



Land Use Workgroup Meeting

August 27th, 2026

1:00 - 3:00pm

[Visit the meeting webpage for meeting materials and additional information.](#)

Summary of Actions and Decisions

Decision: The LUWG approved the July 2026 [Meeting Minutes](#).

Decision: LUWG approved Rosa Hance, Choose Clean Water Coalition, as an at-large voting member of the Land Use Workgroup for the 2026-2028 term.

Action: Peter Claggett will look into the attributes of the Piedmont Environmental Council (PEC) data center dataset to provide more certainty on including proposed data centers in the CBLCM model.

Action: Peter Claggett and Sarah McDonald will investigate the compacted pervious rule for Phase 7 Land Uses in the CBLCM and provide additional context or explanation at the September Office Hours or in the CBLCM FAQ document.

Action: Please reach out to Peter Claggett, Jackie Pickford, or Sarah McDonald (pclaggett@usgs.gov; jpickford@usgs.gov; smcdonald@usgs.gov) about any CBLCM concerns so they can be addressed prior to the final run of the model.

Decision: The LUWG approved the near-final Land Use Planning and Decision Support outcome Management Strategy. Snapshot of signatory programs and statutory authority of signatories sections will be added at a later date once obtained from the Goal Team.

Minutes

Purpose: To review feedback from CBLCM Run #2 and proposed changes for Run #3, as well as finalize and approve the near-final version of the Land Use Planning & Decision Support Outcome Management Strategy.

I. Introduction and Announcements

Announcements:

- Approve July minutes.
- Thank you, Julia, and best of luck on your next chapter!!!

Lead: Debbie Cornwell, MDP/Chair

Materials: July meeting minutes.

Decision: The LUWG approved the July 2026 [Meeting Minutes](#).

II. Coordinator Updates

Jackie reviewed how the LUWG is expected to handle decision-making and voting, as per the recently approved Governance and Management Framework (GMF) document.

Lead: Jackie Pickford, LUWG Coordinator

Materials: [Presentation](#), [GMF Webinar](#), [GMF document](#).

Decision: LUWG approved Rosa Hance, Choose Clean Water Coalition, as an at-large voting member of the Land Use Workgroup for the 2026-2028 term.

Discussion Notes:

- Jackie: I want to give some context on the decision we are asking. In previous years, our chairs or co-chairs have either been a previous signatory member or at-large member. When they moved to the chair position, we allowed them to keep that voting position. That being said, our current chair Rosa was not an at-large member prior to stepping up to chair, but I think it is important that the chosen clean water coalition gets a seat at the table, especially since we have so many vacant positions at the moment.
- There was no opposition or comments from the group.

III. Chesapeake Bay Land Change Model (CBLCM) Update

Run #2 of the CBLCM was completed and posted to the web viewer on August 11th. The LUWG and other interested parties have until August 24th to review these data. During this presentation, Peter gave an overview of the additional planned updates for Run #3, the final model run, which will be reviewed by the LUWG in early September prior to approval from the workgroup. In addition, Sarah, Jackie, and Tom gave an overview of how forecasted development from the CBLCM is utilized as an input to CAST, including Phase 7 land uses, septic counts, and population on sewer and septic.

Lead: Peter Claggett, USGS; Sarah McDonald, USGS; Jackie Pickford, USGS, Tom Butler, EPA.

Materials: [Peter's Presentation](#); [Sarah/Jackie's Presentation](#); [Tom's Presentation](#)
[CBLCM web viewer](#); [CBLCM FAQ document](#).

Action: Peter Claggett will look into the details of the data center dataset to provide more certainty on including proposed data centers in the CBLCM model.

Action: Peter Claggett and Sarah McDonald will investigate the compacted pervious rule for Phase 7 Land Uses in the CBLCM and provide additional context or explanation at the September Office Hours or in the CBLCM FAQ document.

Action: Please reach out to Peter Claggett, Jackie Pickford, or Sarah McDonald (pclaggett@usgs.gov; jpickford@usgs.gov; smcdonald@usgs.gov) about any CBLCM concerns so they can be addressed prior to the final run of the model.

Discussion Notes:

Presentation on Land Use Forecasting & Proposed Changes for Run #3 - Peter Claggett

- **Normand Goulet:** What is your source for the proposed data centers? There is a lot of pushback on them right now, so a lot of what is proposed is not becoming reality.
 - o **Peter Claggett:** A lot of this information is from the Piedmont Environmental Council (PEC). I didn't get it directly from them, it comes from the Frac Tracker

- Alliance, who get their data from the PEC. I can look at the attributes, there may be some nuance in how they are permitted or planned or proposed.
- **Normand Goulet:** A lot of the outer counties are really drawing a line against data centers, and I am leery of using a third-party database that has probably been put together by a data center organization.
 - **Peter Claggett:** Does anyone else feel strongly?
 - **Arianna Johns:** We definitely should NOT use proposed.
 - **Rosa Hance:** There's a potential benefit for forecasting for planning to see what would/could happen.
 - **Owen Bailey:** Most counties on the Eastern Shore are under a moratorium while they catch up on data center land use. Seeing existing proposals as well as infrastructure is really helpful.
 - **Normand Goulet:** Loudoun County..Supervisors voted to direct county staff to draft a potential temporary moratorium on new data center applications while officials rewrite industry standards for noise, height, setbacks, and power use. Bell weather might be to see what the database says for Prince William Digital Gateway. Following a court ruling that voided previous rezoning approvals, the county board voted to walk away from defending the controversial project.
 - **Tyler Trostle:** I agree with Norm, I was thinking about that nuance myself; if these were just initial plans that came in for building proposals, or if they were in the pre-permitting process, or if they are actually permitted. What is the nuance of the data? I agree that maybe we should focus on the already-built and permitted data centers first, and then maybe include proposed later, because as you said, Norm, anybody could have come up with that dataset in the hopes that they would be built later.
 - **Peter Claggett:** Most of these are in Virginia, and most are from the PEC, I did talk to them about how they got their data. Their data is not coming from data center companies because they don't openly share that information. PEC tracked down the air emissions permits or notice of intent that are required for the diesel generators that data centers use. So these data centers all have air permits, but I can verify that with PEC. If they do have these air permits, how do you consider it? Permitted or proposed?
 - **Normand Goulet:** Just because they pre-file for an air permit doesn't mean they make it through local government zoning. Most of these jurisdictions don't have "by right" processes and those areas that do are trying to pull back on data centers. I am not familiar with the whole process, it looks like there are some rabbit holes to go down if you are willing to go down them.
 - **Peter Claggett:** I don't have a lot of time to do that, but I will go down it a little to try to understand. I am hearing from you and Tyler that you want something firm, either that they are already built or will for sure be built.
 - **Tyler Trostle:** Yes, I don't want to rule out potential for forecasting, but for these initial runs it should be built or truly permitted and ready to break ground.
 - **Peter Claggett:** Okay, I can look into it.
 - **KC Filippino:** You were talking about the 2.7x higher estimate for job density earlier, and I don't think I followed it- why would you apply a correction factor and not change the rate at which you are simulating?
 - **Peter Claggett:** We want to change as little as possible. The basic concept of the model is the same as Phase 6, but it has changed a lot already. If we change and add a correction factor we change everything related. It is our first time parameterizing with parcel-based mapping of commercial and residential areas instead of coarser

guestimates. But jobs at the census block level don't always correspond with where we have mapped commercial. For example, the census sometimes puts 100 jobs on a sidewalk, but the building is the next block over, and perhaps there's only one cell in it so there are 100 jobs per cell. That leads to really high densities in some places. That is one identified problem. We estimate an infill amount, and whatever is not infill we grow on the landscape - and it will consume more land if the densities are lower, and consume less land if the densities are higher. We looked at the infill numbers to see if we were overestimating that, but it is a pretty straightforward analysis and we can't manipulate it to have predictable results for every county. The only way we can ensure that we are stimulating more commercial growth as a result of demand is to adjust densities at this time.

- **KC Filippino:** So you adjusted the densities to be higher?
- **Peter Claggett:** We made the densities lower, so the footprint will be bigger. When we compared what we were simulating on an annual basis with what we observed we were only simulating 10 to 40 percent of the annual rate of what we observed. For example, in MD the rate of employment change that happened from 2010 to 2020 is pretty similar to what was forecasted from 2020 to 2040. The demand on an annual basis is pretty much the same. We observed about 800 acres a year of commercial development in the state of MD, but we simulated like 200. So we are simulating 25% on an annual basis of what we actually observed with high-res. So then we thought, how are our densities within this version of the model compared with our last version? It showed that densities are 2.7 times higher than what they were, and it was pretty much exactly the same for MD and VA. Each state will still be different, and each block will be different relative to its neighbors, so we have the spatial variability preserved. And this is something we can implement in the time frame of today and tomorrow to remain on schedule for Run #3.
- **Rosa Hance:** Great presentation. Based on what you shared about the sources of information for data centers, I think it makes sense to include at least some of the proposed ones. It sounds like there are certain levels of permitting that have happened. I am aware of the pushback that communities have seen regarding proposals, but we wouldn't expect each and every neighborhood to already have their permits, and I don't want data centers to be left out of the conservation. The comment in the chat about acreage info, could you talk a little more about that? When I saw the data center acreage estimate, it looked conservative to me. The structures themselves are what is calculated right? If the campus has a buffer area for example, it would be a different category of land use. Is that accurate?
 - **Marel King:** Where is the acreage info coming for data centers? Just one complex under construction in Central PA is 700 acres and your total for PA is 1200 acres. Is it acres of the structures themselves so the rest of the campus falls into another category?
 - **Peter Claggett:** Yes, it is a conservative estimate- the acreage comes from just the building. They are obviously going to have a parking lot and a driveway, etc. When the CBP staffers, Allison and Daniel, looked at the data center footprint, they looked at the impervious cover of the data centers, which was an average of 11 acres per data center. The database I am using varies, sometimes it is 1 million square feet, sometimes 100 thousand square feet total. Rather than make assumptions about all the other space they might have, we have the square footage for the building. It is still potentially 8,000 acres in Virginia, but I used the most conservative estimate.
 - **Rosa Hance:** Thank you for the clarification. In that case, I would like to see proposed data centers be included; people want to see what solar looks like, and so

- understandable people want to see what data centers look like. This is a conservative estimate and I appreciate what you have come up with.
- **Peter Claggett:** I will look at the data and see if we can get more certainty on some of these, and look at the attributes of other points and see if we can come up with something that is more of a compromise.
 - **Deborah Sward:** I had a question about how commercial growth is done in regards to solar. The commercial growth per job was high in some eastern shore counties, and I was wondering if the impervious associated with solar growth was going into the footprint for commercial and if that would be decoupled in the final run.
 - **Peter Claggett:** For the most part, utility scale solar fields are completely decoupled. We don't map parcels with no buildings as commercial or residential. However, if there is a school that is mapped as commercial, the school may have a small solar field adjacent, or police barracks that have a solar field adjacent or something. In that case, in that area of developed commercial, that solar field would be included, but the big utility scale ones are completely excluded.
 - **Deborah Sward:** So when the impervious surface amount or the development amount determines that patch size, is solar included in the patch size or is it excluded?
 - **Peter Claggett:** It would be included in the patch size distribution. When we simulate growth, we look at the continuous distribution of commercial patches, and we stochastically draw from that so the future distribution is similar to what we observed. Of course any single patch impacts the disruption but we don't necessarily pick that exact size.
 - **KC Filippino:** What are the next steps with the model?
 - **Jackie Pickford:** We are going to run the model in the next few days and update the viewer by September 9th, and we will have office hours the following week on the 16th to discuss the updated results and any other post-processing questions you may have. The joint meeting on the 23rd with the USWG is when we are going to make our final approval, and then it will go to the Clean Water GT on the 28th for subsequent approval.
 - **Sarah McDonald:** If anyone has any concerns that would potentially stop them from approving, please say so now- hopefully we can address that in the third run, and then the Phase 7 timeline can continue without delay.

Presentation on Post-Processing Phase 7 Land Use and Sewer/Septic - Sarah McDonald and Jackie Pickford

- **Normand Goulet:** We've discussed it before, but that assumption inside/outside has problems and should be noted in the documentation.
- **Jackie Pickford:** Yes, it will be in the Phase 7 documentation.
- **KC Filippino:** I had a question about the equation for compacted pervious. It says portion of agricultural land converted to development. Why is it just agricultural land?
 - **Sarah McDonald:** One thing Jackie and I talked about was being more exhaustive in the FAQ document and document some of the ratios we are using, so we will update that document prior to September Office Hours with more information.
 - **Peter Claggett:** When we simulate growth, for simplicity's sake we refer to land as either open space farmland or forest if it's not developed. When we say agricultural land, we are basically referring to non-forested pervious land, or farmland in CBLCM talk. I can try to restructure so that is a little more clear.

- o **KC Filippino:** Okay. When I think of compacted pervious, I think of it as coming out of any land use, so I don't understand why forest couldn't turn into compacted pervious.
- o **Peter Claggett:** Right, but we are simulating a change in the landscape and we're considering that as development, but this is simply the pervious portion of the developed land. It has to do more with our assumptions about what the pre-developed land use was. I will get back to you with a more detailed response about this rule.
- o **Normand Goulet:** Yes, please look into that, I could think of a lot of instances on the I-95 corridor through almost all of Northern VA to Richmond where it was previously forested and is now a highway. Can't get more compacted than that.
- o **Peter Claggett:** Right, and we simulate the conversion of some forest to impervious. But what Sarah is giving here is, if we didn't simulate it as impervious, it stayed pervious, some of that land is forest and is going to stay forest, it is just going to be in someone's residential backyard. Some of that land will be assumed to have turf underneath it. Some of it won't be turf, but it is assumed to be compacted, as you might see around a commercial development.
- o **Normand Goulet:** But you are also going to have a ton of right-of-ways associated with that highway development that would be classified as compacted pervious.
- o **Peter Claggett:** That's true in the way we map it for the high-res land use/land cover. But I'm not sure we're doing the same with our forecasts because we don't have detailed data on that. But I'll get back to you and KC about this.

Presentation on CAST Agricultural Land Uses - Tom Butler

- **Jackie Pickford:** I want to note that the Ag Modeling Team (AMT) and the Agriculture Workgroup (AgWG) are the lead workgroups on this topic. We just wanted to provide the LUWG some additional information for how our land use is used in CAST since that was requested by some folks.

IV. Management Strategy

Jackie reviewed the updates made to the Management Strategy based on feedback from the LUWG and Healthy Landscapes Goal Team. The LUWG was asked to approve the near-final version.

Lead: Jackie Pickford, USGS/LUWG Coordinator

Materials: Management Strategy Near-Final Draft

Decision: The LUWG approved the near-final Land Use Planning and Decision Support outcome Management Strategy. Snapshot of signatory programs and statutory authority of signatories sections will be added at a later date once obtained from the Goal Team.

Discussion Notes:

- **Normand Goulet:** Interesting to see universities outside of the Bay region. It is a testament to the cutting-edge work of the Land Data Team.
- **Jackie Pickford:** Is anyone opposed to approving the near final draft? I say near final because the two sections for signatory information are going to be added after the fact.
- **Rosa Hance:** The last comment we were just discussing, the university partnership, is that reflected in the near final or is that something we could incorporate as we finalise?
 - o **Jackie Pickford:** I didn't specifically call it out in the near final draft, but I can add it to the second management approach. Where it says 'will identify and engage influential networks such as watershed organizations, agricultural partners,

non-profits, regional planning organizations..’ I can add universities there if people are comfortable with that.

- o **Lori Brown:** I think it makes sense to add that in.
- o **Jackie Pickford:** Great, I will add that in. And I am not hearing any opposition, so I will consider this approved.

V. Adjourn

Next Meetings:

- CBLCM Office Hours (Part III): Wednesday, September 16th, 1-2pm
- LUWG Meeting: Wednesday, September 23rd, 1-3pm

Attendees

- Julia Fucci, CRC
- Rosa Hance, Choose Clean Water Coalition
- Jackie Pickford, USGS
- Deborah Herr Cornwell, MDP
- Normand Goulet, NVRC
- Nathan Stephens, Caroline County
- Michaela Kuykendall, MDA
- Alisha Mulkey, MDA
- Jesse King, York County Planning Commission
- Emily Heller, EPA
- Tyler Trostle, PA DEP
- Owen Bailey, Eastern Shore Land Conservancy
- Marel King, CBC
- Ho-Ching Fong, Montgomery County DEP
- Peter Claggett, USGS
- Bruce Naylor, PA DEP
- Deborah Sward, MDP
- Cassandra Davis, DEC
- John Wolf, USGS
- Lori Brown, DNREC
- Cass Klingaman, DEC
- Arianna Johns, DEQ
- Suzanne Trevena, EPA
- Young Tsuei, DOEE
- Ashley Hullinger, PADEP
- Sarah McDonald, USGS
- Michelle Katoski, USGS
- Bel I Martinez da Matta, MDE
- Thomas Butler, EPA
- George Onyullo, DOEE
- Labeeb Ahmed, USGS
- Rachel Owrutsky, DNREC
- KC Filippino, HRPDC
- Katherine Brownson, FS, MD
- Mark Symborski, MCPD
- Ivy Ozmon, HRSD
- Kevin O'Hare
- Katherine Dyer
- Kelly Gable
- Petra Baldwin, CRC