## Agricultural Workgroup

#### Items for Consideration for 2018-2019 Work Plan

Based on Feedback from AgWG Membership

#### **Scope and Purpose**

The charge of the Agriculture Workgroup is to provide expertise and leadership on development and implementation of policies, programs, and research to reduce pollutant loads delivered from agricultural lands and animal operations to upstream waters and the Chesapeake Bay. The Workgroup reports to the Water Quality Goal Implementation Team. Functions include:

- Provide a forum for discussion, exchange of information, and evaluation between federal, state, and local agencies, conservation districts, universities, agri-business, and the corporate sector on sustainable and/or cost-effective agricultural production systems that benefit water and air quality.
- Provide recommendations on the prioritization of federal and state technical and financial resources on specific practices in priority watersheds.
- Provide technical expertise and leadership to support the development and implementation of agricultural elements within
  the Chesapeake Bay TMDL, Watershed Implementation Plans, two-year milestones, and tracking and reporting mechanisms
  that support an adaptive management approach towards Bay restoration.
- Coordinate with WQGIT Watershed Technical Workgroup to identify, define, quantify, and incorporate pollutant reduction and conservation practices on agricultural lands and animal operations into the Chesapeake Bay Program decision support system. Provide data and support for the Water Quality Goal Implementation Team and Technical and Support Services.

## **Areas of Focus**

### **Implementation**

Taking state and county watershed implementation plans from theory to on-the-ground practices.

#### Verification

Ensuring that Best Management Practices are accurately reported to the Chesapeake Bay Program for credit towards water quality goals.

### **Phase 6.0 Model Updates**

Ensuring that the agricultural sector is represented in the most accurate terms available.

### **Innovative Practices/Approaches**

Keeping up-to-date and incorporating, when appropriate, new practice and approaches that have been proven effective in addressing the challenges to improving water quality.

### **Climate Change**

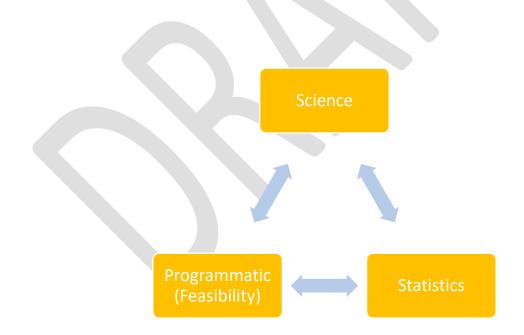
Addressing the factors that make the agriculture sector a key component in adapting to and mitigating climate change.

## <u>Implementation</u>

Topic	Sub-topic	Related Issues	Possible
			Speakers/Resources
Communication	Farmer buy-in		
	Education and outreach		
	Farmer input		
Barriers	Economic	Impact on Famers;	soil conservation districts
	Social & Cultural	Farm Crisis Management	reps; farmer/operators; ag focused social workers
	Lease land	Formalizing of lease agreements	Sarah Everhart, UMD
Opportunities	Focusing BMP implementation to	Use of remote sensing technology;	USGS;
	maximize load reductions	GIS mapping; water monitoring stations	
Resources	Technical Assistance	State Level; Federal Level	Various states, NRCS, NGOs,
	Cooperative Agreements	Land Grant Universities, Tetra Tech, EPA funding sources	citizen groups, CBPO
Cross-Sector Collaboration	Forestry Workgroup	Riparian Forest Buffers	CBPO Workgroup
	Toxic Contaminants Workgroup	STAC Workshop: Contaminants of Concern in Agricultural Settings	Coordinators and members, state/county agency reps,
	Wetlands Workgroup	Non-tidal Wetland Rehabilitation, Enhancement, and Creation BMP Expert Panel	NGOs
	Trading and Offsets Workgroup		1
	Climate Resiliency Workgroup	Carbon Sequestration	
	Co-benefits of BMPs	Cross-reference to Model Inputs	
WIP Development		BMP Co-benefits; idea-sharing across jurisdiction; NEIEN; CAST	State and county-level reps; CBPO staff

## **Verification**

Topics	Sub-topic	Related Issues	Possible
			Speakers/Resources
AgWG vs. EPA role		QAQC methods;	
State Approaches		Cross-jurisdictional idea-sharing	State and county-level reps;
Alternative Methods	Transect Survey	QAQC; Statistical significance;	State and county-level reps;
	Remote Sensing	emerging technologies;	CBPO staff; Tetra Tech
	Producer/ Farmer Self-Survey		
Resources	Technical Assistance	Funding and logistics for verifying	State and county-level reps;
		BMPs	CBPO staff



# Phase 6.0 Model Inputs

Topics		Sub-topic	Related Issues	Possible
BMP Expert	In CBPO Review	Ag Stormwater Management		Speakers/Resources Expert Panel Chairs, AgWG
Panels		Cropland Irrigation Management		technical advisor; NRCS; soil
raileis	In Progress		Motland Export Danel	conservation districts reps
	Establishing	Agricultural Ditch Management Animal Mortality Management (RFP published)	Wetland Expert Panel	conservation districts reps
		Nursery Capture and Reuses (ad hoc group creating EP charge)		
	Re-evaluate (Previous Reports > 5 years old)	Pasture Management Conservation Planning	Weiner- Simpson Report 2009 report	
Crediting Load	Reductions	BMP Life-Spans vs. CBP Credit Cycles		NRCS; CBPO staff
		NRCS 1619 Privacy Agreement		NRCS; CBPO staff
		BMP mapping in CAST	BMPs mapped to Soil Conservation Plans	Tetra Tech,
		Non Cost-Share BMPs	Practices not picked up in agency record-keeping	NRCS; CBPO staff; NGOs; farmer/operators
Data	Soil Phosphorus	Management Board Path Forward (Sept 21, 2017)	CBPO staff;	
		Manure and Litter Nutrient Concentrations	Nutrient Concentrations (Broiler, Swine, Turkey, Dairy)	
			Sampling- Compare National ASTM sampling & analysis	

	procedures to operator-retrieved samples	
Production (Populations)	(Broiler, Swine, Turkey, Dairy)	
Fertilizers	County-level distribution data	CBPO staff;
Soil and Manure Analysis	Regional data management standards; Watershed-wide, county-level database to track trend	
Remote Sensing	Transect survey (tillage and cover crops)	
Co-benefits of BMPs	Cross-reference to Model Inputs	

# <u>Innovations</u>

Topics	Sub-topic	Related Issues	Possible
			Speakers/Resources
Nutrient Application	Partnering with Regional Land	Updating nutrient application	Academic researchers;
Recommendations	Grant Universities	recommendations based on the	USDA-ARS; CBPO staff
		newest research	
Precision Agriculture		Newest technology for efficient	Tulane Grand Challenge
		planting, harvesting, and nutrient	(Nitrogen reduction)
		application; 4 R's	
Soil Health		Carbon Sequestration;	
		conservation tillage; erosion;	
		inter-row mowing for weed	
		suppression; cover crops	
Pay-for-Performance		Economic incentivizing through	Winrock International
		market valuation of BMPs	

Discovery Farms (Midwest)	farmer-led research and outreach
	program focused on the
	relationship between agriculture
	and water quality

# Climate Change

Topics	Sub-topic	Related Issues	Possible
			Speakers/Resources
Impacts		Climate-Resilient Farming	NY- Greg Albrecht
Precision Agriculture			Tulane Grand Challenge (Nitrogen reduction)
Carbon Sequestration	Conservation Practices		