

NOTICE

Issued by:

Office of Planning & Zoning

Notice #:

OPZ-20-03-Rev

Release Date:

Original: 1/10/20

Revised: 11/1/21

Contact:

pzalle00@aacounty.org

Phone #:

410-222-7458

Calculating Forest Conservation, Afforestation and Reforestation Requirements

Anne Arundel County Bill 68-19 became law on January 9, 2020. The bill changes the amount of forest that must be conserved and afforested or reforested on each development site. This notice provides the general public, reviewing agencies and the development community with a new forest conservation worksheet to calculate these requirements.

Any questions regarding this notice should be forwarded to Lori Allen, Planning Administrator, at pzalle00@aacounty.org and 410-222-7458.

Steve Kaii-Ziegler,
AICP

Planning & Zoning
Officer



ANNE
ARUNDEL
COUNTY

M A R Y L A N D

Office of Planning and Zoning



M A R Y L A N D

Office of Planning and Zoning

Steve Kaii-Ziegler AICP, Planning and Zoning Officer

MEMORANDUM

TO: MBIA, Review Agencies and the General Public

FROM: Steve Kaii-Ziegler, AICP, Planning and Zoning Officer

SUBJECT: Calculating Forest Conservation, Afforestation and Reforestation Requirements

DATE: January 10, 2020

Anne Arundel County Bill 68-19 became law on January 9, 2020. The bill changes the amount of forest that must be conserved and afforested or reforested on each development site. This memo outlines the major changes and provides a new forest conservation worksheet that must be completed for each application that is subject to forest conservation requirements.

Conservation thresholds will now differ across sites based upon the following site characteristics:

- 1) Size of the site – whether the site is above or below 5 acres in size;
- 2) Land use of the site broken into the following categories: agricultural; resource; institutional; medium density residential; high density residential; mixed use; planned unit; commercial; and industrial;
- 3) Underlying growth management area of the site broken into the following categories: targeted growth areas; priority funding areas outside targeted growth areas; and areas outside priority funding areas.

Additionally, **reforestation requirements** increased such that for every acre of forest removed above the retention threshold, one-half acre must be replanted.

Page 4 of this document provides a new forest conservation spreadsheet that must be provided for each application. Instructions and helpful tables for growth management areas and land use types can be found on page 3. All of this information and the worksheet itself may be downloaded at <https://www.aacounty.org/departments/planning-and-zoning/forms-and-publications/index.html>.

The worksheet available online will automatically calculate all other necessary values, including afforestation and reforestation requirements after applicants provide the following information about their site:

- a) Growth Management Area;
- b) Land Use Type;
- c) Unique Tract Area – defined as a unique combination of growth management area and land use type; note that sites can have multiple unique tract areas;
- d) Universal Deductions – defined as the area of 100-yr floodplain and critical area within the unique tract area; note these deductions are universal as they apply across all growth management areas;
- e) Impervious Surface Deductions for Targeted Growth Areas and Priority Funding Areas;
- f) Existing Forest Cover within the Unique Tract Area; and
- g) Proposed Forest Clearing within the Unique Tract Area.

ANNE ARUNDEL COUNTY FOREST CONSERVATION WORKSHEET INSTRUCTIONS	
Applicants for projects that are subject to Anne Arundel County's Forest Conservation Ordinance, 17-6-3 shall complete this worksheet.	
Applicants need only input seven (7) values in the worksheet for each unique tract on a project site. These values are contained within the green-shaded cells. All other values shaded within blue or yellow cells, including final mitigation requirements, are automatically calculated for applicants in both square footage and acreage. The values needed from applicants are as follows:	
Growth Management Area - The 2009 General Development Plan divided Anne Arundel County into three growth management areas: targeted growth areas, priority funding areas and areas outside of priority funding areas. The management area defines the forest conservation thresholds for the site. A map of these areas can be accessed through Anne Arundel County's Land Use Viewer.	
Land Use Type - These are defined as in Anne Arundel County Code 17-1-101, and definitions for each type are provided in the worksheet.	
Unique Tract Area - This is the area of the unique tract to the nearest square foot. Unique tracts are explained below. A unique tract for calculation purposes is defined as a unique combination of growth management area (defined within the worksheet) and land use type (defined within the worksheet).	
For example, a single project may contain land within a priority funding area and land outside of a priority funding area. The applicant may be proposing a commercial development. In this example, the applicant should enter values for two tracts of land - one set of values for the tract of commercial land use within a priority funding area, and one set of values for the tract of commercial land use outside of a priority funding area. Similarly, a single project may contain multiple land use areas, and would require similar breakouts into unique tracts for calculation purposes.	
Universal Deductions - This is the area of the unique tract area to the nearest square foot that is encumbered by the 100-yr floodplain or the critical area. This value reduces the unique tract area from which all forest conservation calculations are made.	
Impervious Surface Deductions for Targeted Growth and Priority Funding Areas - This is the area of existing impervious surfaces to the nearest square foot within the unique tract area, assuming the tract exists within a Targeted Growth Area or a Priority Funding Area to the nearest square foot. If the impervious surfaces exist outside of these areas, then this value should be 0. This value reduces the unique tract area from which all forest conservation calculations are made.	
Existing Forest within the Unique Net Tract Area - This is the area of forest to the nearest square foot within the unique net tract area that are not encumbered by the universal or impervious surface deductions.	
Proposed Forest Clearing within the Unique Net Tract Area - This is the area of forest that is proposed to be cleared to the nearest square foot within the unique net tract area.	
Total mitigation required by unique tract and across all tracts are provided automatically in the yellow cells.	
Any questions regarding this worksheet or the Forest Conservation Ordinance should be directed toward the Office of Planning and Zoning.	

Land Use Types	
Land Use Type	Definitions
Agricultural	Undeveloped areas zoned for densities of less than or equal to one dwelling unit per five acres, and primarily used for agricultural purposes. This includes the following AA County zones: RA and RLD.
Resource	Undeveloped areas zoned for densities of less than or equal to one dwelling unit per five acres, and not primarily used for agricultural purposes. This includes the following AA County zones: OS.
Institutional	Schools, colleges, universities, military installations, transportation facilities, utility and sewer projects, government offices and facilities, golf courses, recreation areas, parks and cemeteries. Institutional development may occur on any zone.
Medium Density Residential	Areas zoned for densities greater than one dwelling unit per five acres and less than or equal to one dwelling unit per acre, including both existing and planned development and their associated infrastructure, such as roads, utilities, and water and sewer service. There are currently no medium density residential zones in Anne Arundel County.
High Density Residential	Areas zoned for densities greater than one dwelling unit per acre, including both existing and planned development and their associated infrastructure, such as roads, utilities, and water and sewer service. This includes the following AA County zones: R1, R2, R5, R10, R15, and R22.
Mixed Use Development	Single, relatively high density development projects, usually commercial in nature, which include one or more types of uses. This includes the following AA County zones: MKD-R, MKD-C, MKD-E, MKD-T, and TC.
Planned Unit Development	Developments comprising a combination of land uses of varying intensities of the same land use in accordance with an integrated plan that provides flexibility in land use design approved by the local jurisdiction with at least 20% of the land permanently dedicated to open space. This includes all potential planned unit development in RA, RLO, R1, R5, R10, R15 and R22, as well as C2 and C3 in the BWI/Fort Meade Growth Area.
Commercial	Office complexes, shopping centers, and other similar uses and their associated storage areas, yards and parking areas. This includes the following AA County zones: C1, C2, C3 and C4.
Industrial	Manufacturing operations and other similar uses and their associated storage areas, yards and parking areas. This includes the following AA County zones: W1, W2, and W3.
Growth Management Areas	
Growth Management Area Types	Definitions
Targeted Growth Area	An area targeted for economic growth and depicted as such in the current Anne Arundel County General Development Plan.
Priority Funding Area	An area excluding the targeted growth area designated as priority to receive state funding for "growth-related" projects.
Outside Priority Funding Area	An area outside of either a priority funding area or a targeted growth area.

ANNE ARUNDEL COUNTY FOREST CONSERVATION WORKSHEET (In Square Feet)

Variables	Unique Tract 1	Unique Tract 2	Unique Tract 3	Unique Tract 4	Unique Tract 5
Site Information					
A. Growth Management Area	0	0	0	0	0
B. Land Use Type	0	0	0	0	0
C. Unique Tract Area	0	0	0	0	0
D. Universal Deductions (Critical Area or 100-Yr Floodplain)	0	0	0	0	0
E. Impervious Surface Deductions for Targeted Growth and Priority Funding Areas	0	0	0	0	0
F. Existing Forest Cover within Unique Net Tract Area	0	0	0	0	0
G. Proposed Forest Clearing within Unique Net Tract Area	0	0	0	0	0
H. Unique Net Tract Area = (C)-(D)-(E)	0	0	0	0	0
I. Total Net Tract Area less than or equal to 5 Acres?	Yes	Yes	Yes	Yes	Yes
Key for lookup table	Yes	Yes	Yes	Yes	Yes
J. Conservation Threshold	0%	0%	0%	0%	0%
K. Afforestation Threshold	0%	0%	0%	0%	0%
Forest Conservation					
L. Conservation Threshold Area = (H) X (J)	0	0	0	0	0
M. Area of Forest Above Conservation Threshold = (F) - (K)	0	0	0	0	0
N. Break-even Point (Amount of forest that must be retained so that no mitigation is required.)	0	0	0	0	0
O. If the Area of Forest Above Conservation Threshold (L) is greater than 0, then M = ((0.3333) X (L)) + (K). If the Area of Forest Above Conservation Threshold is equal to 0, then M = (F).	0	0	0	0	0
P. Forest Clearing Permitted without Mitigation = (F) - (M)	0	0	0	0	0
Q. Proposed Forest Retention = (F) - (G)	0	0	0	0	0
R. Reforestation for Retention Above the Threshold	0	0	0	0	0
S. If Proposed Forest Clearing (G) is > Area of Forest Above Conservation Threshold (L), then (R) = 0. If not, then (R) = (L) - (G).	0	0	0	0	0
T. Credit for Retention Above the Threshold	0	0	0	0	0
U. If Proposed Forest Clearing (G) is > Area of Forest Above Conservation Threshold (L), then (R) = 0. If not, then (R) = ((G) - (L)) X 2	0	0	0	0	0
V. Total Reforestation Required = (R) + (Q)	0	0	0	0	0
W. Afforestation Threshold Area = (H) X (I)	0	0	0	0	0
X. Total Afforestation Required	0	0	0	0	0
Y. If Existing Forest Cover (F) < Afforestation Threshold Area (W), then (U) = (W) - (F). If not, then (U) = 0.	0	0	0	0	0
Z. Total Mitigation Required by Tract = (S) + (U)	0	0	0	0	0
Total Mitigation Required for Site					(See PZ)
					0