

Clean water, clean air and many native wildlife and habitats are vulnerable to improperly planned development. Unique wildlife habitats are being fragmented and are disappearing in North Carolina and the Southeast. *This model ordinance is intended to encourage conservation of the <u>most</u> sensitive wildlife habitats such as wetlands and other rare, high quality wildlife habitats, especially in rural landscapes, priority wildlife corridors between protected lands or along the boundaries of rivers or protected lands. Developers benefit from a local conservation district such as this model proposes because they will be better advised and guided through the development process in areas with wetlands and other sensitive environmental features. This will lead to fewer permit delays and opposition from neighbors and the community. <i>The model ordinance can also be adapted as an optional type of development in exchange for a density bonus or other incentive.* The model ordinance was developed by the NC Wildlife Resources Commission and the Duke University Nicholas Institute.

How is the District Determined?

The N.C. Biodiversity and Wildlife Habitat Assessment and existing natural resources and wildlife habitat mapping data are used to determine where significant natural resource areas exist. The local government uses this existing data to establish the limits of the Natural Resources Conservation District (NRCD). The NRCD is delineated as the parcel boundaries of parcels that overlap the mapped significant natural resource areas.

Once a local government determines the boundaries of the NRCD, the local government needs to approve the overlay according to its usual procedures.

Data sources used to map significant natural resource areas in the District are:

• The NC Conservation Planning Tool Biodiversity and Wildlife Habitat Assessment, which is comprised of the following map layers and data:

Data managed by the NC Natural Heritage Program

- Natural Heritage Natural Areas
- Location of rare species (Natural Heritage Element Occurrences)
- Important wildlife travel corridors.

Data collected and managed by the National Wetlands Inventory and the NC Division of Coastal Management

• Wetlands (wetland quality and type)

Data collected and managed by the NC Wildlife Resources Commission

• Streams with state or federally listed aquatic wildlife

What is required for development proposals within the District?

The model ordinance can also be adapted as an optional type of development in exchange for a density bonus or other incentive. Persons proposing a development project that is not exempted by the ordinance need to have a Natural Resources Conservation Plan approved by the town. The Natural Resources Conservation Plan must be based on a site survey conducted by a qualified biologist to delineate the presence of significant natural resources anywhere on the parcel.

Please Note: If the developer is also in the process of obtaining a wetlands delineation for a federal or state permit, the same biologist can conduct the site survey required in the model ordinance.

The required conservation area (See also Diagram 1)

- Adopting local governments can change <u>any</u> of the conservation proportions or criteria described in the model ordinance, such as the proportion of required conservation area.
- Up to, but not exceeding 50% of the tract must be conserved only if significant natural resources are confirmed by the site survey on 50% or more of the parcel.
- If less than 50% of the parcel is comprised of significant natural resources as confirmed by the site survey, then that proportion of significant natural resource area is conserved.
- For example if 25% of the parcel is confirmed to contain significant natural resources then only 25% of the parcel needs to be conserved.
- Natural resource management activities must be identified that will maintain the quality of the natural resources in the conservation area.
- If development impacts cannot be avoided to certain areas that contain significant natural resources, an equal area must be conserved elsewhere on the parcel.

What can developers do if they cannot meet the requirements of the District?

If the ordinance is optional in exchange for a density bonus or other incentive, the developers can choose not to implement a conservation development. If conservation development is required within the district, developers may request a variance from the town. The town will evaluate the merits of the variance request.

Diagram 1. A visual representation of the District conservation area requirement

Legend



No 'significant natural resources' were identified by the site survey in this area.

Areas where Significant Natural Resources were identified by the site survey



Areas where Significant Natural Resources are of the highest priority.

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Areas where Significant Natural Resources need to be conserved

Explanation of the Scenarios

These parcels in the Natural Resources Conservation District have had the required site survey by a qualified biologist.

- A. This site survey has identified that > 50% of the parcel is comprised of 'significant natural resources'. A maximum of 50% of the parcel is required to be conserved and this area needs to include the highest priority resources.
- B. This site survey identified that only 25% of the parcel is comprised of 'significant natural resources'. Only 25% of the parcel is required to be conserved.

Α

Maximum Conservation Scenario: More than 50% of the parcel is identified as containing significant natural resources by the site survey. Only 50% of the parcel needs to be in conservation.





В

Other Conservation Scenarios: Less than 50% of the parcel is identified by the site survey as containing significant natural resources; the extent of significant natural resources on the parcel needs to be conserved.





Model Natural Resources Conservation Ordinance: Impervious Surface Area

- 15% of the *entire* tract can be in impervious surface. The entire tract includes the conservation area which will have no impervious surface.
- The 15% value is based on recommendations in the peer reviewed scientific literature and on research in NC that shows that the average amount of impervious surface in conservation developments is 15%.
- For a development tract of 100 acres 15 acres could be in impervious surface (outside of the conservation area).
- Impervious surface will be roofs, roads and driveways.
- It will be possible to use permeable pavement to reduce impervious surface area.
- Note:
 - 15 acres equals 653,400 square feet
 - If each house is 2,000 square feet each house is 0.046 acres.
 - 1 mile of road 22ft in width is 116,160 square feet or 2.667 acres.
 - Therefore 15 acres of impervious surface is equal to:
 - (15/0.046) = 326 houses
 OR
 - (15/2.667) = 5.62 miles of 22 foot wide road
 - Development area (in white) is 50% = 50 acres
 - 30% of 50 acres is 15 acres.
 - 30% of the development area can be in impervious surface.

50% of the entire tract is conservation area (green).

- Development area (in white) is 70% = 70 acres
- 21.4% of 70 acres is 15 acres.
- 21.4% of the development area can be in impervious surface.

30% of the entire tract is conservation area (green).

Scenario . A. A development within the district has the maximum amount of significant natural resources conservation set aside of 50%.

Scenario B. A development within the district has an area of significant natural resources conservation set aside of 30%.

• Development area (in white) is 90% = 90 acres

- 16.6% of 90 acres is 15 acres.
- 16.6% of the development area can be in impervious surface.

10% of the entire tract is conservation area (green).

Scenario C. A development within the district has an area of significant natural resources conservation set aside of 10%.