



Bill No. 20-04

Concerning: Amending Chapter 1-21 of the County Code (Forest Resource Ordinance) to increase forest conservation efforts

Introduced: March 3, 2020

Revised: _____ Draft No. _____

Enacted: _____

Effective: _____

Expires: June 1, 2020

Frederick County Code, Chapter 1-21

Section(s) 5, 40, and 42

COUNTY COUNCIL FOR FREDERICK COUNTY, MARYLAND

By: Council Member Kai Hagen on behalf of the County Executive

AN ACT to: amend Chapter 1-21 of the Frederick County Code (Forest Resource Ordinance) to increase forest conservation efforts.

Executive: _____ Date Received: _____

Approved: _____ Date: _____

Vetoed: _____ Date: _____

By amending:

Frederick County Code, Chapter 1-20 Section(s) 5, 40, 41

Other: _____

Boldface	<i>Heading or defined term.</i>
<u>Underlining</u>	<i>Added to existing law.</i>
[Single boldface brackets]	<i>Deleted from existing law.</i>
* * *	<i>Existing law unaffected by bill.</i>

Bill No. _____

The County Council of Frederick County, Maryland, finds it necessary and appropriate to amend Chapter 1-21 of the Frederick County Code (Forest Resource Ordinance) to increase forest conservation efforts and to update certain definitions.

NOW, THEREFORE, BE IT IN ENACTED BY THE COUNTY COUNCIL OF FREDERICK COUNTY, MARYLAND, that the Frederick County Code be, and it is hereby, amended as shown on the attached Exhibit 1.

AND BE IT FURTHER ENACTED that the following transitional provisions shall apply:

(1) The amendments and revisions to Chapter 1-21 enacted by this Bill shall apply to:

(a) Any Forest Stand Delineation, Preliminary Forest Conservation Plan, Final Forest Conservation Plan, or any combination thereof, and any exemption application, received by the Department for approval, reapproval, or extension on or after the effective date of this Bill.

(b) Any revised Forest Stand Delineation, Preliminary Forest Conservation Plan, Final Forest Conservation Plan, or any combination thereof, and any exemption application, received by the Department for approval, reapproval, or extension on or after the effective date of this Bill.

M.C. Keegan-Ayer, President
County Council of Frederick County,
Maryland

CHAPTER 1-21 FOREST RESOURCES

§ 1-21-5. DEFINITIONS.

INTERMITTENT STREAM. [A stream in which surface water is absent during a part of the year as shown on the most recent 7.5 minute topographic quadrangle published by the United States Geologic Survey as confirmed by field verification.] A stream that has flowing water during certain times of the year, when groundwater provides water for stream flow. During dry periods, intermittent streams may not have flowing water. Runoff from precipitation is a supplemental source of water for stream flow. These streams are identified through field verification and as approved by the Department. The most recent county hydrography layer may be used as a guide for the preliminary establishment of possible watercourses.

PERENNIAL STREAM. [A stream containing surface water throughout an average rainfall year, as shown on the most recent 7.5 minute topographic quadrangle published by the United States Geologic Survey, as confirmed by field verification.] A stream that has flowing water year-round during a typical year. The water table is located above the streambed for most of the year. Groundwater is the primary source of water for stream flow. Runoff from precipitation is a supplemental source of water for stream flow. These streams are identified through field verification and as approved by the department. The most recent county hydrography layer may be used as a guide for the preliminary establishment of possible watercourses.

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

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

Underlining indicates matter added to existing law.
[Single boldface brackets] indicates matter deleted from existing law.
***** - indicates existing law unaffected by bill.

(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 08.03.08;

(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

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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) Areas identified as green infrastructure network or sensitive species areas in the green infrastructure sector of the Livable Frederick Master Plan;

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

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

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

[Subsection 1-21-42(A) remains unchanged]

(B) Calculation of Requirements. There are two methods to calculate reforestation requirements. The method that results in the most reforestation shall be used.

(1) The first method shall require a 1:1 replacement. This means that for every one acre (or portion thereof) of forest removed, one acre must be planted.

(2) The second method, the “Standard Method”, is set forth in subsection 1-21-42(D).

(B)C) Definitions restated. **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

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|---|----|
| (5) Mixed Use and Planned Unit
Development 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 ([C]D) of this section.

([C]D) *Standard Method Calculations.*

(1) For all existing forest cover cleared on the net tract area above the applicable conservation threshold established by subsection ([A]C) 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 ([C]D)(1) of this section.

([D]E) *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.

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FREDERICK COUNTY GOVERNMENT
OFFICE OF THE COUNTY EXECUTIVE

Jan H. Gardner
County Executive

TO: Frederick County Council
FROM: County Executive Jan H. Gardner 
DATE: February 10, 2020
SUBJECT: Forest Conservation and Environmental and Historic Protection

ISSUE/BACKGROUND:

Growth has been and will continue to be a hot topic in Frederick County. As the County grows, we need to do our best to protect what we love and value about our cherished community including protecting our environmental and historic assets.

We know that Frederick County residents value our rich history, our open spaces and our agricultural heritage. Citizens lament the loss of forest and our historic and cultural amenities as the result of development.

We have witnessed mass grading and significant loss of forest, particularly around Lake Linganore, as development has occurred. Citizens have expressed their displeasure with the loss of forest but have become angry and frustrated when they learn that often no mitigation or planting of trees elsewhere has been required by the County.

The good news is that we can take action to prevent the loss of forest and protect our historic and cultural amenities now into the future.

To protect forest, our environmental resources, and our rich history, I have proposed legislation to ensure that we consider protection of these assets at the time of rezoning, early in the process. We know the beginning often determines the end. If we don't protect these features from the outset, we may lose the opportunity to do so.

As the County Council debates climate change, it is important that we do something very fundamental - protect our sensitive environmental areas and ensure that Frederick County does not lose its forests. This is consistent with Livable Frederick and our mapping of our green infrastructure.

I am proposing two new pieces of legislation:

1. An amendment to our forest resource ordinance to strive for no net loss of forest through the inclusion of a 1:1 replacement of trees lost during the development process.
2. An update to our zoning ordinance adding consideration of our environmental and historic resources at the point of rezoning. This proposal updates and clarifies criteria for these purposes as well as for transportation adequacy.

Forest Resource Ordinance (FRO):

The goal of the amendment to the Forest Resource Ordinance is to stop the loss of forest in Frederick County. Between 2001 and 2005, 4,000 acres of forest cover in Frederick County disappeared. Some of this loss was due to insect infestation and nature deforestation but much of it was the result of new development and the clearing of trees.

In 2008, the County Commissioners passed a Forest Resource Ordinance amendment to require a 1:1 replacement of every acre of forest cleared for development. Carroll County has had a 1:1 replacement ratio in place for many years, so this requirement brings us in line with our neighbor.

In 2011, the former Board of County Commissioners eliminated this requirement and reduced the local law to minimum state requirements. Between 2012 and 2019, Frederick County experienced a net loss of about 480 acres of forest or an average of about 70 acres annually. We can do better and achieve no net loss of forest by simply restoring the 1:1 replacement ratio.

It is important to note that the County invests millions of dollars to plant trees through efforts like Creek ReLeaf to achieve environmental goals and clean water requirements in our MS4 permit. We know that forest is important to protecting our environment, ensuring healthy streams, and providing habitat. Street trees in new developments cannot achieve these goals. Preventing forest loss is much less expensive than mitigating pollution and cleaning our waterways after the fact. Protecting and preserving our forests makes good financial sense.

Zoning Ordinance Amendments

The goal of the proposed amendments to the zoning ordinance are to protect forest, environmentally sensitive areas, and historic assets at the point of rezoning. Evaluating and protecting environmental features and historic assets prior to development taking place and before land is rezoned for development is forward thinking and puts our community's values first. We know our residents value what is special about Frederick County and want us to protect these resources.

In addition, the zoning amendments update and clarify criteria for evaluating and determining the adequacy of the transportation network at the point of rezoning. While transportation adequacy has long been a topic of consideration, the addition of criteria better defines and considers cumulative impacts on our transportation network.

Clearly road congestion and traffic safety are an issue of concern for our residents and businesses alike. Considering these criteria upfront, early in the development process, ensures a better outcome for the citizens we serve. While we cannot undo some of the decisions of the past, we can and should do better planning now into the future.

County staff has provided the technical details of these two proposals in separate staff reports.

RECOMMENDATION:

As County Executive, I urge the County Council to adopt the proposed amendments to the Frederick County Forest Resource Ordinance and to Chapter 1-19 of the Frederick County Zoning Ordinance. The adoption of these legislative initiatives will protect environmental and historic resources, prevent the net loss of forest cover to new development, and will ensure a bright future for Frederick County.



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 
Michael Wilkins, Development Review and Planning Department Director 

DATE: February 11, 2020

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

ISSUE:

Should the County Executive support the staff recommendation regarding amendments to Chapter 1-21 of the Frederick County Code (Forest Resource Ordinance) to update and strengthen the County's law to protect existing forest and strive for no net loss of forest and forward the attached proposed bill (Attachment 1) to the County Council for its consideration?

BACKGROUND:

The proposed amendments to the Forest Resource Ordinance (FRO) will increase forest conservation efforts, update definitions, and clarify language.

The following changes to the FRO are proposed:

1-21-5 - Definitions

The definitions for intermittent stream and perennial stream have not been updated since 1992. The proposed changes to these definitions better describe the defining elements of each stream type and update the resources that may be used to verify the presence of streams.

1-21-40(B) - Priority Areas for on-site conservation

(B)(a) - Removal of existing verbiage that is slightly different than the definition of hydrologically-sensitive area and is unnecessary due to existing code definition.

1-21-40(C) - Priority sequence for on-site forestation

(C)(6) - Added "areas identified as green infrastructure network and/or sensitive species areas in the green infrastructure sector of the Livable Frederick Master Plan" as a priority planting area. Adding mapped green infrastructure to the list of priority planting areas will make the FRO consistent with the goals and objectives of Livable Frederick.

1-21-42(B): 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. This requirement was removed from the code in 2011.

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, and since that ordinance was repealed in 2011, the County uses the State’s formula (aka “standard method”) for determining how much forest must be retained to avoid mitigation (known as the “breakeven point”), and how much reforestation would be required for clearing above the “breakeven point.” In most cases a certain amount of forest can be cleared and if the remaining forest is placed under a FRO easement then no additional mitigation is required. The conservation threshold varies 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 table below illustrates some examples of how the current “standard method” calculations results in the loss of forest cover.

Conservation Threshold	Size of Parcel	Existing Forest	Break-even Point (minimum retention to avoid mitigation requirement)	Area Allowed to be Cleared Without Mitigation	Area To Be Cleared	Area Retained	Additional Mitigation required	Forest Loss
50 (Ag/Rc)	20	16	11.20	4.80	4.80	11.20	0	4.80
50 (Ag/Rc)	40	32	22.40	9.60	20	12	19	1.00
25 (R1)	20	8	5.60	2.40	2.40	5.60	0	2.40
25 (R1)	20	8	5.60	2.40	5	3	4.75	0.25
15 (MU, PD, C, I)	20	16	5.60	10.4	12	4	2	6.00
15 (MU, PD, C, I)	80	64	22.40	41.60	60	4	29	31
15 (MU, PD, C, I)	200	100	44	56	56	44	0	56

The 2007 FRO Ordinance established a 1:1 replacement requirement for all forest that was cleared, which was in addition to the “standard 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.

Under the "standard method," a 300-acre property zoned Mixed Use, Planned Unit Development, 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 do not discourage development projects from claiming the maximum amount of forest clearing allowed without penalty. Projects typically preserve the minimum amount of existing forest necessary to "break even." 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 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 2008 and 2011, when the County had the 1:1 replacement provision, 414 acres of forest was cleared and 424 acres of new forest was planted. During this period the County did not lose forest, and actually gained 10 acres of forest.
- From 2012 to 2019 (the period since the 1:1 replacement provision was repealed), 807 acres of forest was cleared and 328 acres of forest was planted, for a net loss of 479 acres, an average of 68.42 acres of forest per year.

Restoring the 1:1 replacement provision will 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.

The proposed amendments do not change the existing exemptions from the code requirements. Farmers may still be exempt if clearing forest for agricultural activities, and up to 20,000 square feet of forest may be removed without mitigation for subdividing a lot for a child of the owner.

RECOMMENDATION:

Staff recommends the County Executive forward the proposed bill to amend Chapter 1-21 of the Frederick County Code (Forest Resource Ordinance) to the County Council for its consideration.

Approve? Yes ✓ No

Jan H. Gardner
Jan H. Gardner, County Executive
Frederick County, Maryland

2/13/20
Date

FINANCIAL IMPACT: No

ATTACHMENT(S):

Attachment 1 – Proposed Bill – Amendments to Chapter 1-21 of the Frederick County Code (Forest Resource Ordinance)