CHESAPEAKE BAY PROGRAM LAND USE WORKGROUP Call Summary

February 3, 2016 10:00AM-12:00PM

Meeting Materials: http://www.chesapeakebay.net/calendar/event/23308/

Actions & Decisions:

<u>DECISION</u>: The LUWG agreed to re-classify small portions of forested area that are currently classified as tree canopy over turf grass, to open space, which will include a revision of the definition of open space as a land use.

DECISION: The LUWG approved the proposed at-large membership.

10:00 Welcome and introductions/Review of meeting minutes – K. Berger

• Minutes from the January 6th meeting were approved.

10:05 Tree Canopy Mapping Protocol Update – Renee Thompson

- Renee Thompson presented on the proposed Phase 6 forest and tree canopy mapping methodology.
- Mary Gattis: What is the loading rate difference between open space and tree canopy over turf?
 - Claggett: Generally, the range for N export (lb/acre/year) ranged from 2.1 for forest, to 84 for silage with manure. Turf grass is 14.9, tree canopy over turf is somewhat less than that, and open space is 3. When we look at P, forest is .1, open space is .7, turf grass is 1.2, so tree canopy over turf is going to load between open space and turf grass.
- Gattis: Pennsylvania asked a question about loading rates next to streams. In general, would riparian forest buffers in heavily developed areas would be classified potentially as open space in this scenario?
 - Claggett: Small patches of this would be tree canopy of turf. Big patches would be forest. In rural areas, small patches of this would be open space.
 - Thompson: In rural areas, if it's a large contiguous patch of forest, the riparian forest buffers would be captured in this methodology.
- Mark Symborski: The problem with the masking approach is that there's a lot of these urban small fragments of forest that actually don't have turf under them, but will be classed as TC over turf. But they perform as forest, and this is a big concern for local jurisdictions.
 - Norm Goulet: I'm getting concerned about this from that standpoint.
 Additionally, it's over turf which means fertilizer is applied, so we're really talking about increasing some loads that don't exist.
 - Claggett: The proposed methodology reduces the amount of turf grass compared to the old version. So we're being more conservative already in

- what we're calling trees over turf. And what we're talking about with these small patches is a small fraction of the total acreage.
- Goulet: But why not call it open space or something else? It doesn't make sense if you're saying these patches have grass under them when they don't.
- o Gattis: What is under the TC if it's not turf?
- Claggett: We have a whole class that's tree canopy over impervious, so now we're talking about TC over pervious. We're just trying to make a defensible assumption about what that understory probably is, and if it's in a residential or urban area, then if there's a lone tree over herbaceous land, then it's more likely to be turf than if it was in a rural landscape.
- Berger: But it's not functioning as natural forest, and it's probably inbetween natural forest and turf.
- Goulet: If we could get the modelers to not apply fertilizer to the lands we're talking about, I would be more comfortable with this. And I agree with Karl that these are probably compacted soils and don't function as a natural forest would.
- Thompson: Perhaps we could calculate the difference in loading rate depending upon what the red patches are classified as in the urban areas.
- Claggett: The easiest way to turn off the loading rate is to classify them as open space.
- Goulet: I would be very interested in seeing what the load numbers report.
- Symborski: Why can't the assumption be made that tree canopy over turf not be fertilized?
 - Claggett: Because then why not just call all TC over turf open space? You
 wouldn't be accounting for the difference between true open space, and
 tree-covered open space.
 - Symborski: I think this points to the need for a distinction that's not being made.
- Norm Goulet stated that the model assumption that all turf grass is fertilized is not realistic.
- Mary Gattis: What's the margin of error and the impact, and are we better
 off over-estimating the load or potentially under-estimating it? And if the
 load isn't attributed here, then it will have to go somewhere else.
 - Claggett: It will go to another one of the developed classes.
 - Gattis: Which means the urban sector will still be responsible for it.
 - Claggett: The FWG is most comfortable with classifying the red areas in more urban/residential sectors as tree canopy over turf, and the red areas in more rural sectors as open space. And if you classify it as open space, then those acres are ineligible for BMPs.

<u>DECISION</u>: The LUWG agreed to re-classify small portions of forested area that are currently classified as tree canopy over turf grass, to open space, which will include a revision of the definition of open space as a land use.

 Lindsey Gordon updated the LUWG on the outcomes and forthcoming materials from the Phase 6 Land Use Webinar. Materials from the webinar can be found on the calendar event page:

http://www.chesapeakebay.net/calendar/event/23454/

10:40 **Sampling Distribution Briefing** - P. Claggett

- Peter Claggett briefed the LUWG on the progress of creating a sampling distribution of NAIP imagery, with which to identify and characterize areas of impervious change.
- How is that statistical analysis set up?
 - Claggett: If you have a-priori knowledge of where change is going to occur, we can categorize every subsection into high, medium, and low change and those would be our strata for measuring change.
- Katherine Antos: Would this be used for back-casting, forecasting, or both?
 - Claggett: It could inform the way we run our models for forecasting, but it's mainly designed to provide some truth estimate of how the landscape is changing and why. By going in with a subset of samples and manually correcting areas of change, we can qualitatively characterize the types of change we're seeing.
- Claggett: We're prototyping this approach for this year, so this is not likely to inform the September model run, but it could inform future model runs.

11:00 **Confirmation of at-large membership** – K. Berger

DECISION: The LUWG approved the proposed at-large membership.

11:30 Adjourn

Next meeting: March 2nd, 2016; 10:00 AM – 3:00 PM FACE-TO-FACE

Participants:

Dennis Cumbie, Loudon County, VA
George Onyullo, DCDOEE
James Gregory, DE DNREC
Karl Berger, MWCOG
Lee Epstein, CBF
Mary Gattis, LGAC Coordinator
Norm Goulet, NVRC
Steve Stewart, Baltimore County, MD
Renee Thompson, USGS
Sebastian Donner, WVDEP
Peter Claggett, USGS
Fred Irani, USGS
Jeff White, MDE
Jonathan Champion, DCDOEE

Katherine Antos, EPA Darold Burdick, Fairfax County, VA Mark Symborski, Montgomery County, MD Jenny Tribo, HRPDC Lindsey Gordon, CRC Staff