





Appalachian Trail



Introduction

Some of the most beautiful and important land and water in Cumberland County are the parks, trails, forests, streams, and game lands used for outdoor recreation. This section of Land Partnerships documents the benefits of these resources and provides a comprehensive inventory of the park, trail and greenway resources of the County. Additionally, this chapter includes an analysis of the need for parkland for present and future populations. Lastly, tools and strategies for parks, trails and greenways development are provided.

Benefits of Parks, Trails & Greenways

Parks, trails and greenways serve several important functions for the residents and visitors in Cumberland County. Parks, trails and greenways contribute to the quality of life of a community, create a sense of place, help to protect natural resources, and provide recreational opportunities that support healthy lifestyles. The open space system created by interconnected greenways and trails preserves wildlife habitat and bio-diversity while also providing opportunities for recreation and non-motorized transportation.

Cumberland County experiences positive economic benefits as residents and visitors alike come to enjoy the county's parks, greenways and trails. Recent data collection efforts and studies have quantified the economic impact of such outdoor recreation opportunities that are supported by the County's parks, trails and greenways. A summary of the salient findings are included below¹⁷:

- Open space, parks and greenways generate tourism dollars for an area. Travel destinations generate revenue on food, lodging, gas, equipment and a variety of other services.
- Open space preservation can increase business development. Businesses prefer to locate and expand their operations in communities with ample parks, open space and a clean environment.
- Parks and open space enhances property values. Studies have shown property values are higher in communities with athletic fields, walking trails, parkland, open space, and scenic vistas than comparable homes in communities that don't provide and protect these assets.
- Outdoor recreation is big business and a significant economic driver. In 2012, the industry is responsible for¹⁸:
 - ⇒ 6.1 million jobs
 - ⇒ \$646 billion in direct spending annually
 - ⇒ Over \$80 billion in federal, state and local tax revenue



Table 7-1	
Parks & Natural Areas of Cumberland County, 2012	
Feature	Acreage
<i>Federal Resources:</i>	
Appalachian Trail	3,584
<i>State Resources:</i>	
Michaux State Forest	32,907
Tuscarora State Forest	5,570
Kings Gap Environmental Education Center	2,531
Colonel Denning State Park	273
Pine Grove Furnace State Park	696
State Game Lands #169	2,499
State Game Lands #170	333
State Game Lands #230	883
State Game Lands #305	730
Fish & Boat Commission	815
<i>County Resources:</i>	
Mount Holly Marsh Preserve	913
<i>Municipal Resources:</i>	
Municipal Parkland	2,168
<i>Non-Profit Resources:</i>	
Cumberland Valley Rails to Trails Council	302
Other Non-Profit Lands	206
Total Acreage	54,410
As % of County Acreage	15.46%

Parks & Natural Areas of Cumberland County

Cumberland County has a variety of parks and natural areas managed at the federal, state, county and local levels of government. Additionally, several non-profit organizations contribute to the park and open space network. Combined, they offer residents and visitors to Cumberland County a variety of year-round recreation opportunities. These resources encompass over 54,400 acres of land and represent about 15 percent of the landscape. Table 7-1 presents a summary of parks and natural areas and Map 7-1, Park & Trail Map, depicts the parks and natural areas of Cumberland County.

Park systems are composed of an interrelated network of park types and providers. Federal parks have national natural, historical or military significance as units of the National Park Service. State parks are natural resource based parks, which people visit for a day as well as for overnight stays. State game lands, forests, and fish and boat areas are primarily focused on natural resources but often provide visitors with limited recreational opportunities. County facilities are usually resource-based parks that people visit for several hours to a

whole day. In Cumberland County, municipal parks are the foundation of the park system, providing for active, close-to-home recreation needs. These include recreation facilities for scheduled organized activities as well as places for citizens to play and relax at their own discretion. Lastly, there are numerous non-profit facilities that compliment government managed facilities and provide additional recreation opportunities. Following is an inventory and description of the park and natural areas available in Cumberland County by provider.

Federal Resources

There are no traditional national parks in Cumberland County; however, the Appalachian National Scenic Trail traverses the County. The Appalachian Trail is a federal facility, operated by the National Park Service in partnership with the Appalachian Trail Conservancy and its local maintenance clubs. The Appalachian Trail spans 46.5 miles within the County and includes approximately 3,584 acres of public land. The Appalachian National Scenic Trail is the world's longest foot trail, extending from Maine to Georgia and covering approximately 2,180 miles.

Within Cumberland County, the Appalachian Trail begins in the northeastern section of the County along the Blue Mountain ridgeline in Middlesex Township, crosses the valley to South Mountain and follows along the mountain until it exits into Franklin County at the southwestern corner of the County. The trail crosses through State Game Lands, Michaux State Forest and Pine Grove Furnace State Park and is marked by white blazed signs.

State Resources

The Commonwealth of Pennsylvania manages over 38,000 acres of parkland and natural areas in Cumberland County via the Bureau of Forestry, Bureau of State Parks, Fish and Boat Commission and Game Commission.

Bureau of Forestry - There are two State Forest areas in Cumberland County. State Forests are mandated to provide a continuous supply of timber, lumber, wood, and other forest products; to protect watersheds and conserve water; regulate rivers and stream flow, and to furnish opportunities for healthful public recreation.

The Michaux State Forest consists of more than 85,000 acres and is located within Adams, Franklin, and Cumberland counties, with approximately 33,000 acres in Cumberland County alone. The forest is managed for many uses, including timber and wood products, but is better known as a source of potable water for many of the local communities. Recreational opportunities include: hunting, cold and



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warm water fishing, primitive camping, hiking, horseback riding, bicycling and snowmobiling.

The Tuscarora State Forest consists of 95,780 acres and is located within Cumberland, Franklin, Huntingdon, Juniata, Mifflin, and Perry counties. Approximately 5,600 acres of the forest are located in northwestern Cumberland County. Recreational opportunities at the park include: cold water fishing and boating, hiking, sightseeing, hunting, snowmobiling, bicycling, cross-country skiing and picnicking.

Bureau of State Parks - Cumberland County has three State Parks. State Parks are natural resource based parks offering major outdoor recreation and environmental education opportunities suitable for whole day and overnight park visitation. They encompass several hundred acres at minimum and draw visitors from as far away as an hour travel time or more depending on the nature of the facilities and the quality of the resources.

Colonel Denning State Park is located in north-central Cumberland County. The park includes 273 acres of woodland nestled at the side of a mountain and a 3.5-acre scenic lake. Recreation opportunities include: swimming, fishing, 18 miles of hiking trails, hunting, camping, picnicking, environmental education, cross-country skiing and ice skating. Colonel Denning State Park is also a trailhead for the Tuscarora Trail.

Pine Grove Furnace State Park is located in the heart of Michaux State Forest in southern Cumberland County. This park was once the site of the Pine Grove Iron Works that dates from 1764 and operated for over 100 years. Historical buildings remain at the park and can be enjoyed through a self-guided historical trail. This 696-acre park centers on the 25-acre Laurel Lake and the 1.7-acre Fuller Lake. Recreational opportunities include: camping, organized group tenting, swimming, boating, picnicking, fishing, environmental education, hunting, bicycling, ice skating, ice fishing, cross-country skiing, snowmobiling, and hiking. In addition, the Appalachian Trail passes through the park. The Appalachian Trail Museum and the historic Iron Master's Mansion are also notable park attractions.

Kings Gap Environmental Education Center sits astride South Mountain on 2,531 acres of forest and strives to educate visitors about the natural world and the critical environmental issues currently facing society. The programs offered by the center not only educate visitors about environmental issues but also give the visitors a better appreciation for, and an increased enjoyment of, the outdoors. There are three main areas of the park: the Pine Plantation Day Use Area, the Pond Day Use Area, and the Mansion Day Use Area. These areas are connected by sixteen miles of hiking trails that can be enjoyed by hikers of all skill levels.



Doubling Gap Lake,
Colonel Denning State Park

Game Commission - There are four State Game Lands (#169, #170, #170A, #230 and #305) located within Cumberland County, covering a total of 4,445 acres. The Pennsylvania Game Commission is responsible for managing these lands and does so through wildlife management, wildlife law enforcement, land management and informational and educational programs. The primary purpose of state game lands is to preserve wildlife habitat and provide for public hunting and fur taking. Additional recreational uses, including the development of hiking trails, are allowed when they are compatible with wildlife values and Pennsylvania Game Commission management programs.

Fish & Boat Commission - The Fish & Boat Commission maintains and/or owns 815 acres in Cumberland County, including Opossum Lake, Children's Lake, Big Spring Fish Culture Station and Greenway, Huntsdale Fish Culture Station and several boat access points. The mission of the Pennsylvania Fish & Boat Commission is to provide fishing and boating opportunities through the protection and management of aquatic resources.

County Resources

Cumberland County does not operate a traditional county park system. The County owns the Mount Holly Marsh Preserve and manages this important natural area in partnership with The Nature Conservancy. The Nature Conservancy, working with local government officials and citizens, raised funds to purchase the 913 acre Mount Holly Preserve. In March 1992, The Nature Conservancy donated the Preserve to Cumberland County as the County's first dedicated open space.



Adams Ricci Park, East Pennsboro Township

The Mount Holly Marsh Preserve is a perfect spot for hikers and nature lovers. Primary activities within the preserve include hiking and the observation of birds, plants and other wildlife. The preserve features approximately 7 miles of trails ranging from easy to difficult. Hunting is permitted in the upland forest, but not in the marsh preserve. Fishing is permitted along Mountain Creek.

Municipal Resources

Municipal parks are the close to home recreation facilities that provide for the daily needs of the residents. They range in size from quarter acre mini-parks in the County's developed communities to large community parks with 100 acres or more. Approximately 2,168 acres of municipal parkland is available in Cumberland County. Appendix 7-1 provides a detailed listing of municipal parks and recreation facilities throughout the County.



Non-Profit Resources

Numerous non-profit organizations own and manage parks and natural areas throughout the County. These organizations supplement state and local efforts and are an important partner in outdoor recreation and land preservation. The following organizations have preserved land in Cumberland County:

- Central Pennsylvania Conservancy
- Cumberland Valley Rails to Trails Council
- Audubon Pennsylvania
- Appalachian Audubon Society
- Trout Unlimited
- The Nature Conservancy
- LeTort Regional Authority

Municipal Park and Recreation Management

As stated previously, municipal parks are the foundation of Cumberland County's park and recreation system. As such, municipalities will be vital partners in achieving Land Partnerships park and recreation goals. Table 7-2 presents acres of park and recreation land by municipality. Table 7-2 also shows the organizational operating structure for each municipality for park and recreation.

The municipalities of Cumberland County have demonstrated a strong commitment to providing park and recreation facilities for the community. Twenty-six of 33 municipalities (79 percent) have at least one park within their boundaries. Currently, there are over 140 municipal parks, which encompass approximately 2,168 acres of land. In addition, 15 of 33 municipalities have a park and recreation professional on staff or coordinate with a regional park and recreation organization to administer recreation programs. Two regional recreation organizations exist in Cumberland County: Mechanicsburg Area Parks and Recreation and the West Shore Recreation Commission.

Park Classification

Determining the type, size and nature of active recreation facilities is strictly a local decision. It is up to the municipalities to plan for their own park and recreation systems for close-to-home active recreation. Municipalities can do this on their own or in partnership with neighboring communities to take advantage of the benefits of regional recreation.

A park classification system for Cumberland County is provided in Appendix 7-2. The park classification system defines the various types and characteristics of parks. This system is based upon the standard classification system set forth by the National Recreation and Park Association (NRPA). Parks are classified by location, access,

7. Parks, Trails & Greenways

Table 7-2					
Municipal Park and Recreation Data, 2012					
Municipality	2010 Population	Number of Municipal Parks	Acres Municipal Parkland	Municipal Parkland Quotient = X acres/1,000 population	Parks & Recreation Operations Structure
Camp Hill Borough	7,888	4	84	10.6	Director & Board
Carlisle Borough	18,682	18	165	8.8	Director & Board
Cooke Township	179	-	0	-	None
Dickinson Township	5,223	1	20	3.8	Board
East Pennsboro Township	20,228	12	213	10.5	Director & Board
Hampden Township	28,044	8	136	4.8	Director & Board
Hopewell Township	2,329	1	31	13.5	Board
Lemoyne Borough	4,553	10	52	11.4	WSRC
Lower Allen Township	17,980	15	178	9.9	WSRC
Lower Frankford Township	1,732	-	0	-	None
Lower Mifflin Township	1,783	-	0	-	None
Mechanicsburg Borough	8,981	4	65	7.2	MAPR
Middlesex Township	7,040	3	130	18.5	Director & Board
Monroe Township	5,823	3	50	8.6	Board
Mt. Holly Springs Borough	2,030	3	37	18.2	Board
New Cumberland Borough	7,277	5	53	7.2	WSRC
Newburg Borough	336	-	0	-	None
Newville Borough	1,326	4	21	15.6	Board
North Middleton Township	11,143	3	70	6.3	Director & Board
North Newton Township	2,430	1	6	2.5	Board
Penn Township	2,924	1	8	2.7	Board
Shippensburg Borough	4,416	4	96	21.7	Director & Board
Shippensburg Township	5,429	1	26	4.8	Board
Shiremanstown Borough	1,569	2	3	1.9	MAPR
Silver Spring Township	13,657	9	217	15.9	Director & Board
South Middleton Township	14,663	9	288	19.6	Director & Board
South Newton Township	1,383	-	0	-	None
Southampton Township	6,359	2	50	7.9	Board
Upper Allen Township	18,059	13	132	7.3	MAPR
Upper Frankford Township	2,005	-	0	-	None
Upper Mifflin Township	1,304	-	0	-	None
West Pennsboro Township	5,561	1	27	4.9	Board
Wormleysburg Borough	3,070	5	12	3.9	Board
Cumberland County	235,406	142	2168	9.2	None
Adjusted Municipal Acreage & Quotient			2395	10.2	
Source: Cumberland County Planning Department Inventory, 2012					
WSRC - West Shore Recreation Commission MAPR - Mechanicsburg Area Parks and Recreation Department					



acreage, natural resources, and types of facilities. The municipalities and the County can use this system to plan, establish and enhance their own parks. The classification system serves as a guideline not a mandate.

Not every type of park has to be in every community. Municipalities can create the type of park system that will meet the needs of their community as well as to provide a legacy of parks for future generations. One community might decide to have a park in every neighborhood while another community may decide that only central, community parks will be developed to meet the needs of residents. Obtaining an adequate amount of parkland for current and future generations is critical. Planning for 10 to 30 years is essential.

Need for Municipal Parkland

The existing protected federal, state, and county lands of Cumberland County are primarily natural resource based. They were established on lands where the quality of the natural or cultural resource is so important, or of such a large scale, that only the governmental organizations at the national, state or county levels have the funding to purchase them and the capacity to manage them. In these instances, how much is enough is purely focused on the need to preserve an important natural area. These natural areas provide limited, passive recreation opportunities such as hiking, fishing, swimming, boating, hunting and camping.

Municipal parkland serves an entirely different purpose than natural resource based facilities. Municipal recreation areas provide for the day-to-day, close to home active, recreation opportunities. Municipal parks provide amenities such as baseball, soccer, basketball, tennis, playgrounds and paved walking trails suitable for strollers and wheelchairs.

The National Recreation and Park Association (NRPA) have developed standards for local active parkland. In 1971, the accepted minimum standard was established at a range of 6.25 to 10.5 acres per 1,000 populations. This standard has been evolving based upon the major trends in recreation over the last 40 years marked by new recreational pursuits and increasing participation that necessitate additional parkland. Updated NRPA guidelines in 1996 encourage municipalities to tailor their standards to meet recognized recreation needs using a Level of Service approach. That being said, the Level of Service approach is more challenging to develop on a County-wide basis and was not within the scope of this plan.

In order to generally assess parkland requirements across the County, the Land Partnerships plan evaluated municipal parkland against the following standards:



Willow Mill Park,
Silver Spring Township

- Status Quo Parkland Goal
- Model Community Parkland Goal

It should be noted that these goals are to serve as guidelines and not as an absolute target. Land constraints and local recreation needs are examples of factors that drive municipal decisions on parkland to either lower or higher acreage goals.

In several communities across the County, state owned facilities serve as the “local park.” In Dickinson, Lower Mifflin and Cooke Townships, the state parks of Kings Gap, Colonel Denning and Pine Grove (respectively) provide close to home recreational opportunities. Similarly, Opossum Lake serves as a local park to the residents of Lower Frankford. As such, small portions (approximately 10 percent) of select state facilities were included in the determining if communities were achieving goals for municipal parkland acreages. These state allocations are designated as adjusted municipal acreage in goal calculations.

Table 7-3					
Countywide Parkland Goals					
		Status Quo 9.2 acres/1000 (Acres needed (Countywide)	Surplus or (Deficit) (Acres countywide w/ adjusted parkland)	Model Community Goal 15 acres/1000 (Acres needed (Countywide)	Surplus or (Deficit) (Acres countywide w/ adjusted parkland)
	Population				
2010 Census	235,406	2166	229	3531	(1136)
2020 Projection	258,880	2382	13	3883	(1488)
2030 Projection	282,921	2603	(208)	4244	(1849)

Table 7-2 includes the current and adjusted municipal parkland quotients and Table 7-3 provides countywide parkland goals and projected surplus or deficit for the next 20 years at each goal level.

Status Quo Parkland Goal - The 2006 Land Partnerships Plan established a de facto countywide parkland standard of 8.6 acres¹⁹ of parkland per 1,000 populations. This standard was calculated using 2005 population projections and 2005 actual parkland acreages. Since 2006, the 2005 population statistic was updated therefore the de facto standard has been revised to 9.2 acres²⁰ of parkland per 1,000 populations to account for the revised population data. The current unadjusted parkland quotient is 9.2, indicating parkland acquisition is keeping pace with the status quo from 2006. The current adjusted parkland quotient is 10.2 and exceeds the status quo goals for 2010 to 2020. By 2030, population growth will have created a 208 acre deficit.



Model Parkland Community Projections - Many municipalities in Cumberland County have been working towards acquiring additional parkland and developing it to meet community needs. By example, they have set the higher standard for active recreational parkland in Cumberland County by providing adequate parkland for their population and needs. In following NRPA's recommendation to tailor standards based upon trends, conditions and community needs, Cumberland County could consider a goal of 15 acres per 1,000 as the desired amount of parkland in Cumberland County. The Model Parkland Community goal projects the countywide parkland deficit ranging from 1,488 acres in 2020 to 1,849 acres in 2030.

Trends in Parks and Recreation

Societal trends also influence the parks and recreation needs of the community.

Aging

The population is aging, but it is healthier and more active. By 2020, Pennsylvania's 60 and older population is expected to be 25 percent of the total population²¹. This will increase the need for additional recreation facilities accessible to senior citizens.

Obesity

The United States Surgeon General has identified obesity and the lack of physical activity as the number one public health issue in this country: 69 percent of the population is overweight or obese and 36 percent of adults are obese²². Parks provide residents convenient places for recreation and physical activity.

Outdoor Recreation

Outdoor recreation is growing. Participation in outdoor recreation reached a five-year high in 2011 with nearly 50 percent of all Americans ages six and older enjoying the outdoors²⁴. That equates to 141.1 million American outdoor participants.

Community Gardens

Community gardens are recognized by the PA Department of Conservation and Natural Resources (DCNR) as a form of outdoor recreation. Community gardens are growing in popularity as demand rises for fresh foods and as participants realize the many physical, mental, environmental and community building benefits. DCNR allows community gardens on public lands provided they are open to all individuals and do not produce products for commercial sale. DCNR provides guidelines for community gardens at the following link: <http://www.dcnr.state.pa.us/brc/grants/greening/communitygardens/index.htm>

The Community Health Needs Assessment for Five South Central PA Counties identified Physical Activity as a #1 Priority and sited lack of environmental infrastructure (like trails and sidewalks) as one of the factors that prohibit residents from regular physical activity.²³

Reconnecting to Nature

Rapid advancements in technology have led to lifestyles that are more sedentary with an increasing number of people - especially children - spending more time indoors. At a time when technology, land use and society conspire to disconnect us from the land and from nature, the ability to connect to and travel through the outdoors of the County and points beyond, may be more important than ever. Some believe that the healthy future of our society depends on remaining connected to nature and the natural world. In the face of these changes parks will play an ever-increasing role in reconnecting people to nature while also contributing to physical fitness and mental wellbeing.

Cumberland County Trails

Cumberland County has over 200 miles of trails throughout the County. Trails are important for tourism as well as for close to home recreation. Walking has been rated the most popular outdoor recreation activity in Pennsylvania²⁵. In addition to recreation, trails offer non-motorized transportation alternatives for commuters. Appendix 7-3 provides a detailed list of trails and Map 7-1, Park & Trail Map, depicts the regional trails in Cumberland County.

Cumberland County Rail Trails

Rail trails are recreational greenways developed along abandoned railroad lines. Three rail trails exist in Cumberland County. They include the LeTort Spring Run Nature Trail, Cumberland Valley Trail and the Cumberland County Biker/Hiker Trail.



Cumberland Valley Rail Trail

LeTort Spring Run Nature Trail - The LeTort Spring Run Nature Trail is a 2.2-mile trail that extends from LeTort Park to Bonnybrook Road, Carlisle. The LeTort Regional Authority purchased the right of way for the trail from the Reading Railroad in 1974. The scenery along the trail is primarily wooded, with a variety of deciduous trees. The trail is suitable for walking, jogging and cross-country skiing. An added amenity along the trail is the excellent trout fishing in the LeTort Spring Run. Trailheads are located at LeTort Park and Bonnybrook Road.

Cumberland Valley Rail Trail - The Cumberland Valley Rail Trail is an 11-mile recreational corridor that extends from Shippensburg to Newville. The trail follows the path of the abandoned Cumberland Valley Railroad, which ran from Harrisburg, PA to Hagerstown, MD. Cumberland Valley Rails to Trails Council, Inc. (CVRTC) owns and maintains the trail. The CVRTC is a non-profit, volunteer organization established to promote development of multi-use trails



in south-central Pennsylvania. The scenery along the trail varies from farmland to woodlands. The trail is ideal for walking, jogging, bicycling, horseback riding and cross-country skiing.

The community has expressed interest in seeing the Cumberland Valley Trail continue east to Carlisle and even further toward the West Shore communities. In 2011, CVRTC acquired 107 acres of land from PPL Corporation. The abandoned Cumberland Valley Railroad corridor between Newville and Carlisle is utilized by PPL Corporation for utility transmission lines. This land is the core acquisition needed to extend the Cumberland Valley Trail an additional 9 miles from Newville to Carlisle (at Route 465). The PPL land represents approximately 85% of the corridor. Approximately 15% of the corridor remains in private ownership. Carlisle Borough and other trail stakeholders are working on connecting the Carlisle Borough Bike and Pedestrian Trail Network to the Cumberland Valley Trail at Route 465. A Master Site Plan for the Newville to Carlisle Extension is currently under way to prepare a plan for development, maintenance and operation of the trail. When developed, the extension would create a total of 20 miles of trail connecting Carlisle, Newville, Oakville and Shippensburg.



Conodoguinet Creek Water Trail

Cumberland County Biker/Hiker Trail - The Cumberland County Biker/Hiker Trail is a 2-mile trail that extends from Laurel Lake to Fuller Lake within Pine Grove Furnace State Park along the abandoned railroad that had served the iron-making industry. The scenery along the trail is primarily wooded but also includes the remnants from the iron industry at Pine Grove Furnace. The trail is suitable for walking, jogging, bicycling and cross-country skiing.

Regional Trail Initiatives

There are several regional trail initiatives underway within the county looking at connecting trails across municipal boundaries.

Eastern Cumberland County Master Trail Plan – The study area encompasses eight eastern Cumberland County municipalities including Silver Spring Township, Hampden Township, East Pennsboro Township, Camp Hill Borough, Upper Allen Township, Lower Allen Township, Mechanicsburg Borough and Monroe Township. The purpose of the study is to explore the feasibility of developing a regional trail system that will connect the eastern part of the County through both on and off road trails. The final plan will include a proposed network of trails and a prioritized action plan for developing the network.

LeTort Spring Run Trail Master Plan/Urban Greenway Plan – This Plan was initiated by the LeTort Regional Authority but prepared in partnership with the four local municipalities in 2008. The study area encompasses four central Cumberland County municipalities

including Carlisle Borough, South Middleton, North Middleton and Middlesex Townships. The spine of the trail system is the LeTort Spring Run. Since completion of the plan, major improvements to the LeTort Spring Run Nature Trail have been completed as well as development of a Carlisle Borough Bike and Pedestrian Trail Network project. Efforts are ongoing to expand and enhance the network throughout the four communities. The Cumberland Valley Trail Connections organization has also been formed to support a network of trails in Central Cumberland County.

Capital Area Cross River-Connections Study – In 2012, the Harrisburg Area Transportation Study in collaboration with PennDOT initiated a study of the four bridges that cross the Susquehanna River to identify their future role in providing regional mobility. Key issues of the study include future use of the abandoned bridge owned by Capital Area Transit and pedestrian and bicycle access.

Cumberland County Water Trails

Cumberland County has 3 water trails: the Susquehanna River Water Trail, the Yellow Breeches Water Trail and Conodoguinet Creek Water Trail. Water trails are boat routes suitable for canoes, kayaks and other small watercraft. Like conventional trails, water trails are recreational corridors between specific locations. Water trails are comprised of access points, boat launches and day use sites. One of the main goals of the water trails program is to highlight existing recreation facilities and to encourage stewardship of, and safe recreation on, our local waterways.

The *Susquehanna River Water Trail* is divided into several sections. The Middle Susquehanna Water Trail extends from Sunbury to Harrisburg and is managed by the Susquehanna River Trail Association. The Lower Susquehanna River Water Trail extends from Harrisburg to the Mason Dixon Line and is managed by the Susquehanna Gateway Heritage Area.

The *Yellow Breeches Creek Water Trail* includes approximately 22 miles of the Yellow Breeches Creek. The trail is divided into two trips due to the existence of several hazardous dams and the lack of approved access and/or portage. Trip A extends from South Middleton Township Park to Boiling Springs. Trip B extends from Messiah College to the Susquehanna River.

The *Conodoguinet Creek Water Trail* covers approximately 40 miles of the Conodoguinet Creek. The trail begins near Carlisle at North Middleton Park and ends at “The Point” in West Fairview where the creek flows into the Susquehanna River. Users must exit the creek at



Cave Hill Nature Center and reenter at Creekview Park in order to circumvent the Carlisle Raw Water Intake Dam.

Cumberland County Greenways

The greenway network proposed for Cumberland County creates a grid-like web of linear green spaces throughout the County. Greenways can take many forms; some will be corridors of protected natural areas, or corridors that include a footpath for exploring nature, while others can be developed primarily as commuter or recreation trails. The ridge and valley characteristics of the County promote east-west corridors that follow streams, rail corridors, and ridge lines. The conceptual system of major and minor greenways provides a comprehensive network of greenways connecting the entire County and providing greenway opportunities near all citizens of Cumberland County.

The Conceptual Greenway Map (Map 7-2) illustrates the greenways in Cumberland County that include the following:

1. Conodoguinet Creek Greenway
2. Yellow Breeches Creek Greenway
3. Cumberland Valley Trail Greenway
4. Appalachian Trail Greenway
5. Big Spring Creek/Doubling Gap Creek Greenway
6. LeTort Spring Run/Mountain Creek/Hiker/Biker Trail Greenway
7. Trindle Spring Run/Trolley Line Greenway
8. Susquehanna River Greenway
9. Blue Mountain/Kittatinny Ridge Greenway
10. South Mountain/Highlands Greenway

The greenway corridors build upon the recommendations of the Cumberland Countywide Greenway Study that was completed in 2000. This study identified natural and manmade resources that contribute to greenway development and recommended eight regional greenways. The ridges along Blue Mountain and South Mountain Ridge were added in 2006 as part of *Land Partnerships*.

These corridors are designated as major greenway corridors of regional significance that connect population centers and natural resource components and provide linkage opportunities to minor greenways. The Commonwealth of Pennsylvania has designated three of these greenways as having statewide importance to include:

- Appalachian Trail Greenway
- Susquehanna Greenway
- Blue Mountain/Kittatinny Ridge Greenway (Tuscarora Trail)



Appalachian Trail

Minor greenways are shown which extend the greenway network throughout the County along secondary corridors. Minor corridors are similar to a major corridor except that their reach and extent are limited to significant inter-municipal connections.

Minor greenways interconnect with the major greenways, creating loops and extending the function and benefits of the greenway beyond the regional greenway corridors. The 10 minor greenways identified in the Cumberland County Greenway Study are illustrated on the Conceptual Greenway Map and include:

- Burd Run Greenway - Burd Run is a tributary to Middle Spring Creek which is tributary to Conodoguinet Creek. Burd Run's headwaters are located in South Mountain and the stream flows generally northwest, east of Shippensburg Borough to Middle Spring Creek north of Shippensburg Borough. This minor greenway will connect the South Mountain/Highland Greenway to the Cumberland Valley Trail Greenway.
- Middle Spring Creek Greenway – Middle Spring Creek is tributary to the Conodoguinet Creek. The stream originates south of Shippensburg and flows north through the Borough. The Middle Spring Creek Greenway would link Shippensburg Borough, Shippensburg University, and the Cumberland Valley Trail Greenway to the Conodoguinet Creek Greenway.
- Bore Mill Run Greenway – This greenway connects the Blue Mountain/Kittatinny Ridge Greenway to the Conodoguinet Creek Greenway along Bore Mill Run. The greenway will traverse State Game Land #169.
- Yellow Breeches Creek Headwaters Greenway – The headwaters of the Yellow Breeches Creek within the Michaux State Forest are designated as a minor greenway to connect the South Mountain/ Highland Greenway, the Appalachian Trail Greenway, and the Yellow Breeches Greenway.
- Yellow Breeches Creek to Big Spring Creek Greenway – This minor greenway is designated along roadways (Stoughstown Road, Rt. 11, and Big Spring Road) to functionally link the Big Spring Greenway and the Yellow Breeches Greenway.
- Spring Run Greenway - The headwaters of Spring Run are located in the area of State Game Land #230 and flow south through Middlesex Township to the Conodoguinet Creek Greenway, northeast of Carlisle.



- Sears Run Greenway – Sears Run flows south from the Blue Mountain/Kittatinny Ridge Greenway through Hampden Township to the Conodoguinet Creek Greenway. The stream crosses under U.S. Route 81.
- Cedar Run Greenway - Cedar Run is an intermittent tributary to the Yellow Breeches Creek located in Upper Allen Township and flowing east into Lower Allen Township. Cedar Run is classified as a Cold Water Fisheries stream by PA DEP and will connect residential areas south of Mechanicsburg to the Yellow Breeches Greenway.
- Mt. Allen/Spring Run Greenway - Spring Run is a tributary to the Yellow Breeches Creek. This stream has its headwaters in the Mt. Allen area of Upper Allen Township and flows east to join the Yellow Breeches Greenway in Lower Allen Township just east of the Upper Allen Township boundary.
- Trout Run Greenway - Trout Run is a small perennial tributary to the Yellow Breeches Creek located on the west side of Upper Allen Township. This stream joins the Yellow Breeches Creek near the village of Grantham. Portions of this stream are protected as part of the Trout Run Wetland Wildlife Sanctuary, Center Square Park, and Grantham Park. The stream supports a marginal wild brown trout fishery (Pennsylvania Fish and Boat Commission data) and connects the Trolley Line Greenway to the Yellow Breeches Greenway.

The Conceptual Greenway Map identifies “destinations” which are part of a connected network of community places that are proposed for Cumberland County. Destinations provide a multitude of community services including commerce areas, residential areas, schools, parks, churches, service areas, and transportation centers. They serve as primary origin for the movement of people within greenway corridors.

Greenways typically extend beyond political boundaries due to the character of the resources these corridors are associated with such as streams, abandoned rail lines, and ridge lines. Of the 20 major and minor greenways identified for Cumberland County, eight extend beyond the County boundary. Two of these regional greenway corridors are associated with trails and include:

- Cumberland Valley Trail Greenway
- Appalachian Trail Greenway



Waggoner's Gap Hawk Watch, Blue Mountain

The other regional greenways are associated with river, streams, and ridge resources to include:

- Susquehanna River Greenway
- Yellow Breeches Creek Greenway
- Conodoguinet Creek Greenway
- Middle Spring Creek Greenway
- Blue Mountain/Kittatinny Ridge Greenway
- South Mountain/Highland Greenway



Susquehanna River

Adjacent counties have also identified greenways as part of their planning efforts and the following lists corridors in common between adjacent counties and Cumberland County.

- York County – York County has identified the Yellow Breeches Creek, Susquehanna River, and the South Mountain/Highland greenways as part of their York County Greenways and Open Space Plan.
- Franklin County – The Franklin County Comprehensive Recreation, Park, and Open Space Plan identified two trails that connect to Cumberland County: the Appalachian Trail and the Cumberland Valley Rail Trail. This plan also identifies the ridge lines of the Blue Mountain and South Mountain as Greenway/Open Space Conservation Areas.
- Adams County – The Adams County Vision for Parks, Recreation, and Open Space Plan promotes the development of a county-wide greenway system and the County is currently developing a separate greenway plan. Cumberland County and Adams County share a boundary that includes lands of the Michaux State Forest and is designated as the South Mountain/Highland Greenway. The northern boundary of Adams County comes within approximately one-half mile of the Appalachian Trail and Adams County will be exploring opportunities to link trails to this regional long-distance trail.
- Perry County – Perry County and Cumberland County share the border encompassed by the Blue Mountain/Kittatinny Ridge Greenway. The Susquehanna River Greenway extends from Perry County to neighboring Cumberland County.
- Dauphin County – The Susquehanna River lies within Dauphin County and its western shore is the County boundary. Dauphin County does not have a park and open space or greenway plan but has received funding to begin the planning process. The



Susquehanna River Greenway is the primary linear corridor that the two counties have in common. Potential connections and the linear initiative also relate to both counties include the Susquehanna River Water Trail and the recent pedestrian and bicycle accommodations as part of the improvements to the Harvey Taylor Bridge spanning the river.

Cooperation and partnerships with adjacent counties and municipalities to promote these connections will promote greenway and conservation objectives regionally.

Tools for Parks, Trails & Greenways – Acquisition & Development

Techniques for Acquisition

Parks and trails can be acquired or controlled through a variety of methods. The most popular and common method for parkland is fee simple acquisition. Fee simple ownership is the full and unconditional ownership of land, with the right to use and sell and then pass on to one's heirs. Trails or greenways can also be acquired fee simple, but are more frequently acquired through a variety of other ownership methods such as an easement or lease. An easement grants certain rights for a specified purpose (such as a trail or fishing/boating access) to someone other than the owner of the property. An easement may apply to the entire property or only a portion. A lease is a grant by a fee simple owner of the right to use and possess all or part of the land, generally for a term of years.

Sustainable Community Parks and Landscape Design

In 2010, the Pennsylvania Department of Conservation and Natural Resources (DCNR) published its second edition of *Creating Sustainable Community Parks and Landscapes*. DCNR defines a sustainable community park or landscape as “one where the natural resources are protected, where wildlife habitat is improved and where human uses and maintenance practices do not harm the environment”²⁶. In development of parks and trails the following 12 principals²⁷ are recommended for consideration for designing and landscaping in a sustainable manner.

- Retain as much of the pre-existing landscape as possible during new construction, including soils, rocks, native vegetation, wetland and contours.
- Maintain high quality soils that will hold water and supply plants with proper nutrients.
- Connect new landscapes with the surrounding native vegetation to create larger contiguous areas of habitat.
- Create natural stormwater management systems and green infrastructure, such as rain gardens and swales with native grasses.
- Protect wetlands from disturbance and fill.

- Use integrated pest management strategies to minimize the use of chemical pesticides to control plant and insect pests.
- Minimize non-porous surfaces like roads, parking lots and paved trails.
- Use green building practices in new and retrofit construction projects.
- Reduce turf to those areas essential for recreational and other human use activities.
- If you must have some turf grass follow guidelines: mow early in morning or late evening, never remove more than ½ of blade, leave clippings and choose native turf.
- Use native plants, especially trees, in riparian buffers around any stream, lake or wetland.
- Identify and remove invasive plants whenever possible.



Japanese Barberry (Invasive)

Tools for Parks, Trails & Greenways – Planning

The creation and development of parks, trails and greenways can be achieved through the land use planning and development process. Too often in the past, these features were characterized as superfluous amenities, but in increasing the development, community and municipal officials have realized that parks and trails are essential amenities to a prosperous community and high quality of life.

Municipalities Planning Code

The Pennsylvania Municipalities Planning Code (MPC) is intended to empower local municipalities to establish and develop park and recreation facilities for the benefit of the general public. The comprehensive plan, zoning ordinance, subdivision and land development ordinance and official map are all tools available for planning and creation of those facilities.



Article III, Section 301 of the MPC specifies that County and Municipal Comprehensive Plans shall provide a plan for land use to include park and recreation areas and a plan for community facilities which also includes parks and recreation. Similarly, the Comprehensive Plan is to include a plan for movement of people and goods, which would include provisions for pedestrian and bikeway systems (i.e. trails). A plan for parks, trails and recreation facilities should include developing goals and objectives, establishing recreation needs and identifying proposed location of future parks, trails and recreation facilities.

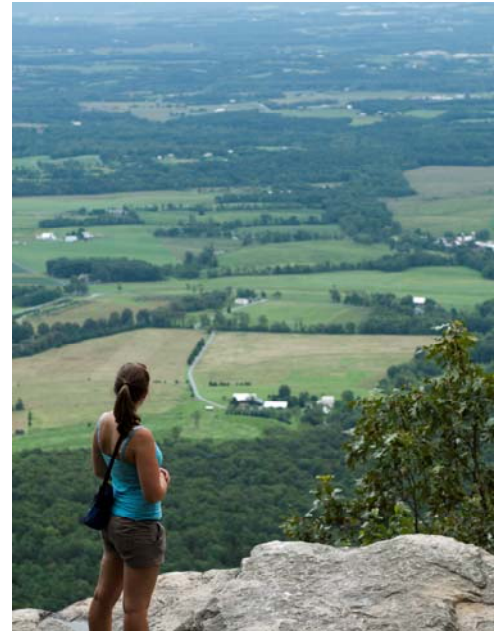
Article IV of the MPC empowers municipalities to adopt an Official Map for parks, playgrounds and pedestrian ways/easements. The Official Map is intended to show the locations of future park and recreation facilities and articulates a municipality's interest in acquiring these lands for public purposes sometime in the future.

The subdivision and land development process can be utilized in several ways to advance park and recreation goals. Article V, Section 503 (11) of the MPC allows a municipality to include ordinance provisions that: 1) require a developer to set aside land for recreation purposes 2) require construction of recreation facilities and/or 3) allow payment of fees in lieu of reserving parkland and/or constructing recreation facilities. A municipality must have an adopted park and recreation plan in order to enact such provisions.

Article VI, Section 604 of the MPC indicates the zoning ordinance shall designate areas for recreational facilities. Typically, zoning ordinances provide for public parks and recreation facilities in most zones and therefore zoning designation is not often problematic.

Tools for Parks, Trails & Greenways – Partnerships & Education

As mentioned earlier in this chapter, Cumberland County has a variety of parks and trails, managed by an assortment of governmental and non-profit organizations. Accordingly, coordination and outreach among those various organizations is critical to maintaining, enhancing and promoting a high quality system of parks and trails. Table 7-4 lists the stakeholders in parks, trails and greenways and highlights their focus areas.



Colonel Denning State Park

Table 7-4
Stakeholders and Focus Areas for Parks, Trails & Greenways

Stakeholders	Program/Initiative
Audubon PA www.pa.audubon.org www.kittatinnyridge.org	Kittatinny Ridge Conservation Project
Appalachian Trail Conservancy South Mountain Partnership www.appalachiantrail.org www.southmountainpartnership.org	Appalachian Trail Greenway South Mountain/Highland Greenway
Appalachian Mountain Club www.outdoors.org	South Mountain/Highland Greenway
Big Spring Watershed Association www.bigspring-pa.org	Big Spring Greenway
Carlisle Area Heath & Wellness Foundation www.cahwf.org	Simply Moving Guide Health Promotion
Conodoguinet Creek Watershed Association http://conocreek.org	Water Trail Implementation Conodoguinet Creek Greenway
Cumberland Valley Visitor Bureau www.visitcumberlandvalley.com	Outdoor Recreation Promotion
Cumberland Valley Rails to Trails Council www.cvrtrc.org	Cumberland Valley Trail Greenway
Cumberland Valley Appalachian Trail Club www.cvatclub.org	Appalachian Trail Greenway
Cumberland Valley Trail Connections www.ccpa.net	Regional Trail Development and Promotion
Harrisburg Area Transportation Study (HATS) www.tcrpc-pa.org	Bicycle and Pedestrian Transportation Planning Capital Region Cross River Connections Study
LeTort Regional Authority www.letort.org	LeTort Spring Run Master Site Plan/Urban Greenway Plan
Municipalities	Community based park and trail development
Mason Dixon Trail System, Inc. www.masondixontrail.org	Mason Dixon Trail



Table 7-4 continued
Stakeholders and Focus Areas for Parks, Trails & Greenways

Middle Spring Creek Association www.middlespringwatershed.org	Middle Spring Creek Greenway
Pennsylvania Department of Conservation and Natural Resources www.dcnr.state.pa.us www.explorepatrails.com	Funding Assistance Recreation Technical Assistance Conservation Landscape Initiative Program
Pennsylvania Department of Transportation www.dot.state.pa.us	MAP-21 Funding Bicycle and Pedestrian Transportation Planning Capital Region Cross River Connections Study
Pennsylvania Fish & Boat Commission www.fishandboat.com	Water Trail Program Fishing & Boating Access Improvement
Pennsylvania Recreation & Park Society www.prps.org	Advocacy Training and Professional Development
Potomac Appalachian Trail Club www.patc.net	Tuscarora Trail Appalachian Trail Greenway
Rails to Trails Conservancy www.railstotrails.org	Rails to Trails Planning and Technical Assistance
Susquehanna Greenway Partnership www.susquehannagreenway.org	Greenway Planning and Implementation
Susquehanna Gateway Heritage Area www.susquehannawatertrail.org	Lower Susquehanna Water Trail
Susquehanna River Trail Association www.susquehannarivertrail.org	Middle Susquehanna Water Trail
The Nature Conservancy www.nature.org	Mount Holly Marsh Preserve
Yellow Breeches Watershed Association www.ybwa.org	Water Trail Implementation Yellow Breeches Greenway



Pine Grove Furnace State Park