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CWGT

Scenario Base Year Overview

Auston Smith
Chesapeake Bay Program Office; EPA

3/23/26

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E3 and No-Action: Controllable Loads

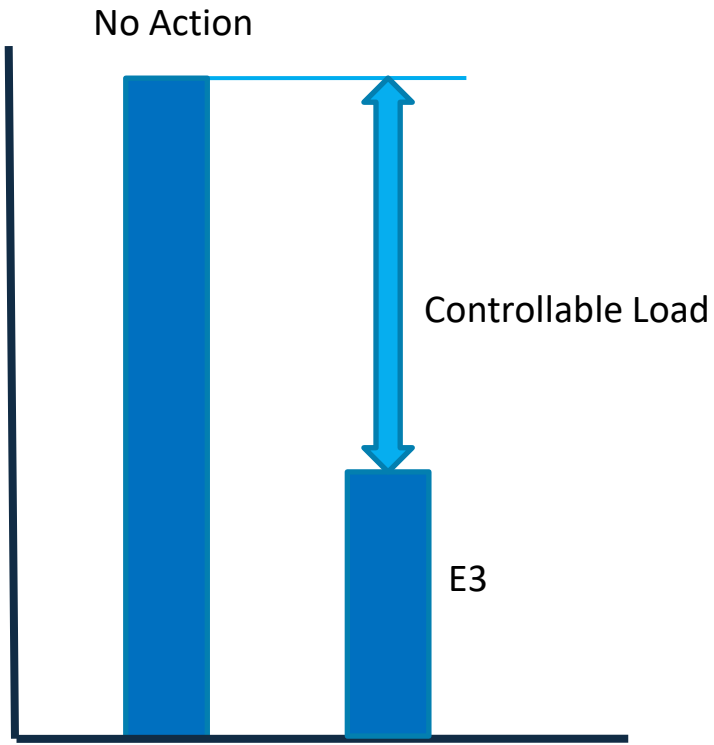
[Chesapeake Bay TMDL Section 6: Establishing the Allocations For The Basin-Jurisdictions]

Section 6.3.2: Determining Controllable Loads

Two theoretical scenarios are created to determine the appropriate context for controllable loads (the difference between these two scenarios' loads).

1. **The No-Action scenario** is indicative of a theoretical worst case loading situation in which no controls exist to mitigate nitrogen, phosphorus, and sediment loads from any sources.

2. **The E3 scenario** represents everything by everyone everywhere—represents a theoretical best-case possible situation, where a certain set of possible BMPs and available control technologies are applied to land, given the human and animal populations, and wastewater treatment facilities are represented at highest technologically achievable levels of treatment regardless of costs.



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WQGIT and Sector Workgroup Decisions:

- Scenario (E3) Inputs- where can practices go, at what % of that land use, and how does that conflict (if at all) with other proposed inputs?

- Scenario Base Year –what base year should be utilized for the scenarios. 2010 was used in the past in both 2010 and 2017.

- Phase III WIP – review these planning efforts and does anything else need to be done to achieve WQS?

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Scenario Base Year Overview

What is a Scenario Base Year?

- The year that trend analyses are based on for use to produce base conditions for other years.
- When data is not available, program must backcast and forecast by use of trend analysis to apportion where things are on the landscape in other years.
- Forecast is automatically through 2075 – for changing environmental conditions work, but when should that begin?

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Some Scenario Base Year Options

2022

- Crop Acres, Yields, and Animal Populations (Ag Census)
- Current land use
- Septic Systems
- Organic and Inorganic Nutrients (Fertilizer, Biosolids, and Manure)
- Population

2010

- Land use and septic systems here are confirmed in backcast. Everything else leans upon the past data submissions that were received during that year.
- For example, the 2022 land use would be referenced to produce a more accurate picture of what the land use was in 2010, using the past categories (2007).

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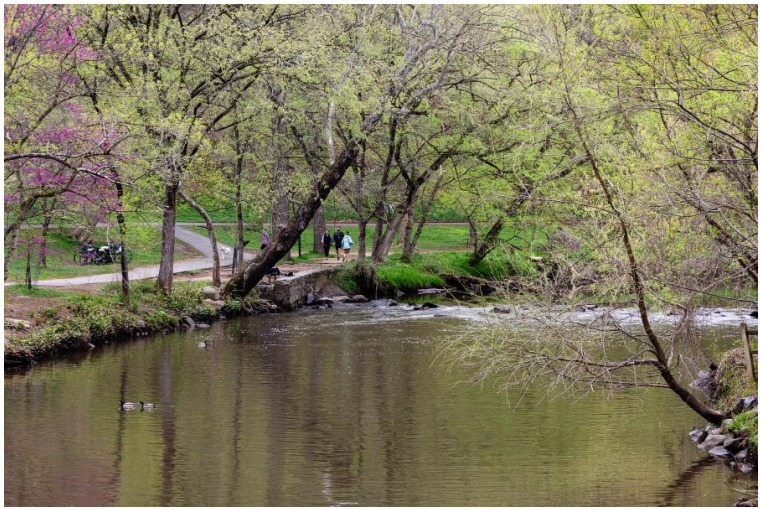
Scenario Base Year Considerations

- If 2010 is still used as the Scenario Base Year, the base conditions will still be updated to be the 2010 version of the updated parameters. So using 2010 does not necessarily mean we are using the same past product.

- 2022 is the most updated base year that should be utilized because this will reflect the current land use most accurately.

- Soil Phosphorus, Animal Manure, and Nutrient Concentrations are items the AMT is discussing so I will not linger there but just wanted to flag that those will be model processes that would also lean upon this decision.



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No-Action and E3 Discussions Timeline for Review and Completion

Input Overview and Discussions:

- **Initial source sector workgroup discussions concluded;**
- **Outreach between these workgroups on thoughts on past and future E3 assumptions is underway**

Timeline:

- 4-6 month review window remaining to complete scenario inputs before Year of Review in 2027.
- Office Hours on any of these topics? Please reach out with suggestions!

Thank you!

Questions?

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