

Open Space Development Model Ordinance

Section I. Background

- A) Open space development has numerous environmental and community benefits, including the following:
- 1) Reduces the impervious cover in a development. Impervious cover contributes to degradation of water resources by increasing the volume of surface runoff and preventing infiltration into the soil surface.
 - 2) Reduces rainfall pollutant loads to streams and other water resources.
 - 3) Reduces potential pressure to encroach on resource buffer areas.



The aquatic buffers section has more information on resource buffer areas and ways to protect them.

- 4) Reduces soil erosion potential by reducing the amount of clearing and grading on the site.



The Erosion and Sediment Control section highlights other techniques to control erosion at construction sites.

- 5) Preserves green space.
 - 6) Preserves open space for recreation.
 - 7) Reduces the capital cost of development.
 - 8) Reduces the cost of stormwater management by concentrating runoff in one area and reducing runoff volumes.
 - 9) Provides a wider range of feasible sites to locate stormwater best management practices (BMPs).
 - 10) Reduces the cost of future public services needed by the development.
 - 11) Can increase future property values.
 - 12) Creates urban wildlife habitat "islands."
 - 13) Creates a sense of community and pedestrian movement.
 - 14) Can support other community planning goals, such as farmland preservation, affordable housing, and architectural diversity.
- B) It is the desire of _____ (*planning agency*) to protect the natural, historic, and community resources in _____
_ (*municipality*) by promoting open space development within our jurisdiction.

Section II. Definitions

Base Density:	The original density permitted under the property's residential zoning category (dwelling units per acre).
Community Open Space	The area of open space remaining after natural open space has been designated. The area may be used for passive or active recreation for stormwater management.
Frontage Distance	The width of a housing lot (in feet) that fronts along the street.
Green Space	Open space maintained in a natural, undisturbed, or revegetated condition.
Impervious Cover	Any surface in the urban/suburban landscape that cannot effectively absorb or

infiltrate rainfall.

Natural Condition	The topography and vegetation of an area that is unaltered by clearing and grading during construction and protected in perpetuity.
Nontidal Wetlands	Those areas not influenced by tidal fluctuations that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.
	 <i>The definition of "nontidal wetland" here is adapted from the definition of "wetland" used by the USEPA and the US Army Corps of Engineers. See the Croton-on-Hudson Wetlands and Watercourses ordinance for an example.</i>
One Hundred-Year Floodplain	The area of land adjacent to a stream that is subject to inundation during a storm event that has a recurrence interval of 100 years.
Open Space	A portion of a development site that is permanently set aside for public or private use and will not be developed. Open space may be used as community open space or preserved as green space.
Open Space Development	A development pattern that arranges the layout of buildings in a compact area of the site so as to reserve a portion of the site for community open space or green space and is protected in perpetuity.
Right-of-Way	The width of a public roadway that encompasses the pavement width and adjacent land needed for placement of sidewalks, utilities, and stormwater drainage.
Setback	The distance a structure must be located from property lines or other structures.
Stream Buffer	A vegetated area bordering a stream that exists or is established to protect a stream system. Alteration of this vegetated area is strictly limited.
Unbuildable Land	The area of a site that includes wetlands and submerged areas, slopes of 25 percent or more, and the 100-year floodplain.

 *The definition of unbuildable land might not include all of these areas. For example, buffers might not be considered unbuildable in many jurisdictions. In addition, other areas might be considered unbuildable in some communities.*

Section III. Application

- A) The provisions of this ordinance apply to all residential zones with a density less than or equal to eight dwelling units per acre.
- B) The minimum size of an open space development shall be five acres.

- C) Open space is a by-right form of development and shall not require a special exception or additional review.



Open space development can be: by special approval or by right. In most communities, open space development requires a special approval process. This requirement discourages the use of open space development because of the time required for approval compared with conventional development. When open space development is by right, an open space plan that meets the requirements of the ordinance goes through the same permit and approval process as a conventional development. The by-right form of development prohibits denial of an open space plan in favor of a conventional plan assuming the open space plan meets the provisions of the ordinance.



In some cases, open space development is mandatory. The Calvert County Open Space Ordinance is one example where open space development is required in rural and large-lot zones.

- D) Plans registered before the adoption of this ordinance are exempt from the provisions of this ordinance.

Section IV. Design Criteria

- A) The total number of residential units allowable within an open space development shall not exceed the number of units that would otherwise be allowed in the existing zoning district using conventional development. The total number of units allowed shall be determined using the following formula:

$$T = BD \bullet [A - (U+R)]$$

Where:

- T = total units (dwelling units)
BD = base density (dwelling units/acre)
A = total site area (acres)
U = unbuildable land as defined in Section II (acres)
R = road and utility right-of-way (acres)



This method of determining the total dwelling units is known as a "partial-density transfer." In the alternative method, or "full-density transfer," the base density would be multiplied by the total area. Typically, the partial-density transfer option preserves a greater amount of open space. However, the full-density transfer might be preferable in many communities, particularly if regional density goals need to be met.

- B) Frontage distance and rear, front, and side yard setbacks may be reduced to 50 percent of the requirements in the base zoning, subject to the following rules:

- 1) The frontage distance shall be no less than 10 feet.
- 2) Front and rear yard setbacks shall be no less than 10 feet.
- 3) Sideyard setbacks shall be a minimum of five feet. This requirement may be waived if the regulations of the _____ (municipality) Fire Department are met.

- C) Lot size may be reduced to 25 percent of base density but no smaller than one-eighth of an acre.



As an alternative to narratively describing lot geometry requirements, a community may make a table of open space zoning requirements based on zoning category or may provide specific zoning text language that guides planning agency staff in approving appropriate subdivision projects.



The values for lot geometry presented here are guidelines; jurisdictions need to select values that make sense within the context of existing regulations and community goals.

B) Irregular lot shapes and shared driveways are permitted in open space design.

C) Shared septic systems may be permitted provided that the requirements of the _____ (municipality) Health Department are met, including appropriate provisions for legal obligations related to maintenance and replacement.



The use of shared septic systems is controversial, primarily because of the maintenance responsibility. In many communities, shared systems become the responsibility of the local jurisdiction. However, requiring one septic system per lot makes open space development more challenging.

F) The number of parking spaces required for a residential open space development shall be two spaces per dwelling unit. Parking may be provided either on the street or in driveways.

Section V. Open Space Requirements

A) The total area of dedicated open space shall equal the amount by which all dwelling unit lots are reduced below the base zoning and shall meet the requirements outlined in Table 1.

Table 1. Open Space Required for Various Densities	
Base Density (du/ac)	Open Space Required (% of <u>buildable</u> area)
>1	35%
0.5<BD<1	40%
0.2<BD<0.5	45%
<0.2	50%



The amount of open space should increase with decreasing density because of the feasibility of protecting open space in these areas. In rural open space designs, the techniques used are typically different from those used in more suburban areas. For example, homes might be clustered in small groups or "pods" that retain a rural character.

B) The following activities or land uses may not be counted as a part of designated open space:

- 1) Land considered unbuildable under Section II
- 2) Existing rights-of-way and utility easements
- 3) Setbacks and lawns



In the full-density transfer option, a greater percentage of open space would be required (up to 75 percent of the total site area). However, unbuildable land would be included in the dedicated

open space.

- C) The following areas shall be high priorities for inclusion in designated open space:
 - 1) Resource buffers
 - 2) High-quality forest resources
 - 3) Individual trees
 - 4) Critical habitat areas
 - 5) High-quality soil resources
- D) At least 75 percent of designated open space shall be contiguous with no portion less than 100 feet wide.
- E) At least 50 percent of designated open space shall be designated as “green space” as defined in Section II and shall be maintained in a natural, undisturbed condition.



In the full-density transfer option, a greater fraction of the open space would be green space, but the open space might include unbuildable areas such as wetlands.

- F) Reasonable effort must be made to locate green space adjacent to green space in an adjoining property(s) to the satisfaction of _____ (*planning agency*).
- G) Limited access to green space may be allowed in the form of an walking or hiker/biker path, the total area of which must be no more than 2 percent of the total green space area.
- H) The remaining designated open space may be “community space” and may be used for passive or active recreation or the location of stormwater management facilities.
 - 1) If used for stormwater management, all design, construction, maintenance, and public safety requirements shall be met using the design criteria set forth in _____ (*stormwater manual*).
 - 2) If used for active recreation, impervious cover shall not exceed 5 percent of this area.



The Maryland Stormwater Design Manual is one example of an up-to-date stormwater design manual. For more information, go to www.mde.state.md.us. Under topics, choose "Stormwater Design Manual."

Section VI. Open Space Management

- A) The boundaries of designated open space areas, recreation areas, stormwater management facilities, and green space shall be clearly delineated on plans, including record plats, and marked in the field with signage approved by _____ (*planning agency*) to distinguish these areas from private property.
- B) Development in designated open spaces in the future is prohibited. Ownership of open space shall be designated through one of the following options:
 - 1) Ownership by the individual lot owners as a homeowners’ association. The deed to each lot shall include a proportionate share of the common open space. Each lot owner shall be required to be a member of a homeowner’s association, which shall be formed prior to conveyance of the first lot. The assessment of dues or

fees for structural improvements requires the affirmative vote of no less than two-thirds of the homeowners' association membership.



A well-designed homeowners' association is an effective way to manage community open space.

- 2) Conservation easement.
 - a) If owned by a separate entity, a conservation easement shall be established for the area as defined in subsection 3) below and shall be given to _____
_____. (*municipality*)
 - b) A conservation easement, established as defined in subsection 3), may be transferred to an established, designated land trust organization, among whose purposes is to conserve open space and/or natural resources. This option is recommended for natural open space areas. Such transfer is allowable, provided that
 - i. The organization is acceptable to _____ (*planning agency*) and is a bona fide conservation organization with perpetual existence;
 - ii The conveyance contains appropriate provision for proper reverter or retransfer in the event that organization becomes unwilling or unable to continue carrying out its functions; and
 - iii. A maintenance agreement acceptable to the homeowners' association is entered into by the developer and the organization.
- 3) The conservation easement shall
 - a) Protect open space from future development and environmental damage by restricting the area from any future building and from the removal of soil, trees, and other natural features, except as is consistent with conservation, recreation, or agricultural uses or uses accessory to permitted uses.
 - b) Provide that residents have access to the open space at all times.
 - c) Dictate whether open space is for the benefit of residents only or may be open to residents of _____ (*municipality*)



A model conservation easement is included in the aquatic buffer section.

- C) An open space management entity shall ensure that the open space will be protected in perpetuity from all forms of development, except as shown on an approved development plan and that it will never be changed to another use. The management entity shall
 - 1) Prescribe all allowable and unallowable uses and activities within such open space.
 - 2) Provide detailed standards and schedules for maintenance of the open space, including vegetative management.
 - 3) If there is not sufficient compliance with the homeowner's maintenance agreement, allow for county or municipal maintenance of open space.