

# CHESAPEAKE BAY PROGRAM LAND USE WORKGROUP Conference Call Summary

July 23, 2015

10:00AM-12:00PM

Posted Materials: <http://www.chesapeakebay.net/calendar/event/22603/>

## **ACTIONS & DECISIONS:**

### Regarding approval of decision rules

**ACTION:** The August 24 LUWG meeting will consist entirely of an in-depth discussion of the methodology used (decision rules) to develop the Phase 6 land use from a variety of sources, including local data. There will be a time period of several months for LUWG members to review methodology for Version 3 of the local land use data.

**ACTION:** Peter will share both the descriptions of the two somewhat distinct methodologies (one for deriving Version I land use from satellite imagery and other Bay-wide data and the other for deriving Phase II land use from a combination of regional and local data) as well as the more detailed spreadsheet documenting methods with LUWG members in preparation for the August 24 discussion.

### Regarding other workgroup actions:

**ACTION:** Peter will discuss options for forecasting and backcasting federal land uses with the Federal Facilities Workgroup and report back to the LUWG on what the various agencies agree to do.

**ACTION:** Quentin will discuss the need for better data for households on sewer with the Wastewater Workgroup.

### Regarding local review of data

**ACTION:** For use in the local review of the Phase 6 land use data, CBPO will ask the states for help in expanding its current list of local contacts. CBPO staff will send the current list of local contacts to the states' LUWG representatives, who will be asked to review existing contacts for accuracy and add in new local jurisdictional contacts where they are currently missing. The updated contact list will be used by both the CBPO and the various contractors analyzing high-resolution land cover data for the Bay Program partners to notify localities when their data is ready to review.

**ACTION:** There will be a webinar (final date to be determined) in September 2015, to explain how Bay Program staff has developed Phase 6 land use from a combination of regional and local data sources. The webinar also will explain the process for reviewing this data and identify the various windows during which local governments can review and comment on the Phase 6 land use for their jurisdictions. The webinar will be recorded and posted on the Land Use Workgroup website for further viewing.

**ACTION:** Peter will discuss the process for local governments to review the Phase 6 land use data with LGAC Coordinator Mary Gattis.

## **MINUTES:**

### **Welcome and Introductions**

### **Workgroup Updates:**

#### **Final Phase 6.0 Local Land Use Methods**

- Peter Claggett (USGS): CBPO has been going through all of the local land use data and deciding how to combine local and regional data sources to represent each county. Version 1 was based exclusively on national/regional data. Version 2 incorporates the local land use/cover data, which is what will be reviewed in the spring of 2015 by the Partnership. We are working on posting the local data as soon as possible, then contacting the GIS folks in each county to take a look at it. Note that this review is the least critical of all review periods. [Attachment A](#), which was distributed last week, contains full documentation of methodology for the local land uses.
- Need for Modeling Workgroup and LUWG to clarify whose role it is to differentiate the types of agricultural land uses.
- Berger: So there is a methodology rule set, but the way it plays out in each county may differ slightly. Are there different rules for different states?
  - Claggett: Correct. There aren't different rules for different states unless we're working with a statewide data layer in some cases.
- Claggett: How do LUWG members want to review P6 regional and local methods & data? Includes sewer vs. septic, and backcast assumptions to 1984.
  - For the localities, the best use of time is to evaluate how the dataset looks and decide if they are comfortable with how we have depicted their land uses. They're welcome to review the methodology too, but this might be too time consuming.
  - Claggett: One option is to publish the methodology in peer reviewed journal. Another would be for a subset of LUWG members to take a close look at the written methodology.
  - Berger: Recommend giving the WG members a deadline to review Attachment A, the methodology.
  - Claggett: How much time would workgroup members need to review the methodology? If major issues were raised in September there wouldn't be time to make adjustments before the October model. Or members can agree the methodology is ok for now, and complete a more detailed review for Version 3.
  - Burdick: Support a longer review after October for Version 3, rather than a rushed review now.
  - MDE: We have looked at all documentation and have some clarifying questions. Suggest a face-to-face discussions to go over the details.
    - Claggett: Yes. We can make this open to all interested members.
  - PA: Would need to rely on our technical folks; need more time to work with them.

- Peter will share the spreadsheet and both local and regional methodologies in advance of methods meeting.

**ACTION:** August 24 LUWG meeting will be an in-depth discussion of the Phase 6.0 local land use methodology. There will be a time period of several months for LUWG members to review methodology for Version 3 of the local land use data.

**ACTION:** Peter will share both the local and regional land use methodologies and the accompanying spreadsheet with LUWG members in preparation for the August 24 discussion.

### **Federal Land Uses**

- MDE: Recommend discussing options with the Federal Facilities Workgroup, to get their opinion on what the trends over time are.
- Claggett: An alternative is to use the land cover record, which will show some development, and use those changes to inform us what happened through time, and for the future hold constant through 2025.
- Berger: Burden should be on feds to produce data similar to the counties.
- Claggett: Another option is to use the land cover record to estimate change through time, then use federal land use editor tool (which is done now, and enables a federal agency to change the proportions of their land uses) to modify the data. If they don't provide a recommendation we'll use the land cover record as default.
- Do federal facilities have master plans?
  - Claggett: We could ask them to provide input via the editor tool for 2025 based on their master plans. If they don't, the default would be to hold constant through 2025.
  - Claggett: Federal agency input would go in to Version 3 as it will take some time for federal agencies to respond to this request.
- Peter will bring this to the Federal Facilities Workgroup and report back to LUWG on their response.

**ACTION:** Peter will discuss options for forecasting and backcasting federal land uses with the Federal Facilities Workgroup.

### **Updated Septic and Sewer Coverage**

- Peter will add the sewer and septic methodology to the write-up for the Workgroup to review.
- Berger: Recommend we make a note to the Wastewater Workgroup that there is need for better data on sewer/septic extent.

**ACTION:** Quentin will discuss the need for better data on sewer/septic extent with the Wastewater Workgroup.

### **High-Res Land Cover**

- Claggett: All three contractors have committed to be done mapping by May 2016, and will be rolling the data out as it becomes available. All are using image segmentation software for classification.

- WorldView Solutions Inc. has not agreed to map tree canopy over impervious surfaces. The UTC Panel may be recommending reduction efficiencies for tree canopy over impervious, which will hopefully pressure to VA to map it.
- Chesapeake Conservancy and University of Vermont need county points of contact (everywhere except VA) for reviewing their draft land cover maps.
  - LUWG has POCs from all counties that sent us data. Asking a representative from each state to add the contacts for each county where we don't have them or change the POC where needed.
  - Peter will send VA POCs to VA and the VA contractor.
  - MDP (Stephanie Martins), PA (Denny Puko), WV (Megan Grose), DE (Jennifer Walls), VA (Bill Keeling and PDCs). Peter will follow up with NY offline.
- Chesapeake Conservancy needs LiDAR Digital Surface Model for Garrett County, MD and for most counties in NY.
- Chesapeake Conservancy needs leaf-off orthoimagery for MD, WV, and NY
- Berger: Recommend states work with contractors directly rather than going through CBPO.

**ACTION:** CBPO will send the existing points of contact for localities to each state. States will update the list and fill in any blanks. The updated POC list will be used by CBPO and the high-res land cover contractors to notify localities when their data is ready to review.

### **Local Land Use Data Inventory**

- Quentin Stubbs (USGS): We have received data for 86% of the 206 jurisdictions. Identifying the points of contact for each locality will be necessary for the review process.

### **Wetland Efficiencies**

- Stubbs: Wetland land use efficiencies are still under investigation by the Expert Panel. Loading rates are being evaluated based on a literature review. The default rate will be equivalent to forests.
- Recommendations expected to go to Water Quality and Habitat GITs in August or September.
- Following October calibration Panel will continue providing Phase 6 recommendations for wetlands restoration, creation and enhancement BMPs.
- Berger: Note that it will be important to map wetlands as accurately as possible because lower loading rates and increased efficiencies will have an impact in the model.
- Claggett: 1<sup>st</sup> order kinetic equation is a statistical regression line fit through data showing that the retention of nutrients in a wetland is a ratio of wetland area to area draining to the wetland. The equation provides a relative retention amount for all mapped wetlands. We can use SPARROW to deconstruct how the loads from land uses get to the stream.

### **Review Process and Schedule: Phase 6 Land Use Data**

- Peter reviewed the timeline for Phase 6 Land Use Development and Review
- The Jurisdictional rolling review will begin in Aug-Sep with proof of concept review ([Attach B](#)).

- There will be a webinar in September, which will be recorded, to explain the process and help get the word out about opportunity for review. Communication will occur through county POCs, the LUWG, and LGAC. Open to other communication suggestions too.
- Berger: Is 4-6 weeks sufficient time for a county to review?
  - Fairfax County: It would be most helpful if we knew when the rolling review period would be for each county.
  - Claggett: We'll know in January what the delay between high-res land cover and the final version would be. So once a county is contacted by the contractor, they'll know they have X months before the final.
  - Fairfax Co: It will be especially important for VA and contractor to know who the POC is in each county so that it goes to the right person.
  - Berger: Will be helpful to give counties advance notice before their review period begins.
  - Berger: Check in with Mary Gattis about the review process to get her feedback as well.

**ACTION:** There will be a webinar (to be scheduled) in September 2015, to go over the review process and help get the work out about opportunity for localities to review the local land use data. The webinar will be recorded and posted on the Land Use Workgroup website for those unable to attend the live webinar.

**ACTION:** Peter will discuss the review process for local land use data with LGAC (Mary Gattis) to gain their feedback on the proposed approach.

**ACTION:** Every effort will be made to give counties advance notice prior to their final dataset becoming available for review.

#### **Next conference call/other business**

- August 27th will be a face-to-face detailed look at methodology rather than a regular LUWG meeting. The meeting will be open to whoever would like to participate in the detailed discussion.
- September 24<sup>th</sup> will be the next LUWG call or meeting. Agenda items to include forecasting future land use, and the Land Use Methods and Metrics Outcome.

#### **Adjourn**

#### **Participants**

Karl Berger, LUWG chair, MWCOG  
 James Gregory, DNREC  
 Peter Claggett, USGS  
 Quentin Stubbs, USGS  
 Norm Goulet, NVRC  
 Lee Epstein, CBF  
 Megan Grose, WVDEP  
 Stephanie Martins, MDP  
 Renee Thompson, USGS  
 Ted Tesler, PADEP

Robert Hirsch, Baltimore County

Lucia Woo

Denny Puko, PA

Jeff White, MDE

Mark Symborski, Montgomery

Jennifer Walls, DNREC

Darold Burdick, Fairfax County

Emma Giese, CRC

Kurt Gottschalk, STAC