

Mecklenburg County
Parks and Recreation



GREENWAY
Plan Update 2008



Mecklenburg County
Park and Recreation

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Acknowledgments (TBD)

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GREENWAYS
INCORPORATED

Landscape Architecture
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Executive Summary

INTRODUCTION & HISTORY

The Mecklenburg County Greenways & Trails Master Plan has been updated as part of the preparation of the comprehensive Mecklenburg County Parks and Recreation Master Plan. The County's Greenways and Trails program is one of the oldest in North Carolina and the southeastern United States. In 1966, the Charlotte-Mecklenburg master plan for recreation recommended greenways "as logical natural elements useful in creating a sense of physical form and order within the city." The plan proposed that greenways preserve the open space of urban residential areas while providing both active and passive recreation areas.

Although part of the planning fabric for several years, it was not until 1980 that an official greenway master plan was developed. The 1980 greenway master plan called for a 73-mile network of trails along 14 creek corridors. The plan envisioned a "green necklace" of creeks around the County that would address multiple objectives, including habitat conservation, recreation, alternative transportation, mitigation of flooding, and protection of water supply. In 1999, the County developed and adopted the Greenway Master Plan Update. The update built on the objectives articulated in the 1980 Master Plan. However, the focus of the program was expanded to concentrate more on stream corridor and floodplain protection. This update reaffirms the intent to adhere to the vision and objectives established within both the 1980 and 1999 master plans – to protect valued stream corridors for multiple purposes and to continue the development of appropriate creekside trails and overland connector trails.

Over the next five years, it is the goal of the County to continue the expansion of the greenway trail system principally on land the County currently owns. The five year action plan identifies practical trail corridors to construct that will serve County residents and fulfill their need for additional hiking and biking trails and will focus the 10 year development plan on connecting trail systems that will create significant linkages, enhance the regional trail network, and provide more residents with access to the growing trail system. The update also calls for the Park and Recreation Department to work closely with other agencies to identify and develop programs and policies that improve efficiency of developing a trail network system as well as focusing more attention on the stewardship of the greenway corridors so they may better serve their function as a conservation and enhancement tool for floodplain and riparian plant and wildlife habitat.

This 2008 update includes a brief description of the existing greenways and trails system; a plan of action that describes goals for trail planning, design, construction, phasing and operations; a summary of benefits derived from the greenways and trail system; an evaluation of best practices in greenway trail development across the region and nation; an evaluation of regulatory policies and programs; and a list of recommendations for programming greenways and trails.

At present, the Division has designed and constructed over 30 miles of trail within 14 greenway corridors. Over 7 miles of trails connect nearby residents from neighborhoods and park facilities to the main trail system. Through planning efforts of both greenway staff and Mecklenburg County Real Estate services, over 3,000 acres of floodplain and riparian habitat have been conserved.

NEED FOR GREENWAYS AND TRAILS

There is a clear public need and desire for greenways and trail development in Mecklenburg County. In the fall 2007 and early 2008, a series of public meetings were held to provide public input into the Park and Recreation planning process. Greenways and trails were a major topic of discussion at these meetings. Additionally, a community survey conducted by ETC Leisure Vision found greenways and trail development was an important and unmet need for the majority of Mecklenburg County residents.

The results of the 2008 Mecklenburg County Parks and Recreation Master Plan clearly reveal the public's appreciation for natural areas and their desire for a trail system. Echoing results found in Charlotte Department of Transportation's bicycle and pedestrian survey results, residents desired and supported the development of an interconnected trail system.

From a list of 28 parks and recreation facilities, the top 5 requested by the public were:

- 74% Walking and biking trails (national average 68%)
- 63% Large community parks and district parks

- 62% Nature center and trails (national average 57%)
- 61% Small neighborhood parks of 2-10 acres
- 59% Park shelters and picnic areas

Survey results indicate County residents understand and support the role of greenways as both corridors for environmental protection and potential trail development.

- 93% of all residents felt the role of greenways as a connected network of walking, biking and nature trails was very important (75%) or somewhat important (18%).
- 88% of all residents felt the role greenways played in environmental protection was very important (65%) or somewhat important (23%).
- 80% of residents support (56% very supportive, 24% somewhat supportive) using floodplain land to develop biking and walking trails

The results generated by the Mecklenburg County survey support trends seen throughout the state and nation. The results of the Statewide Comprehensive Outdoor Recreation Plan (SCORP) for North Carolina closely mimic Mecklenburg County survey results, and provide a strong rationale for natural resource conservation and the development of a strong trail system. According to the SCORP, the most popular outdoor activities for NC residents are:

- 75% Walking for pleasure
- 71% Viewing scenery
- 62% Visiting historical sites
- 53% Visiting natural areas
- 52% Picnicking

BENEFITS OF THE GREENWAYS & TRAILS SYSTEM

Greenways and trails provide a variety of benefits that ultimately affect the sustainability of a community's economic, environmental, and social health. These benefits include:

- Creating Value and Generating Economic Activity
- Encouraging Bicycle and Pedestrian Transportation
- Improving Health through Active Living
- Providing Clear Skies, Clean Water, Protected Habitat
- Protecting People and Property from Flood Damage
- Enhancing Cultural Awareness and Community Identity
- Providing Safe Places for Outdoor Activity

Creating Value and Generating Economic Activity

There are many examples, both nationally and locally, that affirm the positive connection between greenspace and property values. Studies indicate residential properties will realize a greater gain in value the closer they are located to trails and greenspace. According to a 2002 survey of recent homebuyers by the National Association of Home Realtors and the National Association of Home Builders, trails ranked as the second most important community amenity out of a list of 18 choices. Additionally, the study found that 'trail availability' outranked 16 other options including security, ball fields, golf courses, parks, and access to shopping or business centers. Findings from the Trust for Public Land's Economic Benefits of Parks and Open Space, and the Rails-to-Trails Conservancy's Economic Benefits of Trails and Greenways (listed in the plan) illustrate how this value is realized in property value across the country.

Encouraging Bicycle and Pedestrian Transportation

The sprawling nature of many land development patterns often leaves residents and visitors with no choice but to drive, even for short trips. In fact, two-thirds of all trips made are for a distance of five miles or less. Surveys by the Federal Highway Administration show that Americans are willing to walk as far as two miles to a destination and bicycle as far as five miles. A complete trail network, as part of the local transportation system, will offer effective transportation alternatives by connecting homes, workplaces, schools, parks, downtown, and cultural attractions.

Greenway trail networks can provide alternative transportation links that are currently unavailable. Residents who live in subdivisions outside of downtown areas are able to walk or bike downtown for work, or simply for recreation. Trails allow

residents to circulate through urban areas in a safe, efficient, and fun way: walking or biking. Residents are able to move freely along trail corridors without paying increasingly high gas prices and sitting in ever-growing automobile traffic. Last but not least, regional connectivity through alternative transportation could be achieved once adjacent trail networks are completed and combined.

Improving Health through Active Living

A region's trail network will contribute to the overall health of residents by offering people attractive, safe, accessible places to bike, walk, hike, jog, skate, and possibly places to enjoy water-based trails. In short, the trail network will create better opportunities for active lifestyles. The design of communities—including towns, subdivisions, transportation systems, parks, trails and other public recreational facilities—affects people's ability to reach the recommended 30 minutes each day of moderately intense physical activity (60 minutes for youth). According to the Centers for Disease Control and Prevention (CDC), "Physical inactivity causes numerous physical and mental health problems, is responsible for an estimated 200,000 deaths per year, and contributes to the obesity epidemic".

In identifying a solution, the CDC determined that by creating and improving places in our communities to be physically active, there could be a 25 percent increase in the percentage of people who exercise at least three times a week. This is significant considering that for people who are inactive, even small increases in physical activity can bring measurable health benefits. Additionally, as people become more physically active outdoors, they make connections with their neighbors that contribute to the health of their community.

Many public agencies are teaming up with foundations, universities, and private companies to launch a new kind of health campaign that focuses on improving people's options instead of reforming their behavior. A 2005 Newsweek Magazine feature, *Designing Heart-Healthy Communities*, cites the goals of such programs "The goals range from updating restaurant menus to restoring mass transit, but the most visible efforts focus on making the built environment more conducive to walking and cycling." Clearly, the connection between health and trails is becoming common knowledge. The Rails-to-Trails Conservancy puts it simply: "Individuals must choose to exercise, but communities can make that choice easier."

Providing Clear Skies, Clean Water, Protected Habitat

There are a multitude of environmental benefits from trails, greenways, and open spaces that help to protect the essential functions performed by natural ecosystems. Greenways protect and link fragmented habitat and provide opportunities for protecting plant and animal species. Trails and greenways reduce air pollution by two significant means: first, they provide enjoyable and safe alternatives to the automobile, which reduces the burning of fossil fuels; second, they protect large areas of plants that create oxygen and filter air pollutants such as ozone, sulfur dioxide, carbon monoxide and airborne particles of heavy metal. Greenways improve water quality by creating a natural buffer zone that protects streams, rivers and lakes, preventing soil erosion and filtering pollution caused by agricultural and road runoff.

As an educational tool, trail signage can be designed to inform trail-users about water quality issues particular to each watershed. Such signs could also include tips on how to improve water quality. Similarly, a greenway can serve as a hands-on environmental classroom for people of all ages to experience natural landscapes, furthering environmental awareness.

Protecting People and Property from Flood Damage

The protection of open spaces associated with trail and greenway development often also protects natural floodplains along rivers and streams. According to the Federal Emergency Management Agency (FEMA), the implementation of floodplain ordinances is estimated to prevent \$1.1 billion in flood damages annually. By restoring developed floodplains to their natural state and protecting them as greenways, many riverside communities are preventing potential flood damages and related costs. Mecklenburg County has had its share of success converting former repetitive floodprone properties to restored greenway lands. Along Little Sugar Creek, the Westfield Road restoration project was completed in 2004. This project began with the purchase and removal of 70 flood-prone structures from the floodplain, followed by restoration of stream banks and wetlands and more effective management of stormwater from surrounding areas. Funding for the Westfield Road project came from a wide range of sources, including the Charlotte-Mecklenburg Storm Water Services, Mecklenburg County Park & Recreation, North Carolina Department of Water Quality, and the North Carolina Clean Water Management Trust Fund.

Enhancing Cultural Awareness and Community Identity

Trails, greenways, and open space can serve as connections to local heritage by preserving historic places and by providing

access to them. They provide a sense of place and an understanding of past events by drawing greater public attention to historic and cultural locations and events. Trails often provide access to historic sites such as battlegrounds, bridges, buildings, and canals that otherwise would be difficult to access or interpret. Each community and region has its own unique history, its own features and destinations, and its own landscapes. By recognizing, honoring, and connecting these features, the combined results serve to enhance cultural awareness and community identity, potentially attracting tourism. Being aware of the historical and cultural context when naming parks and trails and designing features will further enhance the overall trail- and park-user experience.

Providing Safe Places for Outdoor Activities

Greenways are one of the most studied landscapes in America. Countless surveys, reports and studies have been conducted by different organizations to determine the actual number and types of crimes that have been committed on greenways. In Mecklenburg County, an assessment of crime and the risk of crime have been studied extensively, over a 10 year period, by geographers at the University of North Carolina Charlotte. Two fundamental questions were asked and answered by this decade long study: 1) Do greenways suffer higher crime risk than nearby non-greenway properties?; and 2) Are greenways as safe as the urban landscapes that surround them?

The researchers examined all types of crime and concluded that the subject of violent crime could not be addressed because virtually no violent crime was recorded during the 10-year period. Therefore, they addressed property crime. They looked specifically at the Mallard Creek Greenway in North Charlotte and worked with law enforcement officials to gather and examine actual police reports. The researchers identified the number of reported crimes in the County as a whole (53,947), and within the district where the greenway is located (4,701) and then the greenway itself. They concluded that criminal activity associated with the greenway, in comparison to its landscape context, was negligible. The researchers concluded that greenways are not an attractive nuisance and do not attract crime or a criminal element.

Numerous other studies throughout the United States confirm what the researchers at UNCC found, that greenways do not attract crime, they are not havens for criminals, and that people living adjacent to greenways are not likely to experience an increase in crime as a result of the being located in close proximity to a greenway. A study in Indianapolis, IN, concluded that in fact people who use the greenway were more likely to be in a safer environment than if they were physically located in the adjacent residential neighborhood.

Review of Peer Communities

North Carolina has always been a leader in the national greenway movement. The state was one of the first in the nation to embrace a statewide forum supporting greenway creation at the local level. North Carolina is one of the few states in the nation to have appointed a Governor's Commission to examine the greenway movement and recommend strategies for implementing greenways at all levels of government and in the private sector.

Within this context, Mecklenburg County has been the most progressive of the 100 North Carolina counties with respect to planning and implementing a countywide greenway program. The vast majority of greenway implementation success in North Carolina has occurred at the municipal level. More than 50 North Carolina communities, of all size, are engaged in greenway implementation. All of the large metropolitan areas, Raleigh, Durham, High Point, Greensboro, Winston-Salem, Asheville, Cary, Fayetteville and Wilmington have built greenways in place. Of these municipal programs, Raleigh's Capital Area Greenway Program is often considered to be the oldest and most comprehensive, exhibiting many "best practices." While Raleigh's system is certainly one of the oldest, Greensboro actually has more miles, 80, of constructed greenway in place than any other North Carolina municipality. Raleigh has approximately 60 miles of constructed greenway trail.

5 YEAR ACTION PLAN

To meet the needs and expectations of County residents, the five year action plan will pursue an aggressive schedule for trail development. The focus will be on County-owned land with the goal of providing more trails to more residents. Concurrent goals include the improved efficiency of the design and permitting process in an effort to meet the trail development goals.

Goal – To construct 42.8 miles of new greenway trail by 2013

- Launch construction of 12.8 miles of currently funded projects within the first year of the plan's adoption
- Geographically disperse trail development throughout the county and surrounding towns

- Focus trail construction on County-owned land
- Work with permitting agencies to streamline trail design and development process

Goal – To identify and prioritize acquisition efforts for the 10 year trail development plan

- Base trail development and associated land acquisition on developed ranking methodology
- Determine feasibility of targeted trail construction priorities after two years (2010)
- Work with potential partners to synchronize trail development efforts and explore funding opportunities

Goal – To improve connectivity to existing and proposed greenway trail system

- Work with Charlotte Department of Transportation and coordinate overland connections planning and development
- Work with Charlotte-Mecklenburg Planning Department and other municipal planning departments to incorporate greenway corridor conservation and trail development into the rezoning and subdivision processes
- Work with the Charlotte Area Transit System (CATS) to incorporate trail development and connectivity to transit facilities
- Incorporate the greenway corridor system into the Long Range Transportation Plan
- Work with potential partners to synchronize trail development efforts and explore funding opportunities
- Work with Charlotte-Mecklenburg Schools to locate and construct neighborhood entrances that link schools and residential areas
- Implement improvements to the existing trail system

Goal – To identify and designate official route of the Carolina Thread Trail

- Identify Little Sugar Creek, Long Creek, Mallard Creek and portions of Irwin Creek as initial corridors of the Carolina Thread Trail
- Work with the municipalities within Mecklenburg County to identify the additional Thread trail segments and formally adopt an alignment by 2009

Goal – To explore policies and programs so that greenway corridors may better function as a conservation and enhancement tool for floodplain and riparian plant and wildlife habitat

- Work with Stewardship Services to brainstorm management strategies for greenway corridors
- Work with Charlotte-Mecklenburg Stormwater Services to identify partnership projects and improvement projects within greenway corridors
- Work with Extension Services and Charlotte-Mecklenburg Stormwater Services to brainstorm and develop outreach efforts to educate and involve homeowners within the greenway corridors as to the value of the riparian habitats and possible backyard improvements homeowners can take to conserve and/or improve floodplain habitat.

10 YEAR ACTION PLAN

The ten year action plan sets forth an ambitious goal of adding an additional 61 miles of proposed trail. The feasibility of this goal will be reassessed within the first two years of the 5 year action plan to realistically assess the goals. However, a focus will remain on finishing significant stretches of trail, including Little Sugar Creek and Mallard Creek greenways.

Goal – To construct 61.9 miles of new greenway trail by 2018, bringing the total miles of constructed greenway trail to 129

- Disperse trail development throughout the county and surrounding towns
- Complete signature trails including Little Sugar Creek Greenway, Mallard Creek Greenway
- Work with surrounding counties to identify desired regional connections

Goal – To better facilitate multi-agency approach to trail development

- Work with CMU to prepare and adopt a joint use sanitary sewer and greenway easement instrument to be used when acquiring new joint use corridors
- Work with Duke Energy and other utilities on a joint use easement to develop greenway trail facilities within these easements
- Investigate possible ordinance changes to encourage trail development through the subdivision and rezoning processes

MANAGEMENT POLICIES & RECOMMENDATIONS

The County recognizes that to ensure residents continue to benefit from the greenways and trails system there must be a commitment to the protection and conservation of riparian corridors, the development of trail that provides desired connections and outdoor recreation opportunities, and the coordination of efforts with appropriate agencies. The following policy recommendations will guide the department in the planning and development of greenway corridors.

Stakeholder Approach to Planning

In an effort to better engage the public in the planning and development process associated with greenway trail development, the department will use a stakeholder approach. The greenway trails listed in the five and ten year action plan will undergo additional planning and design to ensure that the public has the opportunity to have input into the final route and alignment of each trail segment and to identify the opportunities and constraints associated with project development. The stakeholder group will be formed before the first community workshop is held. Group participation should be limited (12 persons, maximum) and made up of an array of citizen and local officials with a specific interest in the planning and design of the proposed trail section. For each trail segment, potential stakeholders will be identified for each segment and may include, but are not limited to, a representative of each of the following groups:

Surrounding Homeowners/HOA Board Member
 Park and Greenway Advisory Council Members
 Local Business Owners
 Local Advocacy/Special Interest Groups
 Town and/or Planning Board Members
 Park Recreation District Manager
 Other Key Staff (schools, transportation, etc.)

Incorporation of Town Greenways & Trails Plans

Since the 1999 Greenway Master Plan update, many of the surrounding towns have developed and adopted their own greenway and trails master plans. Mecklenburg County Greenway Planning and Development Services staff will serve as consultants to the towns to help implement the adopted plans. The plans and priorities of the towns is and will continue to be reflected in the County's trail development goals.

Coordination with Other Agencies

To meet the goals advanced in this update, there will need to be considerable collaboration with partners, including permitting agencies, surrounding towns, advocacy groups and others. The update contains an Appendix which specifically addresses the current opportunities and constraints for greenway trail development as defined by existing codes, policies and ordinances. The following are some of the recommendations resulting from this overview:

- Hold a policy summit with Charlotte-Mecklenburg Planning Department to consider changes to the zoning and subdivision ordinances.
- Work with County and City stormwater and floodplain management officials to discuss an appropriate countywide strategy for building greenways that addresses issues related to the Post Construction Ordinance.

CAPITAL COSTS 5 & 10 YEAR ACTION PLANS

Current capital needs for the planning, development and implementation of the five and ten year action plan, as well as improvements to existing facilities, is estimated at \$161,282,000. These capital costs do not include land acquisition.

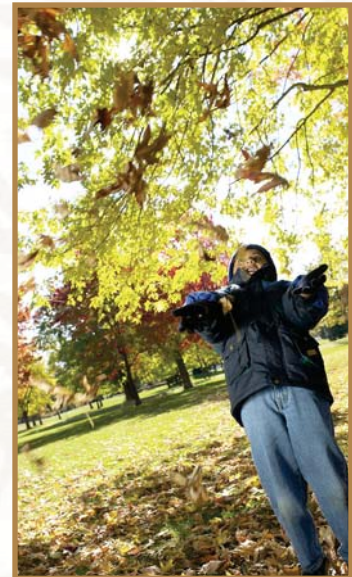
MASTER PLAN UPDATE

1. OVERVIEW

A. Brief Historical Context

The Mecklenburg County Greenways and Trails program is one of the oldest in North Carolina and the southeastern United States. Originally proposed in 1980 by a graduate student at the University of North Carolina at Charlotte, the program has grown through the past two decades to be one of the most comprehensive countywide programs in the nation.

As defined within the original 1980 master plan, approximately 73.7 miles of greenways were envisioned to be established along 14 creek and river corridors throughout the County. The system was established to address multiple objectives, including recreation, alternative transportation, habitat conservation, mitigation of flooding and protection of water supply. This original purpose and premise of the Mecklenburg County Greenways and Trails System is even more valid today, and remains the hallmark of the program.



In 1999, a comprehensive update to the 1980 master plan was completed by the County, which proposed an expansion of the greenways and trails system to 184.9 miles along 34 streamside corridors and 29.7 miles within 19 overland connector corridors. The Board of County Commissioners adopted this update on May 18, 1999. The 1999 master plan expanded on the original multi-objective goals of the program, placing renewed emphasis on floodplain management and water quality protection. The 1999 master plan also recommended that the burden of implementation be spread among several departments within the County.

As of this 2008 master plan update, 30 miles of trail within 14 streamside corridors have been constructed and protected over 3,000 acres of floodplain and riparian habi-

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that have been protected. The County reaffirms its intent to adhere to the vision, goals and objectives established within both the 1980 and the 1999 master plans, to protect valued stream corridors for multiple purposes, and to continue the development of appropriate creekside trails and overland connector trails.

B Purpose of the Update

This master plan update supports the recommendations that are contained in the adopted 1999 Greenway Master Plan and focuses on the implementation of the overall system with recommendations that are intended to improve policies, programs and activities of the greenways and trails program, to accelerate development of the trails network, and to improve the function and operation of the greenway and trails program. To accomplish this, it is recommended that the County adopt a program of action that will yield measurable accomplishments in trail construction, land conservation and improved operations over the next five years.

The County commissioned PROS Consulting, of Indianapolis, IN, LandDesign, Inc. of Charlotte, NC and Greenways Incorporated of Durham, NC to work with the County residents and the Parks and Recreation Department staff to prepare the Greenways and Trails Update as part of the comprehensive Park and Recreation Master Plan Update. The consultant team and staff examined every aspect of the Mecklenburg County Greenways and Trails program, including regulatory structure and influences, facility design and development, and operations, maintenance and management. This comprehensive review has yielded a program of action that will enable the County to meet the vision, goals and objectives outlined and adopted for the program in 1999.

C. Update Plan Process

This plan was completed through a participatory and technical process. The participatory process was undertaken through the overall update of the Parks and Recreation Master Plan effort. Greenways, as well as park facilities, programming and nature preserves, were presented in public workshops, focus group meetings and through a statistically valid survey as an element of the County Parks and Recreation program. In the fall 2007 and the winter 2008, a series of public meetings were held to provide the residents of the County with an opportunity to provide input into the Parks and Recreation master planning process. Greenways were a major topic of discussion at these meetings and the comments received were incorporated into this update. Additionally, a community survey conducted by ETC Leisure Vision found greenways and trail development was an important and unmet need for the majority of Mecklenburg County residents. The results of the survey clearly reveal the public's appreciation for natural areas and their desire for a trail system. Echoing results found in Charlotte Department of Transportation's bicycle and pedestrian survey results, residents desired and supported the development of an interconnected trail system.

From a list of 28 parks and recreation facility needs, the top 5 requested by the public were:

- 74% Walking and biking trails (national average 68%)
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Survey results indicate County residents understand and support the role of greenways as both corridors for environmental protection and potential trail development.

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- 88% of all residents felt the role greenways played in environmental protection was very important (65%) or somewhat important (23%).
- 80% of residents support (56% very supportive, 24% somewhat supportive) using floodplain land to develop biking and walking trails

The results generated by the Mecklenburg County survey support trends seen throughout the state and nation. The results of the Statewide Comprehensive Outdoor Recreation Plan (SCORP) for North Carolina closely mimic Mecklenburg County survey results, and provide a strong rationale for natural resource conservation and the development of a strong trail system. According to the SCORP the most popular outdoor activities for NC

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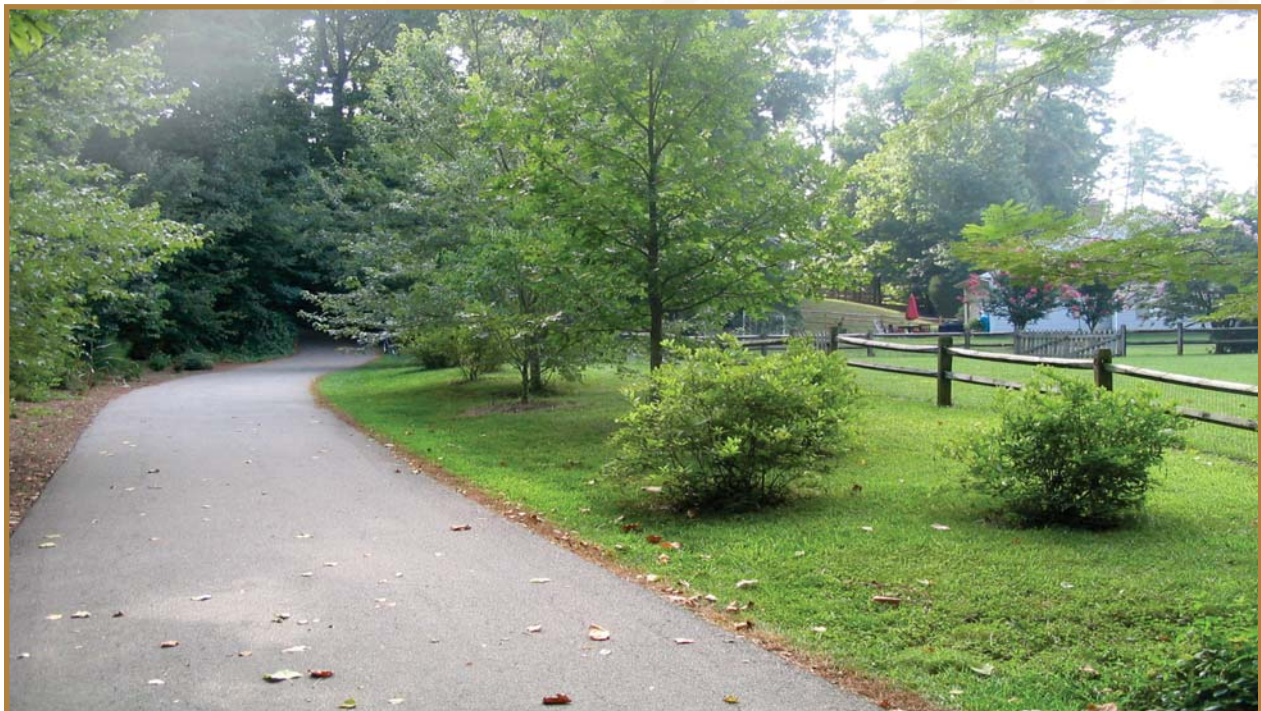
The technical process of this update involved a thorough examination of all aspects of the Greenway program. An exhaustive review was conducted by consultants and Park and Recreation Greenway staff of the existing system, as well as a detailed analysis of the potential for future greenway facility development. Current policies, programs and activities were also examined. The goal of this examination was to evaluate how the County has conducted the business of greenway and trail development and to suggest methods for improving the delivery and efficiency of the program. Additionally, the adopted greenway plans of local communities were examined and incorporated into the update..

"This master plan update emphasizes an interconnected network of trails that provide County residents opportunities"

D. Organization of this Update

The update is organized into the following major sections:

- A brief description of the greenways and trails system
- A plan of action that describes goals for trail planning, design, construction, phasing and operations
- A summary of benefits derived from the greenways and trails system
- An evaluation of other programs in North Carolina, the southeastern United States and the nation.
- An evaluation of regulatory policies and programs that influence and impact the greenway program.
- A list of recommendations for programming greenways and trails to provide greater benefits to Mecklenburg County residents.



2. THE MECKLENBURG COUNTY GREENWAY SYSTEM

A. Overall System Description

The Mecklenburg County Greenways and Trails system continues to conserve natural resources and enhance connectivity of citizens to the resources of the County. This master plan update emphasizes an interconnected network of trails that provide County residents opportunities for recreation, alternative transportation, health and fitness, environmental education, and social engagement. This master plan update addresses the greenway system comprised of primary streamside corridors and overland connector trails that are developed within roadway and utility rights-of-way.

In addition to greenway trails, walking and biking trails are located throughout the County’s park and nature preserve facilities. Over 35 miles of hiking trails are found in five of the County’s Nature Preserves (Reedy, McDowell, Latta, Ribbon-walk, Evergreen). Latta Plantation hosts the only equestrian trails (13 miles) currently available on County property. Over the next 10 years, seven more preserves are being planned with trail systems.

County parks also host walking and biking trails; currently there are just over 15 miles of mountain biking trails available in the park system and nearly 10 miles of walking trails. As future parks are developed, biking and hiking trails will be considered during the site planning process.

Over the next five years, it is the goal of the County to continue the expansion of the greenway trail system principally on land that is either currently County owned, or in the process of being acquired from willing sellers and willing partners. In the long-term, as the County trail system matures, connectivity will become more of a reality and the County can begin to realistically focus on developing a series of loop trail greenways that offer transportation, recreation, health and fitness benefits to County residents. For the immediate future, the focus of the greenway program is to identify and construct practical trail corridors that will serve County residents and capitalize on current land ownership opportunities.

Existing Greenways

The following is a list of the existing greenways trails that have been developed or are currently (as of Spring 2008) under construction throughout the County. The mileage for each segment is defined.

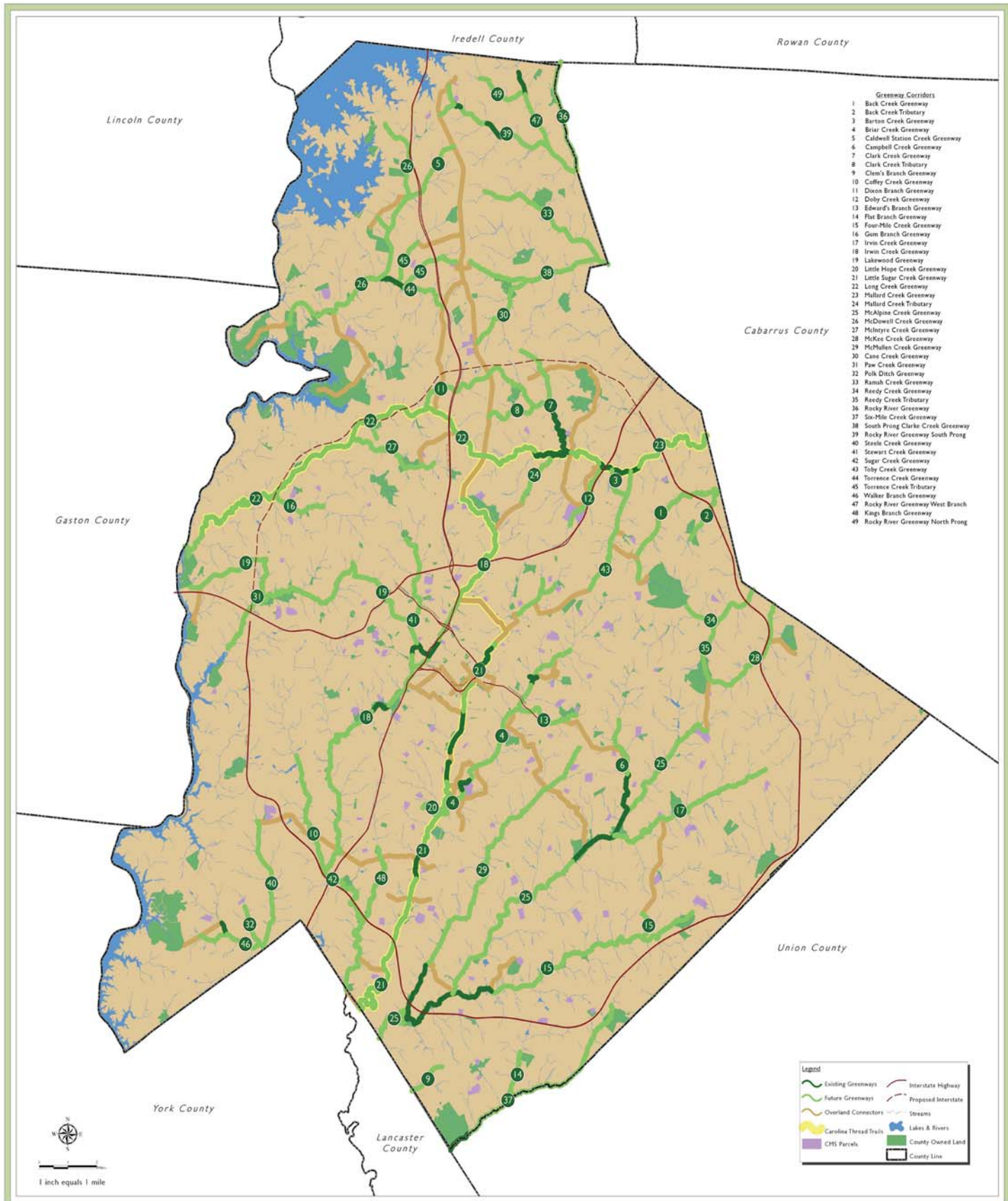
1) Briar Creek Greenway 1	0.4 miles
2) Briar Creek Greenway 2	0.9 miles
3) Campbell Creek/McAlpine Creek Greenway	4.1 miles
4) Clark’s Creek/Mallard Creek Greenway	6.2 miles
5) Four Mile Creek Greenway	2.1 miles
6) Irwin Creek/Stewart Creek/Wesley Heights	1.7 miles
7) Irwin Creek Greenway	1.0 miles
8) Little Sugar Creek Greenway	0.8 miles
9) Little Sugar Creek Greenway 2	2.2 miles
10) Little Sugar Creek Greenway 3	0.7 miles
11) Lower McAlpine Creek Greenway	4.0 miles
12) Six Mile Creek Greenway	1.0 miles
13) Southeast Davidson Greenway	2.8 miles
14) Stewart Creek Greenway	0.7 miles
15) Torrence Creek Greenway	1.4 miles
16) Walker Branch Greenway	0.5 miles
Total Existing Greenways	30.5 miles

B. Primary Greenway Corridors

The primary greenway system is comprised of FEMA regulated floodplains. The following corridor comprise the County greenway system. Some of these greenway corridors may be developed by the municipalities within the County; including Cornelius, Davidson, Huntersville, Matthews, Mint Hill and Pineville.

List of Corridors

- 1) Back Creek
- 2) Back Creek Tributary
- 3) Barton Creek
- 4) Briarl Creek
- 5) Caldwell Station Creek
- 6) Campbell Creek
- 7) Cane Creek
- 8) Clarke Creek South Prong
- 9) Clark's Creek
- 10) Clark's Creek Tributary
- 11) Clems Branch
- 12) Coffey Creek
- 13) Dixon Branch
- 14) Doby Creek
- 15) Edward's Branch
- 16) Flat Branch
- 17) Four Mile Creek
- 18) Gum Branch
- 19) Irvins Creek
- 20) Irwin Creek
- 21) Kings Branch
- 22) Little Hope Creek
- 23) Little Sugar Creek
- 24) Long Creek
- 25) Mallard Creek
- 26) Mallard Creek Tributary
- 27) McAlpine Creek
- 28) McDowell Creek
- 29) McIntyre Creek
- 30) McKees Creek
- 31) McMullen Creek
- 32) Paw Creek
- 33) Polk Ditch
- 34) Ramah Creek



- Greenway Corridors**
- 1 Back Creek Greenway
 - 2 Back Creek Tributary
 - 3 Barton Creek Greenway
 - 4 Bear Creek Greenway
 - 5 Caldwell Station Creek Greenway
 - 6 Campbell Creek Greenway
 - 7 Clark Creek Greenway
 - 8 Clark Creek Tributary
 - 9 Cloe's Branch Greenway
 - 10 Coffey Creek Greenway
 - 11 Dixon Branch Greenway
 - 12 Doby Creek Greenway
 - 13 Edward's Branch Greenway
 - 14 Flat Branch Greenway
 - 15 Four-Mile Creek Greenway
 - 16 Gum Branch Greenway
 - 17 Irvin Creek Greenway
 - 18 Irwin Creek Greenway
 - 19 Laberwood Greenway
 - 20 Little Hope Creek Greenway
 - 21 Little Sugar Creek Greenway
 - 22 Long Creek Greenway
 - 23 Mallard Creek Greenway
 - 24 Mallard Creek Tributary
 - 25 McAlpine Creek Greenway
 - 26 McDowell Creek Greenway
 - 27 McIntyre Creek Greenway
 - 28 McKee Creek Greenway
 - 29 McMullen Creek Greenway
 - 30 Cane Creek Greenway
 - 31 Paw Creek Greenway
 - 32 Polk Ditch Greenway
 - 33 Ramah Creek Greenway
 - 34 Reedy Creek Greenway
 - 35 Reedy Creek Tributary
 - 36 Rocky River Greenway
 - 37 Six-Mile Creek Greenway
 - 38 South Prong Clarke Creek Greenway
 - 39 Rocky River Greenway South Prong
 - 40 Sells Creek Greenway
 - 41 Stewart Creek Greenway
 - 42 Sugar Creek Greenway
 - 43 Toby Creek Greenway
 - 44 Torrence Creek Greenway
 - 45 Torrence Creek Tributary
 - 46 Walker Branch Greenway
 - 47 Rocky River Greenway West Branch
 - 48 Kings Branch Greenway
 - 49 Rocky River Greenway North Prong

Legend

- Existing Greenways
- Future Greenways
- Overland Connectors
- Carolina Thread Trails
- CMS Parcels
- County Owned Land
- County Line
- Interstate Highway
- Proposed Interstate
- Streams
- Lakes & Rivers

Greenway Master Plan

Mecklenburg County, North Carolina



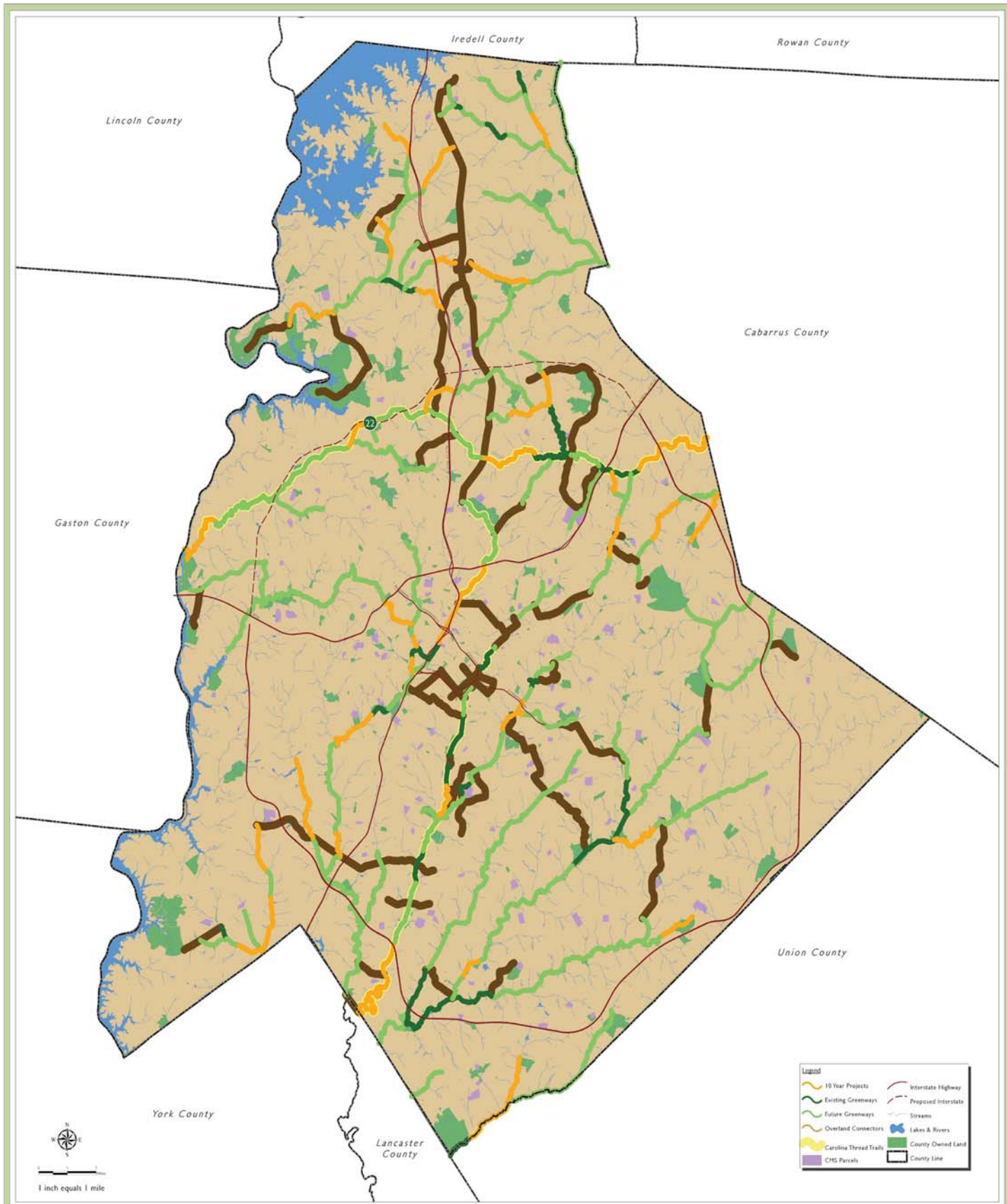
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C. Primary Overland Trail Corridors

Overland connectors provide a way of linking trails between streams and watersheds, creating loops in the system. An original list of overland connectors was provided in the 1999 Master Plan. It is envisioned that the overland connector trails consist of a bicycle facility, such as a bike lane, sidepath, wide outside lane, a system of sidewalks or a trail developed within a utility easement. The development of these overland trail corridors would take place in cooperation and partnership with the Charlotte Department of Transportation's and the surrounding towns' bicycle and pedestrian master plans.

Overland Connectors

- 1) 10th St, McDowell St, 7th St Overland Connector
- 2) 10th-Hawthorne-7th Loop Connector-7th Street Overland Connector
- 3) Beatties Ford Road Overland Connector (include Sample Road)
- 4) Birkdale-McDowell Connector
- 5) Briar Creek-Merry Oaks-Charlotte Country Club Connector
- 6) Colony Road Overland Connector
- 7) Davidson Street/36th Street Overland Connector
- 8) Dilworth Connector
- 9) Double Oaks Connector
- 10) Downtown Huntersville Connector
- 11) Downtown Matthews Connector
- 12) Downtown Mint Hill Connector
- 13) Downtown Pineville Connector
- 14) Harrisburg Road Overland Connector
- 15) Hugh Torrance Pkwy/Stumptown Road Overland Connector
- 16) Huntersville Business Park Loop
- 17) Huntersville-Northlake Connector
- 18) Johnston Road Overland Connector
- 19) Lakeview Road Overland Connector
- 20) Lakewood Connector
- 21) Little Sugar Creek/Southpark Connector
- 22) Little Sugar-Toby Connector
- 23) Long-Mallard Connector
- 24) Mallard Creek Park Connector
- 25) McDowell Creek-Rural Hill Farm-Cowan's Ford Preserve Connector
- 26) McDowell Nature Preserve Connector
- 27) Myers Park Loop Connector
- 28) Nevin Road Overland Connector
- 29) Old Statesville Road Greenway/Transit Connector
- 30) Regional Sugar Creek Connector
- 31) Selwyn Ave. Overland Connector
- 32) Sharon Road West Greenway/Transit Connector
- 33) Steele Creek to Little Sugar Creek Greenway/Transit Connector
- 34) Toby-Back Connector
- 35) University Research Park Loop
- 36) Wesley Heights Greenway
- 37) William R. Davie Park Connector



Legend			
	10 Year Projects		Interstate Highway
	Existing Greenways		Proposed Interstate
	Future Greenways		Streams
	Overland Connectors		Lakes & Rivers
	Carolina Thread Trails		County Owned Land
	CHS Parcels		County Line

Greenway Master Plan (Overland Connectors)

Mecklenburg County, North Carolina



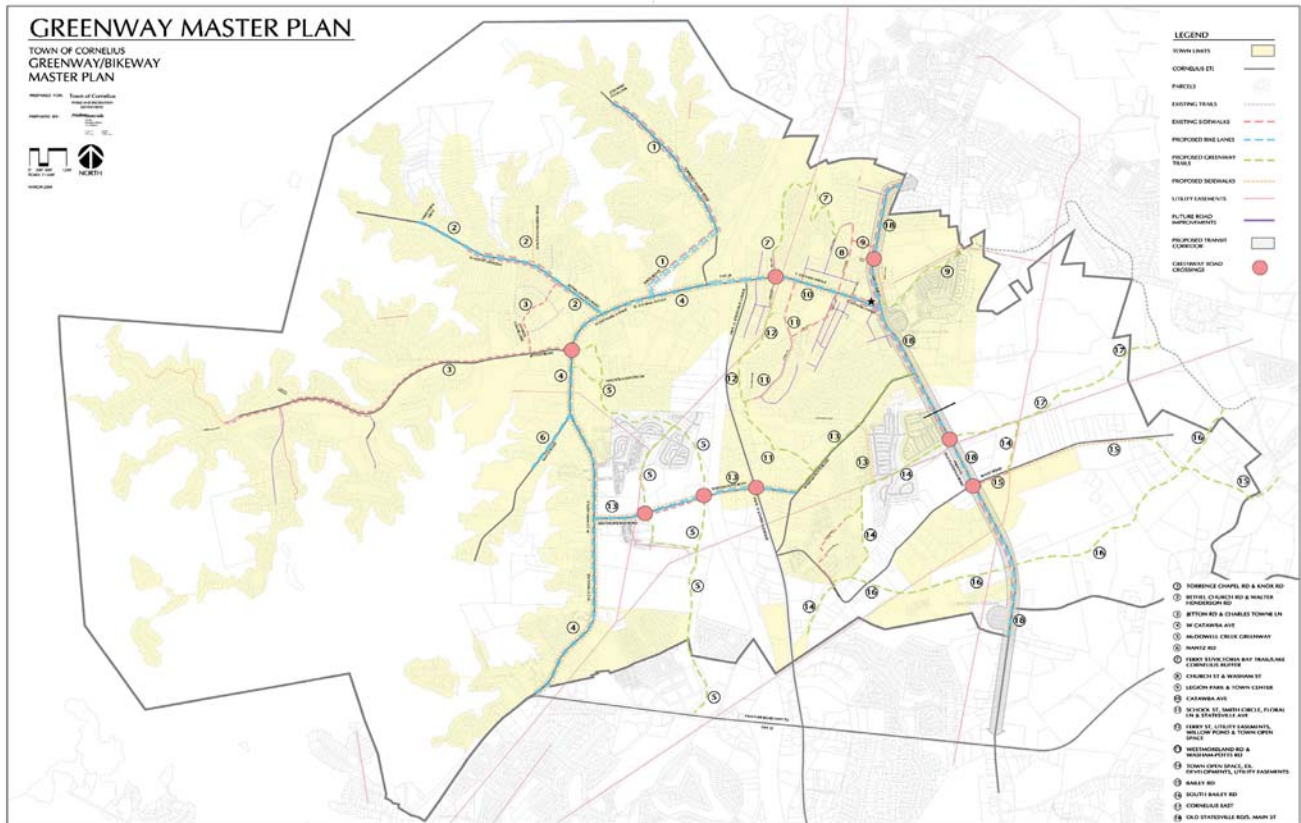
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D. Municipal Greenway Plans

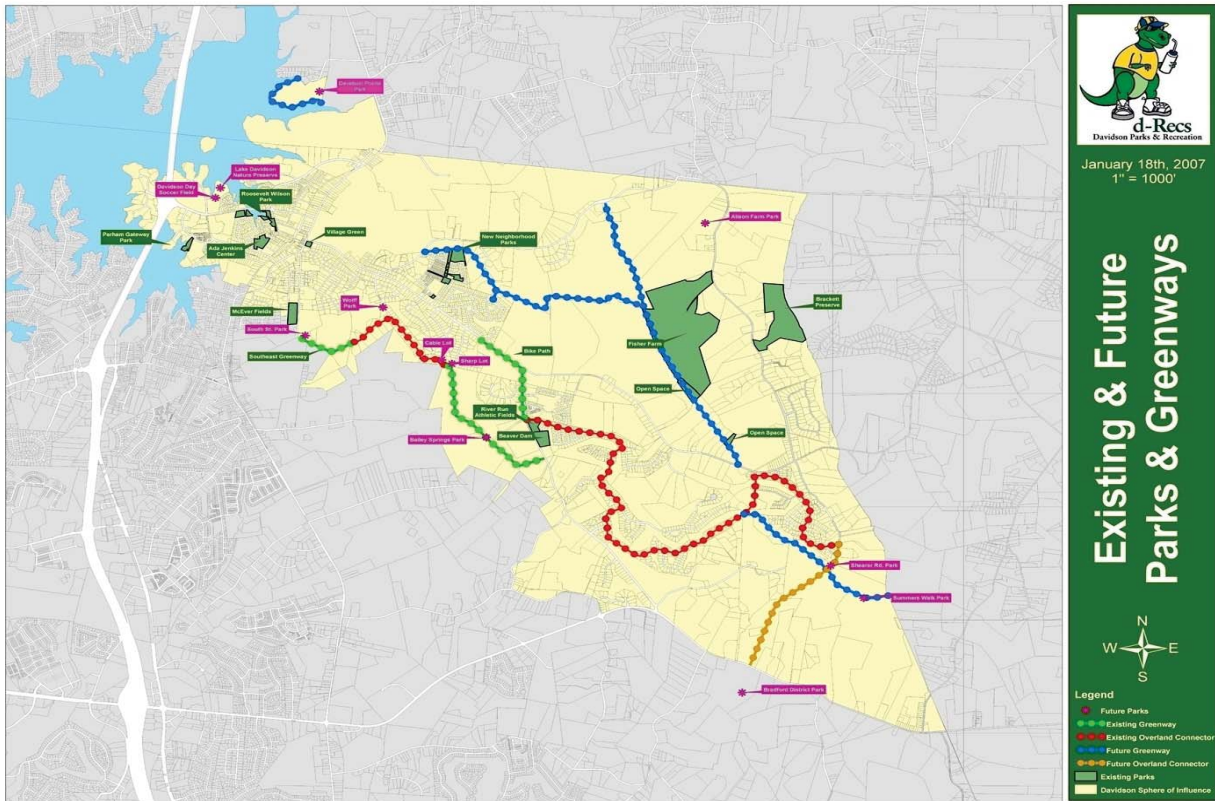
Mecklenburg County has a strong and successful working relationship with the municipalities that are located within the County's jurisdiction when it comes to the planning, design and implementation of greenways and trails. Toward this end, the individual greenway plans that have been completed and adopted by each municipality are included in this Master Plan Update. Currently, Cornelius, Davidson, and Huntersville have adopted greenway plans. Matthews, Mint Hill and Pineville do not have separately mapped and adopted plans.

The following maps are graphic representations only of the completed municipal master plans. Please refer to the actual municipal master plans for more information and detail.

Cornelius Greenway Master Plan



Davidson Greenway Master Plan



MASTER PLAN UPDATE

Huntersville Greenway Master Plan



3. ACTION PLAN

Mecklenburg County's Greenway program is now 27 years old and within this timeframe, the County has constructed approximately 30 miles of greenway trails. A primary emphasis of this Master Plan update is to pursue a more aggressive strategy for conserving land and resources within stream corridors, to serve the multiple benefits which greenways offer, and for building additional greenway trails throughout the County. This update also calls for the Park and Recreation Department to work closely with other agencies to identify and develop programs and policies that improve efficiency of developing the trail network system as well as focusing more attention on the stewardship of the greenway corridors so they may better serve their function as a conservation and enhancement tool for floodplain and riparian plant and wildlife habitat.

A. Process of Identifying Constructible Greenway Segments

The consultants and Greenway staff undertook an exhaustive evaluation of the greenway program to define the constructible segments of greenway trail that could be accomplished within the next five years (2008-2012). The principal guiding feature of this evaluation is where County-owned land exists that would currently support greenway trail construction. Other factors considered included a one-half mile minimum length for greenway segment development, sufficient public access, and geographic distribution of the buildable segments. Using these criteria a lengthy list of possible projects was identified and evaluated. This list was pared back through a GIS-based process to produce the five-year trail development program defined in this Plan Update.

B. Summary of Five Year and Ten Year Strategies

Five Year Action Plan

To meet the needs and expectations of County residents, the five year action plan will pursue an aggressive schedule for trail development. The focus will be on County-owned land with the goal of providing more trails to more residents. Concurrent goals include the improved efficiency of the design and permitting process in an effort to meet the trail development goals.

Goal – To construct 42.8 miles of new greenway trail by 2013

- Launch construction of 12.8 miles of currently funded projects within the first year of the plan's adoption
- Geographically disperse trail development throughout the county and surrounding towns
- Focus trail construction on County-owned land
- Work with permitting agencies to streamline trail design and development process

Goal – To identify and prioritize acquisition efforts for the 10 year trail development plan

- Base trail development and associated land acquisition on developed ranking methodology
- Determine feasibility of targeted trail construction priorities after two years (2010)
- Work with potential partners to synchronize trail development efforts and explore funding opportunities

Goal – To improve connectivity to existing and proposed greenway trail system

- Work with Charlotte Department of Transportation and coordinate overland connections planning and development
- Work with Charlotte-Mecklenburg Planning Department and other municipal planning departments to incorporate greenway corridor conservation and trail development into the rezoning and subdivision processes
- Work with the Charlotte Area Transit System (CATS) to incorporate trail development and connectivity to transit facilities
- Incorporate the greenway corridor system into the Long Range Transportation Plan
- Work with potential partners to synchronize trail development efforts and explore funding opportunities
- Work with Charlotte-Mecklenburg Schools to locate and construct neighborhood entrances that link schools and residential areas
- Implement improvements to the existing trail system

Goal – To identify and designate the official route of the Carolina Thread Trail

- Identify Little Sugar Creek, Long Creek, Mallard Creek and portions of Irwin Creek as initial corridors of the Carolina Thread Trail

- Work with the municipalities within Mecklenburg County to identify the additional Thread trail segments and formally adopt an alignment by 2009

Goal – To explore policies and programs so that greenway corridors may better function as a conservation and enhancement tool for floodplain and riparian plant and wildlife habitat

- Work with Stewardship Services to brainstorm management strategies for greenway corridors
- Work with Charlotte-Mecklenburg Stormwater Services to identify partnership projects and improvement projects within greenway corridors
- Work with Extension Services and Charlotte Mecklenburg Stormwater Services to develop outreach efforts to educate and involve homeowners within the greenway corridors as to the value of the riparian habitat and possible backyard improvements homeowners can take to conserve or improve floodplain habitat

Ten Year Action Plan

The ten year action plan sets forth an ambitious goal of adding an additional 61 miles of proposed trail. The feasibility of this goal will be reassessed within the first two years of the 5 year action plan to realistically assess the goals. However, a focus will remain on finishing significant stretches of trail, including Little Sugar Creek and Mallard Creek greenways.

Goal – To construct 61.9 miles of new greenway trail by 2018, bringing the total miles of constructed greenway trail to 129

- Disperse trail development throughout the county and surrounding towns
- Complete signature trails including Little Sugar Creek Greenway, Mallard Creek Greenway
- Work with surrounding counties to identify desired regional connections

Goal – To better facilitate multi-agency approach to trail development

- Work with CMU to prepare and adopt a joint use sanitary sewer and greenway easement instrument to be used when acquiring new joint use corridors
- Work with Duke Energy and other utilities on a joint use easement to develop greenway trail facilities within these easements
- Investigate possible ordinance changes to encourage trail development through the subdivision and rezoning processes

C. Ranking and Prioritizing the Five Year Plan

The consultants and Greenway staff developed a list of criteria to score and prioritize each greenway segment identified within the five-year trail development program. All currently funded greenway trail segments and proposed five year trails are listed below. The projects are numbered for identification purposes only and do not reflect ranking criteria (see map on page 17).

5 Year Action Plan Projects

1. Sugar Creek Greenway
Billy Graham Pkwy to South Tryon St
Charlotte
2.3 Miles
2. Little Sugar Creek Greenway
Tyvola Road to Huntingtowne Farms Park
Charlotte
2.2 Miles
3. Little Sugar Creek Greenway
Huntingtowne Farms Park to I-485
Charlotte
2.2 Miles



- 4. Long Creek Greenway
Interstate 77 to Primm Road
Charlotte
3.3 Miles
- 5. Irwin Creek Greenway
Old Statesville Rd to Allen Hills Park
Charlotte
2.0 Miles
- 6. West Branch Rocky River Greenway
Fisher Farm Park Trail
Davidson
1.0 Miles
- 7. McDowell Creek Greenway
Taybrook Drive (Wynfield) to Baylis Drive (Gilead Village)
Huntersville
2.0 Miles
- 8. South Prong Rocky River Greenway
South Street Park to North Main Street
Cornelius, Davidson
0.8 Miles
- 9. Briar / Little Hope Creek Greenway
Manning Drive to Marion Deihl Center
Charlotte
1.2 Miles
- 10. Irvins Creek Greenway
Idlewild Road to Lakeview Circle
Matthews
2.0 Miles
- 11. Sugar Creek Greenway
S. Tryon St to Ranchwood Drive
Charlotte
1.1 Miles
- 12. Mallard Creek Greenway
Mallard Creek Road to David Taylor Drive
Charlotte
1.2 Miles
- 13. McAlpine Creek Greenway
Sardis Road to Providence Road
Charlotte
1.0 Miles
- 14. Walker Branch Greenway
S. Tryon Street to Smith Rd
Charlotte
0.8 Miles

"The County will also continue to work diligently to acquire additional land resources necessary to expand the greenways and trails system and achieve the goal of 100 miles of completed greenway trails."



15. McIntyre Creek Greenway
 Beatties Ford Rd to Clarencefield Dr
 Charlotte
 0.7 Miles

16. Irwin Creek Greenway
 West Blvd to Barringer Dr
 Charlotte
 1.0 Miles

17. Paw Creek Greenway
 Little Rock Rd to Starnes Rd
 Charlotte
 1.7 Miles

18. McAlpine Creek Greenway
 Hwy 51 to Johnston Rd
 Charlotte
 1.0 Miles

19. Six Mile Creek Greenway
 Falls Lake Dr to Spokeshave Ln
 Charlotte
 0.8 Miles

20. Campbell Creek Greenway
 Lockmont Drive to W.T. Harris Blvd.
 Charlotte
 0.6 Miles

21. Stewart Creek Greenway
 W. Trade St to MLK Park
 Charlotte
 0.5 Miles

22. Briar Creek Greenway
 Central Ave to Commonwealth Ave
 Charlotte
 0.5 Miles

23. Briar Creek Greenway
 Randolph Rd to Meadowbrook Rd
 Charlotte
 0.9 Miles

24. Four-Mile Creek Greenway
 E. John St to Trade St
 Matthews
 2.1 Miles

25. Little Sugar Creek Greenway
 Belmont Avenue to Morehead Street
 Charlotte
 2.2 Miles

26. McDowell Creek Greenway
 Westmoreland Rd to Sam Furr Rd
 Cornelius, Huntersville
 1.5 Miles

27. McDowell Creek Greenway
 Baylis Drive to Beatties Ford Road
 Huntersville
 1.8 Miles

28. Toby Creek Greenway
 Hwy. 49 @ WT Harris Blvd. to Mallard Creek Greenway
 Charlotte
 2 Miles

29. Torrence Creek Greenway
 I-77 to Bradford Hill Lane
 Huntersville
 1.3 Miles

30. West Branch Rocky River Greenway
 River Ford Drive to Shearer Road
 Davidson
 1 Mile

Total Miles 42.8



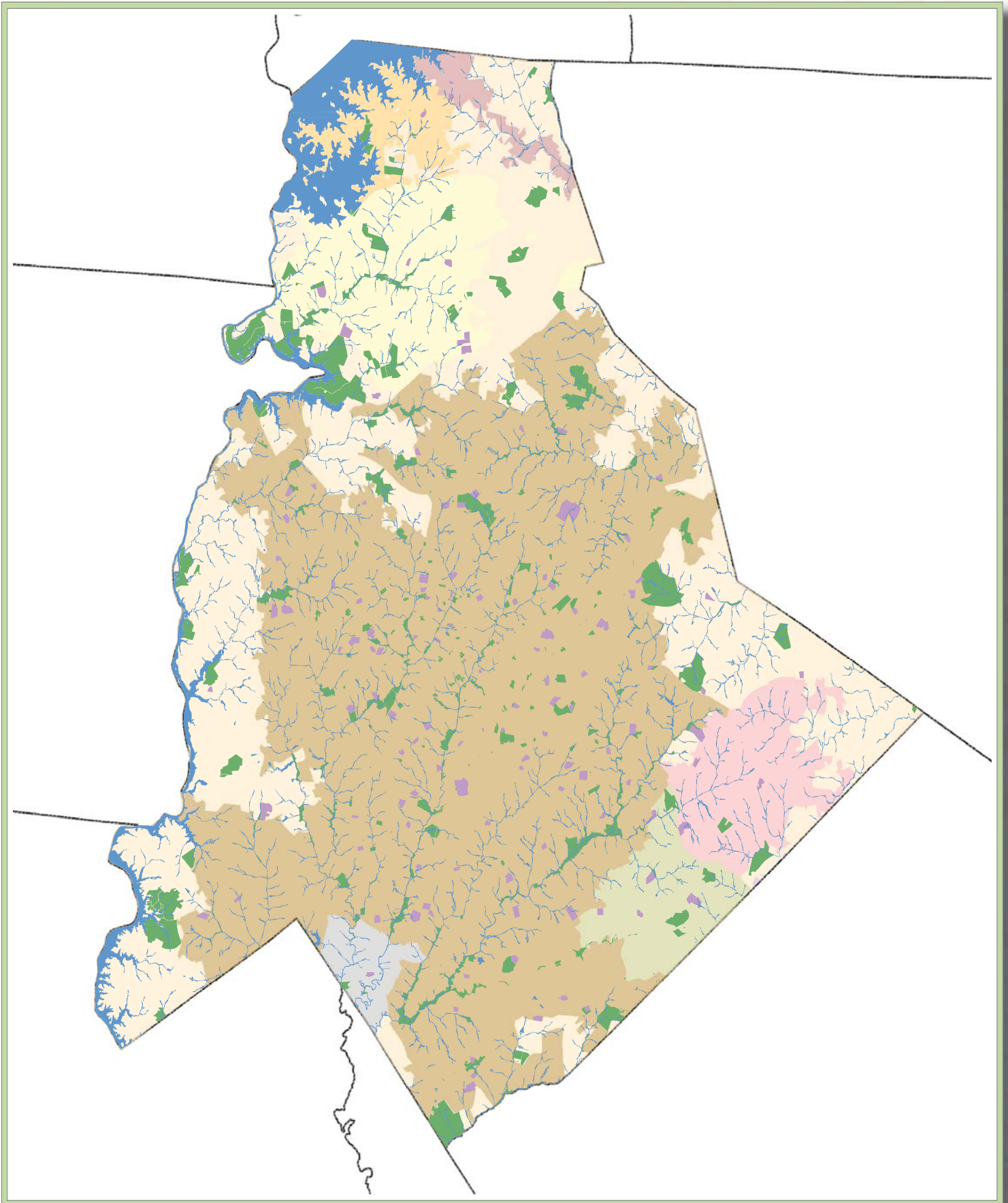
C. Envisioning the Next 10 Years

The County will also continue to work diligently to acquire additional land resources necessary to expand the greenways and trails system and achieve the goal of 100 miles of completed greenway trails. The County will continue to acquire land through a variety of means from willing sellers and through the zoning and land subdivision process. The County will also utilize a targeted land acquisition program in which valued land resources are identified and the County works with municipal partners, land trusts and private landowners to bring the additional land into the greenway system.

This land acquisition program is intended to serve multiple purposes and benefits providing resource areas for water quality protection, wildlife habitat, floodplain management and trail development. This Update of the County Greenways and Trails program reaffirms the intent to have an expanded network of trails. It is also understood that there may be specific greenway corridors where trail development is not feasible, for a variety of reasons. In these cases, the County will evaluate options for routing and aligning future trail development. Each and every trail segment will be evaluated through a planning and design process prior to committing funds to trail construction.

The following table provides a list of trail segments that the County will try to achieve during the next ten years (2008-2017). This table lists creekside and over-land trails, along with budgets for land acquisition, design and construction costs. Finally, each trail segment is ranked. A principal goal of the ten-year plan is to begin acquiring greenway land that can support future expansion of the greenway trail network.





Map Source: Mecklenburg County, NC DOT, GIS

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 a final plan of the local or the regional government. Use of this Data for any purpose
 should be with understanding of the limitations of the Data, including the fact that this Data
 is dynamic and it is a continuous state of development, construction, and updates.

Thursday, April 4, 2008

Greenway Master Plan (Priority Map)

Mecklenburg County, North Carolina

