

Agriculture Workgroup

Prioritization Matrix 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

**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 in the Phase 6.0 Watershed Model.**

**Innovative Practices/Approaches**

**Keeping up-to-date on and incorporating, when appropriate, new practices and approaches that have been proven effective in addressing the challenges to water quality improvement in the Chesapeake Bay watershed.**

**Climate Change**

**Addressing the key components of the agriculture sector’s role in adaptation to, and mitigation of, climate change.**

**Prioritization Considerations**

* ***Impact Factor***

|  |  |  |
| --- | --- | --- |
| ***High*** | ***Medium*** | ***Low*** |
| **Will *significantly aid* in achieving the scope and purpose of the Workgroup.** | **Will *aid* in achieving the scope and purpose of the Workgroup.** | **Will *potentially aid* in achieving the scope and purpose of the Workgroup now or into the future.** |

* ***States/Regions Incorporated***

Efficient and effective use of funding and resources should take into account the applicability of a prioritized item across the Chesapeake Bay watershed. It may be preferable to prioritize items that influence a broader swath of the territory in the watershed. However, there may be cases where the impact factor for an item that applies to a small portion of the watershed is high enough that is can be considered high priority in the pursuit of improved water quality for the Chesapeake Bay and it many tributaries.

* ***Resource Requirements***

|  |  |  |
| --- | --- | --- |
| ***High*** | ***Medium*** | ***Low*** |
| **Funding, time dedicated, or both, will be substantial.** | **Funding, time dedicated, or both, will be moderate.** | **Money, time, or both are not an issue.** |

**Priority Level**

|  |  |  |
| --- | --- | --- |
| ***High*** | ***Medium*** | ***Low*** |
| **Imperative to AgWG Scope and Purpose** | **Important to AgWG Scope and Purpose** | **Relevant to AgWG Scope and Purpose but without urgency.** |

**Implementation**

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

**Verification**

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

**Phase 6.0 Model Inputs**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Topics** | | **Sub-topic** | **Related Issues** | **Possible**  **Speakers/**  **Resources** | **Impact**  **Factor** | **States/**  **Regions**  **Incorporated** | **Resource**  **Requirements** | **Priority Level** |
| BMP Expert Panels | In CBPO Review | Ag Stormwater Management |  | Expert Panel Chairs, AgWG technical advisor; NRCS; soil conservation districts reps |  |  |  |  |
| In Progress | Cropland Irrigation Management |  |  |  |  |  |
| Agricultural Ditch Management | Wetland Expert Panel (over- lapping BMPs) |  |  |  |  |
| Establishing | Animal Mortality Management (RFP published) |  |  |  |  |  |
| 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 |  |  |  |  |
| Manure Transport | Ensuring accurate reporting of transport via public and private systems | State reps; |  |  |  |  |
| Data | | Soil Phosphorus | Management Board Path Forward (Sept 21, 2017); public confidence in model | CBPO staff; |  |  |  |  |
| Manure and Litter Nutrient Concentrations | Nutrient Concentrations (Broiler, Swine, Turkey, Dairy); public confidence in model |  |  |  |  |  |
| Sampling- Compare National ASTM sampling & analysis procedures to operator-retrieved samples |  |  |  |  |  |
| Production (Populations) | (Broiler, Swine, Turkey, Dairy); public confidence in model |  |  |  |  |  |
| Fertilizers | County-level distribution data; public confidence in model | CBPO staff; |  |  |  |  |
| Soil and Manure Analysis | Regional data management standards; Watershed-wide, county-level database to track trends |  |  |  |  |  |
| Remote Sensing | Transect survey (tillage and cover crops) |  |  |  |  |  |
| Co-benefits of BMPs | Cross-reference to model Inputs |  |  |  |  |  |

**Innovations**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Topics** | **Sub-topic** | **Related Issues** | **Possible Speakers/Resources** | **Impact**  **Factor** | **States/**  **Regions**  **Incorporated** | **Resource**  **Require-ments** | **Priority Level** |
| Nutrient Application Recommendations | Partnering with Regional Land Grant Universities | Updating nutrient application recommendations based on the newest research | Academic researchers; USDA-ARS; CBPO staff |  |  |  |  |
| Precision Agriculture |  | Newest technology for efficient planting, harvesting, and nutrient application; 4 R’s | Tulane Grand Challenge (Nitrogen reduction) |  |  |  |  |
| Soil Health |  | Carbon Sequestration; conservation tillage; erosion; inter-row mowing for weed suppression; cover crops; soil health indicators as BMPs |  |  |  |  |  |
| Pay-for-Performance |  | Economic incentivizing through market valuation of BMPs | Winrock International |  |  |  |  |
| 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** | **Impact**  **Factor** | **States/Regions**  **Incorporated** | **Resource**  **Requirements** | **Priority Level** |
| Impacts of Climate Change on Agriculture |  | Climate-Resilient Farming | NY- Greg Albrecht |  |  |  |  |
| Climate Change Mitigation within Agriculture | Carbon Sequestration |  |  |  |  |  |  |
| BMP Co-benefits |  |  |