The Open Space system that is represented on the inserted map (see Wake County Open Space Plan map) illustrates how the Hub and Spoke system would be achieved throughout the county. Green circles illustrate where municipal open space plans call for targeted acquisition of open space parcels (hubs) and dashed lines show where greenway corridors can be developed. Blue shaded areas show the FEMA regulated floodplains that should be protected. The future open space system is summarized in the chart below.

<table>
<thead>
<tr>
<th>Category of Open Space</th>
<th>(Minimum) Goal in Acres</th>
<th>Percent of Total Open Space</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing Protected Open Space</td>
<td>55,719</td>
<td>10.00%</td>
</tr>
<tr>
<td>Conserved Floodplain Lands (future)</td>
<td>60,000</td>
<td>11.00%</td>
</tr>
<tr>
<td>Protected Open Space through land development process (future)</td>
<td>22,000</td>
<td>4.00%</td>
</tr>
<tr>
<td>Future Open Space Acquisitions</td>
<td>27,281</td>
<td>5.00%</td>
</tr>
<tr>
<td>Total Protected Open Space</td>
<td>165,000</td>
<td>30.00%</td>
</tr>
<tr>
<td>Total Land Area of Wake County</td>
<td>550,000</td>
<td></td>
</tr>
</tbody>
</table>
The Wake County Open Space Plan provides for a full range of greenway trail types to meet the objectives of open space protection, and at the same time offer quality outdoor space for public use. There are five different types of greenways that will comprise the system. Wake County greenway corridors may contain more than one type of trail. The selection of a type is not defined for each open space corridor and will be determined after further evaluation of the physical and future use characteristics for each corridor. The five types are described as follows. More specific information can be found in the design guidelines provided within this report.

**Type 1: No Facility Development**
For corridors that are environmentally sensitive and contain steep slopes, wetlands, or rare habitat, a no-facility development type is recommended under the Wake County Open Space Plan. It is anticipated that many corridors defined for water quality, habitat protection, and floodplain management purposes would also fit under this category. Typically, these corridors would remain in a natural, undeveloped condition.

**Type 2: Limited Development, Low-Impact Uses**
The second type of greenway facility would be found within corridors that are environmentally sensitive but can also support limited trail development. These corridors would support bare earth, wood chip, or boardwalk trails. Typically, use would be limited to pedestrian.

**Type 3: Multi-Use Unpaved Trail Development**
This designation would apply to corridors that are capable of supporting a broader range of uses. Greenway trail development, if it occurs along a stream, would be located outside of the floodway. A variety of surface materials could be used, but crushed gravel is the most likely. These trails can be used by pedestrians, cyclists, equestrians and persons with disabilities (ADA).
Type 4: Multi-Use Paved Trail Development
Multi-use paved trails may become one of the most common types of off-road trails in the Wake County greenway system. These trails will support the greatest diversity of users, and can be used year round. They will be more expensive than other types to construct, and they will serve the needs of most users. These trails can be constructed within floodprone landscapes as well as upland corridors.

Type 5: Bike & Pedestrian Facilities in Rights-of-Way
Type 5 trails are generally located within the rights-of-way of roadways throughout the metropolitan area. One of the primary purposes for this trail type is to serve as a connector to the off-road network of Wake County greenways. Sidewalks, bike routes, bike lanes and wide multi-purpose side paths are envisioned as constructed facilities.

For the unincorporated areas of Wake County, the primary goal of the open space plan has been to ensure that the municipal open space plans are properly connected across jurisdictional boundaries, and to identify any parcels of land that should be acquired in order to satisfy water quality goals and objectives as identified in the Watershed Management Plan. Additionally, coordination occurred between the Open Space Plan and the Wake County Transportation Plan to identify potential activity centers where a transportation hub might form in the future. These hubs would be connected with greenway corridors to ensure alternative transportation access.

Implementing the Wake County Open Space Plan will take place at the county and municipal government level. Municipal governments will be expected to fund and implement the recommendations that are provided within their open space plans. To guide this future implementation, this plan envisions continuing the partnership effort begun by the County and municipal governments, currently represented by Partners for Open Space and the Environment (POSE). This partnership should be expanded in the future to include representatives and organizations from the private sector. This county-wide Open Space Plan also unifies the efforts of all local governments. Toward this end, each municipal plan is featured on the following pages. A brief description of the municipal open space system is accompanied by a corresponding map. The individual plans represent an essential building block in what will become a consolidated and unified county wide open space system.
The Parks, Recreation, Greenways and Open Space Master Plan identifies existing community recreation resources (both active and passive) and plans for the anticipated future needs of community members. There are four primary guiding principles of the plan:

1) incorporate cultural, aesthetic and environmental influences into the planning of programs, services and facilities;
2) seek the acquisition of environmentally and culturally significant tracts of land throughout the community as open space assets for the Town of Apex to assure quality of life for the future;
3) utilize greenways as a means of linking neighborhoods, businesses, institutions and recreation facilities within Apex and the surrounding region; and
4) continue and maximize, to the extent possible, shared use opportunities where such relationships are equitable, mutually beneficial and appropriate.

In order to determine the needs of Apex residents, a list of existing open space site features and programs was created to gain an understanding of current site conditions and amenities offered. A series of workshops and surveys were conducted to gain public input about current programs and facilities and define how Apex residents view future open space and recreation resources. The analysis of open space and recreation resources included identifying important natural features and growth patterns, as well as gathering information on parks and recreation facilities available to residents in adjacent communities. Identifying these features created a standard for comparison and helped determine the relative surplus and/or deficit of recreational facilities in Apex. Geographic analysis incorporated key site features such as streams, floodplains, and projected growth areas into the planning process.

As a result of participatory activities used to craft this plan, the Town of Apex has identified the following open space action items:

• acquiring 112 acres of active and 70 acres of passive recreation lands
• acquiring up to nine specific Resource Conservation Area tracts
• addressing the number one citizen activity, walking, by enhancing the sidewalk and greenway systems. Specifically, this means developing the Beaver Creek Greenway and the Lexington Greenway and the near term development of 2.5 miles of sidewalks.

The following greenways are proposed to connect the community open space, neighborhoods, businesses and other towns within the county:

• Beaver Creek Greenway (Phase 1 under construction)
• Lexington Greenway
• North Beaver Creek Greenway (Phase 1 complete)
• Apex High School to Apex Community Park
• Lower Beaver Creek Greenway (Phase 1a complete)
• Middle Creek Greenway
• South White Oak Branch Greenway
• Haddon Hall Greenway to Apex Parkway
• Salem Elementary School to Town of Cary Greenway System
The Cary Open Space and Historic Resources Plan determined actions required to identify Cary’s natural and historic resources, special environmental features and cultural sites. Through this plan, Cary anticipates protecting approximately 12,000 acres of open space that would include both publicly and privately owned properties. There are three primary methods that will be used to preserve this land:

1) regulatory measures;
2) land preservation techniques;
3) voluntary landowner contributions.

The Town has been using an $11 million FY 2002 bond campaign to fund acquisition of open space. The goal is to use these funds to purchase more than 500 acres of targeted open space. The Town is also using a $1 million annual contribution from utility fee revenues to support acquisition.

The Town used an ecological analysis process to define lands that were at the greatest threat of loss. From this, the Town has put threat of loss in order and has listed geographic areas of the Town where protection strategies will be focused.

**First Order of Threat**
- Incorporated Parcels inside Cary Parkway Loop
- Selected incorporated parcels inside RTP Activity Center
- Selected parcels under threat by growth of Holly Springs

**Second Order of Threat**
- Unincorporated Parcels inside Cary Parkway Loop
- Selected unincorporated parcels inside RTP Activity Center
- Remaining incorporated and unincorporated parcels in the project study area.

**Third Order of Threat**
- All remaining parcels not otherwise identified in study area.

The Town provides a "preservation toolbox" that can be utilized to help protect valued properties identified by the plan. ([www.townofcary.org/depts/dsdept/P&Z/openspace/thepreservationtoolbox.pdf](http://www.townofcary.org/depts/dsdept/P&Z/openspace/thepreservationtoolbox.pdf))
Using the Wake County adopted definition, open space areas were assessed through objective screening to identify significant natural and cultural resources within the 71 square mile Fuquay-Varina Urban Services Area (USA). The assessment includes an analysis of these resources within the study area using available sources and limited field reconnaissance. This proposed effort involved the following tasks:

1) a study area definition was obtained from TFV staff;
2) natural and cultural data source information was collected from TFV as well as other public and private sources;
3) an objective ranking system (the “Matrix”) was developed to quantify and rank significant features of multiple themes;
4) the information collected was developed into themes using Geographical Information System (GIS) software and analyzed in different combinations in an effort to prioritize resource areas for further field evaluation;
5) 30 targeted resource areas were evaluated in the field in an effort to verify mapping and conclusions; and
6) digital and photographic databases were developed along with the technical report to summarize the methodologies and findings.

Thirty targeted areas of Open Space were identified for consideration for protection by the Town. (See map on page 3-15). Additionally, the Fuquay-Varina Open Space Plan advocates the protection of stream buffers and greenways along its streams:

• Middle Creek
• Terrible Creek
• Black Creek
• Little Black Creek
• Basal Creek
• Kenneth Creek
• Kenneth Branch

In order to preserve the scenic quality of the town, it was determined that Academy Street (Highway 42), Main Street (Highway 401) and Broad Street (Highway 55) should be protected as entrances into the town.
Public participation was an integral part of Garner's Plan. Two evening community meetings were held to gather public input and display working maps of the community. All Board and planning meetings were open to the public. The input and feedback received from these groups were combined to craft Garner's open space recommendations. Field research and Geographic Information System (GIS) analysis were also used to identify open space and greenways for this plan.

As a result of community meetings, and staff and stakeholder comments, it is recommended that the Town of Garner supplement its existing park system with the following parks and open space acquisitions. These future parks would serve multiple purposes; including active and passive recreation, protection of water quality, floodplain management, and environmental education.

- Central Park - regional park combining Lake Benson Park, White Deer Park, and Thompson Park.
- Adams Branch Park - passive greenway node at Cloverdale.
- Echo Branch Park - neighborhood park near Smith Elementary.
- Yates Mill Branch Park - regional park along Swift Creek.
- West Panther Branch - district park near Vance Elementary.
- East Panther Branch - neighborhood park near the intersection of Jordan Road and Ten Ten.
- White Oak Park - regional park near the Raleigh treatment site.
- Big Branch Park - district park along Big Branch
- Rand Mill Road Park - neighborhood park that expands the existing Rand Mill Road Park.

Two main greenway axes and several loop trails provide alternative transportation and passive recreation options. The greenway network connects the community with businesses, parks, schools and proposed open space parcels.

- Reedy Branch North-South Axis
- Swift Creek East West Axis
- Cloverdale Greenway
- Historic District Greenway
- Lake Benson Greenway
- Vandora Springs Greenway
- Mahler's Creek Greenway
- White Oak Creek Greenway
- Timber Drive Greenway
- Yates Branch Greenway
- Buck's Branch Greenway
- Benson Greenway
- Panther Branch

This Plan also advocates the protection and conservation of the primary streams of Garner, such as White Oak Creek, Buck’s Branch, Mahlers Creek, Adams Branch, Mile Creek, Big Branch, Swift Creek, Yates Branch, etc. Additionally, in order to preserve the character of Garner, it is recommended that several scenic corridors or "viewsheds" are protected, such as Benson Highway, Timber Drive, Main Street and Old Stage Road.