



FREDERICK COUNTY GOVERNMENT
DIVISION OF PLANNING & PERMITTING

Jan H. Gardner
County Executive

Steven C. Horn, Division Director

To: County Council

Through: Jan H. Gardner, County Executive

From: Steven C. Horn, Planning & Permitting Director

Date: June 26, 2017

Subject: Amendments to Chapter 1-21 of the Frederick County Code (Forest Resource Ordinance)

ISSUE:

Should the County Council adopt amendments to Chapter 1-21 of the Frederick County Code (Forest Resource Ordinance)?

BACKGROUND:

The proposed amendments to the Forest Resource Ordinance (FRO) will increase forest conservation efforts, update definitions and agency names, and add clarifying language to various sections of the Code.

ANALYSIS:

Twelve subsections of the FRO are proposed to be amended (as outlined in Table 1). Changes to six of the twelve subsections are non-substantive changes that address existing inconsistencies within the FRO and update agency names. These minor changes are briefly discussed in Table 1 under item numbers 1-5 and 8.

The remaining changes are more substantial in nature and warrant further explanation. The goal of these amendments is to reduce forest clearing, increase the amount of new forest being planted, and restore the mitigation ratio for forest banking credits. Most of these changes will restore the Code language that was established in 2007 by Ordinance 07-25-465 and subsequently removed from the Code in 2011 by Ordinance 11-19-585.

1-21-29: Forest Banking Program

Amendment of this Code section is limited to changing the ratio for utilizing existing forest banking credits from 2:1 to 2.5:1. Under the current law, when existing forest banking credits are used to meet a FRO mitigation requirement the purchaser must obtain 2 acres of existing forest credit for each acre of mitigation that is owed. This 2:1 ratio is the state's minimum requirement. Under the proposed 2.5:1 ratio, 2.5 acres of credit is required for each acre of mitigation that is owed.

The 2.5:1 mitigation ratio was established by the County in 2001 and was reduced to the current 2:1 ratio by Ordinance 11-19-585 in 2011. This reduction in the mitigation ratio has resulted in two negative consequences:

1. Certain property owners entered the Forest Banking Program with the expectation that they would be selling their credits at a 2.5:1 ratio. The reduction of the mitigation ratio to 2:1 has increased the time and number of transactions that are required to sell the credits they have created. Forest Bank owners have invested time, money, and labor to establish their credits and the reduction of the mitigation ratio has resulted in delaying the return on their investment.
2. The reduction of the mitigation ratio has resulted in a significant decrease in forest conservation. Since FY2012, 65 development projects have utilized 207 acres of existing forest credit to meet FRO mitigation requirements at the 2:1 mitigation ratio. If the 2.5:1 ratio was in place during this period, 259 acres of existing forest credit would have been utilized. This increase would have benefited the property owners who are enrolled in the Forest Banking program and would have resulted in 52 acres of additional forest conservation. The 52 acres of credit would have provided \$234,000 of income to forest bank owners, many of whom are farmers. The additional 52 acres of mitigation would have increased mitigation costs by an average of \$3,600 per development.

Restoring the 2.5:1 ratio will increase forest conservation efforts, provide additional income to the private property owners enrolled in the Forest Banking Program, and incentivize new enrollment in the Forest Banking Program, while adding minimal costs to development projects.

1-21-31: Forest Stand Delineation: Exemption for Geotechnical Testing

Prior to the 2011 FRO Ordinance, this Code section allowed limited impact to forest for septic testing and survey lines prior to receiving approval of a Forest Conservation Plan. The 2011 Ordinance added geotechnical testing. Changes to this Code section are limited to reducing the 40,000 square foot clearing limitation to 20,000 square feet and adding language that clarifies the requirement to submit a Forest Conservation Plan immediately after geotechnical testing. This change is consistent with other sections of the FRO that limit forest clearing activities to 20,000 square feet prior to submitting a Forest Conservation Plan.

1-21-40(B): Conservation and Forestation Priorities

Changes to this Code section are limited to changing the ratio for utilizing existing off-site forest from 2:1 to 2.5:1 and adding language that restricts the placement of a FRO easement over land that is already encumbered by a land preservation easement.

Under the current law, when existing off-site forest is used to meet a FRO mitigation requirement, the developer must place 2 acres of forest in easement for each acre of mitigation that is owed. This 2:1 ratio is the state's minimum requirement. Under the proposed 2.5:1 ratio, 2.5 acres of existing off-site forest is required for each acre of mitigation that is owed. This 2.5:1 mitigation ratio was established by the County in 2001 and was reduced to the current 2:1 ratio in 2011 by Ordinance 11-19-585. This change is consistent with the proposed change to Section 1-21-29 (Forest Banking Program). Increasing the ratio by 0.5 will increase the conservation of existing

forest with very minimal additional cost to development projects. Land used for off-site mitigation is typically owned by the developer and the costs associated with placing 2.50 acres of forest under easement versus 2.0 acres are negligible. Areas of off-site forest used for mitigation are generally stream valleys, wetlands, and floodplains that are of little benefit except for environmental mitigation purposes.

Language has been added to this section which restricts FRO easements from being placed over existing land preservation easements. Property that is under existing land preservation easements are already significantly protected, are most often protected through use of government funds, and have covenants that conflict with the FRO covenants. Most land preservation programs already prohibit overlap with other easements. This language is consistent with current practices.

1-21-41: Afforestation and Afforestation Threshold

Afforestation is the establishment of forest cover on an area that is not presently in forest cover. Development sites that have no or very little existing forest are still required to meet certain afforestation requirements, based on the established afforestation thresholds for the particular use or zoning district.

The 2007 FRO Ordinance created a uniform afforestation threshold of 20% for all uses and zoning districts. Prior to this ordinance the threshold varied:

*20% for Agricultural, Resource Conservation, and R1 Residential.
15% for Institutional, R3 through R16, Mixed Use and Planned Developments,
Commercial and Industrial.*

The 2011 FRO Ordinance reversed the uniform 20% afforestation threshold and reinstated the variable 15%-20% threshold.

Under the current 15% threshold, a development project consisting of 50 acres of unforested land would have a 7.50 acre afforestation requirement, meaning 7.50 acres of forest would be planted onsite or would be mitigated offsite. Under the proposed 20% threshold the same development project would have a 10 acre afforestation requirement, which is a 0.05 acre increase per developed acre. With a 20% threshold, a 50 acre parcel zoned R3 with 75 residential lots would incur an additional cost of approximately \$300 per lot.

Since FY12, 413 acres of unforested land has been subject to the 15% afforestation threshold, generating 62 acres of mitigation. Under a uniform 20% threshold, 83 acres of mitigation would have been generated. The 20% threshold would have generated 21 acres of new forest planting or preserved an additional 42 acres of existing forest. The additional 21 acres of mitigation spread out over the 413 acres of developed land again equates to 0.05 acres of additional mitigation per acre of developed area.

Increasing the threshold by 5% for Institutional, R3 through R16, Mixed Use and Planned Developments, Commercial, and Industrial zones/uses will have many benefits while adding minimal cost to development projects;

- Increase the amount of new forest being planted in the County, helping offset the loss of existing forest that is cleared for development (see discussion under *I-21-42* below).
- Increase the sale of forest banking credits, helping existing forest bank owners with the return on their investment and encourage more property owners to enter into the Forest Banking Program, which will in turn result in more forest conservation and forest planting.
- The uniform 20% threshold is equitable to all property owners, regardless of the zoning of their property.

I-21-42: Reforestation and Conservation Threshold

The purpose of revising this section of the Code is to restore the 2007 provision that required, at a minimum, a 1:1 replacement for all forest that is cleared for a development project.

Reforestation is the planting of trees to replace forest that has been or is proposed to be removed. Before the adoption of the 2007 FRO Ordinance, the County used the State’s formula for determining how much forest could be cleared without penalty (known as the “breakeven point”), and how much reforestation would be required for clearing above the “breakeven point”. In some cases a certain amount of forest could be cleared and if the remaining forest is placed under a FRO easement then no additional mitigation was required. The conservation threshold varied depending on the proposed land use and zoning district:

50% for Agricultural and Resource Conservation

25% for R1 Residential.

20% for Institutional, R3 through R16.

15% for Mixed Use, Planned Developments, Commercial, and Industrial.

The 2007 FRO Ordinance established a 1:1 replacement requirement for all forest that was cleared, which was in addition to the standard State method for calculating forest conservation and reforestation requirements. Under the 2007 provision, even if the “standard method” allowed a certain amount of forest to be cleared without penalty, the amount of forest that was cleared would have to be replaced, either by planting new forest on site or by utilizing one of the methods for mitigation offsite (such as using forest banking credits). However, in a case where the “standard method” generated a mitigation requirement greater than a 1:1 replacement, then the “standard method” would apply. The 1:1 provision was removed from the Code in 2011.

Under the “standard method”, a 300 acre property zoned Mixed Use, PUD, Commercial, or Industrial has a 15% forest conservation threshold. If the 300 acre property contained 150 acres of forest, then up to 84 acres of forest could be cleared without triggering a reforestation requirement. Under the proposed 1:1 replacement provision, mitigation for the 84 acres of cleared forest would be required.

The current regulations encourage development projects to claim the maximum amount of forest clearing allowed without penalty, preserving only the amount of existing forest necessary to “break even”. Without having a mitigation requirement for clearing forest, there is little incentive to

explore alternative site designs that would reduce forest clearing while allowing the development to move forward.

Carroll County currently requires a 1:1 replacement of all forest cleared for development except in the Agricultural Zone, where a 2:1 replacement is required for clearing over 25,000 square feet of forest.

The significant loss of forest that is permitted under the current regulations is extremely difficult to replace, even with the afforestation requirements that are generated by development projects that do not contain forest. Between 1992 and 2016, 2,363 acres of forest has been cleared, while only 1,309 acres of new forest has been planted. This net loss of forest will continue to increase under the current regulations. Only by restoring the 1:1 replacement provision can the County curb the significant loss of forest. The 1:1 provision will encourage more thoughtful planning and design of developments, potentially avoiding unnecessary forest clearing in order to reduce the amount of mitigation that is required.

1-21-44: Miscellaneous Credits

The only change to this section is a reduction in the amount of credit that may be used to meet an afforestation requirement from 100% to 25%.

Miscellaneous credits are trees and shrubs planted outside of a forest setting that may be used to meet FRO mitigation requirements. This includes street trees and plantings within stormwater management ponds and rain gardens. Areas utilized for miscellaneous credit are not protected by a FRO easement.

Prior to the adoption of the 2011 FRO Ordinance, only 25% of an afforestation requirement could be met by using miscellaneous credit. If someone owed 3 acres of mitigation, only 0.75 acres could be mitigated by planting street trees and stormwater ponds. The remaining 2.25 acres would need to be provided in the form of forest, either by planting new forest on site, purchasing banking credits, or by providing an offsite forest easement.

Restoring the pre-2011 regulation will result in more forest being planted/preserved and help reduce the net loss of forest the County has experienced over the past two decades (as discussed above under 1-21-42: Reforestation and Conservation Threshold), while still allowing a portion of the planting requirement to be met with street trees and stormwater management ponds and rain gardens.

RECOMMENDATION:

That the County Council adopt the attached Bill to amend Chapter 1-21 of the Frederick County Code (Forest Resource Ordinance).

**TABLE 1
SUMMARY OF PROPOSED CHANGES**

	CODE SECTION/ISSUE	DISCUSSION
<u>1</u>	<u>1-21-5: DEFINITIONS</u>	<ul style="list-style-type: none"> • “DEPARTMENT”: UPDATE DIVISION NAME. • “DEVELOPMENT PROJECT”: REVISED DEFINITION TO MATCH LANGUAGE UNDER 1-21-6. • “REGULATED ACTIVITY”: REMOVED 40,000 SQ.FT. PROVISION TO MATCH CRITERIA UNDER 1-21-6 • “WORKSHEET”: ADD “AS AMEDNED BY THE COUNTY” FOR ADMINISTRATIVE PURPOSES.
<u>2</u>	<u>1-21-6:</u> APPLICABILITY AND GENERAL REQUIREMENTS	<ul style="list-style-type: none"> • DIVIDE (A) INTO TWO SEPARATE LINES (A AND B) FOR CLARITY. • ADD CRITERIA TO BE CONSISTANT WITH 1-21-7(F) (DEVELOPMENT OF EXISTING SINGLE FAMILY LOTS)
<u>3</u>	<u>1-21-10(B)(2):</u> PROTECTIVE AGREEMENTS	<ul style="list-style-type: none"> • CHANGE “BOCC” TO FREDERICK COUNTY
<u>4</u>	<u>1-21-20:</u> ADMINISTRATIVE AGENCIES	<ul style="list-style-type: none"> • UPDATE DIVISION NAME
<u>5</u>	<u>1-21-24: FEE-IN-LIEU</u> PROGRAM	<ul style="list-style-type: none"> • ADD BUILDING PERMITS TO TIMING OF PAYMENT, CONSISTANT WITH TIMING OF OTHER FORMS OF MITIGATION (PURCHASE OF BANKING CREDITS, RECORDATION OF EASEMENTS) PER 1-21-34(A)(2) AND AS PRACTICED FOR 20+ YEARS.
<u>6</u>	<u>1-21-29: FOREST</u> BANKING PROGRAM	<ul style="list-style-type: none"> • CHANGE THE MITIGATION RATIO OF EXISTING FOREST FROM 2:1 TO 2.5:1 • RESTORES PRE-2011 LANGUAGE, UNDER WHICH MANY PROPERTY OWNERS ENTERED INTO THE FOREST BANKING PROGRAM. • INCREASES CONSERVATION OF EXISTING FOREST
<u>7</u>	<u>1-21-31: FOREST</u> STAND DELINEATION; GEOTECHNICAL TESTING	<ul style="list-style-type: none"> • REDUCE CLEARING LIMITS TO 20,000 SQFT IN ORDER TO PREVENT EXCESSIVE FOREST CLEARING PRIOR TO THE SUBMISSION OF A FOREST CONSERVATION PLAN. • CLARIFY THE REQUIREMENT TO SUBMIT A FOREST CONSERVATION PLAN FOLLOWING GEOTECHNICAL TESTING.
<u>8</u>	<u>1-21-33:</u> PRELIMINARY FOREST CONSERVATION PLAN	<ul style="list-style-type: none"> • CHANGE PLAN TYPE TO MATCH ZONING ORDINANCE
<u>9</u>		<ul style="list-style-type: none"> • CHANGE THE MITIGATION RATIO FOR OFF-SITE EXISTING FOREST FROM 2:1 TO 2.5:1, RESTORING PRE-2011 LANGUAGE, CONSISTANT WITH PROPOSED CHANGES TO 1-21-29

	<p><u>1-21-40 (B):</u> CONSERVATION AND FORESTATION PRIORITIES</p>	<ul style="list-style-type: none"> • INCREASES CONSERVATION OF EXISTING FOREST. • RESTORES PRE-2011 LANGUAGE, UNDER WHICH MANY PROPERTY OWNERS ENTERED INTO THE FOREST BANKING PROGRAM. THE 2:1 RATIO HAS SLOWED BANKING CREDIT SALES. • RESTRICT FRO EASEMENTS FROM BEING PLACED OVER EXISTING LAND PRESERVATION EASEMENTS, WHICH ARE ALREADY SIGNIFICANTLY PROTECTED (MOST OFTEN THROUGH USE OF GOVERNMENT FUNDS) AND THAT MAY HAVE COVENANTS THAT CONFLICT WITH THE FRO COVENANTS. MOST PRESERVATION PROGRAMS ALREADY PROHIBIT FRO FROM OVERLAP.
<u>10</u>	<p><u>1-21-41:</u> AFFORESTATION AND AFFORESTATION THRESHOLD</p>	<ul style="list-style-type: none"> • RETURN TO THE UNIFORM 20% AFFORESTATION THRESHOLD ESTABLISHED PRIOR TO THE PRE-2011 CODE. WILL RESULT IN A UNIFORM FOREST PLANTING REQUIREMENT REGARDLESS OF THE ZONING DESIGNATION OF THE PROPERTY AND WILL INCREASE FOREST ACREAGE IN THE COUNTY. THIS WILL INCREASE THE AFFORESTATION RATE BY 5% FOR THE FOLLOWING ZONING DISTRICTS: INSTITUTIONAL, R3 THROUGH R16, MIXED USE AND PLANNED DEVELOPMENTS, COMMERCIAL AND INDUSTRIAL.
<u>11</u>	<p><u>1-21-42:</u> REFORESTATION AND CONSERVATION THRESHOLD</p>	<ul style="list-style-type: none"> • RESTORES THE MINIMUM 1:1 REPLACEMENT REQUIREMENT FOR CLEARED FOREST (THE 1:1 PROVISION WAS ESTABLISHED PRIOR TO THE 2011 CODE AMENDMENT). • THIS WILL REDUCE FOREST CLEARING AND REQUIRE REPLACEMENT MITIGATION FOR AREAS THAT ARE CLEARED.
<u>12</u>	<p><u>1-21-44:</u> MISCELLANEOUS CREDITS</p>	<ul style="list-style-type: none"> • REDUCE AMOUNT OF MISCELLANEOUS CREDITS THAT MAY BE USED TO MEET AFFORESTATION REQUIREMENT FROM 100% TO 25%. THIS WILL RESTORE THE PRE-2011 CODE LANGUAGE. • THIS CHANGE WILL RESULT IN MORE FOREST BEING PLANTED/PRESERVED VERSES ALLOWING STREET TREES AND OTHER NON-FOREST PLANTINGS TO MITIGATE ALL OF A PROJECTS FOREST MITIGATION REQUIREMENT.

