Metropolitan Washington Regional

Tree Canopy Workgroup

Metropolitan Washington Council of Governments

777 North Capitol Street, NE

Suite 300

Washington, DC

Wednesday, December 7th, 2011

Meeting Summary

**Invitees Present**

Katherine Nelson, M-NCPPC- MC

CJ Lammers, M-NCPPC- PG (via conference phone)

Todd Bolton, Takoma Park

Anne Hairston Strang, MDNR-Forest Service

Michael Knapp, Fairfax County Urban Forestry (Proposed Workgroup Chair)

Jim McGlone, Virginia Dept. of Forestry

Larry Finch Chair, NOVA Forestry Roundtable – Urban Forestry Commission, Arlington County

Danielle Wynne, Fairfax County Stormwater Planning Division

Alice Ewen, USFS Urban and Community Forestry Program

Advisory member: Gary Allen, Center for Chesapeake Communities

**Invited but not Present**

Monica Lear, DC UFA

Steve Saari, DC DOE

Ray Bahr, Maryland Department of the Environment

Ronald Tuttle, Fairfax County

Keith Cline, USFS

Erica Bannerman, City of Alexandria

Dan Barry, DC DOE

**COG Staff Present**

Brian LeCouteur

John Galli

Jeff King

Steve Bieber

Amanda Campbell

Maia Davis

1. **Welcome and Opening Remarks**

The meeting began at 11:15am.

Brian LeCouteur, Gary Allen, and Michael Knapp welcomed members and thanked them for their participation. Gary Allen said that the group will try to address the challenges involved in arresting forest loss and expanding tree canopy. Air quality, stormwater, and climate change are among the primary drivers for this effort. Mr. Knapp advised the group to share feedback openly.

1. **Group Introductions**

All attendees introduced themselves. Monica Lear and Steve Saari were unable to attend due to a scheduling conflict.

1. **Tree Canopy Project Purpose and Needs**
2. Tree canopy goals and the 8-hour ozone State Implementation Plan (SIP) (Gary Allen)

Mr. Allen presented an introduction to the challenges of enhancing/expanding regional tree canopy as related to air quality regulations. The Metropolitan Washington Air Quality Committee (MWAQC) is the contact point for tree canopy policies in relation to the State Implementation Plan (SIP) for this multi-state region. As part of the 2008 SIP voluntary bundle of metrics, tree canopy commitments include measurement and tracking, enhancing canopy/strategic planting, public outreach, developing a regional canopy management plan, and monitoring and reporting. The next SIP is due 2013, which may contain a few modifications in standards and goals, but the standing commitment in the 2008 SIP is the basis of current tree canopy efforts.

Issues regarding tree canopy include tracking local program implementation, timing of tree growth versus SIP timeline, modeling complexities, whether air quality credit can be given and how much, baseline calculation, defining no net loss, and maintenance and monitoring. Tree canopy planning would be more compatible with the SIP if EPA could extend the air quality planning horizon to 10 - 30 years. In this scenario, more intensive periodic reporting requirements would still be required, but annual reports would be less burdensome.

Another challenge to implementation is that most forest cover is located on private lands. There are many opportunities to leverage regulations and incentives to protect forest and encourage tree planting in these areas. A variety of calculators and tools are available to find benefits of trees, including one from Casey Trees and another for the Chesapeake Bay watershed launching in January.

Recent air quality modeling for the Metro Washington region indicates that the minimal area of tree canopy gain needed to detect measurable air quality improvements equates to about 5% of the region’s landmass. If adequate tracking and reporting could be accomplished, it could make urban vegetative cover a credible measure for improving air quality, providing landowners a significant financial incentive to preserve ecosystem services on their property.

1. Tree canopy strategies and stormwater management (Brian LeCouteur)

Mr. LeCouteur cautioned that protecting any green space is a challenge, due to changes in land use, unforeseen development projects, invasive species, and deer browse. Lack of consistent data and information to track tree canopy and quantify losses and gains is another difficulty.

Funding resources are diminishing for tree planting and land acquisition programs, and it is often more difficult to get funding for externalities and for maintenance.

Stormwater management and urban tree canopy is an evolving area. Credits are being developed for tree planting / reforestation efforts by MDE under the National Pollutant Discharge Elimination System. Chesapeake Stormwater Network is tasked with developing guidelines for tree planting credits under the Chesapeake Bay Total Maximum Daily Load (TMDL) in concert with the Forestry Work Group, due in 2013.

As in air quality, the challenge for TMDL credits is tracking and reporting. Two years of growth are needed to ensure planted trees’ survival, and a buffer area must be included to receive stormwater benefits. Overall, the challenge is how to preserve the essential services trees provide while growth continues throughout the region.

1. Tree canopy’s role in meeting climate change and Region Forward goals (Jeff King)

Tree canopy planning is part of several policy initiatives at COG. Mr. King explained that after the 2007 air quality planning effort, a climate change roundtable was formed and recommended that the COG Board of Directors create a Climate Change Steering Committee which led to the COG Board’s recommendation to draft a climate change report. The result was the National Capital Region Climate Change Report that focuses on many issues including greenhouse gas reduction targets, climate adaptation and broad recommendations regarding increasing tree canopy. One major outcome was the creation of the Climate Energy and Environment Policy Committee (CEEPC), now chaired by Arlington’s Jay Fisette. CEEPC reports to the COG Board on climate change and environmental issues. One of first CEEPC actions was to create short term goals. The 2012 action plan and targets contain performance measures, often expressed as percent of jurisdictions adopting a given measure. Each year, the committee selects three to five priorities. This year tree canopy was included in the group of top priorities. As a result, COG’s largest policy board is asking for action on forming recommendations on how to enhance forest canopy.

In addition, the Region Forward initiative adopted by the COG Board of Directors in 2010, consists of a charter developed and agreed upon by a regional coalition, and contains sustainability goals including natural resource and open space protection.

Mr. King also mentioned that COG sends an annual membership survey to gather information that is required for various components of the SIP. Currently, only one question relates to tree canopy. The 2011 goal was for 75% of local governments to have prepared a tree canopy plan. Tree planting programs have not yet been surveyed, but it may be a future consideration in meeting SIP tree canopy requirements. Suggestions from the group for additional survey questions regarding tree canopy will be entertained as offered.

Results of this workgroup’s efforts will likely be reported to MWAQC, CEEPC, and on the water quality side, the Chesapeake Bay Policy committee. Mr. King noted that the Greater Washington Board of Trade may develop a carbon credit program to our region which could impact our work.

1. **Desired Outcomes (Michael Knapp)**

Mr. Knapp said that instead of developing a regional canopy management plan, which would take considerable resources to generate, given current time, monetary and staffing constraints, that it may be more advisable to generate an interim report that examines the feasibility of achieving long-term canopy gains. This report could take the form of an issue assessment, a compilation of relevant data and information, and a final recommendation. The report would need to be generated and delivered within about one year’s timeframe.

The ultimate purpose of a regional tree canopy management plan is to achieve a range of environmental and socio-economic goals. The plan could address the following needs and challenges:

* A 20-30 year planning horizon
* The developed plan needs to be fluid to remain meaningful. This plan could be developed as a “living document” with built-in periodic review and amendment processes.
	+ Explore partnerships and interactions with landowners, nurseries, landscaping industry, federal agencies, and social groups including NGOs such as Casey Trees, Earth Sangha, Fairfax ReLeaf, and others.
	+ Examine community demographics and needs.
		- Recommend incentives for private forest tract landowners.
		- Recommend outreach strategies with business owners and developers regarding tree benefits in redeveloping areas.
	+ Address forest pests, herbivore controls, and climate change. There is public resistance to hunting programs, but deer have huge impacts on forests.
	+ Balance tree protection and land use change. Some forest loss can have higher social costs due to community proximity.
	+ Strategize around air and water quality regulations, and climate change offset programs. Examine different management techniques needed to address diverse regulatory programs.
	+ Advertize benefits and avoided costs, including aesthetics, ecosystem services, educational benefits, etc.
	+ Address the need to develop a full marketing campaign that greatly exceeds levels of outreach and public education realized by local and regional governments programs
	+ Address challenges to tree canopy planning.
	+ A reality-based plan with funding sources identified.
	+ Contain measures of success, timelines, roles and responsibilities.
1. **Discuss Scope, Approach, and Timeline**
2. Mr. Knapp further defined possible parts of an interim feasibility report. Such a report should address the feasibility of developing and implementing a regional tree canopy management plan; identify current resources and long-term challenges; provide baseline information for regional forest and tree assets, quantify environmental and socio-economic benefits provided by those assets, and provide maps and inventory data as supplemental materials. Suggested timeframe for completing the report would be one year.
3. Discussion:

Suggested plan attributes included:

* Match program and policy recommendations with tangible performance measures to meet CEEPC expectations.
* Base messaging and recommendations on target audiences, such as ownership categories. This could include identifying stakeholders that are skilled at reaching out to private landowners.
* Analyze regional tree canopy and propose recommendations on different scales, such as by watershed or by parcel.
* Examine how to share resources and implement consistent tracking methods to form a baseline.
* Identify regional tree canopy plan precedents in other areas.
* Emphasize multiple benefits of trees, including socioeconomic benefits. Contain tools to communicate values and goals to everyone; including engineers.

Many participants agreed that developing a plan is feasible, but a more complex question is whether or not the plan would result in a canopy increase, loss or no net loss. Implementation is often a challenge and should be addressed. One option is to evaluate whether or not the whole region could adopt a tree canopy goal. One member suggested that creating a rough draft of a plan might be simpler than a report on the challenges of creating a plan. The group discussed the status of buy-in from policymakers and how the planning process could incorporate policymaker’s feedback.

John Galli suggested taking a step-wise approach, first identifying best practices locally and elsewhere, and second conducting a local assessment (which is underway). COG has completed a green infrastructure map for the region compiled from 1999/2000 Landsat data and has higher resolution data for portions therein. Data analysis should encompass not only percent tree canopy, but also inventory different forest types, delineating urban tree canopy from forest. (Mr. Todd Bolton added that if the term ‘green infrastructure’ is used it should be defined carefully.) Third, existing and proposed incentives for tree canopy enhancement should be described in more detail. Fourth, the report should examine the feasibility of various measures. The fifth step could be examining measurability and trackability. Sixth, the report should identify milestones, both short term and long term. Mr. Galli added that the Anacostia Watershed Forest Management and Protection Strategy, completed in 2005, could serve as a model for the report and subsequent plan. It presents data and current efforts in a way that can be communicated to elected officials. This document may be found at the following URL: <http://www.anacostia.net/restoration/Reports_and_Data/Final_FMPS.pdf>

Mr. Allen shared that as a member of the MD Sustainable Forestry Council has developed a strategy for a no net forest loss in the state by 2020. Mr. Allen is hopeful that the local governments would support these strategies and recommendations.

A final discussion revolved around support from elected officials and supervisors. Mr. Knapp suggested seeking MWAQC member support for the formation of a workgroup. Mr. Bieber also advised obtaining feedback from elected officials and others on different aspects of the plan including stormwater, planning, air quality, and water.

1. **Available Resources**
2. COG overview (Brian LeCouteur)

COG’s 30 meter Landsat analysis contains a broad land cover assessment. COG also has some IKONOS data that captures impervious surface assessments for limited portions of the study area. COG recently received a grant to work with DC government and the U.S. Forest Service to analyze DC, Maryland portions of the Anacostia Watershed, Arlington, and Alexandria. The project will utilize higher resolution NAIP imagery to characterize more recent land cover conditions and show change over time. COG will be working on this project over the next two years. It is important to have a consistent baseline throughout the region, and to work with jurisdictions individually to develop plans in situations where no analysis currently exists.

1. Current tree canopy data/policy inventory (Amanda Campbell)

Ms. Campbell shared the results of her regional survey regarding urban tree canopy programs and goals to date. The survey revealed that the Frederick, Loudoun and Prince William have not conducted a tree canopy analyses for most of their jurisdictions. Tree canopy percentages measured by municipalities and counties in the region range from 12% to 62%. Five jurisdictions have adopted a tree canopy goal. Seven out of the 21 jurisdictions have implemented a plan to increase tree canopy and twelve are in progress. However, the University of Vermont has conducted a tree canopy analysis for Arlington County, Virginia, Montgomery County, Maryland, the District , and Prince George’s County, Maryland. Fairfax County, Virginia has conducted an analysis in-house.

1. Identify preliminary short and long-term information needed (All)

Discussion of information needs included the following points:

* Higher resolution mapping data reveals higher canopy coverage. Care should be taken in expressing accuracy and interpreting data.
* Interpretation may differ for local versus regional analysis. The group may need to compromise accuracy to find a feasible standard.
* Some data analysis has been accomplished utilizing interns and partnerships with universities.
* The report should analyze canopy with forest as a subset of canopy. Urban tree canopy and forest confer different benefits.
* States are interested in coordinating at the regional level to track tree canopy efforts in order to get credit for tracking work.
* Condition, health, age, and biomass may be other qualities to explore. One result of this effort might be standardized data collection.

Ms. Hairston-Strang pointed out that Maryland has one meter forest tree cover data statewide and 2007 agricultural inventory program data for forests greater than one acre. The state is continuing to work on discerning forest from other land cover types. Ms. Hairston-Strang suggested that Landsat might be less expensive, more widely available, and therefore more feasible to use for the region.

Mr. McGlone stated that Virginia has forest land cover data in the form of aerial photography, through the agricultural department. He suggested contacting Northern Virginia Regional Commission for their conservation lands data. Mr. McGlone stated that Forest Inventory Analysis (FIA) data standards may be too coarse to be practical in the region, since there are only a few field data points per county. MDE couples FIA data with aerial extent.

* Some ideas proposed include use of volunteers to measure trees and possibly identification by a family classification at a minimum. MDE is utilizing volunteers to assist in assessing risk of pests such as the Emerald Ash Borer.
* Ms. Nelson pointed out that Maryland requires very detailed field data for county forest conservation plans. The need is for someone to put this data together.

7. **Discussion of Stakeholders (All)**

Mr. Knapp asked that each attendee think about who would contribute to this discussion and forward names and contact information to him and Brian LeCouteur.

Mr. Knapp noted that Casey Trees is very interested in participating in the regional tree canopy effort, and will no doubt be included in the future. Brian LeCouteur suggested that in the beginning stages, the group remain small with municipal/state member representatives.

8. **Next Steps: Review of Action Items**

Mr. Knapp asked that each attendee think about who would contribute to this discussion and forward names and contact information to him and Brian LeCouteur.

Mr. Knapp also asked each attendee to consider the resources his/her jurisdiction can provide for this effort, write a synopsis and send it in by email by the end of the third week of January. This information will help with analyzing assets going forward.

The group will determine time for the next meeting via email with a tentative date in the second or third week of February 2012. In the interim, COG staff will send out a meeting summary for review.

9. **Adjournment:** 2:35pm