

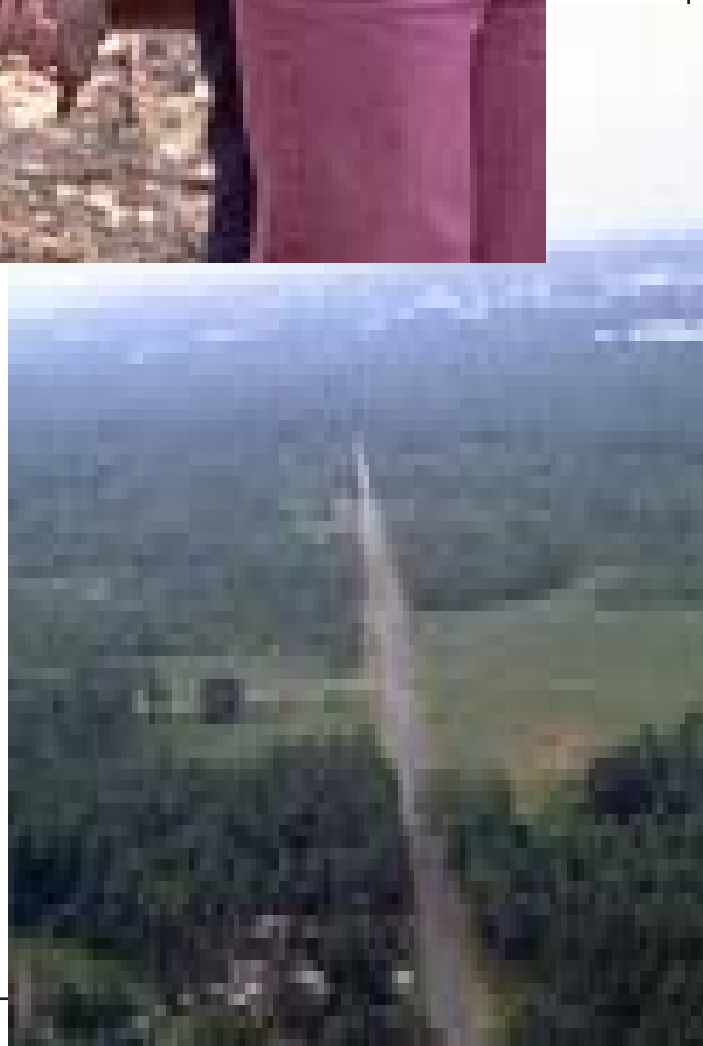


# GREENWAY NETWORK PLAN

*Unified Government  
of Athens-Clarke County,  
Georgia*

**Department of Leisure Services  
Natural Resources Division**

**ADOPTED JUNE 2003**



# GREENWAY NETWORK PLAN

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# GREENWAY NETWORK PLAN

## *Unified Government of Athens-Clarke County, Georgia*

Department of Leisure Services – Natural Resources Division

### **Task 1**

#### **I. Network Development Guidelines**

Definitions and Terms used throughout this report are defined in Appendix A.

##### **A. VISION**

Most individuals view greenways as an essential and critical component to the enhancement and preservation of the quality of life in Athens-Clarke County as well as within the context of the region. (See Appendix B, Benefits of Greenways)

##### **B. MISSION**

The Mission of the Athens-Clarke County Greenways is to identify, protect and create a series of corridors that provide opportunities for conservation, preservation, education, transportation, and recreation. Additionally, these corridors provide opportunities for individuals and families to experience nature in a variety of ways while linking parks, neighborhoods, points of interest, and activity centers.

##### **C. GOALS AND OBJECTIVES**

###### **Goal 1. Conservation and Preservation:**

Provide a natural buffer system that enhances quality of life through the conservation and preservation of natural life support systems. Preservation efforts should focus on the ultimate goal of protection of natural resources. Conservation efforts should focus on the goal of controlled use and systematic protection of natural resources.

###### ***Supporting Objectives:***

- a. Preserve greenway buffers for their ability to clean the air and water, and to reduce urban noise and light pollution while providing aesthetic enhancement to the community.
- b. Conserve interconnected upland greenspace and riverine corridors for plants and wildlife.
- c. Reestablish / stabilize stream and riverbanks.
- d. Reduce or eliminate non-point pollution sources, as these degrade the quality of our soil and water.
- e. Identify and secure lands for future conservation, education, recreation, cultural, or interpretive purposes.
- f. Identify and secure unusual, rare, or ecologically sensitive areas for conservation/preservation purposes.
- g. Provide for flood plain protection, water and air quality.
- h. Create and maintain an interconnected riverine and upland system critical to the survival of plants and animals, and to encourage the identification and protection of areas that are rich in biodiversity resources (note: referred to as source/sink relationships).

**Goal 2. Transportation:**

Provide corridors and facilities that promote the use of non-motorized transportation.

***Supporting Objectives:***

- a. Provide for the design and construction of transportation facilities that allow connectors to existing and/or future modes of transportation such as bike-ways, sidewalk systems, transit systems, etc.
- b. Educate the community about alternative transportation needs and benefits.
- c. Provide connectivity to major community facilities and assets such as parks, neighborhoods, points of interest, and activity centers.

**Goal 3. Education:**

Provide opportunities for both self-directed and interpretative programs leading to a greater understanding of the natural environment, cultural heritage, and preservation/conservation efforts.

***Supporting Objectives:***

- a. Provide opportunities for individuals and families to learn and serve in volunteer capacities while experiencing the resources found in the community.
- b. Create a comprehensive system of education that provides both self-directed and group led educational opportunities.
- c. Assist other Athens-Clarke County Departments and community organizations by providing educational opportunities related to the value of greenspace, natural resources, clean water, recycling and waste management.
- d. Provide learning opportunities in natural resources from botany to zoology.
- e. Provide learning opportunities in cultural history from prehistory to contemporary times.
- f. To enhance and create links between environmental and natural science education and educational institutions such as schools, preschools, technical schools, colleges, the University of Georgia, etc.

**Goal 4. Recreation:**

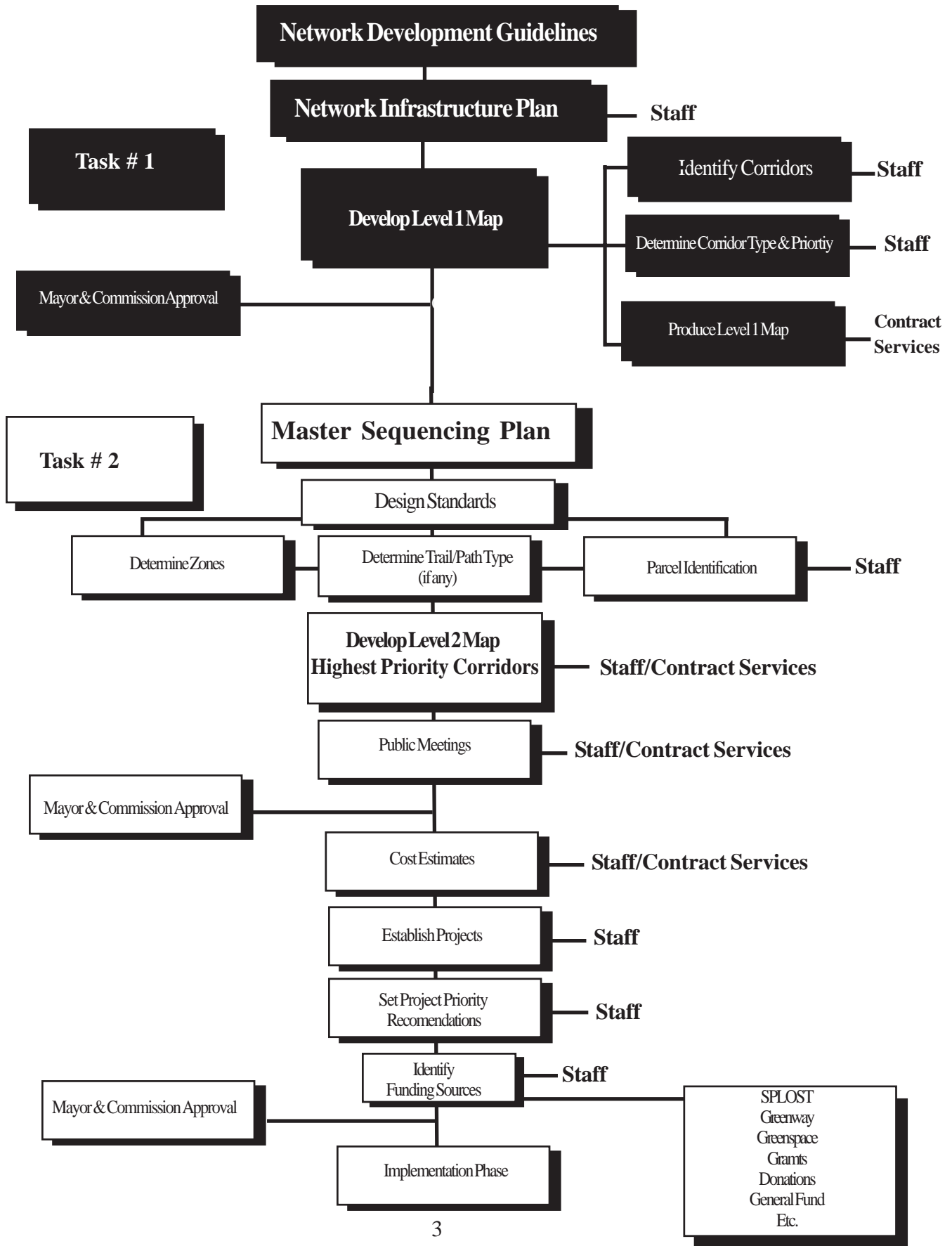
Provide the community an opportunity to experience and enjoy the outdoors in a natural environment.

***Supporting Objectives:***

- a. Create both self-directed and group led recreational opportunities.
- b. Provide walking, jogging, hiking, cycling, and other outdoor recreational opportunities.
- c. Offer fitness opportunities to promote a higher level of healthy outdoor activity.
- d. Provide areas for observation and study of the natural environment.
- e. Provide an aesthetically pleasing environment.

# GREENWAY NETWORK SEQUENCING PLAN FLOW CHART

## THE PROCESS FOR DEVELOPING AND IMPLEMENTING THE SEQUENCING PLAN



## II. Network Infrastructure plan

The Greenway Infrastructure Plan is designed to create a system of greenways through the designation of corridors, destinations, and design standards that provide opportunities for individuals to experience nature in a variety of ways while linking parks, neighborhoods, points of interest, and activity centers.

### A. Corridors

#### 1. Primary Waterway Corridor:

In general, the guidelines used to determine a Primary Waterway Corridor are based on those defined in the latest Land Use Plan, as protected rivers including the upper North Oconee River and Sandy Creek, or areas designated by the ACC Commission.

##### *a. Environmental Component:*

Typically includes major waterways and jurisdictional wetlands, their associated floodways, areas within the 100-year floodplain, and/or the adjacent land as appropriate.

##### *b. Transportation Component:*

Typically it accommodates a variety of non-motorized modes of transportation. The zone determines the specific mode of transportation allowed.

##### *c. Connectivity Component:*

Provides a high degree of connectivity between destination points such as parks, cultural centers, community resources, greenspace, neighborhoods and other activity centers.

##### *d. Potential Zones:*

The zone designation will be determined on a case by case basis. The criteria to determine this designation will be based on the unique features located in this corridor and as described in the design standards section of this document.

#### 2. Tributary Waterway Corridors:

In general, the guidelines used to determine a Tributary Waterway Corridor are based on those defined in the Land Use Plan, as perennial rivers, streams, lakes, or areas designated by the ACC Commission.

##### *a. Environmental Component:*

Typically includes tributary waterways and jurisdictional wetlands, their associated floodways, areas within the 100-year floodplain, and/or adjacent land as appropriate.

##### *b. Transportation Component:*

Typically accommodates a variety of non-motorized modes of transportation. The zone determines the specific mode of transportation allowed.

***c. Connectivity Component:***

Connects Primary Waterway Corridors to destination points such as parks, cultural centers, community resources, greenspace, neighborhoods and other activity centers.

***d. Potential Zones:***

The zone designation will be determined on a case-by-case basis. The criteria to determine this designation will be based on the unique features located in this corridor and as described in the design standards section of this document.

**3. Destination Access and/or Wildlife Corridors:**

***a. Environmental Component:***

Corridors that provide access/connection between destinations, greenspace, buffers, natural areas and/or other activity centers. Also areas which provide wildlife (both vertebrate and invertebrate animals) travel corridors within and between destinations and/or natural areas.

***b. Transportation Component:***

Provides transportation alternatives for both people and wildlife within and between neighborhoods, as well as other natural areas; accommodates non-motorized transportation alternatives ranging from paths to trails.

***c. Connectivity Component:***

Can be used to connect preservation areas, parks, neighborhoods, points of interest, and activity centers.

***d. Potential Zones:***

The zone designation will be determined on a case-by-case basis. The criteria to determine this designation will be based on the unique features located in this corridor and as described in the design standards section of this document.

**4. Supporting Destinations:**

***a. Environmental Component:***

Areas that provide active and passive educational and/or recreational activities, greenspace, natural resource protection, and are of natural and/or historical significance.

***b. Transportation Component:***

Serves as both a starting point and a destination for travel between parks, neighborhoods, points of interest, and activity centers.

***c. Connectivity Component:***

A point of community interest such as parks, neighborhood, points of interest and activity centers connected to a Primary Waterway, Tributary Waterway, or a Destination Access and/or Wildlife Corridor.



*d. Potential Zones:*

The zone designation will be determined on a case-by-case basis. The criteria to determine this designation will be based on the unique features located in this corridor and as described in the design standards section of this document.

## Task 2

### **B. Design Standards:**

Design standards have been established in order to facilitate greenway acquisition, path and trail designation and construction. ACC government reserves the right to review, modify, or revise standards as required for public purposes. Both Preservation Zones and Conservation Zones provide protection to ACC rivers, streams, and floodplains, while ensuring water quality protection. Transportation Zones provide mainly connections, while also encouraging non-motorized transportation usage.

#### **1. Zones:**

*a. Preservation Zone:*

- i. Areas Provided For:** Areas containing natural features, wildlife, and/or plant life that are in need of protection from human activity in order to ensure that these resources are available to future generations.
- ii. Type of Improvements Allowed:** Improvements limited to those necessary to accomplish ACC general government purposes and/or approved educational, research, demonstration, and scientific objectives.
- iii. Activities Allowed:** Areas within this Zone should remain in a natural state and human activity should be restricted. Water Based Trails may be allowed to traverse preservation zones, but canoe landings may be restricted.
- iv. Maintenance:** Maintenance should include activities which are essential to ACC general operations including those essential to preserving or maintaining natural systems and public safety. Routine maintenance and inspections should be conducted based on need.

*b. Conservation Zone*

- i. Areas Provided For:** Natural areas where interaction between the natural environment and humans is encouraged. Provides for conservation of natural resources while allowing human interaction with the natural features located within this zone. This zone provides for floodplain management, water quality protection, education, recreation, transportation, conservation of wildlife and plants, and interpretation of historical sites. This zone will be open to mostly foot travel, designated non-motorized travel modes, limited canoe landings, limited parking lots/motorized travel areas necessary for access.
- ii. Type of Improvements Allowed:** Improvements including those necessary to accomplish ACC general government purposes and/or those features and facilities which enhance the use and access to natural areas within the conservation zone. Improvements may include: trailheads, restrooms, lighting

fixtures, benches, signage, parking lots, boardwalks, and structures that support nature based recreation and educational activities.

**iii. Activities Allowed:** Because interaction between the natural environment and humans is encouraged, activities allowed in this zone may include educational tours, self-guided tours, and recreational activities.

**iv. Maintenance:** Maintenance should include activities which are essential to ACC general operations, including those necessary in conserving natural systems, maintaining improvements, and public safety.

**c. Transportation Zone**

**i. Areas Provided For:** Areas providing interconnections between resources such as parks, neighborhoods, points of interest, activity centers, as well as various transit and transportation alternatives.

**ii. Types of Improvements Allowed:** Improvements including those necessary accomplish ACC general government purposes and/or those features and facilities which enhance the use and access to areas within the transportation zone. Improvements may include: trailheads, restrooms, lighting fixtures, benches, signage, parking lots, canoe landings and structures which support nature based recreation and/or educational activities

**iii. Activities Allowed:** Because this zone is a primary transportation route, activities should include those that are necessary to facilitate the connectivity between destinations.

**iv. Maintenance:** Maintenance should include activities that are essential to ACC general operations, including those necessary in facilitating connectivity and public safety.

**2. Path and Trail Prototypes**

A comprehensive system will be developed for the Athens-Clarke County Community. This system will interconnect paths and trails, linking community assets to people and neighborhoods. Further, this system will create viable alternatives to vehicle traffic as well as provide recreational opportunities. The level of development of the paths and trails along the greenway may vary based on the zone in which they are found. A description of the path and trail types follows:

**a. Trail**

- i. Trails use bare mineral soil, wood chips, and/or soil stabilizer for tread.
- ii. Trails are intended for low impact users (ex: hikers) and are suitable for low to medium use. Trails may also contain boardwalks/structured walkways to limit user impacts on the natural resource.
- iii. Trails offer less intrusion to the natural environment and are suitable for all Greenway Zones.
- iv. Trails may or may not meet ADA standards, depending on the existing site conditions.

*b. Path*

- i. Paths have tread improvements including crushed stone, asphalt, or concrete.
- ii. Paths are intended for moderate to high use, including non-motorized modes of transportation. Non-motorized modes of transportation allowed will be established on a case-by-case basis. Paths may also contain bridges and/or boardwalks/structured walkways to limit user impacts on the natural resource.
- iii. Paths are suitable for all Greenway Zones except Preservation Zones.
- iv. Paths may meet ADA standards.

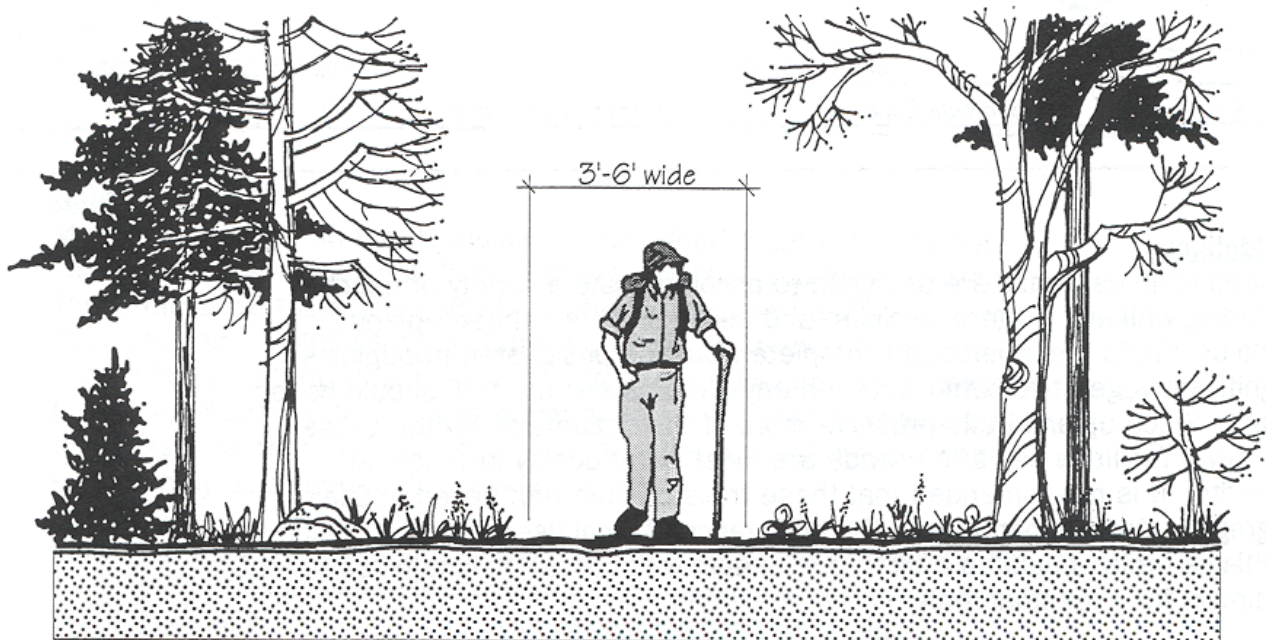
*c. Water Based Trail*

- i. Water Based Trails are designated where rivers and streams can successfully accommodate canoeing, tubing, and/or boating. Water Based Trails may include appropriate signs, landings, portages, or other accommodations necessary for the safety, welfare, and enrichment of community members.
- ii. Water Based Trails are suitable for all Greenway Zones.
- iii. Use Limitation is dependent upon which Greenway Zone it traverses.

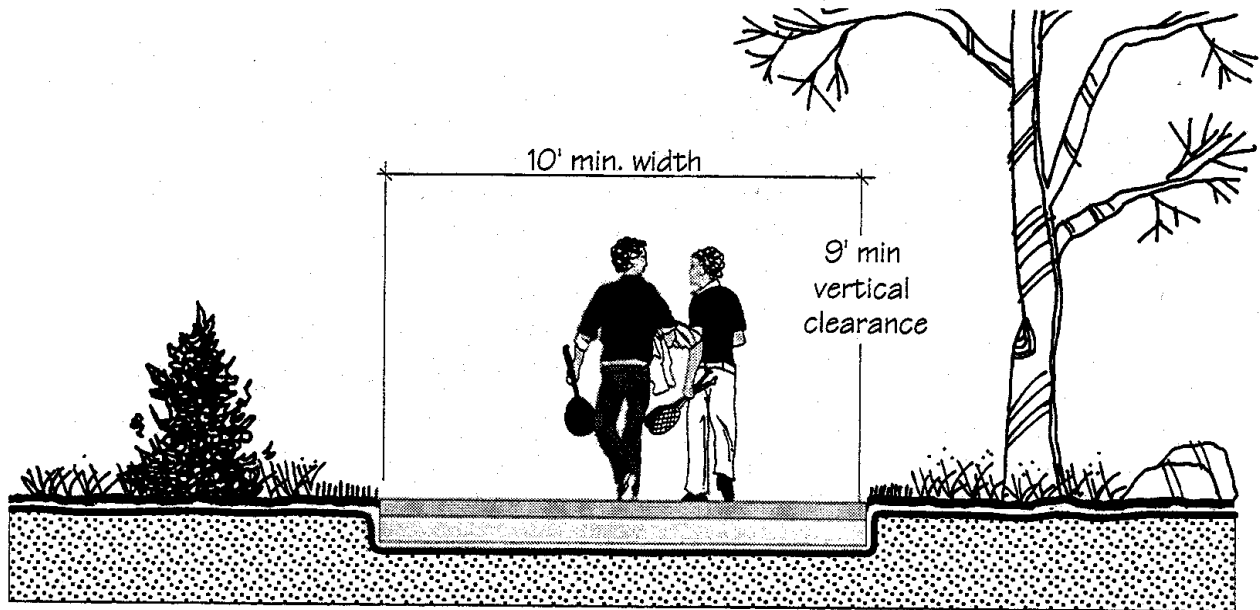
### 3. Cross-Sections

The following are cross-sections of the most common improvements.

- a. **Trails:** Trail design and development will typically follow standards endorsed by the National Trail Association (NTA) and/or National Recreation & Parks Association (NRPA) *see Appendix D*

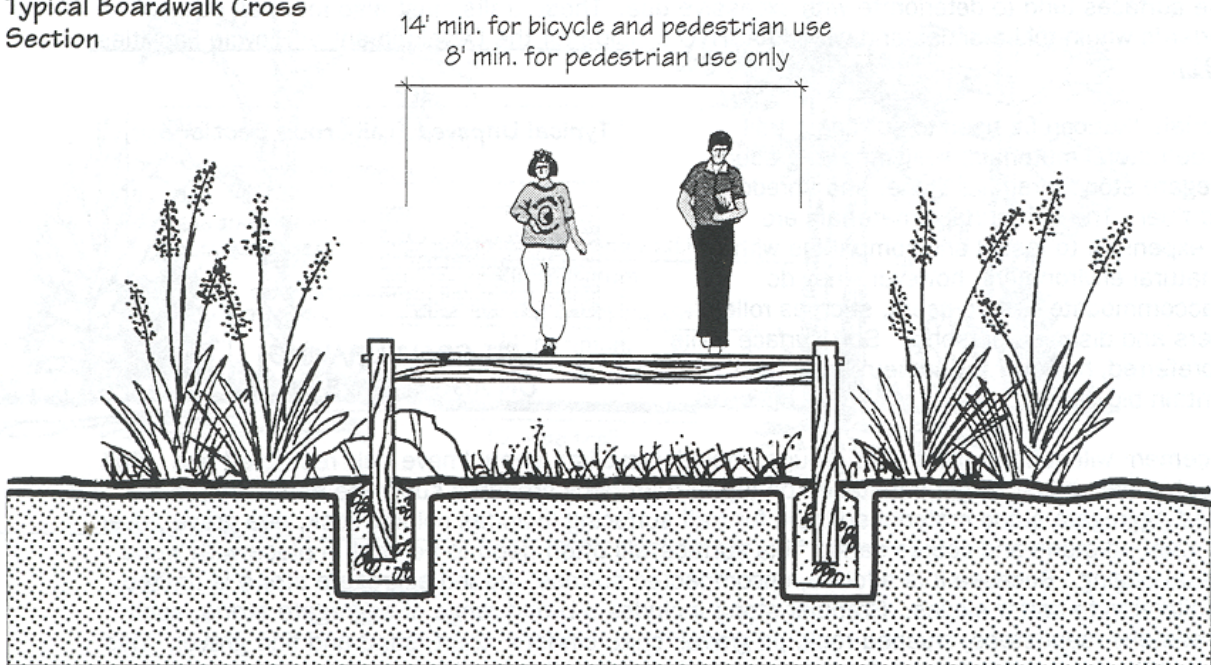


b. **Paths:** Path design and development will typically follow standards endorsed by the Georgia Department of Transportation (GDOT), and/or the National Recreation & Parks Association.



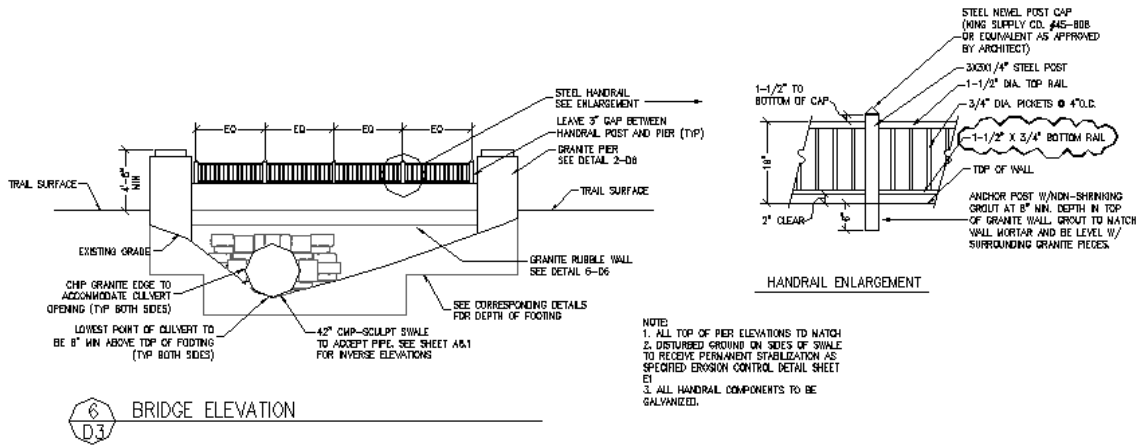
c. **Board Walk**

Typical Boardwalk Cross  
Section

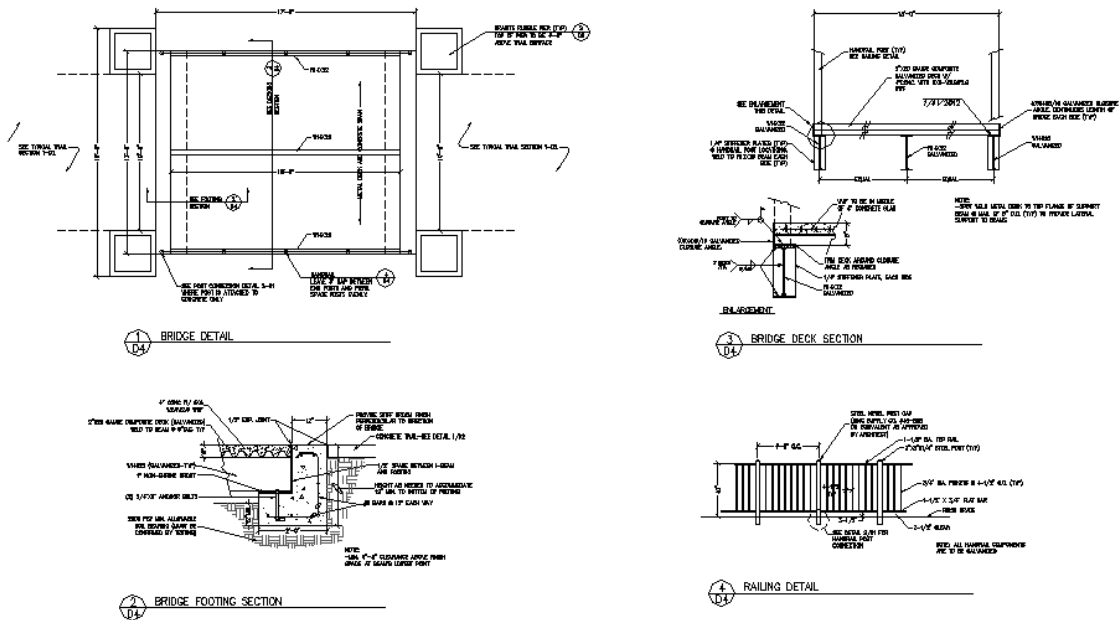


## d. Bridges

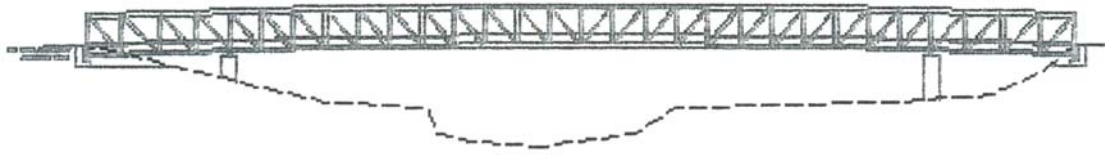
### Stone Bridges



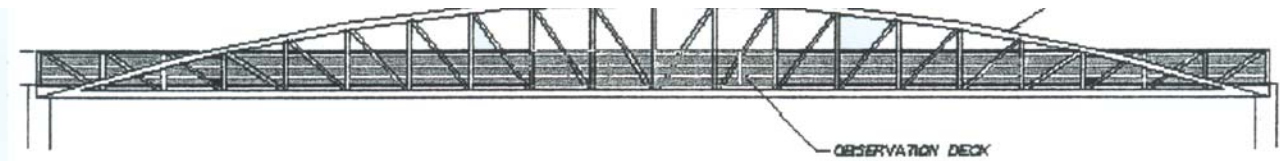
### Wetland Bridge



## River/Stream Crossing Bridge

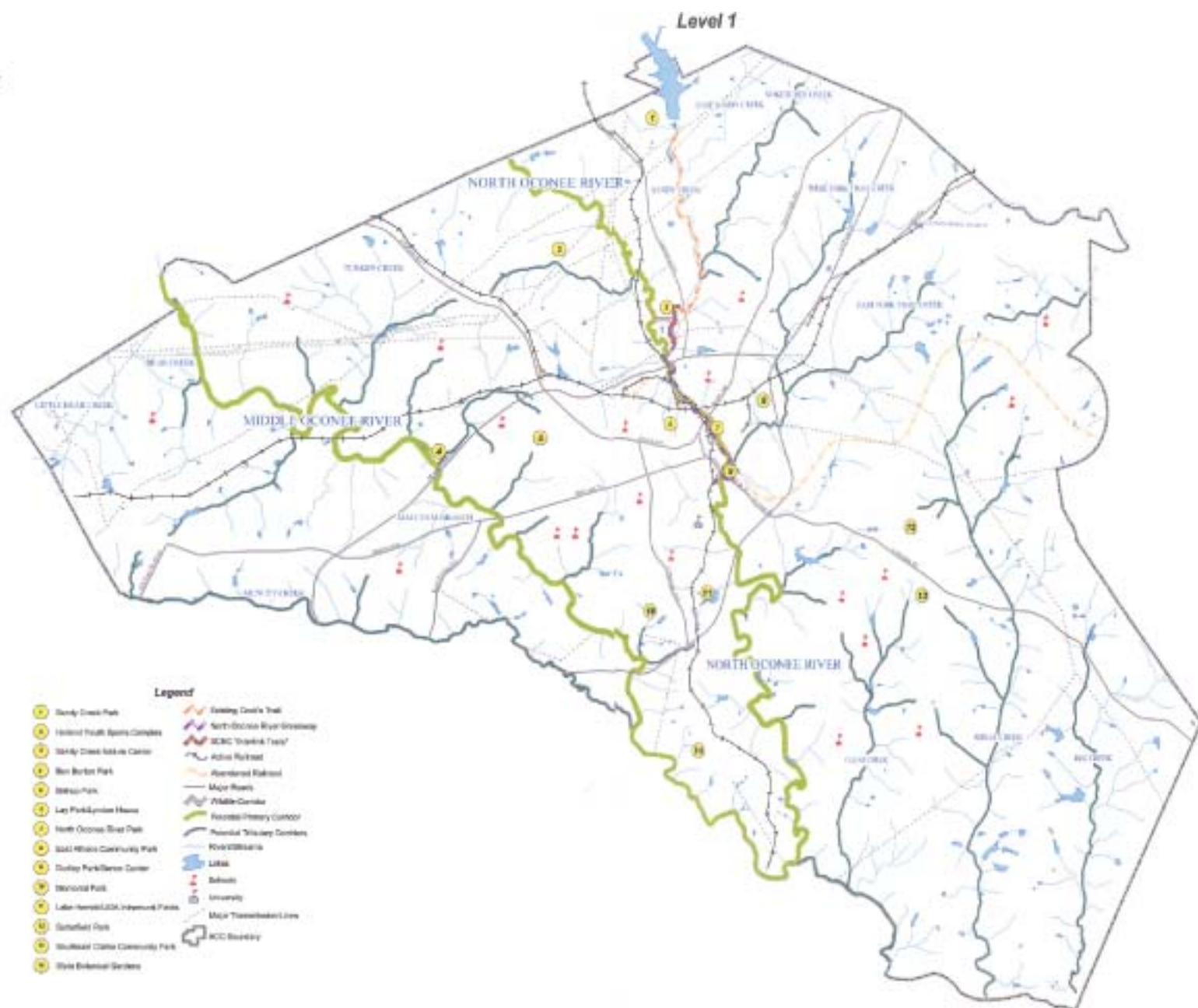


*Option 1*



*Option 2*





#### **4. Network Level 1 Map and Establishing Corridor Priorities**

A level 1 map provides a visual overview of the corridor system of the network plan.

This plan is a “living document” to be used as a reference guide for greenway development in Athens-Clarke County into the future. Design guidelines for greenways and amenities are included to ensure a consistent, high quality system. All future land purchases and development should first consult the plan in order to meet all outlined goals and objectives.

The Athens-Clarke County Greenway Network Plan is a comprehensive vision that identifies potential greenway corridors throughout the county. To realize the vision laid forth in this plan, the following steps will need to be completed for each greenway corridor: land protection/acquisition, master planning, design development, construction, and maintenance.

##### **Potential Greenway Corridor Candidates:**

- A. The following corridors are proposed as the initial candidates for the primary greenway system for Athens-Clarke County (please refer to Level 1 Map, Attachment 1):
  - Waterway corridors including the Big Creek, Carr Creek, Cedar Creek, East Fork Trail Creek, McNutt Creek, Middle/Oconee River, Noketchee Creek, North/Oconee River, Sulphur Springs Branch, Sandy Creek, Hunnicut Creek, Trail Creek, West Fork Trail Creek, Turkey Creek, and Shoal Creek.
  - Destination Access and or Wildlife Corridors including Transcontinental Pipeline, Georgia Power Transmission Line, Colonial Pipe line.
  - Transportation/Recreation corridors including the Oconee Street Rail Corridor (CSX abandoned line between East Broad St. and Winterville)
- B. Establishing Corridor Priority  
Staff, working with input from community groups and the general public evaluated potential corridors throughout Athens-Clarke County. The community groups consulted in this process were The Oconee River Greenway Commission, The Oconee Rivers Land Trust, and Sandy Creek Nature Center, Inc. A criteria for evaluation was established (See Section 4 C for details) and corridors evaluated. Priorities will be established and revised in the future using the following:
  1. Staff: Staff, with input from the community creates, recommends and implements a Commission and Department approved Athens-Clarke County Greenway Network Plan.
  2. Public Input: Staff receives input from a variety of community sources.
    - a. Oconee River Greenway Commission: The Oconee Rivers Greenway Commission is a secondary agency of the Athens-Clarke County Government (ACC). The ACC Commission appoints ten of its fifteen members and the President of the University of Georgia appoints five.



The Commission is advisory in nature and is charged with providing oversight concerning greenway development. It may recommend actions to protect the natural resources of our rivers, such as implementation guidelines, development rules, regulations, or incentives. It may recommend the public acquisition of parcels of land or easements and it may solicit donations of land, easements, or funds to further the objectives of the Greenway System. It may also engage in educational programs for itself and the general public in order to secure maximum public benefit from this system.

- b. Other greenway oriented groups including Oconee Land Trust, Sandy Creek Nature Center, Inc. etc.
3. Public meetings and Greenspace/Greenway Nomination Forms.  
Periodic public meetings will be held and forms nomination forms distributed in order to obtain public input concerning potential greenway parcels. These meetings and nomination form will be coordinated with the Greenspace Initiative.

#### C. Criteria for Determining Corridor Priorities

In developing the recommended corridor priority list, the following criteria were considered (see Appendix C for Evaluation Form and Definition of Terms):

Conservation & Preservation	Transportation	Education & Recreation	Other Considerations
1. Surface Water Quality Protection 2. Wetland Protection 3. Habitat preservation/buffer 4. Wildlife Travelway 5. Protection of Endangered Species 6. Biodiversity 7. Pollution abatement 8. Greenspace Connectivity 9. Likelihood of loss to private development 10. Extent of Existing Human Disturbance 11. Development Buffer	12. Trail Connectivity 13. Community Resource Connectivity 14. Population Center Connectivity	15. Educational Opportunities/Resources 16. Recreational Opportunities/Resources 17. Scientific Interest 18. Public access to the site Public accessibility through the site. 19. Public access on site. 20. Historical, archaeological, and/or Cultural significance. Scenic & aesthetic Value 21. Traffic, noise, and/or crime reduction.	22. Consistency with ACC Comprehensive Land Use Plan. 23. Consistency with ACC Leisure Services Comprehensive Plan. 24. Estimated cost of acquisition. 25. Funding opportunities 26. Sale potential 27. Donation potential. 28. Cost of maintaining property once acquired.

D. Recommended Greenway Corridors:

Based on the evaluation criteria, a recommended priority order was established for each corridor. The recommendation is as follows:

- 1 North/Oconee River
- 2 Sandy Creek
- 3 Middle/Oconee River
- 4 Rail/Trail project as submitted to Congressman Max Burns.

## **5. Corridor Master Plan**

- A. Once approved, the Athens Clarke County Greenway Network Plan will identify a system of greenway corridors throughout the county that fulfill multiple objectives. To realize the vision of this plan, the following steps will need to be completed for each greenway corridor identified.

### **Step One - Corridor Planning**

Highest priority corridor is identified and Level 2 maps are created.

### **Step Two – Corridor Zone Determination**

Corridors will be zoned based on the Network Development Guidelines.

### **Step Three – Greenway Network and Greenspace Plan Integration**

Once potential greenway network corridors have been determined, zoned and approved by the ACC Mayor and Commission, individual parcels are nominated or identified by the public, ACC staff, The Greenway Commission, etc. Parcels are evaluated using forms included in Appendix C (Corridor /Parcel Evaluation Form and Definitions of Terms) to determine suitability of inclusion in the Greenway Network, Greenspace Plan, or both programs. This priority order will determine which parcels will be requested for funding as part of the Greenway Network Plan. Funding sources such as grants, donations, gifts, etc. will also be investigated.

### **Step Four -Project Development**

Once corridors are identified and zoned, project development involving land acquisition and/or facility development may begin.

### **Step Five - Design Development, Construction Documents, and Engineering**

If a parcel or group of parcels is determined to be suitable for potential development, then appropriate recommendations, documents, and cost estimates are developed for ACC Commission review. Input from the public and other community groups should be included in this step. Development will follow design standards outlined in this document as well as those endorsed by the National Park and Recreation Association and/or the Georgia Department of Transportation.

### **Step Six - Construction and Facility Development**

Detailed planning and construction documents are developed. Construction begins as funding becomes available.

### **Step Seven - Maintenance and Management**

Maintenance and management begin immediately after the contractor releases the site. The Athens Clarke County Leisure Services Department and its Natural Resource Division shall be the lead management agency and should work in partnership with other county agencies, state agencies and private sector groups to effectively manage and maintain the greenway system.

### **B. Ongoing Network Plan Development and Revisions**

Flexibility has been built into the plan in order to allow for changing community desires, demographics, and other considerations. The following criteria are provided to guide Athens Clarke County in ongoing development and revision of the plan. Criteria are provided in alphabetical order and the ordering does not represent priority. Specific criteria may be added or removed as needed to meet community goals.

**Expansion of Existing System** - the proposed expansion is an addition to the existing greenway.

**Funding** - funds have been committed or identified for the project.

**Geographical Equity** - construction and acquisition of addition greenway facilities and property provides an equitable balance in greenway facilities throughout the county.

**Land Ownership** - Athens Clarke County has title or public access rights to the land.

**Need for a Greenway** - residents of an area are under-served and development of greenway facilities would meet need.

**Definite Origin and Destination** - the greenway segment has a logical beginning and end point.

**Population Served** - greenway development will serve a significant number of the population in a given area.

**Public Support** - the surrounding neighborhoods and communities support greenway development.

**Trail Facility Development** - an estimate of the cost of the project has been completed and the cost had been determined to be feasible.

**Trail Facility Maintenance** - an evaluation of the project has been completed and it has been determined that the corridor can be maintained within Athens Clarke County policy.

# *Appendix A*

## DEFINITIONS OF TERMS

The following offers a definition for terms that are used throughout this report.

1. **ADA:** Americans with Disabilities ACT, prohibits discrimination on the basis of disability in employment, programs and services provided by state and local governments, goods and services provided by private companies, and in commercial facilities.
2. **Aquatic Species:** Plants and animals found in the water.
3. **Demonstration Project:** The utilization of a product or method to educate others about that product or method.
4. **Emergent Wetlands: Dominated** by annual and perennial herbaceous species. Water usually is present at the soil surface for prolonged periods.
5. **Floodplain:** The lowland that borders a stream, creek, river or water conveyance and is subject to flooding when the stream overflows its banks.
6. **Hydric Soil:** Soil that is periodically to permanently saturated with water.
7. **Oxbow:** A relic stream channel, formed over hundreds of thousands of years, that has been cut off from the main channel, but retains water and flood storage capacity.
8. **Point-Source Pollutants:** Any confined conveyance including, but not limited to pipe, ditch, or channel in which pollutants are or may be discharged.
9. **Riparian:** The land area that is associated with a river or creek.
10. **Terrestrial:** Plants and animals species found on the land.
11. **Tributary:** A stream flowing into a larger stream or other water body.
12. **Trail Head:** A designated public access point along a greenway in which can include bicycle and automobile parking, restroom facilities, drinking fountains, signage, benches, picnic tables, etc.
13. **Trail Tread:** The surface of a trail.
14. **Watershed:** An area of land that drains water, sediment, and dissolved materials into a particular point along a river or stream.
15. **Wetland:** An area of saturated or covered by shallow water at least part of the year, with poorly drained or highly organic soil and containing unique plant species that can tolerate periods of soil saturation or flooding
16. **Wildlife Corridor:** A linear area of conservation, either terrestrial or aquatic, which allows for the movement of a diversity of species.

# *Appendix B*

## **Benefits of Greenways**

Greenways provide a wide range of benefits to users, local landowners, and local communities since they are multiple-use, multiple-benefit resources. A multi-objective greenway system for Athens-Clarke County can address and resolve many community issues that affect the future environmental and economic health of the county. Greenways have been implemented by other communities to control flooding, improve water quality, protect wetlands, conserve habitat for wildlife, and buffer adjacent land uses. Greenways typically incorporate varying types and intensity of human use, including trails for human use, and active park facilities, including open playing fields.

### **1. Flood Control Benefits**

Greenways preserve wooded open spaces along creeks and streams, which absorb floodwaters and filter pollutants from storm water. Flooding has historically been a significant problem in parts of Athens-Clarke County. In some areas, residences, buildings, and land uses have encroached into flood prone areas. By designating floodplains as greenways, the encroachments can be better managed, and in some cases, replaced with open spaces that serve as an amenity to local residents and businesses as well as providing important flood water storage capacity.

As a flood control measure, greenway corridors serve as a primary storage designation during periods of heavy rainfall. The protected floodplain can also be used during non-flood periods for other activities, including recreation and alternative transportation. In conjunction with existing Athens-Clarke County floodplain management policies, recommendations, and programs, greenway lands can be established as development occurs.

### **2. Water Quality Benefits**

Greenway corridors also serve to improve the surface water quality of local rivers and creeks. The floodplain, forests, and wetlands contained within greenway corridors filter pollutants from storm water. These pollutants are not removed if storm water is collected in pipes and discharged directly into local streams. Improving surface water in streams and creeks not only benefits local residents by naturally filtering drinking water, but also numerous forms of wildlife that depend on creeks for their habitat.

### **3. Transportation Benefits**

Most American communities have become dependent on the automobile as the sole means of transportation. Americans have abandoned some traditional means of transportation and have been moving slowly to emphasize environmentally sensitive alternative forms of transportation such as bicycle paths, pedestrian networks (sidewalks), and extended transit service. In order to provide relief from congested streets and highways in Athens-Clarke County, future transportation planning and development should be concentrated on providing a choice in mode of travel to local residents. These mode choices should offer the same benefits and appeal currently offer by the automobile: efficiency, safety, comfort, reliability, and flexibility.

Greenway corridors throughout Athens-Clarke County can serve as extensions of the transit network, offering connections between origins and destinations such as work, schools, parks, shopping areas, and tourist attractions. Destinations can be linked to multiple origins throughout the county with a combination of off-road trails and on-road bicycle and pedestrian facilities. This type of intermodal transportation system can eventually reduce the noise and congestion caused by automobile traffic.

#### **4. Air Quality Benefits**

Greenways as alternative transportation corridors assist in reducing traffic congestion and help improve local air quality. Offering viable alternative transportation choices through greenways will encourage people to bicycle and walk more often, thereby reducing traffic congestion and automobile emissions. The 1970 Clean Air Act calls for federal, state, and local governments to reduce ozone levels to what is believed to be a safe level. The level has been lowered to 0.08 parts per million (ppm) averaged over an eight hour period. Currently, Athens-Clarke County is not a non-attainment area and meets the requirements of the Clean Air Act. However, we must not ignore the possibility of increasing levels and the impact they could have on our community and a greenway system can help Athens Clarke County continue to meet the 1970 Clean Air Act Standards.

#### **5. Plant and Animal Habitat Benefits**

Greenway corridors serve as habitat for many species of plants and wildlife. These corridors provide essential food sources and access to water. Greenways, once conserved and preserved, can function as primary migratory corridors for wildlife. Greenways in Athens-Clarke County can be targeted as a primary habitat and breeding ground for many species of plants and animals. Programs can be established to not only protect the valuable existing forested and wetland areas in the county, but also to reclaim and restore streams to support higher quality habitat. High quality habitat will most likely result in a high quality gene pool for wildlife in the area.

#### **6. Economic Benefits**

Greenways offer numerous economic benefits to Athens-Clarke County, including increased tourism, recreation revenues and cost savings for public services. Tourism is a major component of Georgia's economy. Nature-based and heritage-based tourism has the potential to become the fastest growing segment of the economy. Nature-based and heritage-based tourism adds employment opportunities, distributes economic benefits of tourism all along the greenway and strengthens the appeal of the Athens Clarke County area.

#### **7. Health and Recreation Benefits**

Greenways encourage more people to walk or bike to nearby destinations. Studies have shown that as little as 30 minutes a day of moderate exercise can significantly improve a person's mental and physical health and prevent certain diseases. Every year, American businesses lose billions of dollars because of employee health problems. Exercise derived from recreational activities reduces the health-related problems and subsequent health-care costs. Providing opportunities for participation in these outdoor activities close to where people live and work is an important component of promoting healthy lifestyles for Athens-Clarke County.

In 1987, the President's Commission on Americans Outdoors released a report that profiled the modern pursuit of leisure and defined the current quality of life for many Americans. Limited access to outdoor resources was cited as a growing problem throughout the nation. The Commission recommended that a national system of greenways would provide all Americans with access to linear open space resources.

The greenway system in Athens-Clarke County is being developed so as to complement the community's existing parks and open space system. Trail systems are being developed not only for alternative transportation, but to serve as primary recreation, fitness, educational, and interpretive resources.

## **8. Educational Benefits**

Greenways demonstrate and foster the development a land ethic. People protect and nurture that which they understand and appreciate. Greenways provide significant natural science, science, cultural and other educational opportunities to the community. Such opportunities help create the foundation of knowledge critical to a community's efforts to provide sound land stewardship, address quality of life issues, and learn to understand and work with our natural life support systems. Such appreciation and understanding is critical to the long term health and survival of our society and our planet

## Greenway Network Plan Corridor/Parcel Evaluation Form & Definitions of Terms For Evaluation

### Goal 1: Conservation and Preservation

Provide a natural buffer system that enhances our quality of life through the conservation and preservation of natural life support systems. Preservation efforts should focus on the ultimate goal of protection of natural resources. Conservation efforts should focus on the goal of controlled use and systematic protection of natural resources.

### A. Conservation & Preservation

<i>Considerations</i>	<i>Definitions</i>	<i>Evaluation or Comments</i> 1 – 3 sentence narrative
1. Surface Water Quality Protection	Provides area for natural filtration, sheet flow during storm events and buffer for standing water.	
2. Wetland Protection	Provides buffer for wetland areas and large flood plain systems.	
3. Habitat preservation/buffer	Preserves or buffers habitat critical to piedmont flora and fauna.	
4. Wildlife Travelway	Provides critical natural cover that is used as a wildlife travelway between supporting habitats or destinations.	
5. Protection of Endangered Species	Preserves habitat or buffers necessary to the survival of endangered species.	
6. Biodiversity	Area is a highly productive area for flora or fauna (ex: nesting grounds, large mast crops, etc.).	
7. Pollution abatement	Ability to help reduce air, light, noise, etc. pollution.	
8. Greenspace Connectivity	Connects or helps connect to existing/potential Greenspace or Greenway buffer properties.	
9. Likelihood of loss to private development	How likely the property is to be developed in the next 5 years to a use potentially incompatible with the Sandy Creek Greenway Buffer	
10. Extent of Existing Human Disturbance	Range from a little or no disturbance to a great deal of disturbance.	
11. Development Buffer	Ability of the site to provide buffer from development.	

Section Summary



## Greenway Network Plan Corridor/Parcel Evaluation Form & Definitions of Terms For Evaluation

### Goal 2: Transportation

Provide corridors and facilities, which promote the use of non-motorized transportation.

### B. Transportation

<i>Considerations</i>	<i>Definitions</i>	<i>Evaluation or Comments</i> 1 – 3 sentence narrative
1. Trail Connectivity	Connects or helps connect to existing/potential trails.	
2. Community Resource Connectivity	Connects or helps connect to community resources.	
3. Population Center Connectivity	Connects or helps connect to population centers.	

Section Summary

### Goal 3 & 4: Education & Recreation

Education: Provide opportunities for both self-directed and interpretative programs leading to a greater understanding of the natural environment, cultural heritage, and preservation/conservation efforts. Recreation: Provide the community an opportunity to experience and enjoy the outdoors in a natural environment.

### C. Education & Recreation

<i>Considerations</i>	<i>Definitions</i>	<i>Evaluation or Comments</i> 1 – 3 sentence narrative
1. Educational Opportunities/Resources	Self-directed and Interpretative Program Potential	
2. Recreational Opportunities/Resources	Self-directed and organized events and activities.	

## Greenway Network Plan Corridor/Parcel Evaluation Form & Definitions of Terms For Evaluation

3. Scientific Interest	Research potential.	
4. Public access to the site	Level of public access to the property.	
5. Public accessibility through the site.	The public will be able to pass through the property via a public access corridor.	
6. Public access on site.	Pubic will have access to a significant portion of the property.	
7. Historical, archaeological, and/or Cultural significance.	Range from significant resources to little or no resources.	
8. Scenic & Esthetic Value	Ability of property to scenic or esthetic value to the community.	
9. Traffic, noise, and/or crime reduction.	Range of potential for community improvement.	

Section Summary

### D. Other Considerations

<i>Considerations</i>	<i>Definitions</i>	<i>Evaluation or Comments</i> 1 – 3 sentence narrative
1. Consistency with ACC Comprehensive Land Use Plan.	Degree of consistency with existing plan	
2. Consistency with ACC Leisure Services Comprehensive Plan.	Degree of consistency with existing plan	
3. Estimated cost of acquisition.	Range from low cost to high cost.	
4. Funding opportunities	Possibility of obtaining funding from sources other than ACC.	
5. Sale potential.	Willingness of the owner to sell the property.	
6. Donation potential.	Willingness of the owner to donate or provide an easement.	
7. Cost of maintaining property once acquired.	Level of ongoing maintenance. Ranked from low maintenance to high maintenance needs.	

Section Summary

# *Appendix D*

## **Definitions of Land Acquisition Terms**

A variety of land acquisition methods exist in which Athens Clarke County may utilize to acquire lands for greenway development. The actual method used to acquire individual parcels will depend on which option provides the most cost-effective method to attain the goals set forth in the Greenway Network Plan.

Donation - Athens Clarke County agrees to receive full title to a parcel of land at virtually no cost. In most cases, the owner who donates the land is eligible to receive federal and state tax deductions.

Easement Purchase - Athens Clarke County does not purchase the full title to the land but purchases only those rights granted in the easement agreement. Easement purchase price is less than full title value.

Fee Simple Purchase - Athens Clarke County purchases property from the owner outright. Fee Simple ownership results in the full title and property rights being turned over to Athens Clarke County.

# *Appendix E*

## NATIONAL PARK AND RECREATION ASSOCIATION **TRAIL DESIGN STANDARDS**