

Chesapeake Bay Goal Line 2025: Opportunities for Enhancing Agricultural Conservation Conference Report

Oct 5-6, 2010

STAC

Ag Work Group

MAWP

Campbell Foundation

EDF

AFT

USDA/NRCS

Deere and Company

AgriDrain Corp

Delta Grain Bag

Turning Technologies

Main Objectives

- Identify and develop new nutrient and soil conservation tools, and enhance utilization of existing tools, for implementation of the Chesapeake Bay TMDLs and WIPs at the state and local government levels over the short term (2010-2017).
- Identify nutrient and soil conservation tools requiring further research and development for possible future implementation by the Chesapeake Bay Program partnership over the long term (2017-2025).
- Determine the opportunities and challenges regarding implementation costs, tracking and reporting needs, and verification requirements of these nutrient and soil conservation tools.

High-priority short-term management techniques identified by Conference Focus Sessions

Session Topic	High Priority Short-term Management Techniques	
	Technique/Approach	Complementary Activities
1. Nitrogen Management	Cover crops; expand use especially on sites with high residual N	N timing; apply in phase with crop demand, split applications
2. Alternative Manure Use	Improve cost-effectiveness of proven technologies not yet commercially developed	Public funding for nutrient-removal technologies and commercializing nutrient-dense by-products
3. Dairy Feed Management	Develop more incentives for reducing N and P in dairy rations; verify feeding levels, use milk urea-N and P manure testing	Emphasize production and use of homegrown feeds, reduce N and P mass imbalances
4. Phosphorus Management.	Incorporation or injection of sludge and animal manure	Eliminate the application of P during winter months, establish uniform P-management among states
5. Ammonia Emissions Management	Diet modification; reduce excess crude protein in diet	Manure application; use injection or conservation tillage to incorporate manure
6. Livestock Manure Management	State and federal CAFO standards should be consistent, more incentives for manure injection equipment	Encourage incorporation of organic P into soil, no litter on high-P soils, transport litter out of watershed

Table 2. High-priority long-term management techniques identified by Conference Focus Sessions.

Session Topic and page	High Priority Long-term Management Techniques	
	Technique/Approach	Complementary Activities
1. Nitrogen Management	Incentivize N BMPs; increase economic incentives, improve manure nitrogen use efficiency	Adaptive N management; expand use of N soil and N crop tests with feed-backs to manure & fertilizer N inputs
2. Alternative Manure Use	Aggregate farm-scale projects for regulatory/environmental marketing	Provide regulatory “safe harbor” for manure use innovators
3. Dairy Feed Management	Expand whole-farm planning to manage critical interactions e.g., integrate protein precision feeding and N manure management	Develop environmentally friendly manufactured feed products with reduced P and desirable N/amino acid characteristics
4. Phosphorus Management	Reduce soil P levels to agronomic optimum	Develop whole-farm P-management plans
5. Ammonia Management	Reduce losses from animal housing; for broilers, use non-litter flooring; for dairy, separate urine	Manure application; better injection techniques to lower greenhouse gas losses
6. Livestock Manure Management	Develop new markets for manure with state and federal support, watershed clearing-house for alternative manure technologies	Update optimum agronomic P range in state P-indices; develop minimum P performance criteria for poultry and dairy industries

Cross-Cutting Themes

- Holistic management
- Minimum conservation standards for producers managing nutrients
- Reduce nutrient import to watershed
- Prioritize resource allocations on nutrient reductions obtainable with minimum human and financial resources

Finalizing Report

- STAC has completed writing, editing and proofing the report
- AgWorkGroup and other partners will make comments by mid-Sept
- Report forwarded to CBP for response