

Somerville Climate Forward

Natural Systems Working Group Meeting #1

August 17, 2017

Attendance

- Amy Mertl
- Karl Thidemann
- Micah Davison
- Ona Ferguson
- Patrick Herron
- Yo Yi Chen
- Julie Wood
- Tori Antonino
- Luisa Oliveira (city staff)
- Arn Franzen (city staff)
- Vanessa Boukili (city staff)
- Oliver Sellers-Garcia (city staff)
- Hannah Payne (city staff)

Review and revise draft vision

- Change “urban system” to “built system”
- Can we make the vision less passive?
- Change “adapt” to “resilience”
- “Increased” benefits

Review draft prioritization criteria

- Add soil to the list of ecosystem components in E1
- Is there a criterion related to benefits that are greater than just Somerville? How do we capture benefits that feed into a regional system?
- Green solutions tend to have more flexibility than hardscaped solutions—is there a way to evaluate that?
- Is there a way to capture biodiversity?

Idea brainstorm

- Riparian wetlands on Mystic River
- Continue to use parks to capture stormwater
- Parks provided many resilience benefits during and after Hurricane Sandy in New York.
- What does a resilient planting palette look like in the future? Plants will need to be able to withstand hotter temperatures and changes in precipitation patterns.
- How do parks work as tools for adaptation? Stormwater parks: provides amenities when dry but can totally flood.
- Reduce impervious cover. Road diets. Where are the areas where we could reduce the width of the roads?

- Providing arborist / botanical support for homeowners for those who remove pavement on properties
 - Trainings on how to enhance green and natural systems on your property
- More trees and drainage on the bike path so that it can be used in more climates.
- Daylighting the Miller's River—is this possible?
- Require developers to plant trees from priority list of species.
- Create preparedness coalitions that are focused on different themes every year - stormwater management could be a topic.
- Informational signage about sewer separation projects to help educate residents on need for and benefits of projects.
- Using the city cable channel to share information about urban forest or depaving.
- Tax benefit for reducing impervious surface - stormwater utility?
- Inspectional services: how can we help landowners better maintain private trees? For example, prevent people from paving right up to tree trunk?
- Somerville's progressive identity is a benefit. Community should feel ownership over whether the city is succeeding or failing on goals. Could we set up a dashboard that tracks progress on meeting goals or set up a competition between other cities or between neighborhoods?
 - How well are we doing compared to neighbors? Use this as motivation for action.
- Semi-permeable pavers for parking
- Identify easy reasonable solutions to daily problems.
- Education will need to be a big part of solutions. Can we create a land stewardship program where you can learn how to take care of plants and trees, learn what to plant and how to install a rain barrel?
- Think about very small open spaces, e.g., traffic islands. Use perennial, drought tolerant plants.
- Would you be able to have a water well? Is there an aquifer that we could tap into? Could it be used for irrigation?
- How can natural systems help with air pollution, especially around 93 and the equity and environmental justice issues there? Looking for examples of other cities that have engaged vulnerable populations on addressing their vulnerabilities through natural solutions. Who is not having a voice in decision making? Can we reduce the disproportionate impacts of poverty?
- Reduction in impervious cover helps in all seasons.
- What is the capacity for water infiltration? Where are the areas where depaving should be more of a priority?
- Most existing buildings in Somerville are not structurally sound for green roofs – solar is better option. Can we encourage green roofs on new construction?
- Could we be food solvent?
- Focus implementing solutions on low income housing areas: you can have some of the biggest impact there. Prioritize areas that have more need.
- Eliminate use of pesticides.
- Curbside compost.
- Use biochar for tree planting (see Cambridge)
- More of an urban forest along the Community Path. Can we build more natural connections to this corridor?
- More with floodplain management along the Alewife and the Mystic. Opportunity for living shoreline?
- Food forest – regenerative agriculture – donating fruit trees
- Tree planting volunteer programs (see New Haven)

- What's the biggest bang for your buck (at different price levels) for different interventions? For the homeowner and landowner if you have \$0 – 1000, what's the best thing to do?
- Look at climate change solutions that are working in a comparable density. What is practical here? What is the effect that it is having?
- What can be done with private open space?
- Need better trees that grow faster – the city is focusing on location to prioritize areas with lower tree canopy now and providing good soil and permeable pavement around trees to facilitate growth.