**June Meeting Minutes**
Chesapeake Bay Forestry Workgroup (FWG)

June 7th, 2017 10:00 A.M. – 3:00 P.M.
Fish Shack, Chesapeake Bay Program Office
410 Severn Ave, Annapolis MD, 21401

**Meeting Participants**
Sally Claggett (USFS), FWG Coordinator
Katherine Wares (Chesapeake Research Consortium)
Julie Mawhorter (USFS)
Anne Hairston-Strang (MD DNR)
Dakota Durcho (MD DNR)
Marian Honeczy (MD DNR)
Marah Vecenie (PA DCNR)
Teddi Stark (PA DCNR)
Matt Keefer (PA DCNR)
Mark Hockley (PA DCNR)
Peter Hoagland (PA NRCS)
Lauren Townley (NYSDEC)
Judy Okay (VA DOF)
Frank Rodgers (Cacapon Institute)
Ryan Davis (Alliance for the Chesapeake Bay)
Craig Highland (Alliance for the Chesapeake Bay)
Jenny McGarvey (Alliance for the Chesapeake Bay)
Amelia Avis (USFS Intern)
Jeff Sweeney (EPA)
Marian Norris (NPS)
Olivia Devereux (Devereux Consulting)
Kathy Boomer (TNC)
Matt Royer (PSU)

**Welcome and Introductions**
Sally welcomed everyone to the meeting and confirmed participants.

**Revisiting Forest BMP Verification**
Sally asked how many members are familiar with their state BMP verification procedures. Many replied that they remember creating them, but haven't reviewed them since. In 2018, BMPs that are not verified will not be able to be reported, and source sector workgroups are able to update guidance as needed. Sally and Julie asked the workgroup to review forestry BMP verification procedures and guidance documents and determine any edits or updates that should be made.

Sally offered a few ideas for potential edits or updates regarding forest buffer BMP guidance, specifically related to the narrow buffer BMP, forest conservation BMP, and the addition of new BMPs and the new high resolution imagery in the verification guidance. Julie ran through the Appendix B: Forestry BMP Verification Guidance document, specifically section VII. Verification Guidance for Expanded Tree Canopy, and her suggested edits regarding tree canopy BMP guidance. Sally and Julie asked everyone to go over the guidance document and provide feedback, suggestions, and changes. Sally said that some of the comments can be used for the WIP III Guide as well.

Discussion

- Due to issues with buffer maintenance, the need for spot checks and mentioning that in the documents was discussed. In Virginia, the failure rate of CREP riparian forest buffers was reported at 25%. Judy Okay said that form 4-84 says they must inspect the buffers every 2 years for various parameters which is where that failure rate may be coming from. When there is a failure and there is less than the minimum stems per acre, replanting is done and is sometimes done at the cost of the landowner. Sally said members might have suggestions for language regarding maintenance and survival rate.
- Sally also discussed confusion regarding the Forest Conservation BMP. It is written that you need to have a state documented and approved tool, like the Maryland Forest Conservation Act, for the practice to be considered forest conservation. However, some state protocol says that simply conserving or protecting forest can be designated as the Forest Conservation BMP. Protecting forest alone is not a BMP and is not currently credited.
- Some practices will be reported differently with the Phase 6 Model. Forest harvesting BMPs are a 3 year practice, and then the land use changes and the land goes back to forest loading rates. Riparian forest buffers are a 15 year practice, and then need to be re-enrolled or verified. The new narrow buffer BMP is credited as a conversion, because it does not get any other upland benefit. Sally suggested updating narrow buffer BMP guidance.
- Anne asked how narrow buffers are different than tree planting.
- Sally said she is working with John Wolf to have high resolution riparian forest buffer data and shapefiles available in the CBP Watershed Model Segmentation Viewer.
- Under "VII. Verification Guidance for Expanded Tree Canopy", regarding 1. *Establish urban forestry partner and support mechanisms*, Julie said that for most urban tree plantings, they are decentralized, there are many groups involved, and there are no cost share programs. To address some of these issues, state forestry programs need to approve partnering groups to report data for urban forestry BMPs. States can set parameters and then the local government or nonprofit will be responsible for verification and making sure the BMPs are being done. Julie said she is willing to meet with state forestry programs to work out some details of allowing groups to submit data.
- For point 2. *Urban forestry partner tracks and reports new acres of tree canopy in locality*, Julie said that size of tree does not need to be tracked and that sites per acre needs to be checked/weaved into another bmp. She asked members if they think the statement about natural regeneration needs to be including and if they are tracking it, and if should it be taken out. Marian Honcezy said that her department is being encouraged to plant for pollinator habitat which includes smaller trees; she asked if that would count as natural regeneration. Julie replied that it would have to meet a stocking level equal to forest, so it could be considered a different BMP. Anne commented that she wouldn't mind keeping the natural regeneration section in the guidance document. Frank commented that since the natural regeneration tree

canopy can only be reported for credit after a four year maintenance period, there could be less interests. He said that he has only seen this practice done with private landowners that don't want to mow anymore, and that it is less successful with schools and municipalities. Marian Honcezy said that landowners who stop mowing are likely not reporting it to anyone though. Frank replied that he works with home owner associations and encourage them to stop mowing the lands along streams and uplands that they aren't able to sell which they can document and get credit for. Judy commented that HOAs are usually interested in neat landscapes and don't want to wait four years for regeneration, and are more likely to mow or plant trees; not everyone has a program like Frank's. Julie said that we can keep this section in the guidance is for states like West Virginia that have relevant programs.

- Julie suggested editing the first bullet under 3. *Urban forestry partner should maintain new acres of canopy*, and recommending that dead trees are replaced and not removed from the database.
- Julie said that 4. *Reported practice should represent a net gain* is going to be reworked. Previously, municipalities were expected to assess every 5 years, but now we are going to rely on imagery. The BMP will be credited for 10 years and will then go into tree canopy land cover. Anne commented that the importance of maintaining and survival needs to be communicate with jurisdictions. Sally said that could go into our information packet, along with some examples. Julie said that iTree landscape information will also be taken out of this section.
- Julie said under 5. *State oversight of reporting to localities*, specifics are left up to states to decided, and that she would like to know what states come up with after they decide.
- In VIII. Verification Guidance for Urban Riparian Forest Buffers, it was suggested to remove the section regarding net gain. The difference between urban tree canopy and urban buffers is that there is less credit and oversight with urban tree canopy BMPs. Urban forest plantings have specific 'lack of management' in order to become forest.
- Members discussed recording latitude and longitude data for urban buffers and urban forest plantings, and that it could be helpful to have locations. Judy commented that latitude and longitude aren't always specific enough and that an address or cross street might be better. Frank said that they are able to get very accurate latitude and longitude.
- In section IV. Verification Guidance for Agricultural Buffers, now with the various tools, there's a question about width. Consider spot checking. Anne said that CREP has notes on this. What is considered established, we could say something about professional judgement, going to expand or take out the 1-2 year reference.
- Under 4. *Implementation strategies should include approaches to conserve existing forest buffers so that newly planted buffers represent a net gain in overall buffers for a county or watershed segment*, Anne said that this may not be practical. Sally said they are going to work to establish a baseline when the new land use imagery is finished.
- Frank said a recommendation for municipalities to track canopy would enforce an understanding that it is the municipality's responsibility to grow canopy.
- Matt asked when these guidelines would begin to be followed, does it start in 2018 or is it start with what is reported in 2018? Anything reported as progress in 2018 needs to be verified.

**Resource Improvements (Voluntary BMP Tracking and Reporting)**

Matt Royer, Director of Agriculture and Environment Center at Penn State University, presented on a 2016 project of a survey of Pennsylvania farmers to document conservation practice

implementation in the Chesapeake Bay Watershed. The survey was conducted because not a lot of practices done by Pennsylvania farmers are not counted toward water quality goals. The survey consisted on questions regarding the farmer's operation and conservation practices. They received a 35% response rate and visited 10% of returned surveys (~700 farms) in order assess inventory results and to help analyze data. Data and surveys were analyzed to determine the units of BMPs reported. They found that there was systematically under reporting for all BMPs except for riparian buffers. The over reporting of riparian buffers was due to how survey questions were asked which was different compared to the way trainees observed riparian buffer BMP data. More information on this project can be found here.

Discussion

- Kathy asked if they explored landowner concerns regarding bmp adoption. Matt responded they will be taking another look at the dataset to assess overall trends in adoption and which practices are being implemented and where.
- Frank asked which indicator was the biggest step forward for Pennsylvania. Matt responded that manure management was a big one.

**High-Value Forests for Water Quality**

Jeff Sweeney presented an update to the 2007 map of high value forests that would answer which forests, if converted, would cause the greatest increase in nutrients and sediment to the Chesapeake Bay. Using the Phase 5 Model, a control scenario of 2015 forest acres and distribution and an experiment scenario of 8,000 acre loss of forest per year and 0.5% loss over 20 years was run. Jeff then compared nitrogen loading rates for the urban-forest composite for the control and experimental scenarios and created a map of the change in pounds of nitrogen delivered to the Bay per 100 acres of forest loss. Based on the map, areas along the Susquehanna in Pennsylvania had the greatest increase in nitrogen loading with forest loss. Jeff showed SPARROW's estimated annual yield of total nitrogen and urban sources of total nitrogen maps to help explain some of the changes, which are good to keep in mind. Jeff asked for suggestions about future methodology to help reach the group's ultimate question.

Sally suggested some next steps: use Phase 6, overlay protected lands and development pressure, delivery to streams (not Bay), N P S, and separate by state (highest for each state).

Discussion

- It was asked why there is less of a change in nitrogen loading in Virginia. Jeff responded the highest loading rates for nitrogen are from northern and coastal plain areas in the watershed, because there has been more atmospheric deposition in those areas.
- Looking at delivery with edge of stream was suggested. Jeff said that they have that data.
- Sally suggested making tiers to look for bigger targeted areas. It was discussed whether to do this for each state.
- The need for a layer of forests at risk or susceptible to development was discussed
- The group decided on the following next steps: overlaying the map with protected lands and development pressure, redoing the analysis with Phase 6 Model data, taking delivery to streams into account, doing the study with phosphorus and sediment loads, and looking at results on the state level.

**Need to Offset Additional Phosphorus Loads from Conowingo**

Anne explained how there are addition loads being delivered to the Chesapeake Bay than previously thought or anticipated due to Conowingo Dam. The dam has reached dynamic equilibrium meaning it no longer has the net capacity to trap nitrogen, phosphorus, and sediment. The Chesapeake Bay Program's Principal Staff Committee (PSC) asked the Modeling Workgroup to create three cost-effective approaches to offset the increased nutrients coming from the Susquehanna River and over the Conowingo Dam. Anne showed a report which details the three approaches, which were approved by the PSC. Several groups have been asked to provide input on these possible approaches to addressing Conowingo. The first approach is that since the nutrients are coming from upstream of the Conowingo Dam, the nutrient reduction allocates are given to upstream areas. The second approach is that Maryland and Virginia nutrient reductions are reallocated because those states are most effected by the main stem of the Chesapeake Bay. The third approach is that the entire watershed increases nutrient reduction. In the third approach, there are more options for rural practices which may be cheaper. To learn more, the Allocation of Conowingo Infill Nutrient and Sediment Loads report can be viewed here.

Discussion

- Sally said it would be best to focus on the most practical scenarios; if there is not the amount of land to plant the proposed amount buffers than that scenario should not be considered. She suggested informing the PSC and Modeling Workgroup that the bufferable acres might not be there and that scenarios 3 is the only way to reach it.
- Judy suggested getting a group together before the next PSC meeting regarding Conowingo Dam to discuss and analyze the scenarios more and learn more about the issue via webinars or experts.
- Marian asked whether narrow buffer strips around storm systems would help reduce loads.
- It was asked if there is a way to know how many acres of BMPs are needed to meet the 1million pounds. Anne replied yes, and that it is in the appendices of the report document.
- Kathy said there are communication gaps like understanding of timing and why phosphorus and that the forestry workgroup should comment.

**Forest Conservation BMP discussion**

The forest conservation BMP is specific to Maryland because of the Maryland Forest Conservation Act. Other jurisdictions have claimed the BMP but don't have documentation. The Phase 6 Model questions the need for the forest conservation BMP. The Forestry Workgroup was asked to consider removing this BMP. Sally said that they are going to see what is in the growth model and whether we use the 2025 land use agreement; if it does assume a level of protection, than it doesn't make sense to consider this BMP. It was decided to make this an agenda item for the future.

Discussion

- Olivia said that if the group decides to keep the BMP, a clearer definition should be made.
- It was decided to make this an agenda item for a future meeting.
- It was suggested to have a discussion of the pipeline effects at a future meeting.

**Round Robin**

- Sally said there will a workshop on how to use Phase 6 Model tools on June 29th at the MD DNR office. Frank Lopez is pushing the issue of being able to mow longer in buffer areas, and is

working with FSA. The Chesapeake Bay Forest Service budge was cut, so a forestry assistant will no longer be hired. The national Forest to Faucets data is being updated and analyzed with a focus on the eastern United States. There is a webinar on June 15th on buffer functioning. Please send Amelia Avis any forest buffer success stories for the website.

- Maryland DNR is starting a riparian forest buffer monitoring network. The 15 year mark for many buffers is happening this year which should be interesting to study. Results will be done in the fall, and outreach will be done depending on what is found. There is a new DNR intern. DNR finished training local governments in correct urban tree pruning and trimming methods. They are moving stump dump wood. They are working with UMES to set up an urban forestry project. A nursery asked DNR to find homes for 70 yellow birch trees; they found homes for them and are going to do a study to see if they'll grow in this area.
- Pennsylvania is trying to adopt RFC and put in multifunctional buffers. They have submitted a NFWF grant for buffer maintenance and outreach. The 2017 forest buffer advisory committee meet. The second round of grant applications for multifunctional buffers has closed and they are reviewing application. The Treevitalize program has 2017 grants coming out in June 16th. The Healthy Watershed GIT project just had 2 town hall meetings.
- In Virginia, CREP is evaluating sites 4-6 years old to assess them. Greg Evans has been working with a county government to look at forest conservation and regulations.
- In West Virginia, the Cacapon Institute received a Finley Grant. The Interstate Commission for the Potomac Basin is making a tool for sampling across the river and at different depths; from their research, they are now thinking of rivers as a braided channels. The Shendendoah River is identifiably distinct water in 20 miles of the Potomac River
- National Park Service did a RFB project in 1998 and have an intern using CAST and GIS tools to see where we have existing buffers. They want to work with state leads about what they're doing to make recommendations. They are promoting buffer restoration because it protects archaeological sites.
- Alliance for the Chesapeake Bay: Ryan Davis joined the Alliance in April to expand Forests for the Bay in Pennsylvania and to take over the Prettyboy project. The Alliance submitted a NFWF grant for buffers in Augusta County, Virginia. They are working with land trusts in MD and VA in forestland mitigation. There will be another forestry track for the Chesapeake Watershed Forum.