CHESAPEAKE BAY PROGRAM
LAND USE WORKGROUP
Meeting Minutes
March 15th, 2023
1:00 PM – 3:00 PM
Meeting Materials

Summary of Actions and Decisions

Action: Please review the proposed updated scope and purpose of the LUWG (posted on calendar page). If you have any questions, concerns, or suggestions on the updated scope and purpose, please contact Jackie (pickford.jacqueline@epa.gov) by COB Friday, April 7th.

Action: David Saavedra, Chesapeake Conservancy, will return to the LUWG at a future meeting to present on the hyper-resolution hydrography dataset.

Action: The LUWG will have a future agenda item on solar classification for future editions of the data.

Action: LUWG leadership and HWGIT leadership will work on next steps for Land Use outcomes, SRS documents, and MB response to Quarterly Progress Meeting requests.

1:00   <u>Welcome, Roll Call, Review of Meeting Minutes, Action Item Update</u> – KC Filippino, Hampton Roads Planning District Commission (10 min).

      Announcements:
- *Please put your name and affiliation in the chat box for attendance purposes. Thank you!*
- March 2023: Review of hyper resolution hydrography data – David Saavedra, Chesapeake Conservancy
  - If you have questions, please contact David Saavedra (dsaavedra@chesapeakeconservancy.org).
  - Lisa Beatty: This review is difficult for the local level because we don't have a lot of hydrologists on staff.
  - Katie Walker: No expectation for participation, so no worries. We have a formal technical stakeholder advisory group for this review.
  - Mark Symborski: Working on a stream buffer restoration study in Patuxent reservoir and we needed a really good hydrography dataset. We have an earlier version of this dataset from David, which was very accurate but was showing some things that we don't regulate as streams. But this dataset enables you to subset the streams, which trimmed off the ephemeral streams and things we didn't want to buffer. We found it very useful.

- ○ Katie Walker: There will be additional attribution that will be included in the final data package, too.
- ○ Peter Claggett: At the last LUWG meeting, we heard that having info about stream flow permanence is really important and we're investigating this for future funding. Scoping out project and prototype this coming year to predict streamflow permanence. USGS is paying for conversion of hyper res data into official national 3DHP. Eventually want to build it into the NHD.
- ○ KC Filippino: Once this data is final, we can have this as a separate agenda item.
- Updating the LUWG scope and purpose – Peter Claggett, USGS
  - ○ **Action:** Please review the proposed updated scope and purpose of the LUWG (posted on calendar page). If you have any questions, concerns, or suggestions on the updated scope and purpose, please contact Jackie (pickford.jacqueline@epa.gov) by COB Friday, April 7th.
- **Next Meeting:** Wednesday, June 21st from 1 – 3 PM.

1:10 Update on Status and Timeline for 2021/2022 data and Feedback on the LULC data - Katie Walker, Chesapeake Conservancy (45 min).

Katie provided an update on the status and timeline for the production of the 2021/2022 high resolution LULC data and update on the accuracy assessment and associated publications for the 2017/18 LULC data. Katie also reviewed the feedback received on the 2017/2018 LULC data last fall and during the joint FWG/LUWG meeting in December and provided an overview of updates to the data to address identified systematic errors.

Discussion
KC Filippino: Will you review the animal operation updates at the AgWG?
Katie Walker: Yes, we plan to as we make progress with it. Also the WTWG as well.
KC Filippino: Anything you need right now in terms of the local data ask from jurisdictions?
Patrick McCabe: I'll circulate the list of counties that I still need.
Lisa Beatty: Can you tell us now what you need? It will have to go to different departments within the state, so it would be helpful to get that as soon as possible.
Katie Walker: The information for the land use process is at the county scale. Probably not state level data. This is more county level.
KC Filippino: April 2024 was when we'd provide feedback on the datasets? That is just a LUWG one month review period, is that right?
Katie Walker: Yes, the current plan is to have a two month window of starting to get feedback from March - April. We will refine that as data starts to roll in and we have a better idea of what the process will look like.
KC Filippino: Anything that you've adjusted in the model will be reflected in each time period (2013/24, 2017/18, etc.) for each edition of the data, right?
Katie Walker: Yes. In June of 2024, when we release the 2024 edition, it will have new data for 21/22 time period and updated data for both 17/18 and 13/14 time period.
KC Filippino: Issues with turf grass and barren will be addressed iteratively through those time periods?
Katie Walker: Yes, anything in the new edition will be reflected in the previous time periods.

Deb Sward: Validating LU classification against local data. Do you have any ancillary datasets that might be useful for validating portions of the model? MD has some chicken house data that may be helpful. I can follow up with you offline.

Katie Walker: Sounds good. Definitely a conversation we can revisit with our data team. Will follow up with you separately on specific data layers that might be relevant.

Peter Claggett: This time around we are trying to make more use of local land use or local attributes than we have in the past. Especially places that may look like ag but we know are not ag (industrial sites, recreational areas, cemeteries, etc.). Want to further refine the classification. For certain classes we'll be putting more emphasis on ancillary data than we have in the past.

Samuel Canfield: Have you been interacting with Dave and Alana for land use requests in the past? Is the LULC product outside of the CBW?

Katie Walker: Yes. And the extent of our data is all counties that intersect or are adjacent to the CBW.

Samuel Canfield: Also, about the solar data - is West VA information coming from West VA about our solar arrays on those previous maps?

Katie Walker: Yes.

Dave Montali: If you have requested timber harvest data from West VA, who did you ask?

Mindy Neil: Patrick sent me the counties he requested the info from. Let's talk offline about getting them better data.

Patrick McCabe: The only states left that I need timber harvest data for are DE and MD. Stephen sent that over in early March.

Dave Montali: From West VA department of forestry?

Patrick McCabe: Yes.

KC Filippino: There's the timber harvest piece but there is also a local data request which is different. Folks at the state level might want to see that ask ahead of time before it goes to the local level because I got a lot of questions when that happened.

Patrick McCabe: I'll be sure to include all the state contacts that I have when I send that out.

KC Filippino: Will any of the solar stuff be discussed in the upcoming STAC workshop?

Peter Claggett: I'm not sure but Mike Evans from the Conservancy is scheduled to speak.

Arianna Johns (in chat): Let me know what VA can help you with. I have a list of some people I contacted last time, but there has been a lot of turn over locally, I will absolutely find the people to get you the data

Deborah Sward (in chat): Last time we helped Rachel Soobitsky identify additional local contacts for the LU/LC data and review. If it would be helpful, please feel free to reach out to me at deborah.sward@maryland.gov.

Lisa Beatty (in chat): Thank you for the timber harvest updates. Before emails go out to our county partners about timber harvest can you please contact DEP? My email is elbeatty@pa.gov and Erin at epenzelik@pa.gov

Cassie Davis (in chat): Same here for NY please. My contact is Cassandra.davis@dec.ny.gov. Thanks!

Katie Walker (in chat): We don't ask the counties for timber harvest data - we work solely with state agencies to gather that information.

Katie Walker (in chat): We will certainly share with you the local data request for PA and NY respectively before they go out.

Action: The LUWG will have a future agenda item on solar classification for future editions of the data.

1:55   Updates to LULC Classification – Sarah McDonald, USGS (25 min).

Sarah reviewed how solar, animal operations, water, and wetlands will be classified in the upcoming iteration of the LULC data.

Discussion

Cassie Davis (in chat): Will these animal operations impervious count towards feeding space?

Peter Claggett: At this point we don't know what will count. We are talking about a phase 7 here and there hasn't been any agreement yet to use our calculated estimate of feeding space based on the ag census moving forward. Will have to work with the AgWG, AMT, and MWG to figure out what they want to use. We will be doing it regardless because there are other uses for mapping ag but we'll make sure it's as useful as possible for Phase 7.

Cassie Davis: Also wondering about the 2024 edition - what years will that be mapping?

Sarah McDonald: For 2024 edition we will remap 13/14 data, remap 17/18, and map a new dataset for 20/21.

KC Filippino: What really matters to me is how all of these different classes will roll up for the model. But I guess what Peter was saying is that these are two different conversations. Individual classification schemes won't necessarily have loading rates associated with them, it is more about how they are rolled up.

Peter Claggett: MWG is developing CalCAST to statistically evaluate the water quality significance of changes in input data. So collectively we will have to decide on some priorities to test. But these 64 classes will all collapse into the original 13 classes.

Dave Montali: When will that conversation happen in relation to MWG quarterly meetings?

Peter Claggett: I'd say maybe in a year. I will check with Gary as to when these decisions need to be made.

KC Filippino: There is harvesting of forest in tidal wetlands in VA?

Sarah McDonald: I've cases of it in the eastern shore in MD, not sure about VA. I don't remember where that screenshot was from.

Cassie Davis: What are the additional reasons you are mapping ag facilities for?

Sarah McDonald: At CBP, we're required to calculate land conversion ratios from agriculture, forest, and wetlands to development. And given the current classification without distinguishing type of structure, when a new poultry house or barn goes on to cropland it will be translated to development because it's impervious, but that's not what we're trying to capture. We're trying to capture if we're losing ag fields to residential or commercial development.

2:20   Land Use Methods and Metrics (LUMM) Outcome: Update on Strategy Review System (SRS) Process – Jackie Pickford, CRC (20 min).

As part of the Chesapeake Bay Program's Strategy Review System (SRS) process, the LUWG leadership presented a status update on the Land Use Methods and Metrics Outcome to the Management Board (MB) at their March Quarterly Progress Meeting. This presentation also highlighted ways in which the LUMM proposed indicators are being used across Bay Program goal teams and workgroups to demonstrate the importance of tracking land conversion. Jackie reviewed the feedback from the MB and the "asks" presented by the LUWG leadership, as well as the survey results that

highlight how groups are currently using the indicator data or intend to use it in the future.

- [LUMM Presentation to Management Board](#)
- [LUMM Narrative Analysis](#)

Action: Please review the proposed updated scope and purpose of the LUWG (posted on calendar page). If you have any questions, concerns, or suggestions on the updated scope and purpose, please contact Jackie (pickford.jacqueline@epa.gov) by COB Wed March 29th.

Action: LUWG leadership and HWGIT leadership will work on next steps for Land Use outcomes, SRS documents, and MB response to Quarterly Progress Meeting requests.

2:40   Land Conversion Metrics – Sarah McDonald, USGS (20 min).

Sarah will provide an overview of new LUMM metrics that are under development or proposed for development in 2023.

Discussion
Lisa Beatty: Regarding your second map in orange, it seems like you're mapping two different things in one. Can that be parsed out so we can see that?
Sarah McDonald: Right. The reason these are grouped is because we can't separate them in the classification.
KC Filippino: How does agrotourism fit in there? VA is changing their laws currently on that. Would that be a separate classification?
Sarah McDonald: Great question. I don't think we've internally discussed that use case.
Karl Berger (in chat): I realize the Bay watershed probably has the best overall watershed-wide land use in the country, but will you be able to compare development rates in the watershed to those in other parts of the country?
Sarah McDonald: We can but it would be comparing apples to oranges. The data in other parts of the country would be derived from 30 meter data and classification wouldn't be as dense as ours. Not sure how useful that comparison would be.
Susan Minnemeyer (in chat): Question related to regrowth of harvested forest for Sarah - very similar to Peter's comment on long term data. Could you comment how you distinguish regrowth of harvested forest from conversion of agricultural lands to forest?
Sarah McDonald: The last iteration we relied pretty heavily on NLCD and the cropland data layer to distinguish if it was ag or not in the early date. This time we're planning based on this analysis and other analysis once the data is released that we still do need longer term context to better map that. The state harvest data that we're getting across the watershed will hopefully be associated with a year and will help with that distinction as well as longer term trends.
Sarah Minnemeyer: On the MD forest study we'd seen the lower eastern shore of MD had some increases in forest cover and we were wondering if that was difficulty in mapping forest regrowth but consulting forest service and it's actually an increase of forest in ag areas.
Lisa Beatty: Are there plans to separate out two different sectors from the graph you had?

Sarah McDonald: Not in the near term, but in the 2024 edition we plan to distinguish those structures out so when we recalculate these conversion rates we are hoping we are able to separate them out.

3:00   Adjourn

NEXT MEETING: Wednesday, June 21, 2023 from 1 – 3 PM.

Participants

Jackie Pickford, CRC
Peter Claggett, USGS-CBPO
KC Filippino, HRPDC
Sarah McDonald, USGS
Labeeb Ahmed, USGS
Katie Walker, Chesapeake Conservancy
Samuel Canfield, WVDEP
Allie Wagner, NVRC
Erin Penzelik PA DEP
Irina Beal, WeConservePA
Arianna Johns VA DEQ
Jeff Sweeney, EPA
Katie Brownson, USFS
Lori Brown, Delaware DNREC
Renee Thompson, USGS/CBP, HWGIT
Sophie Waterman, CRC/CBP, HWGIT
Patrick McCabe, Chesapeake Conservancy

Karl Berger, MWCOG
Mindy Neil, WVDEP
Lisa Beatty, PA DEP
Erik Fisher, CBF
Young Tsuei - DC DOEE
Rick Turcotte USDA Forest Service Morgantown WV
Mark Symborski, M-NCPPC
Patrick McCabe, Chesapeake Conservancy
Ruth Cassilly, UMD-CBPO
Lorena Kowalewski, DC DOEE
Jacob Czawlytko, Chesapeake Conservancy
Deb Sward, MD
Dave Montali, WV/MWG
Susan Minnemeyer
Cassie Davis, NYSDEC

Acronym List

CBP: Chesapeake Bay Program
COB: Close of Business
CRC: Chesapeake Research Consortium
LULC: Land Use / Land Cover
LUMM: Land Use Methods and Metrics Outcome
LUWG: Land Use Workgroup
MB: Management Board
NLCD: National Land Cover Database
QPM: Quarterly Progress Meeting
SRS: Strategy Review System
USGS: United States Geological Survey