



# CAMBRIDGE CITY COUNCIL

Quinton Y. Zondervan  
*City Councillor*

To: Donna Lopez, City Clerk  
From: Quinton Y. Zondervan, City Councillor  
Date: June 14, 2018  
Subject: Recommendations for the Urban Forest Master Plan Task Force

2018 JUN 14 PM 2:50  
OFFICE OF THE CITY CLERK  
CAMBRIDGE, MASSACHUSETTS

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Please place the attached recommendations to the Urban Forest Master Plan Task Force on the City Council agenda for the June 18, 2018 meeting.

Thank you.



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## 1. Introduction

Dear Colleagues,

Our tree canopy is in trouble. For the last few years as a community activist and nonprofit leader I've been in conversation with many experts and advocates for trees, and created the Cambridge Trees Advisory Committee to explore and respond to the canopy crisis. We advocated for the Urban Forest Master Plan Task Force to be created, working with Councillor Devereux, and I'm confident they will be successful. Many ideas were discussed and considered over that time, and I would like to offer a distillation of those ideas to the task force, without prejudice, so they have them available during their deliberations. Thank you.

## 2. Ideas to increase our tree canopy

- Prioritizing tree planting in neighborhoods identified by the CCVA as particularly [vulnerable to heat](#), including East Cambridge, The Port, Cambridgeport and Alewife.
- Replacing dead or removed trees in parks in order to restore them to their original design.
- Encouraging DCR to plant more trees along the Charles River on state property in Cambridge.
- Extensively cataloguing and databasing not just existing trees but all tree wells and other new street tree opportunities.
  - Implementing tree labeling as proposed in a winning participatory budget [proposal](#) from PB4 to plant 100 trees.
  - Tracking natural gas leaks, which can damage trees that are in close proximity.
  - Tracking historical tree data in the City's tree database.
  - Conducting frequent tree canopy studies using LiDAR flyover data in order to better understand how the canopy is changing over time.



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- Requiring developments to put in more trees and to take better care of them by e.g. guaranteeing 3 years of watering minimum, and additional watering during droughts.
- Adopting [Low Impact Design \(LID\)](#) Stormwater practices in street and sidewalk design.
- Improving planting conditions, installing bigger tree wells, more careful species selection, and deep watering of newly planted trees to give them the best chance at succeeding.
- Maintaining and upgrading existing tree wells to ensure effective collection and absorption of stormwater runoff
  - Lowering or removing wooden curbs and raised planting beds
  - Breaking up all impervious surfaces in tree wells.

### **3. Ideas to better maintain our tree canopy**

- Encouraging preventative maintenance best practices by establishing a large scale program for owners of private property to encourage and provide city assistance with the timely pruning or removal of damaged trees as well as proactive pruning, “storm proofing”, and other regular maintenance to extend the life of their trees.
- Adding irrigation to public parks where it does not already exist, and repairing existing systems that are broken, including Linear Park.
- Requiring large special permit projects to include irrigation for adjacent street trees.
- Exploring additional ways to water and care for public shade trees during the increasingly hot summer months, including encouraging businesses to water trees in front of their premises (or volunteering access to their water supply for others to do so), asking the Fire Department to assist with watering during droughts, and educating the public through public service announcements, City Manager’s newsletter, and other available channels of communication.
- Prepare a drought response plan which is implemented upon well defined criteria, potentially including:
  - Watering small street trees at least once weekly during periods of intense drought.
  - Enlisting the help of volunteers to accomplish extra watering during droughts.
  - Including a “Tree in distress” option within the See Click Fix app so that residents can report trees that are in need of attention.
  - Expanding the “Tree Ambassador Water-By-Bike” program and consider ways to improve efficiency.
- Reducing winter salt application whenever possible, and substituting brine and/or beet juice for road salt in the winter, especially in the parks and sidewalks. Salt used to maintain the roads eventually enters the soil, which makes it harder for roots to uptake



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water. Salt also enters the air, where it can coat the leaves and further dessicate the tree. Sodium chloride is particularly damaging in this way.

- Reducing winter plowing damage to trees

## 4. Ideas to strengthen legal protections for trees

- Full compliance with [MGL Chapter 87](#), in particular sections 1,5, and 7, by having hearings for public trees within 20' of the sidewalk or for trees otherwise impacting the public way.
- [MGL Chapter 87, Section 4](#), states that approval from the mayor is required to cut down a public shade tree if written objection was received at or before the hearing. In Cambridge this is not the actual practice, with the final decision essentially being delegated to the City Manager. Explicit Council or Mayoral approval could be considered instead and might be more strictly in compliance with the law.
- Pursuing prosecutions under [MGL Chapter 87, Section 11](#) which provides for 6 months imprisonment or no more than \$500 fine for destroying a tree not owned by the perpetrator.
- Reducing large tree removal on private property by requiring that the work be done by licensed, bonded contractors who have a valid tree removal permit (similar to a [building permit](#)), and have been informed of the city's interest in keeping large healthy trees as much as possible (similar to [leaf blower regulations](#)).
  - Always granting such a permit for the removal of a dangerously unhealthy, dead or dying tree. Requiring a compelling reason for removing large healthy trees, such as the tree irremediably being in the way of otherwise permitted construction work.
  - Enforcing the [tool truck permit](#) requirement from the Traffic Department if the work requires occupying road space (e.g. a crane or truck).
  - Enforcing the [sidewalk obstruction](#) permit requirement from Department of Public Works if the work requires blocking the sidewalk.
  - Instructing Cambridge Police to stop the work until valid permits have been obtained.
  - Charging a significant fine for unpermitted tree removal.
- Updating the Tree Ordinance by:
  - Treating all public trees the same as public shade trees, [as defined by state law](#) by requiring a hearing before cutting them down.
  - Instituting canopy volume replacement instead of simple 1 to 1 caliper inch replacement.
  - Publishing the tree fund balance and spending on a regular basis.



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- Protecting the large, mature trees, wherever they may happen to live, public or private land, and ascribing them their [true economic value](#).
- Considering [Newton's Tree Preservation Ordinance](#) as an example.
- Considering [Seattle's comprehensive tree ordinance](#) as an example, including [Tree Service Provider registration and guidelines for arborists](#).

## 5. Selected images submitted by constituents

We have received hundreds of images from citizen activists documenting recent canopy loss in Cambridge. Please see some representative examples, below.





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November 26, 2017

15 Cut Down

Linear Park

October 20, 2017

10 (?) Cut Down

RC Kelley St





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April 24, 2018

9 Cut Down

Smith Place



January 04, 2018

Over-salting

Linear Park

