

## Chatham County Conservation Subdivision Guidelines for Conservation Space Selection

This guidance document addresses the Conservation Space requirements in Section 7.7, Conservation Subdivision, for developing a conservation subdivision. Conservation Space should be selected with consideration of adjacent properties. The goal of Section 7.7 is to provide an incentive for development in a manner that will establish current, or enable future, connections with other conservation areas. The long term goal is to create large, continuous areas of natural space across Chatham County for the benefit of both human and natural environments.

### A. Conservation Subdivision Instructions

- Steps 1-6 are for Applicants and Consultants to be used in conjunction with the other provisions included in these guidelines.
- Please be advised that two maps are required to be reviewed and approved by the Watershed Protection Director prior to your Concept Plan submittal.
- These maps and review process are separate from the Environmental Impact Assessment. Conservation space submittals cannot be bundled with the Environmental Impact Assessment and should be provided per the process below.

- 1) **Identify Conservation Space-** Site surveys must be conducted to identify features/areas for Primary and Secondary Natural Space selection. This includes, but is not limited to, the NC Natural Heritage Program (NCNHP) classification of State Natural Heritage Natural Areas and Element Occurrences. **Contact NCNHP directly to schedule the site evaluation.** Obtain the report and Element Occurrence data for use in mapping exercise below.
- 2) **Generate Maps-** Data gathered through records research, GIS, and site reports should be compiled to generate maps that are the foundation for the planning of the development envelope and overall site design. This involves a thorough reading and implementation of the concepts laid out in the guidelines.
  - a. **Fragmentation Map** drives general conservation selection (i.e. surrounding landscape and potential connections between conservation spaces in a broader context).
  - b. **On-site Inventory Map** is the driving decision making tool for conservation space selection and the areas set aside for development. **THE SITE LAYOUT CANNOT BE DESIGNED BEFORE THE ON-SITE INVENTORY MAP.**
- 3) **Design the Site-** The layout should reflect the Onsite Inventory Map and design the development envelope in areas that are not Primary or

Secondary Natural Space (in order listed) or needed to create connections to Natural Space when more than 40% of the site qualifies as Natural Space. Keep in mind that septic fields should only be shown in the development envelope.

- 4) **Provide Maps and Analysis-** Schedule a pre-submittal meeting with the Watershed Protection Director to demonstrate consideration of conservation space selection is in keeping with the guidelines. If the Director agrees the layout is ready for formal review, proceed to step five.
- 5) **Submit-** Provide the Fragmentation and On-site Inventory maps and the site plan to the Watershed Protection Director for review and approval at least 60 days prior to Concept Plan submittal.
- 6) **Appeal-** If no staff approval is issued, an appeal can be submitted as described in the Subdivision Regulations.

Note: The data sets required for the Fragmentation and On-site Inventory Maps are extensive. It is recommended that multiple exhibits be used in aggregate, especially for the On-site Inventory.

## B. Conservation Space Identification and Mapping Provisions

### 1) Conservation Space Required

Conservation space is comprised of two categories of space to be preserved – Open Space and Natural Space. Open space, as defined in the Subdivision Ordinance, allows amenities such as recreational uses and some non-intrusive common uses ~~(e.g. when land application is not the preferred means of wastewater disposal, community septic systems are allowed in Open Space areas)~~. Open space should be located as close to proposed development as practicable, taking into account considerations such as public safety and soil suitability. Natural space is unimproved land in its naturally occurring state, or preserved to regenerate to in its naturally occurring state, unaltered by human activity, and preserved to maintain or improve the natural, scenic, ecological, cultural, hydrological, or geological values of an area.

1.1) Open Space: Regarding the required minimum 40% Conservation Space for a Site, a maximum of 8% of the site (20% of Conservation Space) shall consist of Open Space.

Areas to Place in Open Space
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| <ul style="list-style-type: none"><li>● Active and/or Passive Recreation.</li><li>● <del>Community Septic Systems, or Sewer system</del> land application areas <u>(excluding septic systems)</u>.</li></ul> |
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- Other Shared Infrastructure Such as Community Wells

1.2. Natural Space: Regarding the required minimum 40% Conservation Space for a Site, a minimum of 32% of the site (80% of Conservation Space) shall consist of Natural Space.

The below prioritization of natural areas was compiled by the Chatham County Environmental Review and Planning boards, and is provided to guide natural

space selection. The natural areas are listed in order of value under two categories, Primary and Secondary. Each type of primary and secondary natural area should be considered in order of its listing. Continuity of natural space is of most importance (i.e., many isolated pockets of primary area are less valuable than several primary areas all connected with secondary areas).

It is expected that secondary and non-identified areas will be required to ensure continuity between primary areas.

On site inventory and fragmentation maps must follow a required field survey and consultation with the NC Natural Heritage Program, and NHP priority areas must be submitted for consideration with the site plan.

~~Chatham County understands that site constraints may be too restrictive for the intended uses (e.g. septic fields) on some properties. In these instances, some of the required Natural Space may be used to satisfy these requirements. The Chatham County Watershed Protection Director will allow less Natural Space preservation when it can be demonstrated that no practicable alternative exists (although at least 40% of the site must still be retained as Conservation Space). In making this decision, the Watershed Protection Director will take into consideration soil suitability, slopes, and alternative means of achieving compliance (e.g., when soil suitability dictates that additional land is needed to accommodate septic fields, whether on site treatment and land application be feasible in lieu of septic).~~

Primary Natural Areas (Preserve these first – listed in order of value)

- State Natural Heritage Areas and Natural Heritage Element Occurrences
- NC Wildlife Action Plan (WAP) Upland Systems\* (≥ 5,000 ft<sup>2</sup> must exist)
- Historic and Cultural Resources (as defined by SHPO and Chatham Historic Assn.)

Secondary Natural Areas (If the above have been preserved and there is still conservation area left, or if needed to connect several primary areas)

- NC Wildlife Action Plan Lowland Systems\*\* (≥ 5,000 ft<sup>2</sup> must exist)
- ~~Active Farms and/or Prime Farmland Soils~~
- ~~Wildlife Resources Commission and Forest Service Hunting and Burn Buffers~~

\* Upland Pool; Upland Depression Swamp Forest; Rock Outcrops; Piedmont Monadnock Forest; Dry-mesic Oak-Hickory Forest; Dry Oak-Hickory Forest; Xeric hardpan Forest; Basic Oak-Hickory Forest; Mesic Mixed Hardwood Forest; Basic Mesic Forest; and, Piedmont Longleaf Pine Forest.

*WAP Systems* require identification by an Environmental Professional. Upland Pools and Rock Outcrops shall be preserved on a site by site basis. Approvals shall be based on the written opinion of the Environmental Professional and recommendation of the Environmental Review Board to the Board of Commissioners.

*Upland pools* to receive protection include natural depressions which seasonally retain water, either by direct precipitation or through intersection

with the water table. Abandoned agricultural or other manmade depressions that do not display these characteristics should not receive special protection.

*Rock outcrops* to receive protection include natural features, of intrusive or extrusive origin, and exist in, or contribute to, a natural community structure that would be expected of the chemical and morphological characteristics of the underlying geological units. Rocks deposited by past human activities should not receive special protection.

\*\*Piedmont Levee Forest; Piedmont Swamp Forest; Piedmont Bottomland Forest; Floodplain Pool; Semi-permanent Impoundment; Rocky Bar and Shore; and, Low-elevation seep

When more than 40% of a site contains Primary and/or Secondary areas, the conservation area shall be selected based on connectivity with adjacent natural space. However, under no circumstances should this section be construed to enable development on otherwise prohibited areas (e.g. watershed buffers, steep slopes, floodplains).

## 2) Maps Required

During the initial planning of a Conservation Subdivision, the applicant is required to submit two maps to demonstrate that the intent of this incentive is satisfied. These maps include a Fragmentation Map, and an On-site Environmental Inventory Map. These maps must be approved by the Watershed Protection Director prior to any plat approval for both major and minor subdivisions.

2.1) The Fragmentation Map illustrates the project site and all land within one mile of its boundaries. This map will assist the applicant in deciding where Conservation Space should generally be located. Conservation Space should create connections with existing Natural Space, or be located to allow future Natural Space connections on adjacent properties. All information required in the Fragmentation map is available on the Chatham County GIS website (<http://www.chathamgis.com/mapguide/ChathamGISWeb/>), except for Element Occurrences (EOs), which must be obtained from the North Carolina Natural Heritage Program (NCNHP) website (<https://ncnhde.natureserve.org/>). Fees may be required by the NCNHP. The map should illustrate the following information:

- a- Parcel lines, roads, and easements;
- b- Existing Natural Space Areas (as available on Chatham Co. GIS);
- c- NHP Natural Heritage Natural Areas (NHNAs) and Element Occurrences (EOs);
- d- Hydrography, including protected floodplains, streams, lakes, ponds, seeps, springs, and wetlands; and,
- e- Steep Slope Areas

2.2) The On-site Inventory Map will be the primary decision-making tool for the applicant in selecting specific areas to include in Conservation Space, and the County in issuing approvals. Data required to generate this map include

existing Chatham County GIS (website provided above), and on-site investigations.

- a- Existing landcover (natural community type, agriculture, developed, fallow field, etc), including all primary and secondary preservation areas;
- b- Proposed natural space preservation locations and acreages;
- c- Topography, using contour intervals of no greater than five feet;
- d- Streams, Wetlands, Floodplains, and required buffers;
- e- Adjacent natural areas ; and,
- f- Cultural and Historic Resources (see Primary Natural Areas above)