

Attachment A: Chesapeake Bay Program Partnership’s Phase 6 BMP Expert Panel Scheduling and Modeling Considerations

The Chesapeake Bay Program (CBP) Partnership currently has 17 BMP expert panels underway to inform the calibration of the Phase 6 suite of modeling and decision support tools. Each of these Expert Panels was identified by the Water Quality Goal Implementation Team’s (WQGIT) Source Sector Workgroups as priority Expert Panels for inclusion in the Phase 6 suite of modeling tools. However, some of the Expert Panels are experiencing delays in either producing a draft report for Partnership review or delays are incurred during the Partnership review and approval process. Therefore, it is necessary to understand which of these Phase 6 Expert Panels need to be completed by September 30, 2016 in order to meet the final Phase 6 calibration deadline, or those Panels that can be deferred until after the Phase 6 modeling tools are complete.

BMP Panel Name	Priority Level	Workgroup/WTWG Approval Date	WQGIT Approval Date
Animal Waste Storage Systems (Agriculture Workgroup)	Tier 1 - This is the most important BMP panel report to approve. It has a very large impact on the amount of manure available to crops. The Phase 6 Model cannot be effectively calibrated without updated values.	AgWG approved the Preliminary Panel Report on September 22 nd . Preliminary report includes preliminary panel recommendations for recoverability factors, by animal type.	Full panel report has yet to be released. Date of final approval by the WQGIT is TBD.
Phase 6 Nutrient Management (Agriculture Workgroup)	Tier 1 - This is the second most important BMP report to finalize. It is the largest BMP in the watershed and has a substantial impact on the calibration.	Revised Panel Report was distributed to the Partnership for review on September 21 st . AGWG/WTWG approval of the report will be sought during the October 20 th meeting.	October 25, 2016
Advanced Onsite Systems (Attenuation), Part 2	Tier 2 - The recommendations from this report are different from standard BMPs because	Report was approved by the WWTWG on September 13 th .	Final approval by Modeling Workgroup anticipated on September 22, 2016

(Wastewater Treatment Workgroup)	they affect delivery factors. This report can't be incorporated into the model if it is not incorporated prior to the final Phase 6 calibration. Draft analysis has confirmed the current bay-wide average attenuation value. Recommendations will provide fine-tuning at more localized scales.		
Phase 6 Conservation Tillage (Agriculture Workgroup)	Tier 2- This practice is extensive in the calibration history, and thus would have a relatively substantial impact on the Phase 6 calibration. States are tracking this practice already according to the draft panel recommendations. Final efficiency values are still needed.	Panel report is targeted for release in October. AGWG/WTWG approval will be sought in November.	Targeted for November 2016
Wetlands (Wetlands Workgroup)	Tier 2- These recommendations would have a relatively minor impact on the calibration. The larger impact is on the amount of credit that can be claimed for each wetland BMP currently being reported in Phase 5.3.2. Draft recommendations may be available by September.	Wetlands WG approved Preliminary Panel Report recommendations on September 23 rd . The release of the full panel report is TBD.	Full Panel report approval is TBD
Cropland Irrigation Management (Agriculture Workgroup)	Tier 3- States have never been asked to track this BMP, but current data sources suggest that it is extensive throughout the calibration history.	Report is expected to be released in November. AGWG approval will be sought on December 15 th . WTWG approval will be sought in January 2017.	Targeted for January 2017

<p style="text-align: center;">Manure Injection/Manure Incorporation</p> <p>(Agriculture Workgroup)</p>	<p>Tier 3- Difficult to judge impact of this practice on the calibration. States have never been asked to track this BMP before, and the scale of implementation is not currently known</p>	<p>AGWG approved preliminary panel recommendations for use in Beta 4 on September 22nd. Full report is targeted for release in October 2016. AGWG/WTWG approval will be sought in November.</p>	<p>Targeted for November 2016</p>
<p style="text-align: center;">Urban Tree Canopy</p> <p>(Forestry Workgroup)</p>	<p>Tier 3- Draft recommendations are already programmed into the Beta 3 version of the Model. There is a relatively small number of acres of this BMP.</p>	<p>Approved</p>	<p>Approved on September 12, 2016</p>
<p style="text-align: center;">Phase 6 Cover Crops</p> <p>(Agriculture Workgroup)</p>	<p>Tier 4- No changes to tracking and reporting are anticipated based on this report. Efficiency changes are expected to be minimal.</p>	<p>Report is targeted for release in October 2016. AGWG/WTWG approval will be sought in November.</p>	<p>Targeted for November 2016</p>
<p style="text-align: center;">Manure Treatment Technologies</p> <p>(Agriculture Workgroup)</p>	<p>Tier 5- Can be incorporated after the final Phase 6 calibration in 2017</p>	<p>Approved</p>	<p>Approved by the WQGIT on September 12th. Incorporation into the Phase 6 Model is contingent upon pending Modeling WG and Management Board decisions.</p>
<p style="text-align: center;">Oyster Restoration/Aquaculture</p> <p>(Water Quality GIT)</p>	<p>Tier 5- Can be incorporated after the final phase 6 calibration in 2017.</p>	<p>N/A</p>	<p>November 2016</p>

Floating Wetlands (Urban Stormwater Workgroup)	Tier 5 - Can be incorporated after the final Phase 6 calibration in 2017	Approved	Approved by the WQGIT on September 12, 2016
Impervious Disconnection (Urban Stormwater Workgroup)	Tier 5 - Can be incorporated after the final Phase 6 calibration in 2017	Approved by the USWG on September 20, 2016	Targeted for October 2016
Boat Pump-Out (Wastewater Treatment Workgroup)	Tier 5 - Can be incorporated after the final Phase 6 calibration in 2017.	TBD	TBD
Advanced Onsite Systems (drip dispersal and peat treatment w/ dispersal to pad), Part III (Wastewater Treatment Workgroup)	Tier 5 - Can be incorporated after the final Phase 6 calibration in 2017	TBD	TBD
Agricultural Ditch (NRCS BMPs) (Agriculture Workgroup)	Tier 5 - Can be incorporated after the final Phase 6 calibration in 2017	Panel report is targeted for late October release. AGWG approval will be sought on November 20, 2016. WTWG approval will be sought on December 3, 2016.	Targeted for January 2017.
Ag Stormwater Structures (Agriculture Workgroup)	Tier 5 - Can be incorporated after the final Phase 6 calibration in 2017	Panel report is targeted for release in 2017.	Targeted for 2017.

Tier Definitions:

Tier 1: Highest Priority Panels. Must be approved prior to September 30, 2016 due to their very large impact on the calibration.

Tier 2: High Priority Panels. Should be approved prior to September 30, 2016 due to large impact on the calibration.

Tier 3: Moderate Priority Panels. Should be approved prior to September 30, 2016, but the impact on the calibration is either unknown, or preliminary recommendations have already been approved and incorporated as a placeholder.

Tier 4: Lower Priority Panels. Should be approved prior to September 30, 2016, but the impact on the calibration is either small, or preliminary panel recommendations indicate that there will be minimal changes to tracking and reporting procedures that would impact how the BMP is programmed into the Phase 6 Model.

Tier 5: Lowest Priority Panels. Do not need to be approved prior to September 30, 2016 and do not impact the calibration.