

Briefing Document: Proposed Changes to Septic System Data in the Phase 6 Modeling Tools
For Discussion at June 5 WWTWG Conference Call

Septic data was sought as part of the ongoing efforts to improve the quantification and expected growth of septic systems in the Phase 6 suite of modeling tools to support development of Phase III WIPs.

States provided detailed septic data via the LUWG:

- MD provided residential septic system data
- VA provided data that included residential and apparently commercial septic system data too
- WV provided data on annual septic development 2013-2016 (couldn't be used in same way as MD and VA data)
- DC has indicated a lack of septic. Therefore we are not simulating any in our forecasts but previous calibration data (with 195 septic) was locked down in August and has not been corrected post-calibration.

CBP staff developed and utilized a method to predict how much septic growth would be anticipated in 2025 for all Bay states, using state-provided data to confirm/assess the predictions. However, anomalies for VA and DC data did not become apparent until recently when CBP staff attempted to integrate the projection methodology values with state data for inclusion/use in CAST. The late identification of these anomalies is due to the timing of when data was submitted, when it was incorporated into the Watershed Model, and when it was used to populate CAST in support of various scenarios.

Recent analysis (see summary spreadsheet) indicates that:

- VA's data appears to be too high (seems it includes more than just residential systems – but that needs to be verified)
- District of Columbia data shows septic systems when they don't have any (i.e., counts are an artifact of the Bay-wide methodology)
- Other minor changes appear in the septic data summary spreadsheet

None of these data issues affect the Phase 6 calibration results; but will affect the 2014 – 2025 septic forecasts in CAST if additional changes or corrections are made.

Resolution of this matter needs to occur by NLT June 5th at the WWTWG's call – because failure to reach a consensus could delay WQGIT action/lock-down of the Phase 6 WSM/CAST inputs – and further delay the Phase III WIP process/timeline

As a result of the original analysis and planned work effort, the summary data indicates current data in CAST and the proposed change. If the WWTWG recommends against making the proposed change, VA's commercial septic systems will remain in the septic counts for VA as an anomaly.

Non-residential septic systems would be a new source of pollution that was not explicitly called out in the calibration, and the Partnership will need to consider whether inclusion in Phase 6 is

appropriate or whether non-residential septic systems should be placed in the “parking lot” for Phase 7.

The WQGIT has charged the WWTWG to consider and make recommendations on the following at the June 5 WWTWG conference call:

1. Recommendation on whether the ‘correction’ of DC septic data to reflect ‘zero’ septic is appropriate/supportable
2. Recommendation to ignore the VA Department of Health data until the Wastewater Workgroup develops a methodology for estimating non-residential septic systems – and will do so as part of the next WSM update process (The CBLCM has already been reviewed and approved for use in Phase 6).
3. Commitment from the WWTWG to develop this methodology to estimate non-residential septic systems for inclusion in a future Watershed Model update, potentially as early as October 2019.