

Emma,

We are developing the target land use export rates for the calibration of the Phase 6 Watershed Model. These export rates serve to maintain the relative loads among land uses. We are using the data from the literature review conducted by Tetra Tech to inform these loading rates. There is also a literature review being undertaken by CBW-ROC of unpublished, non-peer reviewed results to ensure that we do not bias the targets by using only the data that were considered publishable by peer-reviewed journals. This second literature review will be brought in as soon as it is complete. For now, we have sought responses from the Agricultural Modeling Subcommittee on the development of targets for Phase 6 land uses using the data in hand, and are carrying the input forward to the Agricultural Workgroup. The literature review to date supports aggregate land uses. While all nutrient applications will continue to be performed at the crop level in Phase 6, the export rate is calculated on these aggregate land uses. Using the literature review data in hand, is there agreement on land uses?

The literature review includes studies from all over the world. The average export rate is weighted by location (e.g.: within the Chesapeake Bay, similar climatic zones and physiographic regions, and soil moisture regimes). Using the literature review data in hand, is there agreement on the weighting of literature export rates based on location?

There is a significant difference in TN and TP export rates when comparing pre-1995 to post-1995, according to the Tetra Tech literature review report. In some cases, the post-1995 rates are as much as four times higher for TP. The Phase 6 Watershed Model calibration period has been extended and now is 1985 to 2013. Using the more recent literature is proposed since the model calibration period is dominated by the post-1995 time period. Expert input on the possible reasons for this phenomenon is requested.

I am looking forward to responses from the Agricultural Workgroup on these three questions. Thanks for helping to facilitate the meeting.

Olivia