Considerations from the Milestone Workgroup for
Updating Background Conditions and BMP Efficiencies

Considerations from the Milestone Workgroup (MSWG) to the Water Quality Goal Implementation Team (WQGIT)

- EPA will evaluate annual progress and milestones with one progress run using the current Chesapeake Bay Program (CBP) partnership approved background conditions (land use, animal numbers, septic etc.) and Best Management Practice (BMP) efficiencies at the time of evaluation.
- When evaluating 2014-2015 milestone progress, EPA will assess whether statewide and sector load reductions are on track to have practices in place by 2017 that will achieve 60% of necessary reductions compared to 2009.
- To date, the default process for updates to background conditions (land use, animal numbers, septic etc.) or BMP efficiencies has been to incorporate that information into the CBP partnership's modeling tools as soon as they are approved by the partnership and able to be incorporated into the tools. Overall, the general sense from the jurisdictions on the MSWG and WQGIT is that this process should continue.
- There is full consensus of the MSWG and it was presented to the WQGIT in 2013, that milestones be developed and evaluated on the same background conditions. Incorporating updates as soon as available conflicts this preference.
- Options on timing to incorporate science and data updates into the CBP partnership tools are:
  - 1) As soon as approved and able to be incorporated into the tools, (Current default) (This means milestone progress will be evaluated by EPA to determine if they are on track for 2017 based on the most current partnership approved conditions and does not allow for milestones to be compared back to the exact conditions on which they were developed.
  - 2) At the beginning of the subsequent milestone period, (This means that milestone progress will be evaluated by EPA to determine if they are on track for 2017 based on the same partnership approved conditions as when the milestones are developed. Any science and data updates will not be available until the development of the next set of milestones.) or
  - 3) Hold updates until Phase 6. (This means that milestone progress will be evaluated by EPA to determine if they are on track for 2017 based on the same partnership approved conditions as when the milestones are developed. Any science and data updates will not be available until the development of Phase 6 of the partnership modeling tools.)
- EPA is supportive of either incorporating data as soon as available or holding updates for use in the development of the next set of milestones.
- Jurisdictions should consider the impacts of approving updates to background conditions and/or BMP efficiencies used in the partnership modeling tools on the annual progress results. Is using the most current science/data the highest priority or is maintaining data conditions throughout the course of the milestone period the highest priority?

- As updates to background conditions or BMP efficiencies are incorporated into the partnership tools, the partnership should be mindful that some jurisdictions may benefit and some may not in annual progress run simulations due to the changed background conditions or BMP efficiencies. EPA will apply the WQGIT-approved changes uniformly to all jurisdictions in a single model run. It is not possible for some states to have progress evaluated with the updates and others without.

- Milestones are evaluated by EPA based on numeric progress as well as programmatic progress toward WIP commitments and TMDL targets. Although this document focuses on numeric progress, it should not be taken to diminish the importance of programmatic commitments.

Pros/Cons to consider when recommending to approve and incorporate updates

- The following pro/con list is based on impacts to milestone development and progress reporting. Additional pro/cons may apply for other workgroups.

1. Incorporating updates as soon as they are approved by the partnership and able to be incorporated into the tools
   a. PROS
      i. Incorporates the latest science and data as soon as it is available.
      ii. Enables potential gaps in meeting targets to be identified and responded to with adaptive management as quickly as possible.
   b. CONS
      i. Milestone progress would not be simulated on the same conditions and efficiencies as when they were developed. There was consensus from the MSWG jurisdictions that milestones progress be evaluated on the same conditions as they were developed.
      ii. Could result in a jurisdiction meeting/not meeting its milestone based on data changes. If updates occurs late in the milestone period there may be little or no time for adaptive management.

2. Incorporating updates at the beginning of the subsequent Milestone Period (use existing data to simulate progress on current milestones and updated data used for development of new milestones)
   a. PROS
      i. Maintains stability in data for comparing progress to the original milestones.
      ii. Milestones would meet/not meet targets based solely on the implementation completed, as opposed to data changes
      iii. Updates would occur at planned intervals. No surprises in terms of meeting/not meeting milestones.
   b. CONS
      i. A jurisdiction may appear to have met/not met a milestone based on older data.

ii. Jurisdictions may have less time to adaptively manage and develop stronger numeric and programmatic milestones if the data changes indicate less progress than initially expected.

3. Hold updates until Phase 6 of the Watershed Model is developed. (Updates would be made in Phase 6 of the model but would not be used to develop milestones until the first full milestone period after Phase 6 comes on line.)
   a. PROS
      i. Maintains stability in data for comparing progress to the original milestone.
      ii. Milestones would meet/not meet targets based solely on the implementation completed as opposed to data changes.
      iii. Updates would occur at a specific time.

   b. CONS
      i. Many jurisdictions have concerns with not using the latest data available. This does not include those updates which would violate the current 5.3.2 calibration and need to be held until Phase 6.
      ii. Jurisdictions may have less time to adaptively manage and develop stronger numeric and programmatic milestones to meet 2025 TMDL targets, if the data changes indicate less progress than initially expected.
      iii. May be more difficult to plan programmatic needs in milestones and the Phase 3 WIPs in advance if jurisdictions unaware of impacts from a data updates in Phase 6.