

## Proposed FRO Changes (5/26/11 DRAFT)

### § 1-21-24. FEE-IN-LIEU PROGRAM.

(A) *Creation and administration.* There is hereby created a Frederick County Forest Conservation Fund that shall be referred to as “fee-in- lieu program,” and which shall accept payments known as “fee-in-lieu payments.” The Department shall administer the fee-in-lieu program.

(B) *Application.* An applicant required by §§ [1-21-41](#) or [1-21-42](#) of this chapter to conduct forestation may make a payment to the fee-in-lieu program in an amount established by resolution of the Board of County Commissioners per square foot of the area of required planting upon determination by the Department, based on the applicant’s demonstration, that forestation or forest mitigation cannot reasonably be accomplished by the applicant on-site or off-site, as provided in § [1-21-40](#).

(C) *Timing of payment.* Money contributed in lieu of forestation under this section shall be paid prior to the release of grading or sediment and erosion control permits, or prior to recordation of subdivision plats, whichever is earlier.

(D) *Expenditure of fees.*

(1) The county shall expend or encumber the fee-in-lieu money ~~within 3 growing seasons after receipt of the money~~ in accordance with subsection (2) and (3) below.

(2) Money contributed under this section:

(a) May be used for forestation, including site identification, acquisition, preparation, and maintenance; for maintenance of existing forests [that are protected by a long term protective agreement as defined in this chapter]; and for achieving urban canopy goals;

(b) Shall be deposited in a separate fee-in-lieu account; and

(c) Shall not revert to the General Fund and shall not be used to administer the forest banking program, but may be used to purchase forest banking credits.

(3) Sites for forestation using fee-in-lieu money will be sought in the county and watershed in which the original project is located. If this cannot be reasonably achieved, the monies may be used to accomplish forestation anywhere in the county or the state or to buy forest banking credits.

(Ord. 01-20-294, 9-25-2001; Ord. 09-26-530, 9-29-2009)

## **§ 1-21-25. GUARANTEES FOR FOREST IMPROVEMENTS.**

(A) *Required guarantees.* Persons required to conduct forest improvements and maintenance thereof under this chapter shall furnish to the Department for its approval a cost estimate (plus 15% contingency) for the completion of the required improvements under the Forest Improvement and Protection Agreement (FIPA). If the cost estimate equals or exceeds \$1,000, the applicant shall provide to the county a financial guarantee in the form of a cash escrow, an irrevocable letter of credit, or other surety approved by the Board of County Commissioners and the County Attorney's office. The guarantee shall be retained by the county to assure that the forest improvements under the FIPA are conducted and maintained in accordance with this chapter and the approved final forest conservation plan.

(B) *Return of guarantees.*

(1) To be eligible for partial or full return or release of financial guarantees, a substantial amount of living seedlings/trees must exist in forest easement areas for the duration of the FIPA maintenance period. The determination of "substantial amount of living seedlings/trees" shall be made by Department inspectors, with consideration of the stocking and survival rates prescribed in § [1-21-43](#)(D) and (E). The seedlings/trees must meet or exceed the standards of the technical manual, or this chapter, whichever applies.

(2) For development projects requiring a 2-year FIPA (per § [1-21-10](#)) the following provisions shall apply:

(a) For projects requiring only protective fencing and/or signage, but no forestation; and for which the required improvements have been erected by the applicant and approved by Department inspectors, 50% of the financial guarantee may be returned or released upon approval by the Department inspectors. If the protective features remain in good repair for the duration of the forest improvements and protection agreement (FIPA), the remaining 50% shall be returned or released when the applicant has fulfilled all of the requirements of the FIPA.

(b) For projects requiring 1" or 2" caliper tree planting, 50% of the financial guarantee may be returned or released after 1 complete growing season if the conditions of § [1-21-25](#)(B)(1) are met. If after 2 complete growing seasons the conditions of § [1-21-25](#)(B)(1) are met, the balance of the guarantee shall be returned.

(3) For development projects requiring a 3-year FIPA (per § [1-21-10](#)):

(a) If after 1 complete growing season the required forestation or regeneration area meets the conditions of § 1-21-25(B)(1), 25% of the amount of any guarantee that has been posted shall be returned or released;

(b) If after 2 complete growing seasons the forestation or regeneration area meets the conditions of § 1-21-25(B)(1), an additional 25% of the guarantee shall be returned or released;

(c) If after 3 complete growing seasons the forestation or regeneration area meets the conditions of § 1-21-25(B)(1) the balance of the guarantee shall be returned or released.

(4) For projects containing existing forest retention, forestation, or a combination of retention and forestation, 50% of the financial guarantee requirement for tree planting, fencing, and signage may be waived if the following conditions are met prior to the submittal of the required protective agreements outlined in § 1-21-10;

(a) Tree planting, fencing, and signage is installed in accordance with the approved forest conservation plan, and

(b) The installation of trees, fencing, and signage is inspected and approved by the Department inspectors, and

(c) A copy of the inspection report is supplied with the submittal of the protective agreements outlined in § 1-21-10.

(5) For projects utilizing the 50% reduction outlined in (4) above;

(a) For development projects requiring a 2-year FIPA (per § 1-21-10), the financial guarantee shall be returned or released when the applicant has fulfilled all of the requirements of the FIPA. Partial releases during the FIPA period are not permitted.

(b) For development projects requiring a 3-year FIPA (per § 1-21-10) the financial guarantee shall be returned or released when the applicant has fulfilled all of the requirements of the FIPA. Partial releases during the FIPA period are not permitted.

(Ord. 01-20-294, 9-25-2001; Ord. 07-25-465, 7-19-2007)

## **§ 1-21-29. FOREST BANKING PROGRAM.**

(A) *Creation and purpose.*

(1) *In general.* The Frederick County Forest Banking Program allows a person to create new forest areas or designate certain existing forest areas to be held in reserve (or “banked”), in order to be used to meet future forestation requirements imposed on regulated activities by this chapter.

(2) *Definitions.*

**EXISTING FOREST.** Forest that:

1. Meets or exceeds the definition of “standard forest density” provided in § [1-21-5](#) when the forest banking applicant submits a forest conservation plan; or

2. Met or exceeded the standard forest density at any time in the 5 years prior to the submission of the forest conservation plan, and that was subject to either an agricultural or a commercial forestry declaration of intent.

**NEW FOREST.** Forest newly created on land that does not meet the definition of “standard forest density” at the time the forest banking applicant submits a forest conservation plan, and that was not the subject of forest cutting subject to either an agriculture or commercial forestry declaration of intent within the last 5 years.

(B) *Forest banking areas.* Only the following target areas may be admitted into the forest banking program:

(1) New or existing forests that provide buffers for streams, creeks, floodplains, wetlands or other hydrologically-sensitive areas on lands that either are zoned Agriculture or in the judgment of the Department are primarily in bona fide agricultural use, as defined by the Frederick County Zoning Ordinance, [Chapter 1-19](#). The extent of the forest buffers acceptable for inclusion in the forest banking program shall be the largest allowed by the following, unless otherwise approved by the Department for reasons pertaining to ecological benefit or improvement:

(a) Where floodplain(s) exist, forest buffers shall be limited to 25 feet outside of the floodplain(s).

(b) Where no floodplain(s) exist, forest buffers shall be limited to 100 feet in width on each side of a stream bank.

(c) Where moderate slopes of 15% or more are immediately adjacent to hydrologically- sensitive area(s), forest buffers shall be limited to the extent of the steep slopes within the area that is 200 feet in width on each side of a stream bank or hydrologically-sensitive area.

(d) Where steep slopes of 25% or more are immediately adjacent to hydrologically-sensitive area(s), forest buffers shall be limited to the extent of the steep slopes within the area that is 500 feet in width on each side of a stream bank or hydrologically-sensitive area.

(2) Existing forest that is critical habitat for threatened or endangered plant or sedentary animal species. Determination of the presence of threatened or endangered species shall be made by the Department of Natural Resources.

(3) Other areas that are:

(a) Water re-charge zones for municipal or county public water supplies as designated by bona fide hydrological studies, or are listed in § [1-21-40](#)(B) of this chapter;

(b) Not owned by a municipality or other local, state or federal governmental entity;

(c) Not otherwise substantially protected by either this chapter or the Frederick County Zoning Ordinance requirements; and

(d) Of such significance that loss of forest or the lack of creation of forests on such areas would cause a deleterious effect on the health, safety and welfare of the citizens.

(4) For all subsection (B)(3), the first 50 acres shall be credited at a 1:~~2.5~~ 2 ratio, as described in subsection (E) of this section. For all areas that exceed 50 acres, the mitigation ratio shall be 1:4, meaning that for every 1 acre of required forestation, 4 acres of off-site, existing forest must be protected and conserved. In no case shall the total acres of such an application exceed 200 acres.

(5) All applications under this subsection (B) shall provide substantial protection of substantially all of the target areas on a parcel or a set of contiguous parcels owned by the applicant, unless otherwise approved by the Department or the Planning Commission for reasons pertaining to ecological benefit or improvement, other hydrological protection measures implemented by other governmental programs, accommodation of existing farm buildings and residences, or drinking water access for grazing animals. The requirements of "substantial protection" shall be determined by the Department. Applications that offer protection of only unserviceable or unusable areas for inclusion in the banking program, but omit other substantial target areas, such as stream buffers, within a subject parcel or set of contiguous parcels owned by the applicant, shall not be accepted into the banking program.

(C) *Administration.* The Department shall administer the forest banking program, review for approval all forest conservation plans, and keep records of all forest banking sites and any transfers of forest bank credits from one person to another. The Department shall review and have the authority to approve all credit transfers for compliance with forest banking area requirements. The Department shall perform all site inspections as required herein, and as described in § [1-21-20](#), and shall administer required financial guarantees associated with approved forest conservation plans.

(D) *Conditions of approval.* For a potential forest banking site to be accepted into the Frederick County Forest Banking Program, all the conditions set forth below must be satisfied.

(1) *Forest conservation plan.* The forest banking applicant shall submit a forest conservation plan for review and approval by the Department.

(2) *Standards and specifications.*

(a) To create “new forest,” the applicant must follow forestation specifications and standards provided in the technical manual or this chapter, including (but not limited to) species selection, control of exotic species, and stocking/survival ratios.

(b) For approval of “existing forest,” the applicant must demonstrate that the forest ecosystem is in a healthy condition, or provide remedial measures to bring the forest into a healthy condition, such as providing eradication measures to control invasive, exotic species.

(3) *Legal documents and financial guarantees.* The applicant shall execute and submit to the Department all necessary documents and financial guarantees as follows:

(a) A long-term protective agreement, as described in § [1-21-10](#);

(b) A short-term protective agreement (a Forest Improvements and Protection Agreement (FIPA)), as described in § [1-21-10](#) and any associated, required financial guarantee, as described in § [1-21-25](#); and

(c) A forest banking agreement that describes the rights and obligations of the banking applicant with regard to the forest easement credit transfers.

(4) *Site inspection.* Before the Department approves a transfer or use of forest banking credits, the Department shall verify from the Department inspector’s site review that the conditions of the approved final forest conservation plan have been met with regard to establishment of protective features and planting specifications; and that any:

(a) “Existing forest” meets the definition of “standard forest density,” or is covered by an acceptable financial guarantee, as provided in § [1-21-25](#);

(b) “New forest” has been planted, and either:

1. Has matured to meet the definition of “standard forest density;” or

2. Is covered by an acceptable FIPA and a financial guarantee, as provided in § [1-21-25](#); has been planted in accordance with the final forest conservation plan; and has been inspected and approved by Department inspectors.

(5) *Financial agreements.* Any financial agreements between persons regarding approved forest bank transfers shall occur solely as a private transaction. Neither the Department nor the county shall become a party to the financial aspects of any transfers.

(6) *Official notification of credit transfer.* Both the grantor and grantee of any forest credit transfer shall notify the Department in writing of the agreement to transfer forest credit using forms approved by the Department.

(E) *Credit ratios.* Forest bank transfers of:

(1) “Existing forest” shall be credited at a 1:~~2.5~~2 ratio, meaning that for every 1 acre of required forestation, ~~2.5~~2 acres of existing forest must be acquired;

(2) “New forest” shall be credited at a 1:1 ratio, meaning that for every 1 acre of required forestation, only 1 acre of new forest must be acquired.

(F) *Species diversity requirements.* The acres of existing forest combined with new forest shall meet the species diversity requirements stipulated in § 1-21-43(B)(2).

(Ord. 07-25-465, 7-19-2007)

## **§ 1-21-30. PLANS IN GENERAL.**

(A) *Plan applications.* Applicants shall submit all plans on department-approved application forms and applicable fees. Applications shall be valid for 3 years after submission. Thereafter, the applicant must resubmit with new application forms and fees.

(B) *Period of validity.* Subject to the limitations of the forest stand delineation approval period outlined in § 1-21-34(C), all forest conservation plans approved and signed by department representatives shall be valid for a period of 5 years or the duration of the adequate public facilities approval for the development project, whichever is greater, unless vested by execution of the short-term protective agreement described in § 1-21-10(A) and the long-term protective agreement described in § 1-21-10(B).

(C) *Required submissions and permitted combinations.*

(1) Three sequential submissions are required:

(a) A forest stand delineation (FSD);

(b) A preliminary forest conservation plan (PFCP); and

(c) A final forest conservation plan (FFCP), which includes any required legal documents and financial guarantees for forest retention or forest improvements.

(2) The first 2 submissions (the FSD and PFCP) may be submitted simultaneously as a combined submission for all activities regulated under this chapter.

(3) For:

(a) All minor subdivisions;

(b) Site plan projects that comprise not more than 50 acres; and

(c) Grading or sediment and erosion control permits that comprise not more than 50 acres,

(4) All 3 forest plan submissions may be submitted as a “combined delineation and preliminary/final forest conservation plan.” A “combined delineation and preliminary/final forest conservation plan” shall contain all requirements of the FSD, PFCP, and FFPC.

(D) *Specifications and standards.* All forest stand delineations and all preliminary and final forest conservation plans shall follow specifications and standards of performance as provided in the technical manual and as provided in this chapter, with respect to protecting retained forests and trees during construction, and with respect to planting trees, shrubs, and new forest areas. In the case of conflict, this chapter prevails over the technical manual.

(E) *Requirements of plan preparers.*

(1) Except as noted below in this subsection, licensed foresters, licensed landscape architects, or qualified professionals who meet the requirements stated in COMAR 08.19.06.01 must prepare all required forest stand delineations and all preliminary and final forest conservation plans.

(2) Maryland licensed surveyors or other individuals, who by a combination of relevant work experience and education meet the general level of expertise as expressed in COMAR 08.19.06.01, as determined by the Department, may prepare required forest plans for:

(a) All minor subdivisions; and

(b) Site plan projects and major subdivisions that:

~~1. Are not in areas zoned PUD, MXD, PDR or PDE;~~

21. Do not require a full forest stand delineation as determined by the technical manual standards; and

32. Comprise not more than 50 acres.

(3) All persons may submit simplified forest stand delineations, worksheets, and forest conservation plans for site plan or subdivision development projects, provided that:

(a) The submissions are accompanied by a site plan or subdivision plan prepared in accordance with the zoning or subdivision ordinances, as appropriate;

(b) There is no existing forest or shrub cover on the subject tract;

(c) The tract does not include any priority areas; and

(d) The applicant proposes to mitigate any forestation requirements through either the forest banking program or the fee-in-lieu program.

(4) All persons, including the applicant, may submit information showing that this chapter does not apply to certain development projects or that a project is exempt under §§ [1-21-6](#) or [1-21-7](#) of this chapter.

(F) *Use of state funds.* If a local agency or person using state funds makes application to conduct a regulated activity, the provisions of COMAR 08.19.04.01 D-G, shall apply.

(Ord. 01-20-294, 9-25-2001; Ord. 07-25-465, 7-19-2007; Ord. 08-22-498, 8-6-2008; Ord. 10-26-561, 11-9-2010)

## **§ 1-21-31. FOREST STAND DELINEATION.**

(A) *Timing of submissions.*

(1) A forest stand delineation (“FSD”) shall be used during the initial review process to determine the most suitable and beneficial areas for forest conservation. Except as provided in subsection (A)(2) of this section, an FSD shall be submitted simultaneously with the first submission of a development project, whether it be a MXD, PDR, or PDE Phase I Plan, a PUD Phase II Plan, a cluster concept plan, a co-housing plan, preliminary subdivision plan, a site plan, or a grading permit application, but before a sediment and erosion control application is submitted for the tract or development project in question.

(2) Exceptions:

(a) *Septic testing.* In subdivisions classified for individual well and septic service, an applicant may submit for septic percolation testing simultaneously with a partial FSD showing the existing forest canopy line and other environmental features required by the Frederick County Subdivision Ordinance ( [Chapter 1-16](#)) or Zoning Ordinance ( [Chapter 1-19](#)), provided that the applicant shall:

1. Protect all historic, champion, and specimen trees; habitats for threatened and endangered species; and hydrologically-sensitive areas during the septic testing process;

2. Not remove 40,000 square feet or greater of forest; and

3. Submit normal FSD information that includes forest canopy conditions prior to removal for septic testing, before proceeding beyond septic testing.

(b) *Survey lines.* A licensed surveyor may cut trees if necessary to see property or other required survey information, provided that the applicant shall:

1. Protect all historic, champion, and specimen trees; habitats for threatened and endangered species; and hydrologically-sensitive areas during surveying; and

2. Submit normal FSD information if 40,000 square feet or greater of forest area is cut, even if no development project is proposed.

(c) *Geotechnical testing.* An applicant may perform geotechnical testing with a partial FSD showing the existing forest canopy line and other environmental features required by the Frederick County Subdivision Ordinance ( Chapter 1-16) or Zoning Ordinance ( Chapter 1-19), provided that the applicant shall:

1. Protect all historic, champion, and specimen trees; habitats for threatened and endangered species; and hydrologically-sensitive areas during the testing process;

2. Not remove 40,000 square feet or greater of forest; and

3. Submit normal FSD information that includes forest canopy conditions prior to removal for testing, before proceeding beyond testing.

(B) *Required information, in general.*

(1) The FSD shall be prepared at 1 of 3 levels, namely, “full,” “intermediate,” or “simplified.” The criteria for determining which level applies to a development project and the requirements for each level shall be governed by the technical manual, unless this chapter provides otherwise.

(2) All FSDs shall contain the following components:

(a) A topographic map delineating intermittent and perennial streams and steep slopes over 25%;

(b) A soils map delineating soils with structural limitations, hydric soils, or soils with a soil K value (erodibility factor) greater than 0.35 on slopes of 15% or more;

(c) Forest stand maps at an appropriate level of detail (as listed in subsection (B)(1) of this section) based upon the criteria set forth in the technical manual or this chapter, whichever is more stringent;

(d) One hundred year floodplains as described in the flood insurance rate maps published by the Federal Emergency Management Agency and all floodplains listed in the Frederick County Zoning Ordinance, § [1-19-9.100](#), as amended, verified by field inspection;

(e) Locations of exotic, invasive plant infestation;

(f) Locations of historic, champion, and specimen trees; and

(g) Other information the Department determines is necessary to implement this chapter.

(C) *Effective period.* An approved FSD is presumed to remain valid for a period of 5 years absent significant change to the site. The Department may re-approve an FSD for an additional period of time.

(D) *Review deadline.*

(1) Within 30 calendar days after receipt of the forest stand delineation (FSD), the Department shall notify the applicant at its regularly scheduled Technical Advisory Committee meeting or by mail as to whether the FSD is complete and correct. If the applicant is not notified, the FSD shall be treated as complete and correct.

(2) The Department may require further information or extend its time for review and notification for an additional 15 calendar days under extenuating circumstances.

(Ord. 01-20-294, 9-25-2001; Ord. 08-26-502, 10-14-2008; Ord. 10-26-561, 11-9-2010)

#### **§ 1-21-40. CONSERVATION AND FORESTATION PRIORITIES.**

(A) *In general.* In the implementation of any subdivision or development project, priority shall be given:

(1) First, to conservation of existing on-site forest areas according to the sequence listed in subsection (B) of this section;

(2) Second, to forestation of on-site areas according to the sequence listed in subsection (C) of this section;

(3) Third, to forestation or mitigation off- site according to the sequence listed in subsection (D) of this section.

(B) *Priority areas for on-site conservation.*

(1) Trees, shrubs, and plants in priority areas shall be retained and protected and shall be left in an undisturbed condition. The applicant must demonstrate to the satisfaction of the Department that reasonable efforts have been made to protect them and that the plan cannot reasonably be altered. Priority areas include:

(a) Hydrologically-sensitive areas, including the 100 year floodplain and all other floodplains listed in the Zoning Ordinance, § [1-19-9.100](#), as amended; streams and their buffers; steep slopes (25%) contiguous to or within 50 feet of hydrologically- sensitive areas; and wetlands;

(b) Forest segments that connect large forested or heavily vegetated tracts of land within or adjacent to the site;

(c) Areas that contain trees, shrubs, or plants identified as rare, threatened, or endangered under the Federal Endangered Species Act of 1973 in 16 U.S.C. §§ 1531-1544 and in 50 CFR 17, or under COMAR 08.08.08;

(d) Critical habitat areas for sedentary animal species; identified as threatened, endangered or in-need-of-conservation under the Maryland Nongame and Endangered Species Conservation Act, Md. Code Ann., Natural Resources Article, §§ 10-2A-01 through 10-2A-09.

(e) Nonhazardous trees that:

1. Are part of a historic site;
2. Are associated with a historic structure;
3. Have been designated by the state or the Department as a national, state, county, or municipal champion tree; and
4. Are specimen trees, or are 75 percent or more of the diameter, measured at 4.5 feet above the ground, of the current state champion tree of that species as designated by the Department of Natural Resources.

(2) Any of the priority areas listed in subsection(B)(1) of this section that are not retained shall be deemed a modification requiring approval under § [1-21-21](#) of this chapter, unless the exception is authorized by § [1-19-9.110](#), as amended, of the Zoning Ordinance.

(3) The following trees or forested areas shall be retained and protected unless the applicant has demonstrated to the satisfaction of the Department that reasonable efforts have been made to protect them and the plan cannot reasonably be altered:

(a) Forest areas that buffer significantly noncompatible land uses, such as industrial and residential, as determined by the Department; and

(b) Other forested areas that because of their size, location, species composition, or quality are deemed by the Department as being worthy of conserving permanently.

(C) *Priority sequence for on-site forestation.* After every reasonable effort to minimize the cutting and clearing of trees and other woody plants in on-site priority areas listed in § [1-21-40\(B\)](#) has been exhausted, the following areas shall be considered the priority sequence for on-site forestation:

(1) Buffers adjacent to intermittent and perennial streams to widths of at least 50 feet from stream banks;

(2) Areas in 100 year floodplains and all other floodplains listed in the Zoning Ordinance, § [1-19-9.100](#);

(3) Corridors to connect existing forests within or adjacent to the development site with a minimum width of 300 feet where practical to facilitate wildlife movement;

(4) Buffers adjacent to critical habitats where appropriate;

(5) Slopes of 25% or greater and slopes of 15% or greater with a soil K value greater than 0.35, including the slopes of ravines or other natural depressions;

(6) Buffers between differing land uses that are deemed to be noncompatible by the Department or buffers adjacent to highways; and

(7) Lands adjacent to existing forests to increase the overall area of contiguous forest cover, when appropriate.

(D) *Priority sequence for forestation or mitigation off-site.* After every reasonable effort has been made to minimize the clearing of trees and other woody plants in on-site priority areas listed in § [1-21-40\(B\)](#), and after every reasonable effort has been made to afforest or reforest priority areas listed in § [1-21-40\(C\)](#), the following shall be considered the priority sequence for forestation or mitigation off-site:

(1) Purchase of credits through the Frederick County Forest Banking Program;

(2) Forestation of hydrologically-sensitive areas, preferably in agriculturally zoned or used land;

(3) Protection of existing off-site forest at a 1:~~2.5~~2 ratio, as provided in subsection (G) of this section, in areas closely associated with streams, wetlands, or floodplains, preferably in agriculturally zoned or used land, when such land is not already substantially protected by the Zoning Ordinance or other long-term protective instruments in perpetuity; and

(4) Payment into the fee-in-lieu program.

(E) *Flexibility of priorities.* A sequence other than the one described in subsections (C) and (D) of this section may be used for a specific project, if necessary, to achieve the objectives of the County Comprehensive Plan or county land use policies or to take advantage of opportunities to consolidate forest conservation efforts.

(F) *Minimum forest areas.*

(1) Forest areas to be retained or created by means of forestation shall be a minimum of 10,000 square feet and shall be at least 35 feet wide. Disjointed or noncontiguous forest areas shall be used only when more continuous forest areas cannot be practically preserved or created, as determined by the Department.

(2) Forest areas that utilize miscellaneous credits as provided in § [1-21-44](#) shall be a minimum of 2,500 square feet for each area, except for individual trees in nonforested areas, which may be credited on a tree-by-tree basis.

(G) *Off-site existing forest mitigation.* When off-site existing forest is used to mitigate forestation requirements, the applicant must mitigate at a 1:~~2.5~~ 2 ratio, meaning that for every 1 acre of required forestation, ~~2.5~~ 2 acres of off-site existing forest must be protected and conserved.

(H) *Easement restrictions.* No FRO easements (long-term protection) shall be allowed:

(1) Over septic areas or wells; or

(2) On lots less than 40,000 square feet. However, forest in these areas may be protected as “tree save area,” as provided in § [1-21-44](#).

(Ord. 01-20-294, 9-25-2001; Ord. 08-26-502, 10-14-2008; Ord. 09-26-530, 9-29-2009)

#### **§ 1-21-41. AFFORESTATION AND AFFORESTATION THRESHOLD.**

(A) *Definitions restated.* **AFFORESTATION** under this section means the planting of trees where no or little forest exists on-site, in order to meet the afforestation thresholds. **AFFORESTATION THRESHOLD** means the percentage of a net tract area up to which establishment of forest is required if the existing forest area is less than the threshold, as determined by the land use category.

(B) *Applicability.* A person making application for a regulated activity subject to this chapter, excluding those development projects listed in subsection (C) of this section, shall comply with the afforestation requirements provided in this section.

(C) *Exceptions.* Afforestation requirements shall not apply to the following.

- (1) Utility and linear projects that involve no change in land use.
- (2) Those portions of residential subdivision lots over 3.0 acres, in which:
  - (a) A pre-existing agricultural or open space land use will remain unchanged for a period of at least 5 years; and
  - (b) The area over 3.0 acres is approved by the Department.

~~—(D) Afforestation requirements. A tract or development project having less than 20% of the net tract area in forest cover shall be afforested to at least 20% of the net tract area~~

~~-(D) Afforestation requirements. Afforestation on a tract or development project shall be in accordance with the following requirements:~~

~~(1) A tract or development project having less than 20% of the net tract area in forest cover shall be afforested to at least 20% of the net tract area for the following zoning categories:~~

~~(a) Agriculture;~~

~~(b) Resource Conservation; and~~

~~(c) R-1 Residential.~~

~~(2) A tract or development project having less than 15% of the net tract area in forest cover shall be afforested to at least 15% of the net tract area for the following zoning categories:~~

~~(a) Institutional uses in any zone;~~

~~(b) R-3, R-5, R-8, R-12, R-16 residential zones and mobile home parks;~~

~~(c) Mixed use and planned development zones; and~~

~~(d) Commercial and industrial use zones.~~

(E) *Forest removal below afforestation thresholds.* Replacement requirements for removal of forest, even if below the afforestation threshold, are addressed in the reforestation formulas listed in § [1-21-42\(D\)\(3\)](#) and applicants do not need to calculate replacement values separately under this section.

(Ord. 01-20-294, 9-25-2001; Ord. 07-25-465, 7-19-2007; Ord. 09-26-530, 9-29-2009)

**§ 1-21-42. REFORESTATION AND CONSERVATION THRESHOLD.**

(A) *Applicability.* A person making application for a regulated activity under this chapter (including utility and linear projects) shall comply with the reforestation requirements provided in this section. Required reforestation shall be incorporated into the Final Forest Conservation Plan (FFCP). Reforestation per the FFCP shall be accomplished in accordance with the priorities listed in § 1-21-40(C) and (D).

~~(B) *Calculation of requirements.* There shall be two methods to calculate reforestation requirements. The method that results in the more stringent requirement shall be used. The first method shall require a 1:1 replacement — meaning for every one acre of forest removed, one acre must be planted. The second method shall be the method of calculating reforestation requirements described in subsection 1-21-42(C). This method shall be called the "Standard Method".~~

~~(C)~~ B *Definitions restated for the Standard Method.* **REFORESTATION** under this section means the planting of trees to replace forest that has been recently or is proposed to be removed by development. **CONSERVATION THRESHOLD** means the percentage of the net tract area at which the reforestation requirement changes from a ratio of one-quarter acre planted for every 1 acre removed to a ratio of 2 acres planted for every 1 acre removed according to the land use categories as listed below:

| <i>Category of Use</i>   | <i>Threshold Percentage</i> |
|--|-----------------------------|
| (1) Agricultural and Resource Conservation Zones, except for cluster developments therein which shall utilize R-1 values   | 50                          |
| (2) R-1 Residential zoned areas  | 25                          |
| (3) Institutional use areas in any zone  | 20                          |
| (4) R-3, R-5, R-8, R-12, R-16 and Mobile Home Park zoned areas   | 20                          |
| (5) Mixed Use and Planned Unit Development, Planned Development Residential and Planned Development Employment zoned areas | 15                          |
| (6) Commercial and Industrial Use zoned areas  | 15                          |

Required reforestation under the Standard Method shall be calculated according to the formulas provided in subsection ~~(D)~~ C of this section.

~~(D)~~ C *Calculations for the Standard Method.*

(1) For all existing forest cover cleared on the net tract area above the applicable conservation threshold established by subsection (A) of this section, the area of forest removed shall be reforested at a ratio of one quarter acre planted for every acre removed.

(2) For all existing forest cover cleared on the net tract area below the applicable conservation threshold, the area of forest removed shall be reforested at a ratio of 2 acres planted for each acre removed.

(3) For each acre of forest retained on the net tract area above the applicable conservation threshold, credit shall be given against the total number of acres required to be reforested under subsection (D)(1) of this section.

**(E D)** *Accuracy Standards.* All calculations of reforestation requirements shall be calculated to the nearest one-hundredth acre and shall be in accordance with the worksheet provided in the Technical Manual and approved by the Department. However, forest field measurements may be measured to the nearest one-tenth acre.

(Ord. 01-20-294, 9-25-2001; Ord. 07-25-465, 7-19-2007; Ord. 10-26-561, 11-9-2010)

#### **§ 1-21-44. MISCELLANEOUS CREDITS.**

(A) In general. After all on-site priority areas listed in § [1-21-40](#)(B)(1) have been or are shown to be covered by long-term protective agreements, the following types of forest/tree categories may be used at various ratios as specified in this chapter toward meeting forest requirements as part of a final forest conservation plan:

(1) Bio-retention stormwater management ponds and rain gardens that contain native trees and shrubs; and

(2) Certain tree and shrub canopy area.

(B) *Requirements for stormwater management ponds and rain gardens.* The area(s) of canopy cover (projected at a 20-year growth rate) of bio-retention stormwater management ponds and rain gardens may be used at a 1:1 ratio, and shall meet the following criteria:

(1) Tree and shrub density shall meet or exceed any of the various stocking and planting ratios described in § [1-21-44](#)(D).

(2) The area is protected in a stormwater agreement that is protected under a long-term management agreement.

(C) *Eligible types of tree or shrub canopy area.* The canopy area of the following types of trees or shrubs may be used at a 1:1/4 ratio, meaning that for every one acre of canopy area, .25 acres of credit may be given toward meeting forestation requirements:

(1) Proposed native landscaping or street trees not in forest settings at their expected 20 year growth. The standard canopy area for each landscape and street tree planted shall be calculated at a diameter of 30 feet unless otherwise approved by the Department.

(2) Existing trees and shrubs that are healthy and structurally sound are designated as “tree save area” in forest conservation plans; and meet any of the following criteria:

(a) Individual trees and shrubs associated with historic places;

(b) Specimen and champion trees not part of a forest setting; or

(c) Forest areas that are not part of priority areas that are counted as “removed/cleared” forest for purposes of worksheet calculations.

~~(D)~~ *Required protection.* The trees and forest areas listed in subsection (A) of this section shall be required to be protected by short-term protective agreements, as provided in §§ [1-21-10](#) and [1-21-34](#), but shall not be subject to long-term protective agreements.

~~(E)~~ *Credit ratio.* Trees and forest authorized to receive miscellaneous credits shall be given credit for only one-quarter of the canopy area toward fulfillment of forestation requirements.

~~(F)~~ *Required protection of tree and shrub canopy area.* The trees and forest areas listed in subsection (C) of this section shall be required to be protected by short-term protective agreements, as provided in §§ [1-21-10](#) and [1-21-34](#), but shall not be subject to long-term protective agreements.

~~(G)~~ *Limitations in the use of miscellaneous credits.* Miscellaneous credits used in a development project shall not account for more than 25% of the total reforestation requirements of a tract or development project. Miscellaneous credits may be used to meet up to 100% of any afforestation requirement, subject to meeting the requirements of (A) through (F) above.

(Ord. 01-20-294, 9-25-2001; Ord. 07-25-465, 7-19-2007)

## **§ 1-21-51. SITE WORK, IN GENERAL.**

(A) *Preconstruction meeting.* Before cutting, clearing, grading, or construction begins on a tract or development project for which a final forest conservation plan (FFCP) is required by this

chapter, the applicant shall demonstrate to the Department inspector that the protective devices for retained forest and trees have been erected in accordance with the FFCP; and a preconstruction meeting shall be held on- site with a Department inspector.

(B) *Restriction on site clearing.* Excepting the cases of septic percolation testing, geotechnical analysis, and survey lines as provided in § [1-21-31](#)(A)(2), if a forest conservation plan is required by this chapter for a tract or development project, a person may not cut, clear, or grade on the development site until the Department has approved the FFCP or provided written agreement to proceed with tree cutting, or the person will be in violation of this chapter.

(C) *Work completion.* Initial planting and erection of protective forestation devices required by the FFCP must be completed within 1 year or 2 growing seasons, whichever is greater, following completion of final site grading.

(D) *Correcting soil compaction.* Any area to receive planting that has been compacted by construction activity or machinery shall have the compacted soil mitigated so that normal root growth and plant development may occur.

(Ord. 01-20-294, 9-25-2001; Ord. 07-25-465, 7-19-2007)