

Working Group Discussion Draft #4

July 7, 2011

Title of the Bill or Proposal: The Montgomery County Urban Tree Conservation Bill

Section I, Article I Findings and Purpose

(a) ***Findings.***

- (1) Trees constitute an important natural resource, essential to mitigating climate change impacts, reaching greenhouse gas emissions reduction goals and meeting Chesapeake Bay restoration goals.
- (2) Trees are a renewable resource with a natural life cycle and as such can be preserved, relocated or replaced.
- (3) Trees are a unique resource distinct from forests, and mature canopy trees should be preserved whenever possible.
- (4) Conservation can be practiced by preserving, replacing or transplanting trees in order to increase canopy.
- (5) Trees filter groundwater, reduce surface runoff, and supply habitat for wildlife.
- (6) Trees and forested land help to cleanse the air, offset the heat island effects of urban development, and reduce energy needs.
- (7) Trees in urban areas on small lots constitute part of the urban canopy and urban forest, along with street trees in the county rights of way and along roadsides.
- (8) The Forest Conservation Law does not protect trees on properties that only require a building permit from the County Department of Permitting Services.
- (9) Trees on land area of less than 40,000 square feet and below the 20,000 square foot county and State thresholds for forest clearing should be covered under a separate law.
- (10) Current stormwater management regulations can result in removal of trees on individual lots and small stands of trees not covered by current law.
- (11) Preserving and planting trees on small lot sizes of 5,000 square feet or less pose challenges and constraints on planting space and site design when a lot is to be developed or redeveloped.

(b) ***Purpose.*** The purpose of this act is to

- (1) encourage conservation of the tree canopy in urban sections of Montgomery County by incorporating flexibility, incentives and alternatives to current regulations such as stormwater management and providing options to preserve canopy trees where they do not conflict with home improvements,
- (2) establish a Montgomery County Urban Forestry Program within the Department of Permitting Services by modifying existing regulations to administer this legislation, and setting canopy goals and preservation or conservation strategies in cooperation with the Montgomery County Department of Environmental Protection and the Planning Department,
- (3) integrate trees as a best practice in stormwater management and site design.
- (4) require planting of individual trees, as defined herein, as a result of the issuance of building permits subject to a Sediment Control Permit

- (5) create regulatory incentives for tree retention on individual lots by allowing the use of alternative measures for tree preservation during the course of building or land development, such as transplanting trees, and by establishing a County standard for use of trees or small stands of trees for stormwater mitigation,
- (6) codify tree preservation and conservation as an acceptable environmental site design practice to use in tandem with structural stormwater management measures,
- (7) allow for required planting of individual trees on private lots or within the public Right of Way with appropriate approvals,
- (8) provide a policy framework for a technical manual for use in administration of this chapter, and to;
- (9) provide for credit for saving trees on site to meet the requirements of this act.

Section XX -2, Definitions

The following terms have the meanings indicated:

Agricultural activities means farming activities including plowing, tillage, cropping, installation of best management practices, seeding, cultivating, and harvesting for production of food and fiber products (except commercial logging and timber harvesting operations), the grazing and raising of livestock, aquaculture, sod production, orchards, nursery, and other products cultivated as part of a recognized commercial enterprise.

Applicant means a person who submits a sediment control plan.

Certified Arborist refers to professional arborists who have a minimum of three years' full-time experience working in the professional tree care industry and who have passed an extensive examination covering all facets of arboriculture as part of the International Society of Arboriculture (ISA) certification program.

Critical root zone means the zone in which the roots of a tree are located. It is also the area around a tree as defined by the Forest Conservation Law as 1.5 feet x dbh, which should be protected unless other supplemental protection measures are provided.

Diameter at breast height (dbh) means the diameter of a tree measured at 4.5 feet (1.37 m) above ground on the uphill side of the tree.

Director of Permitting Services means the Director of the Department of Permitting Services or the Director's designee.

Forest Conservation Law (FCL) means Chapter 26-A of the Montgomery County code, originally drafted in 1992, which aims to save, maintain and plant forested areas for the benefit of county residents and future generations. Anyone with property of 40,000 or more of

forested land is subject to the FCL and must submit a Natural Resource Inventory and Forest Stand Delineation as part of the development review process under the law. Properties subject to the law must have a Forest Conservation Plan as part of the development process.

Hazardous tree means a tree that, in the opinion of a licensed tree expert, is defective, diseased, dying, or dead and should be removed; poses a high risk of failure or fracture with the potential to cause injury to people or damage to property and should be removed; or is causing damage to property or structures that cannot be mitigated in any manner other than removal of the tree.

Incomplete submissions. The Director of Permitting Services may not approve an incomplete submission.

Licensed tree expert means a person who has received from the Maryland Department of Natural Resources a license indicating the person's qualifications to practice as a tree expert or is an ISA certified arborist.

Lot means for the purpose of this Chapter a tract of land, the boundaries of which have been established as a result of a deed or previous subdivision of a larger parcel, and which will not be subject to further subdivision, as defined under Section 50-1, without an existing approved forest stand delineation and forest conservation plan.

Montgomery County Urban Forester refers to a county employee with an advanced background in arboriculture and urban forestry qualified and authorized to supervise the Urban Forestry Program within the Department of Permitting Services, advise the DPS Director, and coordinate appropriately with the Department of Environmental Protection and the Maryland-National Capital Parks and Planning Commission on urban forestry matters.

Native means a plant species whose geographic range during pre-colonial times included the Piedmont of Maryland, as included in the Maryland Department of Natural Resources list of native trees.

Relocated Tree means an existing tree on a site that is moved to another location on the same site to accommodate home improvement or to be moved outside of a building envelope.

Replacement Tree means a native tree which is planted on a property after the removal of an existing tree on the same site.

Retained tree means a tree that will not be removed, relocated, or damaged during any construction or development of a site.

Retention means the deliberate holding and protecting of existing forest and trees on the site.

Sediment control permit means a permit required to be obtained for certain land disturbing activities:

- (1) under Chapter 19, Article I;
- (2) Sediment Control Plan means a plan showing the boundaries of the lot, the location of improvements on the lot, the sediment control and storm water management measures to be implemented during construction activities and home improvements

Sediment Control Plan Mark Pffeferle suggests putting in a new definition since this is a new term in the document.

Street tree means a tree located in the public right of way along county roads and streets, subject to the Maryland Roadside Tree Law, county policy and under the jurisdiction of the county urban tree program.

Technical Manual means a detailed guidance document used for administration of this Chapter to include use of existing canopy trees as a stormwater management option, specifications for construction practices to protect trees on-site or in the County Right of Way and standards for relocating trees.

Transplanted tree means an existing tree on a site that is saved by relocating the tree to another location on or off of a site.

Tree means a large, woody plant having one or several self-supporting stems or trunks and numerous branches that reach a height of at least 20 feet at maturity or an understory woody plant.

Tree canopy analysis or assessment refers to the urban tree canopy assessment developed by the University of Vermont and used by the Montgomery County Planning Department. For the purposes of this Chapter, the analysis will include categories for public school properties, land use zone categories, community analysis zones, neighborhood areas and street corridors. Tree canopy goals may be set per category area for targeted planting of new trees and retention of existing trees.

Tree canopy cover means the combined area, in square feet, of the crowns of all trees on the site. For replanting purposes, *tree canopy cover* is the typical crown area for each specific tree at 20 years of age.

Tree Canopy Calculation means the method used by Montgomery County to calculate the value of a tree and issue stormwater or tree credit on a development site. The calculation is for the purposes of preserving existing canopy trees onsite, increasing canopy by replacing trees removed for construction, or relocating trees within the path of construction. A number is given in square feet to a tree or group of trees that reflect the overall existing or potential canopy at

maturity of that tree or trees. The TCC is used primarily to allow for stormwater management credit in Environmental Site Design.

Tree Conservation Plan means the plan submitted by an applicant to address preservation of trees on a building site, to replant trees or plant new trees when land disturbance will result in the loss of existing canopy trees.

Tree- save area means the section or area of a lot or construction site that fall outside of limits of disturbance identified on a sediment control plan.

Urban Forest means the sum of all woody and associated vegetation in and around dense human settlements, ranging from small communities in rural settings to metropolitan regions.

Urban forester refers to qualified and credentialed professionals who are authorized to implement the Urban Forests Program or similar programs in the County.

Urban Forestry means the planned and programmatic approach of the development and maintenance of the urban forest, including all elements of green infrastructure within the community, in an effort to optimize the resulting benefits in social, environmental and public health.

Urban Tree Canopy means the trees growing individually, in small groups, or under forest conditions on public and private lands in cities, towns and suburbs. Tree canopy is the layer of tree leaves, branches and stems that cover the ground when viewed from above.

Variance means relief from this Chapter. *Variance* does not mean a subdivision or zoning variance.

Section XX-3, **Administration**

NOTE: This is an area where there is not agreement thus far. Builders are opposed to an urban forestry program and to the County Certified Arborist/Urban Forester now located at DOT moving to DPS to provide this expertise within the context of the sediment control application and inspection process.

- (a) To consolidate county services that are compatible and necessary for administration of this law, the Chief of Tree Maintenance, a certified arborist and urban forester and staff from the Department of Transportation Division of Highway Services and program budget shall be transferred to the DPS Urban Forestry Section.
- (b) Upon transfer to the Department of Permitting Services, the title *Chief of Street Tree Maintenance* will be revised to *Montgomery County Urban Forester*.

- (c) **Montgomery County Urban Forestry Program.** The Director of the Department of Permitting Services (DPS) shall be responsible for the administration and enforcement of this chapter and must establish an *Urban Forestry Section* within the DPS Land Development Division. As part of the urban forest, trees and tree canopy subject to this legislation will include trees within the public Right of Way.
- (d) **Technical specifications.** Minimum standards to accompany this Chapter shall be published separately in a technical manual issued by the Director of Permitting Services. Specifications for preservation of mature canopy trees, use of trees in stormwater management, accepted practices for protection of trees during construction activity, mitigation measures, maintenance of newly planted trees and professional methods of transplanting or planting trees will be included in the technical manual.
- (e) **Program planning and oversight.** The County Urban Forester and staff will coordinate with other county agencies to develop canopy goals and administer oversight, advice, inspections and enforcement of the *Montgomery County Urban Forestry Program*. The Urban Forester will advise the DPS Director and will coordinate with the DPS Stormwater Management Section, DPS Right of Way Section, Department of Environmental Protection, and Maryland-National Capital Parks and Planning Commission, as appropriate.
- (f) **Training for site inspections.** Cross-training may take place between the Department of Permitting Services Water Resources Section and the Urban Forestry Section in order to establish a stronger county policy for using trees in effective stormwater management, to manage workload, and to fully enforce provisions of this Chapter.
- **Tree canopy goals.** Beginning on the effective date of this act, the County Urban Forester must develop and revise tree canopy goals based on updated tree inventory data. These goals must be part of a comprehensive plan for maintaining or increasing tree canopy countywide and targeting specific planning areas where canopy should be increased. Performance measures and goals will be revised every

five years. Montgomery tree canopy goals will be consistent with the most up to date forest research available. These goals will apply to specific planning areas using the County tree canopy analysis used by the Maryland-National Capital Parks and Planning Commission and inventory provided by the Department of Environmental Protection. Unless specified otherwise, the following goals will apply to planning areas:

Average tree cover counting all zones	40%
Suburban residential zones	50%
Urban residential zones	25%
Central business districts	15%

- This program shall direct public policy for meeting canopy goals.

(g) Interagency Coordination and Performance Evaluation. The Urban Forester will work with counterparts in the Department of Environmental Protection and the Montgomery County Planning Department to produce an annual report on the state of the County tree canopy and forest cover. The report will be submitted to the County Executive, County Council, Planning Board and State of Maryland Department of Natural Resources and made available to the public.

(h) Public Engagement. The Urban Forester may

- Convene ad hoc advisory committees or interagency and community workgroups to support the urban forestry program and to provide public input to the program.
- The Urban Forester may conduct public outreach and community education along with other county agencies with duties related to increasing or maintaining the urban tree canopy.

(i) Credits. The Director, at the recommendation of the Urban Forester, may

- Grant credits to encourage canopy tree preservation to meet stormwater management requirements in Chapter 19 of the Montgomery County code. A protocol will be included in a Technical Manual for this Chapter;

- b. Grant additional credits toward tree canopy requirements or stormwater management based on selective site clearing, tree-protection that will allow for reasonable tree-save;
- c. Grant expedited “Green Stamp” review and processing of permitting services when the applicant delivers a verified Tree Conservation Plan and affidavit verifying that the applicant will execute the following steps on a development project under one of two options:

Option A: Where there are existing trees on the site:

- retain more existing trees on-site than required;
- use a Certified Arborist or Licensed Tree Expert to design the building site and provide a professional assessment;
- practice tree-protection measures based on the Technical Guide at all times during construction activity.
- The Sediment Control bond shall not be released until all terms of the Letter of Agreement have been met.

Option B: Where there are no existing trees on the site:

- replace trees at a higher ratio than required;
- use a Certified Arborist or Licensed Tree Expert to design the building site and provide a professional assessment.
- The Sediment Control bond shall not be released until all terms of the Letter of Agreement have been met.

Any complete sediment control permit application an applicant submits for “green stamp review” shall be provided expedited review such that any permit, including building permits and sediment control permits shall be placed by DPS ahead of plans without “green stamps” that have been submitted for DPS review.

- (j) **Coordination of review by the Department of Permitting Services Director.** The DPS Director and Urban Forester must coordinate review of Tree Conservation Plans as necessary with the Director of the Department of Environmental Protection, Washington Suburban Sanitary Commission and any other relevant agency, and any public utility that will serve the site to promote consistency between this Chapter and other development requirements.

Section XX-4, Applicability

Except as otherwise provided by County law, this Chapter applies to plans exempt from the Forest Conservation Law and to:

- (a) any property that is subject to a sediment control permit and is not required to obtain approval of a Forest Conservation Plan under Chapter 22A.
- (b) the cutting or clearing of trees below the 20,000 square feet threshold for clearing where there is land disturbance requiring a sediment control permit issued under the Montgomery County Stormwater Management Code, Chapter 19.
- (c) a tree or cluster of canopy trees used as part of a stormwater management plan and whereby credits are granted by the Department of Permitting Services to meet requirements of the Sediment Control Law, Chapter 19.
- (d) a tree or trees located adjacent lot to the location of construction activity where protection is needed;
- (e) trees located within the public Right of Way;
 - a. where credit can be issued for stormwater management by replanting or relocation of canopy trees, and;
 - b. to protect trees in the public Right of Way during construction activity;
 - c. where public Right of Way areas are identified as optional sites for tree-planting to comply with this Chapter.

Sec. XX-5. Exceptions.

This Chapter does not apply to development activity subject to the Forest Conservation Law:

- (a) any tree nursery activity performed with an approved Soil Conservation and Water Quality Plan as defined in Section 19-48;
- (b) any cutting or clearing of trees within a public utility right-of-way for the construction or modification of electric generation facilities approved under § 7-205, § 7-207, or § 7-208 of the Public Utility Companies Article, Annotated Code of Maryland, if:
 - (1) the person undertaking those activities has obtained any certificate of public convenience and necessity required under §§ 7-207 and 7-208 of the Public Utility Companies Article, Annotated Code of Maryland; and
 - (2) the cutting or clearing of urban forest or tree canopy is conducted so as to minimize the loss of both;
 - (3) routine maintenance or emergency repairs of public utility rights-of-way licensed under Public Utility Companies, §§7-207 and 7-208 or 7-205, Annotated Code of Maryland;
- (c) any logging or harvesting operation of timber or other wood products that requires a sediment control permit, including any harvesting operation performed on agricultural land or conducted under the forest conservation and management program described

in § 8-211, Tax-Property Article, Annotated Code of Maryland Code, that requires a sediment control permit, unless:

- (1) the property on which the logging or harvesting operation is conducted is not the subject of an application for development within 5 years after the sediment control permit has been issued; and
 - (2) the person performing the logging or harvesting operation has:
 - (A) demonstrated to the satisfaction of the County Forest Conservation Coordinator that the logging or timber harvesting plan is consistent with applicable sustainable forest management guidelines; and
 - (B) received a sediment control permit from the Department of Permitting Services; and
 - (3) the Director of Permitting Services sends a copy of all sediment control permits issued for commercial logging or timber harvesting operations to the Planning Director.
- (d) any non-coal surface mining conducted in accordance with applicable state law.
- (e) any tree determined by a Certified Arborist or Licensed Tree Expert to be in poor condition, diseased, dying or dead, which presents a hazard to human life or property, or causes damage to structures.

Section XX-6, Tree Planting, Transplanting and Replacement Requirements

Objectives. The primary objective of this Section is to retain existing trees. Every reasonable effort should be made to minimize the cutting or clearing of trees and other woody plants during

development, grading and sediment control activities, and implementation of the Tree Conservation Plan.

Sequence of Activities for Canopy Improvement and Protection

- (a) As part of the construction planning process, trees on individual lots and building projects shall be managed as a natural resource under the following sequence:
- a. Pre-construction meetings must take place when the applicant submits an application for a sediment control permit. The applicant must discuss impacts on adjacent properties as well as the Tree Conservation Plan as it relates to water resource codes for Montgomery County.
 - b. When a Tree Conservation Plan is submitted along with a Sediment Control application or building permit, the applicant will identify trees to be retained on-site.
 - c. The Tree Conservation Plan will identify any tree or trees that cannot be preserved on-site during construction activity. Trees deemed worthy of relocation or transplanting will be moved by licensed professionals and replanted within the same neighborhood, community or watershed at the applicant's discretion. Public land and the Right of Way can be identified as candidate areas for relocation.
 - d. When all measures to preserve existing trees in good condition have been exhausted, the applicant may:
 - i. Plant replacement trees on the same lot, or within the same community or watershed in Montgomery County. The Urban Forester may consult with the Maryland-National Capital Parks and Planning Commission and the Department of Environmental Protection or refer

to the County Urban Forestry Plan for recommendations on location options to plant new trees.

Standards for retention, establishing new tree canopy and reforestation

- (a) Tree-protection, tree-save or mitigation is required to compensate for the loss of or disturbance to tree canopy.
- (b) As part of the site planning process, the applicant or representative civil engineer, arborist or licensed tree expert must conduct a preliminary site assessment to determine tree-save options as a requirement before issuance of a Sediment Control Permit, and develop a plan that will be submitted as part of the Sediment Control Application.
- (c) Any tree-save requirement that cannot be met first through the preservation of a tree or trees, or relocation of a tree or cluster of trees, can be met through planting of new trees.
- (d) The Sediment Control Permit Application will include a Tree Conservation Plan to determine tree-save requirements, required total number of trees on a site and tree protection measures for trees to be retained or for appropriate protection of tree root zones on lots adjacent to the building site. The determination shall be made based on the percentage of tree canopy which will require a minimum of one tree on-site for every 5,000 sq. ft. or portion of a 5,000 sq. ft. of lot. If the lot is less than 5,000 sq.ft. then a minimum of one canopy tree shall be required on-site.
- (e) Credit may be issued for retention of existing canopy trees, provided the tree or trees are in good condition. If a mature canopy tree is retained on-site, at least one additional tree will be planted on-site, within the same neighborhood or within the same watershed to compensate for any potential damage to critical root zones of existing trees.

- (f) On commercial building projects, appropriate tree canopy percentage will be established by the Urban Forester in conjunction with the County Planning Department. If an existing commercial site is performing modifications, they may only need a tree conservation plan to address requirements for tree preservation, relocation or replacement.
- (g) The Tree Conservation Plan submitted along with a Sediment Control Application will:
- (1) Be prepared in accordance with technical specifications and site design guidance in the Technical Manual.
 - (2) Provide graphic identification and listing of all tree save areas or individual trees to be preserved and protected during the construction process. Strategies for construction protection are addressed in a technical document to accompany this chapter.
 - (3) Require that all trees to be planted or transplanted shall be on the approved list of native trees.
 - (4) Require planting of native trees that are each a minimum of 2" caliper
 - (5) Include measures for protecting and managing tree-save areas during all phases of construction on the site. As needed and determined by a Certified Arborist or Licensed Tree Expert, measures shall be taken to protect critical root zones of trees on adjacent lots or in the public Right of Way to avoid unintended damage to adjacent trees during construction.
 - (6) Require highly visible designation of tree-save areas demarcated by silt fences and standard signage.
 - (7) Note any variances granted on setback requirements to meet a goal of retaining a tree or trees on-site.

- (8) Note trees designated as creditable stormwater management structures and to be protected during construction.
- (9) Adhere to location requirements. The establishment of tree canopy must occur in the neighborhood and watershed in which the project requiring the permit is located. However, if tree canopy cannot reasonably be established in the same community or watershed in which the project is located, then the tree canopy must be established in an adjacent watershed. Otherwise the tree canopy may be established anywhere in the County. The Urban Forester and staff at the Maryland-National Capital Parks and Planning Commission and Department of Environmental Protection may provide recommendations for targeted off-site planting of trees.

Tree-planting requirements; NOTE: The tables below and replacement/mitigation requirements warrant more research and group discussion in order to develop a formula that will maintain or increase canopy.

CHARTS – SEE SLIDES OR ATTACHMENTS.

CHART FOR TREE REQUIREMENTS ON LOT SIZES OR LOT SIZE RANGES WILL BE ADDED IN HERE

- (h) Trees counted toward credits for stormwater management can include:

A tree or cluster of trees of 16” dbh (each tree) or greater that is saved on-site.

A tree of 1 ½” to 2” dbh or greater that is planted on site, on an adjacent property, or within the right of way abutting the property. For purposes of this ordinance a property across the fronting street from the lot is considered adjacent.

Any tree identified as a tree retention tree on the Sediment Control Plan that is damaged during construction must be replaced under the requirements for planting of new trees and based on the size of the tree damaged.

Article XXX. Enforcement and Inspections .

Inspections and notification.

(a) *Permission to gain access.* Representatives authorized by the Director of Permitting Services or the Planning Director may enter properties subject to this Chapter for the purpose of inspection, review, and enforcement.

(b) *Plan to be on site; field markings.* A copy of the approved limits of tree canopy disturbance, and/or tree conservation plan must be available on the site for inspection by representatives authorized by the Director of Permitting Services. Field markings must exist on site before and during installation of all protective devices, construction, or other land disturbing activities.

(c) *Required inspections.* The Department of Permitting Services, per Chapter 19, must conduct at least 3 field inspections on each site that is subject to an approved limits of tree canopy disturbance or tree conservation plan. The inspections must occur:

- (1) after the limits of disturbance have been staked and flagged, but before any clearing or grading begins;
- (2) after necessary stress reduction measures for trees and roots have been completed and the protection measures have been installed, but before any clearing or grading begins; and
- (3) after all construction activities are completed, to determine the level of compliance with the limits of tree canopy disturbance, limits of forest disturbance, and/or forest conservation plan.

(d) *Other inspections.* The Director of Permitting Services may authorize additional inspections or meetings as necessary to administer this Chapter, including an inspection to confirm a tree conservation plan and delineation of tree-protection areas or limits of canopy disturbance.

(e) *Scheduling requirements.* A person must request an inspection by the Department of Permitting Services at least 7 days before the required date of the inspection under subsection (c).

(f) *Coordination.* The Department of Permitting Services must coordinate its inspections, and any pre-construction conferences, with other agencies involved to avoid inconsistent activities relating to the limits of tree canopy disturbance and/or tree conservation plan and sediment control reviews.

(g) *Release of bond for Sediment Control.* The Sediment Control Bond cannot be returned until trees have been approved and inspected as part of the Tree Conservation Plan and Sediment Control Bond Release Inspection.

Section XX. Effective Date.

Applicants submitting Sediment Control Plans and applications 90 days after the final adoption of this Chapter must comply by including a Tree Conservation Plan noting any tree-save area and graphic representation of tree location for transplanting or new planting.