

Scenario Base Year

What does the scenario base year refer to and why does it matter?

The scenario base year is the basis for trend analyses used to produce base conditions for other years. The scenario base year defines which point in time will be used to set the key scenarios for water quality planning targets. These scenarios are:

- **No Action** - is indicative of a theoretical worst case loading situation in which no controls exist to mitigate nitrogen, phosphorus, and sediment loads from any sources.
- **E3 (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.

The difference between E3 and No Action determines the controllable load for each jurisdiction, which is used to represent the level of effort that a given scenario presents for each state-basin.

Key considerations for selecting the scenario base year for new planning targets:

- Level of confidence in data
- Consistency with previous phases of planning targets
- Responsibility for growth

Potential options for the scenario base year:

2010

- Land use and septic systems here are confirmed in backcast using updated data sources.
- Other data categories lean upon the past data submissions that were received during that year.
- Used in Phase 5.3.2 and Phase 6 as scenario base year
- Growth since 2010 is the responsibility of the jurisdiction where it took place

2022

- Updated data for crop acres, yields, and animal Populations (Ag Census), organic and inorganic nutrients (fertilizer, biosolids, and manure), land use, population/septic systems
- Departure from what was used in Phase 5.3.2 and Phase 6 as the scenario base year
- Growth from 2010-2022 spread out across all jurisdictions

Can we predict how a change in the scenario base year will affect the level of effort for a given jurisdiction?

No. It is **not possible** to predict how a change in scenario base year will affect loads and planning targets due to the many changes taking place in Phase 7 (e.g., different methods, inputs, scale). Any additional changes to the critical period, hydrologic averaging period, or planning targets method would also have an influence (to some degree) on the level of effort which cannot be predicted either.