Maintain Healthy Watersheds GIT Meeting
December 12, 2022 11:00 am-1:30pm
Meeting Materials

Jeff Lerner
Renee Thompson, USGS
Jason Dubow, MDP
Sam Canfield, WV DEP
Alison Santoro, MD DNR
Bailey Bosley, USGS
Barba McGuinness, USFS
Camille Liebnitzky, City of Alexendra
Cassie Davis, NY DEC
Debb Herr Cornwall, MDP
Deb Sward, MDP
George Onyullo, DOEE
Helen Golimoswki, Devereux Consulting
Jackie Pickford, CRC
Julia Wakeling, DOEE
KC Filippino, Hampton Roads Planning Commission
Ken Choi, MDP
Kyle McLemore, Upper Mattaponi Indian Tribe
Lori Brown, DNREC
Mark Symborski, mncppc
Megan Gallagher, Caroline County
Peter Claggett, USGS
Rick Turcotte, USFS
Sarah MacDonald, USGS
Scott Phillips, USGS
Scott Stranko, MDE
Shane Kleiner, PA DEP
Todd Janeski, VA DCR
Young Tsuei DC DOEE
Angel Valdez, MDE
Lisa Beatty, PA DEP
Kristen Saunders, UMCES
Dan Murphy, US FWS
Sophie Waterman, CRC Staffer
Nancy Roth, Tetra Tech
Mindy Neil, WV DEP
Cara Johnson, CRC
Anne Hairston-Strang, MD DNR

11:10 AM Overview of Strategy Review System process- *Sophie Waterman, CRC*

Sophie ran through the SRS process and what it means for the LUOE and LUMM Outcomes.

The Strategy Review System is Chesapeake Bay Program's adaptive management process that works towards achieving the outcomes of the Chesapeake Bay Watershed Agreement. SRS runs on a two-year cycle. Each two-year cycle begins at a Management Board Quarterly Progress meeting. The meeting is for outcomes to report on their past two years and request action or assistance for the next two years. Prior to that meeting outcomes have to have the following materials ready:

- The Outcome's past Logic and Action Plan color coded with how that outcome did during the last cycle.
- A narrative analysis which is a review of the last two years and what we are looking towards in the next two years.
- A presentation which summarizes the information in the Logic & Action Plan and Narrative Analysis, as well as any changes the workgroup anticipates making to its Management Strategy. It supports a GIT's request for action, support, or assistance.

The LUOE and LUMM Outcomes live in the Local Action Cohort. The Local Action Cohort starts its new two-year cycle when it presents to the Management Board on February 9th. Prior to that meeting, draft materials and a dry run of the presentation are due. The dry run will take place on January 19th at the STAR meeting where we will get feedback. We will get some time to incorporate it into our materials before we submit to the Management Board.

After the February 9th meeting is when the outcomes create a new logic and action plan for 2022-2024 with updated factors, current efforts, and gaps to reflect any new understanding. Outcomes also get an (optional) opportunity to update their management strategy, which is just a document that outlines how we will manage the outcome. The other component of this is creating science needs which comes out of the identified gaps in the logic and action plan. There is also an opportunity to update previously identified science needs that are still considered a priority.

11:25 AM Overview of the Land Use Options Evaluation Outcome- *Renee Thompson, USGS*
Renee ran through a draft SRS presentation for the LUOE outcome. All MB presentations start with the goal and definition of the outcome. For LUOE the goal is land conservation, and the outcome description is: By the end of 2017, with the direct involvement of local governments or their representatives, evaluate policy options, incentives and planning tools that could assist them in continually improving their capacity to reduce the rate of conversion of agricultural lands, forests and wetlands as well as the rate of changing landscapes from more natural lands that soak up pollutants to those that are paved over, hardscaped or otherwise impervious.

Renee highlighted some of the successes and challenges, and lessons learned over the last 2 years:

- There is a need to increase local land use data and local capacity. This need has started to be addressed through the availability of the new 2017/18 high resolution data. There is however to fully address the need better coordination and understanding of local needs and priorities need to take place.
- LUOE is carried out by many different workgroups (IE LLWG local government engagement or FWG with tree canopy fact sheets)
- 2-way input and direct involvement of locals requires a sustained pathway of mutual listening and learning. We want our work to be mutually beneficial. One way to do that is by bringing back an internal local engagement group.

A big part of this outcome is to increase knowledge at a scale that is locally relevant. The release of tools like the land use view, CHWA (and soon to be CHWA 2.0), the targeting portal, EJ and Equity Dashboard have created ways for local governments to expand knowledge and capacity.

Renee highlighted some of the Scientific, Fiscal and Policy-related developments that could be better incorporated into the outcome:

Policy:

- Better incorporate DEIJ and Climate considerations.
- Integrate climate and DEIJ metrics

Communication, Translation and Engagement:

- Translate, format, package and flow information through to trusted sources.

- How to effectively engage locals directly (our 2022 GIT funding priority project will help address this)

Some potential opportunities for the outcome include:

Permitting for new developments in the counties that intersect the healthy watersheds, as a proxy we are monitoring land use and land cover and we have a forecasting model. Could a permit database be a GIT funding project?

The LUOE outcome and the LUMM outcome go hand and hand. They have similar outcome language and goals. One of the prosed adaptions for LUOE and LUMM is to combine the two together into one as a way to ensure that they are integrated. Renee brought this forward as one of the MB asks. The other MB ask is to Extend the monitoring period. A longer record of change metrics are needed – 2032 to better understand trends

Discussion

KC Filippino of HRPC asked about what does Renee mean by local involvement: what level are we aiming to involve? Staff level, elected officials, all of the above? Renee noted that the outcome specifically calls out local leaders.

Jason Dubow of MD DEP asked about a smart growth network of providers: For such a big geographic area, the HWGIT can't do this work of engagement on its own. Perhaps we need to establish a network of smart growth providers (federal, state, regional government; NGOs) across the Bay to meet and strategize on how to facilitate more local smart growth efforts? It is really hard for one group within CBP to reach such a wide geography.

Kristin Saunders from UMCES brought up that we have the Strategic Engagement Team (SET) who are trying to get at some of the points that Jason and KC noted and that they are trying to embed information directly targeted to planners, etc. SET will meet with outcome leads during and after their quarterly review to help define your engagement needs and tie them to necessary translation or communication needs with local audiences. Laura Catell Noll, Rachel Felver and Amy Handen are the primary coordinators that will pull that conversation together with outcomes in the new year.

In relation to the combing of the LUMM outcome and LUOE outcome Jackie pointed out that the "2025 WIP" Outcome and the "Water Quality Standards Attainment and Monitoring" Outcome share a management strategy but have different logic and action plans, so that is an option as well.

Kristen also pointed out that a curriculum for planners is in development with the Local Leadership workgroup in the lead on a goal team funded project and beginning to see people at the local level eat it up (as Renee noted in some of the meetings she has been invited to present to).

11:40 AM Overview of the Land Use Methods and Metrics Outcome- Peter Claggett, USGS

Peter ran through a draft LUMM presentation that will be given to the management board. The LUMM outcome is defined as: Assess and understand the impacts of land use change on watersheds, habitats, and communities at a scale relevant to county-level decision-makers. The LUOE does not have an indicator, but LUMM has been developing an indicator over the last year. The LUMM indicator would look at Impervious Cover and impervious cover change. Peter ran through the specific of each indicator

and some of the supporting background information like population growth in the watershed which is straight forward. Other supporting metrics include tree cover, natural land, and forest change. That seems like an easy thing to show and explain, however there are nuances. For example, tree cover and forest change also highlight timber harvest. Timber harvest change can be misinterpreted and miss used. For that reason, the Tree cover, natural lands, and forest change indicator is getting tabled until the right communication is created.

Peter talked about some of the uses of the data at the local level that have been kind of a stand in for the tree change data. The tree cover county fact sheets can dish up that information in a meaningful way that is useful to counties.

There are a couple other planned indicators to help with the assessment of the impacts of land use change:

- Effective Percent Impervious Cover (2017/18) and Impervious Cover Change (2013/14 to 2017/18) and acres of effective impervious cover and impervious cover change by catchment and watershed
- Farmland Conversion to Development (2013/14 to 2017/18) Acres of farmland converted to development by place and county
- Forest Land Conversion to Development (2013/14 Acres of natural land to 2017/18) converted to development by place and county
- Wetland Land Conversion to Development (2013/14 Acres of natural land to 2017/18) converted to development by place and county
- Riparian Natural Lands (2017/18) Percent and acres of and Natural Land Change (2013/14 to 2017/18) riparian natural land 1 and natural land change by catchment and watershed

A question that comes up is why we don't already have these indicators and that has to do with the fact that we do not have clear story. If land was cleared prior to 2013 it might be a forest to barren and just classifying it as barren or impervious doesn't give a clear picture.

Effective impervious cover is also in the works to help tell the story of impervious surfaces. Not all impervious is created equal and this indicator will help delineate the different kinds of impervious surface.

Discussion

Jason asked if there is an agreement among the scientific community that effective impervious cover is more important for local governments to consider than impervious cover? If so, we should update our state water resource planning guidance.

Peter response was that no there is not agreement, there is not even agreement on how effective imperviousness is calculated. All measure of effective impervious is some measure of connectivity. Effective impervious has to be communicated effectively.

11:55 AM Discussion: Land Use Outcomes to 2025 and Beyond: Looking Forward

Jeff opened the discussion with clarifying what we are planning on asking the MB:

Continued invest into the land use data to ensure that there that we can extend the monitoring period and create a longer record of change metrics (extend the monitoring to 2032) to better understand trends.

Combined the LUMM and LUOE outcomes together to reduce redundancy and enhance efficiency.

Peter noted that with continued investment ask that we also want to make sure that we highlight the fact that it will make the partnership more adaptable. We are already seeing this data being used at the local level, and in order to keep the confidence among all partners there needs to commitment to continuing to create this data.

Lisa Beatty of PA DEP noted that the data is being used for planning in PA. The people who are using the data at the county are extremely familiar with GIS. General public is not asking to use this data, professionals are using the data for the purpose of planning.

Deb Sward of MD DEP stated that MD DEP has a list of use cases that use the high-res data. Other MD agencies use the high-res data for TMDL planning and tree plantings.

KC noted that there are always conversations about the data being used for new tools. We do not need new tools. We need organization that makes it easier to access the data and information with good summaries that allows you to understand the data without deep diving. Putting the outcomes together into one work plan is a great way to streamline the information together.

In relation to combination request Renee wanted to hear more from the group and make sure that it is something that the GIT would support. Shane Kleiner of PA DEP agreed with the proposal and noted that putting all the info in one document instead of two would help streamline the things to review and understand. Mindy Neil of WV DEP said it made sense as there is already a lot out there and streamlining it would help. Renee noted that the combing of the outcomes benefits the partnership as having one place to go would be helpful to those who are seeking this information.

Kristin asked: should we be considering advancing healthy watersheds for long term conservation protection as jurisdictions look toward conserving 30% of the watershed by 2030? This would be a compatible request with the CCP work. Is there a role for BIL funding that could be carved out to support this ongoing work? Renee responded by saying: Thank you for that important reminder to tie these outcomes back to healthy watersheds and conservation. We will bring that forward more prominently in the management materials.

Jason asked if we could ask for money for Peters work on the high-res LU/LC data. Peter said that ask would be very helpful. Scott Phillips noted that continuing the land-change monitoring and analysis was also recommended in the CBP monitoring report. He Suggested that we ask the MB support maintaining the network. The PSC has already shown support for this. This request needs to be taken to EPA as they hold the purse.

Peter brought up a lack of feedback loops of those who use the data vs the ones who create the data. There has been some discovery into how the data is used through use cases and general feedback…But there is no avenue for people to say what they are using the data for and if the data is meeting their needs.

Jason noted that a creation of a smart growth network could help with the feedback loop and be the space for conversation.

Taking it to a bigger picture Jeff asked how this connects to healthy watersheds and healthy watershed outcome. In August we will be doing our SRS process for the Healthy watersheds outcome and there is an opportunity to connect all these outcomes.

Renee noted that early on we have agreed that land use is the biggest factor impacting watershed health. The update of the CHWA will include metrics from the LU LC data. There is a real opportunity to translate and interpret data for locals through the CHWA.

Peter emphasized that we are monitoring land scape change. The LUMM is all about developing strategies to help reduce the negative environmental change. Observation of change do not necessarily mean bad change. There needs to be a filter of the metrics we produced and what is happening. There needs to be something between the two of them. There are some gaps that have yet to be identified. Jason noted that has the potential to be a science need. Renee brought up conversations that happened during the summer about a good vs bad change and how to present and interpret that information. What type of information needs to be shared to reduce bias.

Kristen noted that peters comment reminded her of the thresholds for various living resources, and the need to communicate those thresholds and the urgency for some species.

Peter mentioned that The HWGIT needs to think about policy response to the change overtime. Jason responded to Peters comments: And it will depend on the sensitivity of the receiving water (e.g., Coldwater stream) and things like karst terrain too, correct? And perhaps it will depend on the level of restoration and mitigation efforts ongoing within the same watershed during the period of land change, correct?

Samuel Cranfield of WV DEP noted that depending on goals, groups could utilize the dashboard using guidance (thresholds). "This was an idea in another work group but using the data portal to produce a dashboard tool where specific metrics can be targeted using all the GIS layers. Targeting co-benefits. Example: You want to target a county with >20% impervious cover, >= 5 endangered species, and >20% low-income population. You could then move scales up and down as needed."

Jamboards were used as supplementary form of gathering feedback. To read the Jamboard responses us the following links:

LUOE Jamboard

LUMM Jamboard

End of Year-Round Robin

Samuel Canfield: Working on down silos in WV DEP is working with DOT highways to help be more connected with them. Working the trust on a whole host of projects to help support GIS, green infrastructure, and other improvements of watersheds.

Jason Dubow: Promoting the local water resource planning guide that is a required element of comp plans. It has specific info on how to protect water bodies. We've been promoting local water resource

planning guidance: https://planning.maryland.gov/Pages/OurWork/envr-planning/water-resources-mg/2022/02/framework-checklist.aspx

https://planning.maryland.gov/Pages/OurWork/envr-planning/water-resources-mg/2022/02/framework-cwa-wqprotection.aspx

Maryland is creating a new statewide Land Preservation and Recreation Plan - perhaps that will be an opportunity to connect to protecting healthy waters.

Angel Valdez: The MDHWA being completed. Hopefully over the next two years figuring out how to visualize those results. Getting the results to people who make decisions
DEIJ and Climate Change: apart of every decision we have been making. It has been a challenge and something we have to work on as we move forward.
Outreach for counties: we need partnership for counties and those who are doing the work of mitigation and conversation. Conflicting land uses and limited resources have led to us needing to be in better partnership.