Frederick County Forest Conservation Worksheet (Version 4.4)

Notes: 1. Use **0.00 acres** for all negative numbers that result from the calculations.
2. Carry all calculations to the nearest **.01 acre*.** (Field measurements may be to the nearest **.1 acre**, but shall be expressed to the nearest **.01 acres**. Example: 43.2 acres of existing forest shall be expressed as **43.20 acres.**)
3. For Afforestation and Conservation Threshold values see § 1-21-41 of the FRO

Net Tract Area:

A. Total *(Gross) Tract Area	A =	0.00
B. Deductions (Critical Area, *100 yr. floodplain, Road dedication for existing roads and easements) **I.d. deductions here:**	B =	0.00
C. Net Tract Area Net Tract Area = Total Tract (A) - Deductions (B)	C =	0.00

Land Use Category:

D. Afforestation Threshold (Net Tract Area [C] x 15%) *use Standard Method % values.	D =	0.00
E. Conservation Threshold (Net Tract Area [C] x 20%) *use Standard Method % values.	E =	0.00

*Standard Method % values are those established by § 1-21-41 and § 1-21-42 of the FRO.

Existing Forest Cover:

F. Existing Forest Cover within the Net Tract Area	F =	0.00
G. Area of Forest Above Conservation Threshold If the Existing Forest Cover (F) is greater than the Conservation Threshold (E), then G = F - E; Otherwise G = 0.00	G =	0.00

Breakeven Point:

H. Breakeven Point (Amount of forest that must be retained so that no mitigation is required) (1) If the Area of Forest Above the Conservation Threshold (G) is greater than 0.00, then H = [0.2 x the Area of Forest Above Conservation Threshold (G)] + the Conservation Threshold (E); (2) If the Area of Forest Above the Conservation Threshold (G) is equal to 0.00, then H = Existing Forest Cover (F).	H =	0.00
I. Forest Clearing Permitted Without Mitigation I = Existing Forest Cover (F) - Breakeven Point (H)	I =	0.00

Proposed Forest Clearing & Retention:

J. Total Area of Forest to be Cleared *(All forest area not protected by easement)	J =	0.00
K. Total Area of Forest to be Retained K = Existing Forest Cover (F) - Forest to be Cleared (J) *(All K must be in a protective FRO easement.)	K =	0.00

Planting Calculations: If the Total Area of Forest to be *Retained (K) is at or above the Breakeven Point (H), no planting is required, and no further calculations are necessary (L=0.00 acres, M=0.00 acres, N=0.00 acres and P=0.00 acres); Otherwise, calculate the planting requirement(s) as follows:

L. Reforestation for Clearing Above the Conservation Threshold (1) If the Total Area of Forest to be Retained (K) is greater than the Conservation Threshold (E), then L = the Area of Forest to be Cleared (J) x 0.25; (2) If the Forest to be Retained (K) is less than or equal to the Conservation Threshold (E), then L = Area of Forest Above Conservation Threshold (G) x 0.25	L =	0.00
M. Reforestation for Clearing Below the Conservation Threshold (1) If Existing Forest Cover (F) is greater than the Conservation Threshold (E) and the Forest to be Retained (K) is less than or equal to the Conservation Threshold (E), then M = 2.0 x [Conservation Threshold (E) - Forest to be Retained (K)] (2) If Existing Forest Cover (F) is less than or equal to the Conservation Threshold (E), then M = 2.0 x Forest to be Cleared (J).	M =	0.00
N. Credit for Retention Above the Conservation Threshold If the area of Forest to be Retained (K) is greater than the Conservation Threshold (E), then N = Total Area of Forest to be Retained (K) – Conservation Threshold (E)	N =	0.00

Planting Requirements:

P. Total Reforestation Required (1) P1: Under Standard Method: P1 = L + M - N (2) P2: Total Area of Forest to be Cleared (J) is the 1:1 replacement requirement: P2 = J (3) Compare P1 and P2 and use the greater of the two values for P	P =	0.00
Q. Total Afforestation Required: If Existing Forest Cover (F) is less than the Afforestation Threshold (D), then Q = Afforestation Threshold (D) - Existing Forest Cover (F)	Q =	0.00
R. Total Forestation Requirement R = P + Q	R =	0.00

Miscellaneous Credits: These credits are allowed as per the criteria and limitations listed in § 1-21-44 of the FRO.

S1. Street Tree/Landscape S1 = ¼ [Canopy area of each planted tree + planted shrub coverage], where a standard street/landscape tree is measured @ 30' mature diameter	S1 =	0.00
S2. "Tree Save" Credits" S2 = ¼ [Canopy area of existing trees and non-priority forest saved during construction, but not protected by easement]	S2 =	0.00
S3. SWM and Rain Gardens S3 = 20-yr. growth canopy-area of SWM Facilities and Rain Gardens	S3 =	0.00
S4. Total Miscellaneous Credits S4 = S1 + S2 + S3	S4 =	0.00

Total (S4) may not exceed 25% of Total Reforestation required (P) and may not exceed 25% of Total Afforestation required (Q).

***Mitigation Summary:**

T. Area of Existing Forest under Easement T = Total Area of Forest to be Retained (K)	T =	0.00
U. Area of Planted Forest (Forestation) under Easement (Total acres to be planted in forest)	U =	0.00
V. Total Miscellaneous Credits (S4)	V =	0.00
W. Total on-site mitigation (W = T + U + V)	W =	0.00
X. Balance of mitigation owed (X = R - U - V)	X =	0.00
Y. Method of providing balance of mitigation owed:		
1. Transfer of Forest Banking Credit (new forest credit @1:1 ratio OR existing forest credit @ 2.5:1 ratio):	Y1 =	0.00
2. Payment of fee-in-lieu ($0.54 per sq. ft. for property outside priority funding areas, $0.43 per sq. ft. for property within priority funding areas)	Y2 =	0.00
3. Off-site easement provided (new forest credit @1:1 ratio OR existing forest credit @ 2.5:1 ratio):	Y3 =	0.00
Z. Total Mitigation Provided (Z= W + Y) (for Y2, use acres of mitigation provided via fee):	Z =	0.00