

Draft Agricultural Verification Protocol Concept Version 3.5																			
Chesapeake Bay Program Agriculture Workgroup (AgWG)																			
December 3, 2012																			
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 Cost	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						
Permit Issuing Programs	Verified compliance with federal NPDES (CAFO) or state agricultural operational permit program requirements.	Yes	Yes	Yes	Yes	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	High
Regulatory Programs	Verified compliance with federal or state agricultural regulatory requirements (non-operational permit).	Yes	Yes	Yes	Yes	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	High	Medium
Financial Incentive Programs	Verified compliance with federal or state program contractual requirements.	Yes	Yes	Yes	Yes	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	High
Farm Inventory	Farm inventory by trained and certified federal, state, and/or county agency personnel.	Yes	Yes	Yes	Yes	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	High	Medium
Farm Inventory	Farm inventory by trained and certified independent third-party personnel.	Yes	Yes	Yes	Yes	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.	Medium	High	High	Medium
Farm Inventory	Farm inventory by trained and certified agricultural consultant personnel.	Yes	Yes	Yes	Yes	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.	Low	High	High	Medium

Farm Inventory	Farmer completes self-certified inventory survey and trained and certified federal, state and/or county personnel visit site to confirm.	Yes	Yes	Yes	Yes	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.	Low	High	High	Medium
Farm Inventory	Farmer completes in-office self-certified inventory with trained and certified federal, state and/or county agency personnel.	Yes	No	No	Yes	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	Low	Medium	Medium	Medium
Farm Inventory	Farmer with training and certification completes self-certified inventory survey.	Yes	No	Yes	Yes	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.	Low	Medium	Medium	Low
Farm Inventory	Farmer completes self-certified inventory survey.	Yes	No	No	No	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	Low
Office Records	Review of existing office records by trained and certified federal, state and/or county agency personnel.	No	Yes	Yes	Yes	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	Medium
Farm Records	Review of existing on-farm records by trained and certified federal, state and/or county agency personnel.	Yes	No	Yes	Yes	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	Medium
Farm Records	Review of existing on-farm records by trained and certified independent third-party personnel.	Yes	No	Yes	Yes	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	Medium
Farm Records	Review of existing on-farm records by trained and certified agricultural consultant personnel.	Yes	No	Yes	Yes	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	Medium
Transect Survey	Transect completed by trained and certified personnel on a County or Watershed scale.	No	No	No	BMP specific (i.e. tillage)	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.	Medium	High	High	High
CEAP Survey	CEAP survey conducted in-person at field-level with NASS trained and certified personnel.	Yes	Yes	Yes	Yes	Maybe	Maybe	Maybe	Maybe	No	No	No	No, must check records to determine.	NASS certification procedures.	Availability of data at required scale.	High	High	High	Medium
NASS Survey	NASS survey conducted via survey with trained and certified personnel.	Yes	No	No	No	No	No	No	No	No	No	No	No, must check records to determine.	NASS certification procedures.	Availability of data at required scale.	High	High	High	Medium

Aerial Photography and Remote Sensing	Remote Sensing with Field Level Visits to Ground Truth Data.	Yes	No	No	No	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.	Medium	High	High	High
NRI Point or some other statistically selected sites	Statistical survey conducted in-person at field-level with NASS trained and certified personnel.	Yes	Yes	Yes	Yes	Maybe	Maybe	Maybe	Maybe	No	No	No	No, must check records to determine.	NASS certification procedures.	Availability of data at required scale.	High	High	High	Medium