Status of Current and Upcoming BMP Expert Panels of the Chesapeake Bay Program Partnership

The Chesapeake Bay jurisdictions implement Best Management Practices (BMPs) to achieve the goals set forth in the 2010 Chesapeake Bay TMDL. Through the Protocol for Development, Review and Approval of Loading and Effectiveness Estimates for Nutrient and Sediment Controls, newer practices and technologies are considered and evaluated for inclusion in the Chesapeake Bay Program partnership modeling tools by expert panels. Existing practices are re-evaluated to ensure they reflect the best available scientific data and information. Below is a table identifying those BMPs that are currently undergoing the expert panel process. A list of completed expert panels can be found on Chesapeake Stat: http://stat.chesapeakebay.net/?q=node/130&quicktabs_10=3

BMP Expert Panel	Key Contact(s)	Description	Current Status	Next Steps
Current Panels				
Poultry Litter ***Start Date: 2011*** ***End Date: April 2015***	Agriculture Workgroup: John Rhoderick and Mark Dubin	The Subcommittee has collected data N and P concentrations in poultry litter, poultry litter generation quantities, and population numbers for multiple poultry species across the watershed.	Subcommittee has collected data from multiple states and drafted a report. The Subcommittee and the Agricultural Modeling Subcommittee (AMS) are jointly developing the modeling recommendations to translate poultry litter data in to the Phase 6.0 model.	The WQGIT approved the PLS Report during their April 13 meeting and is now posted on Chesapeake Stat.
Nutrient Application Management ***Start Date: 2011*** ***Anticipated End Date: May 2015***	Agriculture Workgroup: Chris Brosch and Mark Dubin	The Expert Panel was charged with defining the effectiveness of nutrient management on reducing nutrient and sediment pollution. The panel has organized the practice into three tiers, each building on the previous tier in succession.	The leadership of the AgWG, WTWG, and WQGIT decided that the current panel would focus on recommendations for Phase 5.3.2 and a new panel will be convened to develop Recommendations for Phase 6 of the Watershed Model.	The Nutrient Management Panel continues to meet regularly to refine their Phase 5.3.2 recommendations, which will be submitted to the Agriculture Workgroup in May 2015.

Manure Technologies ***Start Date: December 2014*** ***Anticipated End Date: October 2015***	Agriculture Workgroup and Virginia Tech: Jeremy Hanson	Expert Panel will determine pollution control performance measure estimates for the following six (6) prioritized manure technology BMPs: Microbial Digestion (aerobic/anaerobic); Chemical Treatments – Dry Manure; Thermal (or Thermochemical) Treatment; Solid-Liquid Separation; Composting; and Chemical Treatments – Wet Manure	The expert panel is compiling literature and other resources.	The panel will review the compiled literature and resources and begin to outline their early draft recommendations.
Urban Tree Planting/Expanded Tree Canopy ***Start Date: March 2015*** ***Anticipated End Date: January 2016***	Forestry Workgroup & Virginia Tech: Jeremy Hanson	The Panel will be charged with determining pollution control performance measure estimates for the expansion of urban tree canopy. The Expert Panel will define the conditions under which trees planted in the urban environment reduce stormwater runoff and associated nutrient and sediment loads. Such conditions may include tree placement, leaf density, soils, and other factors.	The Forestry Workgroup confirmed the final panel membership in February 2015 and the panel convened for its first call in March 2015.	The panel will host its public stakeholder session on June 3.
Urban Shoreline Erosion Control Practices ***Start Date: 2013*** ***Anticipated End Date: July 2015***	Stormwater Workgroup/WQGIT: Lucinda Power	The Expert Panel was charged with determining pollution control performance measures for Urban Shoreline Erosion Control Practices.	A revised report and technical appendix is under review by the WTWG.	Comments received on the draft panel report are currently being discussed and the WQGIT Coordinator will bring the revised report for WQGIT approval in summer 2015.
Floating Wetlands ***Start Date: Sep 2013*** ***Anticipated End Date: Summer 2015***	Stormwater Workgroup: Tom Schueler and Cecilia Lane	The Expert Panel was charged with determining pollution control performance measures for Floating Treatment Wetlands.	Panel developing recommendations.	Panel will meet in early 2015 to continue developing their report.

Street Sweeping ***Start Date: September 2013*** ***Anticipated End Date: June 2015***	Stormwater Workgroup and Virginia Tech: Tom Schueler and Jeremy Hanson	The Expert Panel was charged with determining pollution control performance measures for Street Sweeping practices.	Panel used WinSLAMM model to determine sediment loads and nutrient content of sediment. The panel is currently drafting and refining its recommendations.	Panel will strive to finalize its recommendations for release to the partnership in Spring 2015.
Algal Flow-Way Technologies ***Start Date: March 2013*** ***Anticipated End Date: September 2015***	Watershed Technical Workgroup: Sarah Lane and Matt Johnston	The panel is reviewing draft recommendations for nutrient and sediment reductions from algal flow-way technologies (AFTs). The final report will provide guidelines to facility managers and states for tracking and reporting reductions from these facilities.	Recommendations have been finalized. Panel report is undergoing final edits.	The panel report and technical appendix will be reviewed by the WTWG at an upcoming meeting.
Advanced Onsite Systems, Part 2 (broader view) ***Start Date: June 2014*** ***Anticipated End Date: October 2015***	Wastewater Treatment Workgroup: Ning Zhou, and Dave Lindbo	The Panel will determine how to factor nutrient attenuation into Chesapeake Bay TMDL onsite wastewater treatment system load estimates and BMP efficiency factors. The Panel will provide recommendations on the development of spatial variable nutrient attenuation rates based on many factors such as soil, site location, and system characteristics. They will determine whether the Bay model can be improved by using the variable attenuation rates, rather than using a constant attenuation rate.	The panel has identified key "attenuation system characteristics" that could impact nutrient attenuation rates within the Bay watershed and has developed a conceptual framework that would be used to define nutrient reduction efficiency factors based upon those key characteristics.	The panel will meet in mid-May to continue discussing their conceptual framework and to begin assigning the nutrient attenuation rates associated with each of the "attenuation system characteristics".

Wetlands Panel ***Start Date: October 2014*** ***Anticipated End Date: October 2015***	Habitat GIT and Virginia Tech: Jennifer Greiner and Jeremy Hanson	The Panel will discuss proposed methods to define and allocate loads to wetlands (looking at establishing wetlands as a land use in CBP modeling tools). Also reviewing wetland restoration, enhancement, preservation, and habitat benefits.	Current panel efforts are focused on defining wetland land use and loading rates.	The next meeting is TBD.
Oyster Restoration/Aquaculture ***Start Date: May 2015*** ***Anticipated End Date: Spring 2016***	Oyster Recovery Partnership: Ward Slacum and Julie Reichert	Four proposed objectives for the Panel include: 1. Establish a crediting framework that evaluates oyster practices and associated nutrient cycling processes on an individual basis, 2. Resolve outstanding policy questions, 3. Evaluate the suitability of modeling approaches to fill in current knowledge gaps, and 4. Evaluate existing scientific information using the established crediting framework to determine nutrient reduction effectiveness of individual oyster practices.	The WQGIT approved the formation of a BMP expert panel to evaluate the nutrient and sediment removal rates associated with oyster practices.	The Oyster Recovery Partnership will coordinate the panel, and is in the process of drafting a panel charge and a call for panel membership.
<u>Upcoming Panels</u>				
Phase 6 Nutrient Management ***Start Date: May 2015***	Agriculture Workgroup: Mark Dubin	TBD	A subgroup under the AgWG has submitted a panel charge and panel member expertise to the AgWG for approval	Based on the subgroup's recommendation, a panel is expected to be convened in May 2015.

Anticipated End Date: TBD (initial recommendations by October 2015)				
Phase 6 Cover Crops ***Start Date: May 2015*** ***Anticipated End Date: TBD (initial recommendations by October 2015)***	Agriculture Workgroup: Mark Dubin	TBD	A subgroup under the AgWG has submitted a panel charge and panel member expertise to the AgWG for approval	Based on the subgroup's recommendation, a panel is expected to be convened in May 2015.
Phase 6 Conservation Tillage ***Start Date: May 2015*** ***Anticipated End Date: TBD (initial recommendations by October 2015)***	Agriculture Workgroup: Mark Dubin	TBD	A subgroup under the AgWG has submitted a panel charge and panel member expertise to the AgWG for approval	Based on the subgroup's recommendation, a panel is expected to be convened in May 2015.
Manure Injection/Manure Incorporation ***Start Date: May 2015*** ***Anticipated End Date:***	Agriculture Workgroup: Mark Dubin	TBD	A subgroup under the AgWG has submitted a panel charge and panel member expertise to the AgWG for approval	Based on the subgroup's recommendation, a panel is expected to be convened in May 2015.
Animal Waste Storage Facilities / Poultry Heavy Use Area Concrete Pads	Agriculture Workgroup and Virginia Tech: Jeremy Hanson	The panel will evaluate the nutrient reduction potential of various manure storage and handling systems	The AgWG approved the subgroup's recommended charge and scope in March.	Approval of subgroup's recommended charge and scope by the AgWG.

Start Date: Summer 2015 ***Anticipated End Date: TBD***		implemented in the region for various livestock categories. This evaluation will include Poultry Heavy Use Area Concrete Pads. The panel will also assess existing model assumptions for storage and handling nutrient losses that affect baseline loading from animal production areas.	An RFP was released and panel proposals are due on May 22.	Proposals submitted under the RFP will be evaluated and a selected proposal will be distributed for partnership review and comment on the proposed membership.
Cropland Irrigation Management ***Start Date: May 2015*** ***Anticipated End Date: TBD***	Agriculture Workgroup: Mark Dubin	TBD	A subgroup has been formed under the AgWG to develop a specific charge, scope, and proposed membership list for the expert panel.	Based on the subgroup's recommendation, a panel is expected to be convened in May 2015.
Agricultural Stormwater Structures / Nursery and Greenhouse Runoff Capture and Reuse ***Start Date: May 2015*** ***Anticipated End Date: TBD***	Agriculture Workgroup: Mark Dubin	TBD	A subgroup has been formed under the AgWG to develop a specific charge, scope, and proposed membership list for the expert panel.	Based on the subgroup's recommendation, a panel is expected to be convened in May 2015.
Impervious Disconnection ***Start Date: Spring 2015*** ***Anticipated End Date: TBD***	Stormwater Workgroup and Virginia Tech: Jeremy Hanson	The disconnection of existing acres of impervious cover through certain engineering and/or field assessment methods that will be evaluated and defined by the expert panel.	Proposal submitted by the Center for Watershed Protection has been selected and is currently out for review and comment by the partnership.	The USWG will be asked to approve the proposed panel membership and statement of work following review and comment by the partnership. The panel will convene following USWG approval.

Outfall Stabilization ***Start Date: TBD*** ***Anticipated End Date: TBD***	Stormwater Workgroup: Tom Schueler	Outfall stabilization is defined as a practice used to prevent or minimize future erosion of sediments and associated nutrients below a storm drain outfall. The practice uses a combination of engineering and native plantings to stabilize the channel or ditch and keep stream velocities below erosive thresholds during larger storm events.	Tetra Tech is currently conducting a "threshold" literature review to determine if there is sufficient scientific data and monitoring results available for the practice to justify launching an expert panel.	Tetra Tech has produced a short technical memo that summarizes the literature, which they will present to the Urban Stormwater Workgroup in May for final decision on whether there is sufficient literature to launch an expert panel.
MS4 Minimum Management Measures ***Start Date: TBD*** ***Anticipated End Date: TBD***	Stormwater Workgroup: Tom Schueler	Under the terms of their MS4 permit, many Bay communities are required to provide stormwater education and public involvement programs to the general public for the purpose of reducing stormwater pollution. In general, these outreach programs target up to six specific residential behaviors that could prevent potential stormwater pollution (e.g., picking up dog waste, car washing, septic system cleanouts, marina pump outs, reduced fertilization).	Tetra Tech is currently conducting a "threshold" literature review to determine if there is sufficient scientific data and monitoring results available for the practice to justify launching an expert panel.	Tetra Tech has produced a short technical memo that summarizes the literature, which they will present to the Urban Stormwater Workgroup in May for final decision on whether there is sufficient literature to launch an expert panel.
New Bioretention designs with enhanced nutrient reduction features ***Start Date: Last Quarter of 2015*** ***Anticipated End Date: TBD***	Stormwater Workgroup: Tom Schueler	TBD	TBD	TBD

Peat Treatment System ***Start Date: TBD*** ***Anticipated End Date: TBD***	Wastewater Treatment Workgroup: Ning Zhou	A peat septic system functions much like a conventional Title 5 septic system with the exception that the wastewater receives treatment by being filtered through 2 to 3 feet of peat before being discharged to the soil for final disposal.	A panel will be convened to determine if a generic class can be established that would encompass a range of peat treatment system technologies.	A technical directive to task Tetra Tech to coordinate and convene this expert panel is currently under development.
Shallow Placed, Pressure Dispersal ***Start Date: TBD*** ***Anticipated End Date: TBD***	Wastewater Treatment Workgroup: Ning Zhou	Pressure-dosed dispersal is an in situ, or soil treatment, process that allows for uniform distribution of effluent across the entire dispersal field. Dosing allows for the creation of fluctuating aerobic/anoxic environments, which sets up the conditions for nitrification and denitrification to occur.	A panel will be convened to determine if a higher nitrogen reduction efficiency can be assigned to the existing Shallow Paced, Pressure Dispersal BMP.	A technical directive to task Tetra Tech to coordinate and convene this expert panel is currently under development.