#### CHESAPEAKE BAY PROGRAM LAND USE WORKGROUP

Meeting Minutes May 5<sup>th</sup>, 2021 1:00 PM – 3:00 PM **Meeting Materials**: link

# **Summary of Actions & Decisions**

**Decision:** The LUWG approved the March 31st Meeting Minutes.

**Action:** Rachel Soobitsky will work with Jackie Pickford to provide an updated Land Use methods document, along with a tracked changes version, to the LUWG and have it posted on the website page by COB May 7th.

**Action:** The LUWG is asked to review the 2013-2017 land use change data for the 14 prototype counties and provide feedback to Peter Claggett and Rachel Soobitsky by COB May 19th.

**Action:** Peter Claggett will provide the LUWG with the 2013-2017 land use change data for the 14 prototype counties in tabular form by COB May 7th.

**Action:** Peter Claggett will work with Jackie Pickford to distribute 2013-2017 land use change data for the 14 prototype counties to the AgWG, FWG, USWG, WQGIT by COB May 7th.

1:00 <u>Welcome, Roll Call, Review of meeting minutes, Action Item Update</u> – KC Filippino, Hampton Roads Planning District Commission (HRPDC).

Next conference call: 1:00pm - 3:00pm, May 20<sup>th</sup>, 2021 - Land Use Workgroup Meeting

**Decision:** The LUWG approved the March 31st Meeting Minutes.

- 1:10 <u>Meeting expectations and why the focus on land use change vs wall-to-wall data</u> KC Filippino, HRPDC and Karl Berger, Washington Metropolitan Council of Governments. *KC and Karl reviewed the reasons why the LUWG's attention has shifted from review of the county-wide (aka wall-to-wall) draft 2017 land use data towards consideration and review of a land use change product for the period 2013-2017.*
- 1:20 <u>High-resolution 2017 Land Use Comment Review</u> Rachel Soobitsky, Chesapeake Conservancy. Rachel shared and discussed the comments received from the 2017/2018 Land Use review and their plan to address such comments. Rachel also discussed how to review the land use change data on a new web application built just for this purpose.

### **Discussion:**

KC Filippino: The purple counties that indicate April 2021 as their due date for land cover did not receive that data.

Rachel Soobitsky: Yes, I need to update the map if UVM did not deliver as planned. We should be getting those counties ASAP and I'm hoping that means they'll double up on how many to deliver at a time because they're smaller geographies. This brings me to a question I have for all of you about what to tell counties that get their data late. Right now everyone gets a four week review period and will still be incorporated into the December timeframe, but the sooner I receive comments from them, the more likely we can incorporate them to meet the June deadline. So I wasn't sure if you wanted me to notify the counties that if they get their review to me in time, within a week or less, that they will be incorporated in June.

KC Filippino: Yeah that's tricky. I think it's going to depend where we are at with the decision coming forward for the change product itself because I don't think it's fair to shortchange them. Rachel Soobitsky: Okay, yeah, we should give them equal time to review.

KC Filippino: I don't want to speak for everyone though. Does anyone else have thoughts? James Martin: I'm trying to understand the timing. Once the land cover for the remaining counties is complete, how long does it take to get the LU ingestion part of the process completed?

Rachel Soobitsky: As of now, 10 to 12 hours, however, we're running on multiple machines and we're trying to speed up the process by running multiple counties at the same time. Hopefully we can get them all done within a month but we're still trying to figure out how to make it faster. James Martin: Okay, I think it would be great if we could give a couple of weeks to review at minimum, with a commitment that if they get you their review within those two weeks that those issues they've identified will definitely be corrected. If there's no assurance that their comments will be corrected in the June product, then there's no use in rushing them to review.

Rachel Soobitsky: Right. It is also possible that their comments will already be fixed by the review done by UVM so it's not all or nothing.

James Martin: Are the systemic issues found in the earlier review already corrected in the counties that are being delivered now?

Rachel Soobitsky: Mostly, yes. There are always new ones popping up, but yes.

Karl Berger: To your question before Rachel about what to tell counties - maybe let's table that until Peter presents because, from what I understand, the comments you will be receiving shouldn't affect the land change product. Peter is the expert so we'll see what he says but hopefully we'll see whether it matters that much that the comments they give now get into June or if they could take more time, make sure it's systematic, and that will get into the final product sometime in 2022.

Rachel Soobitsky: Okay, so let's wait on a decision. I'll keep it as the normal four week time period for now.

Karl Berger (in chat): Rachel, did you get land use comments from all the states? Rachel Soobitsky: I believe so. Not all the workgroups added points, but they may have just emailed a summary, which actually proved to be easier.

James Martin: So the 2013 and 2017 classifications that were used to determine the change, were those prior to the corrections you showed or after?

Rachel Soobitsky: These are all on the draft land cover and draft land use, the ones that everybody has been providing comments on. Ideally we would be able to run it on the revised land cover and land use data, but because of time, we had to use the draft product.

Peter Claggett: James I'll talk about that in my presentation. I'm going to talk about the differences between looking at the change based on a revised product versus looking at a draft product. At the aggregate scale of the Phase 6 land uses, I believe it's pretty insignificant, but I'll cover it and go more in depth in my presentation.

KC Filippino: So going back to the land cover review then, it doesn't matter if they have two weeks or four weeks to review if this is all done on the draft land use. Is that an accurate assessment?

Rachel Soobitsky: Well my question about that was more for UVM trying to get those corrections into version 1, which would be put into LU and LU change.

KC Filippino: So the viewer we're looking at doesn't have the fixes incorporated, but they will be incorporated for June.

Rachel Soobitsky: Yes, it will be fixed. They are now sending us the first version of land cover but we had to develop this method and run it on what we had at the time which was the draft data

KC Filippino: Okay, thanks. Kudos to you on the viewer, it looks great.

Arianna Johns (in chat): Can the timeline change?

Rachel Soobitsky: I think that's up to you guys and the WQGIT. I'm not sure who makes that decision.

KC Filippino: I think Peter's presentation will help some of those timeline questions. Deborah Sward: So far, jurisdictions have been engaged in reviewing the first prototype counties in MD. It sounds like just Wicomico has been posted for review in MD, are the other two going to be posted for review or would it just be Wicomico for that particular app and then the land change we could look at all of the other counties?

Rachel Soobitsky: Yeah, the old app that we have up for land use is just those three counties. We've talked with Peter and Jacob to see if we can get all other 11 counties done in the revision 1 land use, and while we could do that, it would be tough on the team. The revision 1 isn't perfect, we're still fixing it, so we're hesitant to rerun it on the other 11 counties.

Deborah Sward: Okay that's helpful, thanks. I guess anyone else can just look at the change app too

Rachel Soobitsky: Yeah anyone can look at it who has the link so if you want to share the instructions document please feel free, and then just send over the review to me.

Deborah Sward: Okay and the deadline for that will be included in the email?

Peter Claggett: Yes, comments on the land use change are due by COB May 19th.

Rachel Soobitsky: The methods document will also be updated and have it posted by Friday.

Lisa Beatty: Thank you for taking our considerations about agriculture in Clearfield county and how it was overmapped for abandoned mined areas. Have you done that for oil and gas areas?

Rachel Soobitsky: As of now I haven't thought of a solution that works with our methods but I'm hoping that Jacob's new rules and corrections will capture that.

**ACTION:** Rachel Soobitsky, Chesapeake Conservancy, will work with Jackie Pickford, Staffer, to provide an updated Land Use methods document, along with a tracked changes version, to the LUWG and have it posted on the website page by COB May 7th.

1:30 <u>Methods for developing the CAST land use</u> - Jessica Rigelman, J7 LLC, and Olivia Devereux, Devereux Consulting, Inc. *Olivia reviewed the data that is added to the land change product provided by the Land Data Team and the methods used to incorporate those data into the CAST land use.* 

#### Discussion:

James Martin: So the new mapped land uses anticipated for 2017 and 2025 - I thought we were just talking about 2013 to 2017 change product is what's delivered to you. How is that a mapped land use for 2017 or for 2025?

Olivia Devereux: So we expect that the 2013 will remain static and unchanged. Peter will give us a forecasted land use for 2025. In our processing, we then turn acreage into the change from 2013.

Peter Claggett: Yeah I'll go over this in my presentation James. I think you're reacting to the term "mapped land use", referring to 2025. We forecast changes in LU and I provide tabular data to Jess and Olivia for the 2025 land use, but it's a modeled future condition that is spatial, so there's a map component to it, but it's not the same as the detailed mapping we're doing for 2017.

James Martin: And the spatial component is by land river segment essentially?

Peter Claggett: It's by 30 meter pixel and then aggregated up to land river segment. We forecast change at 30 meter resolution.

James Martin: How about the 2017? What is mapped about that?

Peter Claggett: That's the change product that Rachel just presented for the web viewer showing that is what will determine 2017. All the changes on the landscape will be provided to Jess to update the 2013 conditions to 2017.

Rachel Soobitsky: And, to clarify, that is because the land use change says what it was in 2013 and it says what it now is in 2017. Similar to the land cover so you can get the 2017 layer from the change.

Peter Claggett: Right so we have the complete transition from what it was to what it has become, all with fresh new data that is then being provided into CAST.

Olivia Devereux: Rachel and Peter are looking at something that maybe was pasture and then someone built a housing development. Jess and I, on the other hand, are looking at a tabular data set that says what that land use is in 2017. We don't need to know that it used to be pasture, we just need to know that in 2017 it was developed for some particular place or area.

James Martin: Right, but there's not going to be a 2017 map, I'm not going to be able to look at a map of 2017 land use in June, right? That won't happen until the end of the year?

Olivia Devereux: I'm going to talk about the process of what is going into CAST which is not a map, but Peter will have a map of 2017 and 2025, but that's not going into CAST.

James Martin: Okay, thanks, yeah.

Dave Montali: I have a question regarding error rates. The AgWG right now is looking at approving the use of a mapped land use change for agriculture. If they approve the true-up process, are those error rates used done?

Olivia Devereux: No, and it's because we have construction, harvested, forest, and feeding space. Dave Montali: Okay, I'll wait to hear that. One more question - under the current methodology for mapping the AFO/CAFO, what land use do you take that from?

Olivia Devereux: It's taken proportionately from all the other land uses.

Dave Montali: Okay, thanks.

2:00 <u>Mapping Land Use Change</u> – Peter Claggett, U.S. Geological Survey and Rachel Soobitsky, Chesapeake Conservancy. *Peter compared two alternative methods for assessing land use change for CAST, reviewed results for the 14 prototype counties, and contrasted the accuracy of mapping change with the accuracy of mapping land use throughout the watershed.* 

### **Discussion:**

KC Filippino: Peter, all 14 counties are available on the viewer? Peter Claggett: Yes, all 14 are on the viewer for land use change.

KC Filippino: Not just the 3?

Peter Claggett: Right so the 3 were special because we ran the different methods, quick method on revision 1, quick method on the draft land use, to see if there was much of a difference.

KC Filippino: But these aren't revision 1 right?

Peter Claggett: The 14 that are posted are on the draft land use, not revision 1.

Rachel Soobitsky: Peter just used the revision 1 in the table, just to show you that it's getting better. But all 14 were done on draft land use.

KC Filippino: But 206 will be done on revision 1?

Rachel Soobitsky: That will be done on version 1 of the land cover with systematic correction and with our up-to-date land use methods.

Peter Claggett: So it might even be revision 2 land use. Let me try to restate this for clarification. Everything that goes into CAST and is done by June 30th is going to be based on the land cover data, which is just now coming from UVM to CIC with all the systematic errors fixed. And, on top of that, it will not be revision 1, but rather revision 2 or revision 3 of the land use data, whatever is the most up-to-date. We'll then use the quick method with the latest version of the land use on the latest version of the land cover.

Norm Goulet: Wait, now I'm confused. What we're being asked to review - Is that the version that is going into CAST?

Peter Claggett: No.

Norm Goulet: Then why are we reviewing it?

Peter Claggett: Because it's very close to what is going into CAST and it's going to give you a sense of the accuracy. I think you will see that there will be some minor classification issues that we are dealing with but otherwise it's highly accurate. It's solely based on LC change as the trigger for something happening. The LC change product will change slightly but not much at all. So the places currently showing change on the viewer will be the same places that will show change on June 30th, they may just be classed slightly different, and even those differences in class disappear once it goes up into Phase 6. When everything gets aggregated into CAST, a lot of the issues with classifications go away. The classifications matter for other Bay Program purposes which is why we're working so hard to get them right, but they don't matter for CAST. So what you're reviewing now is very close to what you'll see June 30th, it's just that the categorization of those changes will be somewhat improved by that time.

Karl Berger: The tabular data (the second chart you showed) is that now available? I think that would be valuable.

Peter Claggett: It's not available yet but we can produce that in the next couple days.

Karl Berger: For everyone else reviewing this, particularly at the local county level, I think that would be valuable. It seems to me what you're saying to Norm is that you're asking for people to look at major changes within the county, like if something went from ag to forest like a 500 acre field or 1,000 across the entire county, and see if they show up on the viewer. If they show up on the viewer and it matches your knowledge, then it's good, and if it doesn't then there is an issue. Peter Claggett: Right, exactly, and that's why we included the imagery in the viewer to avoid that problem. Let's say they developed a business park down the street from you. If you don't see that change in the raw imagery, then it's not anyone's fault that it's missing from the change product because it happened after the NAIP imagery was taken in 2017. We included the imagery to avoid that temporal mis-match problem, because that is the exact imagery we use for the change product.

Rachel Soobitsky: Also, if you do see the change was mapped but it was mapped incorrectly, please let us know in an email.

Olivia Devereux: Okay, so I want to make sure I've got this right. People are reviewing version 1 right now which is not going into CAST but shouldn't be vastly different than what is going into CAST. Several people asked for tabular data, but I'm not sure what that is showing. And then version 2 will be available June 30th.

Peter Claggett: Yes, for the tabular data I want to show one table for each of the 14 counties showing that "crosswalk" that includes what it was in 2013/14 and what it became in 2017/18, and what the losses and the gains are. The tabular data would be showing what you're reviewing which is off of the draft 2017 land use using the quick method.

James Martin: I have a question about the table. Peter, you said most of the change is detected in land cover, but when you talked about Loudoun County before you said much of the loss was mixed open and much of the gain was in turf grass. Both of those in LC are classified as low veg. Was all that change based on proximity to other changes within a parcel rather than imagery? Peter Claggett: Yes, so the additional change that's triggered by proximity to a new structure. One of our triggers is if you have an empty small parcel in 2013, and then you have a structure in it in 2017, then that land goes from whatever classification it was to turf.

James Martin: Right, so if an entire field was converted from cropland to turf, for example, without any impervious surfaces added, that's a change that wouldn't be detected because it's low veg to low veg and there weren't any other changes within the parcel. So that example might be unlikely, but I'm just trying to wrap my head around what changes we might be missing as a result here. Rachel Soobitsky: James, my methodology document might help answer these questions. If you still have questions after reading that document, then feel free to email me.

Peter Claggett: Yeah, and if you see the example you just spoke about, then that's an error. But I haven't seen that error when using the quick method of change.

James Martin: Okay, thanks. Do you think that a lot of the cropland and pasture land growth that you identified in Loudoun County is remnant of the non-revision version of the land use as opposed to actual growth and pasture?

Peter Claggett: The revision 1 did not actually make much of a difference in the end (see tabular data on Slide 26). But these are also just the areas of change. If I gave you the total acreage with the draft method and revision 1, I bet you'd see big differences. You would see a lot of errors in the draft that were corrected in revision 1, but this is just the change, and due to how we've classified the change product, we've lost some sensitivity to those corrections.

James Martin: One more question about septic systems - we haven't touched on them. Right now they are part of the forecast from 2013 to 2017. Now that we know where development is actually happening based on the change product and we know whether that change happened in or out of the sewer area, do we change our 2017 septic systems?

Peter Claggett: Good question. That's something that we should think about.

James Martin: I know our focus has been strictly on LU and LC and not these other ancillary systems, but this gives us the data that we need to make a change. My thinking is that comes along with your change to the land use model which isn't happening for CAST21 right?

Peter Claggett: Yeah for CAST21 we will exclude areas that have already been developed from future growth so that it'll inform the model in that way. In terms of re-parameterizing how growth occurs and the patterns of growth based on just four years of high resolution change, I'm not confident that is the wisest choice. I would suggest we wait until the 2021/22 land use where we can use an eight year period that is more representative of the longer term trends.

James Martin: For changes to the land change model?

Peter Claggett: Right, for the probability of growth in certain areas.

James Martin: And septic systems are a direct result of that so effectively, it sounds like what we may be doing is continuing the forecast septic systems from 2013 all the way to 2025 even though we have new land use data points that are shortening our projection window for all other load sources.

Peter Claggett: Well that's where I think there may be some wiggle room.

James Martin: Oh okay.

Lisa Beatty: I just want to say that the spreadsheet on the meeting page with all of the products and their definitions and how everything is going to be used was really helpful and I encourage people to take a look at it. It really helped me understand more of what Peter and Rachel are doing.

Peter Claggett: Thanks Lisa.

Mark Symborski: Once the changes are revised for the entire watershed based on the 14 counties, will there be another comprehensive review at the local level? Peter Claggett: No, we haven't planned for that. It's a rule based model so unless it's a systematic error that we missed in these 14, I would be resistant to make any changes to the code.

Mark Symborski: Will somebody be reviewing it to see if there was a systematic error that happened to affect all 206 counties?

Peter Claggett: Yes, definitely. USGS and CIC will be reviewing the data for all the counties and making sure that there is nothing failed/wrong.

Mark Symborski: Okay, thank you.

KC Filippino: We're way going over our time here but to recap, we've got the 14 prototype counties of the land use change using draft land use data on the viewer now. We will send out an email that will have the instructions and the link. We have until the 19th to provide input and send that to Peter and Rachel. On the 20th we will come back together as a group to determine what our recommendation will be to the WQGIT. Am I missing anything Karl?

Karl Berger: Ideally we would be able to review every last thing before we translate it into these change products and then it gets passed on. So certainly the state reps and anyone else participating in this workgroup has to ask themselves, realizing that they are not seeing the final

version data, whether or not the data is acceptable. Essentially we will be asking if you can accept this and trust the professional judgement of Peter and Rachel and company that they will be reviewing and improving the accuracy of what will be going into CAST.

Peter Claggett: Yeah thanks Karl. For the May 20th meeting, Rachel and I are also going to review the data in detail and present our thoughts and comments and fixes on the data. We plan to go over the feedback and how we're going to fix it. And yes, at some point, trust is involved. If we find a problem, once we recognize that it's there and if we can't fix it, we will be transparent about it and let you know that we can't fix it and the reason why we are unable to do so. Karl Berger: Also, what we currently have isn't 100% accurate either. Hopefully we can improve what we have, but the question on the table is if the change product for CAST21 will be better than if we don't change any LU at all.

Peter Claggett: Right. The question is: Is an interpolated forecast of urban growth affecting 2017 and the ag census survey better than what we've mapped for 2017 as change?

Dave Montali: I think, too, that it may not have to be all or nothing. I agree with what Karl said. Yes, we need to put trust in CIC, but if we're not ready to say okay on May 20th, maybe there's a deal where we can bump the September 1st date or something.

KC Filippino: Peter, will the viewer be updated as the land use gets updated into the various versions?

Peter Claggett: I think it should be but we're trying to prioritize what is most important. There are three counties now with revision 1 data that we could put up on the viewer, showing both the draft and the revision 1 side by side on the land use, right Rachel?

Rachel Soobitsky: That's the plan right now. We're working on getting the 3 counties up on the same viewer that you guys looked at the first draft of the land use so that you can compare version 1 with the draft land data. But as for updating it with every revision, it depends on a lot of things. When Jacob goes in and tweaks the code, he doesn't always have a full county output every time, he kind of just looks at the example of what he fixed and tweaks the methods. I mean we could update it for every version and have people look at it, depending on the timeline. KC Filippino: But it won't be updated by May 20th though, will it?

Peter Claggett: Well for the 3 counties it will.

James Martin: For the land use only right? Not the land use change?

Peter Claggett: Yes, correct. I mean we have the land use change for those three counties that we could put up.

Rachel Soobitsky: Yeah, we just thought that might be confusing with three counties being different than the rest, but Peter has a table that shows the differences. We could publish the three counties of land use change on the version one.

James Martin: I don't think it would be confusing. I think that would be useful in my opinion. Peter Claggett: Well here's the catch. We have a lot to do and not a lot of time. Effort put towards finishing the 14 counties for revision one and putting that up on the viewer, say in the next 10 days, would detract from us completing revision 2 and maybe even a revision 3, because it takes time to put that up on the viewer. So it's up to you guys on what is more important to you. From a developer's perspective, it would make more sense to me to wait longer, say end of this month or early June, to then post revision 2 or 3 of the 14 counties which is what is very close or exactly what will be used for the June 30th deliverables.

Rachel Soobitsky: Right and we're still fixing things with revision 1 which is why we don't want to take a lot of time trying to post it everywhere instead of using that time to make fixes.

Dave Montali: Is there a way we could add a couple weeks to the process? If we go through a conscientious review of what we've got now, the 14 counties of the draft land use, maybe there's a way that we can say okay we're comfortable but we want to see this land use change product after all these things are fixed. Maybe we could make our decision in May to proceed contingent upon a final check in June that might add a couple weeks to the process.

Peter Claggett: I think those at the WQGIT level will have to decide that.

George Onyullo: Would it take up to next month to do the review you talked about earlier? Peter Claggett: I expect all the revisions for the land use will be done by the end of May. Rachel Soobitsky: Just to clarify, the reason that we even had revision 1 for the three counties is just to provide confidence that we know there are a lot of issues and show you all that we're working on fixing them but it's not by any means complete. We're trying to build confidence that we are addressing these issues but we're still in the process of fixing. It wasn't my intention to confuse people with it.

James Martin: Okay, yeah, I'd like to see the end product when it's as close as the deliverable will be when it goes into CAST. Until then I will trust you.

Rachel Soobitsky: Yeah and we'll think about the timeline if by the end of the month we do get revision 2 or 3 of the land use, how much time do we have for review, because in June we need to be mass producing this so there's not going to be a lot of wiggle room. We'll have to talk about that I guess.

KC Filippino: Are we not doing this review then?

Peter Claggett: Remember what we're talking about revision 1, 2, 3 - that is on the wall-to-wall land use data set, which informs the change but has a lot of issues that are outside of the change. What we've asked at this meeting is we put change out there for 14 counties. Our best professional judgement is that it's not going to be that different on June 30th and this is what we want you to review between now and the 19th to make us aware of any categorical errors we're getting or anything that's missed. So they are different. And I'm hoping we can decouple that a bit from various versions of the 2017 wall-to-wall land use, because that won't be done and public until Feb 2022.

Karl Berger: So, Peter, starting at the question of whether or not you are going to update the viewer constantly between now and the 20th as we go along, my recommendation would be just sticking with what we have now. We're not going to update the viewer with the revisions 1, 2, and 3 because the changes would be very small in your opinion. We'll go with what we have now, and make the decision based off of that on the 20th. Then the WQGIT will get it and make their decision.

Rachel Soobitsky: Yes, I agree with that.

Dave Montali (in chat): Agree w/Karl to review what we have now.

Peter Claggett: And regarding the 2017 wall-to-wall land use product, as soon as we get to the point where we are working with the version that will inform the change that goes into CAST, we will put that up on the viewer for the 14 counties, but it may not be until the end of this month. Karl Berger: Right.

Peter Claggett: It will all be up there and made public. So if you look at it then and there are huge errors, then a red flag can be raised and we'll deal with it at that time. But I think if we get good comments on the change product that has just been posted by Rachel, then we'll be able to make all of those fixes. I'm hoping you all will have confidence that between USGS and CIC, we can address your comments, and if we can't address your comments, we will tell you and let you know why we are unable.

Lisa Beatty: I agree with that with the previous comment to just keep going as planned. I've gone into the Viewer and from my community point of view, it's really spot on. I think we should move forward with this and see where it goes to try and make the deadline.

**ACTION:** The LUWG is asked to review the 2013-2017 land use change data for the 14 prototype counties and provide feedback to Peter Claggett and Rachel Soobitsky by COB May 19th.

**ACTION:** Peter Claggett will provide the LUWG with the 2013-2017 land use change data for the 14 prototype counties in tabular form by COB May 7th.

**ACTION:** Peter Claggett will work with Jackie Pickford (Staffer) to distribute 2013-2017 land use change data for the 14 prototype counties to the AgWG, FWG, USWG, WQGIT by COB May 7th.

## **Meeting Chat**

From Olivia Devereux to Everyone: 01:04 PM

Olivia Devereux, Devereux Consulting. Contractor to the Bay Program.

From Rachel Soobitsky (she/her) to Everyone: 01:05 PM

Rachel Soobitsky and Patrick McCabe are here from Chesapeake Conservancy

From Norm Goulet to Everyone: 01:05 PM

Normand Goulet, NVRC

From J Rigelman to Everyone: 01:05 PM

Jessica Rigelman, J7 LLC, contractor to the CBP From Iris Allen, MD DNR to Everyone: 01:05 PM Iris Allen with the Maryland DNR Forest Service

From Labeeb Ahmed (USGS) to Everyone: 01:05 PM

Labeeb Ahmed, (CBPO USGS)

From Chris Hayes to Everyone: 01:05 PM

Chris Hayes, US Forest Service

From Sarah McDonald to Everyone: 01:05 PM

Sarah McDonald, USGS CBP

From dave montali to Everyone: 01:06 PM

Dave Montali Tetra Tech for WV; Alana will be on and Mindy may be listening but unable to

respond

From Lee Epstein CBF to Everyone: 01:06 PM

Lee Epstein, CBF, signing in.

From Matt Gallagher to Everyone: 01:06 PM

Matt Gallagher, DC DOEE

From Shannon McKenrick - MDE to Everyone: 01:06 PM

Sorry, had an audio issue - Shannon McKenrick from Maryland Dept. of the Environment is

here.

From Deborah Sward to Everyone: 01:07 PM Deborah Sward, Maryland Department of Planning

From Tori Nelson to Everyone: 01:07 PM

Tori Nelson, USGS

From Rick Turcotte to Everyone: 01:07 PM

Rick Turcotte, US FOrest Service

From Loretta Mae Collins to Everyone: 01:07 PM

Loretta Collins, UMD (AgWG)

From Mark.Symborski to Everyone: 01:07 PM

Mark Symborski, Maryland-National Capital Park and Planning Commission, Montgomery

County Planning Department

From Ted T to Everyone: 01:08 PM

T Tesler, PADEP

From Renee Thompson to Everyone: 01:08 PM

Renee Thompson, USGS CBP Healthy Watersheds GIT From Louis Keddell to Me: (Direct Message) 01:12 PM

Louis Keddell, Chesapeake Conservancy (CIC) From Peter Claggett to Everyone: 01:12 PM

Peter Claggett, USGS

From James Martin to Everyone: 01:15 PM

The pink on the map show April delivery what is the status? From Alana Hartman, WVDEP to Everyone: 01:17 PM

Alana Hartman, WVDEP... was a few minutes late because I kept trying to log in to Watershed

Technical WG! I think I might be on too many groups, haha!

From Karl Berger to Everyone: 01:29 PM

Rachel, Did you get land use comments from all the states

From Arianna Johns to Everyone: 01:40 PM

Can the timeline change?

From Deborah Sward to Everyone: 01:48 PM

MDP wanted to thank the CIC for incorporating many of our key comments as well

From Rachel Soobitsky (she/her) to Everyone: 02:08 PM

Yes, poultry houses are pending but almost ready- could include in our V2 publication of data.

but prob not for CAST 21 in June

From Rachel Soobitsky (she/her) to Everyone: 02:18 PM

me too!

From Olivia Devereux to Everyone: 02:32 PM

View comparison of acres among CAST-19 and the new proposed agricultural method for CAST-21.

https://public.tableau.com/profile/olivia.devereux#!/vizhome/LandUseExploration/CBWS-

VersionComparison

From Lori Brown to Everyone: 03:02 PM

I think the tabular data would be very useful as well. Thanks for bringing it up Karl.

From Arianna Johns to Everyone: 03:05 PM I think the second one is more valuable as well From Lori Brown to Everyone: 03:05 PM

I agree the second one was what I was thinking. From Olivia Devereux to Everyone: 03:06 PM

I have to hop off for another meeting. Please feel free to reach out if you have any questions.

From Rachel Soobitsky (she/her) to Everyone: 03:11 PM

Again- I will let everyone know when the 3 revision 1 counties are online so you can see how the revisions look. However, they are not perfect or finalized as we are still reviewing and fixing the LU!

From KC Filippino to Everyone: 03:13 PM

Rachel, when you say you're putting the 3 revision 1 counties online, do you mean the 2017 LU, and not the LU change?

From Rachel Soobitsky (she/her) to Everyone: 03:15 PM

yes! thank you for clarifying. The 14 priority counties are live on the new web as draft LU change. The 3 counties I just mentioned are the revision 1 of the LU (which we still need to publish for you to review on the original web application)

From Deborah Sward to Everyone: 03:19 PM

Is the review of the revision 1 counties also due on the 19th?

From Peter Claggett to Everyone: 03:19 PM

No Deborah, but the sooner we can receive comments the better.

From Deborah Sward to Everyone: 03:20 PM

Thanks Peter

From dave montali to Everyone: 03:36 PM agree w/Karl to review what we have now

From Rachel Soobitsky (she/her) to Everyone: 03:36 PM

That makes sense to me too

From Lori Brown to Everyone: 03:43 PM Good point Lisa - it is a good spreadsheet.

## **Participants**

Jackie Pickford, CRC

Karl Berger, MWCOG

KC Filippino, HRPDC

Peter Claggett, USGS

Cassie Davis, NYSDEC

Alana Hartman, WV DEP

Lori Brown, DNREC

Shannon Mckenrick, MDE

Nicole Christ, MDE

Arianna Johns, VA DEQ

Lisa Beatty, PA DEP

Travis Stoe, PA DEP

Ted Tesler, PA DEP

George Onyullo, DOEE

Olivia Devereux, Devereux Consulting

Rachel Soobitsky, Chesapeake Conservancy

Patrick McCabe, Chesapeake Conservancy

Normand Goulet, NVRC

Jessica Rigelman, J7 LLC

Iris Allen, MD DNR

Labeeb Ahmed, (CBPO USGS)

Chris Hayes, US Forest Service

Sarah McDonald, USGS CBP

Dave Montali Tetra Tech

Lee Epstein, CBF

Matt Gallagher, DC DOEE

Deborah Sward, Maryland Department of Planning

Tori Nelson, USGS
Rick Turcotte, US FOrest Service
Loretta Collins, UMD (AgWG)
Mark Symborski, Maryland-National Capital Park and Planning Commission, Montgomery
County Planning Department
T Tesler, PADEP
Renee Thompson, USGS CBP Healthy Watersheds GIT
Louis Keddell, Chesapeake Conservancy (CIC)
James Martin, VA DEQ