Introduction

The first question: What is a greenway?

A greenway can be generally defined as "open space or natural areas that have a linear form" (Smith and Hellmund, 1993). However, greenway implementation can meet a variety of purposes, from recreation to environmental preservation. Depending on the principles or goals established for it, a greenway may take on entirely different sets of characteristics.

Some greenways are created for recreational activities, such as hiking, biking, in-line skating, jogging, running, and strolling. They also provide a means of getting from place to place without a car: to school, a friend's home, the library, a restaurant, or work, to name a few destinations. Greenways are safer alternatives to streets because they separate the user from automobiles. They also provide a more aesthetically pleasing atmosphere for the user. Because they are located away from roads and direct fumes from automobiles, the air quality along greenways is better and "noise pollution" is diminished.

Greenways also are beneficial for conservation. A greenway can be established to protect and preserve natural and cultural resources, whether they are rare species or an *ecosystem*, fragile geological areas, or a series of significant archeological sites. A greenway also can link various conservation areas and ecosystems with each other to allow for the movement of species. The greenway also provides a vital place of refuge for plants and animals, as more and more areas succumb to agriculture, logging, and development pressures.

Established greenways create the opportunity for restoration of cultural and natural resources. Once a greenway is created, the resources within it receive increased protection from destruction or degradation. In many cases, these resources have suffered from previous adverse impacts. Through restoration, dammed streams can be restored to free-flowing streams; invasive *exotic* plants, such as privet and kudzu, can be removed; and remnants of historic mills can be restored. Because these areas are now preserved in perpetuity, the results of restoration are continually rewarding.

Greenways also are used along streams and other waterbodies to protect water quality. They prevent disturbance adjacent to streams, especially direct *runoff* of sediment and chemicals into the river. The trees within the greenway provide shade on the water, which keeps the water temperature optimal for aquatic plants and animals. Greenways provide a vegetated buffer between land uses, such as agriculture, *silviculture*, and urban. The buffer of the greenway filters runoff from these areas, slowing down the water's velocity, filtering out sediment and chemicals, and allowing time for the water to *infiltrate* into the ground.

Greenways also provide an opportunity for environmental education. Educators can teach visitors about the natural and cultural resources in the greenway, including its ecosystems, history, and natural dynamics, as well as the principles behind its creation. The list of topics is endless.

Publicly accessible greenways travel through and link various communities, bringing community members together in a unique way. From greenway implementation, to maintenance, to the sharing of knowledge, involvement provides an opportunity for community members to get to know each other and to use the greenway as an important part of their community.

The establishment of a greenway corridor along the Chattahoochee River is important for all the above reasons; it provides opportunity for the preservation and restoration of cultural and natural resources, water quality improvements, recreation, education, and community participation. To emphasize the importance of all of these goals, the Chattahoochee River Land Protection Campaign established the following principles for the Chattahoochee River Corridor.

Preservation
Identify and preserve valuable cultural and natural resources.

Restoration
Restore sections of the river ecosystem damaged by adverse impacts of human activity, including invasive exotic species, previous land uses, and water management practices.

Water Quality
Protect and improve the water quality of rivers, tributaries, and other water resources.

Recreation
Plan and design recreation to allow all people some appropriate access to experience the Chattahoochee River in a safe, meaningful, and responsible manner. Construct and manage recreational amenities with minimal impact on the cultural and natural resources found within the Chattahoochee River Corridor.

Education
Educate to increase understanding of the Chattahoochee River Corridor's resources and importance to people's quality of life.

Community Participation
Incorporate meaningful public participation into all aspects of the greenway implementation.

The method of greenway implementation depends on the principle for establishing the greenway. For example, a greenway planned for conservation would link various protected natural areas. A greenway created for recreation would maximize links between neighborhoods and popular destinations, while a greenway established for water quality protection would protect a network of streams and other water bodies.

Along the Chattahoochee River, all of the principles described above can be achieved with the establishment of a greenway system. But, how does one incorporate the sometimes conflicting principles of preservation, restoration, water quality, recreation, community participation, and education into one greenway system?

It is possible to establish a greenway system that addresses a number of different principles. It is a matter of balancing the requirements of each principle so that each is addressed equally. Because the greenway system is based on principles of equal importance, no single principle is emphasized to the detriment of any other.

This does not mean that each principle will apply equally throughout every area or segment of the greenway. An important part of the greenway implementation process involves analyzing individual areas to best decide which of the principles can be met in a particular area and which cannot. For example, an area within the greenway that contains sensitive species may have no recreational access at all. Conversely, an area that has been farmed for many years may be used for recreation, and not for conservation. However, when looking at the entire greenway system, the areas for conservation are linked, as are the areas for diverse recreational uses. The principles, guidelines, and implementation process portions of this handbook describe how to do this successfully.

The first half of this section, *Principles and Guidelines*, addresses each of the six principles individually. Each chapter begins by discussing the issues addressed by the principle specific to the Chattahoochee River.

Following the explanation of each principle is a list of guidelines for greenway implementation. Each guideline is defined in relation to the principle and is followed by a series of methods ("How?") for applying the guideline throughout the greenway implementation process.

The second half of this section, *Implementation Process*, shows how the principles and guidelines are incorporated into the process of greenway implementation. It explains how to achieve a balance between all six principles when master planning, designing, constructing, and managing a greenway within the Chattahoochee River Corridor. Throughout this entire section, terms are defined in the text, as well as in the glossary (*Appendix A*). Glossary terms are indicated in italics.

The purpose of the *Chattahoochee River Corridor Greenway Planning and Implementation Handbook* is to assist city and county governments in the master planning, design, construction, and management of greenways within the Chattahoochee River Corridor while balancing the principles of preservation, restoration, water quality, recreation, education, and community participation.

While these principles and guidelines apply to greenway implementation on public lands and in areas allowing public access along the Chattahoochee River Corridor, private landowners are encouraged to utilize these tools as well.