Response to the Urban Tree Canopy BMP Expert Panel Report
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Background

Buildings, impervious surfaces, and overhead and underground utility lines often restrict tree planting opportunities in urban areas. Due to these physical restrictions, tree plantings in urban areas routinely feature isolated trees (e.g. street trees) that have high air quality and aesthetic value among other benefits, but lower water quality function compared to more extensive forests. The recommendations by the CBP Urban Tree Canopy Expert Panel advance the accuracy of CBP nutrient load estimates, particularly within the first ten years after planting, by defining and creating a new BMP for tree planting activities in developed areas with lower nutrient reduction credit than forested lands. However, this new BMP does not accurately reflect the range of tree planting activities in developed areas as some tree planting programs have and will continue to be designed to restore forest-like conditions. For example, in Maryland, the state's Lawn to Woodland program, as well as similar county-level programs, is designed to convert larger turf grass areas back to forest.

The Urban Tree Canopy BMP relies on the nutrient loading rates of the Tree Canopy Land Use. Yet, the scale and common maintenance practices of reforestation-focused programs in developed areas distinguish them from this BMP. Tree Canopy loading rates were intended to be used for areas with trees where the land-management activities are unknown and therefore assumed to be managed in a manicured fashion similar to turf grass. Turf grass management includes weekly mowing and a moderate probability of fertilization, whereas maintenance of a reforestation-focused planting site includes infrequent mowing (often three times per year at most) and typically no fertilization. Therefore, the opportunity to achieve a higher level of nutrient reduction credit is reasonable and justified given specific standards for forest-planting without fertilization, and maintenance to enhance tree survival and mimic meadow like conditions early in the establishment period. Moreover, a two-tiered credit system matches the Chesapeake Bay Program's Phase 6 land use mapping scenarios expected every five years (both forest and tree canopy areas exist in developed areas), and helps harmonize tree cover and water quality goals at the local level.

Summary of nutrient and sediment reducing BMPs:

1. Existing credit system (Phase 5.3.2): Urban Tree Planting BMP

    - 100 trees planted = 1 acre of land use change to *forest*

2. Recommended EP credit system (Phase 6): Urban Tree Canopy BMP

    - 300 trees planted = 1 acre of land use change to *tree canopy*
    - equal to ~10% of existing credit
    - replaces existing credit system

3. Proposed two-tiered system:

    - 300 trees planted = 1 acre of land use change to *tree canopy* (default)
        - ~10% of existing credit
        - Report: trees planted
        - BMP name: urban tree planting
        - BMP credit duration: 10-years

    - 1:1 acres of land use change to *forest* (see eligibility below)
        - equals existing credit
        - Report: acres planted
        - BMP name: urban forest planting
        - BMP credit duration: 15-years

The Urban Forest Planting BMP is reserved for projects in urban or suburban areas designed to re-establish forest ecosystem processes (e.g., nutrient cycling), which require a contiguous community of native trees, shrubs, herbaceous plants, and other organisms. We define these types of projects as: tree planting projects in urban or suburban areas of at least ¼ acre in size and minimum width of 50 ft and having little to no disturbance of the understory except to aid tree establishment, manage for conditions that improve forest health, and natural causes that may impact understory conditions.

To be eligible for the higher tier of credit, an urban forest planting project must be documented in a PLANTING PLAN containing the following information:

- A contiguous planting area of 1/4 acre or greater AND minimum width of 50 ft
- A map of the planting area
- An order list or receipt of the number and species of trees to be planted
    - The majority of trees must be native trees with a large stature such as oak
    - Trees should be relatively large at the time of planting (1 inch in diameter)
    - Planting density should follow state or federal recommendations

- Average soil infiltration rate across the planting site determined through an infiltration test (average of 3 measurements per site)
    - The infiltration rate does not have to meet a certain standard to be eligible for the higher tier of credit. There is high value in simply collecting this information prior to planting to assess if existing site conditions will impact tree survival, and possibly to evaluate the affects of reforestation on long-term site conditions.
- A post-planting maintenance schedule such as:
    - Years 1-5: suppress competition with herbaceous plants by mowing or other methods, and re-plant as necessary
    - Years 7-10: evaluate survival and the need for thinning of trees
    - Years 10+: thin forest stand as necessary and seed for understory species

Pending approval of this recommended crediting approach, a planting plan template and BMP review/reporting process will be developed by the Forestry Workgroup for inclusion in the jurisdictions' verification/QAPP procedures.