

2015 – 2025 Milestone Evaluations: Use of Updated Information

Background of Issue

- Beginning with the development of 2014-2015 milestones, the Chesapeake Bay Program partnership decided to develop future milestone commitments using the land use of that future year so that conditions underlying commitments would be close to conditions underlying progress for that year (e.g., 2015 milestone commitments were set on a 2015 land use).
- However, the WQGIT has been agreeing to incorporate data and informational updates into the tools as soon as possible. So, for example, the 2015 land use that was used to develop the 2014/2015 milestone commitments is different than the land use that will be used for the 2015 progress run. New land use and other data became available for most sectors since development of the milestone scenarios.
- This yearly introduction of data and/or methods changes has created considerable confusion when trying to communicate why loads changed from previous years. Was it more from, for example 1) implementation of BMPs, 2) new data like land uses that are lower loaders than originally predicted, 3) a revised BMP efficiency from a BMP expert panel – or a bit of all of these to various degrees?

Proposed Approach

- ❖ **Incorporate new information to the modeling tools every two years (at the beginning of a new two-year milestone period) and re-run past progress every two years if there's new information.**
 - This approach addresses jurisdictional partners' requests for factoring in new information AND helps to explain the changes to their policy makers and the public.
 - This approach addresses the concern that the change in modeled loads from year to year can be caused more by the introduction of new data and methods than the effects of reported management actions.
- CBPO would continue to do progress runs each year and release annual measures like the Reducing Pollution Indicators as well as other numeric reporting on progress required by, for example, OMB.
- EPA would not do a formal evaluation of the numeric data at the mid-point of the milestone period, reducing the focus on the numbers. However, EPA would still evaluate the jurisdictions' programmatic progress in the interim period.

Alternative Approaches

- 1) Status quo = Introduce new data and methods each year and do not revise reported historic loads. EPA conducts numeric evaluations each year.
- 2) Introduce new data and methods each year and revise reported historic loads each year. EPA conducts numeric evaluations each year – or not.
- 3) Other approaches.

Line by line steps for moving forward if proposed approach is adopted by CBP partnership (using the 2-year period 2017 Progress – 2019 Milestones as the example):

- Jurisdictions will finalize 2017 Progress
 - The same data and methods used for developing the 2017 Milestones will be used in this version of the 2017 Progress run.
- Jurisdictions will develop 2019 Milestones using the best data and methods at the time – including projections to 2019 conditions in the watershed.
- This same data and methods will also be used to update historic Progress runs beginning with 2009 Progress and ending with 2017 Progress

- All that's quantified by these model runs reflects the effects of management actions and changing conditions in the watershed, not swings in loads from introducing new information.
- 2018 Progress will be at the mid-point of the 2019 Milestone period.
 - There will be a mid-term EPA evaluation of progress toward programmatic goals.
 - There will NOT be an EPA evaluation of the status of meeting numeric targets, but 2018 Progress results will be used for reporting on other annual measures.
 - 2018 Progress will NOT include new data and methods that have been obtained/finalized since the 2019 Milestones were developed.
- 2019 Progress will be used for both numeric and programmatic EPA evaluations.
 - It will NOT include new data and methods that have been obtained/finalized since the 2019 Milestones were developed.
 - However, any new data and methods (e.g., land use, new BMP efficiencies, animal and human populations) will be included in the projections made for 2021 for development of the jurisdictions' 2021 Milestones.

What to do for 2015 Evaluations

- Following the current agreed-to method, new data and methods would be introduced for 2015 Progress.
 - The items that would cause the greatest shift in loads from last year's progress assessment are, most likely, the Nutrient Application Management Tiers – reported acres and efficiency changes and any adjustments for compliance accounting.
 - The shift in loads in many cases will not reflect changes in management action since last year, but the change in data and methods.
 - The swings in loads due to the introduction of the 2012 Agricultural Census and data that informs the urban land projections – has already been introduced with 2014 Progress.
- EPA's numeric load evaluations will primarily compare 2015 Progress with the 60% trajectory.
- Following the current agree-to method, this trajectory would not change from the original because the 2009 Progress scenario (one of the endpoints) is not revised with all the new data and methods since 2009 was completed.
- When 2017 Milestone are developed, the proposed approach would be:
 - 1) Introduce the new information for the 2017 Milestones, and
 - 2) Revise the historic scenarios back to 2009 with the new information up to that point – including a 2nd version of 2015 Progress
 - 3) Do not introduce more new information until 2019 Milestone development, i.e., nothing new for 2016 Progress and the first version of 2017 Progress used for EPA's numeric evaluations.