

amendments over time than if we were to incorporate all of its provisions into the Zoning Ordinance.

Attorney Glowa then reviewed the proposed ordinance. The “Tree Ordinance “ would apply widely throughout the city. In retail, office, industrial and institutional areas, any project of 25, 000 square or more would be required to implement a “Tree Protection Plan” approved by the City Arborist. That approved “Plan” would be a condition of the issuance of any building permit authorizing the new construction. The affected areas are those same retail, office, industrial and high density residential zoning districts where the site plan and project review requirements of Sections 19.20 and 19.50 of the recently adopted Citywide Zoning Ordinance are imposed. Where a special permit is required under these sections, the Planning Board would be authorized to impose conditions based upon the Tree Protection Plan and the recommendations of the Arborist, but only after a public hearing at which interested persons could express their views on any such conditions. Two limited commercial areas, at the Kendall Square Urban Renewal area’s Cambridge Center and University Park near Central Square, would not be subject to the “Tree Protection Plan” requirements as these areas are also not subject to the site plan and project review procedures.

In the residential neighborhoods of the city, the same “Tree Protection Plan” would be required where multifamily or townhouse developments needing a special permit from the Planning Board are proposed. In the Residence B and Residence C zoning districts that special permit is required for any proposed project of six or more new housing units. The Residence B district is found principally in North and West Cambridge; the Residence C district is found in Cambridgeport. In the Residence C-1 zoning districts found in Mid-Cambridge, Riverside, and East Cambridge, a special permit is required where twelve or more new housing units are proposed on a lot. As proposed the special permit requirements would not apply to projects of the Affordable Housing Trust or other qualified projects for the construction of low and moderate income affordable housing.

Vice Mayor Davis asked if the ordinance would apply to renovations or just new construction. Mr. Barber said it would apply to only new projects except for multiunit residences being created in a building that is being changed from a nonresidential use.

Ms. Podgers asked what this would mean for someone with a large lot and whether the ordinance is a taking.

Ms. Glowa responded that the “taking” analysis does not apply to this proposal. In general, the types of projects covered are projects that require a special permit, and they already require design review under Article 19 of the Zoning Ordinance.

Ms. Glowa noted that the ordinance contemplates an amendment to the Zoning Ordinance.

Vice Mayor Davis asked in what areas of this city the ordinance would apply. Mr. Barber listed the following districts to which the ordinance would not apply. They include the MXD district, the University Park Development because they are excluded from Article 19. Residence A districts are excluded because multifamily housing is not allowed in Residential A districts.

Commercial and institutional projects are subject to the 50,000 square feet special project trigger and 25,000 – 50,000 square feet trigger for design review.

Vice Mayor Davis asked how many residential projects built in Residential C and Residential B districts during the last five years would have been subject to this ordinance. Mr. Barber responded that there were none over the last year, and approximately 2-3 over the last five years.

Vice Mayor Davis noted that it appears that the impact on residential projects would be quite limited. Mr. Barber agreed and said that the existing special permit already required for such projects has always allowed the Planning Board to look at the issue of tree preservation.

Vice Mayor Davis explained the process for City Council action on this proposal to the members of the public. She said that it has come to the Health and Environment Committee first to provide an opportunity to look in detail at the proposal. When this committee completes its consideration, the proposal will go back to the City Council for referral to the Ordinance Committee for public hearings.

Councillor Murphy stated that the proposed ordinance seems fairly limited in scope and impact with a reasonable balance of competing interests. He applauded the work of all involved.

Vice Mayor Davis then invited public comment, beginning with members of the task force.

Karen Schlomy, 3 Irving Terrace, member of the Tree Protection Task Force, said that Charles Sullivan has said that he does not believe that the Historical Commission has the power to landmark significant trees. Mr. Sullivan replied that the Historical Commission has already taken jurisdiction over landmarked trees. The Commission has landmarked one tree based on proceedings at the Historical Commission. The Commission has recommended another that the City Council did not act on. So the Commission does believe it has jurisdiction and has so acted. In the best of all worlds, the ordinance would designate a separate entity and procedure for saving trees. However, he is comfortable with the proposed ordinance and with the Historical Commission's power to landmark trees.

Karen Carmean, 1657 Cambridge Street, stated that both the Historical Commission and the Public Planting Commission have very full agendas. At some point another venue might be preferable. Trees are valuable in ways additional to historical

value. With regard to the Ordinance's exemption for affordable housing, the City needs to consider how much money trees save in energy costs.

Sam Warner, Tree Protection Task Force, said that it is obvious that there are many different opinions about trees. He believes this ordinance strikes a good balance.

Ms. Carmean said that the ordinance is valuable to owners. It provides a clear statement of the value of trees with information to potential purchasers and new buyers about how trees are valued in Cambridge.

Mary Otis Stevens, 6 Riedesel Road, said that from the point of view of sustainability, it would make sense for an arborist to ascertain the value of the tree. A standard of an eight-inch diameter at breast height is not sufficient. For example, Cambridge has many Norway Maples which are weed trees with shallow root systems. A survey of trees would be very useful. She suggested using the Boston Society of Landscape Architects.

Lydia Vickers, 45 Cherry Street, Area Four Neighborhood Coalition, stated that on the 238 Broadway site there are a number of beautiful oak trees and crabapple trees that should be preserved and would have to be cut down for the soccer field currently planned.

Alison Field Juma, 363 Concord Avenue, stated that the ordinance is very reasonable. She asked about the duration of the bond that an owner would be required to file before a building permit is issued. Vice Mayor Davis said that a five-year bond is required.

Richard Clary, Brookfield Street, North Cambridge Stabilization Committee, said that he does not believe that affordable housing should be exempted from this ordinance, especially with the affordable units as a part of inclusionary zoning in privately constructed multifamily buildings. For fifty years, to the west his house has enjoyed screen of trees on his neighbors property. He would like to see the ordinance apply to private trees to protect them as public shade trees and protected.

Skip Schloming, 102-R Inman Street, submitted a written statement from the Small Property Owners Association and summarized the statement (**Attachment B**). Maximum tree cover is not a valid goal; it would prevent gardening, endanger people and property. This is just the beginning of the regulation of all trees. The best locations for more trees are on the public streets. On the sidewalks there are many vacant spaces designed for trees.

Kathy Podgers, 149 Pearl Street, submitted a written statement (**Attachment C**). She spent a great deal of time in the wilderness and explained why she opposes the ordinance. The ordinance that is needed is one that addresses the management of public trees. She raised a concern about people who are allergic to trees. Trees act as water pumps to remove water from the ground. This ordinance will increase humidity. Trees

cause shade which can cause human depression. Real tree lovers want to see cities regulate woodlands, not private trees on private property. Ms. Podgers emphasized the importance of focusing on the proper maintenance of public trees. Cambridge has 17,000 public trees and one tree crew.

Ellen Mass, 104A Inman Street, Friends of Alewife, stated that Belmont is about to dig up eight acres of silver maple forest. She stressed the necessity of proper evaluation of the environmental impact of these actions.

Debby Kershner, 12 Laurel Street, spoke in support of the need to attend to public trees.

Vice Mayor Davis requested that staff look into the issue raised regarding the importance of looking at the particular type of tree in evaluating a tree's relative importance. She said that she is also concerned about the exclusion of affordable housing and how it relates to the inclusionary zoning units and the projects containing these units. Attorney Glowa said that inclusionary zoning does not fall within the definition of affordable housing exempted under the proposal.

Vice Mayor Davis said that she would like to strike provision exempting affordable housing.

Councillor Murphy asked whether it was discussed in the task force. Commissioner Peterson said that it was not. It was added by the City Manager in furtherance of the Council's overall goal of streamlining the process for building affordable housing.

Vice Mayor Davis submitted the following order:

ORDERED: That the City Manager and the City Solicitor be and hereby are requested to confer to prepare any necessary language to amend the proposed ordinance to eliminate the exemption for affordable housing from the proposed tree protection ordinance and to develop an alternate method to address affordable housing tree protection for consideration at the October 2nd meeting.

The motion passed without objection on a voice vote.

Vice Mayor Davis stated that she is also concerned about the exemption of the MXD District and University Park. Attorney Glowa stated that the City Council just voted to exclude these areas from the larger project review provisions in the revisions to the Zoning Ordinance. The way to change these exemptions would be to amend the Zoning Ordinance. Attorney Glowa also noted that the issue of qualitative tree protection is addressed in the requirement for a tree protection plan which goes to the arborist for evaluation.

Vice Mayor Davis thanked those present for their participation. The next meeting was scheduled for October 2, 2002 at 7:00 P.M.

On motion of Councillor Murphy the meeting was adjourned at 8:30 P.M.

For the Committee,

Vice Mayor Henrietta Davis, Chair

Additional Attachments

Katie Mazut, e-mail – Attachment D

Sue Carlson, e-mail – Attachment E

Susanne Moser, e-mail – Attachment F

“The Power of Trees” by Mark Simon – Attachment G

John Gintell, e-mail – Attachment H

05-20-02 DRAFT

AN ORDINANCE

Be it ordered by the City Council of the City of Cambridge as follows:

Title 8 of the Cambridge Municipal Code (Health and Safety) is hereby amended by adding the following new Chapter 8.66 (Tree Protection).

Chapter 8.66

TREE PROTECTION

Sections:

- 8.66.010 Short title
- 8.66.020 Statement of Purpose
- 8.66.030 Definitions
- 8.66.040 Applicability
- 8.66.050 Procedure for large projects
- 8.66.060 Tree Replacement
- 8.66.070 Tree Replacement Fund
- 8.66.080 Regulations
- 8.66.090 Enforcement
- 8.66.100 Severability
- 8.66.010 Short title

This Chapter may be cited as the Tree Protection Ordinance of the City of Cambridge.

8.66.020 Statement of purpose

The City Council hereby finds that the preservation of existing trees and the promotion of new tree planting is a public purpose that protects the public health, welfare, environment and aesthetics of the City of Cambridge and its citizens.

The urban forest serves a wide variety of functions, which promote the health, safety and welfare of residents. These functions include:

- (a) conserving energy, by providing shade and evaporative cooling through transpiration;
- (b) improving local and global air quality by absorbing carbon dioxide and ozone, absorbing particulate matter, and producing oxygen;
- (c) reducing wind speed and directing air flow;
- (d) reducing noise pollution;
- (e) providing habitat for birds, small mammals, and other wildlife;
- (f) reducing storm runoff and the potential for soil erosion;
- (g) increasing real property values; and
- (h) enhancing visual and aesthetic qualities that attract visitors and businesses.

8.66.030 Definitions

Building. A structure enclosed within exterior walls or firewalls, built, erected and framed of a combination of any materials, whether portable or fixed, having a roof, to form a structure for the shelter of persons, animals or property.

Certified Arborist. An arborist certified by the Massachusetts Arborists' Association or the International Society of Arboriculture, or any successor of either organization.

City Arborist. The City Arborist appointed by the City Manager, or any other Certified Arborist designated by the Commissioner of Public Works and approved by the City

Manager to exercise any of the authority granted to the City Arborist pursuant to this Chapter.

DBH (Diameter at Breast Height). The diameter of a tree trunk measured in inches at a height of four (4) feet above the ground.

Lot. A parcel of land in identical ownership throughout, bounded by other lots or streets, which is designated by its owner to be used, developed or built upon as a unit.

Mitigation Plan. A document to be included within any Tree Study submitted for a project where any Significant Trees are proposed to be removed from a lot, stating (i) why any Significant Trees are proposed to be removed from a lot, (ii) a description of the Replacement Trees proposed to replace the Significant Trees to be removed or the value of which is proposed to be paid to the City to be deposited into the Tree Replacement Fund, (iii) an estimate from a local nursery for the cost of purchasing, planting, watering and maintaining said Replacement Trees for a period of not less than five years or the value of which is proposed to be paid to the City to be deposited into the Tree Replacement Fund, and (iv) certification from a Certified Arborist that the proposed Replacement Trees and cost estimates for purchasing, planting, watering and maintaining said Trees are appropriate and reasonable.

Owner. For purposes of this Chapter, an owner shall be defined as set forth in the Zoning Ordinance, Title 17 of the Cambridge Municipal Code.

Replacement Trees. A tree or trees to be planted on a lot to replace any Significant Trees to be removed from the lot, or whose equivalent value is proposed to be paid to the City to be deposited into the Tree Replacement Fund instead of planting Replacement Trees

on the lot. The total DBH of Replacement Trees, or equivalent value, as applicable, shall be equal to or exceed the total DBH of the Significant Trees to be removed from the lot.

Significant Trees. Any tree or trees larger than 8" DBH which is on a lot or which has been removed from the lot within one year prior to the submission of a Tree Study to the City Arborist.

Tree Protection Plan. This plan may be either a separate drawing or part of a landscape plan, and shall include the following information:

- a) Drawings of tree protection measures and (i) their location on the lot, including Tree Save Areas, and the location, height and DBH of Significant Trees and an indication of which Significant Trees would remain on the site, or (ii) in the event that any Significant Trees are proposed to be removed, the location of those Significant Trees, and the location, height and DBH of Replacement Trees which are proposed to be planted on the lot if feasible, or (iii) in the event that Replacement Trees are not proposed to be planted on the lot, the total sum, as identified in the Mitigation Plan, to be paid to the City to be deposited into the Tree Replacement Fund, shall be required to be submitted together with the Tree Protection Plan;
- b) A schedule for planting the proposed Replacement Trees and a representation that such trees will be inspected and, if necessary, treated by a Certified Arborist once a year for five years; and
- c) Such other information as is required by the City Arborist pursuant to applicable regulations.

Tree Save Area. The area surrounding a tree which must remain undisturbed so as to prevent damage to the tree.

Tree Study. The information submitted to the City Arborist, which shall include a Tree Survey, a Tree Protection Plan, and, if applicable, a Mitigation Plan.

Tree Survey. A plan showing the location, type, height and DBH of all trees on a lot.

8.66.040 Applicability

This Chapter shall apply to all trees located on lots specified in the following section - § 8.66.050. This Chapter shall not apply to any project of the Affordable Housing Trust or otherwise for the construction of low- and moderate-income housing meeting the standards established pursuant to any City, State or Federal housing program designed to assist low- and moderate-income households.

8.66.050 Procedure for large projects

a. In any project which requires a special permit under §§ 4.26.1 – 4.26.3, §19.20, §11.12.1 §11.12.2, or §11.12.3 of the Zoning Ordinance, the application for the special permit shall include a Tree Study, which shall first have been submitted to the City Arborist not less than twenty-one (21) days prior to the submission of the application for a special permit. The Tree Study shall be reviewed by the City Arborist, who shall certify that he has reviewed it, indicating whether it is complete and complies with the applicable provisions of this Chapter and regulations promulgated thereunder. The City Arborist shall refer the Tree Study with his certification and recommendations to the Planning Board, to assist the Planning Board in establishing any conditions that may be required as a result of the findings of the Tree Study in connection with the issuance of a special permit.

b. Regarding any project which includes a building of 25,000 square feet or more and which is subject to the provisions of § 19.50 of the Zoning Ordinance, the

materials submitted to the Inspectional Services Department with the application for a building permit shall include a Tree Study, together with a certification from the City Arborist that the applicant has submitted the Tree Study for review to the City Arborist not less than twenty-one (21) days prior to the submission of the application for a building permit, and that the Tree Study is complete and complies with the applicable provisions of this Chapter and regulations promulgated thereunder. The owner of the lot shall be required to commit to comply with all provisions of the Tree Study and the applicable provisions of this Chapter and regulations promulgated hereunder in the application for a building permit.

8.66:060 Tree Replacement

If Significant Trees are to be removed from a lot in connection with the development of a project subject to the provisions of this Chapter, upon approval of any project subject to the provisions of § 8.66.050(a) of this Chapter by grant of a special permit from the Planning Board, or submission to the Inspectional Services Department of certification from the City Arborist under the provisions of § 8.66.050(b) of this Chapter, the owner of the lot shall either plant Replacement Trees on the same lot in accordance with the schedule set forth in the Tree Study, or he shall pay the estimated cost of Replacement Trees and associated costs for the maintenance of said trees pursuant to the Mitigation Plan, if applicable, to the City to be deposited into the Tree Replacement Fund. In addition, the owner of the lot shall, prior to the issuance of a building permit, post and file a bond with the City Clerk in the amount of the total costs set forth in the Mitigation Plan, but in no event less than five thousand dollars (\$5,000.00), with one or more sureties conditioned to the faithful observance of the

conditions and specifications of the Tree Protection Plan and, if applicable, the Mitigation Plan.

8.66.070 Tree Replacement Fund

There is hereby established a Tree Replacement Fund which shall be held by the City Treasurer in an account and administered in accordance with applicable provisions of the General Laws. Any payments into the Tree Replacement Fund required by § 8.66.060 shall be deposited in said Fund, and shall be used solely for the purpose of buying, planting and maintaining trees in the City.

8.66.080 Regulations

The Commissioner of Public Works shall have the authority to promulgate regulations to accomplish any of the provisions of this Chapter.

8.66.090 Enforcement

(a) Notice of Violations. Any person who violates any of the provisions of this Chapter shall be notified by the City Arborist of the specific violation by certified or registered mail, return receipt requested, or by hand delivery. The notice shall set forth the nature of the violation and a reasonable time period within which compliance must be had.

(b) Stop work order

(1) Upon notice from the City Arborist that work on any lot on which a Significant Tree is located is being performed contrary to any applicable Mitigation Plan or Tree Protection Plan or any provision of this Chapter, such work shall be immediately stopped by the Commissioner of Inspectional Services or his designee. The stop work order shall be in writing, and shall be given to the owner of the lot involved, or to the

owner's agent, or to the person doing the work, and shall state the conditions under which work will be permitted to resume.

(2) Any person who shall continue any work in or about said lot after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be liable to a fine of not more than \$300.00. Each day during which a violation exists shall constitute a separate offense.

(c) Injunctive relief. Whenever there exists reasonable cause to believe that a person is violating any applicable Mitigation Plan or Tree Protection Plan or any provision of this Chapter, the City may institute a civil action for a mandatory or prohibiting injunction in a court of competent jurisdiction ordering the defendant to correct the unlawful condition upon or cease the unlawful use of the property.

(d) Failure to replace trees or make payment. Each failure to replace a Significant Tree or make a payment into the Tree Replacement Fund or to post and maintain a bond in accordance with § 8.66.060 shall constitute a separate violation of this Chapter for which there shall be a fine in the amount of \$300.00. Each day such violation continues shall constitute a separate offense.

(e) Alternative penalty. As an alternative to any fine stated in this § 8.66.090, citations may be issued pursuant to G.L. c. 40, § 21D, assessing a fine of \$300.00 for each day the violation is committed or permitted to continue. The Commissioner of Public Works or his designee, the City Arborist, employees of the Department of Public Works and Police Officers shall be the authorized enforcement personnel.

8.66.100 Severability

The provisions of this Chapter are severable. If any section, provision or portion of this Chapter is determined to be invalid by a court of competent jurisdiction, the remaining provisions of this Chapter shall continue to be valid.

Small Property Owners Association

PROVIDERS OF 75% OF ALL RENT HOUSING
P.O. Box 398115, CAMBRIDGE, MA 02139 617-354-2358

25 July 2002

TESTIMONY regarding Proposed Tree Protection Ordinance

The Small Property Owners Association strongly opposes the proposed tree ordinance for the following reasons:

1. **The ordinance's stated goal – to establish and maintain maximum tree cover – is not a valid goal** that most Cantabrigians accept or would accept if they understood its consequences.
 - a) **Maximum tree cover** would prevent or severely limit gardening – shrub, flower and vegetable gardening – the kinds of beautification activities that give many residents much pleasure and relaxation. Even grass cannot be grown under most trees.
 - b) **Maximum tree cover would endanger people.** Trees in cities do not grow like trees in the country. With more open space in the city, trees grow large and wide, with heavy limbs subject to rot and breakage during storms, endangering people as well as property.
 - c) **Maximum tree cover would endanger property.** Larger trees near houses – the trees most likely to cause conflict with this ordinance – eventually undermine foundations, continually clog rain gutters and lead to moisture damage in properties, and on a regular basis they cause property damage from branches brushing against houses or from limbs falling on houses.
2. **Adoption of the proposed ordinance will increase the danger of trees causing personal and property damage.**
 - a) With the costs associated with petitioning to do anything with a “significant” tree, i.e., any tree over 8-inch diameter, **owners will be deterred** from trimming, pruning or cutting down trees that are endangering people or property.
3. **Adoption of the proposed ordinance will backfire and subvert its goals.**
 - a) **People will simply cut down trees** before they reach the 8-inch diameter breast height size that brings them under the ordinance's protection.
 - b) **Owners planning** an affected construction project, or owners planning to sell their property and make it valuable for an affected construction project, **will cut down trees well in advance** of their project or sale date, avoiding the ordinance's one-year moratorium on tree-cutting prior to an affected project's commencement. Virtually all large projects take more than a year's planning prior to filing for a permit.

4. **Most of the claimed benefits of trees and a maximum tree cover are simply not true.**
 - a) **Trees do not reduce noise pollution; sound barriers do.** If trees did stop noise, we would see trees along major highways and not tall concrete walls to block the highway noise hitting nearby residences.
 - b) **A few more city trees will have no impact on oxygen, ozone or carbon dioxide locally or globally.** One hundred years ago, Massachusetts and New England were 20% trees and 80% open fields under cultivation. Now the situation is reversed. We have 80% trees and 20% open space. A few more trees is a drop in the bucket, nothing.
 - c) **Cultivated gardens – flowers, vegetables, and shrubs – stop storm runoff and soil erosion just as well as or better than trees.**
 - d) **More trees – resulting in fewer cultivated gardens – would reduce property values** and reduce the visual and aesthetic qualities of Cambridge that would attract visitors and businesses.

5. **The best location for more trees is on the public streets of Cambridge, not on people's properties near their houses.**
 - a) The hot streets and sidewalks need shading most of all, to encourage pedestrians, not more trees in household yards that are already cooler.
 - b) Our own street – Inman Street – has 15 empty trees spaces in the one block between our house at 102 Inman and Inman Square. These spaces are already demarcated and set up for tree planting along the sidewalk. There is no reason to impose a burden on private owners when it can be best taken care of by the city on public ways.

6. **Private owners using their own best judgment in how to deal with their own private trees will result is the best balance among the various needs for shading of homes, open sunlight for gardens, and proper pruning or cutting for safety. Such complex decisions on many properties cannot be made by a committee.**

7. **The proposed ordinance will INCREASE the cost and delays of new construction of private housing, which is already overburdened with costly regulatory obstacles and delays.**
 - a) Cambridge claims to be in favor of increasing housing production and lowering housing costs. This ordinance simply adds one more cost and one more delay.

8. **If the burden of planting public trees is too costly for all the city's taxpayers to pay for it, then it is MUCH too costly to impose that burden on a few private owners.**

9. **The extortion from private owners of a payment to a Tree Protection Fund for public use is very likely unconstitutional. It is clearly a device to impose a public burden on a few private owners, a practice already condemned by the U.S. Supreme Court.**

10. Private owners are paying taxes on their trees. They should have control of their trees.

11. The ordinance's likely expansion in the future will cause owners not presently affected by the ordinance to cut down right now any potentially future-affected trees on their properties.

- a) We have already seen earlier drafts of a Tree Ordinance that reveal the ultimate desire of this ordinance's proponents: to stop all tree removal and regulate all tree maintenance on private property.
- b) This current draft already anticipates its expansion to more properties after an initial trial period. All Cantabrigians are being warned and will take action accordingly.

FRANKLY, THIS PROPOSED ORDINANCE IS ABOUT AS BADLY CONCEIVED A PROPOSAL AS WE HAVE SEEN IN A LONG TIME.

It illustrates the law of unintended consequences, how laws backfire. It illustrates the futility of trying to regulate microscopically the activities that tens of thousands of private owners presently manage to do perfectly well by themselves in many small acts every day of their lives.

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TESTIMONY

regarding the Proposed Tree Protection Ordinance

July 25, 2002

by Kathryn S. Podgers at Peaplants@aol.com

Why I Oppose The Proposed Tree Protection Ordinance

The proposed tree protection ordinance seeks to "protect" individual mature trees on private property while ignoring the health and safety of the public.

Cambridge has approximately 17,000 trees which are publicly owned. We need an ordinance that addresses the proper and responsible management of these publicly owned "city" trees in order to protect the health and safety of the public. We do not need a tree protection ordinance that regulates trees on private property.

Q. 1. Doesn't the tree protection ordinance protect the public health and safety?

A. Not really. The proposed tree protection ordinance does not address the management of the 17,000 publicly owned trees. Instead it proposes to "regulate" not manage the trees of a certain class of private property owners.

Q. 2. Isn't it true that trees are healthy for people?

A. Not really. It is not that simple.

- Every year people are injured or killed by trees.
- Trees cause billions of dollars in property damage every year.
- 250 million is lost every year by people who miss work because of allergies to certain trees.
- School children are increasingly being diagnosed with asthma caused by tree pollen.

These health and safety problems can be minimized by the proper management of the city trees. Preventing people from managing the trees in their own yards will endanger not help the health and safety of people.

Q. 3. Don't we need more trees in Cambridge to get more oxygen into the air and to clean the air of pollutants?

A. Not really. All green plants recycle air. Trees and other plants do take in carbon dioxide and release oxygen, but they also take in oxygen and release carbon dioxide.

Q. 4. Don't we need more trees to control the water runoff and to prevent erosion?

A. Not really. Trees are not the only plants that control erosion. We presently have 17,000 city trees. We have plenty of trees on public property and do not need to "take" privately owned trees for this purpose.

Q. 5. Don't trees effect cooling by releasing water into the air through transpiration?

A. Yes they do. Do you know how much water a mature tree releases into the air each day? 100 gallons! How does the tree do that? It pumps the water out of the ground.

- That means that each mature tree removes 3000 gallons of water from the ground each month.

- Cambridge has thousands of mature trees;

- 10 mature trees remove 30 thousand gallons of water monthly,

- 1000 mature trees remove 3,000,000 gallons of water from the ground each month.

Q. 6. It does seem like a lot but doesn't the environment need it?

A. No it doesn't. The evaporation of ocean waters accounts for 88% of all moisture in the air as a result of evaporation. Because we live right next to the Atlantic Ocean we have plenty of moisture in the air in Cambridge.

Increasing the humidity by regulating trees on private property is not necessary. In fact most people would like to decrease the humidity levels. In addition many trees suffer stress because there is not enough water in the ground for all the trees. The best approach is to manage "city" trees properly in relation to environmental conditions.

Q. 7. Don't trees lower air conditioning costs?

A. Yes. The average homeowner could save \$30 yearly from a properly placed shade tree.

- But too many trees can result in the growth of mold, fungus, lichens and other parasites.

- Sun loving flowers like roses, peonies and irises, fruit like grapes, cherries and peaches and vegetables like tomatoes, beans and green peppers need full sun to grow.

If there are too many shade trees people will suffer economic loss because they cannot grow their own fruits and vegetables in the summer and suffer depression from living in deep shade rather that get good exercise and enjoyment from growing beautiful flowers.

Q. 8. Why are you against trees?

A. I am not against trees. I oppose the tree protection ordinance because it fails to protect trees just as it ignores the health and safety of people. Like most "tree protection ordinances" this one was prompted not from a desire to care for trees, but to regulate what private property owners wanted to do with their trees. Professionals who seek to care for trees would prefer to see an ordinance that would manage "woodlands" and not focus on individual "significant" trees on private property.

Q. 9. You keep using the word management instead of protection, what do you mean by that?

A. Trees need proper care and attention to thrive. Healthy mature trees can be beautiful, but when trees do not receive the proper care they fail. In other words they become "dangerous trees". Dangerous trees cause loss of life, personal injury, illness due to allergies and asthma, property damage and

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power outages every year. The proper management of our city trees would minimize this. Failure to do so exposes the city to serious liability.

Q. 10. Why would the city be liable for the damage caused by trees, isn't the damage caused by "dangerous trees" an act of nature?

A. No. Dangerous trees present a foreseeable risk. A review of legal literature on the subject shows that both property owners and cities and municipalities have been held liable for loss of life as well as for property damage. Cities like Cambridge must develop a proper public tree management program. Failure to do so is negligent.

In summary what the city of Cambridge needs is a tree ordinance that addresses the management of the 17,000 publicly owned trees. We need to have city resources applied to this and not diluted by regulating what private property owners do with the trees in their yards. Identifying dangerous trees and minimizing risk to the public health and safety should be the priority.

PS: As a home owner and taxpayer in Cambridge for over 25 years I believe that I and my neighbors have generously supported Cambridge public schools, the police and firemen, city workers and city councilors. You all enjoy good pay and benefits don't you? I surely didn't expect you would take our hard earned tax dollars and instead of managing the city's trees spend time on a scheme to deprive us of our property rights to manage our own backyards. Recently the police had to respond to a dangerous tree that dropped a huge limb causing an accident. Please defeat this "tree protection ordinance" and instead order that the city maintain the PUBLIC trees in a safe and healthful manner.

D

Garrett Simonsen

From: KMazer7086@aol.com
Sent: Thursday, July 25, 2002 10:31 AM
To: HDAVIS@CI.CAMBRIDGE.MA.US
Subject: Health and Environment Committee

Dear Henrietta,

Thanks so much for inviting me to participate in the Cambridge Health and Environment Committee meeting tonight.

I am unable to attend tonight's meeting but I would like to participate in future meetings/concerns. I am interested in the City tree policy as Art and I have several great Hemlock trees infected with a terminal (contagious?) disease, and we hate to lose them.

I have just retired from my position as Childhood Lead Poison Prevention Outreach Coordinator with the US EPA. I am spending the first few months of retirement recreating and exploring volunteer options. I have an interest in community organization, Children's health, occupational health, environmental health.

Katie Mazer
214 garden Street
Cambridge, MA 02138
phone 617 354-6140
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Garrett Simonsen

From: Sue Carlson [suzyq@hsph.harvard.edu]
Sent: Tuesday, July 23, 2002 10:09 AM
To: hdavis@ci.cambridge.ma.us

Thank you for your letter of July 17 re: the meeting of the Health and Environment Committee on July 25. I will be unable to attend.

Unfortunately the map covering zoning districts was not enclosed.

My immediate personal concern is a dead tree in the playground of the Fitzgerald School and a dead tree newly planted last summer as part of the new landscaping job. Larry Acosta had told me that the landscaping contractor had an obligation to replace dead plantings through June. Since that didn't happen, the tree should be replaced by the City.

I hope these two issues will be brought up at your meeting.

Many thanks

Suzanne Carlson
Harvard Center for Population and Development Studies
9 Bow St., Cambridge, MA 02138
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e-mail: suzyq@hsph.harvard.edu

F₁

Garrett Simonsen

From: Susi Moser [smoser@ucsusa.org]
Sent: Wednesday, July 24, 2002 8:28 AM
To: hdavis@ci.cambridge.ma.us
Subject: tree ordinance discussion

Dear Henrietta -

I got your invitation to the tree ordinance discussion and won't be able to come, but here are some thoughts on it:

Obviously, and generally, I strongly support any effort to green the city, to maintain the trees it has, and to increase the total number of trees - for aesthetic, noise reduction, habitat, and climate/cooling reasons. But why not go a step beyond what you've got here right away?

1. I think the trigger size of development beyond which tree protection and maintenance must be pursued is too high. The city will be the greener, the lower we set that limit. [In discussion you may want to give people an existing building or development site for comparison - it's hard to imagine 25,000 square feet. And then also provide a smaller building to compare, so people can see what it would mean to lower the square footage.] I suggest 15,000 sq. ft.

2. The ordinance calls for a "Tree Protection Plan" that will be required and approved by the City Arborist, but you do not specify what ought to be in it - why miss the opportunity to at least state some minimal requirements, such as:

- * existing, healthy trees should be protected/maintained to the extent feasible ("build around existing trees")
 - * any trees removed must be replaced by robust, native, adaptive (species will have to deal with higher temperatures, so, no point in putting in anything that will be dead in ten years), adult trees (i.e., of at least 10 years of age)
 - * protection plan must specify maintenance regime and commitment to replacement if trees die
- (and I'm sure the Arborist can help you with other minimal requirements that ought to be covered in this plan)

3. Why stop at trees? Trees are great, but what we really all need besides the benefits from having trees is GREENSPACE. So, why not require that such large developments (likely to be businesses, industries, or apartment buildings with lots of people who want to get out during breaks etc.) not just plant trees, but along with the trees create nice, inviting green spaces near the buildings entrances and exits (with benches, trash bins, picnic tables, maybe some water fountain etc.) for the people who live and work there to enjoy.

4. Finally, I wonder if you can come up with some mutual agreement with the folks managing the two spaces that are exempted from this ordinance and the zoning apparently. I don't know enough about them to suggest anything that could be done there, but exemptions are always dangerous. others may seek them. So, why not put in there that you will pursue opportunities for greening the city in those exempted areas independently. [Not sure how politically feasible this is.]

I hope these are helpful.

Look forward to seeing you next week with Amy on the climate issues.

Cheers,

Susi

Susanne C. Moser, Ph.D.
Staff Scientist
Global Environment Program

F2

Union of Concerned Scientists
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Tel.: (617) 547-5552 ext. 244
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Email: smoser@ucsusa.org

"In this world of extremes, we can only love too little."
Rich Cannarella

The Power of Trees

BY MARK SIMON

ON ANY GIVEN day in Sacramento, trucks travel the county delivering free trees to suitable homes. The expectant families are preparing proper holes in which to plant the new arrivals. Perhaps a sycamore will provide morning shade along the east-facing side of the house. Or maybe a red oak will be planted on the west-facing side, providing shade later in the day. The Sacramento Shade Program furnishes households and small businesses with up to ten trees—paid for by the Sacramento Municipal Utility District (SMUD).

Currently in its 11th year, the Sacramento Shade Program has delivered 300,000 shade trees to over 100,000 Sacramento County residents. After about three years, as the trees fill out, residents find they can turn down their air conditioners during the city's long hot summers, and utility bills drop accordingly. It is estimated that the rate-paying owners of the municipal utility save up to 40 percent on air conditioning bills, or an average of \$90 annually, for each tree. SMUD in turn saves \$1.5 million by not having to provide or purchase additional power.

The Shade Tree Program took root in 1990, when SMUD faced mounting demands for energy during the summers, but wanted to avoid building additional power plants or purchasing power from other companies. (In that same year county residents voted to close the Rancho Seco nuclear plant that had been supplying two-thirds of the district's power.) The nonprofit Sacramento Tree Foundation (STF) came forward with shade trees as one solution for reducing the summer power peaks. A highly successful model partnership soon developed. SMUD, the country's sixth largest community-owned electric utility, provides total funding for trees and program staff, while the Tree Foundation offers instruction and support,

manages the staff and daily operations, and purchases, maintains, and delivers the trees.

Trees are not simply requested and dropped off. Interested customers begin by attending a neighborhood meeting where they learn about proper tree planting and care. A "community forester" then visits the property and identifies appropriate locations (western exposures are best) and recommends species for maximum energy savings. Residents select from 38 tree species, from large canopy trees like the red maple to



A community forester

small canopy ones like the crepe myrtle. Before the trees are delivered, recipients sign an agreement to provide proper care for the life of the tree. Sacramento Shade Director Baldeo Singh says the process is not unlike adopting a child. The program employs 16 full-time staff, including six community foresters and four nursery staff.

While trees are the primary tool in the SMUD-STF campaign, the promotion of light-colored roofing materials has also helped to lower the city's energy use in the summer months. The overall efforts of the Shade Program are credited with

reducing the "urban heat island" effect created when surfaces like buildings and pavement reflect heat back into the air.

Because of its proven success, the Sacramento Tree Foundation's partnership with SMUD is being duplicated across California—in the quickly growing foothill city of Roseville, the established farming town of Modesto, and mega-urban Los Angeles County.

Sacramento is also one of eight "Cool Communities," where NASA is studying the urban heat island effect. To determine where new trees are most needed, the Tree Foundation consults infrared aerial images. These images—supplemented by temperature readings on the ground taken by schoolchildren—pinpoint the "hotspots," which predictably are in heavily developed areas lacking tree cover. With this information, and the strong support of local elected leaders, the Tree Foundation has undertaken the creation of a regional urban forest master plan that will double the tree canopy of Sacramento and adjacent communities over the next decades.

"Forests are long term," reminds Ray Tretheway, STF's executive director. Fortunately for Sacramento, its residents have a deep attachment to their trees. In return for their stewardship, the trees of this capital city play an active role in conserving energy, strengthening communities, and creating a healthier urban environment. ♻️

Mark Simon is a former staff member at the Sacramento Tree Foundation and the author of its Neighbor Woods Guidebook. He currently does community development work.

SMUD Shade Program, MS A203, 6301 S Street, Sacramento, CA 95817-1899, 800/924-5325, www.smud.org/sacshade. Sacramento Tree Foundation, 201 Lathrop Way, Suite F, Sacramento, CA 95815, 916/924-TREE, www.sactree.com.

H1

Received: from smtprelay7.dc2.adelphia.net [64.8.50.39] by Farley.CI.Cambridge.MA.US with (SMTPD32-7.05) id AB1D474B008E; Wed, 24 Jul 2002 17:24:45 -0400

Received: from shore.net ([24.48.255.94]) by smtprelay7.dc2.adelphia.net (Netscape Messaging Server 4.15 smtprelay7 Dec 7 2001 09:58:59) with ESMTP id GZRVH700.7CW; Wed, 24 Jul 2002 17:24:43 -0400

Message-ID: <3D3F1B27.C04C3184@shore.net>

Date: Wed, 24 Jul 2002 17:25:06 -0400

From: John W Gintell <gintell@shore.net>

X-Mailer: Mozilla 4.74 (Macintosh; U; PPC)

X-Accept-Language: en

MIME-Version: 1.0

To: Henrietta Davis <HenriDavis@aol.com>, dlopez@ci.cambridge.ma.us

CC: "D. Margaret Drury" <MDrury@ci.cambridge.ma.us>

Subject: Health and Environment committee - tree ordinance

Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

X-RCPT-TO: <dlopez@ci.cambridge.ma.us>

Status: U

X-PMFLAGS: 34078848 0 1 P26E10.CNM

I see there is a public hearing on the proposed tree ordinance. I am not able to attend but have some comments:

A general comment

When there are hearings on proposed ordinances, I think the text of the ordinance should be easily available on the city web site so that people can see it ahead of time. I searched the city web site and couldn't find it. I've seen several instances of this ordinance from Karen Carmean and the Tree project but I wouldn't know how they correspond to what is being "heard".

Comment about enforcement

A large portion of this ordinance deals with existing tree protection at construction projects and includes a process for handling it. I don't think this (or any ordinance) should be passed unless there is a commitment by the city manager to provide the direction and budget to administer and enforce it. Creating ordinances that are not enforced

sends a bad message to everyone.

As it says on the inscription of city hall:

God has given Commandments unto Men. From these Commandments Men have framed Laws by which to be governed. It is honorable and praiseworthy to faithfully serve the people by helping to administer these Laws. If the Laws are not enforced, the People are not well governed.

I would hope that this (not the inscription) gets covered in the hearing.

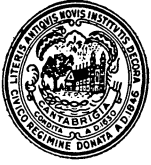
Suggestion that I think may not be in the ordinance

Many of the trees in Cambridge are at the edge of private property and owners are often negligent in caring for them for many reasons which include not knowing what to do. What could the city do to help this situation? - get tree maintenance and planting literature - request advice from Arborist before finding a private vendor to do the work - subsidies for planting street trees - grants or help to a neighborhood or block for dealing with all the trees on a block (economy of scale could save people of money and encourage tree improvement.

I think something like this could have great payoff.

My own experience is that I had 3 ash trees and 2 maple trees (not Norway) on my property. The Ash trees and 1 Maple are all dead and gone. Now I have some far inferior Norway maples that appeared there and I let grow. Perhaps the good trees could have been saved if I knew what to do or where to get competent advice. I and the rest of the city would have been better off.

John Gintell
9 West St



City of Cambridge

O-25
Amended Order
IN CITY COUNCIL

September 9, 2002

VICE MAYOR DAVIS
COUNCILLOR GALLUCCIO
COUNCILLOR MAHER
COUNCILLOR MURPHY
COUNCILLOR REEVES
COUNCILLOR SIMMONS
MAYOR SULLIVAN
COUNCILLOR TOOMEY

ORDERED: That the City Manager and the City Solicitor be and hereby are requested to confer to prepare any necessary language to amend the proposed ordinance to eliminate the exemption for affordable housing from the proposed tree protection ordinance to report on what the financial and feasibility of elimination of the exemption and to develop an alternate method to address affordable housing tree protection for consideration at the October 2nd meeting.

In City Council September 9, 2002.
Adopted as amended by the affirmative vote of seven members.
Attest:- D. Margaret Drury, City Clerk.

A true copy;

A handwritten signature in black ink that reads "D. Margaret Drury".

ATTEST:-

D. Margaret Drury
City Clerk



City of Cambridge

O-25
Original Order
IN CITY COUNCIL

September 9, 2002

VICE MAYOR DAVIS
COUNCILLOR GALLUCCIO
COUNCILLOR MAHER
COUNCILLOR MURPHY
COUNCILLOR REEVES
COUNCILLOR SIMMONS
MAYOR SULLIVAN
COUNCILLOR TOOMEY

ORDERED: That the City Manager and the City Solicitor be and hereby are requested to confer to prepare any necessary language to amend the proposed ordinance to eliminate the exemption for affordable housing from the proposed tree protection ordinance and to develop an alternate method to address affordable housing tree protection for consideration at the October 2nd meeting.

S-260

Committee Report #2

Committee Report from Vice Mayor Henrietta Davis, Chair of the Health and Environment Committee, for a meeting held on July 25, 2002 for the purpose of discussing a proposed tree protection ordinance.

In City Council September 9, 2002

**REPORT ACCEPTED.
PLACED ON FILE.**