
Appendix E: Operations, Maintenance and Management

Operating, maintaining and managing a system of open space and greenways in Rolesville will require a coordinated effort among all Town departments, private sector organizations and individuals. The following text defines key aspects of Open Space and Greenway System management, beginning with a discussion of a governance structure for the system, followed by definition of operational policies, facility management, land management, safety and security, trail user rules and regulations, an emergency response plan, and risk management program.

For a successful Open Space and Greenway System to be developed it is critical for the players to understand their role in supporting and managing the system.

Role of Rolesville

The Rolesville Open Space and Greenway System will be developed and managed by the Town and its departments. Listed below and on the following pages are the key departments and organizations that will play a role in this implementation.

Role of Department of Parks and Recreation

As the primary developer of greenways, the Parks and Recreation Department is the most prominent participant in the Open Space and Greenway Plan. The Department will be responsible for the design, management and maintenance of the greenway system. The Parks and Recreation Department will need to work closely with the planning Department in the siting of greenways.

Role of the Planning Department

The Planning Department should provide support for the Open Space and Greenway Plan and assistance with future implementation of the system. This can be accomplished by defining future greenways within related planning efforts; utilizing the rezoning process to encourage dedication of lands, including sidewalks and bicycle facilities for the Open Space and Greenway System; and planning transportation improvements in coordination with greenways.

Overview

Governance Structure

Role of Private Sector

Role of Department of Public Utilities

The Department of Public Utilities is an important player in the implementation strategy for the Open Space and Greenway System. The Department manages the system of sanitary and stormwater sewers which offer enormous potential for shared use with greenway development objectives. For the expansion and development of new sanitary sewer lines, the Department should consider the use of a joint-use easement document during right-of-way negotiations to acquire subsurface and surface rights from willing sellers. The Department could function as a greenway developer in partnership with the Parks and Recreation Department. Additionally, stormwater management objectives can be enhanced through the development of the Open Space and Greenway System through the use of funds obtained from federal and state grants.

Role of Department of Police Services

The Department of Police Services should assist the Parks and Recreation Department with patrolling and law enforcement for Open Space and Greenway System lands and facilities.

The private sector throughout Rolesville is the primary beneficiary of the Rolesville Open Space and Greenway System. As such, private organizations, businesses and individuals can and should play an important role in the development and management of the system. Private sector groups and businesses can sponsor implementation projects for open space and greenways as a partner of the Town. These groups can also help to maintain open space and greenway lands through cooperative management agreements with the Town.

Role of Local Businesses and Corporations

Rolesville businesses and corporations might choose to sponsor a segment of greenway for development or maintenance. Businesses and corporations can work with the Parks and Recreation Department to give money, materials, products and labor toward the development of a greenway facility. Businesses can also consider installing facilities, such as bike racks or lockers, benches, and signage that links their operations to the Open Space and Greenway System.

Role of Civic Organizations

Local civic groups and organizations, including the Junior League, Boy Scouts and Girl Scouts, garden clubs, YMCA, Kiwanis and Rotary Clubs, to name a few, can be participants in the Rolesville Open Space and Greenway System. These organizations can play a vital role in building sections of greenway trails, maintaining and managing greenway lands and facilities, and co-hosting events that raise money for the Open Space

and Greenway System. There are many ways in which civic organizations can participate in the development of the Open Space and Greenway System. The most appropriate involvement can be determined by matching the goals and objectives of each organization to the needs of the greenway program.

Role of Individual Citizens

Local residents who are interested in the development of Rolesville's Open Space Greenway System can participate by agreeing to donate their time, labor, and expertise to the Parks and Recreation Department. Residents might choose to partner with a friend or form a local neighborhood group that adopts a section of greenway for maintenance and management purposes. As an adopt-a-greenway organization, individuals might help pick-up trash, plant flowers and trees, care for newly planted vegetation and serve as additional "eyes and ears" for safety and security on open space and greenway lands. All volunteer efforts would be recognized by the Parks and Recreation Department through a community-wide program.

Over the course of time, Rolesville will encounter a variety of issues that are important to the successful management and operation of the Open Space and Greenway System. The following operational policies are defined to assist the Town in responding to typical greenway implementation issues. More specific problems and issues may arise during the long-term development of the system that results in additional policies being considered and adopted.

The protection of stream corridors from urban encroachment is essential in order to permit stream channels and their floodplains to perform natural infrastructure functions. Stream corridors are best protected by first delineating the landscape boundaries of the 100-year (regulatory) floodplain and then by encouraging landowners to engage in land stewardship practices that limit encroachment and preserve the native landscape.

This section of the Plan defines land acquisition procedures that can be used to conserve, protect, and preserve the stream corridors of Rolesville. This Plan recommends a voluntary land acquisition program for protecting the streams and floodplains of the Town. The text in this section offers a menu of tools that landowners, land conservation organizations and local government can use to establish the physical boundaries of the Open Space and Greenway System. In the event that certain parcels of land within the floodplain are considered vital to the overall efforts of the Open Space and Greenway System, mechanisms defined herein enable Rolesville to purchase or negotiate for the dedication of certain property rights. Dedication should be negotiated in a manner that is consistent with local, state and Federal laws that permit and govern such action.

Open Space and Greenways Operations

Land Acquisition Procedures

Methods for Acquisition of Land Through Management

Management is a method of conserving the resources of a specific greenway parcel through either an established set of policies called Management Plans, or through negotiated agreements or easements with private property owners.

Management Plans

Management plans are prepared for Town-owned greenway lands. Management plans should identify valuable resources; determine compatible uses for the parcel; determine administrative needs of the parcel, such as maintenance, security and funding requirements; and recommend short-term and long-term action plans for the treatment and protection of the resources.

Easements

Land management agreements in which Rolesville receives less than full interest in a parcel of land in order to protect a valuable resource. The purpose of these agreements is to establish legally binding contracts or a mutual understanding of the specific use, treatment and protection that these greenway lands will receive. Property owners who grant easements retain all rights to the property except those which have been granted by the easement. The property owner is responsible for all taxes associated with the property, less the value of the easement granted. Easements are generally restricted to certain portions of property, although in certain cases an easement can be applied to an entire parcel of land. Easements are transferable through title transactions, thus the easement remains in effect in perpetuity. Three types of greenway easements are:

Conservation Easements

This type of easement generally establishes permanent limits on the use and development of land to protect the natural resources of that land. Dedicated conservation easements can qualify for both federal income tax deductions and state tax credits. Tax deductions are allowed by the Federal government for donations of certain conservation easements. The donations may reduce the donor's taxable income.

Preservation Easements

This type of easement is intended to protect the historical integrity of a structure or important elements of the landscape by sound management practices. Preservation easements may qualify for the same federal income tax deductions and state tax credits as conservation easements.

Public Access Easements

Right of public access easements provide the general public with the right to access and use a specific parcel of property. Both conservation easements and preservation easements may contain clauses for the right of public access and still be eligible for tax incentives.

Methods for Acquisition of Greenways Through Regulation

The second method of protecting stream corridor/greenways is through government regulation. Regulation is defined as the government's ability to control the use and development of land through legislative powers. The following types of development ordinances are regulatory tools that can meet the challenges of projected suburban growth and development and, at the same time, conserve and protect greenway resources.

Dedication/Density Transfers

Also known as incentive zoning, this mechanism allows greenways to be dedicated for density transfers on the development of a property. The potential for improving or subdividing part or all of a parcel of real property, as permitted under land use development laws, can be expressed in dwelling unit equivalents or other measures of development density or intensity. Known as density transfers, these dwelling unit equivalents may be relocated to other portions of the same parcel or to contiguous land that is part of a common development plan. Dedicated density transfers can also be conveyed to subsequent holders if properly noted in transfer deeds.

Negotiated Dedications

The Town may ask a landowner to enter into negotiations for certain parcels of land that are deemed beneficial to the protection and preservation of specific stream corridors. The Town may ask for the dedication of land for greenways when landowners subdivide property (a minimum size would be determined). Such dedications would be proportionate to the relationship between the impact of the subdivision on community services and the percentage of land required for dedication - as defined by the US Supreme Court in *Dolan v Tigar*.

Fee-in-Lieu

To complement negotiated dedications, a fee-in-lieu program may be necessary to serve as a funding source for other land acquisition pursuits of the Greenway Program. Based on the density of development, this program allows a developer the alternative of paying money for the development/protection of greenways in lieu of dedicating land for greenways. This money is then used to implement greenway management programs or acquire additional greenway lands.

Reservation of Land

A reservation of land does not involve any transfer of property rights but simply constitutes an obligation to keep property free from development for a stated period of time. Reservations are normally subject to a specified period of time, such as 6 or 12 months. At the end of this period, if an agreement has not already been reached to transfer certain property rights, the reservation expires.

Methods for Protection of Greenways through Acquisition

Buffer/Transition Zones

This mechanism recognizes the problem of reconciling different, potentially incompatible land uses by preserving greenways that function as buffers or transition zones between uses. Care must be taken to ensure that use of this mechanism is reasonable and will not destroy the value of a property.

Overlay Zones

An overlay zone and its regulations are established in addition to the zoning classification and regulations already in place.

Subdivision Exactions

An exaction is a condition of development approval that requires a developer to provide or contribute to the financing of public facilities at their own expense. For example, a developer may be required to build a greenway on-site as a condition of developing a certain number of units because the development will create need for new parks or will harm existing parks due to overuse. The mechanism can be used to protect or preserve a greenway which is then dedicated to the Town. Consideration should be given to including greenway development in future exaction programs.

The third method of protecting stream corridor/greenways is through the acquisition of property. A variety of methods can be used to acquire property for greenway purposes.

Donation/Tax Incentives

A government body, public agency or qualified conservation organization agrees to receive full title or a conservation easement to a parcel of land at no cost or at a “bargain sale” rate. The donor is eligible to receive a federal tax deduction of up to 30 to 50 percent of their adjusted gross income. Additionally, North Carolina offers a tax credit up to 25 percent of the property’s fair market value (up to \$5000). Any portion of the fair market value not used for tax credits may be deducted as a charitable contribution. Also, property owners may be able to avoid inheritance taxes, capital gains taxes and recurring property taxes.

Fee Simple Purchase

This is a common method of acquisition where a local government agency or private greenway manager purchases property outright. Fee simple ownership conveys full title to the land and the entire “bundle” of property rights including the right to possess land, to exclude others, to use land and to alienate or sell land.

Easement Purchase

This mechanism is the fee simple purchase of an easement. Full title to the land is not purchased, only those rights granted in the easement agreement. Therefore the easement purchase price is less than full title value.

Purchase/Lease Back

A local government agency or private greenway organization can purchase a piece of land and then lease it back to the seller for a specified period of time. The lease may contain restrictions regarding the use and development of the property.

Bargain Sale

A property owner can sell property at a price less than the appraised fair market value of the land. Sometimes the seller can derive the same benefits as if the property were donated. Bargain Sale is attractive to sellers when the seller wants cash for the property, the seller paid a low cash price and thus is not liable for high capital gains tax, and/or the seller has a fairly high current income and could benefit from a donation of the property as an income tax deduction.

Option/First Right of Refusal

A local government agency or private organization establishes an agreement with a public agency or private property owner to provide the right of first refusal on a parcel of land that is scheduled to be sold. This form of agreement can be used in conjunction with other techniques, such as an easement, to protect the land in the short term. An option would provide the agency with sufficient time to obtain capital to purchase the property or successfully negotiate some other means of conserving the greenway resource.

Purchase of Development Rights

A voluntary Purchase of Development Rights (PDR) involves purchasing the development rights from a private property owner at a fair market value. The landowner retains all ownership rights under current use, but exchanges the rights to develop the property for cash payment.

Condemnation

The practice of condemning private land for use as greenways is viewed as a last resort policy. Using condemnation to acquire property or property rights can be avoided if private and public support for the Greenway Program is present. Condemnation is seldom used for the purpose of dealing with an unwilling property owner. In most cases, condemnation for greenway purposes has been exercised when there has been absentee property ownership, when title to the property is not clear, or when it becomes apparent that obtaining the consent for purchase will be difficult

because there are numerous heirs located in other parts of the United States, or in different countries. The community must exercise caution in using Eminent Domain.

It is recommended that the right of eminent domain for a specific property be exercised by the community only if all of the following conditions exist:

- a) that the property is valued by the community as an environmentally sensitive parcel of land, significant natural resource, or critical parcel of land, and as such has been defined by the community as irreplaceable property;
- b) that written scientific justification for the community's claim that the property possesses such value should be prepared and offered to the property owner;
- c) that all efforts to negotiate with the property owner for the management, regulation and acquisition of the property have been exhausted and that the property owner has been given reasonable and fair offers for compensation and has rejected all offers;
- d) that due to the ownership of the property, the timeframe for negotiating the acquisition of the property will be unreasonable, and in the interest of pursuing a cost effective method for acquiring the property, the community has deemed it necessary to exercise the right of eminent domain.

Right of Public Access and Use of Trail Lands

The general public should have access to and use of those greenway lands that support public use (i.e. trail development), and that are owned by Rolesville or on land that the Town has secured the right of public access and use. All access and use is governed by existing Town policies and should also be governed by a Greenway Trail Ordinance. The use of all trails is limited to non-motorized uses, including hiking, bicycling, running, jogging, wheelchair use, skateboarding, in-line skating (rollerblading), equestrian use, mountain biking, and other uses that are determined to be compatible with the Town's greenway trails.

Naming of Greenways

Greenways are named for the significant natural features that are found within the corridor. Greenways can also be named after an individual or individuals if these persons are truly distinguished within the community, or if these persons have contributed a gift equal to more than 50% of the value of greenway development within that corridor segment.

Fencing and Vegetative Screening

Rolesville should work with each landowner on an individual basis to determine if fencing and screening is required and appropriate. The Town may agree to fund the installation of a fence or vegetative screen; however, it should be the responsibility of the adjacent property owner to maintain the fence or vegetative screen in perpetuity, including the full replacement of such fence or screen in the event of failure or deterioration due to any circumstances.

An Adopt-a-Greenway Program should be established by Rolesville to encourage community groups, families, businesses, school groups, civic clubs and other organizations to join in managing the Open Space and Greenway System. Rolesville should implement this program for every greenway corridor in the system, and work closely with local organizations to ensure that these groups manage and maintain trails in a manner that is consistent with Town objectives. The Town should develop written agreements for each Adopt-a-Greenway entity and keep a current record of this agreement on file. Adopt-a-Greenway entities will be assigned a specific section of the Open Space and Greenway System, defined by location or milepost. The activities of each organization should be monitored by the Town or its designee. Agreements for management can be amended or terminated at any time by either party, giving 30 days written notice.

Management Agreements will be established between Rolesville and specific public or private organizations wishing to assist with the management of designated segments of the Open Space and Greenway System. The objective of these agreements is to define areas of maintenance and management that are compatible with existing land management activities, especially where greenways intersects with public or private properties and/or rights-of-way. Management agreements spell out specific duties, responsibilities and activities of Rolesville and public or private organization that wishes to assist with management activities. They can be amended or terminated at any time by either party, giving 30 days written notice.

Rolesville can use cross access agreements to permit private landowners that have property on both sides of a greenway corridor access to and use of a greenway corridor to facilitate operation and land use activities.

Cross access agreements are based on case law of the United States and specific experiences from other greenway trail systems throughout the United States. Adjacent landowners generally have the right to use the access at any time. However, access cannot block the right-of-way for trail users, other than for temporary measures such as permitting livestock to cross, or transporting equipment. Adjacent landowners are responsible for acts or omissions that would cause injury to a third party using the trail. If a landowner must move products, materials, livestock or equipment across the trail on a regular basis, appropriate signage should be installed to warn users of the trail to yield for such activities.

Crossing of abandoned or active rail lines, utility corridors and/or roads and highways will require the execution of agreements with companies, local, state or federal agencies and organizations that own the rights-of-way. These crossings must provide clearly controlled, recognized, and

Adopt-a-Greenway Program

Management Agreements

Cross Access Agreements

Greenway Facility Management

defined intersections in which the user will be warned of the location. In accordance with the American Association of State Highway Transportation Officials (AASHTO) and the Manual on Uniform Traffic Control Devices (MUTCD), the crossing will be signed with appropriate regulatory, warning and information signs.

Greenway facilities shall be maintained in a manner that promotes safe use. All trail facilities should be managed by Rolesville or its designee. Trail maintenance should include the removal of debris, trash, litter, obnoxious and unsafe man-made structures, and other foreign matter so as to be safe for public use. Trailheads, points of public access, rest areas and other activity areas should be maintained in a clean and usable condition at all times. The primary concern regarding maintenance should always be public safety.

All trail surfaces should be maintained in a safe and usable manner at all times. Rough edges, severe bumps or depressions, cracked or uneven pavement, gullies, rills and washed out treads should be repaired immediately. Volunteer vegetation occurring in the tread of the trail should be removed in such a manner so that the trail surface is maintained as a continuous, even and clean surface.

Land Management

Property owned or used by Rolesville for the Open Space and Greenway System shall be maintained in a condition that promotes safety and security for greenway users and adjacent property owners. To the extent possible, the property shall also be maintained in a manner that enables the corridor to fulfill multiple functions (i.e. passive recreation, alternative transportation, stormwater management and habitat for wildlife). Property that is owned or managed by other entities should be managed and maintained in accordance with the policies of that public body responsible for the affected parcel.

Private lands and neighborhood groups wanting to connect to the Rolesville system will need to seek permission from the Rolesville Parks and Recreation Department. Efforts to connect to the system will require the approval of the Department and will be decided on a case-by-case basis. Development expenses will not be covered by the Rolesville Parks and Recreation Department. Connecting to the Rolesville municipal system does not relieve neighborhood greenways management bodies of their responsibilities of safety, security, and/or maintenance.

Vegetation adjacent to trails shall be managed as necessary to maintain clear and open lines of sight along the edge of the trail, and eliminate potential hazards that could occur due to natural growth, severe weather or other unacceptable conditions. To promote safe use of any greenway trail, all vegetation should be clear cut to a minimum distance of three (3) feet from each edge of a trail. Selective clearing of vegetation should be conducted within a zone that is defined as being between three (3) to ten (10) feet from each edge of a trail. At any point along a trail, a user should have a clear, unobstructed view, along the centerline of a trail, 300 feet

ahead and behind his/her position. The only exception to this policy should be where terrain or curves in a trail serve as the limiting factor.

Rolesville or their designated agent should be responsible for the cutting and removal of vegetation. Removal of vegetation by an individual or entity other than the Town of Rolesville or its designee shall be deemed unlawful and subject to fines and/or prosecution.

It may also be necessary for Rolesville to conduct wildlife management programs on lands that are publicly owned. This shall be accomplished in a manner that is in keeping with accepted laws, professional practices and/or recommended strategies that are provided to Rolesville by wildlife management experts.

In order to provide a standard of care that offers reasonable and ordinary safety measures, Rolesville shall cooperatively develop and implement a Safety and Security Program for the Open Space and Greenway System. This program will consist of well-defined safety and security policies; the identification of trail management, law enforcement, emergency and fire protection agencies; the proper posting, notification and education of the trail user policies; and a system that offers timely response to the public for issue or problems that are related to safety and security. The safety and security of the Open Space and Greenway System will need to be coordinated with local law enforcement officials, local neighborhood watch associations, and Adopt-a-Greenway organizations.

Important components of the safety and security program include the following. Rolesville should:

- 1) Work with law enforcement agencies to establish a Greenway Safety and Security Committee that can meet periodically to discuss management of the Open Space and Greenway System.
- 2) Prepare a Greenway Safety Manual and distribute this to management agencies and post it at all major trailheads.
- 3) Post User Rules and Regulations at all public access points to greenway trails.
- 4) Work with the management agencies to develop Trail Emergency Procedures.
- 5) Prepare a Safety Checklist for the Open Space and Greenway System, and utilize it monthly during field inspection of greenway facilities.
- 6) Prepare a Greenway User Response Form for complaints and complements and provide copies at all trailheads.
- 7) Work with management agencies to develop a system for accident reporting analysis.
- 8) Conduct a regular Maintenance and Inspection Program, and share the results of these investigations with all management agencies.
- 9) Coordinate other Public Information Programs that provide

Safety and Security

User Rules and Regulations

information about greenway events and activities that Town residents can participate in.

- 10) Have an ongoing evaluation of greenway program objectives.

Trails within greenway corridors shall be operated like all other parks within Rolesville open for public use from sunrise to sunset, 365 days a year, except as specifically designated. Individuals who are found to be using unlighted facilities after dusk and before dawn should be deemed in violation of these hours of operation and treated as trespassers. Where trails are lighted for nighttime use, the rules established within the Trail Ordinance should govern permitted uses and activities.

Rolesville shall enforce trespassing laws as defined under North Carolina General Statutes for publicly owned lands and facilities.

Rolesville should always discourage the general public from using any segment of a greenway trail that is under construction. Trail segments should not be considered officially opened for public use until such time as a formal dedication ceremony and official opening has been completed. Individuals who use greenway segments that are under construction, without written permission from the Town should be deemed in violation of this access and use policy and treated as a trespasser.

Trail Ordinance

Multi-use conflict is a national problem for community and regional Open Space and Greenway Systems. Typically, conflicts are caused by overuse of a greenway trail; however, other factors may be problematic including poorly designed and engineered trail alignments, inappropriate user behavior, or inadequate facility capacity. The most effective conflict resolution plan is a well-conceived safety program that provides the individual user with a Code of Conduct for the greenway trail, sometimes called a Trail Ordinance. Several communities across the United States have adopted progressive trail ordinances to govern public use and keep trails safe for all users. The following Rules and Regulations are recommended for the Rolesville Greenway System. These rules should be displayed both on brochures and information signs throughout the Open Space and Greenway System.

- 1) **Be Courteous:** All Trail users, including bicyclists, joggers, walkers, wheelchairs, skateboarders and skaters, should be respectful of other users regardless of their mode of travel, speed, or level of skill. Never spook animals; this can be dangerous for you and other users. Respect the privacy of adjacent landowners! No trespassing allowed from trails, remain on trails at all times.
- 2) **Keep Right:** Always stay to the right as you use the Trail, or stay in the lane that has been designated for your user group. The exception to this rule occurs when you need to pass another user.

- 3) **Pass on the Left:** Pass others going in your direction on their left. Look ahead and behind to make sure that your lane is clear before you pull out and around the other user. Pass with ample separation. Do not move back to the right until you have safely gained distance and speed on the other user. Faster traffic should always yield to slower oncoming traffic.
- 4) **Give Audible Signal When Passing:** All users should give a clear warning signal before passing. This signal may be produced by voice, bell or soft horn. Voice signals might include "Passing on your left!" or "Cyclist on your left!" Always be courteous when providing the audible signal - profanity is unwarranted and unappreciated.
- 5) **Be Predictable:** Travel in a consistent and predictable manner. Always look behind before changing position on the Trail, regardless of your mode of travel.
- 6) **Control Your Bicycle:** Lack of attention, even for a second, can cause disaster - always stay alert! Maintain a safe and legal speed at all times.
- 7) **Do not Block the Trail:** When in a group, including your pets, use no more than half the trail, so as not to block the flow of other users. If your group is approached by users from both directions, form a single line or stop and move to the far right edge of the Trail to allow safe passage by these users.
- 8) **Yield when entering or Crossing Trails:** When entering or crossing the Trail at an uncontrolled intersection, yield to traffic already using the other trail.
- 9) **Do not Use this Trail Under the Influence of Alcohol or Drugs:** It is illegal to use this Trail if you have consumed alcohol in excess of the statutory limits, or if you have consumed illegal drugs. Persons who use a prescribed medication should check with their doctor or pharmacist to ensure that it will not impair their ability to safely operate a bicycle or other wheeled vehicle.
- 10) **Clean-up Your Litter:** Please keep this Trail clean and neat for other users to enjoy. Do not leave glass, paper, cans or any other debris on or near the Trail. Please clean up after your pets. Pack out what you bring in - and remember to always recycle your trash.
- 11) **Keep Pets on Leashes:** All pets must be kept on secure and tethered leashes. Keep pets off of adjacent private property. Failure to do so will result in a fine.
- 12) **Prohibition on Camp Fires:** Fires, for any purpose, are prohibited within the Trails System. Any person caught lighting a fire for any purpose will be prosecuted to the fullest extent of the law.

In order to effectively patrol the Open Space and Greenway System and

Emergency Response Plan

respond to the potential for fire, flash floods and other natural or human-caused disasters, Rolesville shall adopt a greenway emergency response plan. This plan defines a cooperative law enforcement strategy for greenways based on services required and those that are typically provided by police, sheriff, fire and EMS agencies. Specifically, all trails should be provided with an address system that denotes specific locations along the length of a trail corridor. A site plan that illustrates points of access to each trail corridor should be produced and kept on file and provided to each agency. Trails in flash flood areas shall be appropriately signed to warn users. Each trail should be designed to permit access for law enforcement, fire and EMS agencies and vehicles that are not in excess of 6.5 tons gross vehicle weight. Typically, inter-governmental agreements are executed for this. A system of cellular-type emergency phone should be located in remote sections of the system, providing users with access to the area 911 Emergency System. All emergency phones should be placed above the flood elevation to ensure long term usage.

The emergency response plan should also define the agencies that should respond to 911 calls, and provide easy to understand routing plans and access points for emergency vehicles. For long distance trails, access points for emergency and maintenance vehicles should be located at reasonable distances from trailheads (approximately every 2-3 miles). Local hospitals should be notified of these routes so that they may also be familiar with the size and scope of the project. The entire Open Space and Greenway System should be designed and develop to support a minimum gross vehicle weight of 6.5 tons.

The purpose of a Risk Management Plan is to increase safety for the users of the Rolesville Open Space and Greenway System and reduce the potential for accidents to occur within the system or on lands adjacent to the system. While it is impossible to guarantee that all risk will be eliminated by a Risk Management Plan, implementation of a plan is in fact a critical step to reduce liability and improve safety. A Risk Management Plan establishes a methodology for greenway management that is based on current tort liability and case law in the United States related to the development, operation and management of public use greenway lands and facilities.

The ultimate responsibility for managing the Open Space and Greenway System, as defined within this Plan, rests with Rolesville. The Risk Management Plan has as its major goals:

- 1) Risk Identification: determining where risk (threat to safety or potential loss) exists within the corridor.
- 2) Risk Evaluation: conducting appropriate examination of areas defined as a risk and determining the factors that contribute to risk.
- 3) Risk Treatment: defining and implementing an appropriate

Risk Management Plan

solution to the area of risk in accordance with one of the four options:

- a) Risk avoidance: prohibiting use of a risk area.
- b) Risk reduction: limit use of area and repair risk area immediately.
- c) Risk retention: obtain waivers from all potential users of the risk area.
- d) Risk transfer: transfer risk area (property) to an agency better suited to manage the area.

The following sixteen step plan should be implemented by Rolesville to establish a Risk Management Plan for the Rolesville Open Space and Greenway System.

- 1) Develop a policy statement about risk management.
- 2) Conduct a needs assessment for the greenway program.
- 3) Determine goals and objectives for risk management - what are acceptable and not acceptable management levels.
- 4) Develop specifications for site and facility development.
- 5) Establish a clear and concise program for risk management.
- 6) Define supervision and responsibility for risk management.
- 7) Define appropriate rules and regulations that govern the use of the trail system.
- 8) Conduct routine/systematic inspections and investigations of the trail system.
- 9) Develop an accident reporting and analysis system.
- 10) Establish procedures for handling emergencies.
- 11) Develop appropriate releases, waivers and agreements for use and management.
- 12) Identify best methods for insuring against risk.
- 13) Develop a comprehensive in-service training program for employees of the Town.
- 14) Implement a public relations program that can effectively describe the risk management program and activities.
- 15) Conduct periodic reviews of the Risk Management Plan by outside agents to ensure that the Plan is up to date.
- 16) Maintain good legal and insurance representation.

The design, development, management, and operation of the Rolesville Open Space and Greenway System must be carefully and accurately executed in order to provide a resource that protects the health and welfare of the public. Liability may occur when a facility has been under-designed to handle its intended volume of use; when management of the facility is poor; or when unexpected accidents occur because the trail manager failed to recognize the possibilities of a potentially hazardous situation. To reduce the possibility and exposure to liability, the Town should have in operation the following measures prior to opening the first segment of greenway:

Liability

- 1) a thorough Maintenance Program that provides the appropriate duty or level of care to greenway users;
- 2) a Risk Management Plan that appropriately covers all aspects of the Open Space and Greenway System, and as necessary adjacent landowners;
- 3) a comprehensive working knowledge of public use laws and recent case history applicable in North Carolina.

Rolesville's existing program may be adequate to protect the Town government from financial loss that might occur through the development and operation of the Open Space and Greenway System. Trails are no greater liability to the Town than park and recreation, sidewalk or urban open space resources. The Town should review its current policy and check coverages to be certain that all aspects of its policies are up to date.

Rolesville should exercise reasonable care in the design and construction of all greenway facilities to reduce hazardous, public nuisance and life threatening situations. In fact, it is very difficult to find any case law in the United States where an adjacent property owner has been sued because a trail user strayed onto the adjacent private property and fell victim to an accident that was caused by the adjacent landowner. Some landowners have claimed that their insurance rates will go up because of the presence of a trail abutting their property. Once again, there is no case history among insurance companies to support this claim — provided the landowner has not gone out of their way to create an attractive nuisance and lure trail users onto their property.

It is also important that a fee not be charged to use any portion of the Open Space and Greenway System, because typically this may impact the way in which the recreational use statutes in North Carolina apply to the use of the system. A voluntary donation applied to the Open Space and Greenway System will generally not affect the recreational use statute.