Forestry Workgroup Meeting

March 9, 2022

9:00am-11:00am

Meeting Materials: Link

Katie Brownson, USFS
Sally Claggett, USFS
Lydia Brinkley, Upper Susquehanna Coalition
Cassie Davis, NYSDEC
Julie Mawhorter, USFS
Ned Brockmeyer, PA BOF
Ryan Davis Alliance for the Chesapeake Bay
Rebecca Lauver, Alliance for the Chesapeake Bay
Kesha Braunskill, DE Forest Service
Taryn Davidson, DE Forest Service
Iris Allen, MD DNR
Ashley Traut, GBWC
Peter Claggett, USGS
Paul Emmart, MDE
Karl Blankenship, Bay Journal
Anne Hairston-Strang, MD DNR
Jim Woodworth, DOEE
Rick Turcotte, USFS WV
Caitlin Verdu, VDOF
Peter Hoagland, NRCS PA
Eric Greenfield USDA FS NRS FIA
Jeremy McGill, WV DOF
Teddi Stark, DCNR Forestry, PA

Tree Cover Status & Change Fact Sheets- User Guide

The Forest Service is working with the land cover/land use data partners on a short "user guide" (title TBD) to accompany the County Tree Cover Status & Change Fact Sheets when they are released. (see Feb. FWG materials for fact sheet project background). Julie gave a brief overview of proposed content and took input on additional content suggestions.

Last meeting Julie came and showed the group the fact sheets and members gave feedback. That feedback was taken into consideration and the newest version was shown. The fact sheets cover big land use categories and where tree cover falls within those categories. I-tree landscape benefits are listed on the sheet. The second page of the fact sheet is about tree cover change. It covers gains and losses on developed lands or developing lands. Links at the end of the fact sheets have been updated and lead to correct websites. State tree canopy programs will be listed as well, Julie will be talking with each state to ensure the correct information is there.

Comments and questions on the fact sheet:

Rebecca: When do you expect it's going to be put on the website?

> Julie: We are waiting on the final data sets. It will take some processing to get the data onto the fact sheets and then get them posted onto the website. This project and template will be shared with LGAC in March to let them know that this is a tool that is coming and find ways to disseminate the information.

Anne: I think it looks good! I like the gain and loss graphic. The only thing I was wondering about was net loss over four or five years, should it be as an annual rate or percentage or something like that? It's the

headliner, it's a number that people are going to pluck out. I just want it to be clear about the rate of change.

> Julie: Let's talk about this offline. We can see what that can look like. I worry a little bit if we do it as a percentage or something, it will be so small that it will not get people's attention and we want to get people's attention.

Anne: I think the loss rate is four times four or five times what it actually is.

> Julie: You think they're going to think that that number is an annual number?

Anne: A lot of times these loss rates are expressed per year. It is just something to think about in terms of how we present So that you don't have to do math to get the answer.

> Julie: We used to have "over a four-year period" listed under net loss of trees, but then got a request to list the actual years. That way folks can see the two points in time. Maybe we can combine the two?

Anne: Yeah, that totally can help!

Peter Claggett: I agree with Anne's concern. I have noticed while finalizing the data that the time period of change in MD and DE is 5 years whereas elsewhere the period of change is 4 years. So it is not fair to compare the metric of change without explicitly stating the years that we are talking about. Either be specific by jurisdiction or analyze it and be done with it and just say it's over this general period on annual rates of X.

Rebecca: The definition of tree equity… not everybody may know what that is. We may want to sneak the words "public health" or something along those lines under the tree equity section.

Ashely Traut: I wonder if we should add a target as a reminder to folks. Adding something like "your goal is to double tree canopy by 2040" or something like that. It might be better than just listing the net loss number.

> Julie: Unfortunately, we cannot add that as tree goals vary so much across the watershed. Adding the goal will have to be done by those who are using this to make their cases to local jurisdictions. I think it is important, but we can't add it.

Anne: I am thinking ahead to the Buffer Leadership Team presentation, those presentations are the places where we would want to make sure goal information. Addressing goals is another document.

Lydia: Up in NY there are not going to be local tree canopy coverage goals, I am wondering that instead we just use literature that has been published on tree planting goals. I know that 70 to 75% canopy cover within a specific watershed, but maybe within a specific area are needed for water quality. So then maybe we can use that 75% for all those goals that are presented or maybe that be in the guidance document or something along those lines.

> Julie: It's a great question because I mean for urban areas the target used to be 40%. And then everybody set that goal, and then we have gotten a lot of criticism since then that it really needs to be based on what the community has and where they want to go. I hear you.

Lydia: Maybe this is something we put together to help those of us who are presenting. Maybe having some numbers and information on what the percent cover goal and what that percent cover goal is based on how you even start developing a canopy goal.

Cassie: Is the county covered the whole county or just the part in the watershed?

> Julie: whole county. The hope is that we can do municipality during phase 2

Technical guide/user guide

This was put together very quickly and this is a rough cut. The front page has a why does tree cover matter and why map the trees cover sections. The vision is that the guide will act as a technical guide and have some depiction of the land cover and change mapping. The land use classification section has been developed by Peter Claggett and his team. There is background on i-Tree metrics and then an additional resource section. The additional resources are a place for us to put resources that we also want to cover. Input from members on those additional resources is what Julie wants input on.

Peter provided an overview of the project, and why these data are so valuable and unique and cutting edge for our watershed in the introduction. Mapping workflow is a section that UVM is working on to try and convey the steps involved in the land cover mapping. Data types and change mapping are also listed.

The land use classification side has definitions for things like tree canopy over turf, tree canopy over impervious surface, etc... i-Tree stats and where they come from are also listed.

Comments and questions on the technical/user guide

Cassie: It looks nice! It looks like it will be an easy read.

Kesha: I think this is going to be useful, often we have communities as about this type of information so this will be a good tool to provide them.

Kesha: I don’t know if this is appropriate here. But we often get asked about creating a canopy goal, I am wondering if this can be included in the user guide or maybe creating a new document to help address that.

> Julie: That ties back to what we were talking about earlier. If we were able to make a whole section on creating and setting canopy goals (it would not be one size fits all it would be different approaches for people to consider) would that meet the need that Ashely and Lydia raised about having a space for locals to pull from? Or do you think we just need a standalone one pager?

Anne: I think we need a standalone one pager.

> Julie: So maybe we could have both. We could create it as a standalone document that's usable just by itself on goals as a summary and but have similar or the same text in this guide as sort of ending section would that be okay?

Ashley: I think two documents would be good. In the user guide, it is about “here it's how to set your goal”, and then the standalone one pager ideally for county or municipality.

Anne: adding some basic synthesis could be useful for understanding.

Paul Emmart: Can you do gap analysis on the map viewer to find opportunities?

> Julie: Some of that was done but a while ago. I am hoping that this sparks planning to get trees into the ground and for people to look at those opportunities again.

Rebecca: This whole conversation is reminding me that terminology matters.

Presentation and discussion on the new forestry Land Use Methods and Metrics (LUMM)

We are very close to releasing the public version of the one-meter land use for 2017/18 and the change from 2013/14 to 2017/18. There is a difference between land cover and land use. Land cover is the surface characteristics of the landscape and land use is the representation of the human activities happening on the landscape. For environmental applications, you really need to know both. For example: you need to know how much impervious cover there is (land cover) and how much crop land there is (land use). Forest is not a thing for land cover, it is classified as tree canopy/tree cover. In the land use, tree cover is broken out into different classes. Peter ran through an example in Baltimore City and showed that there are many different types of trees, whether they are forests or trees over turf, or other trees which are just clusters of trees under an acre. Another example in Dorchester County was shown and you can see that there are wetlands and forest. In the past the wetland was just classified as wetland and there was no specification on if trees were growing there or not. In this data that has been corrected and you can now see where trees are growing within the wetlands. Just because it is a wetland class does not mean that there will not be trees. Agriculture classification and forest and tree cover classification were the most improved with this data.

There are 62 planned land use/cover classifications for 2021/22, and 54 classes mapped for 2017/18. Mapping 50 plus classes is not going to look good, so a general classification for land use of 18 classes was developed, and it is a roll up of those 50 plus classes. The classes are forest heavy; all the trees are definable in the 18 classes. Both the 54 individual classes and the generalized 18 classes will be realized so you can get both depending on your needs. We have really good tree data, hence the forest centric classifications.

65 to 70% of tree loss is due to timber harvest. That is the biggest change on the landscape. If you zoom into those areas with the land use viewer you can see where change is classified and what Peter and his colleagues classify as harvest. This information will be available to look at as a part of this rollout.

Peter showed the land use change matrices by county, state, and watershed. Classes listed in one column show the 2013 condition and then across the top 2017 condition and then everything off the diagonal is a change. The acres are reported, and you can see changes in developed, natural, ag landscapes. Charts like this matrix will be able to be downloaded at multiple different scales.

Having this high-resolution data has allowed for 53% more impervious surface in the watershed to be mapped compared to using the 30 m national data. 95% accuracy anticipated for tree canopy and impervious surface classes. For the first time we will have time over time at 1 m resolution.

There are some caveats such as data being retrospectively revised with future data releases. This data is a snapshot in time. You have 2013/14 and 2017/18. Pre 2013/14 land use data are needed to distinguish forest and farmland conversion to development and post 2017/18 land use are needed to verify the end state of transitional land uses (e.g., natural succession, suspended succession). There is also the potential

to confuse transitional and temporary change with permanent change. Timber harvest is the largest change in the Bay watershed but signifies only a temporary change in tree cover, not a loss. Changes from forest to tree canopy over turf grass represent contextual change, not a loss of tree cover. Change periods are not consistent across the watershed; DE and MD are on a 5 year period, while DC,NY,PA, VA, and WV are on a 4 year period.

Peter and his team will use all available data to go back to the 1980s and understand how the landscape has gotten to where it is today and use that to inform future revisions of our 2013 2017 2021 data. Going back through time is going to be done at the parcel scale where you can see current parcel-ization of the landscape and then compare that to the 1980's and see if that land was forested or not.

USGS paid for a digital surface model for all of DE and MD to see if it will help nail down the successional stages of forests. Peter is hoping that this DSM will be able to be used to refine classification of the landscape.

The 2017 data and revised 2013 data is set to be released this spring. In 2024 2021/22 LULC and LULC change from 2013/14 to 2017/18 to 2021/22 Hyper resolution streams, channels, and ditches with channel and flow permanence attributes will hopefully be released. Spring 2028 (TBD funding) 2025/26 LULC and LULC change from 2013/14 to 2017/18 to 2021/22 to 2025/26 will be released. Spring 2032 (TBD funding) 2029/30 LULC and LULC change from 2013/14 to 2017/18 to 2021/22 to 2025/26 to 2029/30 release.

Discussion:

Anne: Would you like field data points? FIA would also be helpful as they have permanent plots.

> Peter: Yeah, that would be helpful. I think we should have a subgroup of folks that want to dive into this conversation of DSM and succession a little bit more.

Sally: I know you were debating whether to bring up the timber harvest and the fact that we may be missing some years of disturbed forest/ accounting for years of disturbed forest in the model.

> Peter: There may be a misunderstanding between how the states are reporting timber harvest and how CAST is calculating it. The original intent was that the timber harvest has a higher load than forest for three years and then it loads like forest again. I think that the states were under the impression that they just report the acres harvested each year and that CAST will carry over what will account for that three-year duration. CAST does not and has not done that. It basically results in the underestimation of timber harvest by over 50%. This issue warrants a lot of attention as and you have agreed and that's why we have this timber harvest Task Force and so I think it goes beyond CAST in terms of the importance of getting this right, but there is a CAST component to it.

Anne: What do we use the historical data for?

> Peter: Introducing the historical data helps with the reporting problem. Reporting the whole history again may show that there is a constant impact the overall amount would be higher than we thought. it's important to not artificially introduce change into CAST, because then you would be tasked with trying to manage that change and that it wasn't really a change, it was just a reporting same.

Anne: My understanding is that this is not that big of an issue compared to some other ones.

> Peter: Correct. The watershed modelers are not alarmed as they have bigger issues. But as a geographer when I see the biggest change on the landscape is timber harvest and locally its larger areas that are being harvested I try to understand that change from a habitat and water quality perspective. What are the impacts associated with that harvest? I think that warrants a lot of attention. I think it goes beyond CAST in terms of getting this right.

Cassie: I thought we were to report the state's report of forest harvest every year, and then we report the forest harvesting BMPs every year because it's an annual BMP… I wasn't aware that there's three years associated with it.

> Peter: I don't think anyone was. I don't think New York reports that all the timber harvested acres and so they are calculated at 1.5% of your forest area in every county (it is assumed that 1.5% is harvested in every county). That is a lot of acres because NY has big counties that are mostly forested. Our data showed that what is actually happening is isolated and happening only to a few counties and that there is not nearly as much harvested.

Cassie: We don't have a way currently to track our harvested forest on private lands and so we were hoping we could use the high-resolution land use to kind of identify the universe of forest harvested and then use that as an average.

Catlin: Could you repeat what you've seen is the immediate to short term implications of this realization.

> Peter: Immediate implications are not much. We will probably have to wait for a new CAST version like CAST 23, which will be realized 2 years from now, before new information gets put in there. The reality of it, is that if it's true, that timber harvest has an impact for three years, which kind of makes sense because it takes a while for things to grow back. It was agreed upon previously that we are not counting that so we're underestimating these large sediment loads from timber harvest and where they occur. If we're trying to understand or explain observations of water quality change and ignoring that then that's a problem. States may be trying to put BMPs on more acreage that actually exists in CAST to receive those BMPs. There is a disconnect with reality and reporting.

Anne: There is going to be a disconnect with reality if we don't have the BMPs reported.

> Peter: This is something the Timber Harvest Task Force would tackle.

Sally: I would like to see the watershed technical workgroup take this on to get them to tell us what we are dealing with and how to deal with it.

> Peter: The two purposes of including natural succession is to not confuse that land with cropland and pasture, and to allow us to tell the story of the forests. If you want to understand the net change of forests you need to look at what is being lost, what is growing back, and what the time frame is for this forest regrowth. We have never been able to capture that, and we are on the brink of being able to look at it. If not now, but in the future we will be able to make decisions on this high quality information. Having the funds to do that is going to be crucial.

Rebecca: You have brought up funding a handful of times, would having a note or formal statement from the FWG help you with getting those funds?

> Peter: Yes, I think voicing support for this and federal funds to continue monitoring LC/LUp. To the Management Board, PSC, and the water quality goal team need to know that people want this data over the long term.

Rebecca: It has been pointed out that this is extremely valuable. Money runs out after the 2024 report and after that there seems to be no money. This is valuable work and needs to continue. Is there anyone who is against the Monitoring of the landscape at one meter resolution? No one seems to be against it. We appreciate your work and what you do Peter

Update on RFB workshop planning

Invitations have gone out for the workshop on April 27th. The target audience is the Management Board and above. The objective is to target leadership and get their involvement with addressing issues around programs, policies, and funding. We want to get a diverse set of people involved. This is not just for the forestry workgroup. We really want to get states to strengthen their buffer action plans. There are two pre workshop webinars: the first will address technical assistance outreach and social science, and the second will be focused on policies, programs, and land conservation. There will be separate conversations at the state level happening with an EPA contractor called ERG. Conversations with each state will be held and best practices within the states will be documented. ERG will find out what is working and not working and a full snapshot of what is happening in each state. ERG should also encourage them to bring their key state forestry people to help the conversation. For the actual workshop the hope is that people at the Principal Staff Committee (PSC) present on this topic. State Cabinet level folks are the ones who sit on the PSC. Additional folks can be invited, but we do not want to go over 100 people for the workshop. If you are interested please contact Sophie (swaterman@chesapeakebay.net). The forestry workgroup has done a lot of the heavy lifting in the past, and now it is time for the higher ups to step in and buy into this workshop and state plans.

Updating the Official FWG Membership List

Our State Signatory Members list is outdated, and we do not have any at large members. Sophie and Katie went over State Signatory Members and got updates from the states. See below. A request for at large members was put out. During the next meeting at large member nominees will introduce themselves and will be given one minute to speak to the group. The workgroup can have up to 6 at large members. Anyone in NGOs, quasi-governmental organizations, federal agencies, academic institutions, and other local practitioners are able to be at large members.

Jurisdiction	Name and Affiliation
Delaware	Kesha Braunskill, Delaware Forest Service
Maryland	Anne Hairston-Strang, Maryland Department of Natural Resources
	Iris Allen, Maryland Department of Natural Resources

Pennsylvania	Matthew Keefer, Pennsylvania Department of Conservation and Natural Resources
New York	Cassie Davis, New York State Department of Environmental Conservation
	Lauren Townley, New York State Department of Environmental Conservation
Virginia	Caitlin Verdu, Virginia Department of Forestry
	Terrance Lasher, Virginia Department of Forestry
West Virginia	Jeremy McGill, WV Div. of Forestry
	Rosalie Santerre, WV Div. of Forestry
Washington, DC	Jim Woodworth, DOEE
	Robert Corletta, DDOT

Round Robin

Rebecca: The rising waters temperatures workshop will be happening next week, and we have a couple of forestry workgroup folks who are helping run the watershed side of the workshop. Forests are a known cooler and can help reduce water temps. The watershed recommendations that were crafted by the steering committee will be put forth to help generate discussion. These recommendations are to show you what the watershed group has come up with. Any further ideas should be sent to Katie.

Pennsylvania

Ryan Davis: We are gearing up for a pretty big planting season. We've got 75 acres up here in south central PA. About 35 of those acres are going to be planted with volunteers. It is also grant season, so we are applying for a bunch of grants through NFWF, DCNR, and other sources. It is also presentation season, so we are all over the place.

West Virginia

Jeremy McGill: We're in the first year of our five-year plan. We have mapped and graded all our managed timberland parcels in the eastern pan handle for riparian potential and for existing riparian areas. The new 1m data was not available for this mapping so next year there will most likely be a remap. Rosey has started to do field visits on a select number of those sites to try and interest the landowners and riparian plans or plantings if it's not already forested.

Maryland

Anne Hairston-Strang: We're proceeding on our mission to plant 5 million additional trees, on top of existing commitments by 2031 and just trying to gear up for that. We will be presenting a very high level DNR strategy to the Carbon Markets and Trees Commission this Friday. As soon as we have funding confirmed in the legislature then we're going to proceed with hiring, we are looking for 13 new people to hire. So, if you know of people who want to help communities plant trees, and work with the

environmental justice and equity lens then we want to hire them. Iris is looking to update the RFB design and maintenance guide. That could potentially be put on a future agenda so she can get some input on that.

Delaware

Taryn Davidson: We just wrapped up our call for competitive grant applications for plantings so we're processing those for this spring and fall plantings coming up. We're also planning for Arbor Day events and plantings.

New York:

Cassie Davis: No updates currently.

Washington, DC

Jim Woodworth: I'll just mention that we are in the planting season already. We share everyone's enthusiasm to get trees in the ground and getting volunteers back out working again after dampening our community and stewardship efforts unnecessarily because of the pandemic as being outdoors is the safest place. I hope we haven't lost any momentum in engaging people but excited to get them back out there with shovels.

Virginia

Catlin Verdu: I will be posting our application for three new positions related to watershed stewardship. If you know anyone who would be interested send them to VDOF.

Others

Ashely Traut: the Greater Baltimore Wilderness Coalition is in the swing of grant writing season. Looking at NFWF Small Watersheds Grants and starting to envision the idea of the climate corps focused on urban trees and urban restoration work I'd be interested in hearing from anyone who has thoughts about that.

Paul Emmart: On April 6th from 1-2:30pm MDE is hosting a webinar that is focused on the MS4 community. MDE is in the regulatory business, and we want to encourage MS4s to take advantage of forestry as a BMP. The webinar will be looking at calculations based on the stormwater guidance in Maryland on loading reductions and how the cost per acre values changes, depending on the type of bmp used. The target audience is private sector consultants in Maryland. The reason for that is because they often do the planning work for local governments in order to accomplish the permit compliance.

Sally Claggett: It is great to hear so many talk about NFWF. I encourage you to apply as there is so much money flowing out to some good projects. There is so much money flowing to the Bay Program, USDA, and state revolving funds. You can't get that money if you do not apply.

Katie and I have been working on trying to reinstate and re charge the forestry legacy proposals coming into the forest service. The Chesapeake Bay states have been mildly successful, and I think we could do a lot better with some of our proposals. We've been talking to the folks in DC and with the Land Trust Alliance to try to get some more capacity to the state level. At the April meeting we're going to have our regional forest legacy person come and update us on some of the new changes to forest legacy.

Anne: USDA's Partnership for Climate Smarts Commodities RFP is out and might be worth looking into.