

F. Greenway Concepts

F.1 Greenway Benefits

F1. GREENWAY BENEFITS:

Benefits of Greenways

A multi-objective greenway system for Town of Rush and Village of Honeoye Falls can address and resolve many community issues that affect the future environmental and economic health of the area. 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 recreation and alternative transportation, and active park facilities, including open play fields. Greenways have also been shown to increase the value of adjacent private properties as an amenity to residential and commercial developments.

1. Flood Control Benefits

Greenways preserve wooded open spaces along creeks and streams which absorb flood waters and filter pollutants from storm water. Flooding has historically been a significant problem in many parts of Honeoye Creek Valley. In some areas, buildings and land uses have encroached into flood prone areas. By designative floodplains as greenways, the encroachments can be better managed, and in some cases, replaced with linear 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 zone 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 town and village floodplain management policies, recommendations, and programs, greenway lands can be established as development occurs.

The expense associated with the establishment of the greenway system can be offset by the savings realized in reduced flood damage claims. Additionally, for those residents who are required to purchase flood insurance, implementation of a community-wide greenway system in the valley is likely to result in reduced flood insurance rates.

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 quality in streams and creeks not only benefits local residents, but also numerous forms of wildlife that depend on creeks for their habitat.

The greenway initiative will help to improve water quality within the creek

watershed by protecting and promoting stream side buffers that will filter pollutants from overland runoff.

3. Transportation Benefits

In past years Towns of Rush and Mendon and The Village of Honeoye Falls along with most American communities have grown in a sprawling, suburban form as a result of dependence on the automobile as the sole means of transportation. Americans have abandoned some traditional forms of transportation (such as passenger train service) and have been slow to improve other forms of transportation.

Multi-use trails within Greenways can serve as extensions of the roadway network, offering realistic and viable connections between origins and destinations such as work, schools, libraries, parks, shopping areas, and tourist attractions. Greenway-based bikeways and walkways are most effective for short travel distances. National surveys by the Federal Highway Administration have shown that Americans are willing to walk as far as two miles to a destination and bike as far as five miles. It is conceivable that destinations can be lined to multiple origins throughout the County with a combination of off-road trails and on-road bicycle and pedestrian facilities.

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4. Air Quality Benefits

Greenways as alternative transportation corridors can serve to reduce traffic congestion, helping to improve local air quality. Offering viable alternative transportation choices through greenways will encourage people to bicycle and walk more often, especially on short trips, thereby reducing traffic congestion and automobile emissions.

Cars and trucks are the key contributors of ozone pollution in Monroe County. In 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 Monroe County is not a non-attainment area and meets the requirements of the Clean Air Act. However, air quality monitoring shows that levels of air pollutants, such as ozone, are increasing.

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. Greenway corridors in Monroe County function as primary migratory corridors for aquatic, avian and terrestrial wildlife, serving to help maintain the integrity of plant and animal gene pools. Some wildlife biologists have extolled greenways as a future “gene-ways” and determined that migration routes are essential to maintaining healthy wildlife populations. Greenways can also serve as “gene-ways” for plant species which migrate with changes in climate and habitat. These “gene-ways” often follow river and stream corridors that have long served as transportation

routes for animals and humans. Greenways in Monroe 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 of the corridor, but also to reclaim and restore the stream to support higher quality habitat.

6. Economic Benefits

Greenways offer numerous economic benefits including higher real property values, increased tourism and recreation related revenues, and cost savings for public services. Greenways have been shown to increase the value of adjacent properties by as much as 5 to 20 percent. For example, within a new development new lots situated on greenways are often priced thousands of dollars higher than comparable lots off the greenway. Builders typically charge premiums ranging from \$1000 to 5000 for \$120,000-\$200,000 homes bordering open space and greenways.

Many home buyers and corporations are looking for real estate that provides direct access to public and private greenway systems. Greenways are viewed as amenities by residential, commercial and office park developers who, in turn, are realizing higher rental values and profits. American LIVES, a Real Estate Research Firm, completed a national study of the top reasons that people choose their new home. Walking and biking paths are viewed as extremely important to 74% of buyers nationally. Homebuyer surveys often reveal that walking/biking paths that meander was the second most important amenity to buyers across all price points and buyer types. Additionally, greenways can also save local tax dollars by utilizing strategies for managing community storm water and by placing landscapes that would not normally be developed into productive use.

Greenways will enhance the quality of life in the region and ensure long term economic viability. Tourism is currently ranked as the number one economic force in the world. In several states, regional areas, and localities throughout the nation, greenways have been specifically created to capture the tourism potential of a regional landscape or cultural destination. Studies show greenways often generate travel and inter-tourism and full year of operation equaled complete return on such investment.

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-intensity exercise (such as bicycling, walking, or in-line skating) can significantly improve a person's mental and physical health and prevent certain diseases. Providing opportunities for participation in these outdoor activities close to where people live and work is an important component of promoting healthy lifestyles for Monroe County residents.

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 proposed greenway system can be developed to complement the community's existing parks and open space system. Trail systems will be developed not only for alternative transportation, but also to serve as primary recreation and fitness resources.

8. Cultural Benefits

Greenways can enhance local culture and protect many of the historic resources in the area. Successful greenway projects across the United States have served as new "main streets" where neighbors meet, children play, and community groups gather to celebrate. For cities, villages and towns large and small, greenways have become a cultural asset and focal point for community activities. Some communities sponsor "greenway days" to celebrate the outdoors and local traditions. Various walking and running events are also held on greenways to support charity or to extend traditional sporting events. Many civic groups adopt segments of greenways for clean-up, litter removal and environmental awareness programs. Some greenways, like San Antonio's Riverwalk, are the focal economic development.

The richness and diversity of the area's historic resources is represented by numerous locally significant sites and historic structures. The interpretation of historic and archeologist sites along greenways can serve to increase the awareness and appreciation of the area's rich history. Greenways can also be a vehicle to provide controlled public access to important cultural sites in a manner that promotes preservation and enhances interpretive opportunities.

9. Safety Benefits

Many Americans are concerned with crime. Some of the most successful deterrents to criminal activity have involved increased neighborhood awareness by citizens and participation in community watch programs. Greenways have proven to be an effective tool to encourage local residents to participate in neighborhood watch programs. Some greenways have even been developed as part of efforts to deter criminal activity in a neighborhood.

As a recreation resource alternative transportation corridor, or area where fitness activities can take place, most greenways provide a much safer and more user-friendly resource than other linear corridors such as local roads. Greenways typically attract local residents who use the facility frequently and create an environment that is virtually self-policing. Crime statistics and reports from law enforcement officials have shown that parks and greenways are typically land uses with the lowest incident of reported criminal activity. According to national

crime statistics, on average, a person is more likely to be raped, robbed or assaulted on a street, in a parking lot, or inside their home than in a park. Additionally, a study by the Rails-to-Trails Conservancy, only 3 percent of the trails reported experiencing any type of major crime.

Greenways also improve the safety of their users by providing off-road facilities for bicyclists and pedestrians that are much safer than the roadways. Nationally, over 5,000 pedestrians are killed every year on streets. Sixteen percent of those fatalities are children

F.2 Types of Greenways

F.2 TYPES OF GREENWAYS

CLASSIFICATION BY USE

This terminology is currently being adopted for use by other communities throughout the nation and helps to clarify the different uses and purposes that greenways can have in a community. Under this philosophy, the level of facility development and use for a greenway corridor will vary significantly, and is defined according to different types of use. Differing types of facility development and use, as categorized below are assigned to specific sections of the corridor. In many cases, it may be appropriate for one corridor to contain more than one type of use. The designation of “type” should in no way be construed to establish priority or hierarchy.

- **Type 1: No facility development:**

This designation applies to corridors containing environmentally sensitive areas, steep slopes, wetlands or other constraints that make greenway facilities undesirable or impossible. The corridor will remain primarily in a natural state as human access would be extremely limited. Other functions for these corridors will include floodplain management, water quality protection and conservation of important habitat for wildlife and plants. Compatible with installation of dirt hiking trails, picnicking areas and other passive recreation activities.

- **Type 2: Limited development, low impact uses:**

This designation applies to corridors containing environmentally sensitive features that limit the extent of development in and alongside.. The corridor will remain primarily in a natural state, with both active and passive recreational uses. Trail head facilities and other amenities, multiuse trails, and service businesses in developed areas) will be permitted.

- **Type 3: Multi-use unpaved trail development**

This designation applies to trails within greenway corridors designated for multiple uses, in less travelled locations. Aggregate surface and stone dust trails (4 to 10 feet wide) are appropriate for sections outside the floodplain where anticipated use or adjacent landscape dictates a more natural trail. These trails are restricted to non-motorized uses, including recreational bicycling, pedestrian and wheelchair activity. Wheelchair users and persons with strollers can use unpaved trails if they are designed to ADA standards and surfaced with compacted stone materials.. Trail head facilities and other amenities (such as benches, signage and picnic tables) will be developed as needed where appropriate.

- **Type 4: Multi-use paved trail development:**

This designation applies to sections where high use is anticipated, that do not contain environmentally sensitive areas. The paved trails can be surfaced with asphalt or concrete (10 foot minimum) for use by several user groups, including bicyclists, joggers, wheelchair users and rollerbladers. Although asphalt is the most common paved surface used for greenway trails, concrete is best for areas within

developed areas. Trail head facilities and other amenities {such as lights, benches, and signage) will be developed as needed and where appropriate.

- **Type 5: On-road (sidewalks and bikeways)**

This designation applies to sections in developed areas where an off-road option is not possible, or corridors which function as connections between off-road trails and major origins and destinations. On-road areas will consist of sidewalks for pedestrian use and road shoulders or traffic lanes for cyclists. Bikeways can vary from 6-foot wide bicycle lanes (complete with pavement striping and signage) to 4-foot wide paved roadway shoulders to a 14-foot wide curb lane (to be shared by cyclists and motorists). Refer to the GTC's bicycle facility design guidelines. Pedestrian-scale lighting, street trees, benches and other amenities can be developed to encourage sidewalk use.

- **Type 6: Water Based Trails (Blueways)**

This designation applies to rivers and streams that can successfully accommodate and/or which are designated to support canoeing, kayaking and boating. Water based trails can be designed with features and facilities that make this activity more enjoyable for users, including signage systems, pull-outs and/or docking areas at desirable destinations, improved low-flow channels or rapids, and safety systems. The Plan identifies locations where proposed improvements are appropriate to encourage increased usage for kayakers and canoeists.

CLASSIFICATION BY FUNCTION

Within a greenway centered upon a stream corridor, the valley bottom and sides must be managed in a manner to protect water quality, habitat, and aesthetics.

A minimum corridor width of **up to** 100 feet each side of the 100 year regulated floodplain. (astreambank or valley wall) should be established. Greenway lands that provide less width will require more careful planning, design, construction and maintenance. This 100 foot width will be divided into three distinctive zones: *streamside zone, managed use zone and upland zone*

- **Streamside Zone**

The Streamside Zone protects the physical integrity of the ecosystems that are present. Native vegetation should be preserved and existing forest canopy should remain undisturbed. This zone is very restrictive to development. Permitted uses in the zone may include flood control and bank stabilization. Other land uses that disturb the existing native vegetation and ecosystems are prohibited except for specified secondary uses when no practical alternative exists. Other mitigation efforts should be undertaken to restore the native ecology of this zone. If appropriate, unpaved and unimproved foot trails and/or boardwalk trails can be constructed in this zone.

In some urban settings, it may be necessary to develop a hard surfaced trail because of limited public right-of-way. Such development should only occur in conjunction with ecosystem improvements, such as water quality features, soil bioengineering, and Best Management Practices. Development of this type of trail may also occur in conjunction with new utility installation and repair and upgrades of utilities to limit the amount of disturbance that can occur in this zone. Trail alignment occurs at the toe of the bank in this type of situation. This type of trail development is limited to the urban areas of the County.

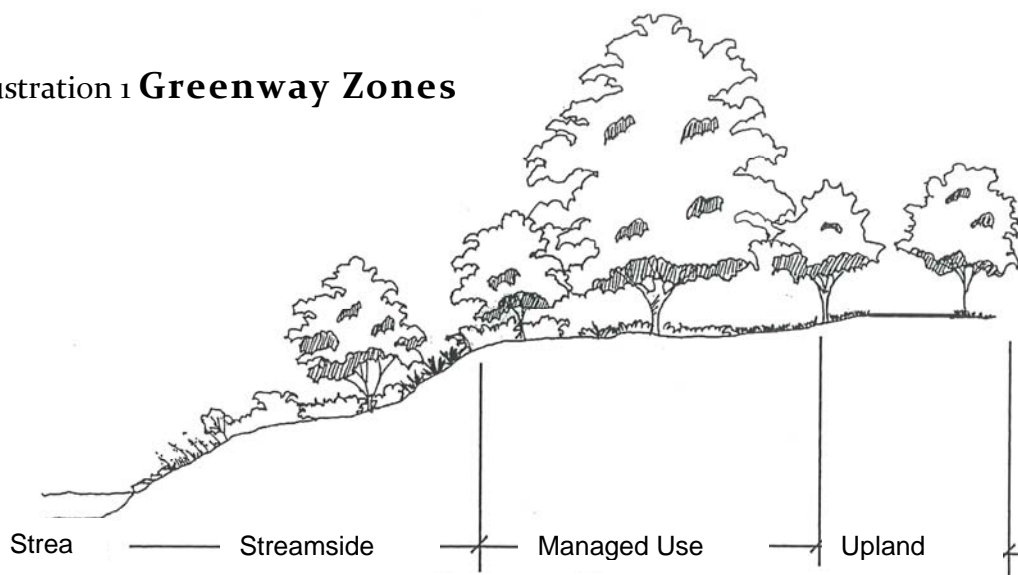
- **Managed Use Zone**

The Managed Use Zone provides some distance between upland development and the streamside zone. The vegetation within the managed use zone should consist of a managed forest, with some clearing allowed. The land use within this zone should be limited to some types of recreational activities, storm water best management practices (BMP's), multi-use trails, and all secondary uses. Within the Managed Use Zone, the majority of greenway facility development should occur, including stone, asphalt and concrete surfaced trails for walking, bicycling, rollerblading and education activities. Other greenway facilities can also be located in this zone, such as signage, bench seating and safety systems.

- **Upland Buffer Zone**

The final Upland Zone prevents encroachment and filters backyard and adjacent property runoff. A forest canopy is encouraged within the Upland Zone, but at the very least a grass cover should be provided within this zone. The land use for this zone is restricted to lawns, gardens, BMP's, minimal impervious cover, and storage buildings. In some locations the trail may also be located in this zone.

Illustration 1 **Greenway Zones**



From: Mecklenburg County Greenway Master Plan