# CHESAPEAKE BAY PROGRAM LAND USE WORKGROUP

Conference Call Meeting Agenda June 6, 2018 10:00 AM – 11:30 AM Meeting Materials: link

# Actions & Decisions:

ACTION: Peter Claggett will send out state and county-specific nutrient loading data for the thematic land use scenarios once WTWG decision is made.

ACTION: Peter Claggett will resend the basic land change information that is available not only at the state level, but down to county and LRSEG levels.

# Welcome/ Roll Call/ Review of meeting minutes/ Action Item Update - K. Berger, MWCOG

The LUWG approved the meeting minutes from the May 2<sup>nd</sup> meeting.

# <u>Update on Jurisdiction-Specific Future Scenarios</u> – P. Claggett, USGS

Peter updated the group on development of jurisdiction-specific 2025 future land-use scenarios. Outstanding data needs from jurisdictions were highlighted.

- Claggett addressed the state and county-specific nutrient loading information on the thematic land use scenarios.
  - Land use data has already been sent out in a zip file with acres by county in each of the three thematic scenarios on top of two baselines (a total of 8 scenarios) for each state.
  - Nutrient loading information has not been sent out yet due to requests for changes (the latest being septic numbers) pushing back finalization. Once WTWG makes a decision regarding septic, loads will be calculated. When this loading information is sent out, it will include very specific information regarding the combination of scenarios used so that it can be reproduced in CAST.

ACTION: Peter Claggett will send out state and county-specific nutrient loading data for the thematic land use scenarios once the WTWG decision is made.

#### Discussion:

- Claggett: We are just about ready to start running our first scenario (PA). We have made great
  progress with defining the scenarios for all the states except for NY and WV. I would like an
  update from those representatives on the call for when we might expect to finalize their
  scenarios.
  - o Donner: I will have to check in with WV folks and get back to you.
  - Davis: We will reach out to you to have a conference call in the future to go over NY specific future scenarios we're interested in.
- Berger: So, you have one per jurisdiction at this point. For right now you've asked each state to
  define which specific aspects they want you to forecast. Moving forward, you might be able to
  run other scenarios for the states as well?
  - Claggett: Correct. We will run one scenario for each state and then move to the next state to ensure all states are covered. Then we can go back and run more scenarios for states that already have their first scenario. We are trying to run theses in the order we receive them.

- Dubow: Do you have a specific way you want model inputs delivered to you?
  - Claggett: Depending on the size of data, we can decide. FTP, Google Drive, Dropbox, or email are all possibilities.
- Symborski: We have talked about more specific data at the county level that could be useful for land use scenarios and getting finer resolution data. For example, information about land that will most likely stay undeveloped, or our impervious data for certain zoning. Is that useful or too detailed for your type of modeling?
  - Claggett: That's pretty far in the weeds, we have universal impervious estimates based on lot size and location. We could incorporate a county wall to wall map of lot size that could improve impervious cover estimates and we could discuss this further.

## **Update on Adjustments to Septic Systems** – P. Claggett, USGS

Peter updated the group on adjustments made to future septic system numbers since fall 2017.

 Claggett noted that VA septic numbers were high due to data provided by VA on the number of septic systems by county. The WTWG decided not to use the data provided, VA has agreed to that and it does not affect other states.

#### Discussion:

- Dubow: We have both individual and community septics for 10-20 homes at a time. How can we go about forecasting those may occur in the future and distinguishing between the two?
  - Claggett: That speaks to anomalies we see in the local vs. regional estimates. We need the Wastewater Workgroup to tackle that question.
  - Berger: The original goal of deriving a load from the septic sector was to identify residential units on septic. If we had the number of systems for a county, the Wastewater Workgroup plugged in assumptions based on averages to estimate the N load for an average household. Another issue with the VA numbers was that the state reported all systems for which they had records, including non-residential systems. What do we do with loads from those systems (ex. churches, stores)?

## **Update on Geospatial RFP** – P. Claggett, USGS

Peter updated the group on EPA's award of the CBP GeoSpatial RFP.

• Claggett: EPA put out a request for proposals to remap the watershed at 1m resolution, map hyper resolution streams, and provide additional web tools and geospatial services to the Bay Program partners. The RFP was awarded to the Chesapeake Conservancy, and planning for a kick-off meeting in the next few months is underway. We will keep you all informed of when that kick-off meeting will be. EPA now has a cooperative agreement with the Conservancy that will ensure we get a repeat high-resolution land cover map.

#### Discussion:

- Berger: What is the timeline?
  - Claggett: There will be some update every two years, over the next six years. Then, a wall to wall high resolution in 2019 and 2020.
- Berger: Will the kick-off meeting be a chance to have the Conservancy, Bay Program, and other
  interested parties discuss future plans, and give suggestions? This will potentially cover all
  states, including VA if they want to use this data instead of their own.
  - Claggett: There will be another local data call to inform this land use update, and there will be plenty of opportunities for input throughout the entire process.

# Update on Chesapeake Bay Land Change Model, version 4 - P. Claggett, USGS

Peter updated the workgroup on the Version 4 Land Change Model.

- Claggett: We are almost ready to release version 4 of this model. There are a couple things this version does differently than the current model:
  - Approach of eliminating growth in ultra-rural areas for 2025 growth. That was agreed on reluctantly, which is not the preferred approach. We have eliminated a growth boundary based on the lowest probability of growth, which allows us to execute reasonable model run times.
  - We have introduced dynamic probability. The growth patterns in 2025 are going to influence the growth patterns in 2040 and further through time. This change is not relevant to 2025, but is relevant to how the model performs further out in time.
  - Simulation of land conservation (PA and MD state specific scenarios). We made change to version 4 to ensure consistency. We will simulate current zoning with version 4 for 2025 and then simulate state specific scenarios with version 4, and apply the difference to version 3. We are not changing current zoning scenario or output for 2025 but will look at relative differences.

#### Discussion:

- Dubow: Could you describe the difference in current zoning between versions 3 and 4?
  - Claggett: The current zoning scenario in CAST is locked down for 2025 using version 3 of the model. That will not change in CAST. We will simulate our current and future scenarios using version 4 of the model. To make sure we focus on the effect on current zoning in version 4, we will run current zoning and state specific scenarios using version 4 in house. We will calculate the differences and then apply those relative differences.

# <u>Proposed Organizational Change and Meeting Schedule</u> – K. Berger, MWCOG and P. Claggett, USGS

The group discussed the possibility of moving the oversight of the LUWG from the Water Quality Goal Implementation Team to the Maintain Healthy Watersheds GIT in the future. The group also discussed shifting to a quarterly meeting schedule, starting in the fall: so perhaps September 2018, December 2018, March 2019, and June 2019.

## Discussion:

- Berger: We are about wrapped up with Phase 6 workgroup input from the LUWG. Future forecast to 2025 is all we have left for WIP purposes. We are proposing no meetings in July & August and moving into a quarterly meeting schedule starting in September.
  - Dubow: Since we are in the middle of helping states with WIPs, having meetings more frequently may be helpful to understand where all the states are. If new issues come up, we will have an opportunity to discuss it. We are in a busy time with conservation plus scenarios.
  - Berger: We can build the September meeting largely around initial results from state specific scenarios. It would be great to have Jason or someone from MD to discuss what they simulated. It would be nice to have some other states volunteer discuss their state specific scenarios as well. After the September meeting, we can make a judgement whether a quarterly or a bi-monthly schedule works going forward.
- Berger: Once we get through the WIP process and state specific scenarios, we have basically accomplished our to-do list for the WQGIT. The tasks we have left to do are more associated

with the Healthy Watersheds GIT. These include tracking resource conservation metrics, such as change in forest land use (forest conservation, Ag conservation, wetland, impervious cover). We hope to largely accomplish this with the RFP. These metrics are overseen by Healthy Watersheds GIT.

- Option 1: No change, remain a workgroup under WQGIT
- Option 2: Complete change, become a workgroup under Healthy Watersheds GIT
- Option 3: Cross-GIT workgroup, if this exists, possibly a workgroup for both GITs
- Claggett: Our proposal for any changes will go up to WQGIT and need discussion with Lucinda.
- Dubow: Does the WQGIT vote to approve changes to the CBP land change model?
  - Claggett: They haven't asked for that level of oversight for that model. The overall
    approval of the use of a land change model has been a PSC decision. However, neither
    the PSC nor the Water Quality GIT toned to approve technical changes to the model.
  - Dubow: Given the other support the WQGIT gives us to coordinate with other workgroups under the same GIT, it may be best to stay where we are.
- Goulet: I would suggest picking one or the other. Given the fact that the WQGIT oversees most aspects of the modeling framework, including the milestones, it seems like remaining under the WQGIT is the best option.
- Griffin: I would suggest aligning with a single GIT.
- Berger: If anyone is interested in chairing this group, it might be good to have a new chair in 2019 once WIP development is complete.

## Next meeting: September 5, 2018 Face-to-Face Meeting

Karl Berger	MWCOG
Peter Claggett	USGS
Allie Wagner	CRC
Labeeb Ahmed	Attain
Cassandra Davis	NYSDEC
Travis Stoe	PA DEP
Lori Brown	DNREC
Debbie Cornwell	MDP
Jason Dubow	MDP
Shannon McKenrick	MDE
Sebastian Donner	WV DEP
Jennifer Herzog	Land Trust Alliance
Jonathan Champion	DOEE
Linda LaSut	VDOT Planning
Katherine Filipino	HRPDC
Fred Irani	USGS
Mark Symborski	Montgomery County Planning
George Onyullo	DOEE
Norm Goulet	NVRC
Pat Gleason	EPA
Ted Tesler	PA DEP
John Griffin	Chesapeake Conservation Partnership