



# Maryland Proposed Path Forward on CAST

Management Board  
Dec 16, 2022

# Four Starting Points:

1. Remain firmly grounded in and guided by the science
2. We are not backing off of any 2025 commitments
3. The fertilizer issue is a significant issue that requires special attention.
4. Success requires compromise





## BIG CHALLENGE...

This is a technically complex issue with significant implications that is being decided by largely non-technical PSC members.

**SOLUTION:  
Say the same thing twice...**

**Once in non-technical language  
that clearly captures our intent in  
a form that all can agree on,**

**And then a second time that  
translates our intent into more  
technical “agreement” language.**





1. To reaffirm the partnership’s commitment to being guided by the best science available in our pursuit of a restored Chesapeake Bay, while recognizing that the science is constantly evolving and that we must constantly adapt our efforts and workload to reflect our improved scientific understandings.
2. To reaffirm the jurisdictions’ commitments to complete the amount of work by 2025 that they previously committed to completing by 2025 when they submitted their Phase 3 WIPs as informed by the best science available at that time, and which were evaluated by EPA.
3. To recognize that since the jurisdictions’ Phase 3 WIPs were submitted, continued evolutions in the science and the identification of inadvertently omitted data have both resulted in additional loads and resulting additional work necessary to achieve our goal of a restored Chesapeake Bay. However, given the late date, it is unrealistic for the jurisdictions to adjust their strategies sufficiently beyond what they already committed to do in their Phase 3 WIPs in order to accomplish that additional amount of work by 2025. Those “additional, unaccounted loads”, therefore, will not be ignored but will be addressed by the partnership after 2025. The amount of pounds of nutrients / tons of sediment in the “additional, unaccounted loads” is not determined at this time and will be calculated after the partnership has had the opportunity to explore and address concerns related to fertilizer loads in the modeling tools. Additionally new scientific understandings from the STAC CESR Report, monitoring results, and other appropriate information will be taken into consideration in calculating the “additional, unaccounted loads” to be addressed after 2025.



- A. The partnership approve using CAST-21 after revisions to address Intent #5 above, and CAST-23 when appropriate as per the processes followed in previous CAST updates with the following conditions to address partnership concerns.
- B. Understanding that jurisdictions cannot realistically adjust implementation in time to meet significant changes in load reductions represented by CAST-21 by 2025, we recommend that jurisdictions be held accountable to meeting the nutrient and sediment load reductions that the jurisdictions previously committed to meeting by 2025 in their final Phase 3 WIPs and which were evaluated by EPA. “Additional unaccounted loads” will be defined as loads identified after the planning targets were adopted in July 2018. Specifically, interim 2025 planning targets will be produced by adding the change in the WIP scenario loads caused by model changes and data updates to the original Phase 3 planning targets. Any additional load reductions required to address increases that occurred due to the CAST-19, CAST-21 and 2025 Climate Change will be addressed post 2025. The interim planning targets will change again between now and 2025 with the release of CAST-23 using the same methodology.
- C. To ensure clarity and transparency, CBPO will calculate and share with the partnership the 2018 planning targets and what is currently identified as additional unaccounted loads by January 20, 2023 with the understanding that the additional unaccounted loads may change by 2025.
- D. Over the next year, the MB will develop and recommend to the PSC a process and timeline for addressing how the “additional unaccounted loads” are to be addressed after 2025. This process should include consideration of appropriate findings and recommendations from the STAC CESR report and results from the monitoring program. (Addresses PSC 8/29/22 Decision #1).



4. To recognize that the inadvertent omission of AAPFCO fertilizer data from CAST-19 and its appropriate application in the model is a significant issue of concern by some jurisdictions that must be adequately addressed prior to incorporating it into a Phase 7 Model.
5. To recognize that the revision of non-farm application rates proposed in CAST-21 using previously approved data sources and protocols has produced illogical results for multiple jurisdictions. As such, it does not represent the best science available to guide partnership restoration pursuits. Prompt correction is warranted and scientifically defensible mechanisms are available to adjust model updates protocols and resolve this issue in the short-term.



- E The MB charges the WQ GIT to work with other partnership groups as appropriate to:
- 1) Make a priority of resolving partnership concerns regarding the technical appropriateness of a) incorporation of AAPFCO farm fertilizer data within the model, and b) the modeling processes when the data is applied. Resolving these issues and reporting back to the MB with recommended actions should be a priority of the WQ GIT given the fact that the inadvertent omission of the AAPFCO fertilizer data and its resulting application in CAST-19 is a significant issue of special concern to the partnership. These issues should be addressed to partnership satisfaction prior to updating the Phase 7 model. (Addresses PSC 8/29/22 Decision #2)
  - 2) Make a priority of revising the protocols for incorporation of new AAPFCO non-farm fertilizer data within the model to resolve non-representative and illogical model results and report back to the MB. This issue should be addressed to partnership satisfaction prior to finalization and use of CAST-21 (Addresses PSC 8/29/22 Decision #2)



- E The MB charges the WQ GIT to work with other partnership groups as appropriate to:
  - 3) Work with the Watershed Technical Workgroup and others as appropriate in the development of a policy for the partnership regarding safeguards, triggers, and protocols to prevent future data analysis variations and how they are applied. (Addresses PSC 8/29/22 Decision #3)