

CHESAPEAKE BAY PROGRAM 2023 RECAP & 2024 UPDATES

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WATER RESOURCES TECHNICAL COMMITTEE January 12th, 2024

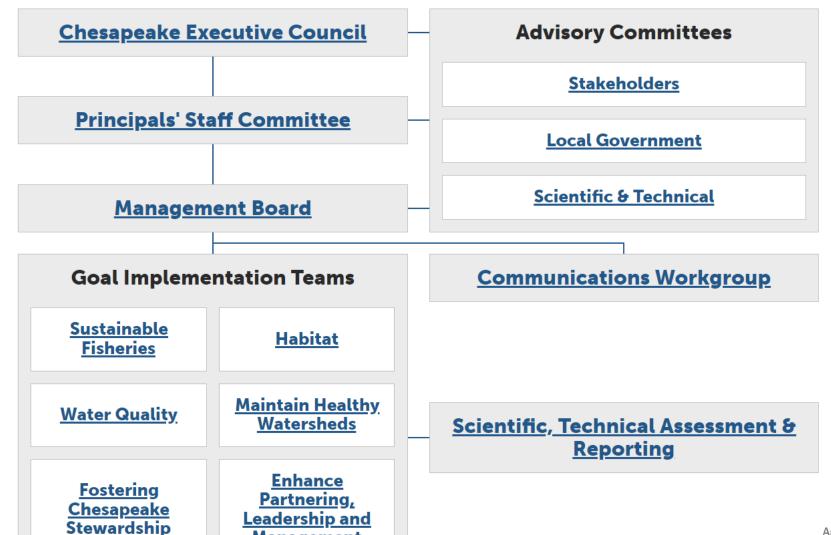
Agenda

- Organizational structure of the CBP
- What groups COG tracks
- CAST overview/update
- Phase 7 timeline
- Notable decisions of 2023
- Other key 2024 dates
- Beyond 2025





How the Chesapeake Bay Program is Organized



Management

Workgroups COG Tracks

- Water Quality Goal Implementation Team (GIT 3)
 - Agriculture Workgroup
 - Forestry Workgroup
 - Land Use Workgroup
 - Toxic Contaminants Workgroup
 - Urban Stormwater Workgroup
 - Watershed Technical Workgroup
- Scientific, Technical Assessment & Reporting (STAR)
 - Climate Resiliency Workgroup
 - Modeling Workgroup
- Habitat Goal Implementation Team (GIT 2)
 - Stream Health Workgroup
- Enhance Partnering, Leadership & Management (GIT 6)
 - Local Leadership Workgroup



▼ Workgroups and Action Teams

Agriculture Workgroup

BMP Expert Panels

BMP Verification Ad-hoc Action
Team

Best Management Practices (BMP)
Verification Committee

Federal Facilities Workgroup

Forestry Workgroup

Land Use Workgroup

Local Planning Goals Task Force

Milestones Workgroup

Reevaluation Technical Workgroup

Sediment Workgroup

Toxic Contaminants Workgroup

Trading and Offsets Workgroup

Urban Stormwater Workgroup

Wastewater Treatment Workgroup

Watershed Technical Workgroup

▼ Workgroups and Action Teams

Climate Resiliency Workgroup

Criteria Assessment Protocol Workgroup

Data Integrity Workgroup (formerly AMQAW)

Integrated Monitoring Networks Workgroup

Integrated Trends Analysis Team

Modeling Workgroup

Status and Trends Workgroup

▼ Workgroups and Action Teams

Black Duck Action Team

Brook Trout Action Team

Stream Health Workgroup

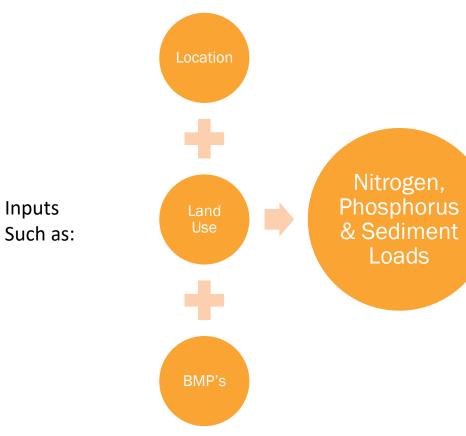
Submerged Aquatic Vegetation
Workgroup

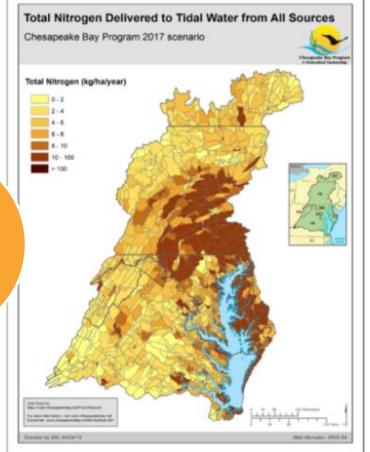
Wetland Workgroup

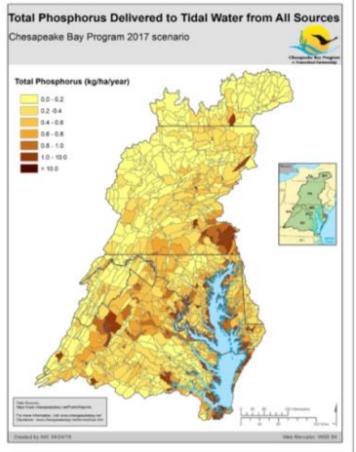
Fish Passage Workgroup

CAST Overview

Chesapeake Assessment Scenario Tool









CAST Changes

CAST Upgrades

CAST Versions

Model Phases

There were 9 updates to CAST in 2023. Some notable improvements include:

- Update to the manure application eligibility and timing
- Correction to the unregulated/regulated land use classification
- Addition of the Eutrophication Units Calculator
- New BMP Unit-sort to the Add BMPs page
- Adds the Transportation BMP to the BMP Summary Report

- Corrects error in the Compare Scenarios cost estimates
- WIP 3 and WIP 3 Climate Change scenarios updated with the Pennsylvania transportation policy BMP
- The Conowingo WIP and Conowingo WIP Baseline are now available on CAST



CAST-2023 Release Schedule

ONov 18 to Dec 8, 2023

CBP responds to comments and finalizes CAST-2023

C Early/Mid 2024

Release of CAST-2023. Release occurs after the finalization of 2023 Progress and verification assessment. The 2023 Progress assessment is on the current version of CAST (CAST-2019)

CBP partnership review period for the latest two updates

Presentation to the PSC on the final version of CAST-2023

Dec 8, 2023

O Nov 3 to 17, 2023

CAST-2023 Release Schedule

Slide from Lee McDonell (EPA)'s presentation to PSC December 8th, 2023



Looking ahead to Phase 7

Option 1: CAST 2023 is last update for Phase 6

Year	2022	2023	2024	2025	2026	2027	2028
Phase 6 CAST	CAST6-	2019	CAST6-2023				
Phase III WIP evaluation	Evaluate and track with Phase 6						
Current Climate Plans	Build P	Vlodels	Review CAST	Develop 2035 targets	Track with Phase 7		
Phase 7 PSC Approved	Build Mode	ls that will also A Cond	Address 2035 Cl ditions	Review Models	New 2035 climate targets with P7 models	Track with Phase 7	



Timeline from Bay Program staff presentation to WQGIT July 24th, 2023

Notable Decisions from 2023

- The recommendation for CAST-23 to be the last update to the Phase 6 suite of models was approved.
- The last change for CAST-23 will be to change all crop nutrient applications to be both manure and fertilizer eligible.
- The PSC agreed to support the pursuit of an EC Directive to establish an Agricultural Advisory Committee.
- Methods developed by the WTWG to address illogical model results and include additional safeguards to prevent data analysis variations was approved.
- A method for defining unaccounted additional loads was approved.



Decisions from 2023 - Unaccounted additional loads

"Unaccounted For" Loads To Be (Mostly) Addressed Post-2025

Load Risk	TN	TP	
2021 Conowingo Dam WIP (Lost Trapping Capability)	6.0 Mlb/Yr	0.26 Mlb/Yr	
Climate Change to 2025 (#s Might Double for 2035)	4.99 Mlb/Yr	0.60 Mlb/Yr	
CAST-23	9.91 Mlb/Yr	0.08 Mlb/Yr	
Plus Other Issues TBD (Additional Reduction Need)	EX: Differences between Phase 6 and 7 Models EX: High uncertainty in ag ammonia emissions		
Total	20.9+ Mlb/Yr	0.94+ Mlb/Yr	



Other Key 2024 Dates

- The 2022 Census of Agriculture is to be released in February
- High Resolution Land Use is to be completed by June



1-meter Land Use/Land Cover Data Project Overall timeline - 2024 edition





2024 Dates Continued: Two-Year Milestones

Upcoming Due Dates

- December 1: Implementation progress due to NEIEN
 - Federal data should have been submitted to states in Oct.
 - Progress review meetings are, or will be, scheduled with jurisdictions
- January 16, 2024: Jurisdiction/Conowingo/Federal 2022-2023 programmatic progress due
- January 16, 2024: Jurisdiction/Conowingo/Federal 2024-2025 draft programmatic commitments and draft numeric commitments due
 - January 31, 2024: EPA compiles federal agency programmatic milestone commitments and posts to Federal Leadership website
 - January 31, 2024: Jurisdictions/Conowingo milestone commitments and progress posted to their websites
 - Within 60 days of submission of draft programmatic milestones OR finalized numeric progress reports, which ever is later – EPA provides draft evaluations to jurisdictions, Conowingo Steering Committee, and Federal Agencies

