Chapter 1: Overview

What will Wake County look like 100 years from now? Will the landscapes of the County resemble anything that is familiar to the residents of today? Will there be enough land to support a diverse economy and enough water to support a growing population? Will the air be clean to breathe? Will the tall pines and stately oak trees continue to frame the horizon? Will our environment become a landscape crowded with buildings and highways? Or will the county retain the landscapes that have attracted thousands of new residents during the past three decades?

In 1970, the Raleigh-Durham MSA (Metropolitan Statistical Area) was home to 540,000 people. Today, our regional population surpasses one million. In 2020, the region will be home to two million people, larger than the present-day Charlotte, San Antonio, Orlando, or New Orleans regions. Each month, more than 2,000 people take up residency in the Raleigh-Durham area. With this rate of growth, what will the future hold for the new generations of Wake County residents?

The purpose of the Wake County Consolidated Open Space Plan is to set forth methods for protecting and conserving the lands and waters that Wake County will need for our current residents and future generations. To begin this process, it is first necessary to understand the current condition of our open space -- the lands and waters not developed, and those lands already considered to be in some form of protection and conservation.

The issue of “open space planning” is not a new concept. However, it is a concept that has not been practiced with vigor during the past 30 years. As a result, growth and land development has far outstripped conservation and protection measures. From 1987 to 1997 the Triangle Region transformed 190,500 acres of previously undeveloped land into new residential subdivisions, office parks, shopping malls, highways, schools and other commercial uses. The County converted 10,000 acres of open space to development in 2005. In fact, the County has already developed 45 percent of its available real estate. Conversely, approximately 10 percent of our land area has been conserved and protected as open space. Given the current rate of growth and development, if the County does not begin to emphasize land conservation policies and programs, an estimated 78 percent of the county land area will be developed by the year 2020. (source: Triangle Land Conservancy, 2000).
As evidence by the formation of a Growth Management Task Force, Watershed Management Task Force and Open Space Advisory Committee, Wake County is concerned about future growth and land development, and the impact that this has on the quality of life throughout the county. Wake County Government has begun an earnest effort to protect lands and waters that are of value, and which help ensure that the quality of life that residents enjoy today remains desirable for years to come.

Wake County wants to implement a strategy for sustainable growth and development. This Open Space Action Plan, a “greenprint” for the future, is one of several tools currently being implemented by County government to set a new course. A Watershed Plan assessed the impact that growth and development is having on the water supply, watersheds and associated floodplain landscapes. A Growth Management Plan defined new strategies for accommodating future land development activities. A Transportation Master Plan explored ways in which residents travel throughout the county using a variety of modes. Together, these plans are working to establish a foundation for future growth and development that is both sustainable and economically viable.

Wake County did not undertake the preparation of this “greenprint for growth” alone. The County formed strategic partnerships with its 12 municipal governments, and worked with the State of North Carolina, federal agencies, private corporations in the county, landowners, and non-profit organizations that support land conservation. The County understands that it alone cannot accomplish all that must happen to achieve balanced growth and sustainable development.

Toward this end, the County sought and received from voters the authority to issue Open Space Bonds totalling $41 million through referendums approved in 2000 and 2004. This money has been used to purchase land and protect it as open space. In 2002 and 2003, the County awarded more than $250,000 in planning grants to eleven of the twelve municipal governments so that they could complete their own open space plans, and established Partners for Open Space and the Environment (POSE) to produce and implement these local plans. These actions are a first for a North Carolina county and clearly demonstrate the progressive objectives and evolving support for open space conservation in Wake County.

Additionally, open space protection and conservation is not the exclusive concern of local governments. County residents have clearly voiced their concerns and shown their support for land conservation programs. Private landowners, businesses and corporations in Wake County are doing their part to advocate for and participate in open space conservation efforts. A broad-based partnership among the public and private sector will be essential if Wake County is to be successful in conserving its valued undeveloped lands and waters.
Open space has long been synonymous with park and recreation development. It will become apparent throughout this report that much of the open space protection and conservation strategies of local governments has been closely associated with the provision of park and recreation lands and facilities. Open space can and must be thought of in broader terms as the “green infrastructure” upon which communities build and grow. Open space is the infrastructure that provides our communities with clean water. Open space can be used to absorb floodwaters in flood-prone landscapes and reduce impervious surface areas throughout a watershed. Open space absorbs floodwaters and therefore can serve to keep people and property out of hazardous flood prone landscapes. Open space provides the land area necessary to grow healthy stands of native trees which clean air and moderate climate. Open space also defines our sense of place, it is what makes living in Wake County different from Chester County, Pennsylvania, Broward County, Florida, Boone County, Missouri and King County, Washington.

Water Quality
Water is one of our most precious resources. All life depends on a stable source of clean water. In Wake County, our water is drawn from several surface lakes, including the Falls Lake reservoir, Jordan Lake reservoir and several secondary sources including Lake Benson and ground water. Fresh water is not an infinite resource. In fact, the fresh water supply is a finite resource that must be properly managed, especially given the demands of our growing population. While we take our drinking water for granted, America is one of the few nations in the world to enjoy this diminishing luxury. The Centers for Disease Control in Atlanta reports that each year more than one million Americans become ill, and annually 900 die, from drinking polluted water. The CDC expects these incidents to increase as more pressure is exerted on the nation's fresh water delivery systems.

The signs of stress are beginning to emerge as Wake County's population continues to grow. Moratoriums on new growth and development have been declared in several Wake County municipalities in years past due to restrictions on water usage. The drought of 2002 also caused communities to examine growth management in light of water shortages. New strategies are emerging in several communities that involve piping water from adjoining counties into Wake County to ensure a plentiful supply in the future. It is important to implement sound water management principals and practices today so that our water supply will keep up with the demands of the future. This means Wake County must not allow its water supply to become degraded and polluted.

The protection of our water supply should begin with the protection of the infrastructure that produces clean water. This includes the wetlands, vegetated stream buffers, aquatic habitat, and biological processes that remove pollution from our water and keep it clean. Toward this end, the
County’s Watershed Management Plan is closely tied to the efforts of the Open Space Action Plan. Protecting and conserving open space is the least costly and most effective method for protecting our water supply. As one example of this strategy, the state of New Jersey spent $55 million to acquire property in the State of New York, to safeguard its drinking water supply. The City of New York estimated that it would cost between $6 and $8 billion to continue to upgrade its water filtration systems in order to provide clean water to NYC residents. Instead the City is spending $1.5 billion to purchase land around its upstate water reservoirs in order to keep its water supply from becoming polluted so that treatment costs will be reduced. These are the types of strategies that Wake County must employ, and request that surrounding counties employ, to protect the water supply reservoirs of our region.

Ecological Values
The lands that serve to filter pollution from our water supply serve other important purposes. We can strategically access and use the land for recreation. Viable forestry operations can be sustained on these lands, which in turn will support a diversity of plant and animal life, and help to keep our air clean. Maintaining vegetative buffers, healthy streams and biologically diverse landscapes mitigates the effects of urbanization on our local climate. Our soil will remain rich and receptive to rainwater. Our landscapes will remain distinctive.

These ecological values are important in defining our quality of life. They are essential in sustaining life for plants and animals that are native to Wake County. In 1987, the Triangle Land Conservancy in partnership with the North Carolina Natural Heritage Program and Wake County government conducted a Natural Heritage Inventory of the County. This effort identified more than 53 natural area landscapes considered to be significant and in need of protection. Many of these sites contained rare plant and animal species. Some sites were of local significance, while others merited regional and state significance. The greatest threats to these landscapes in 1987 was the rapid growth in population and resulting land development.

Since the Natural Heritage Report was published, some of these sites have been protected, while others remain unprotected. Some of these sites have been lost to development. In 1999, Wake County commissioned phase one of this Open Space Action Plan. The purpose of the Phase One study was to examine four watersheds (Falls Lake, Neuse River corridor, Swift Creek and Harris Lake) and determine lands that were in need of immediate protection. From this study, 44 sites were identified for further study. Many of these sites remain unprotected, as of this date.

Despite the 12 year difference in time between these two studies and reports, one thing remains clear. The natural heritage in Wake County is not going to be protected by studies and reports, it will be protected by our actions or lost by our lack of action. Now is the time to take action.
Economic Values
Protecting open space is not in conflict with a healthy and vibrant economy. Both are possible under the principles of sustainable development. Open space represents value added in the American landscape. Increasing numbers of communities throughout the nation have come to realize that protecting open space is a good investment and not an unwarranted expense. In Austin, Texas, community residents have decided to “invest” $130 million in local bonds to protect open space in critical watersheds and create new parks and greenways. This is being done to enhance the quality of life and offer a new, competitive national model for sustainable urban growth that will be used to lure new business and industry to the community.

Open space has value in Wake County’s economy. In fact, the sprawl that Wake County has experienced during the past three decades has been costly. Howard County, Maryland, found that providing services for open space, parks and farmland cost the community $0.35 for every $1.00 collected in taxes, while providing services to residential property cost the community $1.25 for every dollar collected. Minneapolis-St. Paul, MN, reports that rural undeveloped landscapes require $0.50 in services for every tax dollar paid, while its residential properties require $1.04 in services for every tax dollar paid. Similar studies are found throughout the nation.

Open space can also prevent economic loss. Former Raleigh City Manager Dempsey Benton stated that the financial impact from flooding resulting from Hurricane Fran (1996) could have been much worse had it not been for the 25-year old Capital Area Greenway program, which has served to keep homes and businesses out of flood prone landscapes (source: News and Observer).

Open Space attracts new business and industry. After conducting a five-state search for a new manufacturing site that would bring 700 new jobs to a community, Reichold Chemical settled on its present day site in the Research Triangle Park (RTP). Reichold publicly stated that the development of RTP’s trails and greenways was the deciding factor in its relocation decision. Reichold sponsors on-site health and wellness programs and its proximity to RTP’s greenway system influenced its final decision and was an enticement that no other site offered. In fact, recent surveys of small business owners rank recreation/parks/open space as the highest priority in choosing a new location for their business (source: Trust for Public Land).

Open space also improves the value of adjacent land. Shepherds Vineyard subdivision in Apex reports land values are 20% higher for properties that are located adjacent to the community open space and greenway, versus those that are not immediately adjacent. As an investment in the future, property that is conserved for open space and subsequently removed from the tax rolls will serve to improve the economic value of land.
immediately adjacent, resulting in little or no net loss in taxable value. For example, in Oakland, CA, a three-mile long greenway was found to add $41 million in value to surrounding properties. Also, between 1980 and 1990, the percentage of Denver residents who said they would pay more to live near or on one of its famed greenways rose from 16 percent to 48 percent. Chattanooga, TN’s investment in its public greenway system has attracted more than $750 million in private sector investment to properties that surround the greenway. Open space enhances property values.

Connectivity
One of the central ideas and purposes of the Open Space Action Plan is to support connections. Aldo Leopold said, “Everything is connected to everything else.” Protecting open space, creating greenways and establishing a Greenprint for Wake County is all about maintaining connections. This plan is concerned with many different types of connections, ecological and human.

In most cases ecological systems don’t share human-created geopolitical boundaries. Many of our watersheds for example, one of the largest organizational frameworks for ecological systems, extend beyond the county boundaries. Wake County does not control the actions of other local governments with respect to how water and land is managed within a watershed that is outside our political boundary. Conversely, the actions in Wake County affect our neighboring downstream counties. It is easier to control the subwatersheds that are entirely contained within our boundaries. Many of these subwatersheds are experiencing severe degradation and pollution resulting from land development activities, including an increase in flooding from upstream urbanization. For example, the Nature Conservancy and the Association for Biodiversity Information has named the Upper Neuse Watershed, which includes Wake County, as one of 15% of all watershed in the United States that must be protected to preserve at risk freshwater mussels and fish species.

Understanding ecology and its role in defining our quality of life is one of the most important “connections” to make. The County must strive to make future land development “sustainable.” These subwatersheds do have a carrying capacity -- there is a limit as to how much land development and landscape alteration can take place before ecological systems are degraded.

Many Wake Countians enjoy being “connected” to the great outdoors. Hiking, cycling, skating, fishing, picnicking, hunting (on state and federal gamelands), participating in organized sports, boating, and many other activities are enjoyed every day by residents of the county. These connections can be strengthened by improving access to the unique landscapes of the county through the provision of more greenways, parks and open space. Many of these connections need to occur closer to our urban centers and towns, where the greatest number of people of the county reside.
These physical connections can and should be linked together to form an interconnected network of open space resources that can improve recreation and offer alternatives to automobile travel.

Our Sense of Place

As Wallace Stegner said, “If you don’t know where you are, you don’t know who you are.” During the past 30 to 40 years many of our communities all across America have begun to look alike, indistinguishable one from another. It is difficult to determine a difference in the suburban landscapes throughout Wake County. Are you in Raleigh, Cary, Garner, Wake Forest or Fuquay-Varina? Additionally, the landscapes that were created during this period, miles of strip malls, fast food restaurants, auto dealerships and gas stations, are often inhospitable to everyone except automobile visitors.

This strip development along our entry roadways tell visitors and residents alike very little about Wake County. Our culture and heritage is better defined by our open space and best articulated in the stewardship of the land. Due to the fact that Wake County is not located in the mountains, or along the ocean’s edge, or on a major river, the most significant natural resources of Wake County include the green forests of loblolly pine, oak and maple. Our community grew along the creeks and streams that flow from abundant watersheds throughout the county. Our rolling terrain has been the building block for our agricultural and industrial economy. Our natural heritage has served to define who we are as well as where we live. We can’t afford to turn our back on this heritage. We must do our part to protect and conserve this place for future generations.