September 25th, 2025

Phase 7 Model Wastewater Input Decisions Recap

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Decisions

1 **Sanitary Sewer Exfiltration**

2 **Tabling SSO Loads**

3 **Sewer Service Area**

4 **Sewer/septic Model**

5 **Tabling Boat Pump-out BMP**

6 **CSS Data Layer (today!)**

Where can I find information on these?

- WWTWG calendar pages
- WWTWG Small Group Materials
- WQGIT Office Hours Recording
- Phase 7 Model Development Project Page
  - Phase 7 Decision Planner (WQGIT-wide)

Phase 7 Model Development `In Progress`

These updated modeling tools will be used by the Chesapeake Bay Program partnership to inform decisions related to the nutrient and sediment reduction goals outlined in the 2014 *Chesapeake Bay Watershed Agreement*.

Description

Currently in development, the Phase 7 Modeling Tools will be used by the partnership to inform decisions related to the nutrient and sediment reduction goals outlined in the 2014 *Chesapeake Bay Watershed Agreement*. Integral to this updated suite of tools is the ability to project changing environmental conditions through 2035. The model, which will be ready for use by 2028, consists of seven interrelated projects: (1) High Resolution Land Use, (2) Chesapeake Assessment Scenario Tool (CAST), (3) Optimization, (4) Agricultural Inputs, (5) Atmospheric Deposition Modeling, (6) Watershed Modeling, (7) Estuarine Modeling and (8) Criteria Assessment.

The development of the Phase 7 model is ongoing. Evolving plans and related documents will be posted here as they become available.

More information on the role of the model in the Chesapeake Bay Program, and why this update is happening can be found on the Phase 7 Model Development webpage.

WQGIT Phase 7 Office Hours

The WQGIT organized optional sessions to facilitate comprehension of Phase 7 topics and updates. These topics continue to be discussed at the appropriate workgroup. Recognizing an interest to better understand these evolving methods, we provided these "office hours" as informal briefings and discussions for the WQGIT or other interested parties. Notes from all three sessions are compiled here.

- **Friday, August 15, 1-2:30pm** - BMP Excess, Land Use Loading Rate Ratios - Recording, Notes
- **Monday, August 18, 1-2:30pm** - Land Use Topics: Back-Cast Overview, Land Use aggregation, CAST Land Uses - Recording, Notes
- **Monday, September 15, 1-2:30pm** - Wastewater Topics: Exfiltration method, Septic/Sewer Model, SSO Loads, Boat Pump-Outs - Recording, Notes

Project Resources
- Phase 7 Decision Planner 09 18 25 [PDF, 62.8 KB]
- Phase 7 Decisions Descriptions 07.28.25
- Phase 7 Timeline Extension_Presentation to PSC Aug 2025
- Proposed Phase 7 Timeline_Presentation to Modeling Workgroup July 2025
- Chesapeake Bay Watershed Historical Land Use (1985-2013) Workplan [PDF, 1.6 MB]

Contributing Workgroups & Action Teams

Water Quality Goal Implementation Team (GIT 3)

Agriculture Workgroup

Forestry Workgroup

Land Use Workgroup

Phase 7 Inputs Decision Planner

Chesapeake Assessment Scenario Tool

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Model Documentation

Suggested Citation

Chesapeake Bay Program, 2024. Chesapeake Assessment and Scenario Tool (CAST) Version 2023, Phase 6-[7.XX.X See bottom of any page for specific version number]. Chesapeake Bay Program Office, Last accessed [Month, Year].

Preview of Phase 7

The land data team developed a methodology for the land use for years prior to 2013. In 2013, 2017, and 2021, there are land cover/use data that is at the 1-meter scale. Prior to those years, the data available are much less detailed. This document describes the methodology for developing the back-cast land use for 1985 through 2012.

Land Use Back Cast Methodology

Phase 6 and Phase 7 Land Use Crosswalk

The Water Quality Goal Implementation Team (WQGIT) organized optional sessions to facilitate comprehension of Phase 7 topics and updates. Recognizing an interest to better understand these evolving methods, these "office hours" are provided as informal briefings and discussions for the WQGIT or other interested parties. Session recordings are listed below.

BMP Excess, Land Use Loading Rate Ratios

Land Use Topics: Back-Cast Overview, Land Use aggregation, CAST Land Uses

Sanitary Sewer Exfiltration Method, Septic/Sewer Model, CSO Loads, SSO Loads, and Boat Pump-Outs

CAST Model Documentation Page

Dolly Sods Wilderness | Photo by Will Parson/Chesapeake Bay Program

Thank you!

Any questions?
You can contact me at baldwin.petra@epa.gov