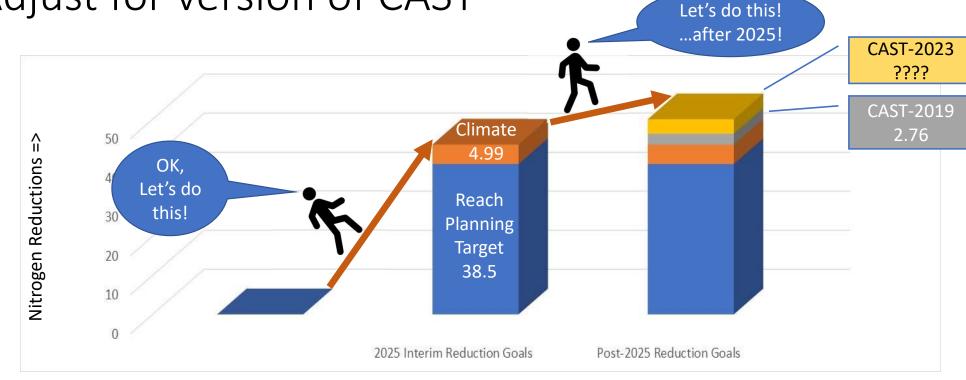
Addressing the PSC Decisions Related to CAST from 08/22/22

Three PSC Decisions – CAST 2021

- **PSC Decision 1**: Over the next year, as a partnership, we will figure out how the unaccounted additional loads are addressed post-2025, and on what timeframe, as we work to 'recalibrate' the goal line.
- **PSC Decision 2**: Convene a committee to develop short-term, interim resolutions to fertilizer data concerns (Check in at next PSC meeting) before moving forward with CAST 2021 as well as long-term resolutions for Phase 7 model.
- **PSC Decision 3**: Refine the process to include additional safeguards to prevent data analysis variations and to assess reasonability of modeling results after Chesapeake Bay Program protocols are applied.

Develop interim targets
Include reductions for climate
Adjust for version of CAST

Waiting on CAST-2023



Salient Points: Fertilizer Data



Data Updates



Urban Fertilizer



Agricultural Fertilizer

Urban Fertilizer: Where We Are



Spring 2023

Presentation on current methods to USWG UNM Task Force recommendations to USWG

Update data sources
 & smoothing
 methods for Phase 6

Inform WQGIT We Are Here
Inform PSC















UNM task force discussed proposed methods changes for Phase 6 Recommendation for changes to data & methods approved

Inform MB

USWG = Urban Stormwater Workgroup UNM = Urban Nutrient Managment WQGIT = Water Quality Goal Implementation Team MB = Management Board PSC= Principals' Staff Committee

Urban Stormwater Workgroup Decisions



Use AAPFCO data for the entire period of record

Use instead of NAWQA data



County-scale smoothing method





Incorporate data from states/jurisdictions, if possible

Takes care of latency with AAPFCO data

AAPFCO = American Association of Plant Food Control Officials NAWQA = National Water-Quality Assessment

Agricultural Fertilizer

Fertilizer Expert Group

- Federal, state, industry
- Examine fertilizer data sources

Recommendations

- Immediate concerns
- Shape future

Progress



Investigated data sets

Formed recommendations

Discussions at the July 24th WQGIT

PSC Decision 3: WTWG Recommendations to the WQGIT

- August 2022 PSC Decision 3: The partnership will update the process for incorporating data into CAST to include additional safeguards to prevent data analysis errors and to assess reasonability of modeling results after CBP protocols are applied.
- WQGIT charged WTWG with developing recommendations for this charge
- WTWG broke charge into two parts: PRE (Track 1) and POST data processing (Track 2)
 - <u>Pre-Data Processing</u>: Safeguards and protocols to prevent and protect against data input errors
 - Post Data Processing: A process/protocols to assess reasonability of results ("after protocols are applied" means "when we see results")
- Evaluated each track separately; addressed both within the framework of a formalized CAST
 Updates Review Process
- Presented Draft CAST Updates Review Process Outline and detailed recommendations to WQGIT for consideration in June, expect a decision at the 7/24 WQGIT meeting

QA- CAST Inputs

CBP IET and Source Sector
Workgroups begin QA checks for all data inputs and methods

Jurisdictional Domain Data Due to CBP

Source Sector Workgroups approve new data and methods

WQGIT approves new data and methods

Development Team has incorporated new functionality into CAST

CAST output review by CBP IET is completed

WQGIT-Recommendations

- Update review process includes quality assurance review of data input sources, data preparation methods, model processing methods that inform loads, and corresponding documentation
- Guided by source sector WG's and Implementation and Evaluation Team
- Timely Partnership review supported by CBP IET staff
- Anomalies: appropriate source sector workgroup, scientifically supported and confirmed, resolution with IET support, confirmed by partnership, option to revert to previous model data and methods

QA- Outputs and Anomalies

Final BMP and wastewater submission for progress for July 1 to June 30 of previous year and for 1985 to June 30 of previous year for a new release of CAST

Partnership Review Begins**

Illogical Results Focus***

Final Partnership Comments****

CBP Response to Final CAST Comments****

Release CAST

Consolidated Timeline

PSC Decision	Draft to WQGIT	Final By WQGIT	Draft to MB	Final By	Presentation to PSC for approval
1 - Unaccounted Additional Loads			8/10/2023	9/5/2023	9/26/2023
2 - Fertilizer	6/26/2023	7/24/2023	8/10/2023	9/5/2023	9/26/2023
3 - Illogical Results	6/26/2023	7/24/2023	8/10/2023	9/5/2023	9/26/2023