

A Sustainable Environment

Vision for 20/20

As stewards of the environment, North Carolinians preserve and protect the state's vast resources. The quality of the air, water, and land will be maintained and enhanced. The collection and dissemination of environmental data will reflect advanced technology and communication.



Goal 1: In 2020, North Carolina's air and water will be of the highest quality.

In some respects, North Carolina has made significant progress in protecting its air and water over the past 20 years. Four of the six primary air pollutants -- including lead and sulfur dioxide -- have declined since the 1970s. In addition, municipal and industrial sewage treatment plants are dumping less noxious waste into rivers. All is far from well, however. Ground-level ozone, which triggers asthma and other respiratory illnesses, has been on the increase since 1995, placing North Carolina among the least healthy states in terms of air quality. Non-point source pollution -- such as runoff from roads and agricultural lands -- presents a critical challenge in maintaining the quality of streams, rivers, and estuaries over the next 20 years. Meanwhile, both pollution and dwindling aquifers pose problems for ground water supplies.

Facts:

- In 1998, high ozone triggered "unhealthy" air advisories on 70 days.
- In 1999, North Carolina had the country's 5th highest number of unhealthy air days.
- Of the most ozone-polluted metropolitan areas in the nation, Charlotte ranked 8th and Raleigh-Durham ranked 11th.
- 27% of NC 7th and 8th graders reported either diagnosed asthma or undiagnosed wheezing.
- As of March 2001, 9,035 leaking underground storage tanks needed repair to prevent or halt contamination of groundwater by petroleum or other chemicals.
- 23% of the 32,392 active underground storage tanks are not in compliance with regulations designed to detect or prevent future leaks.
- Over the past 10 years, there have been 2,199 chemical, biological, and petroleum leaks and spills that contaminated ground water at unregulated sites.

Targets:

1.) **Air Quality.** Air quality throughout the ozone season will be assessed as "good." Half of this improvement will take place by 2010. In 2000 there were 35 "unhealthy" ozone alert days.

2.) **Surface Water Quality.** A significant improvement in the percentage of water bodies supporting their designated uses will be achieved. Specifically:

- 20% improvement in stream miles (500 miles cleaned up);
- 43% improvement in lake acres (13,600 acres cleaned up); and
- 20% improvement in estuary acres (14,000 acres cleaned up).

3.) **Drinking Water.** All North Carolina residents will have access to drinking water meeting water quality standards. Today 71% of the population has access to drinking water meeting federal water quality standards. In conjunction with this measure, all 100 counties will have and enforce well construction standards by 2010. Today only 30 counties have such standards.

4.) **Contaminants.** All contaminant incidents threatening damage to ground water will be properly managed. The scope of the current problem is unclear, but more than 9,000 leaks from underground storage tanks have yet to be remediated, and 7,000 tanks still in use lack the required systems for detecting and preventing future leaks. Landfills and hazardous waste sites also present threats.

5.) **Ground Water Quantity.** Withdrawal from major aquifers will not exceed the recharge rate of each aquifer. Currently, two major aquifers in the coastal plain, the Black Creek and the Upper Cape Fear, have significantly declined and are being used beyond their capacity to be replenished.

Goal 2: North Carolina will ensure healthy and productive natural resources.

The renewable natural resources that have provided sustenance and income to generations of North Carolinians are in danger. Significant steps will be necessary to allow these resource to regenerate and then to keep them diverse and productive.

Facts:

- About 55,000 acres of shellfish beds are closed to harvesting each year.
- More than 90% of shellfish acreage closures are attributed to storm water runoff.
- Of the marine fish stocks studied, more than three-quarters are in danger of depletion. (p124)
- Every year North Carolina loses about 150,000 acres of forest and agricultural land to development.
- Timber harvests clear 500,000 acres of forest land per year.
- Since colonial times wetlands have decreased by 49% in the coastal plain, 28% in the Piedmont, and 89% in the mountains.

Targets:

1.) **Shellfish.** 100% of the current acreage for saltwater shellfish will remain open for harvesting through 2020. Approximately 4% of the state's shellfish acreage (56,191) already has been closed because of pollution.

2.) **Marine Fish Stock.** 100% of evaluated fish stocks will improve and be classified as either Viable, Recovering, or under an approved rebuilding plan. Only 23% of stocks evaluated in 2000 were considered viable.

3.) **Forest land.** 100% of the current forest acres will be maintained through 2010, and forest diversity will be maintained as to age, class and type. Between 1982 and 1997, North Carolina lost an estimated 77,200 acres of forest every year.

4.) **Wetlands.** 100% of the current wetlands and riparian functions will be preserved through 2010. North Carolina currently has 5 million fully functioning acres of wetlands and 2.5 million acres of degraded wetlands.

Goal 3: North Carolina will preserve and enhance the quality of rural and urban life.

While the state's growing population aids economic vitality, it also challenges policy makers to control urban sprawl. Today that sprawl is gobbling farm and forest land, generating unhealthy air, and increasing gasoline consumption. Some of the development is occurring in sensitive natural areas.

Facts:

- The state's population is projected to grow from 8 million in 2000 to 9.6 million in 2020.
- The population of state's five largest counties (Mecklenburg, Wake, Guilford, Forsyth, and Cumberland) grew an average of 26% during the 1990s. (p129, f413)
- The coastal counties of Brunswick, Pender, Currituck, Dare, and New Hanover all grew by more than 20%. (p129, f413)
- Some 2.8 million acres of land was under protection from development in 2001. Most of it was owned by the federal government.
- 21 counties lack countywide plans for managing and directing growth.

Targets:

1.) **Land Use Plans.** All local governments will have and use plans incorporating growth management strategies, development monitoring measures, and natural resource conservation policies. Growth is directed to areas with existing infrastructure, including transportation, and water and wastewater systems. Currently 79 counties have land use plans.

2.) **Protected Land.** North Carolina will protect from development an additional 1 million acres of land, reserving it for such uses as parks, forests, floodplains, and wildlife areas. This represents a 35% increase over the acreage under protection in 2000. Present funding levels allow for the protection of only 43,000 to 63,000 acres per year.

3.) **Brownfields.** By 2010, some 2,000 current brownfield properties will be fully utilized. Brownfields are abandoned, idled, or underused industrial properties where expansion or redevelopment is complicated by real or perceived contamination.