

CHESAPEAKE BAY PROGRAM LAND USE WORKGROUP Meeting Summary

USGS MD-DE-DC Water Science Center

June 4, 2015

10:00AM-3:00PM

Meeting Materials: <http://www.chesapeakebay.net/calendar/event/22904>

ACTIONS & DECISIONS

DECISION: Land Use Workgroup members decided that localities will have three opportunities to review local land use data: 1) a fall review of the draft land use (proof of concept review), 2) a review of the high resolution land cover, and 3) a rolling review of the proposed final Phase 6.0 Land Use data that will go into the Phase 6 model. The final review period will be the most important, but each period will present an opportunity for input.

MINUTES

Karl Berger, LUWG chair, welcomed everyone to the meeting.

Phase 6 land use data and gap filling method discussion

Peter Claggett, USGS, presented the [gap filling methodology](#) for use in Phase 6.0 in all jurisdictions that do not provide local data. Next year the Partnership will have 1 meter data for all counties in the Chesapeake Bay, which will further refine the final dataset.

- The Extractive Land Use is on hold, acres not being put in the model because of the poor quality of the data.
- Using National Wetland Inventory to map wetlands, not relying on satellite data,
- How is the difference between Wetland Forest and Upland Forest identified?
 - Claggett: Based on the NWI classifications, flood plain maps, and tidal stage maps, three classifications are defined: 1) headwater, 2) flood plain, and 3) tidal.
- Berger: How do wetlands affect loading?
 - Claggett: The default is that wetlands act as forests. The Wetlands Expert Panel is working on unique loading rates for the three types of wetlands. Wetlands also have an added efficiency based on the flow they intercept, and the Expert Panel is working on developing the value of added efficiency for each classification of wetland.
- Berger: Does the water land use pick up swimming pools?
 - Claggett: Local data maps swimming pools as water, however the scale makes this classification fairly inconsequential.
- Agriculture is everything that is leftover. This works well in Montgomery County in 2007, with 99.9% accuracy. In some counties, the Census of Agriculture counts more acres than what is mapped, resulting in a high error margin.
- Mary Gattis: Recommend discussing the discrepancy between the Ag census and mapping data with the conservation districts in places with this discrepancy exists.

- Mary Gattis will provide contacts to Peter Claggett.
- How are orchards reflected?
 - Claggett: Depends how big the trees are, Christmas tree farm may be picked up as a forest, it's hard to say, but most likely won't be picked up as herbaceous agriculture even with high-res.
- Fairfax County: Note that high res land cover may be more current than land use from localities, this will be difficult to merge.
 - Claggett: May have to use a hybrid approach to combine the data.
- Norm Goulet: There will be a disconnect between what's happening in VA and the rest of the Bay watershed, because they are not contracting the conservancy.
 - Claggett: Meeting with VGIN, the Chesapeake Conservancy, and the VA vendor and to sort out the consistency issues.
 - Berger: Would it be best to skip the interim product review in VA to reduce duplication of effort?
 - Goulet: It will probably be better to get some information to the localities so they can see how the data is being used.
- Berger: Any input from PA on the review process?
 - PADEP: Worth further discussion in PA.
 - Peter clarified that the question is not whether or not to share with the locals how the data is being used, it is more a question of when this data sharing should occur.
- Berger: Should we take a state by state approach to the review period?
 - Mary Gattis: Important piece is that the local governments have the opportunity. State by state approach is fine as long as there is clear communication as to what the opportunity is.
- The localities will have the opportunity to review the land cover data layer as a product before it is integrated into the Phase 6 model.
- Three points of review for localities:
 - 1) CBP will contact localities on a rolling basis to review proof of concept.
 - 2) When the high res land cover is done, counties will be contacted by vendors to review on a rolling basis.
 - 3) High res data goes to CBP and is integrated into Phase 6 and localities have a chance to provide input again.

DECISION: Land Use Workgroup members decided that localities will have three opportunities to review local land use data: 1) a fall review of the draft land use (proof of concept review), 2) a review of the high resolution land cover, and 3) a rolling review of the proposed final Phase 6.0 Land Use data that will go into the Phase 6 model. The final review period will be the most important, but each period will present an opportunity for input.

CSN Webcast during lunch break: [Where Are the Urban Nutrients Coming From?](#)

Local land use decision rules

Fred Irani, USGS, presented the local land use decision rules.

- Claggett: The local land use data will be superimposed onto the regional data, and the local data will take its place. This code will be developed over the summer.
- Members recommended that there be a policy decision about how this hierarchy will work.
- LUWG will review the hierarchy of datasets in the final land use dataset.

Backcasting land uses

There is a need for land use data from 1984-2013 for Watershed Model calibration, and many localities do not have data going back this far. Propose using Landsat 30m data for 1984, 1992, 2001, 2006, and 2011 for landcover change, and Census population and housing data to measure change in housing from 1990, 2000, and 2010. These are the proposed backcasting methods to be used next summer unless this group decides on a different approach. Unlike Phase 5.3.2, using these methods to backcast change in forest and tree canopy as well as development.

Upcoming Meetings

- June 25th
- July 23rd

Upcoming Agenda Items:

- Matt Johnson will be invited to speak about the decision process of designating Open Space vs. Agricultural land.
- Discussion with tree canopy experts on how to handle the difference between the designation of tree canopy urban, tree canopy edge or forest, and tree canopy over impervious or herbaceous.

Land Use Metrics and Methods Management Strategy

- Peter presented the Land Use Metrics and Methods Management Strategy to the Management Board. The charge is to look at rate of change in forest cover, wetlands, impervious cover, and farmland. In discussions with the LUWG, considered just looking at rate of impervious cover change and its effect. The Management Board said no, they want to see forest conversion, farm conversion, wetland conversion and rate of impervious cover change. So this will affect the approach we take in measuring four separate conversions. Peter will present ideas for how these parameters could be measured. Has not been a priority for this workgroup while the Phase 6 land use development is occurring.

Adjourned

Participants

Karl Berger, Co-Chair	MWCOG
Peter Claggett, Coordinator	USGS

Jenny Tribo	HRPDC
Steve Stewart	Baltimore County
George Onyullo	DDOE
Kristen Wolf	DEP
Jennifer Walls	DNREC
Alisha Mulkey	MDA
Jeff White	MDE
Stephanie Martins	MDP
Norm Goulet	NVRC
Megan Grose	WV DEP
Quentin Stubbs	USGS/CBPO
Mary Gattis	LGAC Coordinator
Greg Evans	VDF
Lucinda Power	EPA
Reid Christiansen	CWP
Paul Patnode	Prince George's County
Lea Rubin	Chesapeake Research Consortium
Darold Burdick	Fairfax County VA