Request for a Credit for Conversion of Turf to Mixed-Open Land Use

New Land Use in Phase 6 Watershed Model

Def: Mixed Open Natural Land Use

- All scrub-shrub and herbaceous and barren lands that have been minimally disturbed (e.g., periodically bush hogged, meadows, etc.), reclaimed, or that have internal and/or regulated drainage. These include active, abandoned and reclaimed mines, landfills, beaches, water body margins, natural grasslands, utility right-of-ways and a portion of herbaceous lands within industrial, transitional…and warehousing land uses.

- Also included are potential agricultural lands that were not mapped as either cropland or pasture in the NASS Cropland Data Layers (2008 through 2015).

- The new category acts likes a "dumpster" where "everything else that is mostly green" gets dumped.

Pros for The Conversion Credit

- Fills an key gap by allowing credit for landscaping BMPs for homeowners, institutions and municipal lands.

- Currently, no credit for converting turf grass into conservation landscaping, urban meadows, Bay-scapes or other natural landscaping practices.

- May need minimum criteria before credits are granted

  - The conversion needs to have a design plan (soil de-compaction , tilling, seeding, planting , etc) that shows how turf will be transformed into a meadow

  - Need a minimum maintenance regime to arrest succession and ensure the parcel stays in meadow state (e.g., periodic mowing, bush-hogging, controlled burns, etc)

  - Communities will need software such as the SMART tool to report, inspect and verify the conversions since most conservation landscapes are very small (usually less than one acre in size).

Cons for the Credit

- Devolve into a "Zen credit" where a community gets something for doing nothing at all -- ceasing to mow and allow natural succession to proceed on abandoned turf grass.

- Not clear whether past urban soil compaction can be effectively mitigated

- No assurance that a future owner or land manager would not revert back to turf grass, especially if the meadow "product" looks scruffy, creates nuisances (ragweed, pests, ticks) or prompts public complaints.

- The credit would be a nightmare to report and verify, and unlike tree canopy, cannot be easily measured by remote sensing techniques

Two Options for The Credit

Table 1: Comparative Loading for Turf Grass and Mixed Open Land Uses [1]			
Land Use	Sediment [2]	Nitrogen	Phosphorus
	pounds/acre/year		
Turf Grass	760	11.19	0.86
Mixed Open Natural	4,720	2.45	0.43
Difference (%)	**-521**	**78**	**50**

[1] from most recent CAST output 2013 progress runs
[2] Sediment loading rates based on MS4 average loading rates.

OR use the methods devised by the urban tree canopy expert panel. (Appendix A) to show nutrient reduction associated with meadow creation using a curve number approach.

Questions and Next Steps