

Chapter 9 Park, Recreation, Open Space & Greenways Plan

INTRODUCTION

Overview

Land development in municipalities creates pressure on environmental resources, while exacerbating demand for recreational amenities. Communities that plan inadequately risk degradation of environmental value and quality of life for their citizens. Although development resulting from growth pressure is unavoidable, it can be accommodated within a context of natural resource protection and in a manner that meets increasing recreational needs of increasing populations.

The proposed recreation, open space and greenway areas contained in this plan are coordinated with the Future Land Use Plan, the Natural Resources Plan, and the Historic Resources Plan. Active recreation (e.g. ball fields) is proposed in proximity to population centers. Open space and greenways coincide with natural resource protection areas. Trails provide links to historic resources and other significant destinations. The overall goal of this plan is to promote a contiguous network of open space, greenways, and trails that provides recreational opportunities while achieving environmental protection. This network can subsequently be linked to a regional or countywide system.

GOALS & OBJECTIVES

- Goal #1** **Provide for recreational opportunities for all age groups.**
- Provide sufficient opportunities for active recreation for residents of all ages.
 - Maintain the availability and quality of sports and play facilities.
 - Require the installation of park facilities in all new developments.
 - Provide for passive recreational uses within open space areas.
 - Provide recreational access to the Manada Creek.
 - Support the East Hanover Township Recreation Plan of 2003 to assure its responsiveness to current needs and to additional demands created by future development.
- Goal #2** **Create and preserve a Township-wide open space network that connects to open space areas in adjoining townships**
- Protect the Township's three mountains and respective valleys for recreational opportunities such as hunting, hiking, and fishing.
 - Create open space within new developments and on tracts contiguous to existing open space and recreational areas.
 - Work with landowners to encourage voluntary preservation of environmentally important land on their properties.
 - Utilize open space to protect habitat and water resources.
- Goal #3** **Establish a trail and greenway network that provides connections between public lands, Township identified open space, scenic and historic areas, and trails in adjoining Townships.**
- Create a walkable community.
 - Provide for trails in all new residential and non-residential developments.
 - Protect and maintain existing trails, including the Appalachian Trail and Horse-Shoe Trail and other unnamed trails.
 - Establish Greenways for conservation and recreational purposes.
 - Promote and protect hiking trails linking with landmarks and community focal points, historic sites, and neighboring municipalities.

- Encourage pedestrian connections between developments.
- Promote trail design that minimizes conflict between different users and with adjacent property owners.
- Provide for new trails and park facilities in all new residential and non-residential developments.
- Establish new trail connections to assist in the development of a more regional trail network.
- Promote the creation of on and off-road bicycle paths.
- Provide for adequate parking for trailheads.
- Improve recreational access to creeks and water trails.

EXISTING CONDITIONS

Overview

Much of the area in the northern part of East Hanover Township is protected state and federally owned land. Of the remaining land, approximately 67% has potential for development. Given the prospect of increased development and population in the Township's medium to high-density residential zoning districts, more consideration should be given to the promotion of neighborhood parks and the creation of linked open space and passive recreation areas, trails, and greenways.

Dauphin County Parks, Recreation, Open Space, and Greenway Study, 2009

In 2009, The Dauphin County Parks, Recreation, Open Space, and Greenway Study was published. The study evaluated the ecological and social benefits found inherently in the County's natural spaces and recreational facilities. The Study evaluated the status of outdoor and recreational facilities using inventories and comparative analysis of facilities based on guidelines from the National Recreation and Parks Association (NRPA). This analysis provided a summary of surpluses and deficits of parkland and recreation for four distinct planning sections of the County.

The Study concluded that the Southeast Planning Section (the portion of the county in which East Hanover Township is found) is experiencing several deficiencies in park type, acreage and facilities. The Study also includes guidelines for increasing available open space and greenway development from a regional perspective. The Township recognizes the deficiencies and guidelines set forth by this study by incorporating them into the recommendations and implementation strategies portions of this chapter.

Recommendations & Implementation Strategies

- Coordinate with Dauphin County and the Tri-County Regional Planning Commission to promote goals and action recommendations from the Parks Recreation, Open Space, and Greenways study.

***Township
Recreation Plan
Of 2003***

In 2003 the Township enacted a Recreation Plan to provide a framework for future decisions regarding provision of recreational services to the public. Goals have been set in the plan regarding planning, facilities, and administration.

The Recreation Plan provides an analysis of the parks in the Township and discusses the sustainability of the park system based on inventory, population growth, and NRPA guidelines. However, NRPA guidelines have since been updated based on a new needs analysis methodology.

The 2003 Recreation Plan finds that many existing parks are in need of improvements. Community scale parks such as East Hanover Township Elementary School and Shellsville VFW can support their respective populations if pedestrian accessibility to the parks is improved. The Recreation Plan finds that the neighborhoods surrounding Grantville, the southern portion of the Township near Laudermilch Road and Chesapeake Mobile Home Park are in need of improvement. Either expansions of existing facilities or creation of smaller parks to support non-vehicular access are recommended.

In locations where no parks are present, the Recreation Plan supports Township acquisition of land via mandatory dedication and collection of fees-in-lieu to be applied to neighborhood park development.

Regarding the park in the Chesapeake MHP Neighborhood, the plan recommends that the Township should provide for a 1.9 acre developed neighborhood park in the short term and require that the developer enlarge and improve it according to the Mobile Home Park Ordinance of 1970 as more mobile homes are added to the property. During the research period establishing the basis for this plan, it was found that an inconsistency exists between the park and recreation plan and the mobile home park ordinance of 2003. In this specific instance, the current ordinance does not support the Chesapeake MHP statement made by the Recreation Plan.

The Recreation Plan recommends that extensions or linear parks should be designed to connect existing trails, historical sites, and centers of community activity. The Plan recommends that the Township should seek methods to protect its existing trails by requiring development plans proposed along them to relocate them away from roads and provide overland alignment by designing developments that respect trail integrity and use.

Recommendations & Implementation Strategies:

- Review and update the 2003 Recreation Plan for consistency with new NRPA guidelines, the 2010 Census and new development patterns.
- Review and Update The Park and Recreation Plan and SALDO for consistency.
- Reevaluate sufficiency of neighborhood parks and plan based on any future modifications to the Park and Recreation Plan.

Existing Parks & Open Space

The following recreation and open space areas are inventoried on Map A-8.

PA State Game Lands #211: Approximately 3,050 acres of wooded game lands comprise the northernmost portion of the Township. This is a portion of St. Anthony's Wilderness, recognized as the second largest roadless area in the state¹. The State Game Lands are traversed by the Appalachian Trail, the Horse-Shoe Trail and the Stony Valley Railroad Grade rail-trail. This land currently provides recreational opportunities and landscape essential to the Township's character, health and wellbeing. It also provides protection for critical habitat and natural resources, including several Natural Areas Inventory Sites.

Recommendations & Implementation Strategies:

- Make all feasible efforts to protect the Township's Mountain and Valley areas.
- Open space should be used to maintain the rural character of the Township and provide for passive recreational pursuits
- Recognize State Game Lands 211 as conservation land use in order to maintain protection of this land in the case of closure or sale of the property.
- Communicate to the Pennsylvania Game Commission the Township's interest in preserving the State Game Land property and the trails that traverse it.

Fort Indiantown Gap Military Reservation: 6,942 of the 17,000 acres of the Reservation are located in East Hanover Township, stretching from the southern portion of the State Gamelands through Manada Gap. The Reservation has over 140 military training facilities restricted from public use. These facilities are concentrated, however, in a small portion of the Reservation. The remaining land is made available for outdoor activities such as bird watching, hunting, fishing, and wood gathering. The Horse-Shoe Trail passes through the property. It is also contains some of the

¹ Website: <http://home.comcast.net/~StAnthonyWilderness/anthony.htm>. 2009

Township's most scenic and environmentally significant landscape. Fort Indiantown Gap supports environmental conservation by engaging in public education and requires visitors to pay an entrance fee and attend a safety briefing.

Recommendations & Implementation Strategies:

- Make all feasible efforts to protect the Township's Mountain and Valley areas.
- Open space should be used to maintain the rural character of the Township and provide for passive recreational pursuits
- Recognize Fort Indiantown Gap as conservation land use in order to maintain protection of this land in the case of closure or sale of the property.
- Communicate to Fort Indiantown Gap the Township's interest in preserving this land and the trails that traverse it.

County and Neighboring Municipal Parks: The southeastern section of Dauphin County in which East Hanover Township is located, hosts nearly 544 acres of public parkland. Nine municipal or county parks are located within five miles of the border of the Township. Two parks are located nearby in neighboring Lebanon County. Memorial Lake State Park in East Hanover Township, Lebanon County encompasses over 200 acres and provides picnic areas, trails, and lake access for fishing and boating (electric motors only). H.M. Levitz Memorial Park is also located in East Hanover Township, Lebanon County. This park offers various outdoor sports facilities, an ice skating pond, and hiking areas.

Recommendations & Implementation Strategies:

- Work with Dauphin County and neighboring municipalities to provide trail and greenway connections between park and recreation areas.

East Hanover Township Public Parks and Recreation Areas:

According to the County Study, an additional 27.4 acres for Neighborhood Parks and 27.3 acres for Mini parks would help the southeast planning section approach a sufficient amount of acreage for the projected population. Regarding facilities, the southeast section has been found deficient in only baseball fields and tennis courts.

The Township's municipal park is approximately 60 acres. In 2009 expansion was made to the park's soccer fields and additional baseball fields are in the planning and design stage. The park offers playground and picnic facilities, and fitness and walking trails. Adequate parking and restroom facilities are also provided. The park benefits from its centralized

location but is primarily a vehicular destination for most of the Township's residents.

The East Hanover Township Park and Recreation Board and Park Director position was established in 1980. The Board directs, plans, and administers a variety of park activities open to the public. A quarterly newsletter is also issued to the public. Township staff members currently maintain the park.

Recommendations & Implementation Strategies:

- Increase non-vehicular connections to the Township Park through trails and greenways.
- Create agreements with athletic organizations and other park users for maintenance of the play fields and other facilities.
- Regularly monitor use of the Township Park and the condition of park facilities and upgrade as necessary.
- Promote the construction of the planned baseball fields in the Township Park in future budget and capital improvement discussions.
- Examine the need and feasibility of creating a township or neighborhood Park in the vicinity of the Englewood development off of PA 743.
- Consider use of an Official Map to identify potential parklands.

Lower Dauphin Area Elementary School: Offers 3.9 acres of open space with playground equipment and ball fields. This recreation area is open to the public and used by the elementary school for various recreation and educational activities. The park offers playground equipment, two baseball fields and a football field and basketball court. Some limited indoor facilities are also available for public use. The facilities are permitted for use by various public associations, primarily for sports activities.

Recommendations & Implementation Strategies:

- Partner with the school district on the sharing of recreational resources and the sharing of maintenance of recreational facilities.

Shellsville VFW Open Space: Houses a picnic area, playground and additional ball fields available to public use. The VFW is very near the Township Park and is adjacent to the Lower Dauphin Area Elementary

School. The facilities of the open space are used by the public and are shared with East Hanover Township Elementary School.

Recommendations & Implementation Strategies:

- The VFW open space could be connected to the Township Park. The Township and VFW should examine the feasibility of purchasing or acquiring through donation, the VFW's open space area and facilities.

The Manada Conservancy: Currently owns two parcels adjacent to Shells Church Road. This land is often used for passive recreation and educational purposes.

Recommendations & Implementation Strategies:

- Partner with Manada Conservancy and other land trusts and conservancies to assist landowners with the sale and donation of conservation easements that include public access to land and/or trails.

Private Recreation Areas: Various privately owned recreation facilities are located in the Township. These include the Manada Golf Course, Penn National Raceway and Ball Field, and Mountain Road Driving Range in the Commercial Recreation Area; Faith United Church playground and basketball courts, Chesapeake Mobile Home park playground and basketball court, and Tall Cedars Recreation Area, fronting on Manada Creek.

Recommendations & Implementation Strategies:

- Support the continuation of privately owned recreational facilities in the Township.
- Should the Tall Cedars site cease to operate, consider the need and feasibility of this site as a Township park that could connect to a greenway along Manada Creek.

Private Open Space Although much land in the Township is devoted to conservation purposes, the percentage of privately owned open space in the form of conservation easement and homeowner association (HOA) open space is relatively small. This may be due to the lack of incentive for implementing cluster development and utilizing Transfer Development Rights (see Chapter 6). According to Dauphin County Board of Assessment, privately owned and managed open space accounts for approximately 81 acres in the Township. The largest portions of privately owned and maintained open space are found at the Preserve at Bow Creek land development on Laudermilch Rd, adjoining the Creek.

Recommendations & Implementation Strategies:

- Pursue improvements to existing parks and creation of new neighborhood parks to meet the recreational and social needs of increasing neighborhood populations.
- Review, update, and enforce SALDO regulations requiring developers to provide for recreation within the development, or to pay a fee in lieu of recreation facilities to help fund active and passive recreational needs in the Township.
- Review and amend, if necessary, the provisions of the Zoning Ordinance to provide additional incentive for the use Cluster Development and require an appropriate amount of open space within such developments.
- Amend the TDR provisions of the Zoning Ordinance to provide an incentive for Sending Area landowners to sell development rights.
- Form a Township open space, trails and greenways committee to conduct education and outreach to encourage landowners to conserve land through conservation easements, TDR, and other available means.

Trails

East Hanover Township is home to several historically and environmentally important trails. Three out of the four trails inventoried below are found in the northern, mountain section. The Township recognizes the need for continued preservation and improvement of these trails as an attraction and benefit to the community.

The Appalachian National Scenic Trail: Conceived in 1921 and completed in 1937 the Appalachian National Scenic Trail is the nation's longest marked footpath spanning approximately 2,178 miles along the Appalachian Mountains from Georgia to Maine². The Trail was designated a national scenic trail in 1968. It is a privately managed unit of the national park system. Along its path it crosses six other units of the national park system, traverses eight national forests, and contains several occurrences of rare, threatened and endangered species³. The Trail is nationally and internationally renown. An estimated two to three million people hike portions of the Trail each year. Although one in four Thru-hikers complete the entire trail, it is primarily used by short distance, local hikers from around the region⁴.

² Website: www.appalachiantrail.org. 2011

³ Website: <http://www.appalachiantrail.org/about-the-trail/plants-wildlife/faqs>. 2011.

⁴ Website: <http://www.appalachiantrail.org/about-the-trail>. 2011.

Headquartered in Harpers Ferry, West Virginia with four regional offices, including one in Boiling Springs, Pennsylvania, the Appalachian Trail Conservancy (ATC) has been delegated responsibility by the National Park Service to coordinate the management and protection of the Trail footpath and its surrounding corridor lands. The ATC has approximately 40,000 members and employees approximately 45 regular staff. The Trail is cooperatively managed by the National Park Service, the Appalachian Trail Conservancy (ATC), 30 trail clubs, the USDA Forest Service and other public land management agencies. In Pennsylvania, it is managed by the ATC, the PA DCNR, the PA Game Commission, Penn DOT, and 11 trail clubs. The footpath and a corridor of land of varying width surrounding the Trail are owned by the Commonwealth of Pennsylvania and the National Park Service.

On June 11th 2008, the Governor of Pennsylvania signed House Bill 1281 amending the Appalachian Trail Act of 1978. HB 1281 is now known as Act 24 of 2008 and became effective on August 10th, 2008. The amended act now requires the 58 Pennsylvania municipalities through which the Appalachian Trail passes to adopt and enforce zoning ordinances that preserve the “natural, scenic, historic and esthetic values of the trail and to conserve and maintain it as public resource”.

The Appalachian National Scenic Trail passes through the northern portion of East Hanover Township, entering near the gap of Stony Run and exiting along the Stony Mountain ridge. The Trail offers spectacular views of the surrounding landscape. Protection of the Trail footpath and surrounding landscapes is imperative to preserving the superior, national scenic status of the Trail, the Trail experience, and the benefits the Trail provides.

Recommendations & Implementation Strategies:

- In accordance with Pennsylvania Act 24, amend the Zoning Ordinance to include provisions to protect the Appalachian National Scenic Trail.
- Conduct a preliminary study of the trail footpath and its viewshed to determine the geographic extent of the protection measures.
- Create a Township open space, trails, and greenways committee to spearhead efforts to communicate with the Appalachian Trail Conservancy (ATC) and PA Game Commission, to contribute to trail protection efforts, and to monitor Act 24 developments, and to encourage support for the ATC.
- Consider use of an Official Map or the Open Space Lands Act to acquire easements along the Appalachian Trail corridor.

The Horse-Shoe Trail: Established in 1935, this dual purpose hiking and equestrian trail extends 140 miles, beginning at Valley Forge National

Historic Park and connecting to the Appalachian National Scenic Trail at Stony Mountain on East Hanover- Rush Township border. “The history of the Trail is entwined with the development of the iron industry in this part of Pennsylvania during the 18th and 19th centuries. The many furnaces and forges were connected by trails, portions of which have survived to form the foundation of today’s Horse-Shoe Trail. The trail expanded and evolved since becoming open to the public in 1935. The trail provides opportunities to explore the region’s lush landscapes and visit important natural and historical landmarks. These include Hopewell Furnace, French Creek State Park, Middle Creek Wildlife Management Area, Cornwall Iron Furnace, Mt. Gretna, and Manada Furnace, the northernmost site along the Trail ⁵. The PA DER recognized the Horse-Shoe Trail in 1989 as being a model greenway corridor linking recreational resources while preserving natural resource values.

The Horse-Shoe Trail enters East Hanover Township at its southern boundary along Canal Road. It then runs north, entering the Fort Indiantown Gap Military Reservation at Furnace Road. It exits the Township into West Hanover Township, then loops back in and runs through State Game Lands No. 211 to Stony Mountain where it connects to the Appalachian National Scenic Trail.

The Trail has been maintained by the non-profit, volunteer Horse-Shoe Trail Conservancy since 1935. “The work of the Conservancy is done by a number of standing committees. These include Trail Protection; Trail Maintenance, which maintains, enhances and improves the Trail; Fundraising, which raises the needed dollars for Trail maintenance, improvement and protection; Communications, which publishes the Conservancy newsletter and other related materials; and Membership.⁶”

The Conservancy owns no land. The trail is kept open on both public and private lands by agreements with landowners who have given permission to hikers and equestrians to follow the portions of the Trail that fall on their properties. Over the years, the Trail has been increasingly re-routed onto roadways causing conflict of space and use, detracting from the trail experience, and potentially posing a danger to hikers. This is evidenced in East Hanover Township where the entire length of the Trail south of Furnace Road is on-road. Communities are working to move the Trail back off-road locations. Through partnership with landowners and the Horse-Shoe Trail Conservancy, East Hanover Township can join in this effort.

Recommendations & Implementation Strategies:

- Create a Township open space, trails, and greenways committee to organize efforts to raise awareness of the Horse-Shoe Trail, to foster appreciation for the Trail by sponsoring hikes, to encourage support for the Horse-Shoe Trail Conservancy, and to communicate with the

⁵ Website: www.hstrail.org. 2010.

⁶ Website: www.hstrail.org. 2010.

Horse-Shoe Trail Conservancy and landowners along the Trail in an effort to obtain off-road trail easements or agreements to allow access to the Trail on their properties.

- Work with South Hanover Township, Derry Township, and the Horse-Shoe Trail Club to develop permanent off road easements for the trail between Hershey and Manada Gap.
- Require new subdivisions and land developments along the Horse-Shoe trail to provide for an off-road trail easement with permission for public access. In the case of Cluster Developments, the Trail easement can be located in the development's designated open space area.
- If the Trail is routed onto private lands, prepare a trail ordinance to establish rules for conduct on trail within the Township.
- Consider use of an Official Map or the Open Space Lands Act to acquire easements along off-road portions of the Horse-Shoe Trail.

Stony Valley Railroad Grade: The Stony Valley Railroad Grade is a rail trail established on the former Schuylkill and Susquehanna Railroad, built in the 1850s to transport coal to the canals and tourists to enjoy the healing mineral waters at Cold Springs. The trail is located on 44,342 acres of state game land and passes through diverse natural habitats with an abundance of wildlife. Its western trailhead is at Ellendale; its eastern trailhead is on Gold Mine Road, north of Swatara State Park in Lebanon County⁷.

In East Hanover Township, the dirt and gravel rail trail passes through State Gamelands No. 211 and Fort Indiantown Gap. It enters the Township at its border with Middle Paxton Township, shares the railroad bed with the Horse-Shoe Trail, then exits on the northern slope of Sharp (Second) Mountain into East Hanover Township, Lebanon County. Trail activities including walking, horse riding, biking, cross-country skiing, and snowmobiling. Automobiles are permitted on the trail for one day per year, a unique feature for the rails to trails system⁸. The Pennsylvania Game Commission manages the railroad grade.

Recommendations & Implementation Strategies:

- Create a Township open space, trails, and greenways committee to organize efforts to raise awareness of the Stony Valley Railroad Grade in East Hanover Township, to foster appreciation for the Trail by sponsoring hikes, and to encourage support for the Rail-Trail Conservancy.

⁷ Website: www.railstotrails.org. 2010

⁸ Website: www.railstotrails.org. 2010

Swatara Water Trail: Described by the Pennsylvania Fish and Boat Commission as an “urban wilderness”⁹ this 60-mile segment of the Swatara Creek begins at Pine Grove, Schuylkill County, and flows through Lebanon County to its mouth on the Susquehanna River in Middletown, Dauphin County. The water trail incorporates several historical and environmental sites of interest, including Swatara State Park, Union Canal locks, the Appalachian Trail Bridge, the abandoned Lebanon to Tremont railroad and bridge, Harper's Tavern, various farms and bank barns, forested riparian buffers, limestone outcrops, and the only lava deposits in Pennsylvania.¹⁰ In East Hanover Township, the only official access to the water trail is located at the Union Canal Canoe Rentals at river mile 14. Lands adjoining the Creek are in the 100-year floodplain and are restricted from development.

The Dauphin County Study finds that the Swatara Creek / Union Canal Greenway and Water Trail to be the second highest priority greenway for protection under municipal ordinances.

Recommendations & Implementation Strategies:

- Create a Township open space, trails, and greenways committee to organize efforts to raise awareness of the Swatara Water Trail, to foster appreciation for the Trail by sponsoring paddling trips, and to encourage support for the Swatara Watershed Association.
- Establish and preserve a greenway along the Swatara Creek through creation and preservation of a riparian buffer and by partnering with land trusts, conservancies and landowners for placement of conservation easements on properties along the Creek.

Local Trails & Bikeways: The Township should consider establishing walking trails within its neighborhoods in order to give neighborhood residents, especially children, an opportunity to exercise and enjoy the outdoors and to connect neighborhoods to other trails and points of interest. Bikeways along the Township's less congested roads could also enable physical activity and non-vehicular access to points of interest.

Recommendations & Implementation Strategies:

- Create a Township open space, trails, and greenways committee to identify opportunities for new trails and trail connections and to evaluate their feasibility.

⁹ Website: <http://www.fish.state.pa.us/watertrails/swatara/trailguide.htm>. 2011

¹⁰ Website: www.baygateways.net. 2009

- Ensure that trails and trail access are provided in future subdivision and land development plans. Trails can be located in the designated open space area within conservation subdivision designed developments.
- Expand the trail system in order to connect existing neighborhoods to other trails, parks, and points of interest in the Township and the region.
- Examine the feasibility of improving access in the Township to the Horse-Shoe Trail, Appalachian Trail, and Stony Valley Railroad Grade.
- Establish greenways along streams that would accommodate trails and trail connections. Utilize existing riparian buffers in order to form the greenways.
- Utilize locally and historically significant sites as destinations along the trail system. Route trails in a manner that promotes the preservation of these sites as trail destinations.
- Establish a system of bikeways on the Township's least congested roads. Work with Penn DOT to include bikeways in transportation improvement plans.
- Consider adoption of an Official Map to or use of the Open Space Lands Act to acquire trail easements where appropriate and feasible.

Greenways

Greenways can be defined as corridors of undeveloped land, potentially along rivers and streams, that are reserved for recreational and conservation purposes. These corridors often connect urban centers, historical locations, or locations of environmental value. The East Hanover Township Subdivision and Land Development Ordinance of 2003, section 623.4 indicates that the Township may waive any or all design standards in order to preserve natural and historical resources and to integrate greenbelts throughout a development that link residences with on site or adjoining parks, schools or other similar features.

The Dauphin County Parks, Recreation, Open Space, and Greenways study of 2009 has identified and proposed greenways in three categories. Recreational greenways would provide for low impact recreation and human quality of life benefits. Conservation greenways support ecological and conservation related values. Finally, multiuse greenways support both human and ecological / conservation purposes. The Dauphin County Study has identified the following five greenways in East Hanover Township.

1. **The Horse-Shoe Trail** – Recognized by the State Greenway Plan, this Greenway is identified as multi-use.

2. **Manada Creek Greenway** – The County Study proposes a conservation greenway for the entire length of the Creek from Manada Gap to its mouth at Swatara Creek.
3. **The Stony Creek Greenway and Trail** – The County Study proposes a multi-use greenway to serve both the creek and railroad grade.
4. **The Appalachian Trail Greenway** – This National Scenic Trail is recognized as a multiuse greenway by the County Study.
5. **The Swatara Creek / Union Canal Greenway and Water Trail.** The County Study recognizes this Multi-Use Trail as Second Highest Ranking trail of any category.

As part of the Township's Dairy Lane Wastewater Treatment Facility and Bow Creek Study performed in 2010, Conestoga Rovers & Associates performed a biological monitoring project on the Bow Creek. Not only did the report find that water quality on the creek was unaffected by effluent from the Treatment Facility but output from the facility and groundwater infiltration to the stream in its southern reaches actually tended to improve water quality through dilution.

As the bow creek is the location for primary wastewater treatment, and is also located in the most intensively used areas of the township, consideration of its protection from pollution and supply threats of any kind is pertinent to the Township's interest. The US Environmental Protection Agency had issued a Total Maximum Daily Load Restriction to an unnamed tributary to the bow creek for phosphorus due to non point source phosphorus pollution.

The establishment of greenway corridors and enforcing riparian buffer regulations for the Bow Creek can result in the promotion of filtration of groundwater entering the stream and help to buffer other potentially harmful land uses. This would protect the Bow Creek as a natural and a recreational resource.

Potential Township greenways have been identified and located on Map # A-8. These locations are calculated as a 100-foot buffer of stream banks.

Recommendations & Implementation Strategies:

- In reference to providing for greenways along watercourses, the East Hanover Township Zoning Ordinance of 2003 has identified three riparian buffer zones to provide protection to lands adjacent to perennial streams, including Manada Creek, Stony Creek, and Bow Creek. The buffers also incorporate 100-year floodplains, wetlands, and slopes greater than 25 percent. The intent of the buffer zones is to protect water quality, sustain local wildlife, and reduce the adverse impacts of stormwater runoff. The ordinance can be strengthened to

prohibit disturbance of the buffer area excepting the creation of trails and activities consistent with the purposes of the greenways.

- In reference to the establishment of greenways along the Appalachian Trail and Horse-Shoe Trail, the Township must partner with landowners and the trail conservancies to obtain easements that will allow public access to the trails, protect their footpaths and viewsheds, and in the case of the Horse-Shoe Trail, provide an off-road route.
- Recognize the conditions present in Bow Creek that make protection of its waters priority. Promote the creation of a Conservation or Multiuse greenway and additional open space protection for the Bow Creek sub watershed.
- Create a Township open space, trails, and greenways committee to identify opportunities for new trails and trail connections and to evaluate their feasibility.
- Consider use of an Official Map to or the Open Space Lands Act to acquire easements for greenways where appropriate and feasible.

PLANNING IMPLICATIONS

Summary

East Hanover Township should continue to preserve its current open space, promote interconnected open space networks, and accommodate increasing future needs for recreational facilities. The 2002 Comprehensive Plan Survey of Township residents found that 87% agreed that preservation of agricultural properties and open space should be a primary priority.

The planning policies and recommendations contained in this chapter are intended to advance the creation of an integrated, networked system of parks, recreation, open space, trails, and greenways that protects resources while meeting the demands of Township residents. These policies are intended to connect the community, to promote the continued identity of East Hanover Township as a scenic rural home for its residents, and to enhance the health and well being of Township residents.