CHESAPEAKE BAY PROGRAM LAND USE WORKGROUP (LUWG) MEETING

Meeting Minutes March 20, 2024 1:00 PM – 3:00 PM Meeting Materials

Summary of Actions and Decisions

Decision: The LUWG approved the Dec 2023 minutes.

Action: Please review our 2023 SRS materials and let LUWG leadership (kfilippino@hrpdcva.gov; Arianna.johns@deq.virginia.gov; smcdonald@chesapeakebay.net; pickford.jacqueline@epa.gov) knowneaded.chesapeakebay.net; pickford.jacqueline@epa.gov) knowneaded.chesapeakebay.net; knowneaded.chesapeakebay.net; knowneaded.chesapeakebay.net; pickford.jacqueline@epa.gov) knowneaded.chesapeakebay.net; <a h

- Which SRS option should we choose for 2024?
 - Option A) Full SRS process
 - Option B) Brief Update
 - O Option C) "Pass" on SRS for 2024
- If option A or B what needs to be updated from our 2023 materials? What new information should be included? Excluded?

Meeting Minutes

- 1:00 Introductions and Announcements KC Filippino, HRPDC/Co-Chair (20 min).
 - New membership and leadership
 - o Co-Chair: Arianna Johns, VA DEQ
 - At-Large members: Andrew Gray (Carroll County MD), Steven Guinn (Chesapeake Conservancy), Norm Goulet (NVRC)
 - **Decision:** The LUWG approved the Dec 2023 minutes.
 - New June meeting date to avoid Juneteenth holiday
 - Wednesday, June 26th from 1 3 PM
 - Please look out for a new meeting invite from Sarah McDonald.
 - GIT funding projects Sarah McDonald, USGS
 - Update on LU-related <u>GIT funding projects for 2024</u>
 - Katie Brownson, USFS (in chat): I also submitted a project to support the Timber Harvest Task Force that has strong LUWG connections to improve projections of timber harvest land use trajectories.
 - Update on 2023 Projects
 - Community response to land use change Sarah McDonald, USGS
 - DelMarVA marsh project Sarah McDonald, USGS
 - Mapping potential nontidal wetlands (watershed-wide) Katie Walker, CC

1:20 **Updates on the 2024 edition high-resolution land use land cover data products** – Steven Guinn and Katie Walker, Chesapeake Conservancy (40 min).

Steven provided an update on the 2024 edition of the high-resolution land use/land cover data and compared outputs of the 2024 and 2022 editions of the data. Katie reviewed the new timeline and review process. There was time for questions and discussion following the presentation.

NEW TIMELINE for data release of the 2024 Edition:

- Now June: Finalizing land cover product and conversion to land use/land cover data.
- June July 2024: Stakeholder review period (4 weeks).
- September 2024:
 - o Release of the 2024 Edition of the LULC data
 - Complete model documentation and communication materials
 - End of Chesapeake Conservancy's cooperative agreement with EPA for LULC data production

Discussion

Tree Canopy Rule Change Effects

Katie Walker: From a water quality perspective, we'd be putting 3500 acres into "tree canopy other" and "forest" in this county, so there will be less loading from a model perspective.

Norm Goulet: How much validation has gone into this change? That's a huge change, nearly over 50% change. Will have a major impact on loads.

Katie Walker: A lot of these changes have come from a stricter alignment with the USDA Forestry Inventory Analysis (FIA) definition of what forest canopy is. All of this was vetted in our September meeting and joint FWG December meeting. We also met with FIA to make sure we had these definitions correct and how to assign tree canopy.

Sarah McDonald: Also, we aren't anticipating this data being utilized for Phase 6. It won't be incorporated until Phase 7. The LUWG and FWG made some decisions about this during previous meetings. We reduced this buffer size from structures from 20m to 10m and made sure it didn't extend past the parcel boundary.

Norm Goulet: When this is done watershed wide, you will have to explain this to a lot of people since this will shift some stuff around.

Sarah McDonald: I expect it will be variable by locality. I think a lot of this change will be in urban areas.

Katie Walker: I agree, Norm. There will be explanations and statistics provided in addition to our typical documentation to help get ahead of that.

Norm Goulet: We previously never paid much attention to "tree canopy other" from a loading standpoint because it was so minor. If it's not going to be minor anymore, I wonder what the implications will be and if it will actually load like "forest".

Sarah McDonald: That's a good question. We are trying to align with FIA because it's an ecological understanding of what a forest is, but that may not align with the water quality perspective of what a forest is and is not.

Katie Brownson: From a water quality perspective, it matters whether the understory is managed or unmanaged. That was the main driver for tightening up that buffer area around developed areas. Before, we probably lumped in areas that had unmanaged understory but were functioning from a water quality perspective, but since they were within that distance from a building, we treated them as "tree canopy over turf". That was the reason we wanted to

make this change, and also to be better aligned with FIA. In terms of distinguishing forest and other tree canopy, that distinction really matters when we're talking about habitat issues rather than water quality impacts.

Dave Montali: I'm fine if it's aligning with FIA for ecological reasons, then it's not a managed understory and it's close enough for me. In rural settings, I would see a chunk of contiguous forest with the advent of a new house adjacent to it, and there would be 20m of "forest" changing to "tree canopy over turf" when really the function of that strip of land should not have changed. I think this is an improvement.

Sarah McDonald: Thanks Dave. We'll try to get together some examples of how this affects change at the next meeting.

KC Filippino: Two things: (1) This is the 2024 edition and 2022 edition of 2018 imagery. We use a lot of datasets to inform things like fact sheets or indicators and if we're going to have data changes that could be significant, how do we utilize those tools and make sure we're using the appropriate data inputs for those? For example, do we need to update the Tree Canopy fact sheets based on these changes and updated data? (2) I think we need to look at loading rates for "tree canopy other" for Phase 7 sometime in the future.

Katie Brownson USFS (in chat): Good point, KC.

Norm Goulet: There is a trickle-down effect, though. We base the fertilizer loading rates off of some of the turf grass numbers. We have a fixed amount of N for this, so if we're now reducing the amount of turf grass acres, it means the loading rate will have to go up for loading on turf grass.

Arianna Johns, VA DEQ (in chat): I agree all the loading rates should be re-analyzed.

NLCD replaced by CDL

Dave Montali: Did you say that use of CDL better aligns with the total amount of ag land uses in the ag census?

Steven Guinn: Yes, it aligns better with the ag census, but it's still not perfect.

Adjacency Fill

Dave Montali: There's a place in West VA called Sleepy Creek Lake where you can see this. That would be a good place to check to see if these rule changes work. Adjacent should be all "forest", so hopefully this method would say "succession".

Classifications

Dave Montali: If we map these agricultural facilities, does the LUWG have the job of mapping how these new ag land uses roll up for CAST?

Katie Walker: These would be proposed land uses for Phase 7. I think the intention is that the ag facilities would roll up in Phase 7 as "feeding space", but nothing is set in stone.

Dave Montali: So you'd lose previous/impervious components but it would be a way to track the animal feeding operations?

Sarah McDonald: Yes. That decision is still up in the air though, and I'll talk about that later on in the meeting.

Deb Sward: I remember in previous iterations the solar panels rolled up differently in generalized vs the detailed classification?

KC Filippino: I thought they were always in development?

Sarah McDonald: Currently we still have the same 18 classes that we had last time. I think last time we had solar arrays themselves roll up to impervious development, but the solar fields themselves rolled up to pervious development. I believe that is still the plan this time.

Katie Walker: The big difference in solar arrays for the 2024 edition is just what we're actually mapping as the solar arrays. There were some features that got missed during the land cover classification and therefore missed during the land use conversion. So we worked with UVM to improve that and made more consistent mapping of the solar panel arrays. But they shouldn't roll up any differently.

<u>Timeline/Review Process</u>

KC Filippino: We are only reviewing 21/22 imagery, correct?

Katie Walker: Correct.

Arianna Johns: How will we contact localities?

Katie Walker: We will welcome feedback on that if you have any. The plan right now is to share it out through the LUWG listserv. Also, the Conservancy has their own list of contacts that we will also contact. Between now and June, Patrick will share who we are contacting with the state reps to see if there should be any changes to that list.

Dave Montali: In June/July - will we be looking at the detailed 56 class land use? Or the rolled up 18 class land uses, or both?

Katie Walker: For the most part, it will be visually represented at the 18 class, but if you click on it you can see the more detailed land use specifications, which gives you the full 56 classifications.

Dave Montali: What happens after September? Will there be an additional process in the next year to refine anything?

Katie Walker: The Conservancy's current role will end in September. That will be the end of our cooperative agreement with EPA. My understanding is that Peter Claggett is working with EPA leadership to develop a new RFA for a cooperative agreement to continue mapping the land use moving forward. That has not been released yet, though.

Sarah McDonald: To reiterate, the data will be released in September. After that, the LUWG and other CBP workgroups will work on how that will be rolled up into Phase 7 CAST and make other modeling decisions as needed.

2:00 Strategy Review System (SRS) process updates: Land Use Methods and Metrics (LUMM) and Land Use Options Evaluation (LUOE) outcomes – Jackie Pickford (10 min).

Jackie gave a brief overview of the new Strategy Review System process. She also reviewed the materials the LUWG submitted for the land use outcomes in 2023 and asked the group for feedback on if and how the materials need to be updated.

Discussion

Katie Brownson, USFS (in chat): Option B would also give an opportunity to reiterate the ask to continue the land use data project.

Sarah McDonald (she/her), USGS, CBP (in chat): Completely agree Katie. At this point, we have collected a lot of use cases as well to back-up our ask.

Arianna Johns: Is there a drawback to not presenting to the Management Board this year? Jackie Pickford: I wouldn't necessarily say it's a drawback if we don't present to them, especially if we have nothing to update them on since we already gave them an update last year. However, it can never hurt to remind the Management Board that we exist/that our outcome is important and give them an update on the work we're doing.

KC Filippino: My inclination is to choose Option B and focus on expectations for the future. From experience I think Management Board members can get overwhelmed with the documentation.

Sarah Brzezinski: Two things I wanted to highlight - first, we would only expect you guys to update your management strategy, not create it from scratch. and second, if you guys wanted to go through the full SRS process this year, we wouldn't require you to do the full 45 minute presentation if you don't want to. It's up to you how much time you need for your presentation. Jackie Pickford: Thanks Sarah. That's a good point - both the management strategy and the work plan will only need to be updated, not created from scratch, unless we felt it necessary to do so. And the outcome review summary will borrow a lot of information from our previous narrative analysis.

Sarah Brzezinski: I'll also add that it's never a bad thing to raise the importance of your work to the management Board, especially in light of conversations going on around Beyond 2025. But it's entirely up to your workgroup how you decide to participate in the process.

Action: Please review our 2023 SRS materials and let LUWG leadership (kfilippino@hrpdcva.gov; Arianna.johns@deq.virginia.gov; smcdonald@chesapeakebay.net; pickford.jacqueline@epa.gov) knownedge the following by Wed, April 3rd::

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2:10 Use Case Lightening Talk: Maryland State-wide Land Use Data – Deb Sward, MDP (15 min).

The Maryland Department of Planning's statewide land use map will show the general location of developed lands, including residential, commercial, industrial, institutional, and other urban lands as well as the general density of residential development statewide. The map was developed using statewide parcel polygons attributed with tax assessment data, the Chesapeake Bay Program's 2017/18 Land Use Land Cover data, and land use data from county and municipal jurisdictions.

Discussion

KC Filippino: we have regionalized our land use data, but nothing at the state level. Wish we had this in VA!

Sarah McDonald: This is really helpful for us thinking about how we could potentially provide the data in a format that would be more helpful for planning purposes.

Deb Sward: We have our tax assessment data centralized in MD. I don't know how many other states have that, but it was definitely critical for this project because it standardized a lot of the local data we received.

Irina Beal, WeConservePA (in chat): From PA - I look at 67 county tax parcel sources. Cassandra Davis, NYS DEC (in chat): NY has a centralized tax parcel source.

2:25 **Phase 7 Modeling Discussion** – Sarah McDonald, USGS (30 min).

Sarah gave an overview of land use related decisions and topics that need to be addressed for the Phase 7 Watershed model. She will return in June for a more in-depth discussion with the LUWG on certain decisions regarding land uses and loading rates.

Discussion

Dave Montali: Regarding mixed open - we have limited time to do extensive work for Phase 7. It must involve sector workgroups, the Modeling WG and the LUWG. Is there a task force to do this? Is it possible for you guys to brainstorm like 1 or 2 land uses within mixed open that might be the most important to address? We can live with a little bit of fluff water-quality wise for ones that aren't that far off. Also, it is important to notice the difference in scales between N and P.

Sarah McDonald: Yeah, we can do that.

2:55 **Review of Actions/Decisions** – Arianna Johns, VA DEQ/Co-chair (5 min).

NEXT MEETING: Wednesday, June 26th from 1:00 – 3:00 PM.

Participants

Jackie Pickford, CRC

Sarah McDonald, USGS-CBPO

KC Filippino, HRPDC Arianna Johns, VA DEQ Katie Walker, CC Stevin Guinn, CC Patrick McCabe, CC

Ann Basehore

Arianna Johns, VaDEQ Samuel Canfield, WVDEP

Dave Montali, WV/Tetra Tech/MWG

Norm Goulet, NVRC

Andrew R. Gray, Carroll County MD

Tyler Trostle PA DEP Kit Friedman Luke Peters

KC Filippino, HRPDC Allie Wagner, NVRC Jeff Sweeney, EPA Irina Beal, WeConservePA Lori Brown, DE DNREC

Olivia Devereux, Devereux Consulting, Inc

Sarah Brzezinski, CBPO

Emily Beach

Ashley Hullinger, PA DEP Shannon McKenrick - MDE

Deb Sward, MDP Jenna Schueler, CBF

Sarah McDonald (she/her), USGS, CBP

George Onyullo (DC-DOEE)

Nichole Christ, MD Caitlin Bolton Clint Gill, DE

Mark Symborski, MCP

Rob Hirsch, Baltimore County

Katie Brownson, USFS Young Tsuei - DC DOEE Cassandra Davis, NYS DEC

Acronym List

MDP: Maryland Department of Planning NVRC: Northern Virginia Regional Commission

SRS: Strategy Review System

VA DEQ: Virginia Department of Environmental

Quality

USDA: United States Department of Agriculture

USGS: United States Geological Survey USFS: United States Forest Service

CBP: Chesapeake Bay Program

COB: Close of Business

CRC: Chesapeake Research Consortium

FWG: Forestry Workgroup

HRPDC: Hampton Roads Planning District

Commission

FIA: Forestry Inventory and Analysis

LULC: Land Use / Land Cover

LUMM: Land Use Methods and Metrics

Outcome

LUOE: Land Use Options Evaluation Outcome

LUWG: Land Use Workgroup