

STAR Science Needs Meeting: Tree Canopy



Chesapeake Bay Program
Science. Restoration. Partnership.

Julie Mawhorter, USDA Forest Service (Tree Canopy Outcome Coordinator)

Completed Science Needs

Creation of the Community Tree Cover Indicator

- Worked closely with the CBP GIS team to develop the indicator
- Continuation of high-resolution land cover/land use and change analysis is crucial in the upkeep of the indicator

Development of the [County Tree Cover Status and Change Fact Sheets](#)

- “wall-to-wall” high resolution land cover/land use data for the entire watershed.
- Fact sheets share tree cover status, benefits (from i-Tree) and change information over the 2013/14 to 2017/18 time periods

- Full resources
- **Partial resources**
- No resources

Ongoing/In Progress Science Needs

- **Need:** Monitor forest and tree cover change in developed areas using hi-rez data
- **Why Need:** Monitoring is crucial for the outcome's indicator. This need is a cross outcome need.
- **Status of Need:** In progress
- **Engaged Resources:** GIS team
- **What actions are being done and what resources are being used to address it?**
 - Community Tree Canopy indicator developed
 - State of Chesapeake Forests 2.0 initiated
 - **New integrated science need: Monitor forest buffer, forest and tree cover status and change watershed-wide using the new hi-rez data**

New and Emerging Science Needs – High Priority

Need: Share models / best practices for effective incentive-based and regulatory approaches to protect urban tree canopy.

- A need identified from the Tree Canopy Funding & Policy Roundtable GIT project
- Needed to help promote urban tree canopy
- Opportunity to work with Local Leadership

Status of the resource

- Full resources
- **Partial resources**
- No resources

New and Emerging Science Needs – High Priority

Need: Develop and share data, tools and best practices for advancing tree equity

- Build on prior work of the CBP Environmental Justice and Equity Dashboard
- Synthesize and disseminate environmental justice and climate resilience-related datasets, tools and resources that can best support local tree equity initiatives
- Explore opportunities with the CRWG and Diversity WG

Status of the resource

- Full resources
- **Partial resources**
- No resources

- Full resources
- **Partial resources**
- No resources

New and Emerging Science Needs - High Priority

Need: Develop a Trees & Climate Resilience best practices technical guide with analysis on which tree species are thriving or struggling in the face of climate change.

- Incentivize resilient species in nursery stock and track seed sources
- There is a need for guidance and standards/best practices for tree planting and maintenance to improve long-term survival
- New GIT Funding project focused on Scaling up Regional Tree Supply will complement this work, related to nursery supply needs

Status of the resource

- Full resources
- **Partial resources**
- No resources

New and Emerging Science Needs - Medium Priority

Need: Develop suite of Tree Canopy outreach materials for local governments, non-profits, and other community organizations to aid in public outreach work.

- OpinionWorks completed a study (report forthcoming) to evaluate public outreach and engagement for tree planting and maintenance
- Report recommends additional audience research to better understand the motivations of new audiences
- Completion of the Tree Cover Status and Change Fact Sheets

Status of the resource

- Full resources
- **Partial resources**
- No resources

New and Emerging Science Needs – Medium Priority

Need: Understanding the key drivers of tree canopy loss in different parts of the watershed

- We know now how much loss and gain is occurring where, but local partners want more detailed analysis of what is driving the losses in their area to target the right solutions; this involves taking a deeper dive into the existing high rez change data to understand trends at local scales

Status of the resource

- Full resources
- Partial resources
- **No resources**

Questions?

Point of Contact information for new/emerging science needs.*

- Julie Mawhorter
- Julie.mawhorter@usda.gov