\$50	1	ELM	2/18/2013
2305-T	3 SHERBROOK RD.	\$100	61	SEE DRAWINGS	2/26/2013
2306-T	2 RECTORY LA.	\$100	12	PINES & HEMLOCKS	3/4/2013
2307-T	7 HARVEST DR.	\$100	14	MAPLE TREES	3/5/2013
2308-T	5 KINGSTON RD.	\$50	2	OAKS	3/13/2013
2310-T	7 REIMER RD.	\$100	14	SPRUCE, CRAB, APPLE, EVERGREEN	3/27/2013
2311-T	31 TAUTON ROAD	\$100	4	(2) RIVER BEECH (2) MAPLES	3/28/2013
2313-T	50 BROOKLEY RD.	\$100	2	(1) DOGWOOD (1) HEMLOCK	4/3/2013
2314-T	18 ARDMORE ROAD	\$50	1	(1) ASH	4/3/2013
2315-T	61 CATHRINE RD.	\$50	1	(1) 28" ELM	4/4/2013
2316-T	47 COLBY LANE	\$100	30	SEE ATTACHED	4/16/2013
2317-T	217 ROCK CREEK LANE	\$100	17	SEE ATTACHED	4/17/2013
2318-T	260 MAMARONECK ROAD	\$100	8	SEE ATTACHED	4/18/2013
2319-T	50 WALWORTH AVE.	\$100	1	NORWAY MAPLE	4/23/2013
2320-T	15 HERKIMER RD.	\$100	3	SEE ATTACHED	4/28/2013
2321-T	260 MAMARONECK ROAD	\$100	4	PINES	4/29/2013
2322-T	43 CRANE ROAD	\$100	3	NORWAY MAPLE	4/30/2013
2323-T	65 LOCKWOOD AVE	\$100	1	OAK	5/8/2013

Permits Geographically Thru 10/13



-  2009
-  2010
-  2011
-  2012
-  2013



“I love the Sycamore trees around Davis Park and on Tunstall Rd. They are truly one of the highlights of Edgewood. I also love the giant, mature tree in front of Edgewood School--not sure what type of tree it is--maybe a Red Maple? But it is lovely.”

Violations

ADDRESS	DATE	ENFORCEMENT ACTION	RESULTS
50 Brewster Rd.	9/30/2009	Summons	\$50 fine
32 Claremont Rd.	5/20/2009	Summons	Withdrawn by Village Prosecutor
17 Colvin Rd	7/1/2009	Summons	\$250 fine
18 Kent Rd.	3/30/2009	Stop Work Order	Work Stopped
50 Ogden Rd.	10/25/2010	Stop Work Order	Work Stopped
4 Dell Rd. (48 Wildwood Rd)	2/25/2011	Stop Work Order	Permit Issued
16 Highland Way	11/13/2012	Stop Work Order	Worked Stopped
15 Ridgecrest North	9/26/2012	Summons	\$100 fine

Not included: 260 Mamaroneck Road (next page)

The CAC and others believe that unpermitted tree cutting is significantly understated.

Two causes:

- **Lack of awareness of the tree permit process**
- **Purposeful avoidance**



“...developments deplete and tax our infrastructure and deprive us of trees which supply oxygen and habitat for wildlife. There is never enough trees but we have certainly reached the point where there is enough "development" in this town. No more is needed.”

Enforcement Case Study: 260 Mamaroneck Road

Before permit (Spring 2013)

- Resident cut down five tall pine trees without a permit nor neighbor notification
- Neighbors called the police when trees “thundered to the ground”
- Village staff issued code violations to resident landowner and contractor for removing trees without a permit

Case resolution

- Resident pleaded guilty to code violations
- Charges were dropped by Village against contractor
- Resident paid \$2,500 fine, reduced from \$8,000 due to circumstances including his plan to plant 80 new spruce trees and the condition of some of the trees removed
- Resident planted numerous new spruce trees that he was allegedly already planning on planting before the code violation was issued

After permit

- After receiving the tree code violations above, the same resident applied for and received three separate tree removal permits to remove 19 more trees
- Resident paid \$300 in permit fees,
- Resident legally removed 19 more trees

Permitted Removal Case Study: 8 Kent Road



**BEFORE
DEMOLITION**



AFTER

“Residents should notify neighbors where the properties share a border, and the result could impact neighbor. Removal of trees should be tied to tree or major shrub replacement where possible.”

LESSON: Even when permitted, large scale tree removal often elicits a visceral response among neighbors.

CAC's Judgement on Current Ordinance: A Paper Tiger

- **Tree removal permits are automatic**
 - **Village staff have no authority to deny**
 - **No replacements are required under 36"**
- **Permit fee does not correlate with number of trees removed**
- **No distinction between resident and non-resident property owners**
- **No distinction between limited removals and widespread deforestation**

"Our main issue is that there are several trees on our neighbor's property that could easily fall on our house. The top of one sheared off during Hurricane Sandy and nearly hit our house."



Result of Tree Ordinance Insensitivity To Context

Spruce Lane: first cleared in about 2004-2005



1994



2011-2013

"I live on Spruce Lane. I was very saddened to see that a builder who is currently clearing property at the corner of Spruce and Rock Creek to build a new home, was granted permission (I think) to cut down all but one of the Spruce trees that lined the property."

Lack of a tree replacement requirement – coupled with substantially built out lots – have transformed a former small forest into a “deforested street” that will take years to reacquire canopy cover



“It is vital for the homeowner to be able to make decisions regarding tree removal, especially in regards to proximity to their house.”

Village Tree Maintenance



“Clear cutting of trees is OK as long as they are replaced in kind (species).”

Village Trees & Maintenance: Key Facts

- Planting along the right of way
 - Four new species are chosen each year, two each for utility- and non-utility sides of the road
 - Trees are selected from lists maintained by Cornell University and ConEd, subject to review by the Village’s consulting arborist
 - Residents may plant trees along the right of way, with permission
- The Village has a "reactive " street tree trimming and elimination program. There is no systematic survey of street tree health
- Village crews may prune until within 10 feet of electrical lines; ConEd handles pruning above this point
- 15-20 residents per year are informed of at-risk trees on their property
- 2-3 violations per year are issued for tree removal in the right of way, likely too few
- 60-70% of trees that fell during Sandy were on private property



“Sometimes tree is removed for certain reasons (safety, aesthetics). Replacing it would defeat purposes.”

Village Trees Maintenance By the Numbers

In calendar year 2012:

- 348 trees were removed
- 120 tree removals were hurricane-related
 - About 60% of these trees were private trees that were removed from the roadway
- 323 trees were pruned
- **162** new trees were planted

In calendar year 2011:

- 314 trees were removed
- 288 trees were pruned
- **166** new trees were planted

Previously, about **300** trees were planted per year



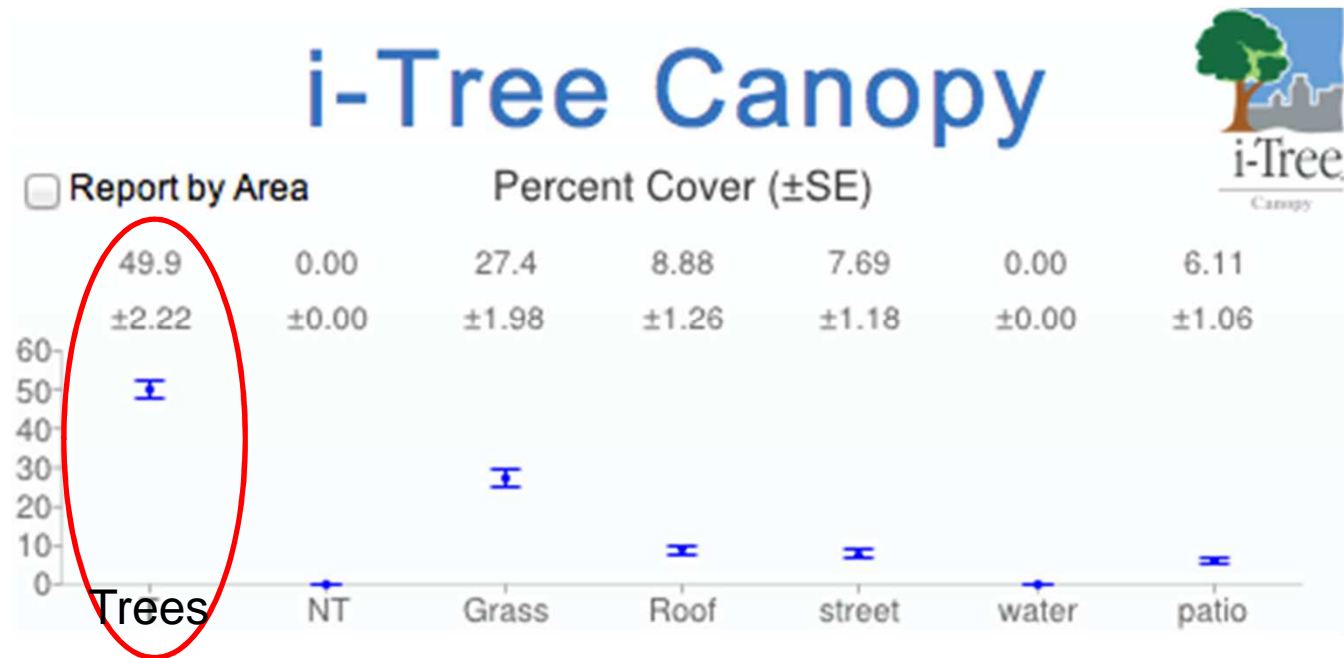
Scarsdale's Tree Canopy

"Greenacres is still very green on the west side of the Post Road, though Walworth may never look as glorious as it did in the eighties when the avenue had an arbor of maples lining the street."



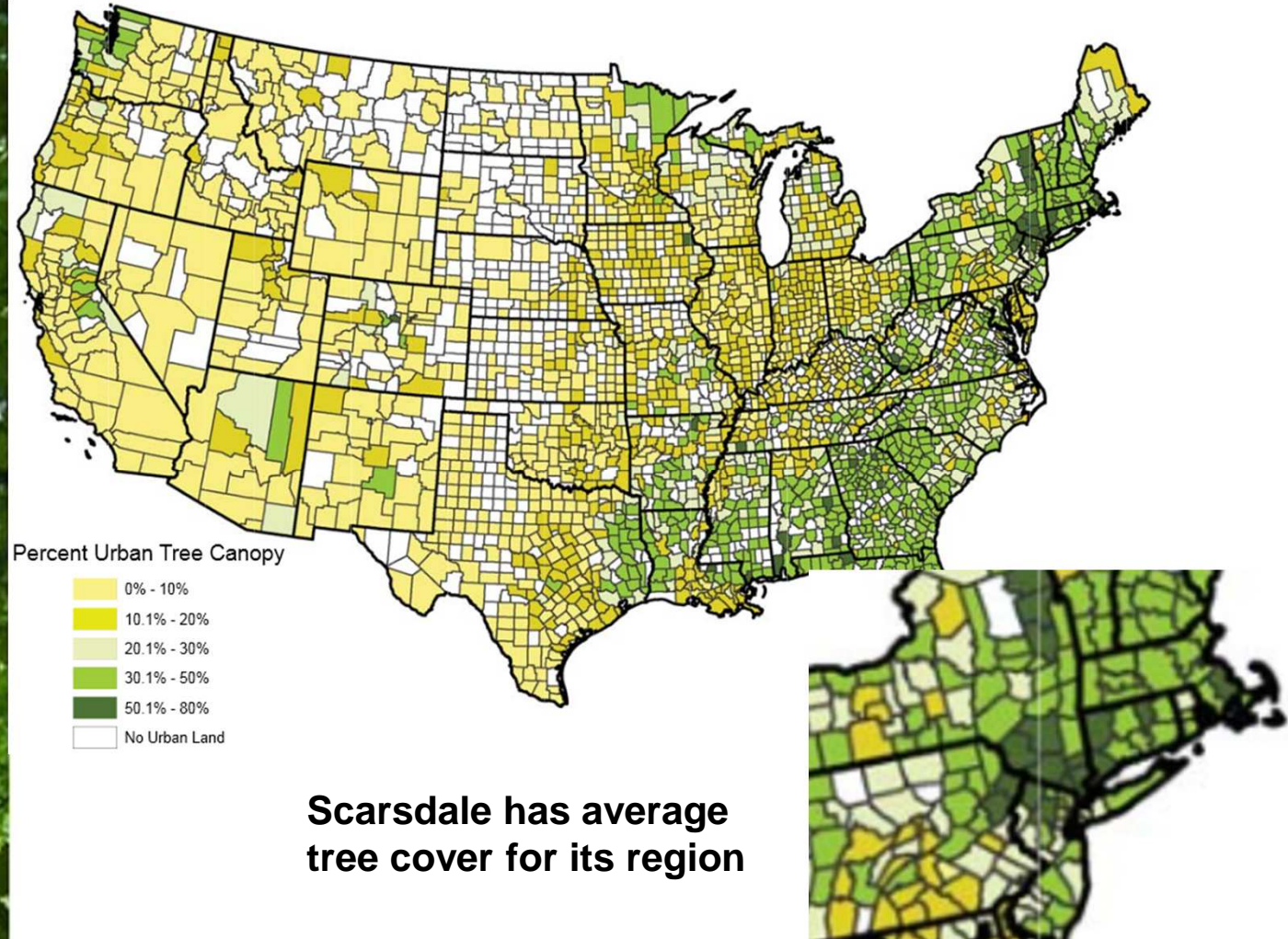
"I think the town should continue to be vigilant about proactively clearing the trees from the power lines, and homeowners should be held accountable for protecting one of the signature elements of our town's landscape."

Scarsdale's Current Tree Canopy



- **iTree Canopy uses a probabilistic sampling method**
- **Runs with over 500 and 600 points sampled showed similar results (500-1000 suggested)**

Urban Canopy Cover Nationwide



“Critical to take replacement and planting seriously for the future. Mature trees are what make neighborhoods like Scarsdale so special and we have a responsibility to future generations to maximize the aesthetics of our properties.”

Scarsdale has average tree cover for its region

Source:

http://www.fs.fed.us/openspace/fote/reports/nrs-62_sustaining_americas_urban.pdf

based on National Land Cover Database (NLCD) estimates derived from Landsat satellite imagery taken around 2001



"I think people have the right to cut down trees. It's their property."

Comparative Survey of Neighboring Tree Ordinances

Town	EXAMPLE or CLARIFICATION	Greenburgh	Rye	Ryebrook	Irvington	Tuckahoe	Larchmont	Bronxville	Scarsdale	Mamaroneck
Representative(s)	Move cursor over triangle in upper corner	Aaron Schmidt		Mike Nowak	Anne Acheson	Elaine Garry	Ann Langone & Toni Porter		Lee Fischman	
Confirmed/Modified		Yes		Yes	Yes	Yes				
Definitions/Background										
*Date Adopted/Amended	Adopted 1987. Amended 2004.	2005. Proposed amendments 2013.	1942. Amended 1990	Last amended 2010	2012	2009	1962/2001	1981	2009	Last amended 2003.
*Length - pages	12	ROW =3, PP = 6	5	13	15	5	4	2	10	7
*Definition for a controlled tree using diameter	Most codes use Diameter at Breast Height (DBH) measured in inches.	DBH ≥ 6"	DBH > 8" at 54" above ground.	DBH ≥ 8"	DBH ≥ 3" for steep slope, wetland or native. DBH ≥ 8" all others.	DBH ≥ 10"	NA	N/A	6 in	6 in.
*Definition for a controlled tree using height	Typically a minimum height measure in feet.	NA	≥15 ft.	NA	NA	NA	NA	N/A	≥10	NA
*Definitions of minimum lot size and lot development	Minimum lot size covered under the ordinance.	No permit required for tree removal on developed properties < 1 acre.	NA	N/A	NA	NA	N/A	N/A	NA	NO permit required for tree removal on developed properties ≤ 20,000 sq. feet.
*Definition for controlled shrubs	height or spread ≥ 6'	NA	NA	NA	height or spread ≥ 6'	NA	NA	NA		NA
Permit required for										
*tree > certain height OR DBH (specify)	Height over 12' OR DBH ≥ 8"	DBH ≥ 6" on property ≥ 1 acre and on all undeveloped properties, regardless of size.	DBH >8"	DBH ≥ 8"	DBH ≥ 3" for steep slope, wetland or native. DBH ≥ 8" all others.	DBH ≥ 10"	N/A	N/A	6 in DBH	6 in DBH
*NYS protected or other special trees	Describe the types of trees and the parameters for protection.	NA	NA	NA	Yes - 3" DBH or greater	Yes.	N/A	N/A	A. The American elm. B. The American beech tree. C. Heritage trees.	NA
*in conservation development areas		No. *	NA	NA	Yes	N/A	N/A	N/A	N/A	NA
*in historic district		No. *	NA	NA	Yes	NA	N/A	N/A	N/A	NA
*number per year	2	NA	NA	None noted	5	1 per year or 2 per 24 months	N/A	N/A	3 or more in a twelve month period	5 ≥ 6 in DBH or 1 ≥ 18 in DBH.
*lot size and lot development definitions	2 / acre	No permit required for tree removal on developed properties < 1 acre.		N/A	No	No	N/A	N/A	No	NO permit required for tree removal on developed properties ≤ 20,000 sq. feet.
*wetland	Describe any special regulations for a wetland area. Otherwise use NA	Yes. Regulate all trees ≥ 4" DBH in wetlands, watercourses and buffer areas.		No	Yes	NA	N/A	N/A	Yes	NA
*steep slope	Describe any special regulations for a steep slope. Otherwise use NA.	Yes. Regulated disturbance of more than 500 sq. ft. on slopes > 15%.		No	15%	No	N/A	N/A	N/A	NA
*In specific zones on Natural Resource Inventory or similar maps.	Yes	Conservation District protects wooded areas.			Yes - per site development, replanting, or restoration area	No	N/A	N/A	N/A	NA
*pruning		No. *		No topping.	25%	No.	N/A	N/A	N/A	NA
*town property	Yes or No if included. Also, describe any special regulations for town property.	Yes	Yes.	Tree Removal Permit is required on municipal property	No. But Village to provide notice	See #46 Public Trees	Village Responsibility	Yes	Yes - by permit	NA
*clear cutting (give size)	1/4 acre	No. *			No	Yes and my require replacement.	N/A	N/A	N/A	NA
*lot setbacks	100 feet	No.			No	No	N/A	N/A	N/A	NA
Other Requirements										
*arborist letter					Yes	No				Yes
*performance/restoration bond										Yes
*replanting					Yes	In most cases.				Yes
Prohibitions										
*damaging root zones					Yes - by trenching, dumping poisoning or grade change.					NA
*destructive pruning					Yes - for protected trees.	Village trees protected.				NA
*utilities						see #40 below.				
Exceptions										
*dead or severely impaired tree	Yes	Yes, but the Forestry Officer may still impose other requirements such as replacements.		No	Yes	a factor to be considered	N/A	N/A	Yes	with permit
*safety / emergency	Yes	yes, but the Forestry Officer may still impose other requirements. **		A condition in which permit is normally favored.	Yes. See comment.	a factor to be considered	No - Owner responsibility	N/A	Yes	with permit
*fire hazard	No	No, but permits will be issued for the removal of trees within 10 feet of a building		No	No	a factor to be considered	No	N/A	Yes	with permit
*utility lines or subsurface improvements	Yes	Yes - separate ordinance for utility lines in ROW;		NA. See comment.	Yes. List of trees slated from removal to be forwarded to TPC before removal.	Village must select species compatible for planting under utility lines. Utilities must protect health and appearance of the street trees and take reasonable precautions against harm to tree and/or roots.	No - owner responsibility	N/A	Yes	with permit
*invasive		NO. *			No	No	N/A		Yes - on IPANE list	with permit



Survey Key Observations

- 2 ordinances are focused on public trees only and have no controls on private tree removal.
- The other 7 ordinances define controlled trees using Diameter at Breast Height (DBH) ranging from 6" to 10".
- Some of these 7 ordinances define additional control parameters including minimum height or varying DBH requirements based on classification of land area (i.e. wetlands vs. slope).
- 5 of these 7 ordinances that control private property trees have exemptions or exceptions that remove a significant number of trees from protection.
- Several of the contacts complained that lot size exemptions or "free trees" have essentially invalidated their ordinances.
- 4 of 7 ordinances define restoration requirements post removal.
- 1 requires a bond payment until proof of restoration is provided.
- 5 of 7 require a review process through a planning board or tree review organization.
- Fees, penalties and enforcement issues were not covered in this comparison.

"The village government has no business in telling residents what they may or may not do with private property. If the village government wants trees on private property it should persuade the owner to do so or buy the property."



"[There are] too many unhealthy trees that homeowners [are] too cheap to remove and it impacts all of us when electricity goes down."

Survey Conclusions

Small lot exemptions

Several TPC/CAC members from surrounding towns confessed that their codes were almost useless due to these exemptions

Details don't matter

For example, the various definitions of controlled trees do not have much relevance in saving trees.

Survey-Driven Recommendations

- **Eliminate exceptions by including all “diameter at breast height” DBH-defined trees on all properties.**
- **Establish a permit review process.**
- **Support restoration requirements with a bond or other follow-up process.**

“I would imagine that the new homeowners would not want a treeless property but let's let them decide how to manage the aesthetics on their property.”



“The clear cut of the trees on the new site on Weaver Street was a crime. A plan should have been required to save as many as possible. they clear cut the entire property years before they built anything. how was this allowed?”

Village Resident Survey



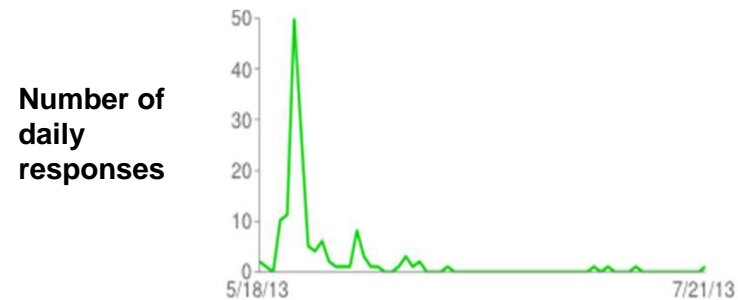
“Scarsdale is a lovely community and trees add a big part to it's overall look.”

Village Resident Survey

Questions developed collaboratively and vetted through Village Trustees and Manager

Publicized through:

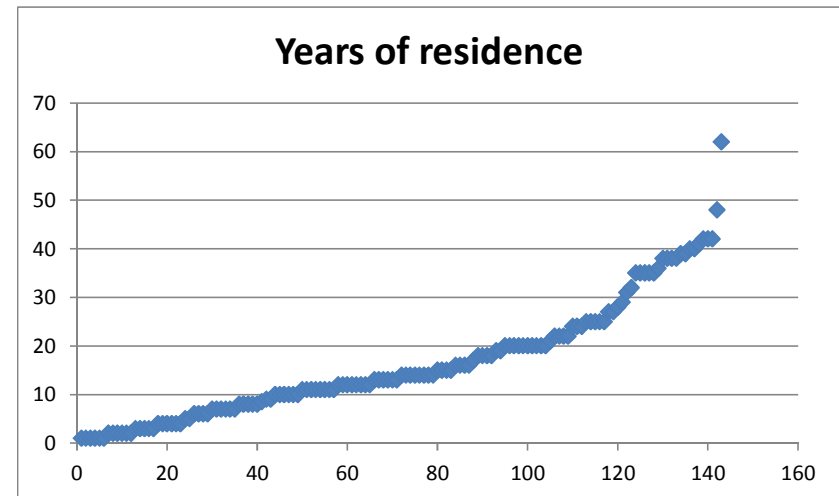
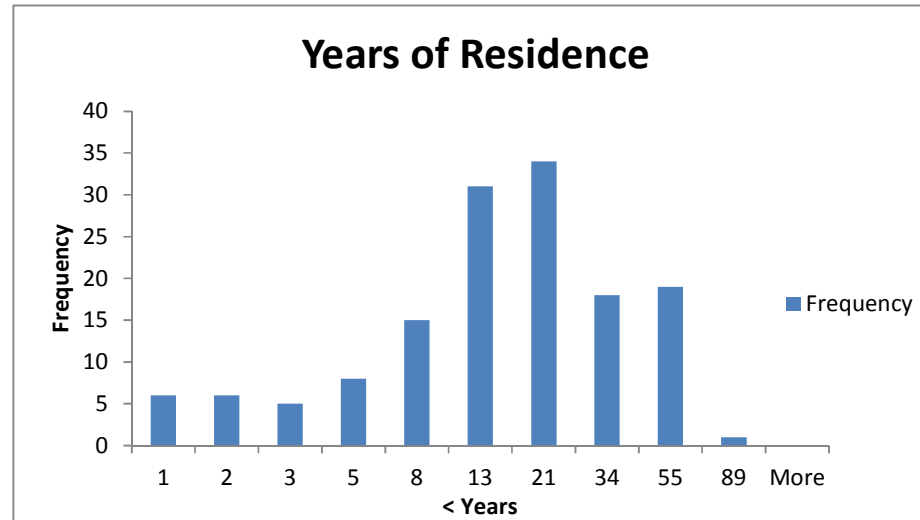
- Scarsdale Inquirer
- Scarsdale10583.com
- Scarsdale Forum
- Houlihan Lawrence Realty
- Platinum Drive Realty





“Anything to be removed on/near the property line should be cleared with the neighbor, as ownership can be in doubt. can't put a mature tree back once it has been cut down!”

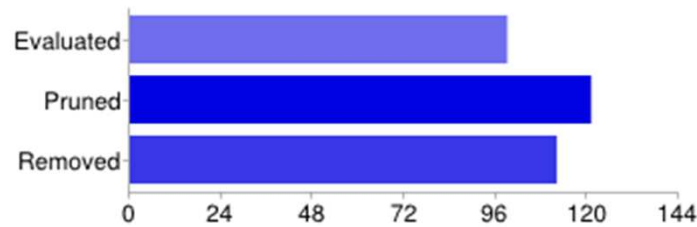
Respondents' Years of Residence



Survey Responses Page 1

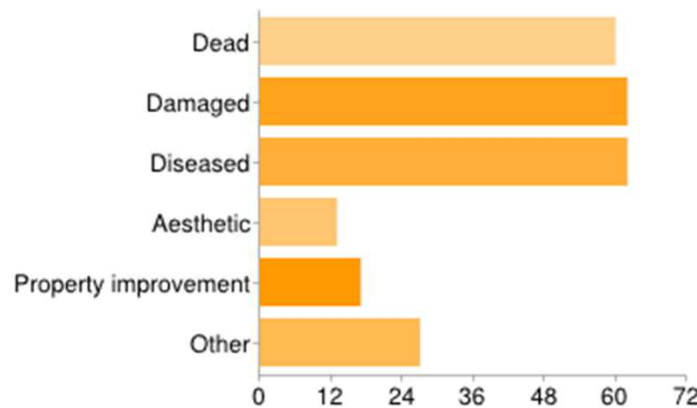


2. Have you had any of your trees:



Evaluated	99	30%
Pruned	121	36%
Removed	112	34%

3. If you removed a tree, for what reason?

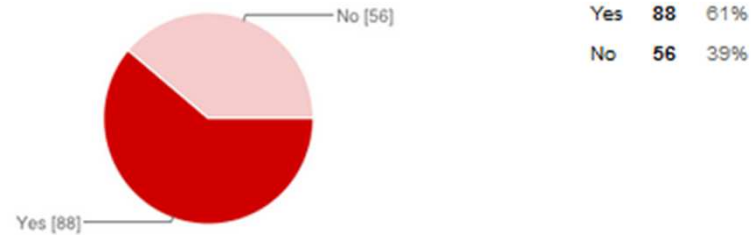


Dead	60	25%
Damaged	62	26%
Diseased	62	26%
Aesthetic	13	5%
Property improvement	17	7%
Other	27	11%

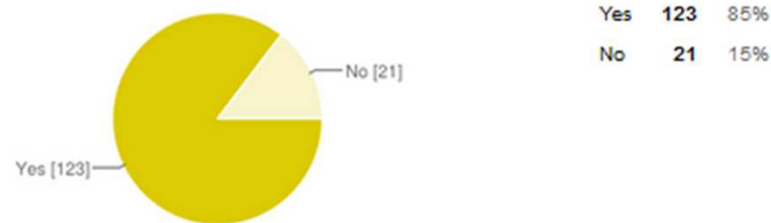
Survey Responses Page 2



4. Are you aware that you can request the Village to plant a tree in the public right of way in front of your home free of charge?



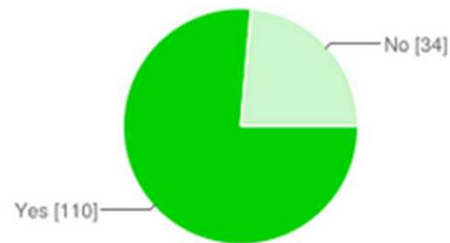
5. Are you aware that a Village permit is sometimes required to remove trees from your property?



Survey Responses Page 3

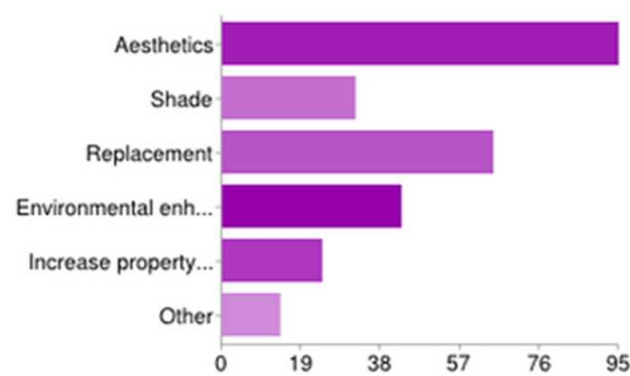


6. Have you planted trees on your property?



Yes	110	76%
No	34	24%

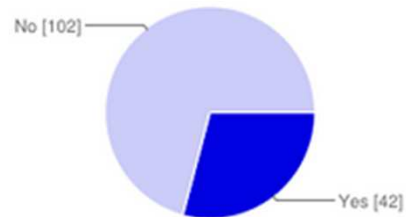
7. If you've planted trees on your property, for what reason?



Aesthetics	95	35%
Shade	32	12%
Replacement	65	24%
Environmental enhancement	43	16%
Increase property value	24	9%
Other	14	5%

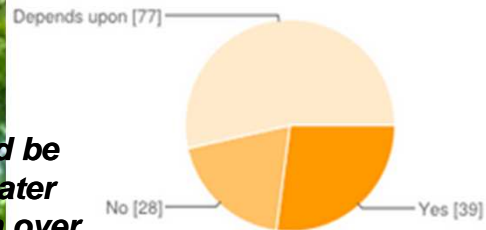
Survey Responses Page 4

8. Are you aware that many commercial, ISA (International Society of Arboriculture) certified arborists will evaluate your trees at no charge?



Yes	42	29%
No	102	71%

9. Should residents be required to notify their neighbors before tree removals?



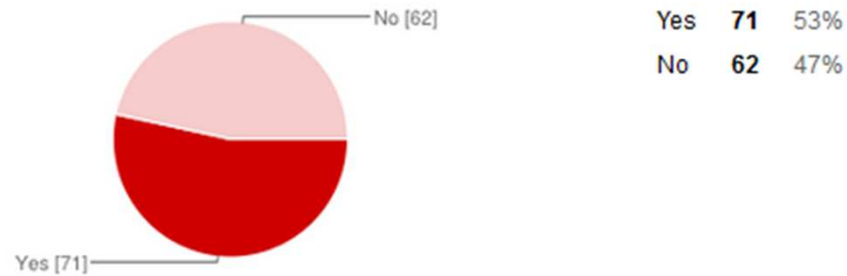
Yes	39	27%
No	28	19%
Depends upon size & number	77	53%

“Builders should be under much greater scrutiny. A often over looked problem is when there is a tree on or near the property line, often belonging to the neighbor, that is compromised and ends up having to be removed because of builder's actions.”

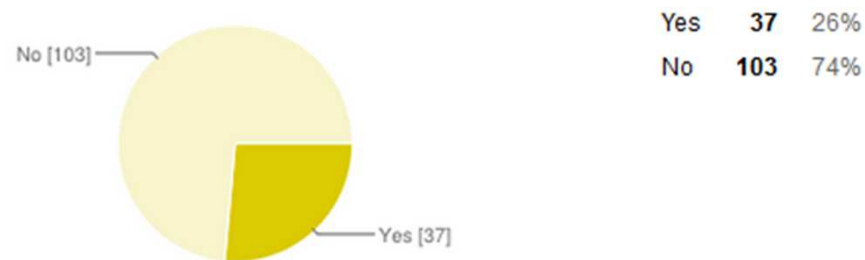
Survey Responses Page 5



10. When a healthy mature tree is removed, should the landowner be required to replace it?



11. During new home construction and major renovation, should the property owner be permitted to "clear cut" (remove all or nearly all) trees from the property?



COMMENTS WERE ACCEPTED for both questions – available upon request



“They are also a dangerous aesthetic delight.”

Problems With the Current Ordinance

- **Staff have no criteria for refusal and so approvals are essentially automatic**
- **Permits are blind to the number and type of trees removed**
- **Tree context and contribution is ignored**
- **Residents are left with the false impression that trees are in some way protected**



"I want more trees. I'm on Madison and know that Johnson Rd. was devastated by tree loss (one street away). Trees enhance the Village and make the community more desirable"

Challenges

- **Landowner rights must be respected**
- **Neighbors' rights must be respected**
- **Specific replacement and mitigation standards may be arbitrary or ill-adapted to specific sites and contexts**
- **The permit process needs to work in practice**
- **Workload on strained staff and boards can't be increased**



“There should be more publicity around what the Village will plant at no cost and how to make the request. I plan to follow up and get a tree!”

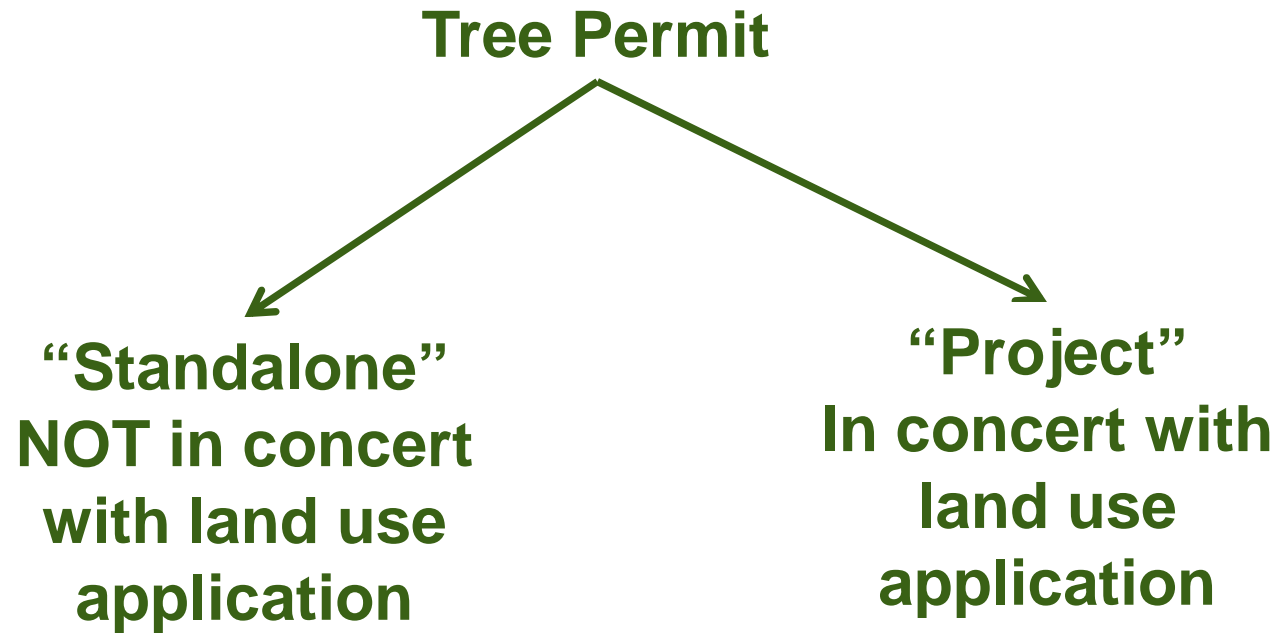
Recommendation 1:

**Divide Permits Into Two Types:
« Standalone » and « Project »**



"I have witnessed many trees lost through construction but have witnessed very few developers planting new trees to replace those that have been removed."

Primary Distinction





Standalone Tree Permitting

1. **Require a permit for ANY tree over 6-8" DBH (TBD).**
2. **Expedited or post permitting are allowed for critical safety issues, provided adequate documentation (arborist letter, pictures).**
3. **Permit application must state reason for removal (damaged or diseased, dead, safety, aesthetic, etc.) and replacement plan if any, although not required.**
4. **Flat filing fee.**
5. **A permit application triggers a neighbor notification, similar to that used for construction and landscaping.**
6. **Permits are issued no sooner than 10 days after notifications have been sent.**

“Homeowners should be given better information on tree care. Specifically, they should be informed that vines growing on their trees will eventually kill the trees, diminishing the value of their property and its beauty.”

The CAC feels that standalone tree permits, typically issued to homeowners, can be simplified to reflect the practical truth of the current permit process.

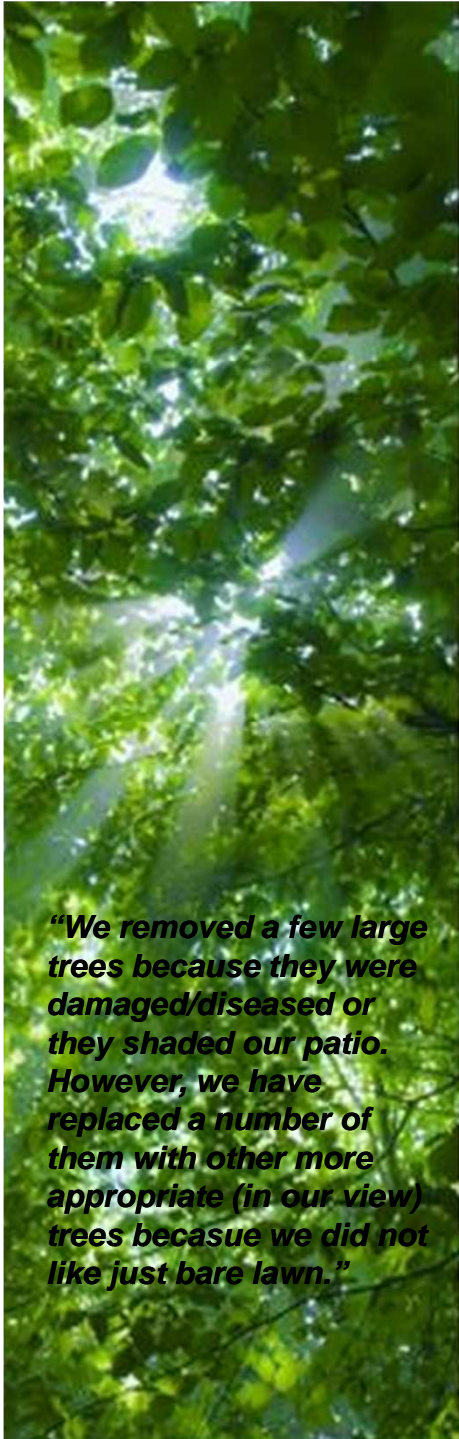
At the same time, notifications should be implemented to address its shortcomings. Notifications are likely to generate a number of positive consequences, including neighbor dialog and awareness.



Project Tree Permitting

- **Based on replacement according to one of several standards**
- **Applicant would have to certify and submit calculations**
- **Intended to be 'user friendly' for land use boards**
- **Provide choices for flexibility**

"... trees are removed that would in no way complicate the construction process. The ridiculous aspect of this practice is that the builders then plant new trees which will take decades to achieve the size and beauty of the trees they removed."



“We removed a few large trees because they were damaged/diseased or they shaded our patio. However, we have replaced a number of them with other more appropriate (in our view) trees because we did not like just bare lawn.”

Recommendation 2:

For Projects, Implement Flexible Although Formal Replacement Standards



“Years ago, the house behind mine changed owners. The new folks cut down the forest of trees between our kitchens, in his back yard. Then we had that big April storm and he threatened to sue me because of all the water in his yard.”

Multiple Replacement Standards for Maximum Flexibility

- **Value** – a multifaceted standard using an industry-standard approach.
- **Canopy** – minimum level of (mature) plant canopy
- **Unit** – a gross but relatively straightforward approach
- **Monetary** – a trade in lieu of other replacement



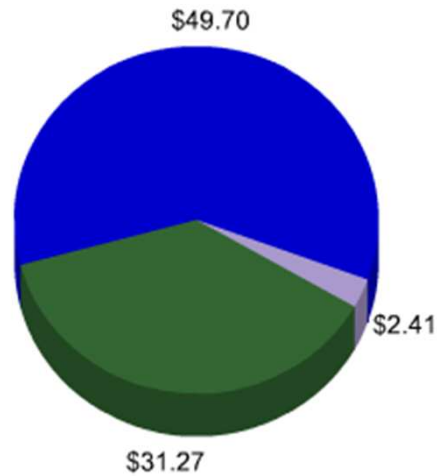
“Many of trees in Edgewood/Arthur Manor are overgrown and are in need of very heavy pruning. This should be a priority given the recent devastation wrought by Sandy. These trees are accidents waiting to happen.”

Value Replacement (Using iTree)

Evaluate the impact of landscaping in quantified, normalized terms

Village Norm

■ Stormwater ■ Air Quality ■ CO2

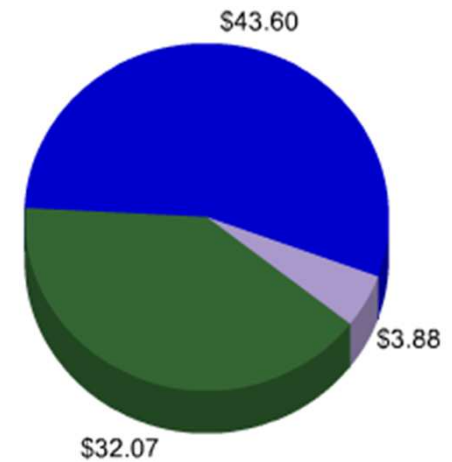


\$83.38

Vs

Proposed

■ Stormwater ■ Air Quality ■ CO2



\$79.55



“In general homeowners fail to properly prune and maintain trees.”

Canopy Replacement

Tree canopy databases provide the necessary information to establish a “canopy at maturity” estimate

The canopy percentage can be based on the normative percentage for Scarsdale – around 50%. Since this includes forested areas, a lower % is probably appropriate.



Virginia Nursery and Landscape Association

Email: info@vnla.org

Tree Canopy Spread & Coverage in Urban Landscapes



Virginia Tech Urban Forestry

Email: pwiseman@vt.edu

[About This Website](#)

[Download in Excel format](#) -or- [Download in PDF format](#)

Sort database by: Botanical Name

Botanical Name	Spread at Planting (ft)	10 Year Spread (ft)	10 Year Coverage (sq ft)	20 Year Spread (ft)	20 Year Coverage (sq ft)
Deciduous Species					
Acer barbatum	5-5	9-12	61-106	13-17	132-228
Acer buergerianum	3-4	8-10	50-78	11-15	113-177
Acer campestre	3-4	8-10	50-78	11-15	113-177
Acer ginnala	3-4	8-10	50-78	11-15	113-177
Acer palmatum	3-4	8-10	50-78	11-15	113-177
Acer platanoides	5-7	12-15	113-176	15-20	177-314



“Our neighbor cut down approximately 143 trees last year. We then lost more trees in Hurricane Sandy, most likely because the root system was weakened by the cutting earlier in the year. Our street looks entirely different now than just a few years ago. We have lost our beautiful tree canopy, which cannot be replaced in our lifetime.”

Unit Replacement Using A Table

Shown below: Greenburgh’s replacement table

Tree Unit Minimum Standard Requirement for Retained and Replacement Trees

Property owners are required to meet the tree unit minimum standard requirement on their property, as provided for in the table below.

Tree Density Table

Site Area (sq. ft.)	Minimum Number of Tree Units
Less than 5,000	3
5,000 to 7,500	5
7,501 to 10,000	7
10,001 to 15,000	10
15,001 to 20,000	14
20,001 to 25,000	18
25,001 to 30,000	22
30,001 to 35,000	26
35,001 to 40,000	30
40,001 +	5 additional tree units per each additional 5,000 sq. ft.

When determining if a property meets the tree unit minimum standard requirement, utilize the information provided in the table below.

Tree Density Table for Existing and Replacement Trees

DBH	Tree Units
1”-6”	1
6”-12”	1.5
12”-14”	2
14”-16”	3
16”-18”	4
18”-20”	5
20”-22”	6
22”-24”	7



Monetary Settlement

Appropriate when:

- **The landowner does not wish to use an alternate replacement method**
- **Other replacement methods fall short**

Fee calibrated to the estimated replacement value.

"I am more accepting of the removal of one or two mature trees, homeowners may have various reasons for doing so on their own property and should not have to go through lots of red tape"



“Neighbors have clear cut property and violated other village ordinances without penalty. If there is no enforcement mechanism for egregious violations, then it is very unfair to those who play by the rules.”

Recommendation 3: Improve Permit Awareness



“Trees in my neighborhood for the most part are terrific. Except one neighbor has never met a tree she did not like; hence, there are far too many.”

Education

- **Tree ordinance provisions should be publicized as part of a homeowner’s “Here’s the keys” basic education**
- **Key actors – landowners, builders, landscape architects and tree care companies - need to be made more aware (if warranted) of the tree ordinance as part of the permit process**
- **Homeowner education is the best form of surveillance against unpermitted tree removal**



“Many people plant only small ornamental trees like dogwoods, cherries and pears because they are pretty and easy to find a spot for. We need to know more about local tree species that will do well here and add diversity to our tree inventory.”

Enforcement

- **Fines based on the combined diameter at stump height of all removed trees**
- **Fines at the rate of \$25/inch**
- **Fines may be reduced partially or entirely if a replanting plan is submitted. The reduction formula would be [mature diameter of combined new plantings] – [combined diameter at stump height] of all removed plantings]**
- **The fine must be paid as a bond, to be refunded in all or part after one year, based on the replanting**
- **Contractors with multiple violations could be temporarily banned from work within the Village**



“Many neighborhoods feel has changed greatly from the removal of trees. all that is left is electrical wires. looking more urban than ever.”

Replacement In Practice: Examples



"I live now in the house that my parents owned when I was a child; as I grew to maturity, so did the Japanese maple in the middle of our side yard. It saddens me to think that the next owner of the property will probably cut this beautiful tree down -- but I think that to do so should be his/her right."

Permitting Example 1

A homeowner wishes to remove a tree from their yard under non-emergency circumstances. They apply for a permit which is automatically granted at a set fee for any number of trees.

Notice is given by mail to the homeowner's neighbors of the intent to remove said tree(s). Trees to be removed also must be marked with a sign.

After a certain number of days have elapsed, the homeowner is free to remove the tree.

The permit expires after a set period of time.



“When the Village takes large canopy trees down it should replace them with more than just one puny tree. Also the Village should not require an owner to ask for the tree. It should just be replaced.”

Permitting Example 2

A homeowner wishes to remove trees in order to install a pool. They apply for a permit related to the pool installation.

Because the tree removals are being made in concert with a land use approval, the homeowner is required to offset the tree removal.

Selecting the value formula, the homeowner plants elsewhere on the property in order to offset the removed trees.

Notice is given by mail to the homeowner’s neighbors of the intent to remove said tree(s) and of the offset plan.



“A developer should be allowed to remove trees but must be required to replace them. Some trees should remain if they are healthy and provide the neighbors with privacy from the new house. This should be done at meetings where all adjoining neighbors are notified by mail.”

Permitting Example 3

A builder intends to remove trees in preparation for new home construction.

Because the tree removals are being made in concert with a land use approval, the builder is required to offset the tree removal.

Selecting the monetary formula, the builder pays the Village an amount equal to the estimated value of trees being removed. This amount is contributed to tree replanting elsewhere in the Village.

Notice is given by mail to neighbors of the intent to remove said tree(s) and of the offset plan.



"I live in Greenacres where there are many over-grown trees. I personally have had 5 trees over 100ft tall fall during storms and one that was hit by lightning. It is dangerous to allow trees to grow beyond a safe height."

Permitting Example 4

A landowner has removed trees without a permit, easily found out because neighbors had not been notified.

Site inspection indicates that five trees were removed with combined diameter at stump height of 100 inches. At \$25/inch, the fine is \$2500.

The landowner agrees to replace these trees. After 1 year and upon inspection, the fine can be refunded in all or part based on the estimated mature diameter at breast height of the replacement trees.



“I think the village should replace the tall trees that come down with similar tall trees (white oaks, maples, etc). I think we are losing too many tall trees.”

Recommendations Beyond the Tree Ordinance



"This neighborhood (at least our street) always had more than its share of trees since it was built in a former "woods" that was ultimately developed by someone who had respect for trees and left as many as possible to enhance the "block", so we have MANY elderly trees providing shade and beauty, almost too many."

Increase Right-of-Way Planting

More street tree plantings will offset the (probable*) net loss of trees on private property

- **Mandate right of way planting for all new construction lacking sufficient tree frontage**
- **Educate residents about the right of way planting program, via yearly communication**
- **Let residents know that tree species are selected for minimal impact on utility lines**
- **Calm fears over trees falling by pointing out that younger trees are more likely to withstand storms**
- **Increase funding for the right of way program using enforcement fees**

* Due to larger homes and heightened safety concerns

Enact Tree Care Standards

- **Insist on tree protection standards during construction (ANSI 300) with Village staff inspection prior to construction**
- **Consider a technical manual companion to code, an approach being undertaken in Greenburgh**



"I live in a densely populated section of Scarsdale. Large trees have no where to fall except on houses, cars and, possibly people. Power is frequently disrupted due to falling limbs and trees. These trees are old."



“Romanticizing old trees and demanding they not be felled comes with a price. Trees are lovely, but they have a life span. Old trees are especially dangerous due to their size.”

Award FAR Based On Progressive Practices

Reduce permissible FAR and make it adjustable upwards given:

- **Use of pervious surfaces**
- **Notable sustainable landscaping**
- **Canopy improvements above the normative standard**
- **Meaningful side yards**



“There are not many trees left in my neighborhood and those mature trees that remain will most likely come down in a year or two from storm damage or aging. There is virtually no canopy of trees left on our street and little or no shade.”

Acknowledgments

In addition to data sources cited within this report, we thank the following persons for their time, expertise and assistance:

- Aaron Schmidt, Environmental Planner, Village of Greenburgh
- Michael Nowak, Superintendent of Public Works, Village of Rye Brook
- Stephen Skyer, Staff Arborist and Mike Galvin, Director of Consulting, SavAtree
- Bartlett Tree Professionals
- Eric Gerring, Deputy Superintendent of Public Works, Village of Scarsdale
- Jane Veron, Planning Board, Village of Scarsdale
- Mary Kaye Koch, Board of Architectural Review, Village of Scarsdale
- John Goodwin, Assistant to the Village Manager, Village of Scarsdale
- Elizabeth Marrinan, Village Planner, Village of Scarsdale
- Nanette Albanese and Albana Habili, Assessor’s Office, Village of Scarsdale
- Building Department, Village of Scarsdale
- Stephen Pappalardo, Assistant Village Manager, Village of Scarsdale
- Anne Acheson, Irvington CAC
- Elaine Garry, Tuckahoe CAC
- Ann Langone, Larchmont CAC
- Janet Andersen, Lewisboro CAC



"It takes years for a tree to mature to recreate the beauty, and shade of a mature tree-- 30 to 100 years old. They cannot be replaced without the passage of many years and often neighbors will share the loss."

Appendix:

iTree In More Detail



“The current Village ordinance regarding tree removals is a major step forward from what had been. I believe it balances the needs and wants of property owners with reasonable controls to prevent the wholesale removal of trees without replacements.”

Value Replacement Using iTree Design

“i-Tree is a state-of-the-art, peer-reviewed software suite from the USDA Forest Service that provides urban and community forestry analysis and benefits assessment tools.”

i-Tree Design 1001 Post Road, Scarsdale, NY 10583, USA Home

Get started with these easy steps:

Select your tree's species:
 Ginkgo
Note: tree names are listed as "Maple, Red."

Enter the width (diameter) or circumference of your tree's trunk at 4.5 feet above ground:
 width: 42 circumference: 131.9 (inches)
This measurement helps us compute what foresters call "diameter at breast height" or "dbh".

Select what type of condition best describes your tree: Excellent

Forecast your future benefits: 30 (1-99 years)
Calculate current benefits for your tree and estimate future annual benefits by entering the number of years to "grow" your tree.

Plant your trees:
 Use the tree tool above the map to locate your existing tree or place a virtual tree.
 - Place the marker as close to the base (or center) of the tree as possible.
 - Cancel the tree placement by clicking .
 Plant additional trees by repeating the steps above - starting with entering your tree species.

Check here to evaluate energy effects:

Draw your structure:
 Use the drawing tool above the map to outline your house or building.
 - Be sure to outline "conditioned" living area only; garages and other unheated / uncooled spaces should not be included.
 - Double click the last point to finish the tracing.
 - You can also use to delete your last point or use to cancel the entire drawing.

This structure was built: 1950-1980

Map | Satellite

Map data ©2013 Google Imagery, ©2013 Bluesky, DigitalGlobe, New York GIS - Terms of Use [Report a map error](#)

Lat: 40.98893	Bearing: 298.0	Tree: Ginkgo	Energy Savings: \$0.00
Lng: -73.79899	Distance: 138.6m (454.7ft)	Total Savings: \$79.64	kWh: 0.0 Therm: 0.0

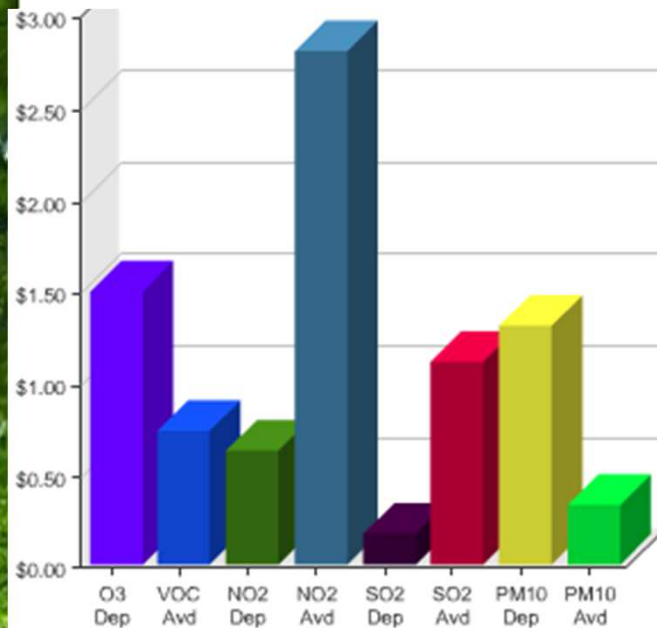
Less desirable More desirable

Preferred planting zones to maximize tree benefits will be shown around the structure and can be turned off and on by pressing the tool. Hover your cursor over different zones to explore the impacts each location has on various benefits as displayed below the map.

iTree Design Benefit Estimation

Stormwater

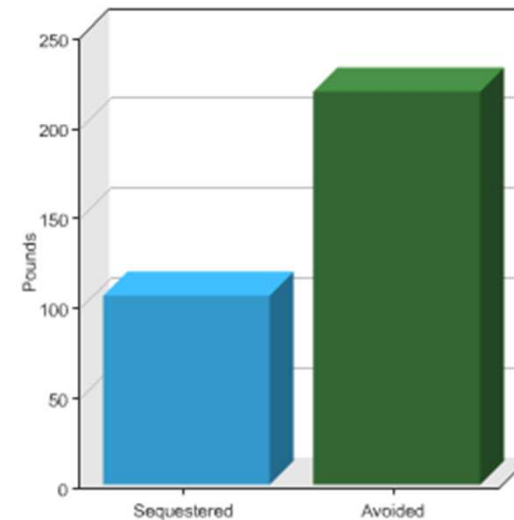
Your 13.4 inch diameter Ginkgo will intercept 935.42 gallons of stormwater this year.



Air quality

Energy

This year, your 13.4 inch Ginkgo will conserve 73.69 Kilowatt-hours of electricity and reduce consumption of heating fuel by 21.79 therm(s).



CO2

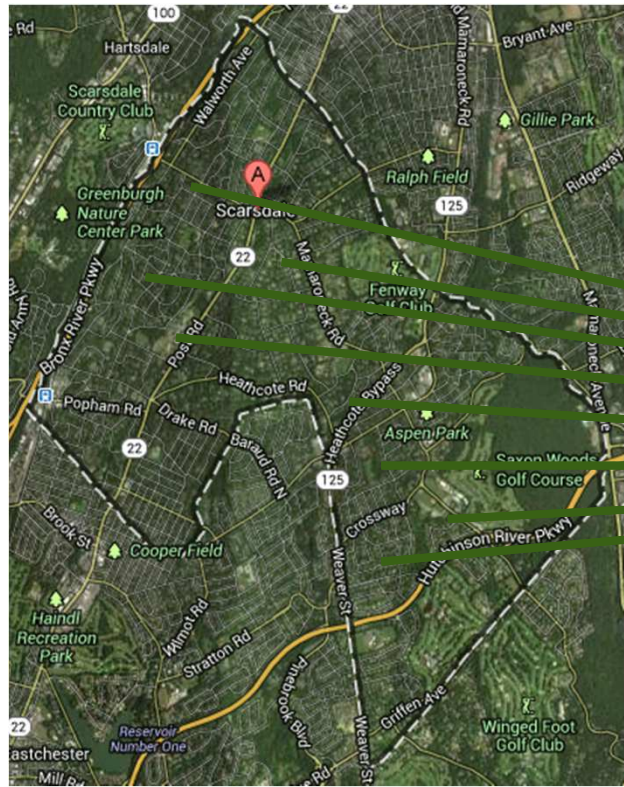
“Trees are, and should be, an object of a property-owners rights to control (including remove) but because trees affect more than one property, replacement should be required (and is).”



"I am concerned that many of the deciduous trees that are removed are replaced by conifers, which will eventually change the character of an area."

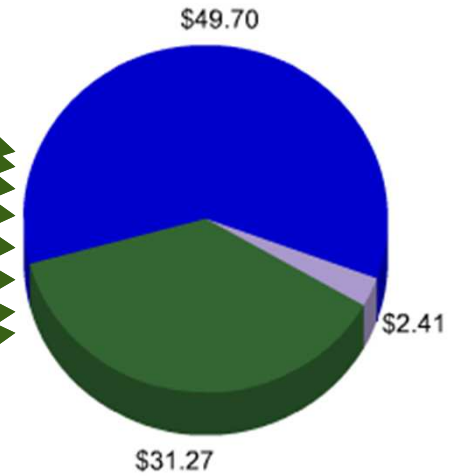
Village Norm for iTree Analysis

A baseline can be determined from a representative sample of existing mature properties



Village Norm

■ Stormwater ■ Air Quality ■ CO2



\$83.38