

CHESAPEAKE BAY PROGRAM LAND USE WORKGROUP

Meeting Minutes

Dec 1st, 2021

1:00 PM – 3:00 PM

Meeting Materials: [Link](#)

Summary of Actions and Decisions

Decision: The LUWG approved the [November meeting minutes](#).

Action: The LUWG is changing their meeting times to the 3rd Wednesday of the month from 1-3pm, starting in January 2022. Jackie Pickford, CRC, will send out cancellation notices for the existing calendar invites, and new calendar invites for 2022.

Action: The CAST-23 schedule discussion will be postponed until the WQGIT comes to a decision about future versions of the model and the incorporation of the 2021/22 high-resolution imagery. The WQGIT will be discussing Phase 7 at their [Dec 13](#) meeting for those interested in attending. The LUWG will be notified of the official outcomes of this meeting once they are finalized.

Action: Peter Claggett, USGS, will work with the LUWG and Matthew Baker, UMBC, to help coordinate local review of the hydrology data. See progress of data [here](#).

Welcome, Roll Call, Review of Meeting Minutes, Action Item Update – KC Filippino, Hampton Roads Planning District Commission (10 min).

Announcements:

- **Decision:** The LUWG approved the [November meeting minutes](#).
- **Action:** The LUWG is changing their meeting times to the 3rd Wednesday of the month from 1-3pm, starting in January 2022. Jackie Pickford, CRC, will send out cancellation notices for the existing calendar invites, and new calendar invites for 2022.
- **Action:** The CAST-23 schedule discussion will be postponed until the WQGIT comes to a decision about future versions of the model and the incorporation of the 2021/22 high-resolution imagery. The WQGIT will be discussing Phase 7 at their [Dec 13](#) meeting for those interested in attending. The LUWG will be notified of the official outcomes of this meeting once they are finalized.
- **Next Meeting:** Wednesday, Jan 19th from 1:00 - 3:00 PM.

Version 2 Product Status and Accuracy Assessment Framework – J. Czawlytko and K. Walker, CIC.

Jacob and Katie gave an update on the status of the V2 2017 land cover, land use, and 2013-2017 change product and accuracy assessment framework. At this time, the CIC is:

- *Finalizing the Version 2 land cover QA/QC, editing the land use scripts to match updated decisions and general debugging.*
- *End of December: Land cover and change products will be delivered*

- Jan/early Feb: LC and LCC products will be translated into land use products.
- Mid to late Feb: Review and polishing of data for the accuracy assessment publication
- Finalizing accuracy assessment methods and drafting a white paper to document the process.
- For the next set of data products, 2021/22 high-res land cover, land use, and change products, the CIC will create two schedules to present to the LUWG in January: 1) a schedule based on the CAST-23 timeline, and 2) a schedule independent of the CAST-23 timeline, solely based on what they need to deliver a good final product.

Discussion on V2 data products

KC Filippino: How will the Version 2 data be delivered?

- The CIC will provide GIS data via download links by county or state, as well as pivot tables with the full suite of land use classes (not rolled up into Phase 6 classifications). It will include the 17/18 land use, land cover, and 13-17 change products. Documentation will be provided for explanation.

Dave Montali: When you present to the WQGIT and the LUWG, it might be worth putting those in terms of Phase 6.

- **Peter Claggett:** I can give a presentation to the LUWG and the WQGIT on the differences between V1 and V2 Phase 6 land uses.
- **Karl Berger (in chat):** Differences between these two versions should be minimal, right?
- **James Martin (in chat):** Agree. Yes, I think that comparison between v1 and v2 is needed. Also, if change is significant, I would want to see a proposed modification to 13-17 change product for CAST23.

Discussion on Accuracy Assessment

KC Filippino: Could we include a strata based on the quality of the NAIP imagery? For example, differences in snow or leaf cover.

- **Peter Claggett:** We can do that. Stratifying by state would be for political purposes, but it doesn't really tell you much aside from that. The quality of lidar data based on year might be more useful.

Karl Berger: Will you compare your land use product to a different similar product produced by a county to get an accuracy based on that?

- **Peter Claggett:** It wouldn't be difficult to do mechanically, but it would only lead to a discussion about differences in definitions. The best thing would be to have a better source of imagery to compare it to.
- **Karl Berger:** If we can't afford to buy the NAIP for the entire watershed, maybe we can buy it for select counties.
- **Lisa Beatty:** I think our time and resources should be equitable across all jurisdictions.

Peter Claggett: Lisa, what do you think about watershed accuracy as a whole vs by state?

- **Lisa Beatty (in chat):** The watershed strata instead of state strata would benefit PA more. We do assessments by county but are starting to move towards watershed HUC level point of view, especially for delisting streams.

KC Filippino: What are the next steps?

- **Peter Claggett:** The next steps are figuring out how many samples we can afford and what we need to meet the statistical rigor that we're proposing, and then how we balance the two. The Conservancy is simultaneously working on the mechanics of it.

Hyper-Resolution Hydrography Data Update – Matthew Baker, UMBC.

Matthew provided an update on progress producing the hyper-resolution hydrography data for the Bay watershed. UMBC and the CIC has been working on improving the automation procedure used to produce the hyper-resolution hydrography data, refining the process of delineating streams, and building in the capacity to update the data quickly as new information becomes available. Progress is being tracked [here](#).

Discussion

Mark Symborski: Do you anticipate the flow permanence aspect of the project to tell us what channels are ephemeral streams vs perennial or intermittent streams? Local jurisdictions typically don't regulate ephemeral channels so if we want to prioritize stream buffer restoration, we need to know which are the perennial/intermittent to give us the most benefits for money invested.

- **Matt Baker:** We are going to develop modeled estimates of those characteristics and we hope to validate those in some stratified way to determine the accuracy of those predictions.

Dave Montali: How will the lack of lidar affect the representation in the western part of West VA?

- **David Saavedra:** With that particular HUC8, there are two elongated portions of that area that we're missing lidar DEMs for, but we do have lidar DEMs for the remainder of that HUC. I'm working on finding them or getting an estimation of when they will be available so we can start working in that HUC.

James Martin (in chat): When will the data product be released to the Partnership? What format will the end-product be in?

- **Matt Baker:** Vector data (blue line) and an attribute table with different characteristics will be available in Spring or Summer of 2022. The other output will be the aerial extent of the channel.

Mark Symborski: Will there be an official review period for localities to provide feedback?

- **Matt Baker:** That hasn't been decided yet.
- **Peter Claggett:** The LUWG can be involved in or help coordinate a local review of the data. I will coordinate with Matt and the LUWG to determine the best approach.

Action: Peter Claggett, USGS, will work with the LUWG and Matthew Baker, UMBC, to help coordinate local review of the hydrology data. See progress of data [here](#).

Additional Land Use Methods and Metrics Outcome Indicators – Peter Claggett, USGS.

Peter gave an update on the Land Use Methods and Metrics outcome indicators related to impervious cover change.

Discussion

KC Filippino: Are you doing any other geographies other than NHD catchment?

- **Peter Claggett:** We'll be doing some by census places like urban tree canopy and census urban areas.

James Martin: Looking at CAST23 and updates to the land change model, is this the type of additional information that you would need to modify the algorithm for where growth might be most likely to occur?

- **Peter Claggett:** Yes. It will eventually inform the land change model, it's just a question of when.

KC Filippino: How will this be delivered?

- **Peter Claggett:** That still needs to be decided. We're considering putting it on Chesapeake Progress.

Review of CBLCM and Land Policy BMPs: Part 2- Peter Claggett, USGS.

Peter gave an update on the effects of the CAST-21 Land Policy BMPs.

Discussion

KC Filippino: Did you get a chance to assess how the land change data that went into CAST21 affected or made differences on the results of the land policy BMPs?

- **Peter Claggett:** The outputs will change but mainly because we've shortened the period of time from 2013-2025 to 2017-2025, but they aren't going to make any fundamental changes to the land policy BMPs.

James Martin: At the county scale, if you implement the growth management practice, does it change the growth in population? Or only the developed acres per unit of population?

- **Peter Claggett:** It only changes the developed acres per unit.

Meeting Adjourned

Meeting Chat

From James Martin to Everyone 01:14 PM

When you say hi-res data, you mean a change product right?

December 13 WQGIT meeting

https://www.chesapeakebay.net/what/event/water_quality_goal_implementation_team_conference_call_december_13_2021

From Normand Goulet to Everyone 01:15 PM

https://www.chesapeakebay.net/channel_files/43866/phase_7_schedule_11-29-21.pdf

From James Martin to Everyone 01:16 PM

I would encourage you to put forward the schedule you need to deliver the final change product

From Normand Goulet to Everyone 01:16 PM

https://www.chesapeakebay.net/channel_files/43866/schedule_for_p6_to_p7_transition_11-29-21.pdf

From Me to Everyone 01:22 PM

Link to Calendar page:

https://www.chesapeakebay.net/what/event/land_use_workgroup_conference_call_december_2021

If you can't see the meeting materials on the calendar page, try refreshing the page

From Karl Berger to Everyone 01:28 PM

Differences between these two version should be minimal, right?

From James Martin to Everyone 01:31 PM

agree. Yes I think that comparison between v1 and v2 is needed. Also, if change is significant, would want to see proposed modification to 13-17 change product for CAST23

From James Martin to Everyone 01:49 PM

Data Quality - LIDAR class?

From Peter Claggett to Everyone 01:55 PM

LiDAR date and resolution

From James Martin to Everyone 02:05 PM

Is the priority to do the V2 land cover or the land use change product?

From KC Filippino to Everyone 02:06 PM

LC and LC change I thought is what he said.

From Peter Claggett to Everyone 02:07 PM

Yes- we're only planning to assess land cover and land cover change. It's too challenging to train people to interpret land use.

From James Martin to Everyone 02:08 PM
and V1 or v2 LC?

From Peter Claggett to Everyone 02:19 PM
v2 LC only

From James Martin to Everyone 02:24 PM

When will the data product be released to the Partnership? What format will the end product be in?

From Lisa Beatty, PA DEP to Everyone 02:32 PM

@Peter I thought about it and the watershed strata instead of state strata would benefit PA more. We do assessments by county but are starting to move towards watershed HUC level point of view, especially for delisting streams.

From Peter Claggett to Everyone 02:33 PM

Thanks Lisa.

From Karl Berger to Everyone 02:34 PM

Need to leave the meeting now.

From David Saavedra to Everyone 02:35 PM

Agreed, I like the sound of that

From Lisa Beatty, PA DEP to Everyone 02:50 PM

We told our jurisdictions Spring 2022 for the public data so if it comes earlier it will be ahead of schedule! 😊

From James Martin to Everyone 03:02 PM

Does Growth Management change the population or just the developed land acres per unit of population growth
CAST21 = Change product resulting from high resolution data

Participants

Jackie Pickford, CRC

Karl Berger, MWCOG

KC Filippino, HRPDC

Peter Claggett, USGS

Mindy Neil, WV DEP

Lori Brown, DNREC

Deb Sward, MDP

Arianna Johns, VA DEQ

Lisa Beatty, PA DEP

David Saavedra

Jacob Czawlytko, Chesapeake Conservancy

Katie Walker, Chesapeake Conservancy

Matt Baker, UMBC

Cassie Davis, NYS DEC

Shannon McKenrick - MDE

Sarah McDonald, USGS, CBP

Ruth Cassilly UMD

Helen Golimowski, Devereux Consulting

Rick Turcotte USDA FS

Dave Montali, Tetra Tech, MWG, WV

James Martin, VA DCR & WQGIT

Gopal Bhatt, Penn State | CBPO

Katie Brownson, USFS

Ted Ritsick - Pennsylvania DCED

Labeeb Ahmed, USGS-CBPO

Young Tsuei - DOEE