

Appendix K

MDA Recommended Practices

2019 GGRA Draft Plan

Greenhouse Gas Reductions From Agriculture: Menu of Recommended Practices

NRCS Conservation Practices Cropland Management Description of practice Co₂ N₂0 Sum Conventional Tillage to No Till (CPS 329) Conventional Tillage to Reduced Tillage (CPS 345) Reduced tillage = strip till Improve N fertilizer management to reduce by 15% through 4R or nitrification inhibitors N Fertilizer W Soil Amendments (CPS 590) Soil amendments include compost, manure 1.75 0.00 1.75 Conservation Crop Rotation (CPS 328) Decrease fallow or add perennial crop to rotation 0.21 0.01 0.22 Cover Crops (CPS 340) Add seasonal cover crop to cropland 0.32 0.05 0.33 Insert forage planting into rotation (CPS 512) Mulching (CPS 585) Add high carbon mulch to cropland 2.32 NA 0.32 Land use changes- add herbaceous plants Convert to permanent unfertilized grass, legume, pollinator or other mix, ungrazed Convert to permanent unfertilized grass, legume, pollinator or other mix, ungrazed Convert strips to permanent unfertilized grass, legume, pollinator or other mix (CPS 389) Convert strips to permanent unfertilized grass, legume, pollinator or other mix Convert strips to permanent unfertilized grass, legume, pollinator or other mix Convert strips to permanent unfertilized grass, legume, pollinator or other mix Convert strips to permanent unfertilized grass, legume, pollinator or other mix Convert strips to permanent unfertilized grass, legume, pollinator or other mix Convert strips to permanent unfertilized grass, legume, pollinator or other mix Convert strips to permanent unfertilized grass/legume to filter water Convert strips to permanent unfertilized grass/legume to filter water Convert strips to permanent unfertilized grass/legume to filter water Plant stiff vegetative cover on hillsides or by streams to reduce unord unproductive cropland or grassland to farm woodlot (CPS 612) Plant trees and shrubs in marginal cropland to restore diversity, improve water quality 1.98 0.28 2.26 Tree & shrub establishment (CPS 612) Plant trees and shrubs 1.98 0.28 2.26
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Riparian Forest Buffer Establishment (CPS 391) Replace strip of cropland near water with woody plants 2.19 0.28 2.47
Alley Cropping (CPS 311) Replace 20% of annual cropland with woody plants 1.71 0.03 1.74
Replace 20% of cropland with trees & shrubs of different
Multistory Cropping (CPS 379) heights, could be permaculture 1.71 0.03 1.74
Replace strip of cropland with one row woody plants, Hedgerows (CPS 422) Could combine with Conservation Cover for pollinators 1.42 0.28 1.70
Grazing
Silvopasture (CPS 381) Add trees and shrubs tograzed pastures (> 20 plants/acre 1.34 0.00 1.34
Prescribed grazing/rotational grazing (CPS 528) Short-term intense grazing in small paddocks 0.26 0.00 0.26

Note: Some implementation guidelines not listed in the NRCS Conservation Practice Standards (CPS) may be required to ensure adequate carbon sequestration and alignment with the GHG reduction estimates from COMET-Planner.