

Topic	Description
Version: July 28, 2025	<i>Descriptions below are provided to aid discussion and Mentimeter responses at our July 28 WQGIT call. These descriptions are based on recent or available agendas and may be subject to change or clarification by content leads.</i>
Agroforestry EPEG Recommendations	The Agroforestry EPEG was formed and evaluated NRCS CPS Alleycropping 311 and Silvopasture 381 for CBP BMP status. The final EPEG report says that " The Agroforestry EPEG reviewed the available research and determined that there was sufficient evidence to merit crediting these practices for their water quality benefits if appropriately managed and key qualifying criteria are met. The EPEG is recommending the Chesapeake Bay Program (CBP) credit these practices as efficiency BMPs based on the credit that would be received from converting 25% of the agricultural lands where the practice is applied into forest." The FWG, AgWG, WQGIT will each be asked to review the recommendations (and Technical Appendix for the WTWG).
Animal Population Data	At the August AMT, the group will see animal population trends from the new census, including populations from broiler and layer data collection efforts. Ultimately, the AMT will decide whether or not to incorporate new animal population data for broilers and layers (including Hillandale farms layers)
BMP Excess	A request came to the AMT to review the current process in the model versus actual BMP reporting for several instances where BMPs are submitted to CAST, but CAST doesn't credit all of them. The difference of non-credited BMPs is called "excess". Three main cases of excess were based on animals (animal waste management systems, animal mortality disposal, and riparian fencing). The AMT will work to find and decide on a fix for Phase 7. Note: unit conversions, default values, and process based items will be decided on at the AMT. Items related to the BMP functioning will be recommended and sent to the WTWG.
Boat Pump Outs	This would have been a new BMP for boat pump out loads, but the workgroup decided to not pursue it given concerns with prior load estimate methodology from the expert panel report and a lack of interest and capacity to revise it from Phase 7. Documentation was created to capture this rationale.
Broiler Nutrient Updates	The AMT will need to decide whether or not to incorporate new broiler data. Included in this is the collection and incorporation of broiler populations, litter tonnage, and litter nutrient concentrations.
Construction Acres	<p>The WTWG will be voting on the following at the August meeting:</p> <p>Mapping construction with high-resolution LULC data: All patches of barren land uses (except "bare shore") that became at least 10% developed within 3-5 years represent "Regulated Construction".</p> <p>Reconciling mapped and reported construction: Construction acres reported at the county scale will be allocated to LRSEGs by the relative amount of a county's mapped construction within each LRSEG.</p> <p>i. If reported construction exceeds mapped construction in an LRSEG, remaining reported construction acres will be subtracted from the developed sector (proportionally by developed class).</p> <p>ii. If reported construction is less than mapped construction, remaining mapped construction will be reclassified as Compacted Pervious (loading like Mixed Open in Phase 6).</p> <p>A follow-up discussion is required at the FWG August 6th meeting to discuss how previous decisions around forest harvests affect construction.</p>
Cover Crop Excess Model Process Update	Traditional and traditional with fall nutrient cover crops are available on all cropland, and commodity cover crops are only eligible on small grains and grains (sgg) and double cropped land (dbl). Since these BMPs are processed together, it leads to excess (cutoff) on small grains and grains and double cropped land. The WTWG will vote on the proposed method to solve excess at the August meeting. The proposed method is to 1. Credit commodity cover crops first, since it is a limited area and 2. Credit traditional cover crops and traditional with fall nutrients cover crops second (taking the acres already occupied by commodity cover crops into account).
CSO Loads	This is an update to the data on combined sewer overflows from jurisdictions utilized for Phase 7. There is not a proposed major change to the method.
Exfiltration Estimation Method	This is new to be considered in Phase 7 to better appropriate where these loads are coming from as they are currently misappropriated mostly to stormwater and lawn fertilizers. WWTWG approved the method for estimating the baseline exfiltration and edge of stream delivery of nitrogen and phosphorus from sanitary sewers in the Phase 7 model.
Inorganic Fertilizer	Prior to September, the AMT will decide on the scale and use of a new fertilizer data set. The original plan was to be done by September. This is one of the items that is extended. Post September, the AMT will continue to explore sources, processing, and replacement of inorganic fertilizer data.
Land Use Aggregation to Phase 7 Land Use	The 2021/22 high resolution LULC data will be aggregated, or rolled-up, from its native 56 classes to ~16 classes as input to CAST. These 16 classes are an intermediate land use product between the LULC and CAST land use, referred to as the Phase 7 aggregation. The aggregated LULC schema is summarized as acres by LRSEG and delivered to CAST to assess water quality. The vote on the final aggregation will take place at the September LUWG meeting.

Land Use Back-Cast Methods	A decision is needed on the approval of the back-cast methods described in the workplan for representing historical land use conditions from 1985-2012 in the Phase 7 suite of models. The LUWG was asked to vote on these methods via email in July. The full list of back-cast methods are listed in the back-cast workplan (https://www.chesapeakebay.net/files/documents/LandUseBackCast_Workplan_2025June.pdf) as well as a recent LUWG Presentation (https://www.chesapeakebay.net/files/documents/LUWG_backcast_update_20250618.pdf) The goal of the Phase 7 Back-Cast is to utilize the spatial and categorical accuracy of 1-meter resolution Land Use/Land Cover (LULC) to represent the present and the temporal accuracy of Landsat derived products to deconstruct the landscape back through time. The Back-cast is used to set appropriate planning targets and Total Maximum Daily Load (TMDL) allocations, estimate spatially explicit loading rates from monitored loads, and as inputs to scenarios run in CAST and the Dynamic Watershed Model representing those land use years.
Land Use Loading Rate Ratios for Managed Hay and Managed Pasture	In February 2025, the AMT agreed to make two new land uses: Managed Pasture and Managed Hay, designed to represent high application land uses. As new land uses, loading rate ratios are needed to determine how N loads off the land for these land uses. The loading rate ratios are relative loading behavior of Land Uses compared to the reference land use, in this case pasture. The AMT will need to vote on these new loading rate ratios of managed hay and managed pasture.
Map of Sewer Service Areas	This is an updated map of the sanitary sewer service area which will be used in Phase 7 CAST for estimating septic system pollutant loads and for forecasting future land use scenarios for CAST and other CBP applications.
Methods to Estimate Septic Counts/Population on Septic and Methods to Estimate Population On Sewer	This is an update to the methods for the sewer/septic model, which estimates the number of septic systems, population on sewer, and population on septic within the watershed. The Phase 7 method incorporates updated local data, captures areas where multiple families are living in single housing units, and improves accuracy by using parcels instead of census blocks.
Review of MS4 Areas	This is an updated map of the municipal separate storm sewer system (MS4) which will be used in Phase 7 CAST for estimating urban stormwater area and loads.
Phase 7 CAST Load Sources	The CAST land use is a combination of the intermediate Phase 7 aggregation with the Census of Agriculture, annually reported forest harvest and construction acres from the states, and Combined Sewer Overflows (CSOs). This produces a table of acres per load source (or land use) by land-river segment (counties x watersheds x orographic regions) in which BMPs are applied and loads are calculated.
Land-River Segmentation	This is an update of the land-river segments used in Phase 7 CAST, which includes a shift to using HUC-12 watersheds for river segments and new shoreline data. The WQGIT reached consensus on this in June meeting, but registered disagreement on minimum size thresholds and a desire to continue discussing how to treat BMPs in small segments.
SSO Loads	WWTWG voted in their July 24th meeting to not pursue SSO loads, which would have been a new load in Phase 7, given the limited data available from jurisdictions and the small percentage of urban load from the data received so far. Specific data from Md, e.g., may be included in Multiple Tributary Models.
Upland Reductions for Non-Exclusion Buffers	VADEQ requested the Bay Program review how buffer upland benefit is calculated and suggested a proposed change to the assignment of load sources for upland benefit exclusion versus non-exclusion buffers. The proposal is to "Distribute the Upland Benefit from Non-Exclusion Buffers Proportionally to the Load Sources it is Applied – Stop Providing Upland Credit to Non-Exclusion Buffers from Pasture". This has gone to the WTWG and AgWG and will be coming back in August for final vote of approval.
Urban Nutrient Management Updates	An UNM expert panel was formed to revisit key assumptions behind the UNM BMP credit. The expert panel has completed a literature review of new data since the 2013 expert panel report, and recommendations from their report will be decided on for an update to the BMP in Phase 7.
Federal BMP Load Sources	FFWG is discussing whether to track and credit currently unassigned federal land uses/BMPs types, but options for this were determined to be onerous and challenging to implement. Given these considerations, the CAST team now recommends maintaining the status quo reporting methods.
Federal Boundary Layer	This is an update to the federal facilities data layer for Phase 7.