

Changes to Phase 6 NEIEN Appendix

Appendix available at: <http://webservices.chesapeakebay.net/schemas/>

Presented to WTWG June 2, 2016

CHANGES MADE:

Manure Transport – States can now report manure transport using the unit name, “Dry Tons.” This will assume zero percent moisture. States may still report using the unit name, “Tons,” which will assume the following moisture fractions:

Animal Type	Moisture Fraction
beef	0.880000
dairy	0.860000
other cattle	0.870000
horses	0.850000
hogs and pigs for breeding	0.900000
hogs for slaughter	0.900000
sheep and lambs	0.720000
goats	0.670000
pullets	0.740600
turkeys	0.740000
layers	0.742100
broilers	0.286500

Appendix excerpt:

BMP_NAME	DEFAULT_SB_LAND_USE	MEASUREMENT_NAME	UNIT_NAME	SB_BMP	COMMENTS
Manure Transport	beef	beef	DRY TONS	ManureTransport	Assumes 0 percent moisture

Submitting Animal Counts – States can now report the unit name, “Count” to designate the number of animals treated by feed management, litter amendment, mortality composting, barnyard runoff control and waste storage structure BMPs. This method of reporting is strongly encouraged if data are available in this format because all manure generation and feed operation land use area in Phase 6 are dependent upon the number of animals in a county.

Appendix excerpt:

BMP_NAME	DEFAULT_SB_LAND_USE	MEASUREMENT_NAME	UNIT_NAME	SB_BMP
Amendments for the Treatment of Agricultural Waste	broilers	broilers	COUNT	LitAmend
Animal Compost Structure RI	beef	beef	COUNT	MortalityComp
Feed Management	dairy	Animal	COUNT	DairyPrecFeed
Waste Treatment - Beef	beef	Animals	COUNT	AWMS
Barnyard Runoff Controls	Feed	dairy heifers	COUNT	BarnRunoffCont

Stream and Shoreline Load Sources – The Modeling Workgroup has added explicit loads for stream and shoreline to the Phase 6 Model that were not previously broken out in the Phase 5 Model. Stream restoration, shoreline management, and ambient water treatment practices are assumed to treat these loads rather than the upland sources. These two land use sources were added to the “LU” tab in the Phase 6 NEIEN Appendix, and added as default land uses for these practices.

Appendix excerpt:

BMP_NAME	DEFAULT_SB_LAND_USE	MEASUREMENT_NAME	UNIT_NAME	SB_BMP
Streambank Restoration	StreamBedAndBank	Linear Feet	FEET	UrbStrmRest
Urban Shoreline Management	Shoreline	Length Restored	FEET	shoreurb

Algal Flow-ways – States can now report algal flow-way systems for Phase 6. These are not available in Phase 5 because they were not approved prior to the deadline for approved BMPs for 2017 Milestones.

Appendix excerpt:

BMP_NAME	DEFAULT_SB_LAND_USE	MEASUREMENT_NAME	UNIT_NAME	SB_BMP
Monitored Non-Tidal Algal Flow-way	StreamBedAndBank	Acres	ACRE	nontideaftmon
Monitored Non-Tidal Algal Flow-way	StreamBedAndBank	TN	LBS	nontideaftmon
Monitored Non-Tidal Algal Flow-way	StreamBedAndBank	TP	LBS	nontideaftmon
Monitored Non-Tidal Algal Flow-way	StreamBedAndBank	TSS	LBS	nontideaftmon
Monitored Tidal Algal Flow-way	Shoreline	Acres	ACRE	tideaftmon
Monitored Tidal Algal Flow-way	Shoreline	TN	LBS	tideaftmon
Monitored Tidal Algal Flow-way	Shoreline	TP	LBS	tideaftmon
Monitored Tidal Algal Flow-way	Shoreline	TSS	LBS	tideaftmon
Non-Tidal Algal Flow-way	StreamBedAndBank	Acres	ACRE	nontideaft
Tidal Algal Flow-way	Shoreline	Acres	ACRE	tideaft

CHANGES PROPOSED:

Conservation Tillage – CTIC survey results will be provided to states in the coming weeks. These results will provide crop acres and/or percent of crop acres under the following categories: reduced tillage; mulch tillage; ridge tillage and no-tillage. According to the preliminary findings of the Conservation Tillage expert panel, these practices should be reported in the following way:

NEIEN BMP Name	Unit	Assumed Residue	SB BMP Full Name
Reduced Tillage	Percent	15-30%	Low Residue Tillage
Mulch Tillage	Percent	>30%	Conservation Tillage
Ridge Tillage	Percent	>30%	Conservation Tillage
No-Tillage	Percent	>60%	High-Residue Tillage

States will be responsible for reporting CTIC, or their own state data to NEIEN. This will be an annual BMP, so data should be supplied for every year. The panel is currently recommending that if no additional information is available, states assume the practices did not change since the most recent CTIC or state survey.

Manure Injection/Incorporation –No changes to the NEIEN Appendix are proposed at this time.

Panel is currently recommending 0 acres be reported for the historic BMP effort. Reasoning: “...Manure incorporation by tillage has long been common, but timing of incorporation must be considered to determine eligibility for historic implementation. Because timely incorporation of manures is a component of many nutrient management plans, the panel will work with the Nutrient Management Panel to develop recommendations for extracting estimates of the applicable utilization of manure incorporation by tillage.”

Nutrient Management – No changes to the NEIEN Appendix are proposed at this time.

Panel is proposing a number of BMPs that will need to be tracked for future purposes, but may not be applicable to the historic data cleanup. States should continue to submit ALL nutrient management acres for Phase 6 using the following:

BMP_NAME	DEFAULT_SB_LAND_USE	MEASUREMENT_NAME	UNIT_NAME	SB_BMP
Nutrient Management	CropHay	Tier 1 Acres	ACRE	EffNutMan

These acres will be used in the July calibration to assign different crop application needs in-line with land grant university nutrient application recommendations for all acres submitted.

When the panel completes its work, the NEIEN Appendix will be revised to contain all applicable BMPs.

Cover Crops – No changes to the NEIEN Appendix are proposed at this time.

The panel is considering changing the definitions and efficiencies of traditional and commodity cover crops, but this likely will not result in a change to the NEIEN Appendix, only to the way states track the BMP. It is possible that additional species will be added later this year by the panel.