



TRACKING ISSUES AND OPTIONS FOR THE URBAN TREE CANOPY OUTCOME

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Chesapeake Bay Program
A Watershed Partnership

WHAT WE CURRENTLY HAVE

- States have the ability to submit urban tree planting data to the Chesapeake Bay model for credit towards TMDL reductions (NEIEN)
- Counted in # acres at county or land-river segment scale; if dispersed plantings, use conversion 100 trees = 1 acre)
- Not much data coming in – only captured if the state has a funded tree planting program and keeps a database of plantings

BMP VERIFICATION GUIDANCE

Forestry Workgroup developed BMP verification guidance for urban tree planting practice:

2 Main Elements

- Track tree planting through Chesapeake Bay model/TMDL using verification standards
- Track canopy cover change over time (e.g. 5 year intervals) to ensure net gain

TRACKING CANOPY COVER CHANGE

- Interest and partnership efforts underway to pursue statewide high resolution data to cover entire Bay watershed (like Maryland's recent assessment with NASA)
- Pursue this as a means for robust Baseline and periodic reassessments (e.g. every 5 years) to track change using consistent methodology
- Proposal: form a tree canopy assessment advisory team to work with Bay Program partners on this effort and promote/guide the UTC elements of it

BMP VERIFICATION – TREE CANOPY

1. Establish urban forestry partner and support mechanisms

- For a decentralized practice, primarily on private land, a local urban forestry partner would improve confidence in tree survival/health and accuracy in tree reporting in a defined locality. An urban forest partner may be a local government entity, or a non-governmental organization with necessary expertise who works cooperatively with the locality. The partner would be endorsed by the state forestry agency, which provides oversight and support with training, tools, etc. In turn, urban forest partners can provide outreach and technical assistance on urban tree planting, tree care, and other issues that arise.

BMP VERIFICATION – TREE CANOPY

2. Urban forestry partner tracks and reports new acres of tree canopy in locality

- For new plantings, the following information should be collected: 1) acres of planting, 2) dates of planting, and 3) anticipated stature of trees at maturity (e.g. large or small). Urban tree canopy plantings can be credited once planting is confirmed. All plantings over ½ acre should be site-checked by the urban forestry partner.

BMP VERIFICATION – TREE CANOPY

3. Urban forestry partner should maintain new areas of canopy

- New urban plantings can have a high rate of mortality, succumbing to weed competition, dehydration, physical damage, or other injury. Removing competing vegetation is often necessary. A planted tree (e.g., one in a tree pit or open-planted, i.e., non-contiguous) that dies should be replaced, or removed from the NEIEN database.

BMP VERIFICATION – TREE CANOPY

4. *Reported practice should represent a net gain*
 - Every 5 years, a locality should re-assess the tree canopy in its defined boundaries to show that there has not been a decrease in overall canopy. This is important especially since tree canopy losses may occur despite good policies and practices for urban forestry. Ongoing problems for tree canopy are the expansion of invasive pests such as emerald ash borer, required tree trimming for electrical reliability standards, and natural aging of trees.

BMP VERIFICATION – TREE CANOPY

5. *State oversight of reporting localities*

- To provide accountability, state forestry agencies regularly spot-check a subset of a locality/urban forest partner BMP project files and/or 5-year assessments of net gain for accuracy and thoroughness. This may also entail site visits to tree planting sites on record. The state oversight process needs to be transparent and publicly accessible so that NGOs, watershed groups and other stakeholders can be confident that BMP implementation is real. Improvements on reporting are suggested. The state forestry agency should coordinate with the state MS4 oversight program, where local partners are implementing tree planting BMPs regulated by that program.

BMP VERIFICATION – HOW???

For Tree Planting:

Ideas...

- A common online tracking database and field app (e.g. iPhone/tablet) for submitting and mapping tree planting data
- Create certified users of the tools to ensure users have been trained in data QA/QC standards and state has confidence in the data (e.g. local urban forestry partners-govt or ngo, etc.)
- Data are collected in format that can easily be summarized and submitted to state for Chesapeake Bay model/TMDL (NEIEN)

TOOLS TO EXPLORE

PennTreeMap



Community
FORESTS



pennsylvania
DEPARTMENT OF CONSERVATION
AND NATURAL RESOURCES
www.dcnr.state.pa.us



amec



Whether you live in a community with tree canopy assessment or not, PennTreeMap, “An interactive tool for your community forest” can help you find, track, promote, plan, and talk trees.

Find how much tree and impervious cover is on your place of interest.

Track the trees you plant by adding them to the interactive map.

Promote your community forest by calculating the ecosystem services of trees you’ve planted.

Plan your urban forest by prioritizing tree planting/protection areas and setting canopy goals.

Talk to communities about goal setting and gain information for a sustainable community forest.

Stay tuned for the web link and upcoming webinars explaining how to use PennTreeMap to benefit your community forest!

TOOLS TO EXPLORE

Track. Tree Plantings and Inventories

- Add attributes to trees planted or inventoried
- Searchable tree data by attribute

Search for species		Location			
<input type="button" value="List"/>	<input type="text"/>	near	<input type="button" value="List"/>	<input type="text"/>	<input type="button" value="Search!"/>
(Example: Acer rubrum or Red maple)		Tree ID	(Street Address)		Show advanced filters ▼
Species					
<input type="text"/>					
Diameter	0 – 50"				
<input type="text"/>	<input type="text"/>				
Height	0 – 200'				
<input type="text"/>	<input type="text"/>				
Plant Date	1950-2012				
<input type="text"/>	<input type="text"/>				
Plot Size	0 – 15+				
<input type="text"/>	<input type="text"/>				
Characteristics		CSS or MS4	Project Trees	Missing Data	
<input type="checkbox"/> Flowering		<input type="checkbox"/> CSS	<input type="checkbox"/> Yes	<input type="checkbox"/> Species	
<input type="checkbox"/> Fall color		<input type="checkbox"/> MS4	<input type="checkbox"/> No	<input type="checkbox"/> Trunk Diameter	
<input type="checkbox"/> Edible		Condition	Plot Type	<input type="checkbox"/> Condition	
<input type="checkbox"/> Native		<input type="checkbox"/> Excellent	<input type="checkbox"/> Island	<input type="checkbox"/> Other	
Powerlines		<input type="checkbox"/> Good	<input type="checkbox"/> Median	Age	
<input type="checkbox"/> Yes		<input type="checkbox"/> Fair	<input type="checkbox"/> Tree Pit	<input type="checkbox"/> New	
<input type="checkbox"/> No		<input type="checkbox"/> Poor	<input type="checkbox"/> Other	<input type="checkbox"/> Established	
Tree Steward		Tree Entered By		Last Updated By	
<input type="text"/>		<input type="text"/>		<input type="text"/>	
				Sponsor or Grant?	
				<input type="text"/>	

(Style and attributes not exact)

TOOLS TO EXPLORE

- Baltimore partners – Green Registry Tool
- Others online apps/tools



A geospatial technology firm specializing in urban forestry, planning, and natural resources.

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How-to-Videos



TRACKING TREE PLANTING

- Propose forming a Tracking Team with state and local representatives to assess tools/options, work through issues, and decide on what approach will be taken
- Work with state partners/local partner network to put in place the tracking system over the next year+

Thoughts???

UTC STRATEGY – NEXT STEPS

- We will send out revised early Draft Management Strategy to all by Dec. 15 based on today's feedback – will be shared with CB Management Board
- State urban forestry coordinators will solicit input in January on state-level priorities and actions
- February 4 Forestry Workgroup Meeting –final input and discussion to finish up Draft Strategy for public release/input
- Form issue teams to continue work on key actions in the 2 Year workplan (tracking, outreach, etc)