

CHAPTER 9: UTILIZATION OF THE CONSERVATION PLANNING TOOL

The approach to conservation of land and water involves five steps:

1. Identify lands in your area that have been identified as the most important by reviewing the Conservation Planning Tool report and the series of focused assessments. These statewide layers can be overlaid on any existing land use map at the same scale, including parcel data;
2. Verify the presence and value of these lands on the ground;
3. Conserve those lands that are currently not protected through targeted acquisitions and easements;
4. Explore the possibility of connecting these lands via a system of connectors through conservation or restoration;
5. And lastly, implementation of actual land conservation, including management, is performed by various state programs, local governments, land trusts, private landowners, and other entities.

What is the Status of North Carolina's Land Conservation?

The acreage converted to development is increasing even more rapidly now, as suburbs expand outward and large-lot houses are built in formerly rural areas. The scattered pattern of modern development consumes a large amount of land and fragments the landscape. However, we understand that growth is a part of our state's economy and prosperity - growth is not the issue, it is the pattern of growth.

As forests and natural lands are divided and isolated by roads, houses and shopping malls, wildlife habitat and migration corridors are lost, and normal ecosystem function such as absorption of nutrients, recharging of water supplies, and replenishment of soil are disturbed or destroyed. Water quality has been degraded in numerous streams and rivers. Many remaining wetlands have been drained, filled, polluted, or otherwise degraded. Habitat loss and fragmentation have contributed greatly to a continuing loss of biodiversity in North Carolina. At least 7 plant and 21 animal species have been extirpated from North Carolina. Another 907 plants and 565 animal species are rare, threatened or endangered. Billions of dollars are spent each year to construct or maintain the state's built infrastructure of roads, bridges and utilities that we depend on for modern life. By contrast, the state's natural areas, which exist naturally, are under tremendous pressure from development, yet is virtually ignored in public policy. Left unprotected, the remaining natural areas are vulnerable and will be further reduced and fragmented. North Carolina is projected to grow in population by four million in the next 25 years. Under current rates, this translates to the loss of an addition 8 million acres in that same 25 year period.

Focusing conservation efforts on natural areas will help protect the ecological health found in each region of the state, including forests, streams and wetlands,

preserving and enhancing this heritage for future generations. By acting now, North Carolina can ensure cleaner air and water for its citizens, safeguard habitat needed to spare native animals and plants from extinction, and preserve outdoor recreational opportunities that a large and increasing number of residents and visitors enjoy.

Creating partnerships at all levels of involvement, in all areas of land and water planning, conservation and stewardship of our state's most significant natural resources, is essential to the success of the statewide effort and the future of North Carolina.

Importance of Field Verification at the Parcel Level

Determination of existing significant natural resources is in many cases made using on-the-ground data. However, because of our ever-changing landscape, field verification of current data will need to be confirmed before any major investments toward conservation are made. In addition, some datasets were evaluated on land cover data, aerial photography, and modeled projection. These are cases where field verification are required.

Identifying Data Gaps

Landscape/Habitat Indicator Guilds: The use of Landscape/Habitat Indicator Guilds in this plan has proven to be a comprehensive and accurate way of determining conservation targets for large scale essential habitats. This is currently the most accurate tool available for addressing landscape integrity and habitat fragmentation.

County Natural Heritage Inventories: In some areas of the state, field inventories have not been completed. The Natural Heritage Program conducts detailed field inventories on a county-by-county basis, with a lead biologist focusing on each county for approximately two field seasons. Data collected during inventories feeds directly into NHP's protection work. Since the 1980s, approximately 91 counties have been surveyed individually or as part of regional studies, with seven counties currently in progress and two that remain to be done. In addition to counties that have not yet been surveyed, data from the earliest inventories is becoming outdated. Two important areas in which to focus survey efforts are the northeast/middle coastal plain and in all mountain counties. In these areas ecosystem integrity likely remains high, yet development pressure is predicted to rise and could pose new threats.