

Forestry Workgroup Meeting Conference Call November 6, 2019 9am-11am

Conference Line: 929-205-6099 Meeting ID: 285 886 409

URL:https://zoom.us/j/285886409

Attendees:

Sally Claggett, USFS, Coordinator Nora Jackson, CRC, Staffer Katherine Brownson, USFS Matt Keefer, PA DCNR Patti Webb, DE DNREC Nancy Sonti, USFS Lara Johnson, VA DOF Anne Hairston-Strang, MD DNR Matt Poirot, VA DOF Frank Rodgers, CI Elliot Campbell, MD DNR Williams Pownell, WV DOF Teddi Stark, PA DCNR Peter Hoagland, PA DCNR Judy Okay, VA DOF Julie Mawhorter, USFS

Ecosystem Services

Elliot Campbell, MD DNR

Elliot Campbell presented on <u>ecosystem services</u> and how they have been quantified and mapped for the state of Maryland and how they use it for land acquisitions and restoration activities. John Wolf will be using this data and doing some analysis at the watershed scale. You can see the values on Maryland's <u>GreenPrint</u> web map, and is included in the Parcel Evaluation Tool (PET) which creates a report card on the conservation benefits and ecosystem services of an individual parcel. Maryland is promoting the use of the PET among the land trust community. The addition of ecosystems services help target priority areas for land preservation or restoration. It displays the sum value for all ecosystem services and can be broken down to look at specific metrics like biodiversity or habitat connectivity.

Looking at examples like the interaction of pollution, population, and tree cover, we looked at why tree cover has especially high benefits in a highly polluted and populated area. Existing urban tree cover has a high service value because there is a greater population that will benefit from air pollution mitigation. Next step for the project is to update the green infrastructure map and include data on climate resiliency, which has been done in some counties but not all. MD has been working with EPA Region 3 to do similar work in DE and possibly other states.

Forestry is a key part of the plan to reduce GHG emissions 40% by 2030. Forest is the largest carbon sink in MD, and the state plans to provide management and cost-sharing programs for support and conservation. Avoiding forest conversion is also a key component, and the FCA has help reduce the amount of conversion. Projections were made in a variety of scenarios including potential funding limitations, economic variation, and landowner participation.

Maryland has a new collaboration with USCA Natural and Working Lands partnership who encourage states to quantify the benefits of carbon storage and sequestration on natural and working lands. Forests are the biggest carbon sink in Maryland. Partnering with PA DCNR, USFS, and American Forests, they will be analyzing carbon and economic impact of forest management over time, and annualizing forest carbon inventories using NASA data products. They want to use this analysis to help identify practices that are win-wins for carbon and economic benefits.

Questions and Comments:

- How easy is it to update the layers as the values change over time? It is very time consuming
 and a lot of work. There is a new function that could be built into the analysis, and that in
 addition to improved protocol should reduce the time.
- What is the resolution of the NASA data? NASA data is 1m high-resolution lidar, and they
 model forest carbon both above and below ground at the 90m scale. The idea is to take the
 imagery which is updated every year to look at forest change and combine it with lidar based
 models of above ground biomass, to determine how much carbon biomass was lost when
 the forest was lost.

2018 BMP Progress

Katie Brownson presented an overview of the bay-wide forestry BMP progress in 2018 from CAST, split into urban and agricultural by state. While some states added large numbers of ag forestry BMPs, there was a large loss because expired BMPs were removed from the model due to lack of verification, including 47,312 acres of ag forest buffers. A lot of states are increasing their urban forestry BMPs, and only a few of these expired. The numbers that are particularly concerning are for forest buffer BMPs. When they are removed from the model we lose upstream efficiency water quality benefits.

Secondary Land Uses

Peter Claggett presented on upcoming land use data analysis and potential land use classification, looking for input on what types of new land uses should be studied, and doing:

- 1) land use land cover change analysis
- 2) high-resolution hydrography for mapping streams and tracking buffer progress, and
- 3) strategic BMP implementation.

This will also be discussed in more detail at the joint December meeting.

Since 1m data can be dense, it has been aggregated up to 10m land cover/land use. There are new potential categories of land use that are more specific than previously used, like deciduous, evergreen, or cultivated forests (orchards and vineyards). The largest change has been in the silvicultural category, because the loss is immediate, but the regrowth is gradual, and the data only shows a specific point in time when the imagery was taken. The new categories aim to help distinguish different mixed open layers, especially with natural succession and identifying forest age.

Questions and Comments:

- What is fractional turf? It is a combination of things; turf was too big of a category and could be
 misleading, it was being overestimated. They had to separate out and recategorize this
 different type of turf.
- Under the extractive land use category, does it include fracking and windfarms? *Unsure, most of the extraction category is mining or suspended succession*.
- Anne commented that it shouldn't be assumed that managed succession grows into a forest faster than natural succession, managed refers to after a timber harvest and natural succession refers to agriculture or fields.
- Frank mentioned possible discrepancies given the impervious non-road surfaces, how
 identifying individual buildings is difficult, and that solar developers can label solar fields as
 "pervious."

Round robin updates

- **West Virginia-** This year, the cost-share program for tree planning on private lands is equal with public land, approximately 1,000 trees for each. The match with federal funds gives these projects lots of potential. Herb is officially retired, and they are unsure when his position will be filled.
- Pennsylvania- Buffer specialists have been funded for another year, and a new position focusing on general watershed forestry will be posted in the next few months. They received a large amount of funding from EPA, for buffers specifically, to use by the calendar end of 2020. Pilot on correctional collaborative wrapped up with a two-acre planning on DOC property, and the state will use NFWF and GIT funding to provide the program next year. The 2020 buffer summit will be in Altoona, PA in March. Although proposals are being reviewed now, they are still accepting presentation ideas. A bill just passed including an option to donate \$3 to buffer/urban tree plantings when people renew their vehicle registration.
- Maryland- A lot of state foresters will be retiring soon so the department may be seeing some changes. There is a statewide effort working on economic adjustment strategies for closures of paper and saw mills, looking to reverse the steep decline in forest markets, and support markets for sustainable forest management. The Forest Service is planning to be more involved in visits with landowners about forest management practices and will be re-opening the lawn to woodland program. Last year's competitive grant money from USFS is funding a project about forestry on reservoirs focused on climate adaptation. In January, they will be hosting a workshop on climate adaptive silviculture, looking at the implications for rainfall, regeneration, and the whole changes ecology.
- **Virginia-** Submitted BMP data, including some accomplishments going back 10 years. They have been having issues with the new FEMA floodplain maps, and the floodplain program seems to be in direct conflict with some Bay Program work. Pennsylvania is having similar issues;