Land Use & Comprehensive Planning to Minimize Impacts on Wildlife

Crafting Plans that are Effective in Decision-making

Over a third of our 1,000 wildlife species in North Carolina are declining due to habitat fragmentation and loss from spread-out development patterns. To maintain habitat quality and connectivity for wildlife it is ideal to encourage conservation of large, connected areas of habitat and to maintain desired rural and agricultural areas.

Important Considerations

- Incorporate strong justification for natural resource conservation and intended growth areas.
- Be specific about what types of land uses are preferred or not preferred in each future land use district.
- Creating a conservation overlay district that permits conservation subdivisions as by-right with incentives is ideal for sensitive resource areas. High Impact land uses can be directed to more appropriate land use districts.
- Maintain a rural land use district around existing protected areas and in the landscape between protected areas.
- Direct major development toward town and city centers.
- If your community can adopt an official conservation plan that all relevant plans are tied to, this is very effective.

Plan the Green Before the Gray

Follow the 6 step conservation planning process in the Green Growth Toolbox Handbook.
1) Identify and describe the status of priority species and habitats in your community.
2) Through a public process, establish a conservation vision and set conservation goals.
3) Develop conservation strategies.
4) Identify how strategies will be implemented.
5) Write a conservation plan or section of the comprehensive plan.
6) Implement the plan and monitor progress.

How to Identify Priority Conservation Areas

Focus on connecting large areas of habitat in contiguous blocks.
- Understand and use the Conservation Data for Green Growth in Section 2 of the Green Growth Toolbox handbook and available on our website.
- The Biodiversity and Wildlife Habitat Assessment map combined with the Managed Areas map layer may be all you need to create an initial map of priority conservation areas.
- Include areas within a half mile of existing conservation lands (Managed Areas) within priority areas as much as is practical to reduce development impacts to conserved lands.
- Identify natural areas between existing protected lands. It is important that these areas remain rural so that wildlife can travel through the landscape.

Biodiversity and Wildlife Habitat Assessment

<table>
<thead>
<tr>
<th>Relative Conservation Value</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>9-10 (Maximum)</td>
<td>Light Purple</td>
</tr>
<tr>
<td>8</td>
<td>Light Brown</td>
</tr>
<tr>
<td>7</td>
<td>Light Green</td>
</tr>
<tr>
<td>6</td>
<td>Green</td>
</tr>
<tr>
<td>5</td>
<td>Brown</td>
</tr>
<tr>
<td>4</td>
<td>Orange</td>
</tr>
<tr>
<td>3-4</td>
<td>Yellow</td>
</tr>
<tr>
<td>1 (Moderate)</td>
<td>Red</td>
</tr>
<tr>
<td>0 (Unsuitable)</td>
<td>Black</td>
</tr>
<tr>
<td>Vegetation &gt;20%</td>
<td>Gray</td>
</tr>
</tbody>
</table>

Areas between existing protected areas (Managed Areas), especially areas with priority wildlife habitat are identified as a rural / agricultural conservation district where major development would not be preferred.

It is essential to direct major development within and toward municipalities, as depicted with the example ‘Intended Growth Areas’ in the top map. It is especially important to maintain a conservation district in high priority conservation areas where development pressure is high.
CAUTION!
Help prevent poaching. Don’t Display Species Name on Maps!

Supporting your Community’s Intended Growth Character

- In order to clearly direct major development to the areas that are appropriate it is essential to have a comprehensive plan that is defensible during the decision-making process.

- Identify intended growth areas and in the description of this land use district include a table of desired development characteristics that lists what types of general land uses are permitted and those that are not preferred.

- Polk County’s 20/20 Vision Plan is a good example of this method (pages VI-3 to VI-7). Durham’s Comprehensive Plan also provides an example (Chapter 2. Land Use Element).

- Include graphics that explain conservation development design that minimizes wildlife habitat fragmentation. See the NC Wildlife Commission’s Toolbox Preferred Development Design fact sheet for more information on conservation development design.

- In order to protect wildlife and natural resources intended growth areas should not be placed directly adjacent to Managed Areas, in rural areas or in rural areas between Managed Areas.

How to Find Information on the Species and Habitats of Greatest Conservation Need

- It is best to contact a N.C. Wildlife Resources Commission Biologist that you know or contact us at greengrowth@ncwildlife.org or (910) 638-4887. NCWRC can assist you in using the NC Wildlife Action Plan and N.C. Natural Heritage information that is specific to your community.

- You can download a list of rare species for your county from the N.C. Natural Heritage Program website at: http://ncnhp.org/data/species-community-search. Just enter the name of your county in the ‘County Name Like’ box without the word ‘county’. At the bottom of the page click on the ‘Help’ or ‘Definitions’ document for information on what the columns of the rare species table mean.

- To obtain the GIS map layer with complete rare species information and approximate location (Natural Heritage Element Occurrences) training is required and offered by the N.C. Natural Heritage Program. Training dates can be found at the bottom of https://ncnhde.natureserve.org/.

- Once you know what priority habitat types are in your community, the NC Wildlife Action Plan (www.ncwildlife.org/plan) can be used to obtain a description of those habitats and information on threats.

- Take or request a Green Growth Toolbox workshop.

<table>
<thead>
<tr>
<th>Subdivision Types</th>
<th>Major subdivision</th>
<th>Not preferred</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conservation design minor subdivision (&lt;5 lots)</td>
<td>Permitted</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Land Use Types</th>
<th>Industrial</th>
<th>Conditional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thoroughfare Types</td>
<td>Highway / Interstate</td>
<td>Not preferred</td>
</tr>
</tbody>
</table>

(Above) Example Rural Agricultural Conservation Sector or District. Showing images of what desired conditions look like and providing tables of preferred land uses and densities, strengthens land use plans.

Where can I find good example land use and transportation plans?

The Toolbox website lists plans that have good examples of conservation elements at ncwildlife.org/Conserving/Programs/Green-Growth-Toolbox/Green-Planning.