

STAC SGA Update

March 10, 2020

The Objectives

- Identify gaps and uncertainties in system response —physical, chemical, biological, and socioeconomic— that impact efforts designed to attain WQS.
- Identify recent scientific developments that can shed light on the gaps and uncertainties in system response to advance efforts to attain WQS, and
- Recommend research strategies that improve understanding of system response to support informed decision making to attain WQS.
- *Recommend strategies for integrating scientific and technical analysis with active adaptive management in order to aid decision-making under uncertainty.*

Draft Report Outline

1. Introduction
2. *Background and overview for identifying and evaluating gaps & uncertainties*
3. **Watershed**
4. **Estuary**
5. **Living Resource**
6. Science, Uncertainty, and Water Quality Management (TBD)

The Process and Progress to Date

Generate a broadly supported document

Workgroups:

1. Inform and solicit feedback from STAC membership on topics and issues
2. Develop draft written materials for review and comment
 - Google drive workgroup space and access
3. Repeat 1 and 2 as necessary

Tentative Timeline

Dec 2019: Watershed group overview

March 2020: Estuary Group Overview/Q&A

Time to organize/discuss writing assignments

June 2020: Living Resource Overview/Q&A

Discussion/feedback of Watershed Section

September 2020:

Discussion/feedback of written products

Organize/discuss writing assignments

Discussion of Report Conclusions

December 2020:

Discussion/feedback of written products

Organize/discuss writing assignments

March 2021:

Report review/discussion

June 2021:

Finalize report

Feedback on Sections 1 and 2

We would like substantive comments, ideas, & feedback on sections 1 and 2

Getting Feedback:

- Today's discussion
- Send remaining comments to Annabelle
- We will post collective comments and subsequent revisions to everyone on SGA Google Drive

Reminder: final edits responsibility of the SGA Steering Committee

Related Activities/Updates

Chesapeake Community Research Symposium 2020

The TMDL faces several challenges as we enter the third decade of the 21st century:



Nutrient Reductions

What magnitude of additional nutrient reductions, beyond those specified in the 2017 mid-point assessment, will be needed to compensate for impacts of climate change and population growth in 2025 and beyond?



Effort

What is the current status of efforts to account for these impacts and what new observations and models are needed to improve future predictions?



Living Resources

How will we look beyond the TMDL to restoration of living resources?



Management

What is the state of the art in our ability to predict how management of nutrient and sediment loads will impact higher trophic levels in the Bay and its watershed?



Observation & Modeling

What additional observations and models are needed?



Chesapeake Community Research Symposium 2020

Some Sessions

Session 4: Chesapeake Bay Submerged Aquatic Vegetation: Progress and Future Challenges

Session 6: Insights on BMP performance: why aren't we seeing desired improvements at the watershed scale?

Session 7: Understanding response, recovery and restoration trajectories in the Chesapeake Bay's estuarine ecosystem.

Session 8: Water-quality patterns and trends in the Chesapeake Bay and its watershed: Integrated monitoring and modeling approaches to advance science and inform management

Session 11: The Next Generation of Hydrogeomorphic Data, Tools, and Applications

Session 18: Increasing Effectiveness and Reducing the Cost of Non-Point Source Best Management Practice Implementation: Options to Incentivize BMP Targeting

Session 23: Effects of habitat and water quality changes on higher trophic levels in the Chesapeake Bay and its watershed

Chesapeake Community Research Symposium 2020

<https://ccmp2020.chesapeake.org/>

June 8, 9, 10

Crowne Plaza Hotel, Annapolis, Maryland

Early Registration through **March 15**

Deadline for submitting abstract: **March 15**