

PREPARING FOR CLIMATE CHANGE IN DOVER

GAINING INSIGHTS AND CHARTING A COURSE

Green Infrastructure and Land Use Regulations Discussion Notes

November 17, 2014

Green Infrastructure Group

Action items need to consider:

- How the City can lead by example (identified previously)
- Education campaigns as an underlying components (identified previously)
- Resilience in community over time
- Cost; how value exceeds cost; cost in short vs long term
- Begin with less expensive options

Highest priority action items:

1. Create community gardens (an action with co-benefits)

1. Create multiple community gardens in Dover
2. Create on municipal property so that “city leads by example”
3. Utilize roof top spaces
4. Need to determine best practices, i.e., what is the best model for Dover?
5. Need signage in neighborhoods

2. Installation of tree-lined streets with tree boxes, rain gardens

- It’s a real time action item. There are ongoing projects that it could be incorporated into.
- Tree line streets – Heritage commission can play a role
 - Educate them on tree boxes
 - Need to follow-up with Chris Parker
- Conduct a city-wide audit of existing rain gardens and tree boxes, and identify local areas of high % of impervious surfaces and other areas opportune for tree boxes.
 - AND most-prone areas to flooding
 - Evaluate culverts
- Possible partners: Great Bay Stewards, UNH/Cooperative Extension, Public Works Dept., Planning Dept., Conservation Commission
- Subsidize cost of rain gardens/barrels for residents

C. Protect more open space

- Constructed wetlands
- Recharge stations for cars (pass this to Energy Commission)
- Solar or piscataqua turbine for electrical production (pass this to Energy Commission)
- Buffers – protect, improve buffer zones (flood plains) “park-ify” flood plains (create parks in floodplain)
- Using existing demarcation to define flood plain (100 yr storm inadequate)
- Create markers to symbolize the 12’ sea-level rise flood line
- Revisit how buffer zone is defined
- Construction of rain gardens and bioswales
- Look for reductions in toxics application
- Land Use Change Tax: Conservation Commission & Open Space
- Need a general fund/bond
- Need public education campaign
- **Who to target**
 - City council
 - Planning board
 - Work the network and ID champions
 - Chamber of commerce
 - Religious and civic orgs
 - Dover Listens (utilize them to recruit diverse array of citizens)
 - Those most impacted

Land Use Regulations Group

Include Climate Change in City document updates:

- *Incorporate climate change into the Hazard Mitigation Plan (next update due in 2017)
- *Incorporate climate adaptation section into Master Plan (currently acknowledges climate as factor in land use plan, but this is the only mention of climate so far).

Update Storm water Regulations

- Use new precipitation data and projected climate data in stormwater regulations
- Connect stormwater regulations to flood risk
- Refer to model stormwater regulation (Southeast Watershed Alliance)
- Have developers agree to an annual maintenance report? (but hard to enforce)
- Roof Drainage is a big storm water issue

Buffer Regulations

- *Identify vehicle for improved buffer enforcement, e.g. buffer zone enforcement citation
- Currently buffer reg is 50 ft for wetlands
- Neighbor reporting is status quo

Zoning Regulations

- Planning dept oversees/enforces

Building Code – currently above Base Flood Elevation

- Use new FEMA flood plain maps
- *Need to consider projected future sea levels & precipitation in regulations/code (Are there legal restrictions?)

Public education opportunities

- * Educate realtors and others about Base Flood Elevation rules, setbacks, etc.
- Educate re: storm water, setbacks, buffers
- *Education of insurance companies and other commercial entities. Learn how they are dealing with this

Land Conservation and Infill Development

- * Conserve land outside city to limit development
- Talk to Land Trusts About How They Prioritize? (open space committee does this)
- Key landowners targeted for conservation
- Use Transfer of Development rights as a tool?
- Current regulations encourage redevelopment because required not to make storm water worse.

- Encourage “infill” development in existing high density areas to conserve undeveloped open space. There is no density limit downtown now
- Central Business District, form based code - Limitations are parking & setbacks
- * Need better public transportation; Encourage fewer vehicles
- Conservation district 150 ft → can mitigate
- *Enforcement is challenging – how can this be done better? No fine (too much effort)
 - Education
- * Impervious Surface regs - City parking lots pervious
- Tie pervious requirements into infill development
- Storm water utility - need education and reporting
 - Controversial → maybe w/EPA MS4 permit?
- Current culvert project → turtle passage (wildlife corridors in cities)
- Incentivize green infrastructure w/ tax credits
- Currently charge fee per foot pavement → one potential incentive tool, not much \$\$ now
- Open space plan & committee
- Incentivize Private Property Owners
 - Storm water utility would do this
 - Could other taxes be reduced?
 - *Ask tax assessor if can incorporate incentives for GI
- * Consider membership to SRPC w/ funds from city council
- *Assess vulnerability of Dover Floodplain using climate projections
- * Promote removal of Sawyer Mills Dam