

Draft Agricultural Verification Protocol Concept Version 3.5.3																		
Chesapeake Bay Program Agriculture Workgroup (AgWG)																		
February 14, 2013																		
For all agricultural BMP verification protocol categories, verification procedures must be established that demonstrate an 80% (or greater) confidence level that the subject BMP has been implemented, is currently operational and is being maintained to meet the BMP definition for standards and requirements.																		
Annual BMPs: Cover Crops; Commodity Cover Crops; Conservation Tillage / Interim BMPs-																		
Structural BMPs: Animal waste management system; Barnyard runoff control; Biofilters; Lagoon covers; Loafing lot management; Mortality composters; Non-urban stream restoration: shoreline erosion control; Off-stream watering w/o fencing; Stream access control with fencing; Pasture alternate watering systems; Soil conservation & water quality plan elements; Water control structures; Wetland restoration / Interim BMPs- Dirt & gravel road erosion & sediment control; Non-urban stream restoration; P sorbing materials in Ag ditches;																		
Management BMPs- Plans: Enhanced nutrient management; Horse pasture management; Nutrient management; Precision Intensive rotational grazing; Prescribed grazing; Soil conservation & water quality plans / Interim BMPs- Nutrient management as BMP only																		
Management BMPs- Practices: Alternate crops; Continuous no-till; Dairy precision feeding; Decision agriculture; Forest buffers; Grass buffers; Land retirement; Poultry litter transport; Poultry litter treatment; Poultry Phytase; Steam-side forest buffers; Stream-side grass buffers; Stream-side forest buffers; Stream-side wetland restoration; Swine Phytase; Tree planting / Interim BMPs- Cropland irrigation management; Dairy manure injection; Irrigation water capture reuse; No-till; Poultry litter injection; Tree planting: vegetative environmental buffers- poultry;																		
Agricultural BMP Verification Protocol Category	Assessment Method	Conservation Practice Category				Cost-Sharing Information				Other BMP Information				Verification Methodology	Verification Issues	Relative Scientific Defensibility	Relative Accountability	Relative Transparency
		Annual BMPs	Structural BMPs	Management BMPs: Plans	Management BMPs: Practices	Federal C/S	State C/S	NGO C/S	Private Funded	Meets Specs	Functional Equivalent	Almost : provides benefits, but needs work to meet specs.	Installation Date					
1.) Permit Issuing Programs	Verified compliance with federal NPDES (CAFO) or state agricultural operational permit program requirements.	Feasible	Feasible	Feasible	Feasible	Yes	Yes	Yes	Yes	Yes	Yes	Maybe	Through record checks.	Through on-site permit compliance inspections by trained agency personnel.	Frequency of compliance inspections during permit life span.	High	High	High
2.) Regulatory Programs	Verified compliance with federal or state agricultural regulatory requirements (non-operational permit).	Feasible	Feasible	Feasible	Feasible	Yes	Yes	Yes	Yes	Yes	Yes	Maybe	Through record checks.	Through on-site regulatory compliance inspections by trained agency personnel.	Frequency and percent coverage of regulatory compliance inspections.	High	High	Medium
3.) Financial Incentive Programs	Verified compliance with federal or state program contractual requirements.	Feasible	Feasible	Feasible	Feasible	Yes	Yes	Maybe	No	Yes	No	No	Through record checks.	Through on-site contractual compliance inspections by trained agency personnel.	Frequency of compliance inspections during contractual life span.	High	High	High
4.) Farm Inventory	Farm inventory by trained and certified federal, state, and/or county agency personnel.	Feasible	Feasible	Feasible	Feasible	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Through record checks	Through on-site visit by trained personnel while collecting data, check databases.	Accredited data source through training/certification.	High	High	Medium
5.) Farm Inventory	Farm inventory by trained and certified independent third-party personnel.	Feasible	Feasible	Feasible	Feasible	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Record checks may be possible.	Through on-site visit by trained personnel while collecting data, check databases.	Accredited data source through training/certification.	High	High	Medium
6.) Farm Inventory	Farm inventory by trained and certified agricultural consultant personnel.	Feasible	Feasible	Feasible	Feasible	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Record checks may not be possible.	Through on-site visit by trained personnel while collecting data, check databases.	Accredited data source through training/certification.	High	High	Medium

7.) Farm Inventory	Farmer completes self-certified inventory survey and trained and certified federal, state and/or county personnel visit site to confirm.	Feasible	Feasible	Feasible	Feasible	Yes	Yes	Yes	Yes	At onsite visit	At onsite visit	At onsite visit.	Through record checks.	Through on-site visit by trained personnel.	% of checks determines acceptance of some practices.	High	High	Medium
8.) Farm Inventory	Farmer completes in-office self-certified inventory with trained and certified federal, state and/or county agency personnel.	Feasible	Not Feasible	Not Feasible	Feasible	Maybe	Maybe	Maybe	Maybe	Maybe	Maybe	Maybe	Must check records to verify.	Farmer certified during the visit at USDA or governmental office.	Farmer Self certification with Professional Assistance	Medium	Medium	Medium
9.) Farm Inventory	Farmer with training and certification completes self-certified inventory survey.	Feasible	Not Feasible	Feasible	Feasible	Maybe	Maybe	Maybe	Maybe	Maybe	Maybe	Maybe	Must check records to verify.	Farmer trained and certified by governmental agency.	Farmer self-certification with training and certification.	Medium	Medium	Low
10.) Farm Inventory	Farmer completes self-certified inventory survey.	Feasible	Not Feasible	Not Feasible	Not Feasible	Maybe	Maybe	Maybe	Maybe	Maybe	Maybe	Maybe	Must check records to verify.	By Farmer self certification when submitted.	Wide variance in knowledge of farmers.	Low	Low	Low
11.) Office Records	Review of existing office records by trained and certified federal, state and/or county agency personnel.	Not Feasible	Feasible	Feasible	Feasible	Yes	Yes	Maybe	Only by elimination	Yes	No	No	Yes	Trained personnel verify through knowledge of the farm or through calls made to the farmer.	Identifies formerly contractual BMPs and may miss many non C/S practices.	Medium	Medium	Medium
12.) Farm Records	Review of existing on-farm records by trained and certified federal, state and/or county agency personnel.	Feasible	Not Feasible	Feasible	Feasible	Yes	Yes	Maybe	Only by elimination	Yes	No	No	Yes	Trained personnel verify through knowledge of the farm or through calls made to the farmer.	Misses many non-C/S practices	Medium	Medium	Medium
13.) Farm Records	Review of existing on-farm records by trained and certified independent third-party personnel.	Feasible	Not Feasible	Feasible	Feasible	Yes	Yes	Maybe	Only by elimination	Yes	No	No	Yes	Trained personnel verify through knowledge of the farm or through calls made to the farmer.	Misses many non C/S practices	Medium	Medium	Medium
14.) Farm Records	Review of existing on-farm records by trained and certified agricultural consultant personnel.	Feasible	Not Feasible	Feasible	Feasible	Yes	Yes	Maybe	Only by elimination	Yes	No	No	Yes	Trained personnel verify through knowledge of the farm or through calls made to the farmer.	Misses many non C/S practices.	Medium	Medium	Medium
15.) Transect Survey	Transect completed by trained and certified personnel on a County or Watershed scale.	Feasible: BMP specific (i.e. tillage)	Not Feasible	Not Feasible	Not Feasible	Maybe	Maybe	Maybe	Maybe	Yes	Maybe	No	No, must check records to determine.	Verified by the trained personnel completing the transect on the ground.	Can only determine existence and quality of practices not source of funding.	High	High	High
16.) CEAP Survey	CEAP survey conducted in-person at field-level with NASS trained and certified personnel.	Feasible	Feasible	Feasible	Feasible	Maybe	Maybe	Maybe	Maybe	No	No	No	No, must check records to determine.	NASS certification procedures.	Availability of data at required scale.	High	High	Medium

17.) NASS Survey	NASS survey conducted via survey with trained and certified personnel.	Feasible	Not Feasible	Not Feasible	Not Feasible	No	No	No	No	No	No	No	No, must check records to determine.	NASS certification procedures.	Availability of data at required scale.	High	High	Medium
18.) Aerial Photography and Remote Sensing	Remote Sensing with Field Level Visits to Ground Truth Data.	Feasible	Not Feasible	Not Feasible	Not Feasible	No	No	No	No	No	No	No	No, must check records to determine.	Verification can be same as Aerial Remote Sensing method or by visit to each site to collect and certify data.	Availability of data at required scale, resolution, and timing.	High	High	High
19.) NRI Point (NRCS) or some other statistically selected sites	Statistical survey conducted in-person at field-level with NASS trained and certified personnel.	Feasible	Feasible	Feasible	Feasible	Maybe	Maybe	Maybe	Maybe	No	No	No	No, must check records to determine.	NASS certification procedures.	Availability of data at required scale.	High	High	Medium