Agricultural Modeling Team Workplan

Document Purpose:

The Agricultural Modeling Team (AMT) is a group working to update agricultural data inputs to the Phase 7 Chesapeake Assessment Scenario Tool (CAST). This document serves as a roadmap outlining the topics which the group will cover in addition to the anticipated timeline for evaluation of these topics. It is important to note that due to the connected nature of topics examined by the AMT that this timeline is subject to change.

AMT Topics:

A list of topics with descriptions are posted on the AMT webpage. This list is also subject to change based on the priorities of the Chesapeake Bay Partnership but will remain updated and publicly available.

Workplan:

The AMT will operate consistent with the guidance found in its charge which includes a consensus based approach to decision making. For the current timeline see Table 1., listed below.

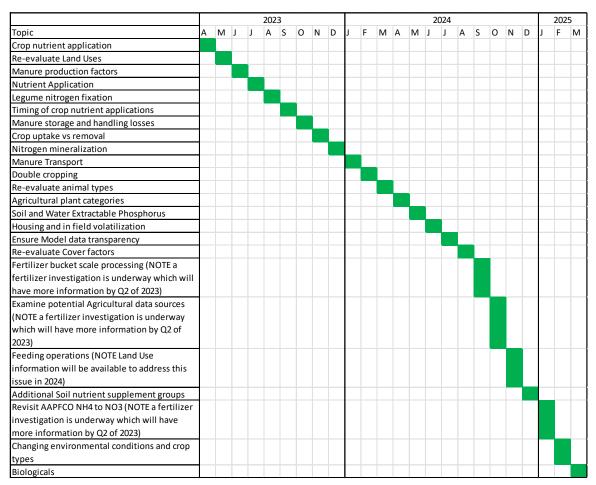| Topic	2023 A	M	J	J	A	S	O	N	D	2024 J	F	M	A	M	J	J	A	S	O	N	D	2025 J	F	M
Crop nutrient application	■																							
Re-evaluate Land Uses		■																						
Manure production factors			■																					
Nutrient Application				■																				
Legume nitrogen fixation					■																			
Timing of crop nutrient applications						■																		
Manure storage and handling losses							■																	
Crop uptake vs removal								■																
Nitrogen mineralization									■															
Manure Transport										■														
Double cropping											■													
Re-evaluate animal types												■												
Agricultural plant categories													■											
Soil and Water Extractable Phosphorus														■										
Housing and in field volatilization															■									
Ensure Model data transparency																■								
Re-evaluate Cover factors																	■							
Fertilizer bucket scale processing (NOTE a fertilizer investigation is underway which will have more information by Q2 of 2023)																		■						
Examine potential Agricultural data sources (NOTE a fertilizer investigation is underway which will have more information by Q2 of 2023)																			■					
Feeding operations (NOTE Land Use information will be available to address this issue in 2024)																				■				
Additional Soil nutrient supplement groups																					■			
Revisit AAPFCO NH4 to NO3 (NOTE a fertilizer investigation is underway which will have more information by Q2 of 2023)																						■		
Changing environmental conditions and crop types																							■	
Biologicals																								■

Table 1. AMT workplan timeline.