

Iterative Improvements to NEIEN Appendix for Phase 6 Historic BMP Submissions

August 4, 2016

All cells highlighted in yellow are new.

Urban Trees

- States must distinguish between Tree Planting and Urban Forest Planting. More than likely, the historic acres being reported by most states would be considered Tree Planting. Only acres that qualify as restoring a forest-like ecosystem should be reported as Urban Forest Planting.
- 300 trees now equal 1 acre.
- Report awaiting final approval.

BMP_NAME	DEFAULT_SB_LAND_USE	MEASUREMENT_NAME	UNIT_NAME	SB_BMP	TRANSFORMATION_TYPE	TRANSFORMATION_VARIABLE	CREDIT_DURATION
Tree Planting	Turfgrass	Number of Trees Planted	COUNT	UrbanTreePlant	/	300	10
Urban Forest Planting	Turfgrass	Acres Planted	acre	UrbanForPlant	*	1	15

Erosion and Sediment Control

- States can report percent.
- States should report close to 100%, with some estimate of less-than 100% if they have acres that don't fall under general permits.
- ESC Level 1 should be reported through time, with ESC Level 2 reported in more recent years, and very few acres of ESC Level 3.

Tillage

- States should report using the new tillage BMPs and reporting as percents: Mulch Tillage; No Tillage; Reduced Tillage; and Ridge Tillage
- Report being drafted.

BMP_NAME	DEFAULT_SB_LAND_USE	MEASUREMENT_NAME	UNIT_NAME	SB_BMP	CREDIT_DURATION
Mulch Tillage	ROW	Percent	percent	ConserveTill	1
No Tillage	ROW	Percent	percent	ConserveTill	1
Reduced Tillage	ROW	Percent	percent	LowResTill	1
Ridge Tillage	ROW	Percent	percent	ConserveTill	1

Manure Incorporation

- States should report three new BMPs: Manure Injection; Manure Incorporation High Disturbance; Manure Incorporation Low Disturbance
- Please see draft panel report for definitions.
- Report being drafted.

BMP_NAME	DEFAULT_SB_LAND_USE	MEASUREMENT_NAME	UNIT_NAME	SB_BMP	CREDIT_DURATION
Manure Injection	ROW	Acres	acre	injection	1
Manure Incorporation High Disturbance	ROW	Acres	acre	injectionhigh	1
Manure Incorporation Low Disturbance	ROW	Acres	acre	injectionlow	1

Nutrient Management

- States should report eight new BMPs. Please see draft panel report for definitions.
- States should submit acres that qualify under each of the eight BMPs. This means that acres may be submitted up to eight times.
- Please see draft panel report for definitions.
- Report in review.

BMP_NAME	DEFAULT_SB_LAND_USE	MEASUREMENT_NAME	UNIT_NAME	SB_BMP	CREDIT_DURATION
Nutrient Management Core N	ROW	Acres	acre	nmcoren	1
Nutrient Management Core P	ROW	Acres	acre	nmcorep	1
Nutrient Management N Rate	ROW	Acres	acre	nmraten	1
Nutrient Management N Placement	ROW	Acres	acre	nmplacen	1
Nutrient Management N Timing	ROW	Acres	acre	nmtimen	1
Nutrient Management P Rate	ROW	Acres	acre	nmratep	1
Nutrient Management P Placement	ROW	Acres	acre	nmplacep	1
Nutrient Management P Timing	ROW	Acres	acre	nmtimep	1

Changes for BMPs that likely DO NOT impact historic submissions

Floating Treatment Wetlands

- States should report one of five practices based upon % coverage of raft area.
- See panel report for definitions.
- Practices do NOT replace wet ponds, but are an additional enhancement to wet pond treatment.
- Panel report awaiting approval.

BMP_NAME	DEFAULT_SB_LAND_USE	MEASUREMENT_NAME	UNIT_NAME	SB_BMP	CREDIT_DURATION
Floating Treatment Wetland 1	MS4CSSNonRegulated	Acres Treated	acre	FTW1	3
Floating Treatment Wetland 2	MS4CSSNonRegulated	Acres Treated	acre	FTW2	3
Floating Treatment Wetland 3	MS4CSSNonRegulated	Acres Treated	acre	FTW3	3
Floating Treatment Wetland 4	MS4CSSNonRegulated	Acres Treated	acre	FTW4	3
Floating Treatment Wetland 5	MS4CSSNonRegulated	Acres Treated	acre	FTW5	3

Manure Treatment Technologies

- States have the option of reporting 19 different practices, 18 of which will impact nitrogen volatilization of manure by an efficiency factor established by the panel. The final practice (MTT19), will increase nitrogen volatilization by a monitored amount.
- For practices 1-18, states must report the following: animal type; dry tons of manure transported; county from; county to
- For practices 1-18, do NOT report manure transport using the traditional manure transport BMP.
- For practice 19, states must report the following: animal type; dry tons of manure transported; county from; county to; and lbs of TN lost to the atmosphere.
- For practice 19, do NOT report manure transport using the traditional manure transport BMP.

BMP_NAME	DEFAULT_SB_LAND_USE	MEASUREMENT_NAME	UNIT_NAME	SB_BMP	CREDIT_DURATION
Manure Treatment Slow Pyrolysis	beef	beef	dry tons	MTT1	1
Manure Treatment Slow Pyrolysis	broilers	broilers	dry tons	MTT1	1
Manure Treatment Slow Pyrolysis	dairy heifers	dairy heifers	dry tons	MTT1	1
Manure Treatment Slow Pyrolysis	Goats	Goats	dry tons	MTT1	1
Manure Treatment Slow Pyrolysis	hogs and pigs	hogs and pigs	dry tons	MTT1	1
Manure Treatment Slow Pyrolysis	hogs for slaughter	hogs for slaughter	dry tons	MTT1	1
Manure Treatment Slow Pyrolysis	horses	horses	dry tons	MTT1	1
Manure Treatment Slow Pyrolysis	layers	layers	dry tons	MTT1	1
Manure Treatment Slow Pyrolysis	other cattle	other cattle	dry tons	MTT1	1
Manure Treatment Slow Pyrolysis	Poultry	Poultry	dry tons	MTT1	1
Manure Treatment Slow Pyrolysis	pullets	pullets	dry tons	MTT1	1
Manure Treatment Slow Pyrolysis	sheep and lambs	sheep and lambs	dry tons	MTT1	1
Manure Treatment Slow Pyrolysis	Swine	Swine	dry tons	MTT1	1
Manure Treatment Slow Pyrolysis	turkeys	turkeys	dry tons	MTT1	1
Manure Treatment Slow Pyrolysis	NA	County From	NA	MTT1	1
Manure Treatment Slow Pyrolysis	NA	County To	NA	MTT1	1

BMP_NAME	DEFAULT_SB_LAND_USE	MEASUREMENT_NAME	UNIT_NAME	SB_BMP	CREDIT_DURATION
Manure Treatment Direct Monitor	beef	beef	LBS	MTT19	1
Manure Treatment Direct Monitor	broilers	broilers	LBS	MTT19	1
Manure Treatment Direct Monitor	dairy heifers	dairy heifers	LBS	MTT19	1
Manure Treatment	Goats	Goats	LBS	MTT19	1

Direct Monitor					
Manure Treatment Direct Monitor	hogs and pigs	hogs and pigs	LBS	MTT19	1
Manure Treatment Direct Monitor	hogs for slaughter	hogs for slaughter	LBS	MTT19	1
Manure Treatment Direct Monitor	horses	horses	LBS	MTT19	1
Manure Treatment Direct Monitor	layers	layers	LBS	MTT19	1
Manure Treatment Direct Monitor	other cattle	other cattle	LBS	MTT19	1
Manure Treatment Direct Monitor	Poultry	Poultry	LBS	MTT19	1
Manure Treatment Direct Monitor	pullets	pullets	LBS	MTT19	1
Manure Treatment Direct Monitor	sheep and lambs	sheep and lambs	LBS	MTT19	1
Manure Treatment Direct Monitor	Swine	Swine	LBS	MTT19	1
Manure Treatment Direct Monitor	turkeys	turkeys	LBS	MTT19	1
Manure Treatment Direct Monitor	beef	beef	dry tons	MTT19	1
Manure Treatment Direct Monitor	broilers	broilers	dry tons	MTT19	1
Manure Treatment Direct Monitor	dairy heifers	dairy heifers	dry tons	MTT19	1
Manure Treatment Direct Monitor	Goats	Goats	dry tons	MTT19	1
Manure Treatment Direct Monitor	hogs and pigs	hogs and pigs	dry tons	MTT19	1
Manure Treatment Direct Monitor	hogs for slaughter	hogs for slaughter	dry tons	MTT19	1
Manure Treatment Direct Monitor	horses	horses	dry tons	MTT19	1
Manure Treatment Direct Monitor	layers	layers	dry tons	MTT19	1
Manure Treatment Direct Monitor	other cattle	other cattle	dry tons	MTT19	1
Manure Treatment Direct Monitor	Poultry	Poultry	dry tons	MTT19	1
Manure Treatment Direct Monitor	pullets	pullets	dry tons	MTT19	1
Manure Treatment Direct Monitor	sheep and lambs	sheep and lambs	dry tons	MTT19	1
Manure Treatment	Swine	Swine	dry tons	MTT19	1

Direct Monitor					
Manure Treatment Direct Monitor	turkeys	turkeys	dry tons	MTT19	1
Manure Treatment Direct Monitor	NA	County From	NA	MTT19	1
Manure Treatment Direct Monitor	NA	County To	NA	MTT19	1