# Perkiomen Township Montgomery County, Pennsylvania



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MONTGOMERY COUNTY, PENNSYLVANIA

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Lodal Creek, Cover Background Perkiomen Trail, Cover Foreground **PERKIOMEN TOWNSHIP** 

## **OPEN SPACE PLAN**

2006

Prepared by the Montgomery County Planning Commission under funding through the Montgomery County Green Fields/Green Towns Program

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## **RESOLUTION 2006-19**

## ADOPTION OF THE MUNICIPAL OPEN SPACE PLAN

#### PERKIOMEN TOWNSHIP

*WHEREAS*, On December 18, 2003, the Commissioners of Montgomery County established the Green Fields/ Green Towns Program which provides grant funds for green infrastructure improvements and open space preservation; and

*WHEREAS*, the Green Fields/ Green Towns Program requires the preparation of municipal open space plans and provides grants which may be used by any municipality in Montgomery County for the preparation of an open space plan; and

WHEREAS, the Township of Perkiomen has prepared an open space plan in accordance with guidelines established by the county; and

*WHEREAS*, the open space plan has been reviewed by the Montgomery County Open Space Board in accordance with guidelines established by the county; and

WHEREAS, copies of the draft open space plan were distributed to all the adjacent municipalities and the Perkiomen Valley School District on April 12, 2006; and

WHEREAS, the Open Space Plan Committee conducted public meetings on the plan during 2005 and 2006 and received comments on the plan; and

*WHEREAS*, there were two advertised public hearings on the Open Space Plan. The public hearings were held on May 4, 2006 and May 23, 2006.

**NOW THEREFORE BE IT RESOLVED** that the Board of Supervisors of Perkiomen Township does hereby adopt the Open Space Plan in accordance with Section 302 of the Municipalities Planning Code and authorize its submission of the final adopted copy to the Montgomery County Open Space Board.

Duly presented and adopted by the Perkiomen Township Board of Supervisors in public meeting held on June 6, 2006. Perkiomen Township

Attest: <u>Lecile M. Daniel</u> SECRETARY

By: William CHAIRMAN

1 Trappe Road, Collegeville, PA 19426

Phone: 610.489.4034 Fax: 610.489.4918

Board of Supervisors

# CHAPTER 1 community profile

The Community Profile Chapter of the Perkiomen Township Open Space Plan is designed to provide residents, planners, and officials the necessary background to make well informed decisions regarding the future preservation of natural and cultural resources within their community. It consists of three parts 1) the Regional Setting, which examines the community's position in Southeast Pennsylvania, 2) the Existing Land Use Analysis, which describes the use of each property in the township, and 3) the Demographic Analysis, a study of the demographic trends in Perkiomen Township.

## **REGIONAL SETTING**

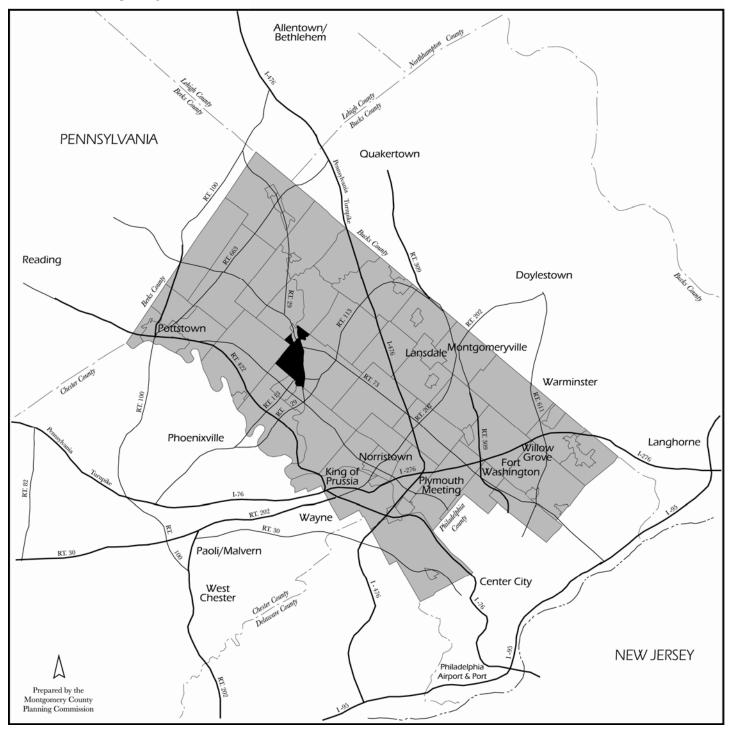
Perkiomen Township is a 4.8-square mile municipality in the west central section of Montgomery County. Located along the Perkiomen Creek, which divides approximately 400 acres from the bulk of the township's land area, it historically has been a rural community surrounding the two villages of Rahns and Graterford. It is approximately 30 miles from Center City Philadelphia and within the triangle formed by three of the major urban centers of Southeast Pennsylvania: Reading, Philadelphia, and Allentown-Bethlehem as shown in Figure 1.

Traditionally, the Perkiomen Valley has been farmland surrounded by more developed boroughs and small villages. Increasingly in the past decade, though, many of these communities have felt the pressures of suburban development. This is due in part to the Route 422 corridor. This corridor will continue to be one of the fastest growing areas in the county during the next decade.

Perkiomen Township's position places it on the edge of this transportation corridor, and as a result the township has experienced explosive residential growth in recent years. This development is expected to slow because of decreasing developable acreage, but the remaining expansion will yield a highly developed suburban community.

To help better manage growth in the Central Perkiomen Valley, Perkiomen Township joined with five neighboring municipalities to create the Central Perkiomen Valley Planning Commission. The six municipalities involved are pursuing regional goals with the intent to help guide growth to where it is best suited in the region.

Figure 1 Perkiomen Township's Regional Position



## TRANSPORTATION

The township is well served by the regional road network. Described below, four principal arterials extend through the township: Route 29, Route 113, Township Line Road, and Route 73.

Route 29 is the most significant as the spine of the township as well as a major north-south county road. It has direct access to the Route 422 Expressway, which provides township residents with direct access to King of Prussia, a major retail and employment center, the Pennsylvania Turnpike and the cities of Reading and Philadelphia. Also, surrounding the Route 29 and Route 422 interchange, in the heart of this growth corridor is a pharmaceutically based employment center. The location of several major drug research companies located there in Upper Providence Township has transformed the rural landscape to a business campus. Continuing development of the intersection of Route 29 and Route 422 is expected.

Route 113 also extends north-south through the county. It's direction meanders however, and at one point in Perkiomen it changes direction and runs east-west. It intersects Route 29 in the village of Rahns. Route 113 provides the township with access to Phoenixville in Chester County and to Perkasie in Bucks County. Route 113 is designated a Heritage Corridor on which efforts are underway to protect historic character.

Township Line Road serves as the township's western border with Limerick Township. It terminates at a "T" intersection near the northern border. At this intersection, Limerick Road provides access to Schwenksville, where it connects with Route 29. Township Line Road also has a connection to Route 422, providing residents with direct expressway access at the Royersford interchange.

Route 73 is a major east-west county road. Opened in 1715, it is historically the main route to Philadelphia. It intersects with Route 29 below Schwenksville where the creek divides the township. Eastwardly, it runs through Blue Bell near the Montgomery County Community College and the Fort Washington Office Center. Westward it runs through the Boyertown area and on into Berks County. These roads provide the bulk of the regional transportation network for Perkiomen. Public transportation is virtually non-existent. The Southeastern Pennsylvania Transportation Authority (SEPTA) does have a bus line, which runs between Norristown and the Graterford Prison on a limited schedule. In Perkiomen, stops are possible along Route 29.

## PARKS & OPEN SPACE

The township has two county-owned parks. Pennypacker Mills contains the historic house of former Pennsylvania governor, Samuel Pennypacker built in 1720, farmland, and a picnic area. The Central Perkiomen Valley Park, part of an extensive greenway, has a pavilion and a playing field. Both parks allow access to the creek.

Perkiomen also enjoys close proximity to several major regional parks. Evansburg State Park, which is primarily located in the neighboring communities of Lower Providence and Skippack, provides for mainly passive recreation opportunities based on its trail system. Valley Forge National Historic Park is accessible via Route 422. Besides its historic sites, it has walking and biking trails. The county's Upper Perkiomen Valley Park and Green Lane Reservoir are somewhat further away but linked to Valley Forge by the Perkiomen Trail which runs through the township for over 3.5 miles. These provide attractive destinations for a variety of recreational opportunities.

Also important to the township is the presence of the Perkiomen Trail which parallels the creek from the township border with Upper Salford in Spring Mount to Hunsberger Woods in Collegeville. This trail, already a great asset to the community, will grow in popularity and carry tens of thousands of people through the township annually.

The township's most significant natural feature is its namesake, the Perkiomen Creek. This creek, located at the township's eastern border, is part of a vast watershed that extends far beyond the county's border. Other prominent natural features include the wooded valleys and steep slopes in the vicinity of Miller and Otts Roads and the wooded stream valleys of Schoolhouse Run, Landis Run, and the Lodal Creek. Many of these features are privately preserved.

## EXISTING LAND USE ANALYSIS

This analysis focuses on the current land uses within the municipality, enabling a more in-depth focus of municipal land use patterns. In addition to the Existing Land Use Map shown in Figure 2, Figure 3 details the acreage of each category and the change from 1994 to 2006. These numbers are useful in understanding changes in land use patterns and help to identify potential open space and recreational needs.

## RESIDENTIAL

This is the largest land use category in the township. It accounts for 45% of the township's total land use. This is an increase of 30% since the 1994 analysis. The close proximity to existing and planned sewer interception lines was an important factor in the location of development. Figure 4 displays the location of many of the residential developments in the township.

Existing areas of high density development (5 or more dwellings units to the area) include Birchwood, Maple Hill, and Highland Manor. The villages also contain several multi-family conversions and are mostly zoned for higher density. Rahns, which is served by public water and sewer, experiences infill development. Graterford, which does not have public water and is only partially served by public sewer, has seen less development activity. Primarily zoned commercial or medium density (2-4 dwelling units per acre), it has one area that is zoned high density.

Areas of medium density are primarily three 1950 era subdivisions: Chetwin Farms, Brookwater Park, and Perkiomen Village. Some 1910 and 1920 era twins and singles located along Bridge Street between the village of Graterford and Seitz Road are also medium density. In the past several years, phases of Cranberry, Fox Heath, and Perkiomen Greene have also been constructed at medium densities.

The remaining residential areas within the township exist as low density. The least dense land lies north of the Perkiomen Creek. Of special note should be the low density area between Seitz Road and the township's border with Lower Frederick and Schwenksville. Containing several working farms it is arguably Perkiomen's most scenic area. Its mixture of stream valleys, steep slopes, and woodlands provide many scenic vistas and perform many important environmental functions.

## AGRICULTURAL

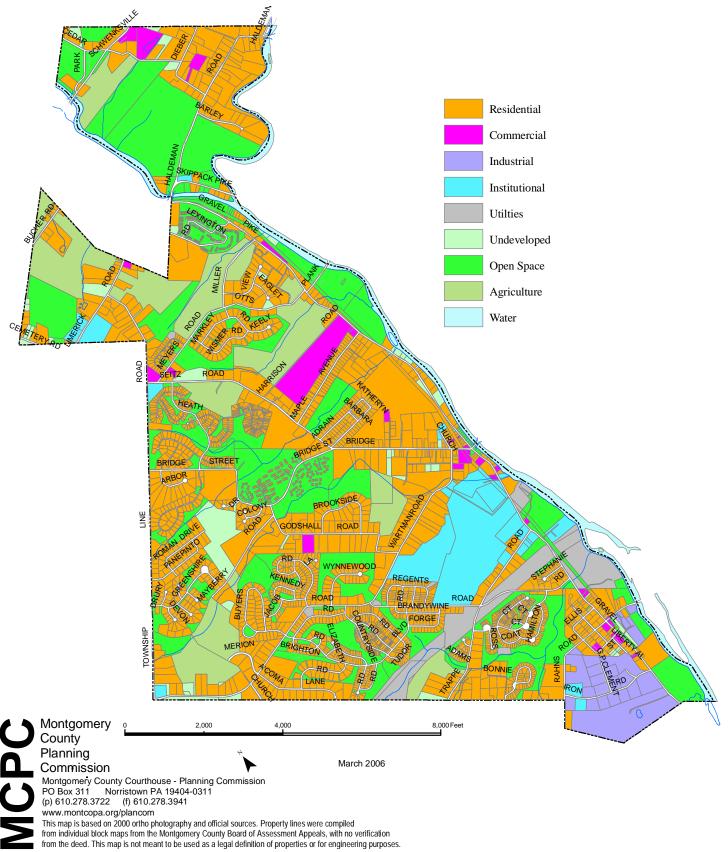
In 1994, this use was strongly positioned as the second highest land use in the township totaling almost 700 acres. Since, it has decreased by 54%, covering 320 acres on approximately ten tracts. As mentioned, most of the working farms are north of Seitz Road . This area also has the township's highest number of tracts under Act 319, a state preferential tax assessment program that allows tax breaks for agricultural property. The purpose of this preferential status is to reduce development pressure on agricultural lands. However, unless permanent preservation actions are taken on these remaining farms, the combination of decreasing agricultural profitability and increasing development pressure will likely result in their loss.

## COMMERCIAL

Only 2% of Perkiomen Township's land is used for either retail sales, service, or commercial office purposes. However, due to development activities in the past fifteen years an increased pressure for commercial development will likely grow. Commercial uses are concentrated in three areas of the township. The most intensive retail uses are located in the vicinity of the intersection of Route 29 and Harrison Road. This area, which includes the Landis Shopping Center and Ott's Greenhouse, comprises the majority of land devoted to retail use. The other two locations are concentrated in the villages of Rahns and Graterford. These are generally service establishments with relatively low customer turnover. All of these village retail service establishments are located along Route 29.

Few parcels in the township are exclusively used for office space. Those offices in the township are integrated into buildings with other retail or residential uses. Mixed use parcels make up 24 acres spread throughout the township, either in the villages or in converted homes.



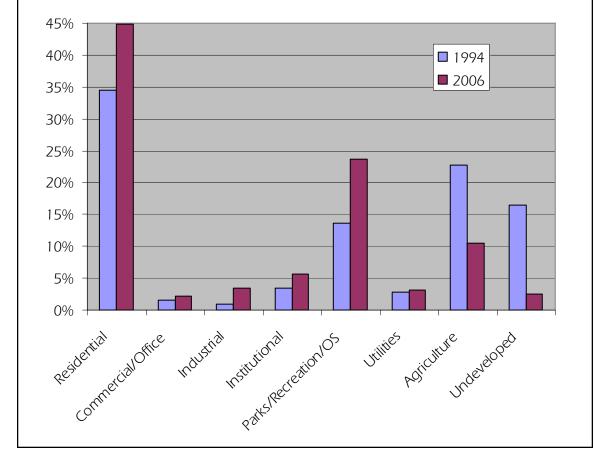


	19	1994		06	1994-2006	
land use	Acres	% Total	Acres	% Total	% Change	
Residential	1,051	34.5%	1,365	44.8%	29.9%	
Commercial/Office	48	1.6%	69	2.3%	43.8%	
Industrial	29	1.0%	105	3.4%	262.1%	
Institutional	106	3.5%	174	5.7%	64.2%	
Parks/Recreation/OS	416	13.7%	721	23.7%	73.3%	
Utilities	84	2.8%	96	3.2%	14.3%	
Agriculture	693	22.8%	320	10.5%	-53.8%	
Water	119	3.9%	119	3.9%	0.0%	
TOTAL DEVELOPED	2,546	83.6%	2,969	97.5%	16.6%	
Undeveloped	499	16.4%	76	2.5%	-84.8%	
TOTAL ACREAGE*	3,045	100%	3,045	100%		

#### Figure 3 Existing Land Use Comparison: 1994 & 2006

Source: Montgomery County Planning Commission Land Use Maps

\*Discrepancies due to digitization of parcel information



## Existing Land Use Comparison

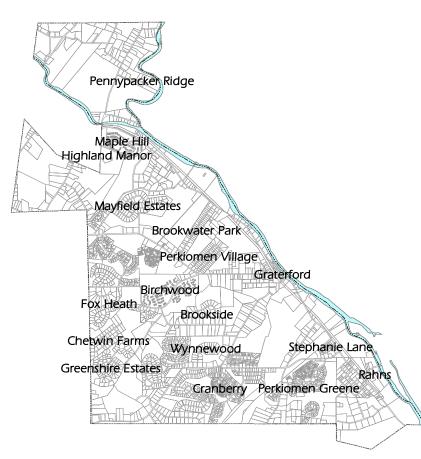
#### INDUSTRIAL

All of the industrial uses in Perkiomen are located in the village of Rahns or the adjacent Iron Bridge Corporate Center. Industries in the township include HYK Corporation (Rahns Construction) and Paragon Industries. The industrially-zoned land in the Iron Bridge Corporate Center is attracting new industry to the township. In total, industrial sites comprise over 100 acres.

## INSTITUTIONAL

All government buildings, schools, and religious uses are considered institutional uses. The existing institutional land uses have a total land area of 174 acres. The Perkiomen Valley School District has long been the largest institutional landowner in the township. The 136-acre site contains the High School, Middle School, Evergreen Elementary School, parking facilities, and substan-





tial outdoor recreational facilities. Recently, the school district purchased other parcels totaling 15 acres adjacent to the school. These parcels were purchased from a resident and the township's open space system. These new parcels will accommodate new playing fields as the existing ones will be used for school expansion. This project will add to the large multi-purpose campus that is the focal point for the school district.

Religious institutions in the township include the Graterford Bible Fellowship Church, Perkiomen Valley Brethren Church, and Christ Church. Keely's Cemetery, which dates from the early 18th Century, is a historically significant institutional use. The Perkiomen Watershed Conservancy is also located in the township along Route 73.

## UTILITIES

Utility land uses account for 96 acres of land, or 3% of the total land area in township. The primary utility uses include the Philadelphia Electric Company's transmission line right-of-way and their substation and pumping station located on Route 29.

## PARKS, RECREATION, & OPEN SPACE

Land devoted to public or private recreational uses represents 24% of the land in the township totaling 721 acres. This includes public recreational facilities which add up to 407 acres. The largest individual landowner of open space is the Montgomery County Parks Department with over 300 acres along the Perkiomen Creek and Pennypacker Mills. The township owns 113 acres, the majority of which surrounds the Perkiomen Greene subdivision.

Permanent private open space totals 288 acres and includes land set aside as part of various development projects. It is interesting to note that for every acre of residential land in the township, there is more than one-half acre of permanently protected open space, either public and private. Other open space areas with no permanent protection are owned by the Pennsylvania Live Steamers on Route 29 and the Rolling Turf Golf Club.

## DEMOGRAPHIC ANALYSIS

The demographics analysis consists of information relating to population, housing, and economics. The sources for most of the information are the U.S. Census Bureau and the Delaware Valley Regional Planning Commission (DVRPC).

Demographic characteristics provide insight when planning for open space preservation and recreational development. They can assist in determining not only how much land should be preserved, but also where. Additionally, this information can further assist a municipality in determining what type of recreational facilities, if any, should be placed in the preserved areas and the creation of public access standards.

## POPULATION

In the 1980's the township's population experienced a 2% decline. In the period between 1990 and 2000, Perkiomen's population increased by over 120% as shown in Figure 5. In terms of percentage, Perkiomen was the fastest growing municipality in Montgomery County over this period. In comparison, the county population grew by 11%. In 2004 population estimates, Perkiomen had approximately 8,270 residents, ranking it the 33rd most populous municipality of Montgomery County's 62 townships and boroughs, up from 46th in 1990. Neighboring Skippack grew by 13% and Upper Providence by 59% in the period between 1990 and 2004.

## POPULATION PROJECTIONS

The rate of municipal population change is an important measure of the magnitude change that has occurred over time. Typically, when there is a significant population increase, it can be attributed to either the provision of infrastructure (sewer, water, roads), new transportation routes, or industrial growth. This is the case Perkiomen Township.

Perkiomen Township's population will not expand at the same rate as in the 1990's. However, already its estimated 2004 population has met its 2005 population projection. DVRPC projects, based on current conditions and local trends, that the township's population will swell to 10,000 by 2030. However, as fewer acres are now available for development, and the Central Perkiomen Valley Regional Comprehensive Plan has been adopted, the growth rate will stabilize. It should be noted that the projections made by DVRPC as shown in Figure 6 do not fully take into account the zoning changes that are possible by the township with adoption of the regional plan.

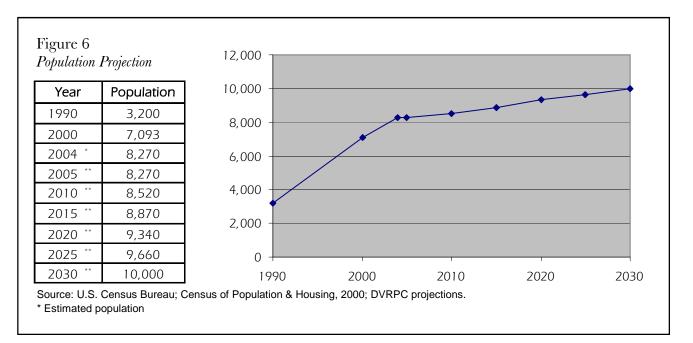
## HOUSEHOLD TYPES

Between 1990 and 2000 Perkiomen Township saw growth in all categories of household types with its extraordinary population growth. The household type that saw the greatest increase as a percentage of the whole were married couples with children. This also explains the increase in the average number of people per household as shown in Figure 7. While household size across Montgomery County decreased, Perkiomen's

Figure 5 Population Classification

	1990		20	00	1990 to 2000
POPULATION TYPE	Number	% Total	Number	% Total	% Change
Household Population	3,200	100.0%	7,087	99.9%	121.5%
Group Quarters Population	0	0.0%	6	0.1%	-
TOTAL POPULATION	3,200	100%	7,093	100%	121.7%

Sources: U.S. Census Bureau; Census of Population and Housing, 1990, 2000.



## Figure 7

Household Types

	19	1990		2000	
HOUSEHOLD TYPES	Number	% Total	Number	% Total	% Change
Married Couples with Children	383	32.2%	1,021	41.4%	166.6%
Married Couples with No Children	390	32.7%	693	28.1%	77.7%
Single Parent	73	6.1%	166	6.7%	127.4%
Other Family	58	4.9%	87	3.5%	50.0%
1 Person Non-Family Households	254	21.3%	400	16.2%	57.5%
2+ Person Non-Family Household	33	2.8%	101	4.1%	206.1%
TOTAL HOUSEHOLDS	1,191	100%	2,468	100%	107.2%
Average People per Household	2.69		2.87		6.9%

Sources: U.S. Census Bureau; Census of Population and Housing, 1990, 2000.

household grew to become the 6th highest in the county at 2.87 individuals per household. This compares to the county's figure of 2.54 individuals per household and 2.48 for the state.

Generally, when the household size is higher, reaching up to three, it indicates that there are many children within the community. For recreation purposes, this would mean that active recreation opportunities such as tot lots and ball fields would be preferred over passive recreation such as walking trails and jogging loops for an older population. Another important trend is the decrease in the number of households comprised of married couples with no children. This may indicate younger couples with no children yet, or older, empty nest families. More information about this can be found through the following analysis of the age demographics.

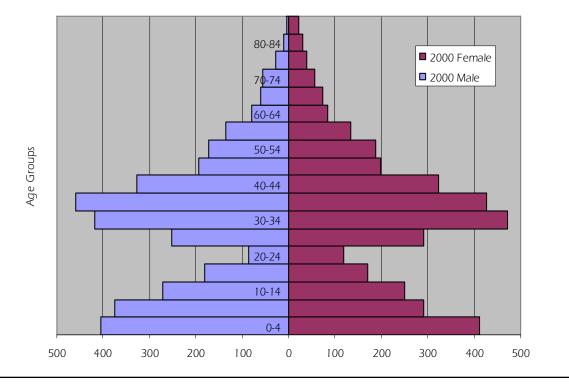
## AGE

Another important aspect of demographic study is the age characteristics of the population. Age characteristics can point out the future need for

## Figure 8 *Age Profile*

A = 0	19	90	20	00	1990-2000
Age	Number	% Total	Number	% Total	%Change
0-4	257	8.0%	816	11.5%	217.5%
5-9	210	6.6%	664	9.4%	216.2%
10-14	204	6.4%	522	7.4%	155.9%
15-19	228	7.1%	353	5.0%	54.8%
20-24	201	6.3%	205	2.9%	2.0%
25-29	311	9.7%	544	7.7%	74.9%
30-34	317	9.9%	891	12.6%	181.1%
35-39	286	8.9%	885	12.5%	209.4%
40-44	262	8.2%	651	9.2%	148.5%
45-49	212	6.6%	392	5.5%	84.9%
50-54	143	4.5%	360	5.1%	151.7%
55-59	140	4.4%	269	3.8%	92.1%
60-64	122	3.8%	163	2.3%	33.6%
65-69	110	3.4%	133	1.9%	20.9%
70-74	83	2.6%	112	1.6%	34.9%
75-79	62	1.9%	65	0.9%	4.8%
80-84	37	1.2%	41	0.6%	10.8%
85+	15	0.5%	27	0.4%	80.0%
Total	3,200	100.0%	7,093	100.0%	121.7%
Median Age	33.0	-	32.6	-	-

Sources: U.S. Census Bureau; Census of Population and Housing, 1990, 2000.



facilities such as schools, day care, retirement facilities, medical care, parks, and open space. The age structure of Perkiomen Township has shifted over the last ten years to yield a 198% increase of residents under 14 years of age. Figure 8 shows that this part of the population has grown from 21% of the population to over 28%.

Mimicking the increase in the numbers of children, the age group between 30 and 44 also rose 7% of total population. This has been brought on by the relatively affordable detached single-family dwellings and townhouses recently constructed. The proportion of all age groups above 45 years generally decreased in the 1990s. The result of this is a median age within the township that is one of the lowest in the county which compares at over 38 years. The demand for open space and, in particular, active recreational areas is at its highest.

### **EDUCATION**

The educational attainment of community residents shows not only the amount of schooling, but can also indicate the occupation and income level of the typical resident. In 2000, over 90%

of the township's population over 25 years of age had attained their high school diploma or GED. This is slightly better than the figure for the entire county. Perkiomen experienced a dramatic increase in the percentage of the population with graduate and professional degrees. This increase well outpaced population growth as did the percentage of residents holding bachelors degrees. Nearly two of five Perkiomen residents over 25 years of age hold a bachelors degree which is on par with the county.

### INCOME

During the 1990s the township saw a positive growth in two income categories. Both per capita and median household income (MHI) increased by roughly 25% based on 1999 adjusted figures. As shown in Figure 10, this also outpaced figures for the county that did not reach 5%. Perkiomen Is now tenth in the county for MHI and 27th for per capita income. This correlates to the fact that there are many young households in the township with two incomes. These figures, along with education levels, lend support to the trend of increasing numbers of residents with white color jobs.

#### Figure 9 *Education Level*

	19	90	20	00	1990-2000
EDUCATION LEVEL	Number	% Total	Number	% Total	% Change
Less than 9th grade	123	5.9%	86	1.9%	-30.1%
9th through 12th grade, no diploma	200	9.5%	316	7.0%	58.0%
High school graduate (includes equivalency)	757	36.0%	1,126	24.8%	48.7%
Some college, no degree	381	18.1%	878	19.3%	130.4%
Associate degree	175	8.3%	377	8.3%	115.4%
Bachelor's degree	348	16.6%	1,276	28.1%	266.7%
Graduate or Professional degree	116	5.5%	483	10.6%	316.4%
TOTAL POPULATION 25 YEARS AND OVER	2,100	100.0%	4,542	100.0%	116.3%

Sources: U.S. Census Bureau; Census of Population and Housing, 1990, 2000.

## Figure 10

Income Levels (1999\$)

INCOME	1989	1999	% Change
Per Capita	\$22,366	\$27,800	24.3%
Median Household	\$58,048	\$74,878	29.0%

Sources: U.S. Census Bureau; Census of Population and Housing, 1990, 2000.

Figure 11 Special Needs Groups

	19	90	20	00	1990-2000
SPECIAL NEEDS GROUPS	Number	% Total	Number	% Total	% Change
Persons 16-64 with Disabilities			692	9.8%	N/A
Persons 16-64 with Mobility and Self Care Limitations	31	1.0%			N/A
Over 65 Years of Age	307	9.6%	383	5.4%	24.8%
Under 18 Years of Age	800	25.0%	2,268	32.0%	183.5%
Income Below Poverty Level	106	3.3%	258	3.6%	143.4%
TOTAL POPULATION	3,200		7,093		121.7%

Sources: U.S. Census Bureau; Census of Population and Housing, 1990, 2000.

#### SPECIAL NEEDS GROUPS

These can be people with work disabilities, mobility and self care limitations, certain age groups, and people below the poverty line. These groups will need special attention with regards to community services, including recreational facilities. Of particular concern are accessibility, special programs, and the needs of the very young and the elderly. Besides making all areas handicapped accessible, the special recreational needs of seniors and children should be addressed.

Figure 11 shows the population of children under age 18 that now live in the township, makes up one third of the total population. Also of significance, nearly 10% of Perkiomen's population is of working age with some form of disabilities.

#### HOUSING TYPES

Changes over time in housing type distribution reflect patterns of residential development in a community. As communities grow and develop, greater diversity in the housing stock usually occurs, as is seen in many urban and suburban areas.

The composition of housing stock in Perkiomen Township has certainly changed in the past decade. The residential category is the single largest land use category in Perkiomen. It accounts for 45% of all the land in the township. Figure 12 shows that the number of dwelling units doubled from 1990 to 2000. The vast majority of these new units were single family detached dwellings, nearly 80%. As the price of land in the township has been relatively inexpensive, developers have been able to supply the market demand for single family detached homes. It should be noted that almost 300 new single family attached units have been added to Perkiomen Township's housing inventory, however, this category decreased as a percentage of all units.

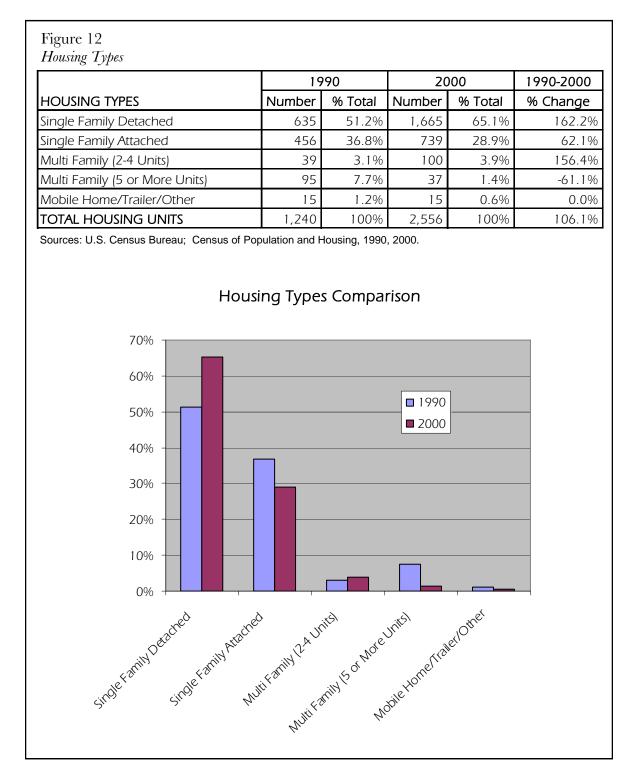
## OCCUPATION

Historically, the U.S. Census Bureau categorized occupations into three broad groups that combine more refined job descriptions, white collar, blue collar, and other. Although this has generally been a useful distinction in terms of income and educational requirements, the lines of distinction have become less marked as the nation's economy has moved from an industrial base to an information and service base. In 1990, 65% of the township's labor force was white collar. As of 2000, that figure rose to 75%. In Montgomery County, 73% of all workers are white collar.

It is important to note one other occupation-related trend for the township. Perkiomen Township has the highest average travel time to work in the county, at 36 minutes each way. Of the approximately 2,800 workers residing in the township, over 28% spend at least 45 minutes commuting each morning and afternoon. This is partly due to the fact that the top two places of employment for Perkiomen residents are Upper Merion and Philadelphia.

## **EMPLOYMENT FORECAST**

In recent years, the county has increased the number of jobs that are located within its borders, thus becoming an employment center as opposed to only a bedroom community for Philadelphia. Evi-



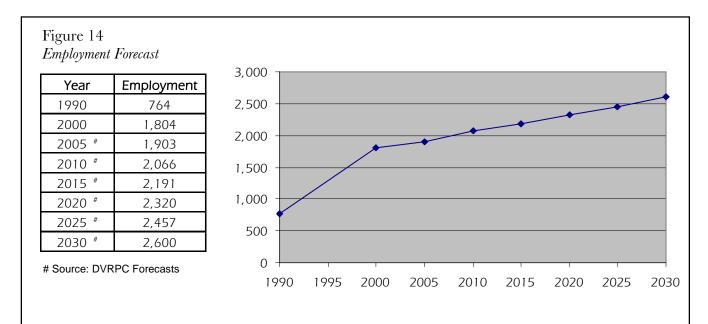
dence of this can be found in the office and industrial development that has taken place in the King of Prussia, Willow Grove, and Plymouth Meeting areas, and along the Route 422 corridor. Employment figures refer to jobs, not workers and can be used to inform the public of current and anticipated economic conditions. They can also be used as a basis for decision-making for potential employers or investors in the region. Because an area's growth and activity is related to its economy, employment data can also be tied to land use and transportation planning.

The total number of jobs within the township in 2000 was 1,804. DVRPC develops employment forecasts based on census data, past trends, the

Figure 13	
Labor Force by	Occupation

		20	00
	OCCUPATION	Number	% Total
	Management	661	17.4%
White	Professional	963	25.3%
Collar	Sales	477	12.5%
	Clerical/Office	748	19.7%
Blue	Construction	261	6.9%
Collar	Production/Transportation	386	10.1%
Collei	Farming	9	0.2%
	Services	301	7.9%
	TOTAL	3,806	100%

Sources: U.S. Census Bureau; Census of Population and Housing, 2000.



job market, and available land. The forecast for job growth within Perkiomen Township does not indicate any trend towards gaining significant employment opportunities. There is some projected growth but this is smaller than the projected population growth. Figure 14 shows a 44% increase in employment opportunities to 2,600 jobs by 2030. This compares to a similar increase in population over that same period. However, the majority of the township work force will continue to commute to employment opportunities outside of the township.

#### EXISTING MUNICIPAL PLANS CENTRAL PERKIOMEN VALLEY REGIONAL PLAN

As mentioned before, Perkiomen Township is a member of the Central Perkiomen Valley Regional Planning Commission which adopted their regional comprehensive plan in June 2005. A major goal of the regional comprehensive plan is to encourage investment in open space. The plan indicates a focus on the Perkiomen Trail and the creation of additional regional trail linkages, as well as methods to develop and improve existing parkland and to develop recreational opportunities in the region.

# CHAPTER 2 goals & objectives

In 1993, the Montgomery County Open Space Preservation Program provided an opportunity for municipalities to develop open space plans that reflect the needs of their residents. This chapter first describes the goals and objectives developed by Perkiomen Township under that program as written in the 1995 Perkiomen Township Open Space and Environmental Resource Protection Plan. The second part of this chapter describes the updated goals and objectives that will guide the creation and implementation of this 2006 plan.

## **1995 OPEN SPACE PLAN** GOALS & OBJECTIVES

In 1995, Perkiomen developed a series of goals and objectives to address issues regarding the preservation of open space and the protection of environmental resources. As a part of the update process required by the Montgomery County Green Fields/Green Towns Open Space Program, Perkiomen has evaluated previous goals and objectives to address whether they are still valid and to evaluate why some of the recommendations were not implemented. The original goals are listed below with their descriptions as stated in the 1995 plan.

### 1. PRESERVE REMAINING OPEN SPACE

Traditionally a rural community, Perkiomen is rapidly suburbanizing. Therefore, it is desirable to preserve as much of the remaining open space as possible. However, the township also wishes to maintain a balanced, viable tax base. Therefore, the township wants to concentrate primarily on acquiring residentially zoned parcels. Yet, of the remaining undeveloped or underdeveloped parcels, the most desirable, both for their natural features and proximity to residential areas, are zoned residential.

- Encourage the preservation of undeveloped or underdeveloped residentially-zoned parcels either through direct township acquisition or the acceptance of conservation easements.
- Encourage and assist other groups, such as land trusts or conservation groups to preserve land in the township.

## 1. PROTECT SENSITIVE NATURAL FEATURES

Protect sensitive natural features such as floodplains, woodlands, and steep slopes. The township, realizing that natural features serve important environmental functions, contribute to the quality of life, and add to the desirability of an area, wants to preserve and enhance areas containing these features.

- Establish a setback from stream corridors, ponds, or natural drainage swales to protect their banks.
- Continue to enforce the township's floodplains and steep slope ordinances and update them as necessary.
- Enforce and tighten up the township's subdivision ordinance, which encourages tree preservation and requires the replacement of removed trees.
- Work with the county on their creation of a greenway along the Perkiomen Creek.

#### 1. PRESERVE RURAL CHARACTER IN LOW DENSITY RESIDENTIAL AREAS

To many residents, Perkiomen is defined by its rural character. While recent development has altered or erased this character from many zones, the residentially-zoned (R-1) low density areas that retain these characteristics will be preserved as much as possible. This would maintain a link with the past, preserve livability, and enhance property values.

- Implement innovative zoning that helps to retain the rural character of these areas.
- Preserve rural character through setbacks and buffers from roads.

#### 1. RECREATIONAL NEEDS

While many of the newer high density residential developments have private recreational facilities, older areas, such as the villages or 1950 era subdivisions, lacks such facilities. The plan should ensure that the recreational needs of all the township residents are met. Community level parks are designed to meet the recreational needs of all

residents, while neighborhood parks are designed to serve the needs of the residents of a particular area.

- Create a new community level township park to supplant the existing small park at the township building.
- Work with the county on expanding the recreational facilities at the Central Perkiomen Valley Park.
- Encourage the creation of neighborhood parks in areas of the township found to be deficient of recreational facilities.

#### 1. TRAIL SYSTEM

Perkiomen is traversed by many utility easements. Some of these easements will be used to create a trail system that would connect neighborhoods and the villages. They also could be used to make public open space areas accessible to all residents. Also, the township should work with the county to ensure that the location of the Perkiomen Rail Trail is acceptable.

- Utilize utility easements to formulate a system of interconnected trails.
- Establish a dialogue with the county to ensure that township concerns regarding the rail trail are addressed and that the trail is beneficial to both the township and the region

## RECOMMENDATIONS

To accompany the goals stated above, the 1995 plan created specific objectives to help guide the township's open space decisions, regarding both the acquisition of property and non-acquisition methods. These recommendations are summarized in Figure 15.

The Open Space Committee has evaluated these goals and objectives and revised them through the audit process to help the township meet the current needs of local residents. This chapter will serve as the framework for Perkiomen's plan for open space preservation and protection of natural resources.

## ALTEMOSE TRACT DISCUSSION

In 1996, Perkiomen Township received a County open space grant for \$225,000 to purchase the approximately 10 acres that make up the Price and Altemose properties. The property is located at the intersection of Route 29 and the Lodal Creek, adjacent to both the Perkiomen Trail and the Perkiomen Valley High School property. In 2003, the School District asked permission to buy this open space property from Perkiomen Township in order to expand their school facility and construct more sports fields. The County approved the sale with several conditions

- 1. The district would pay the township the original sale value of \$260,000
- The steep slopes and riparian area of the Lodal Creek corridor would be preserved through a conservation easement (approximately 2.75 acres)

- 3. An access easement would be conveyed to the county for a future spur trail from the Perkiomen Trail
- 4. The township would use the \$260,000 to purchase new open space within six months.

In early 2006, using funds from the sale of the Price and Altemose tracts to the school district, Perkiomen Township purchased two new open space properties. The Stephanie Lane tract forms a connection to the Perkiomen Trail for several existing developments. The Demeno tract preserves a missing piece of the open space puzzle in the Spring Mountain area.

Figure 15
1995 Open Space Plan Recommendations

	Proposed Action	Status - 2006
	Acquire the Altemose Tract	Owned by Perkiomen Valley School District with a conservation
		easement. Demeno and Stephanie Lane tracts purchasedin 2006.
	Acquire the Price Tract	Owned by Perkiomen Valley School District with a conservation
Ľ		easement. Demeno and Stephanie Lane tracts purchased in 2006.
quisition	Accept dedications of open space, particularly below Seitz Road	Open Space protected through Brookside, Greenshire Estates, Cranberry,
qui		& Perkiomen Greene in this portion of the township.
Ac		Montgomery County Parks has expanded its open space acreage around
		Spring Mountain, Pennypacker Mills, and the Perkiomen Trail.
	Create a park near the intersection of Otts, Meyers, and Miller	The site of Maywood Estates, this cluster development has significant
	Roads	open space and a loop trail.
	Create open space linkages on existing public lands and to the	Trails exist on various open spaces as constructed through the land
	Perkiomen Trail	development process.
ion	Draft and adopt a mixed use village zoning district for Graterford	Village Commercial - Residential VCR-2 District adopted in 2001.
uisitior	Draft and adopt zoning for resource and open space protection	Riparian Corridor Conservation, Steep Slope Overlay, and Floodplain
cdr		Conservation Districts adopted in 2001.
A-n	Draft and adopt subdivision provisions for resource and open	Landscaping and woodland management requirements adopted in
No	space protection	2001.
	Draft and adopt an improved cluster ordinance	Open Space Residential Overlay adopted in 2001.
	Begin a dialogue with the county regarding the Perkiomen Trail	Perkiomen Trail is complete.

## GOALS & OBJECTIVES

The Open Space Committee has evaluated the goals and objectives of the previous plan and revised them to reflect what was discussed during the audit process. Updated goals and objectives as developed by the Township Open Space Committee are include here to describe the new direction Perkiomen Township plans to take to preserve open space and natural resources. Four goals are provided, each followed by a series of objectives. An overarching theme these goals pursue is an open space network that serves the community's diverse needs in a sustainable way. These are not prioritized in any order.

#### PRESERVE REMAINING RURAL LANDSCAPES

- A. Preserve undeveloped land where it remains to retain a connection to Perkiomen Township's rural heritage
- B. Preserve farmland where development pressure is greatest and land is productive
- C. Support farmers as they maintain agriculture as a productive industry

#### PROVIDE ACTIVE RECREATION OPPORTUNI-TIES FOR RESIDENTS

- A. Develop parks with playing fields, courts, and other facilities to accommodate organized, active recreation
- B. Develop partnerships with neighboring municipalities and the Central Perkiomen Valley region to develop greater recreation opportunities
- C. Add specific active recreation requirements to the land development process
- D. Cooperate with the School District and County Parks Department to maximize use of existing facilities
- E. Create partnerships with private landowners to establish active recreation sites

#### LINK EXISTING OPEN SPACE

- A. Develop an interconnected linkage network using the Perkiomen Trail as an anchor
- B. Partner with local businesses and institutions to maximize open space opportunities and access
- C. Require strong pedestrian connections between land developments and existing trails
- D. Cooperate with regional efforts to build connections across the landscape

#### PROTECT NATURAL RESOURCES

- A. Preserve lands on which sensitive natural resources exist and deserve protection
- B. Adopt regulations that further add protection to natural resources
- C. Provide public access to natural areas while ensuring a high standard of protection

## ACTIVE & PASSIVE RECREATION

In regard to open space goals and existing use, it is important here to establish the difference between active and passive opportunities. The presence of the Perkiomen Trail, its various uses, and its varied surrounding land uses makes this categorization difficult in Perkiomen Township. The definition given here is arguable, but for purposes of this plan, the following descriptions will hold.

For the remainder of this plan, the term "active open space" will generally describe land used and managed for organized activities. These areas see relatively intense use for athletic activities such as soccer or tennis, cultural activities such as a band shell, or as playground equipment.

The term "passive open space" will refer to land that may or may not be used for recreation. It may act to protect natural resources or screen land uses. Recreation that may occur in such areas may include low intensity activities such as birding and casual hiking that have a minimal impact on the landscape and require relatively little maintenance.

Trails are also included in the definition of passive open space. Neighborhood trails are used for occasional pedestrian use and therefore require little management from week to week. However, in the case of the Perkiomen Trail, although it can be the site of intense use, this use is decentralized as trailheads are well dispersed along the route. Management costs are also relatively low for such a use as the trail is already established.

# CHAPTER 3 EXISTING PROTECTED LAND

A key component of the open space plan is a review of existing protected land. An inventory of existing conditions, along with an assessment of future needs, is necessary for formulating many of the plan's goals and objectives. Existing protected land refers to land preserved for active or passive recreation use or for environmental conservation purposes. In addition to municipally-owned areas, it can include land preserved by private conservation groups, agriculture, schools, and private open space preserved as part of residential or non-residential development.

This chapter identifies existing open and recreational land in Perkiomen and separates it into two categories of protection: permanently and temporarily protected land. Naturally, there are many benefits when land is permanently protected. Temporarily protected land also makes an important contribution to the overall recreation base and open space network of a community by preserving open space, conserving significant natural features, and providing recreation facilities that may not require municipal involvement in maintenance. However, temporarily protected land can easily be lost. In evaluating open space needs, this distinction is important, as is the goal of increasing the amount of permanently protected land and developing it wisely for the benefit of future generations. Existing open space, both permanently and temporarily protected, is described below and presented in Figures 16 and 17.

## PERMANENTLY PROTECTED LAND

In total, over 700 acres are permanently preserved in Perkiomen Township. While this is a significant acreage, these open space parcels often offer little recreation potential. The following discussion of these parcels places them in three categories based on ownership: township, county, and private.

## TOWNSHIP OPEN SPACE

Perkiomen's existing system of parks and open space is comprised of eleven sites totaling 113 acres. Of this acreage, all but the three acres, located near the township building, are considered passive open space or currently used for buffering purposes. The following is a brief description of these tracts.

**Demeno Tract** (5.9 acres) - This generally wooded tract in the northern corner of the township is part of a larger block of open space preserved by Montgomery County, Schwenksville Borough, and Upper Salford Township surrounding the ecologically significant Spring Mount and the historic Spring Mountain House.

Lexington Road & Perkiomen Trail (>0.1 acre) -Located north of Lexington Road on Gravel Pike and adjacent to county open space, through this small site runs the Perkiomen Trail.

Huber Park (16.8 acres) - This relatively steep, undeveloped tract of open space protects the headwaters of a stream that originates near Township Line Road and enters the Perkiomen Creek above Miller Road.

**Graterford Bridge** (1.1 acre) - Located along the Perkiomen Creek, this strip of open space is located immediately to the north of the Graterford bridge. It complements other land along the creek owned by Montgomery County.

**Exmoor Drive** (>0.1 acre) - This small site is located at the end of the cul-de-sac on Exmoor Drive and borders a woodland.

**Mayberry Road** (7.7 acres) - Located along Township Line Road, this site contains a gravel parking lot and the Lodal Creek corridor. It was purchased by the township in 1971. Wynnewood Drive (22.3 acres) - Surrounding a development of approximately 25 homes on Wynnewood Drive, this preserved land is relatively open with a trail connecting to Eisenhower Lane.

**Myers Park** (3.3 acres) - This site, located at Route 29 and Trappe Road adjacent to the township building has a pavilion and playground equipment.

**Stephanie Lane** (2.2 acres) - This open space protects part of a stream corridor and buffers homes from the PECO Energy corridor. It will eventually connect several existing communities to the Perkiomen Trail.

**Ellis Road** (0.1 acre) - This parcel is located just north of Ellis Road on Rt 29 in the village of Rahns.

Perkiomen Greene (53.3 acres) - The largest township-owned parcel makes up the open space surrounding the Perkiomen Greene development. This acreage holds the floodplain of Schoolhouse Run and one of its tributaries for just less than a mile. Much of this stream is lacking a riparian buffer. Steep slopes are also preserved in this public open space.

## COUNTY OPEN SPACE

The 302 acres owned by Montgomery County in Perkiomen Township help make up the Perkiomen greenway. On the north side of the Perkiomen Creek, the county owns over 159 acres where two park nodes exist within the township. The first is where the county has located a regional trailhead at Cedar Road for the Perkiomen Trail. The second is the historic Pennypacker Mills which includes a nearby boat launch between Skippack Pike and the Perkiomen Creek.

On the south side of the creek the Central Perkiomen Valley Park begins. Through this linear park runs the Perkiomen Trail for over three and a half miles within the township. Plank Road straddles the heart of this park. Located here is an old mill house used for special events, a tot lot, playing field, and maintenance building. Continuing downstream, across from the Perkiomen Valley High School, is a large gravel parking lot that serves a softball field near the creek and as another popular trailhead. Finally, near the southern border of the township lies Central Perkiomen Valley Park that preserves the floodplain extending into Collegeville Borough.

## PRIVATE OPEN SPACE

Perkiomen has a great deal of private open space that is permanently protected. All of the 286 acres preserved by homeowners associations are products of the development process. These lands are most likely deed restricted to remain as open space. However, because of the important role these lands play on the landscape, protection status should be assured. No land is preserved resulting from efforts conducted by conservation organizations or land trusts.

Maple Hill (22.4 acres) - A townhouse development that was built in phases between 1972 and 1990, its open space includes a tot lot, basketball court, swimming pool, and a wooded hill.

**Mayfield Estates** (27.5 acres) - This open space includes a walking trail and the headwaters of the stream that eventually runs through Central Perkiomen Valley Park near Plank Road.

Fox Heath (39.8 acres) - A planned residential development (PRD), its open space includes several tot lots, two playing fields, a stream valley, and buffer areas.

**Pennypacker Ridge** (17.4 acres) - This large, contiguous area preserves over one-quarter mile of the stream corridor of the Landis Run, a tributary to the Perkiomen Creek.

**Birchwood** (70.2 acres) - A development of townhouses, twins, and singles, its open space includes a large multipurpose field, tennis courts, woodlands, and stream corridors. Much of this open space acts as resident's lawn area, maintained by the homeowners association.

Welsh Road (9.0 acres) - This open space includes steep slopes and the stream corridor of the Landis Run that confluences with the Perkiomen below Maple Avenue.

**Brookside** (14.1 acres) - Continuing the stream corridor from Birchwood, this acreage preserves woodlands and steep slopes.

**Greenshire Estates** (12.8 acres) - This acreage buffers the yards of the approximately 70 dwelling units in this development.

**Cranberry** (72.4 acres) - Another PRD, this open space includes tennis courts, a basketball court,



Central Perkiomen Valley Park looking north towards Spring Mount

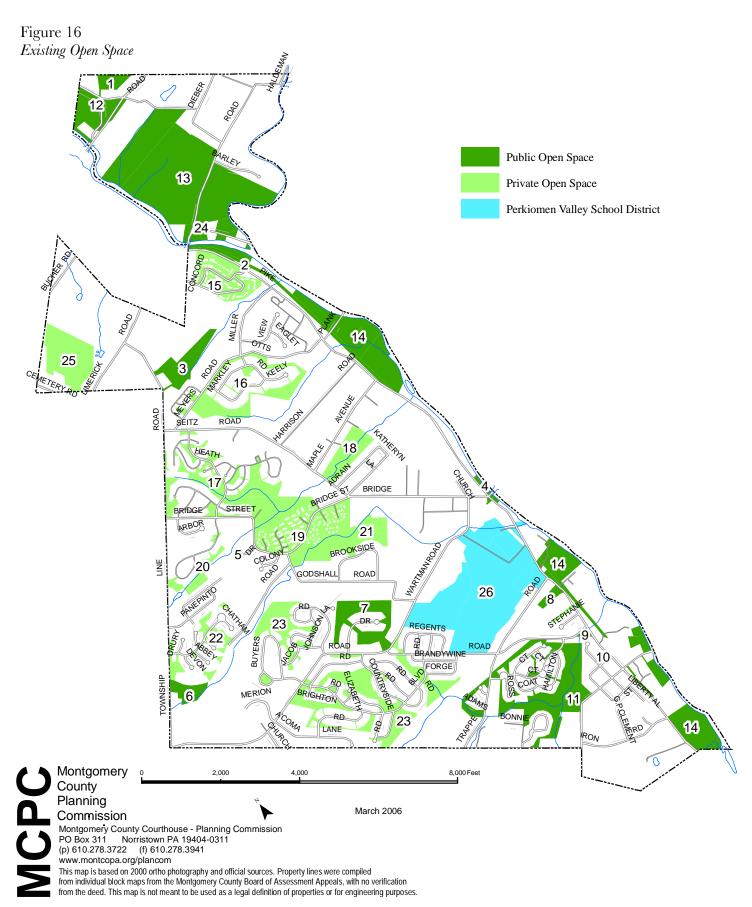


Figure 17	
Existing Public, Private,	& Institutional Open Space

Protection Type	Ownership	Site Number	Name	Acreage	% of Open Space
Permanent	Township	1	Demeno Tract	5.9	
		2	Lexington Road & Perkiomen Trail	0.1	
		3	Huber Park	16.8	]
		4	Graterford Bridge	1.1	]
		5	Exmoor Drive	0.1	
		6	Mayberry Road	7.7	
		7	Wynnewood Drive	22.3	
		8	Myers Park	3.3	
		9	Stephanie Lane	2.2	]
		10	Ellis Road	0.1	]
		11	Perkiomen Greene	53.3	
			SubTotal Township	112.9	10%
	County	12	Cedar Road Trailhead	18.3	
		13	Pennypacker Mills & surroundings	158.6	
		14	Central Perkiomen Park & Perkiomen Trail	125.1	
			SubTotal County	302.0	27%
	Private	15	Maple Hill	22.4	
		16	Mayfield Estates	27.5	
		17	Fox Heath	39.8	
		18	Pennypacker Ridge	17.4	
		19	Birchwood	70.2	
		20	Welsh Road	9.0	
		21	Brookside	14.1	
		22	Greenshire Estates	12.8	
		23	Cranberry	72.4	
			SubTotal Private	285.6	26%
Total Permanent Open Space			700.5	63%	

Temporary	Institutional	24	Perkiomen Watershed Conservancy	1.3	
	Private	25	Rolling Turf Golf Course (Act 515)	31.2	
			Act 319 Parcels (10 tracts)	340.8	
	Institutional	26	Perkiomen Valley School District (138 total acres)	45.0	
			Total Temporary Open Space	418.3	37%
			Total Open Space	1,118.8	100%

Sources: County Board of Assessments; MCPC field checks, 1994, 2004

baseball field, and playground equipment. It also includes a stream valley and buffer areas and is adjacent to the some of the school district's playing fields.

## TEMPORARILY PROTECTED LAND

Over 400 acres in Perkiomen Township are temporarily protected in some form. These areas are great resources that help maintain some of the township's rural character. However, these parcels risk development in the future and permanent forms of preservation should be considered. The following is a discussion of these temporarily preserved lands and their current use.

## INSTITUTIONAL

Perkiomen Township has a significant amount of open space temporarily protected by several institutions. The Perkiomen Valley School District's tract on Gravel Pike is currently undergoing a large expansion of the high school. Assuming acreage of open space and athletic fields stays constant after land development, approximately 45 acres will remain in a relatively open state. This open space will provide playing fields, basketball courts, open fields, and natural areas.

Of special note, 1.3 acres are owned by the Perkiomen Watershed Conservancy on Skippack Pike on which the historic barn is used as its office.



The Perkiomen Trail towards Schwenksville

These open spaces differ from those owned by the county, township, or homeowners association because they may not remain open forever. For instance, land use decisions for public schools are not made by the municipality. Therefore, as enrollment patterns in the region as a whole change, the local schools could be further expanded, reducing available open space.

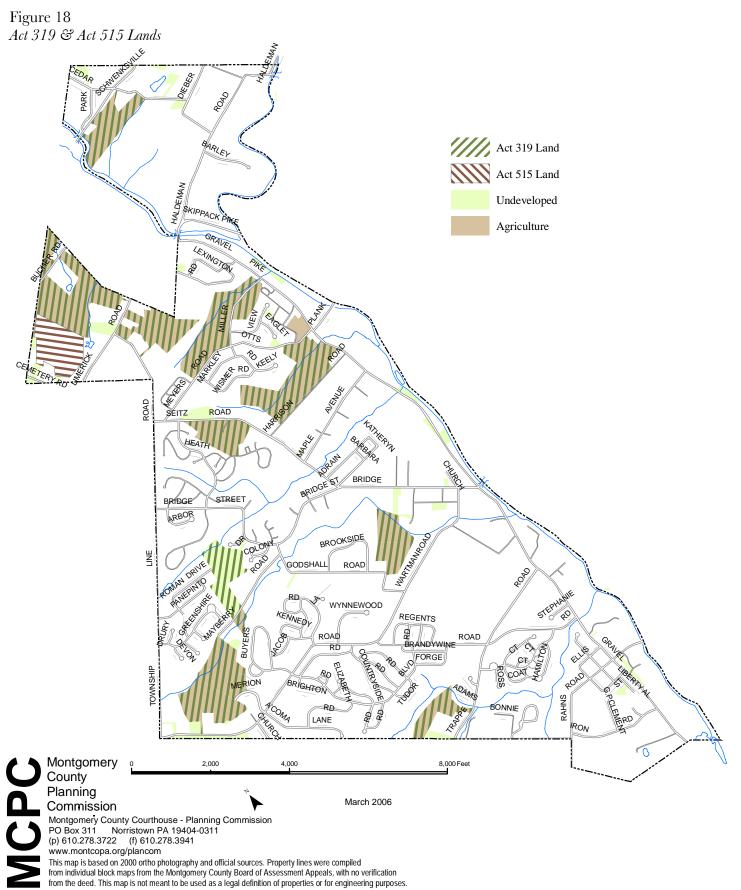
Despite their temporary nature, these sources of open space are still important to Perkiomen Township as they offer residents a greater range of choices to meet their recreational and cultural needs. They also add an aesthetic quality to the township by opening views and providing some relief to an increasingly developed landscape.

## ACT 319

The Pennsylvania Farmland and Forest Land Assessment Act was created to preserve land devoted to agricultural use, agricultural reserve, or forest reserve. This preferential tax assessment gives landowners a small incentive to keep the their parcel intact (minimum 10-acre parcel size). If a breach occurs, the landowner must pay roll-back taxes for the previous seven years plus interest. With the high demand for land, this penalty is not a significant deterrence, and therefore Act 319 provides minimal land protection. There are 10 tracts totaling 341 acres enrolled in this program. This is 11% of the township's land area. If lost, this would create a significant change in the local land matrix. These parcels are presented in Figure 18.

## ACT 515

The Pennsylvania Open Space Covenant Act was created to stabilize open areas through the use of real estate tax assessment techniques. It allows certain counties to covenant with landowners for preservation of land in farm, forest, water supply or open space uses. Some eligible lands can be as small as ten acres and must be consistent with the county or municipal open space plan. Unless properly terminated, covenants require the landowner to pay roll-back taxes for the previous five years plus interest. Act 515 provides little to no long-term land protection. The Rolling Turf Golf Course is the only parcel in the township that takes advantage of this Act. It comprises 31.2 acres along Limerick Road shown on Figure 18.



## DISCUSSION

In total, the township has a significant amount of protected land, with more than 1,100 acres either permanently or temporarily protected through ownership, tax assessment, or by virtue of the land's current use. This land provides Perkiomen Township residents with many opportunities to enjoy all that open space can offer – recreation, tranquility, beauty, and a sense of community. However, 37% of this open space could be lost to development in time if the land owners or land use changes. Another 26% is not publicly owned and may have access restrictions. Therefore, only 37% of all of the local open space is guaranteed to be there for the entire community in the future.

Perkiomen Township has positioned itself well to improve the open space network across the community. In November 2004, residents passed a referendum that adds a 1/8% earned income tax. Raising approximately \$250,000 a year, this tax will allow the township to be more active in open space preservation. If Perkiomen Township acquires open and recreational land and administers land development properly, residents can be assured that Perkiomen Township will be able to further enhance the open space network they enjoy today.

# CHAPTER 4 INVENTORY OF POTENTIALLY VULNERABLE RESOURCES

An important part of any planning effort is the identification of vulnerable resources. In Perkiomen Township, the unique qualities of the landscape contribute significantly to the township's distinct identity and to the overall quality of life. Perkiomen's natural resources serve to provide clean air and water, fresh produce, and essential wildlife habitat. Protecting these resources will benefit the township by preserving local character and protecting sensitive natural features. The natural, cultural, and historic features of the township also help to identify the opportunities and constraints for expansion of development.

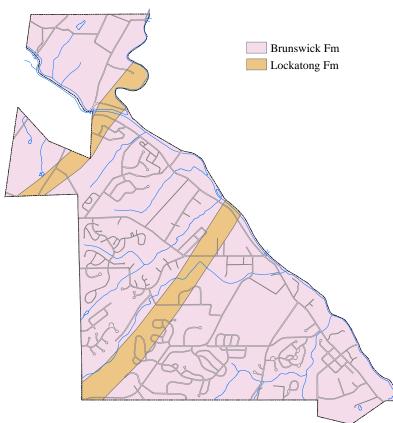
The community should identify these resources and others that are important for the health and welfare of the community, along with their importance for the preservation of the unique sense of place. Then, the community can prioritize these resources according to their vulnerability and local importance.

## GEOLOGY

The discussion of geology should center around three issues, groundwater availability, physical implications (slope), and depth to bedrock. The bedrock geology, along with the hydrological cycle, is responsible for the changes in elevation, steep slopes, location of watercourses, and aspect. As with any natural system, there are inter-relationships that work to provide a functioning system. For instance, slope has implications for vegetative communities, soils, and available sunlight to both the natural and the man made community.

The township's bedrock geology as shown in Figure 19, while mostly unseen except for surface outcrops, defines the character of all the overlying natural features. Bedrock geology, and the way it interacts with the hydrologic cycle, is responsible for changes in elevation, steep slopes, the location of watercourses, and soil characteristics.





Bedrock geology and its unique composition is a primary indicator for groundwater yields. For example, geologic formations having a higher clay content are less likely to have soils that provide significant infiltration and groundwater yields. Harder rocks, including those that have cooled from liquid rock or magma, will be less likely to form those fractures and joints that can contribute to higher groundwater yields. In Montgomery County, the differences in groundwater yield ranges from several gallons per minute (gpm) to over 100 qpm.

The bedrock geology that underlies Perkiomen consists of two formations: Brunswick and Lockatong. This is quite a common mix and is frequently found throughout the county.

### BRUNSWICK

This sedimentary formation underlies most of the northwestern half of the county. The Brunswick formation sustains moderate groundwater yields in most locations (up to 100 gpm). The yields may vary and secondary openings such as joints and fractures are the key to adequate water flow. This formation results in the flat or gently rolling topography that is found throughout the county. In addition, the Brunswick formation includes harder and more resistant rocks called hornfels. The hornfels resulted when the red shale of the Brunswick was super heated by super hot magma of the diabase intrusions to the north through a process called metamorphosis.

### LOCKATONG

This sedimentary formation lies in two large arcs that run perpendicular to the Perkiomen Creek. This formation is resistant to weathering and often forms ridges that are prevalent throughout the county. The Lockatong yields smaller water supplies for domestic use (5-15 gpm) which can also be highly mineralized and hard. Lockatong also has very poor septic absorption capacity and often lies close to the surface.

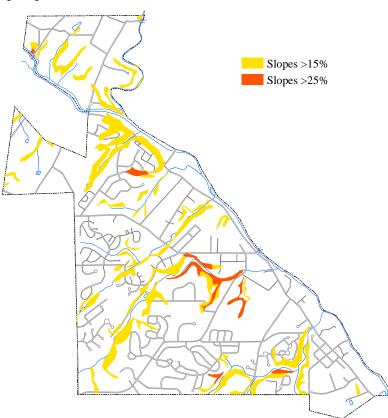
### TOPOGRAPHY STEEP SLOPES

Steep slopes within Perkiomen Township have been caused by the erosion of bedrock geology through the action of wind, rain, and chemical breakdown. As water flows over the landscape, it will break away portions of the ground and carry it elsewhere. Steep slopes are natural features of the landscape which cause limitations to development, provide scenic views, and are environmentally sensitive.

The degree of steepness and the existing soils found on steep slopes are a result of the precipitation, vegetation, and underlying geology. Maintaining the proper vegetative cover, along with minimizing development, on steep slopes will greatly reduce the risk to the public health, safety and welfare. Generally speaking, as the slope increases above 15%, the depth of the topsoil and the ability of the soil to support structures decreases. It is for this reason that maintaining a vegetative cover on steep slopes as well as minimizing the impervious covers on slopes is a township priority.

The steep slopes shown in Figure 20 are derived from the Montgomery County Soil Survey which

### Figure 20 Steep Slopes



classifies soils by slope. Most of the township lies in close proximity to steep slopes of between 15% and 25%. As shown, there are extensive slopes greater than 25% along Schoolhouse Run. It is important to note that Figure 20 is not a complete inventory of steep slopes in the township and field inspections should occur.

### WATERSHEDS & DRAINAGE AREAS

Water is arguably a community's most valuable resource. It is consumed by people and industry, enjoyed for recreation, employed in the assimilation of treated sewage, and integral to the scenic landscape. The average precipitation in the county is approximately 46 inches per year. Of this amount roughly 25% becomes runoff, 50% evaporates or is transpired by plants, and 25% replenishes groundwater supplies.

As the water finds its way through the township, it erodes the land, carries soil sediment, affects vegetation communities, and replenishes the groundwater. The topography of any community is a result of the interaction between the geology and the surface water as it makes its way across the landscape. The plants that are found in an area differ depending upon their location and the wetness of the soil. Finally, as water flows across the land it also enters the underlying aquifers by filtering through the soil and into the underlying bedrock.

Perkiomen contributes to five separate watersheds as shown in Figure 21. Four of these, the Lodal Creek, the East Branch, the Mine Run, and the Schoolhouse Run, ultimately drain to the fifth and largest stream, the Perkiomen Creek.

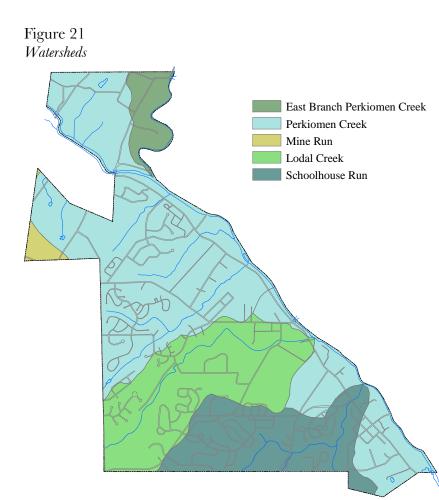
Because basins usually span municipal boundaries, an interrelationship exists whereby municipalities that are upstream contribute surface water flow to Perkiomen Township, while those downstream receive the township's flow. With this in mind, the township should aim to maintain natural conditions as they relate to water resources, such as preservation of open space and natural vegetation along watercourses and wetlands.

## SURFACE & GROUND WATER

There are two major surface waterways that run through the township. The Perkiomen Creek creates the eastern boundary of the township. This regionally important stream, the largest tributary to the Schuylkill River begins in Berks County and flows into the Schuylkill above Valley Forge. The East Branch of the Perkiomen which begins in Bucks County above Perkasie, flows as the northeast boundary of the township and into the main branch of the Perkiomen below Schwenksville.

The remaining tributaries in the township, including the Schoolhouse Run, Lodal Creek, and many streams that are unnamed, meander parallel to each other until they meet the Perkiomen Creek. These are shown in Figure 21.

Groundwater behaves much like surface water, flowing downhill like a stream, but at a much slower pace. Groundwater is tapped as a source of drinking water and for industrial purposes. The replenishment of groundwater occurs slowly as precipitation and, in some cases, stream water seeps through the soil, down into the underlying aquifer.



Much of the township relies on groundwater for its drinking water supply. Four large water supply wells exist that serve the greater Central Perkiomen Region. For this reason, open, undisturbed land is essential to groundwater recharge. Undisturbed, vegetated land retains precipitation and allows it to soak into the soil rather than running off the surface. In turn, impervious surfaces (roofs, driveways, etc.) prevent the infiltration of water into the aquifer and speed up the runoff potential.

### FLOODPLAINS & WETLANDS

The 100-year floodplain is shown in Figure 22. This is a hydrological feature that affects the health, safety, and welfare of Perkiomen's residents. Much of the time the floodplain is dry, but during significant storms the floodplain conveys and stores excess floodwater. Development within the floodplain reduces the carrying capacity of the watercourse and increases the height and destructive ability of floodwater. Floodplain areas are found along the entire length of both the Perkiomen Creek and East Branch. Flooding events that damage local infrastructure and private property may be the result of insufficient stormwater management within the township, land use upstream in other municipalities, or simply naturally occurring events. In the township's floodplain there are approximately 25 existing structures.

Wetlands, also shown in Figure 21, are important in minimizing erosion and water pollution, protecting water quality (temperature, chemistry, and velocity), and providing animal habitat. Well vegetated buffers along stream corridors and wetlands filter out nonpoint source pollutants, shade the stream, and provide wildlife habitat. Wetlands that filter, store, and infiltrate stormwater are frequently found along stream corridors and within floodplains.

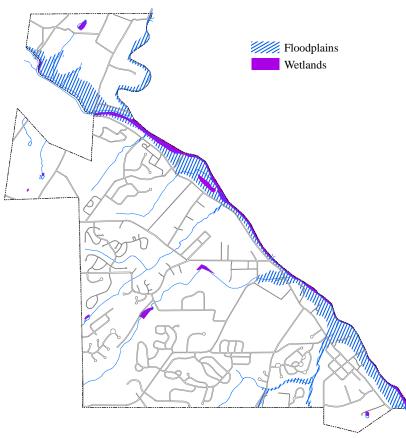
## SOILS

One of the most influential natural factors to consider is the township's soils. Shown in Figures 23, 24, and 25, local soils are the result of the hydrology and the weathering capacity of the underlying geology. They are also influenced by the orientation (north vs. south) of the land and the types of vegetation that grows on their surface. The following soils are discussed in this section: prime and important agricultural soils, hydric soils, alluvial soils, soils with poor septic suitability, and soils with a high infiltration capacity.

### PRIME & IMPORTANT AGRICULTURAL SOILS

The agricultural capability of soils is based on fertility, depth to bedrock and groundwater, texture, erodability, and slope. Based on these characteristics, soils are classified as prime, important, or other. Prime farmland includes deep, well drained, and moderately sloped soils that can support high yields of crops with little management. Soils of statewide importance (important agricultural soil) includes soils that will support cultivation, but require careful management. Often these soils, and the appropriate agricultural land use, can be preserved through state or county programs that are intended to keep the practice of farming alive. By retaining as much farmland as possible on parcels possessing these soils, the community can also preserve open space with scenic value. These soils are displayed in Figure 23.

### Figure 22 Floodplains & Wetlands



### HYDRIC SOILS

Shown in Figure 24, these are periodically wet soils in an undrained condition that often support the growth of wetland vegetation. In an undisturbed, undrained condition, hydric soils are almost always wetlands, with a seasonal high water table at or near the surface, and therefore are subject to regulation by the U.S. Army Corps of Engineers and the Pennsylvania Department of Environmental Protection (DEP). Since not all hydric soils are found in undrained conditions, not all hydric soils exhibit wetland vegetation. Hydric soils that have been drained for agricultural use is an example. Other soils that have hydric components are found in depressions, bottomlands, swales, drainageways and alluvial soils. These types of soils usually have a high water table and frequently pond. These soils should not be developed for reasons such as erosion potential, seepage from septic systems into the groundwater, and the inability to build solid foundations.

### ALLUVIAL SOILS

These soils are frequently, but not always, located within a floodplain as shown in Figure 24. They have been deposited by flowing water and are not stable because of their texture and composition. The presence of alluvial soils is only one indicator of a floodplain. Changes in tributary drainage areas or slope of the adjacent stream may create a floodplain that is either larger or smaller than the area of alluvial soils. An important aspect of alluvial soils is the fact that they are often aquifer recharge areas. These soils should not be developed because of their lack of stability, the potential for groundwater contamination, and aquifer recharge.

### HIGH INFILTRATION SOILS

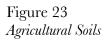
Soils can also be classified by hydrologic soil grouping. Based upon infiltration capacity, soils are classified as "A," "B," "C," or "D" soils. "A" soils are high in sand content and have the highest capacity for infiltration. Conversely, "D" soils are higher in clay content and have the lowest capacity for infiltration. In addition to understanding the ability of a soil to infiltrate, hydrologic soil groups also predict which soils will generate higher levels of runoff. In terms of runoff, the "D" soils, having the lowest levels of infiltration, will generate the most runoff. Montgomery County contains no "A" soils.

However, one area of "B" soils exists in the township on the northern side of the Perkiomen Creek. The greatest occurrence of these "B" soils exists within land preserved as part of the Pennypacker Mills site. These areas exhibit good drainage and can provide the highest levels of groundwater recharge. These are also shown in Figure 24.

### SEPTIC SUITABILITY

Soils that provide very limited potential or no potential for on-lot sewage disposal are found in all areas of the region, ranging in extent from small pockets to broad swaths Depth to groundwater or bedrock and the soil's ability to percolate water will affect on-site sewage disposal. Figure 25 shows the suitability for on-lot sewage disposal based on soil categories.

In areas not served by municipal sewer systems, soil suitability tends to restrict development to



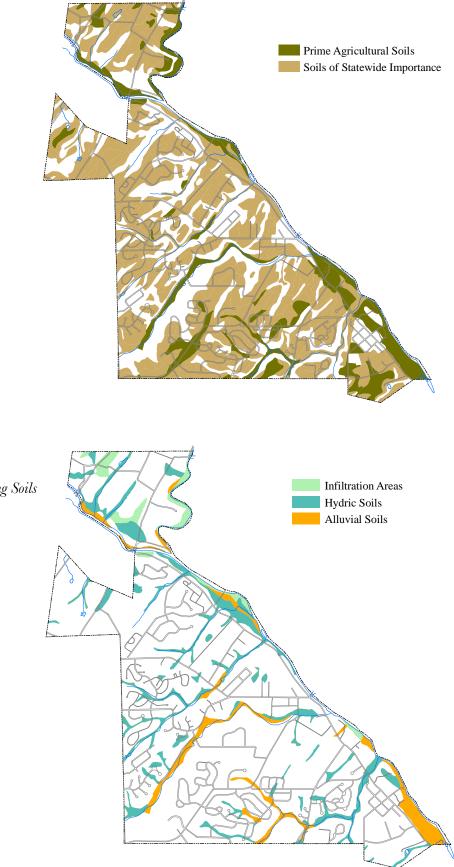


Figure 24 Hydric, Alluvial, & Infiltrating Soils

lower density uses served by on-lot systems or by various forms of community disposal systems, where appropriate. Such sewage disposal systems should help to recharge the groundwater supply. These include spray irrigation, sand mounds, and traditional in-ground systems.

However, as technology improves, soil suitability is becoming less important in determining development potential. Consequently, the township's comprehensive plan, zoning ordinance, and 537 plan should be consistent so that development follow patternsthe vision for the region and the township.

### VEGETATION & WILDLIFE WOODLANDS

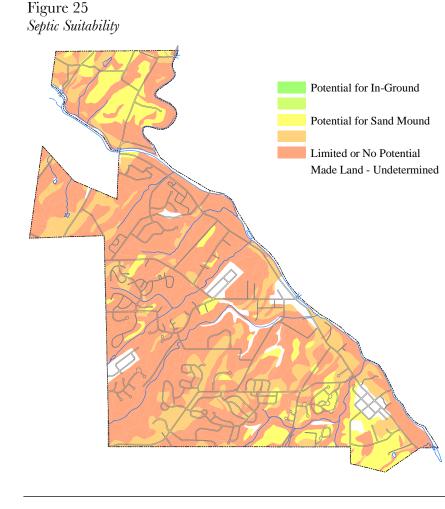
The original vegetation of Montgomery County was a dense forest of hardwoods which covered over 99% of the county. Oaks were the dominant species, but chestnut, tulip poplar, hickory, ash, red maple, and dogwoods were also present. Several hundred years of clearing and cultivation, and in more recent times the rapid development of houses and commercial facilities, have reduced woodlands to a shadow of their former extent.

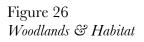
Woodland species depend on the soil, slope, and orientation. For instance, as a result of the short period of solar exposure, the soils on north facing slopes will tend to be cooler and moister than on south facing slopes. This aspect dictates what type of tree will be found in these areas, the north tending to be softwoods (evergreens such as pines and hemlocks) while the south slopes tend to have hardwoods (deciduous trees such as oak and beech).

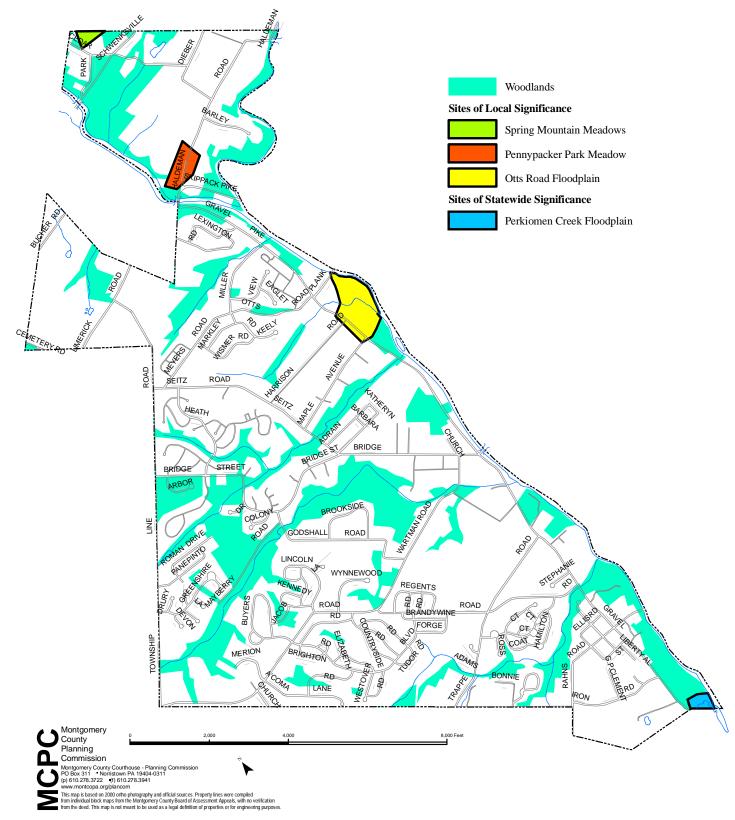
The presence of woodlands serves many purposes, both functional and aesthetic. Generally, woodlands prevent erosion, provide habitat for wildlife, provide buffers for surface and subsurface water courses, and offer recreational opportunities for residents.

While all woodlands are important, some of the most significant woodlands are those found along the streams. These riparian woodlands help absorb rainfall, shade the stream, provide food for aquatic organisms, and minimize the addition of sediment into the waterways. Although, some streams within the township are completely lacking a vegetated riparian buffer, significant woodlands exist along streams as shown in Figure 26. Often, these are protected as the result of preservation efforts through the land development process. On agricultural lands, farmers should be encouraged to enroll in programs that give conservation credits to those who protect the stream through buffering.

Another aspect of the woodland stands is their function as corridors which provide cover for wildlife movement, shelter, and migration. There are several examples of corridors within the township and every effort should be made to preserve these







areas. Hedgerows are also a form of corridor, but are usually not wide enough to provide the necessary "safe" cover for wildlife movement. The hedgerows do serve an important aesthetic purpose and lend an agrarian atmosphere to the township.

### HABITAT

The Montgomery County Natural Areas Inventory of 1997 defines 59 areas across the County as areas deserving special protection due to their unique ecological characteristics. Four areas within Perkiomen Township contain natural communities or features of high quality or exceptional diversity. One of these sites, the Perkiomen Creek Floodplain, exhibits qualities that give it statewide significance. The three other sites, the Spring Mountain Meadows, the Pennypacker Meadow, and the Otts Road Floodplain, are included in the inventory because of their local significance. These four sites are displayed in Figure 26 and described below.

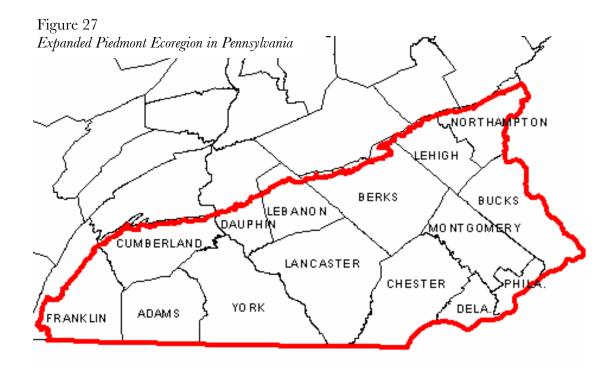
**Perkiomen Creek Floodplain** - A small population of an endangered plant was found in 1987. The floodplain forest habitat is marginal for this species but supports many other native floodplain species. Nonnative plants, such as garlic mustard, are a problem. The site also provides a buffer along the Perkiomen Creek. **Spring Mountain Meadows** - This site supports a diversity of butterflies. The meadows contain a variety of nectar plants such as ironweed, milkweed, thistles, etc. Historically, several butterfly species of special concern were found in this vicinity.

Pennypacker Park Meadow - Protected within a county historic site, adjacent to the Perkiomen Watershed Conservancy headquarters, the site is ideal for environmental education programs. It contains a diversity of native grasses and wild-flowers (big bluestem, Indian grass, swamp milk-weed, etc.) and provides good habitat for butter-flies. The site is an excellent example of some of the management options available to parks. The current mowing regime - perhaps once a year in late fall - provides a cost savings while providing a very scenic and rich assemblage of native plants and butterflies.

Otts Road Floodplain - Located north of Maple Avenue, this small, locally significant floodplain with gravel bars along the Perkiomen Creek contains willow, sycamore, false nettle, and wildflowers such as cutleaf coneflower and sneezeweed. The existing forest cover should be maintained. Eliminating vehicle access would also help to restore the site's quality.



Forested riparian buffers help stabilize the bank of the Perkiomen Creek



#### NATURAL LANDS TRUST SMARTCONSERVATION PRIORITIZATION PROGRAM

This is a project developed by the Natural Lands Trust and sponsored by DCNR, DEP, and the William Penn Foundation. It is a model that analyzes large quantities of spatial data about natural resources from across Pennsylvania's expanded piedmont ecoregion. This is shown in Figure 27. This includes data about native species habitat, impervious cover change, protected lands, greenway corridors and barriers, and impaired streams. The resulting map is a tool allowing local officials to make "educated decisions about how to prioritize between conservation projects."

For every area across this 15-county region, a value was given describing that site's relative priority status for preservation. As Figure 28 shows, 72% of the township has a relative conservation value greater than the median across the expanded Pennsylvania piedmont ecoregion. However, only 2% of the township's land area lies in the top 20% of all lands across this wide region. These lands exist primarily along the East Branch and the Perkiomen Creek above Maple Avenue. Perkiomen Township therefore has a great responsibility to manage the important remaining acreage within the township that retains some of the highest value habitat.

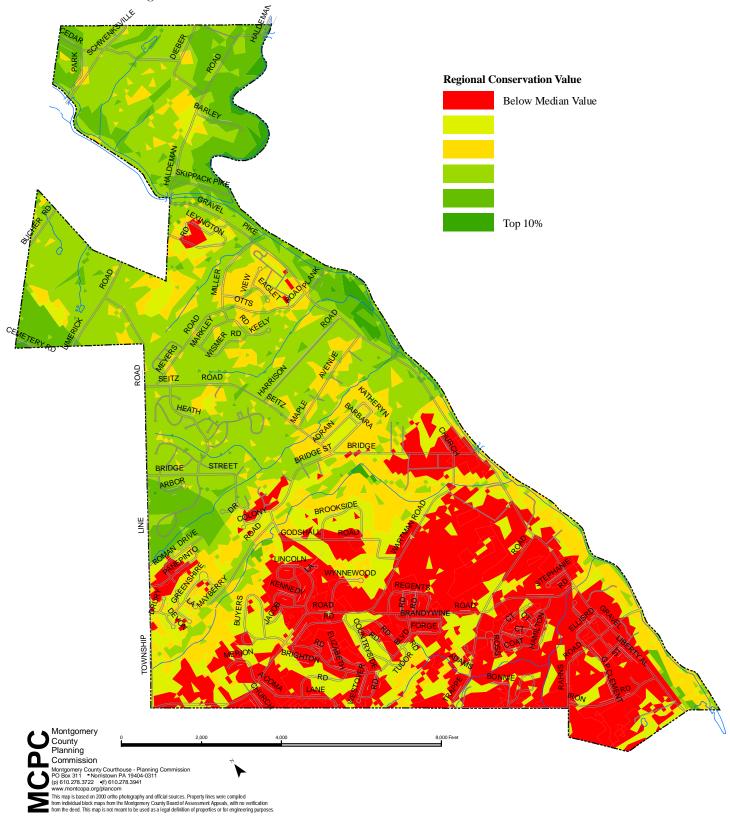
### HISTORIC & SCENIC RESOURCES HISTORIC SITES

Perkiomen has one property listed on the National Register of Historic Places, the Pennypacker Mills site was placed on the register in 1976. The primary significance of the site is its association with George Washington and his troops. After losing the Battle of Brandywine, General Washington and his troops encamped on the site, then a farm owned by the Pennypacker family. They stayed at the site from September 26 to 29, 1777. At least three soldiers are buried on the site. Their graves are marked by granite headstones.

Nearby Keely's Church (no longer extant) served as a hospital. The church's graveyard, now Keely's Cemetery, contains the bodies of several soldiers who died of their wounds. Washington's official headquarters was at the Peter Wentz Farm in Worcester Township.

Besides the site's association with George Washington and his troops, the large stone house preserved on the site was the residence of Samuel Pennypacker (1843-1917) who was Governor of Pennsylvania from 1903 to 1907. The house was organically constructed in 1720.

### Figure 28 SmartConservation Ecoregion Priorities



Sites of historical significance and listed in the county's Inventory of Historic and Cultural Resources (1975) include the following.

Skippack Pike Bridge - The bridge is primarily known for its proximity to the ruins of the old Ellinger Tavern, a site infamous for curious murders and other scandalous acts. In a tradition straight out of Washington Irving, a headless horseman has been held responsible.

**Pennypacker Mills–Site of the Mills** - In colonial times this site included a grist mill, saw mill, fulling mill and possibly a country store. Today, the archways for the mill race remain.

**Keely's Cemetery** - This graveyard dates back to the 1750s. The earliest grave stones are inscribed in German. A Lutheran Church once stood in the cemetery. It was used as a hospital by Washington's troops. The church has been razed.

**DuBois Farm** - The main house, a barn and other out buildings were built from local stone in the last half of the 18th century (the house dates from c. 1781). The DuBois family bought the property in 1716 from William Harmer, who received the property in 1703 from William Penn. The DuBois Family owned the property for 159 years.

John Mauchly (1907-1980) lived in the main house on the DuBois Farm from 1933 to 1946. While living in the house he developed ENIAC, the world's first electronic computer, at the University of Pennsylvania. As the residence of a significant figure in the development of the computer, this house has significance that extends far beyond the township. It also deserves a National Register Listing and should be marked with a plaque.

It should be noted that the township has additional sites of local interest. There are several old stone houses along Route 29. One, near the corner of Harrison Road and Route 29, has a date stone from 1754. The MacElhenney house on Mayberry Road dates from at least the 1750s and perhaps earlier. The village of Rahns contains some interesting mid-Victorian houses and buildings, while the village of Graterford has several buildings (Perkiomen View Hotel and the Mrs. Fly's Pies building) that were popular dance halls. These sites demonstrate that, while they are not included in reports or studies, they also contribute to the historic fabric and unique character of the township. All told, sixteen

sites have been identified as having historical significance as shown in Figure 29.

### SCENIC RESOURCES

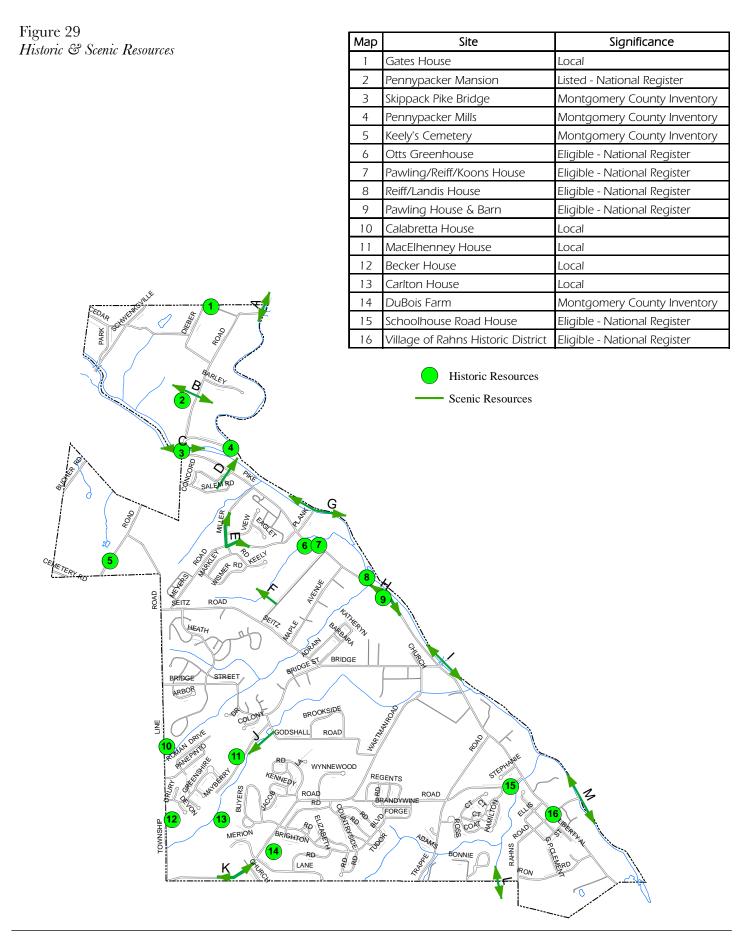
In the past, the analysis of the landscape for its scenic quality has been left out of land use planning because scenic beauty is difficult to assess objectively. This is changing as residents realize that scenic beauty is a tangible community resource that has value and any loss of unique views would have a negative impact. The key to protecting visual quality is creating a nexus between environmental protection and natural resource conservation. Roadways traversing areas with scenic attributes also contribute to a community's open space system because they provide a way to view its scenic resources and in some cases also serve as recreation routes for walkers, bicyclists, and joggers.

In general, scenic quality of viewsheds is associated with waterbodies, pastoral scenes, woodlands, and unique natural landforms. These views can significantly add to the community's sense of place, which in turn contributes to the resident's overall quality of life. In fact, the Montgomery County Comprehensive Plan of 2005 identifies Route 29 as an Aesthetically Unique Scenic Road.

Complementing the scenic qualities of the farms and woods of Perkiomen, are the numerous historic buildings and structures. The scenic qualities of the township's farmland, cannot be separated from the historic farmsteads and crossroads villages found throughout the landscape. Farmhouses, barns, wagon sheds, and associated outbuildings were built largely from stone, brick and lumber from the Perkiomen Valley, and in some cases from materials found entirely within the township.

The following list details scenic resources that are generally considered significant. The location of these scenic resources are also shown in Figure 29.

1. Garges Road Bridge - Located at the townships border with Skippack, this bridge over the East Branch of the Perkiomen Creek provides scenic views of the corridor of the east branch of the Perkiomen Creek.



2. Haldeman Road - This stretch of road is an excellent example of a rural landscape. Running through the Pennypacker Mill Site, there are views of farm fields, meadows and the historic farmhouse. In the distance a view of Spring Mount is available. Given the parkland on both sides, this view will be preserved.

**3. Skippack Pike Bridge** - This bridge provides a scenic view of the Creek. Looking either upstream or down, one can get a view of the creek that must be very similar to how it looked prior to settlement. This view illustrates the importance of woodland preservation along stream banks. The section of Route 29, immediately south of the bridge, is nicely wooded.

**4. Lexington Road** - At the top of this road, in the Maple Hill development, there is an expansive view of the Perkiomen Creek and its corridor.

**5. Miller & Otts Roads Vicinity** - As mentioned, the steep wooded slopes, stream valleys and rolling terrain, make this one of the most scenic areas in the township. The view down Miller Road from the Meyers Farm is especially picturesque.

**6.** Harrison Road - The view north from Harrison road is of a pleasant rolling pasture, a stream valley and some woodlands. It a view that all too rapidly disappearing from the township.

**7. Plank Road Bridge** - Another scenic view of the creek's corridor is possible from the Bridge.

8. Route 29 North of Graterford - A wooded stretch of Route 29 that is particularly scenic and is listed in the county comprehensive plan as such. Similar to the wooded view in 3.

9. Graterford Road Bridge - See 7.

**10. Lodal Creek at Godshall & Mayberry Roads** - Looking west there is a nice view of a wooded stream corridor.

**11. Wartman Road–West of Kagey Road** - This segment of Wartman Road provides an example of when development is buffered from view. The appearance is of a wooded, rural road, but behind the trees are single family houses. An excellent example of retaining rural character with sub-urban development.

**12. Betcher Road** - The stretch of road is nicely wooded and rather picturesque as the road dips for the stream valley of a tributary of the Schoolhouse Run. Similar to the 10, this is a nice view of a wooded stream corridor.

13. Route 113 Bridge - See 7.

## DISCUSSION

In many parts of Perkiomen Township, the state of existing development leaves few natural resources remaining for preservation or protection. Cultural, natural, community, and scenic resources will only become more vulnerable as development continues. Opportunities to integrate neighborhoods, trails, and business districts will become more limited. It is important now for the township to begin to guide new development so that it enhances resources and preserves local character. Open space protection, land development standards, farmland preservation, and trail creation are ways to establish this unique character for Perkiomen Township and its villages.

# CHAPTER 5 potential open space linkages

An important aspect of open space is the accessibility of that space to community residents and to the region as a whole. This section of the plan identifies potential open space linkages that can tie together park and open space sites within the township and connect to open space and trail opportunities in adjacent communities. Such connections help form a more comprehensive open space system for residents and contribute to the creation of a more effective and enjoyable regional network. Trails and pathways increase accessibility to parks by encouraging pedestrian and bicycle access and also act as recreational opportunities in and of themselves.

Identification of potential linkages from a perspective that considers the Perkiomen Trail and the entire region will help to contribute to Montgomery County's vision of a county-wide trail system complemented by local spurs. Already the site of over three miles of the Perkiomen Trail, Perkiomen Township has an existing backbone upon which to base its local trail system. Examples of other potential linkages include utility corridors, stream valleys, and sidewalks.

## BENEFITS OF GREENWAYS & TRAILS

Trail and greenway networks are generally conservation oriented landscape features. Pennsylvania DCNR's publication, *Pennsylvania's Greenways - An Action Plan for Creating Connections* published in 2001, identifies a list of following specific benefits of greenways:

- Enhance the sense of place in a community or region.
- Accentuate the scenic beauty and majesty of our state.
- Protect our state's water resources by buffering non-point sources of pollution.

- Provide opportunities to protect and manage wildlife, forests and ecological systems.
- Provide recreation opportunities for families and individuals of all ages and abilities.
- Provide alternatives to automotive transportation, reducing traffic congestion.
- Add positively to our economic climate.
- Are a core component of strategies to foster health and wellness, especially as our population ages.

In addition, greenways and trails help increase real estate values and promote eco-tourism, as well as cultural, heritage, and recreational tourism.

## PERKIOMEN TOWNSHIP CONNECTIONS

Located within the Perkiomen greenway, the Perkiomen Trail acts as a strong connection along the eastern side of Perkiomen Township and a strong starting point upon which to affix future local trails and sidewalks. Existing local trails are established in open space areas at Perkiomen Greene, Fox Heath, and Wynnewood Drive. These were created through the land development process and are important internal features within those local neighborhoods. However, these existing linkages do not create an integrated open space network. Instead, the township has an assortment of individual open spaces with few connections between them. If parks are interconnected, they create a greener image for a community, a more vibrant pedestrian atmosphere, and more useable public space. By improving linkages between public open spaces, neighborhoods, commercial districts, and the existing Perkiomen Trail, the township will add recreation and transportation opportunities for the entire community.

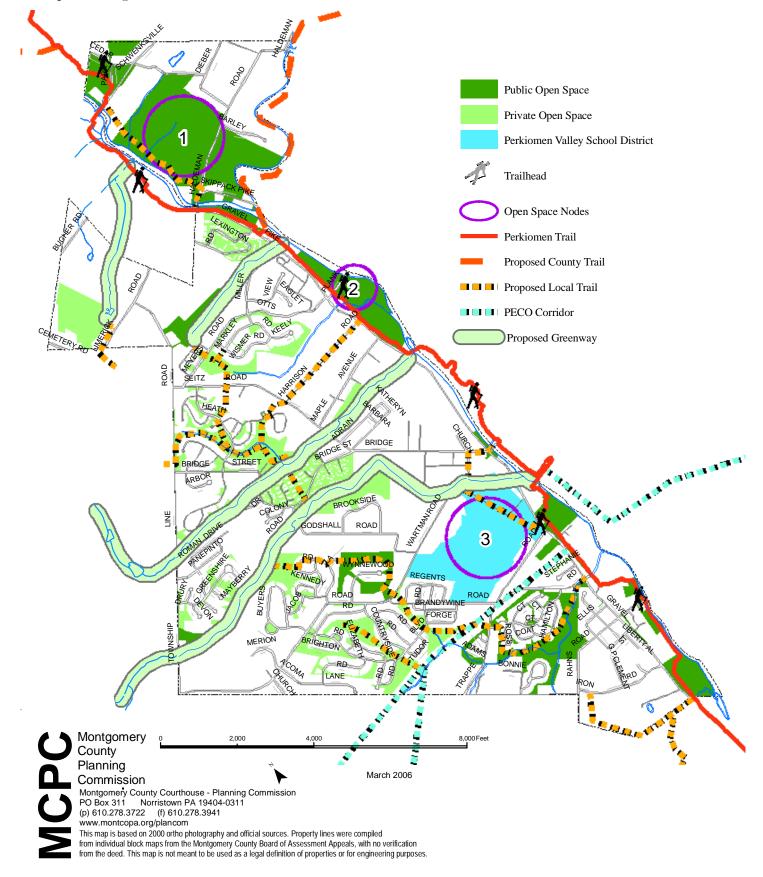
Defining specific open space destinations, the township open space system possesses three major nodes as shown in Figure 30. Each node has its own character and offers a different open space experience to the community. These nodes are similar, however, in that each node is supported by its close proximity and access to the Perkiomen Trail. Also of note are the other trailheads to this regional trail in the township as well as Collegeville's nearby Hunsberger Woods Park and the Central Perkiomen Youth Association's fields on Cemetery Road in Limerick. These nodes are described below.

1. **Pennypacker Mills** - Totaling over 150 acres in the northern corner of the township, this



Cedar Road Trailhead

### Figure 30 Conceptual Linkage Network



county-owned park is the site of the historic Pennypacker Mansion, picnic areas, and frontage along the Perkiomen Creek.

- 2. Central Perkiomen Valley Park This park is a collection of parcels along the Perkiomen Creek through which run several lengths of the Perkiomen Trail. The main node of the park straddles Plank Road in Perkiomen Township. Here is the site of the Mill House, a multi-purpose field, and a tot lot.
- 3. Perkiomen Valley School District Campus -Clustered together here are three schools that serve area students. The high school campus has recreational opportunities including athletic fields, a running track, and multi-purpose open space. The middle school has a wetland and pond habitat above a stream corridor. Evergreen Elementary School has playground equipment.

Figure 30 also shows conceptual links between these nodes and existing residential land developments. These proposed linkages will differ in surface material, width, and use. Further, the feasibility of specific trail routes may require further investigation due to existing natural constraints. This figure also shows potential greenway linkages along Lodal Creek and Landis Run toward Limerick and Boyer Run toward Schwenksville.

## REGIONAL TRAIL NETWORK

Considering a broader perspective, surrounding Perkiomen are several efforts that will become significant recreation and transportation alternatives to Perkiomen Valley residents. The township has the opportunity to link into these efforts at strategic points to develop strong connections with its neighbors. Greater connections could offer township residents a means of accessing other trails and parks that exist outside the municipal borders. Figure 31 displays the proposed County Trail Network. Figure 32 displays other regional efforts Perkiomen Township can cooperate with in order to give its residents greater recreation and transportation alternatives. These opportunities are listed below.

**PECO Corridor** - This regional trail will bring together multiple municipal partners to cooperate with PECO Energy to use its utility corridor. The goal of this corridor is to connect the proposed extension of the Schuylkill River Trail to the existing Perkiomen Trail. The eastern portion of this corri-



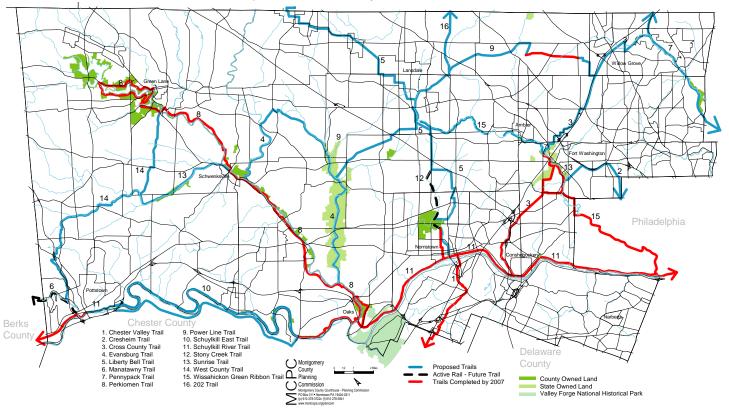
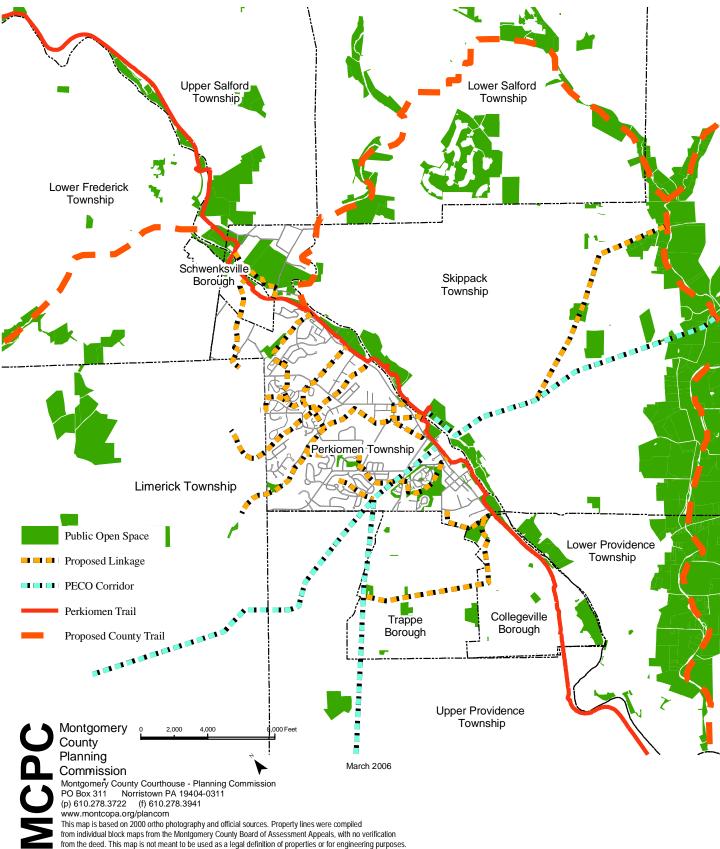


Figure 32 Conceptual Regional Linkages



dor, mainly in Skippack Township will connect the Perkiomen Greenway with Evansburg State Park and Skippack Village on Route 73.

**Evansburg Loop** - Already a network of small trails that makes use of the Lower Salford municipal trail system, this trail will be upgraded. As part of the County trail system it will use the Skippack Creek as it meanders through Evansburg State Park.

Hunsberger Woods Loop - This would be a cooperative project with Collegeville, Trappe, and private land owners. Using the Perkiomen Trail, this loop would take walkers along a stream corridor and successional meadow in Hunsberger Woods, along sidewalks to Main Street in Trappe and then to the PECO corridor described above.

Iron Bridge Corporate Center - A trail connection from this industrial and office complex could help connect Collegeville and Trappe Boroughs to the Perkiomen Trail through Hunsberger Woods as described above. This would allow Perkiomen residents to take advantage of the park systems and other amenities of these municipalities. Issues involving steep slopes and access will be addressed during trail connection.

**Boyer Run** - Boyer Run is a small tributary to the Perkiomen Creek whose watershed includes parts of Limerick, Perkiomen, and Schwenksville. At the top of this greenway lies the Central Perkiomen Youth Association's baseball fields. The stream has its headwaters in the pond at Rolling Turf Golf Course and eventually flows under the Perkiomen Trail. Working cooperatively with landowners and neighboring municipalities, this corridor could serve as a trail in the future.

# CHAPTER 6 ANALYSIS OF UNPROTECTED RESOURCES

As outlined in Chapters Three and Four, important resources such as permanent open space, floodplains, steep slopes, woodlands, scenic views, and historic sites are found throughout the township. This chapter first identifies areas where those resources important to the township have no permanent protection or inadequate maintenance. Then priorities for future preservation are proposed. The unprotected resources are those lands and resources that add to the character of the township, are ecologically significant, contain unique visual elements, promote an atmosphere of community, and generally help define the sense of place that is inherent in Perkiomen.

Generally, the priority categories presented in this chapter are based on the extent and concentration of resources found in a given area, their location and contribution to community identity, and the open space goals established in Chapter Two. The reason that the following resources are identified as vulnerable is because they are potentially developable, privately owned, or require more attention to planning and maintenance. Any change from their present state may have adverse impacts on the community land matrix.

## VULNERABLE RESOURCE ANALYSIS

Perkiomen Township's vulnerable resources are much more than woodlands and stream valleys. They include the neighborhoods and landscapes that give the township its sense of place. The township has limited resources with which to protect and enhance places in which valuable resources and vulnerable features exist. Therefore, priority areas are described below based on these different landscapes to guide open space decisions. These priorities are based on the goals set forth in Chapter Two and discussions by the township Open Space Committee.

To help define this sense of place, the township landscape can effectively be split into four relatively different areas of land use. Each of these landscapes provides different opportunities and has different open space and green infrastructure needs. These regions are generalized in Figure 33. It is important to note that these priority areas will often overlap. This is evidence of Perkiomen's efforts to integrate the open space network with the greater community.

### **RURAL HERITAGE**

To the northwest, surrounding Schwenksville Borough, the predominant land use remains agricultural or large lot, single family detached residential. Although several moderately dense communities exist here, of all areas in the township, this area has preserved the largest remnants of the township's rural past. The remaining rural resources located in this part of the township are becoming more vulnerable. This region can be divided into the following two categories.

### AGRICULTURAL LANDS

The agriculture industry in the township has weakened. In 1994, 693 of the township were dedicated to agriculture. By 2006, that figure dropped by over 50% to only 320 acres. This acreage exists on roughly ten parcels, the majority of which lie



The rural chacaracter of Haldeman Road

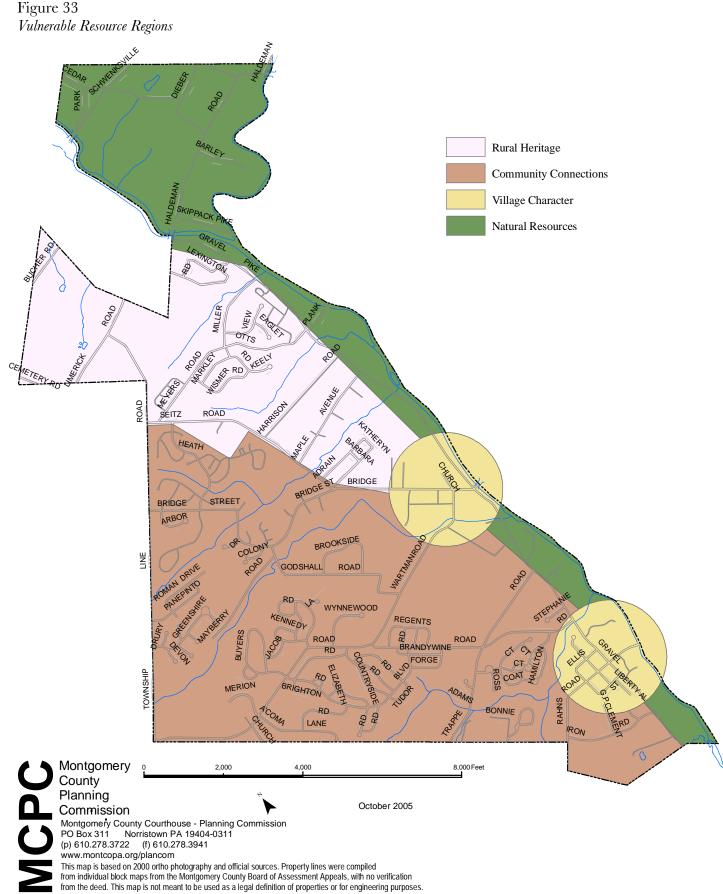
above Seitz and Harrison Roads. This area also has wooded stream corridors flanked by pastures and cropland and several high locations offering views of the Perkiomen Valley. This acreage represent the rapidly vanishing rural aesthetic that exists in the township.

While Perkiomen understands that the landscape will continue to become more developed in years to come, the overall desire of the municipality is to assure that any change in population has minimal impact on the rural character, agriculture industry, and natural resources that so define this part of the community. As growth occurs and arterial corridors see increased traffic, the existing character should be maintained. This can be accomplished through open space preservation, appropriate landscaping requirements, and specific standards for placement of structures on a site. Also, as development occurs in this region of the township, land should be preserved to accommodate the recreation needs of the large population of young families living in the township.

### UNDEVELOPED LAND

The Perkiomen Creek and its tributaries that flow across the township's landscape have shaped the land as well as local land use patterns. These streams and the soils they have cut have resulted in significant steep slopes across the township. Wetlands and broad floodplains associated with the streams have also contributed to shaping land use patterns. These natural constraints to development in this part of the township have historically lessened the development pressure here. However, the township is seeing increased interest to develop these naturally constrained lands as the supply of dry and flat parcels is shrinking. The land that remains undeveloped in the township is most often found along watercourses and steep slopes.

As parcels with greater natural constraints are becoming developed, along with agricultural lands, a vulnerable resource disappearing in the township is land with potential to accommodate active recreation. Through the 1990's and into this decade, the number of children under 14 years old living in the township increased by 198%, dramatically outpacing total population growth. The needs of families with children include tot lots and park facilities that allow for organized, active recreation. Currently, insuffi-



Perkiomen Open Space Plan

cient recreation facilities exist in the township. As this age group will remain a large fraction of the local population (28%), the need for these facilities will grow as a priority. The Rural Heritage area may be the best area in which to locate a recreational facility.

### COMMUNITY CONNECTIONS

The southwestern portion of the township is relatively built out from land development occurring since the early 1990s. This region exists below Seitz Road and Bridge Street. A large population of young families with children live in these neighborhoods. Over 200 acres of preserved open space existing here protects stream corridors and steep slopes. However, this existing open space, although permanently preserved, is relatively under utilized and does not meet its highest potential.

These stream corridors are potential routes for trails and pathways to connect neighborhoods within the township. This would require protected lands to be better maintained and linked together. Cooperation between the township and owners of unprotected stream corridors could also increase links.

### VILLAGE CHARACTER

The villages of Graterford and Rahns are two areas in the township, as identified in Figure 33, that were developed in a different era. These historic development patterns contrast current trends and show examples of historic architecture. These vulnerable resources provide a link to a community's past and thereby can make a valuable contribution to its current educational, cultural, and social environment.

In the case of historic structures, often their architectural significance or uniqueness create visual interest by contrasting with surrounding, more recent development. The village of Rahns itself is eligible to be placed on the National Register of Historic Places. Efforts to preserve or enhance existing village character could include streetscape standards or incentives to landowners to stabilize historic structures. Taking advantage of the route of the Perkiomen Trail, the township could promote the economic development of the villages of Rahns and Graterford.

### NATURAL RESOURCES

Perkiomen Township is largely a developed township with the majority of its most vulnerable natural resources concentrated within the floodplains of the East Branch and Perkiomen Creeks. This area is displayed as the Natural Resources region in Figure 33. This Perkiomen greenway provides open space opportunities through the Perkiomen Trail, Pennypacker Mills, and Central Perkiomen Valley Park. Except for several scattered residential properties and some sites within Rahns, this floodplain and its surrounding area is undeveloped and protected within county open space.

To preserve sustainable habitat, water quality, and scenic values, the land use surrounding these vulnerable areas should be protected. Where gaps exist in stream and wetland buffers, both acquisition and education and outreach are tools to address this issue.

Although the greatest concentration of resources lie in the Natural Resources region described here, neighborhood trees and streamside vegetation found throughout the township also add to Perkiomen's green infrastructure network. These features can function as scenic amenities, shade trees and windbreaks for homes and habitat for migratory birds. Studies have found that trees found in urban and suburban environments benefit not just the aesthetic landscape, but also enhance energy savings and increase property values.

# CHAPTER 7 Evaluation of GROWTH AREAS

In addition to establishing open space preservation areas, it is important to identify areas that will accommodate the community's projected population growth. While less than 80 acres within the township remain in a state yet to be developed, there are opportunities for redevelopment, including the conversion of agricultural lands to residential areas and infill within the villages. As described in the Montgomery County Comprehensive Plan, the majority of the township lies in the Designated Growth Areas and Existing Suburban Development categories. However, the inclusion of additional greenways or buffers in new land developments will help discourage a homogenous urban blanket. In contrast to these growth areas, the land located in the township north of the Perkiomen Creek is designated as Proposed Open Space and a Rural Resource Area.

This chapter analyzes current demographic trends and Central Perkiomen Valley regional planning efforts and how the needs of a changing township will help shape open space planning. This analysis is then used to support the township's open space needs and goals in developing recommendations found in Chapters Ten and Eleven. Appendix A is significant to this discussion as well. Found there is a potential build out scenario for the township that is based on current zoning.

## POPULATION & EMPLOY-MENT PROJECTIONS

As described in Chapter One of this plan, the DVRPC projects that Perkiomen Township may have a population of 10,000 by the year 2030. This is a 21% increase from the 2004 estimation of 8,270 residents. This projection is shown in Figure 34.

Using this projection and current household size of 2.87 people per household, 600 new housing units would be needed by 2030 to house these new residents. The most likely location for these new units is where the majority of undeveloped or underdeveloped land lies in the township, the area above Seitz Road and Harrison Avenue. However, based on current zoning, it may be unlikely that 600 new units would be allowable.

However, It is important to note that these projections performed by DVRPC do not take into account the fact that the township is reaching a built out state. Also, zoning changes accompanying the Central Perkiomen Valley Regional Comprehensive Plan, as described below, allow for a reduction in density in many parts of the township. Further, the township plans to acquire open space to serve the public which will also decrease local developable acreage.

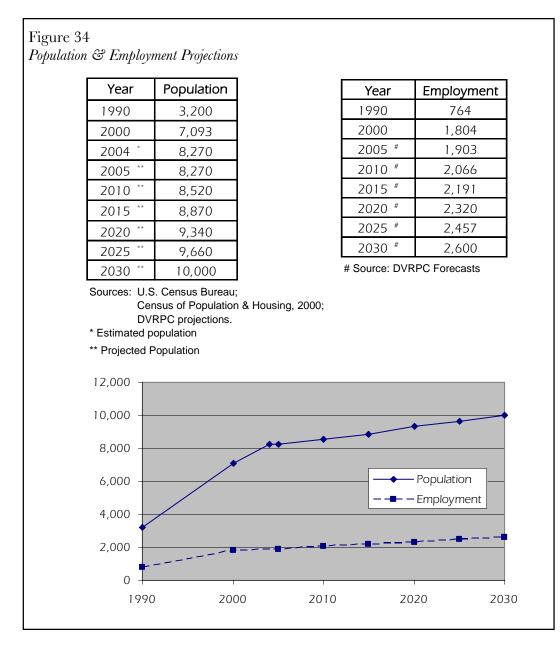
DVRPC also estimated that the employment opportunities in the township will grow by over 44% between 2000 and 2030. This represents a significant increase in employment. Although opportunities will grow locally, many new residents are expected to work in other communities.

### THE RATE OF GROWTH IN PERKIOMEN TOWNSHIP HAS DECREASED BECAUSE OF

- OPEN SPACE PRESERVATION EFFORTS,
- ZONING AMENDMENTS,
- REGIONAL PLANNING, AND
- LESS AVAILABLE DEVELOPABLE ACREAGE



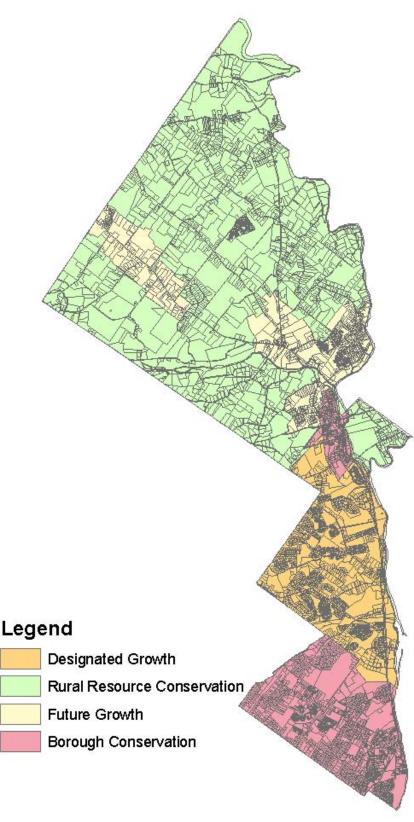
Civil War reenactment at Pennypacker Mills



### CENTRAL PERKIOMEN VALLEY REGIONAL COMPREHENSIVE PLAN

Perkiomen is participating in a regional planning effort that will allow future development to be directed to the most appropriate regional locations. Regional planning, among other things, increases energy efficiency and decreases future tax burdens on local residents and businesses. This regional approach allows some municipalities to shift more intense uses to the most appropriate areas of the region. The region is comprised of the townships of Lower Frederick, Perkiomen, and Upper Frederick, and the boroughs of Collegeville, Schwenksville, and Trappe. Over the past several decades, development in the Central Perkiomen Valley has occurred at a rapid pace. The region is experiencing the burdens of such growth, with a growing school-age population, loss of open space, diminishing natural and cultural resources, and a congested road network. The region must find a new development model, one that will allow the region to grow, encourage economic vitality, and ensure a high quality of life for generations to come. As the cornerstone of the Central Perkiomen Valley Regional Comprehensive Plan, the Future Land Use Plan will provide this development model.





### FUTURE LAND USE PLAN

The Future Land Use Plan will guide the six municipalities in implementing land use policies. Understanding existing land use patterns in each municipality, and properly integrating future land use as part of one unified plan will result in a more efficient land use pattern that preserves open space, encourages sustainable development and preserves the small town character that is so important to residents. The Land Use Plan designates appropriate areas for new growth and directs revitalization, new development and infrastructure improvements into those areas. Outside of the designated growth areas, the primary land use objective is preservation of the region's rural landscape and its natural and cultural resources, through less intense development that is sensitive to such resources.

The Future Land Use Plan, as shown in Figure 35, establishes the framework for the type and character of development that the municipalities are authorized to permit. Implementation of the Future Land Use Plan shall be achieved via local zoning and subdivision and land development ordinances. In accordance with the Pennsylvania Municipalities Planning Code (MPC), municipal ordinances are required to be "generally consistent" with the regional plan. In an effort to aid the municipalities in achieving general consistency with the Plan, Future Land Use Policy Matrices have been developed for each Future Land Use Category. When determining general consistency between local zoning ordinances and the Future Land Use Plan, individual municipalities shall reference the Future Land Use Map and Future Land Use Matrices.

### PERKIOMEN'S REGIONAL POSITION DESIGNATED GROWTH AREA

As described in the Central Perkiomen Valley Regional Comprehensive Plan, Perkiomen Township is located almost entirely in the Designated Growth Area. The Designated Growth Area includes the majority of Perkiomen Township. Areas located in the Designated Growth Area contain a variety of land uses, with the predominant land use being "suburban-type" residential. In regard to infrastructure, the Designated Growth Area is primarily served by public sewer and water. It contains a variety of land uses that range in type, intensity, and age. It is anticipated that this development pattern will continue. Future land use objectives shall ensure that new development, both residential and non-residential, enhance the community character of the Designated Growth Area. Emphasis shall be placed on the development of standards that encourage good project design that preserves open space and encourages the protection of natural and historic features.

This variety of suburban land uses should fit into the existing landscape, architectural forms, and land use patterns. By directing growth into this area of the region, especially around land adjacent to the boroughs, natural resources can best be protected and public infrastructure best utilized. As growth occurs in the Designated Growth Area, care should be taken to ensure sufficient open space exists to serve the expanding population.

### **RURAL RESOURCE AREA**

By directing the majority of new development into the growth areas through the provision of public infrastructure and higher densities, rural resource areas outside the growth area can be established to preserve the Central Perkiomen Valley's natural and cultural resources. Preserving the open spaces, farmland, woodlands and other natural and cultural resources within these rural resource areas is very important to sustaining the natural environment, agricultural economy, and the quality of life in the Central Perkiomen Valley Region.

The rural resource area includes the undeveloped and environmentally sensitive land in the Region. To preserve the remaining undisturbed natural features and cultural resources, public infrastructure will not be permitted. Future development will be compatible with rural preservation and the predominant land uses will be low-density residential, farmland, preserved woodlands, and reforested areas.

## DISCUSSION

Perkiomen Township plays a central role in regional planning efforts. Located within the growth areas between neighboring boroughs, the township will remain the site of residential communities with access to the growing employment centers and commercial districts in surrounding municipalities. The township should take advantage of its position to support economic development efforts in the region by maintaining this quality residential environment.

Employment opportunities for the township are projected to grow, but continue to lag behind population growth. This population growth will be driven by nearby employment centers such as those along the Route 422 corridor and in the North Penn region. Residential units should be constructed with consideration of the carrying capacity of the land. This is particularly important as much of the undeveloped land in the township possesses steep slopes and other natural constraints. Perkiomen Open Space Plan

# CHAPTER 8 EVALUATION OF OPEN SPACE NEEDS

Perkiomen is a relatively small geographic place of 4.8 square miles with a population of over 8,200 residents. As discussed in Chapter Five, three significant open space nodes exist in the township to serve this changing population with recreation opportunities: Pennypacker Mills, Central Perkiomen Valley Park, and the Perkiomen Valley School District Campus. Of regional importance is the Perkiomen Trail that links together the eastern side of the township and the entire Perkiomen Valley. Important to the character of the township are 400 acres of public open space and the nearly 300 acres of permanent, privately owned open spaces that add relief to the suburban landscape for local neighborhoods. This chapter evaluates the existing open space network, its ability to serve the community, and plans to fill Perkiomen's future open space needs.

## **EXISTING PARKS**

Two categorizations exist that are important when evaluating Perkiomen's existing and future open space needs.

## OPEN SPACE ACREAGE CATEGORIZATIONS

One way the National Recreation and Park Association (NRPA) defines open space is by using acreage. A community park is generally 20 to 100 acres in size and intended to serve people living within one or two miles of the park. Because community parks serve a wide area of an approximate one-mile radius, people usually drive to them. Typically, these parks include natural open areas, athletic complexes, swimming pools, and other large scale recreational spaces. Community park facilities in the township include Central Perkiomen Valley Park and Pennypacker Mills.

Traditional neighborhood parks are usually less than 20 acres and can accommodate a wide range of recreational activities. Neighborhood parks are used by people living from a quarter to a half mile away who can walk or bike to the park. These parks support those desiring informal recreation as well as facilities for short term, frequent, and active use. Good examples are playgrounds, tot lots, and pocket parks. These are most valuable in areas that are not conveniently served by community parks because of distance or inaccessibility. In the township, the baseball field at the Graterford trailhead serves this purpose. However automobiles are the primary mode of transportation used to access the park here.

Neighborhood parks can also include very small mini-parks. Mini-parks are less than one acre and have facilities designed to serve only a very limited segment of the community. Mini-parks are used by people that live within a quarter mile radius of the park. Example of mini-parks include everything from tot-lots in residential communities to urban plazas in a commercial district. Myers Park located near the firehouse and township building serves this purpose for Perkiomen Township residents.

### "No single park, would provide people with all the beneficial influences of nature."

Frederick Law Olmstead, Sr.

## OPEN SPACE SETTING & USE CATEGORIZATIONS

Where population densities are high and land is highly valued, activity on open spaces may need to be intensified on less space. Parks may need to provide for playing fields for an active community, leaving little room remaining for resource protection areas. In other settings, the development of an urban plaza inserts green spaces into highly developed districts. Conversely, in less developed areas, the protection of large blocks of natural resources may be a high priority, allowing for a use of the land that requires less maintenance.

Three corners of a triangle emerge as the far extremes of potential open space settings as shown in Figure 36. Every parcel within an open space system will have varying proportions of each of these setting types as described below. Some will line up near a vertex, while other open spaces will have mixed uses.

### **RESOURCE PROTECTION**

Open space in this setting would include streams, wetlands, and steep slopes. Special flora or fauna species may exist in these protected areas. If amenities exist at all, they may include only a small parking lot and walking path. These settings may be used by schools or summer camps for habitat studies, fishermen, or nature enthusiasts. The floodplain area of Central Perkiomen Valley Park offers passive recreation opportunities and lies in this corner of the triangle. Other examples include the protected riparian corridor at Perkiomen Greene.

### **RECREATIONAL FACILITY**

Various forms of fields and courts exist here to serve an active population throughout the year. This type of site requires a good deal of maintenance and should expect intense use during sports seasons. The campus surrounding the Perkiomen Valley High School provides these facilities.

## COMMUNITY GATHERING PLACES & CONNECTIONS

These areas can serve as gathering areas or play areas for a community. Main Streets and village centers can benefit from the green space provided by these places. Included here is the Perkiomen Trail that links different uses





## **OPEN SPACE NEEDS**

As demographics, land use, and development pressure change within a community, so do the needs of the population. For instance, a younger population may utilize active open space in the form of playing fields. Active recreation facilities should be located where significant residential density exists or is proposed. Where older populations exist, less intense open space uses such as walking trails and jogging routes may better serve the community. These passive recreation areas often allow for natural resource protection opportunities. The following is a discussion of current open space needs.

### RURAL RESOURCE PRESERVATION RURAL CHARACTER

The preservation of local heritage is important in maintaining quality of life in Perkiomen. The landscape of Perkiomen Township has retained a portion of its rural history, especially in the northern third of the township as described in Chapter Six. Links to local heritage consists of the historic buildings, landmarks, and landscapes that provide a link to a community's past and thereby make a valuable contribution to current educational, cultural, and social environment.

### AGRICULTURAL RESOURCES

In this same Rural Heritage region, the landscape of Perkiomen Township has a rich agricultural



Confluence of the East Branch with the Perkiomen Creek

history. Not only is agriculture an important industry, but when maintaining a sense of place, farms, fields, woodlots, and pastures are crucial elements deserving preservation. It is with this in mind that Perkiomen hopes to preserve and support the farming industry to fulfill local and regional goals.

Perkiomen Township hopes to protect the viable agricultural lands by acquiring easements that strengthen farming operations in the county while providing the following benefits.

- Lower property taxes
- Provide on-farm and farm-related jobs
- Promote local tourism
- Provide fresh locally-produced food
- Recharge groundwater
- Improve & support wildlife habitats

### **ACTIVE RECREATION**

Based on 2000 Census data, the median age in the township is nearly six years below the county median of 38.2. Of the 62 municipalities in Montgomery County, Perkiomen has the third youngest population in the county, as there was a 198% increase in school-age children in the 1990s. Household size is also growing as the township has the sixth highest population per household in the county. The number of households with children increased by 160% in the 1990s. Evidently, a need exists to plan for open spaces with more active recreation opportunities.

Perkiomen Township will continue to see growth as it lies in the Designated Growth Area as described in the Central Perkiomen Valley Regional Comprehensive Plan. This growth also results in a greater need for active open space here, especially as more coordinated sports programming is desired by new young families moving in.

### **EXISTING RECREATION FACILITIES**

Currently, only 7% of the existing permanentlyprotected open space is used for active recreation, located at Central Perkiomen Valley Park and the Myers Park. The majority of the open space acreage buffers natural features such as steep slopes and stream corridors. This causes many families to take advantage of parks and youth leagues in neighboring communities. Therefore, to fulfill its municipal responsibility, proper maintenance and expansion of these existing active recreational lands, owned by either the county or the township, is of great importance.

The Perkiomen Trail is of interest here as it provides recreation opportunities that could be categorized as both passive and active. This trail is a significant asset to residents of the township, providing for a variety of users including equestrians, bicyclists, joggers, walkers, and bird watchers.

### **RECREATION PARTNERSHIPS**

Several opportunities exist that could help develop the township and region open space and linkage network on lands not owned by the township. Specific potential partnership opportunities with the Montgomery County Parks Department, Perkiomen Valley School District, and PECO are described in Chapter Ten.

## OPEN SPACE NETWORK & ACCESSIBILITY

### LOCAL OPEN SPACE ACCESSIBILITY

Perkiomen has significant preserved open space acreage. On a map of the township, the Perkiomen greenway within Central Perkiomen Valley Park and the numerous permanently preserved private open spaces stand out as significant features on the landscape. But it is not enough to have good parklands. Recreation opportunities could be expanded using trails and sidewalks to create a diverse and accessible open space system. As described in Chapter Five, developing more pathway spurs through the community that connect the Perkiomen Trail, residential neighborhoods, existing private open spaces, commercial districts, and schools, would lead to a wide variety of open space opportunities.

### **RECREATIONAL FACILITIES ACCESSIBILITY**

Each open space site possesses important open space characteristics that serve the community through recreation opportunities, aesthetics, or natural resource protection. However, some open spaces serve the residents of a community better than others. These are shown in Figure 37 as having High Accessibility because they offer attractive open space options, are publicly owned, and have good access. Figure 37 reveals those areas that are currently underserved by open space facilities as they lie outside a quarter-mile radius. For a developed township existing at current densities, these are significant gaps in open space service. Although many acres are preserved and held by homeowners associations, few facilities exist at these sites that serve the public.

There will be a need for more recreational areas here in the future as further development occurs and density increases. In neighborhoods with a reasonable degree of accessibility to open space, upgrading linkages, including sidewalks, will further enhance accessibility. Expansion of existing parks or development of pocket parks will also add to local open space accessibility.

### **REGIONAL NETWORK**

Improved linkages, including trails, sidewalks, and even boat ramps, would not only connect communities within the township, but can act regionally to connect Perkiomen Township to the larger county-wide trail network. The Perkiomen Trail plays a significant role in activities of this type. Opportunities to work jointly with neighboring municipalities, the county parks department, the school district, local utilities, and other partners will increase the level of service provided by the open space network. Specific recommendations are discussed in Chapter Ten.

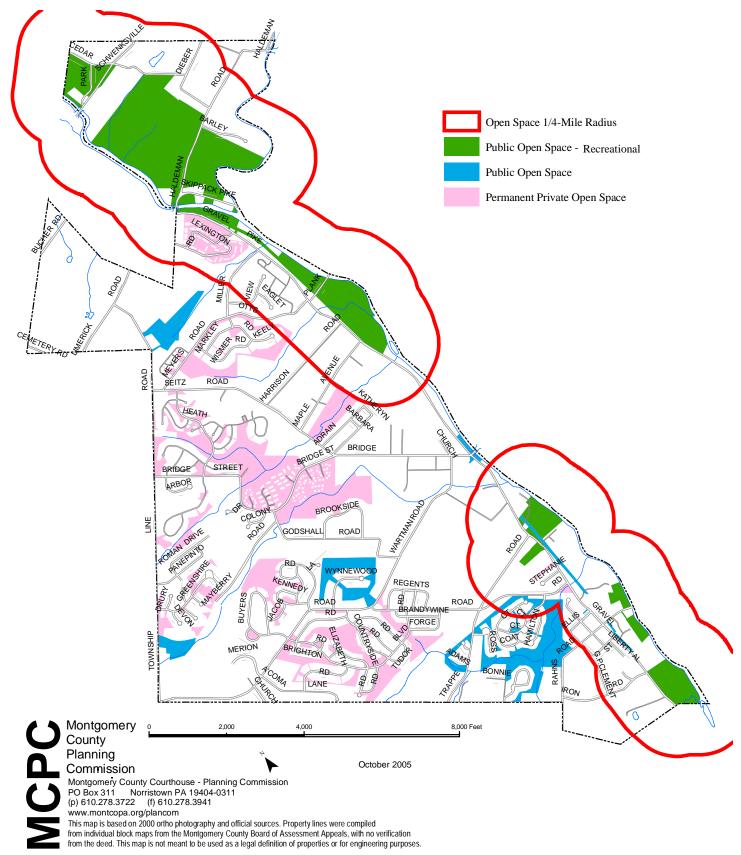
### **GREEN INFRASTRUCTURE**

A need exists in the township to protect the existing green image of the and plan for future management of green resources. Green infrastructure amenities such as protected stream corridors, scenic viewsheds, and street and neighborhood trees make up a significant part of Perkiomen Township's character.

**Public Trees** - On public lands, existing mature trees should be supplemented with the next generation of trees to take their place. These include street trees, park trees, and parking lot landscaping.

**Private Trees** - On private lands, policies and programs should be created to encourage landowners to maintain their trees, woodlands, and landscaping as part of the larger green infrastructure network.

### Figure 37 Existing Service Areas of Recreational Facilities



**Streetscape** - Street trees should be integrated into a streetscape plan with appropriate pedes-trian amenities, especially in the village areas of the township.

Hedgerows & Woodlands - Hedgerows are landscape features, often a mix of native canopy and understory trees that are remnant of former pasture fence lines and crop fields. Preserving or installing hedgerows or woodlands reduce the visual impact of development to protect rural character. These features also offer habitat and serve as windbreaks.

**Greenways** - Following stream corridors, greenways can be preserved through acquisition, landowner education, or conservation easements. Greenways protect water resources where they are most vulnerable from surrounding land use.

## NATURAL RESOURCE PROTECTION & PASSIVE RECREATION

These two needs often go hand in hand. Where lands are preserved to protect natural resources, some low impact recreational opportunities can be offered to the public.

### WATER RESOURCES

Chapter Six describes the benefits woodlands, canopy trees, streams, and wetlands offer to township residents. If these features are lost or degraded, Perkiomen Township's character will be likewise affected. As past preservation efforts have protected the Perkiomen Creek along its length on the eastern border of the township, the smaller tributaries to the Perkiomen Creek should also have appropriate protection, including the East Branch and Lodal Creek. Education, outreach, conservation easements, and land use tools are all viable ways to protect the stream. Also, as redevelopment occurs, stormwater management should be a priority to increase the health of local stream networks for Perkiomen Township residents and those downstream. Stormwater management and aesthetic green infrastructure applications can address several of the township's goals.

One of the benefits offered by the presence of the Perkiomen Creek and its associated floodplain is the passive recreation opportunities it creates. Central Perkiomen Valley Park has wooded areas, wetlands, and walking trails that make it suitable for passive recreation. The development of passive recreation opportunities at this and other per-



Perkiomen Creek from Skippack Pike

manently protected sites, including jogging and walking trails and nature interpretation could improve the usability of these open spaces.

#### HABITAT

To support natural resource protection decisions, the Natural Lands Trust's SmartConservation Prioritization Program objectively values land based on its habitat value. In the township, these areas exist in highest concentration within floodplains, both along the Perkiomen Creek and the upper reaches of the Lodal Creek as shown in Chapter Four. Perkiomen has the responsibility to manage some of the region's most sensitive and valuable natural resources and greenway corridors. This is especially important in a developed area where increased habitat fragmentation can significantly alter the ecological balance. Any change in land use in the these areas of the township could have significant affect on habitat values.

#### VILLAGE CHARACTER & HISTORIC PRESERVATION

The preservation of local heritage is important in maintaining quality of life in Perkiomen Township. Local heritage consists of the historic buildings, landmarks, and landscapes that provide a link to a community's rural and village past and thereby make a valuable contribution to current educational, cultural, and social environment.

The inventory of historic places in Chapter Four describes some of the historic resources in the township. Protecting these sites and others with historic architecture protection measures and appropriate zoning will help to maintain or enhance the character of the village areas of Rahns and Graterford and parts of the township's rural landscape. Also of importance will be redevelopment and infill development that is consistent with local historic character.

#### NRPA ACREAGE STANDARD

The NRPA developed national standards for recreation, parks, and open space (Recreation, Park and Open Space Standards and Guidelines; 1983). These standards are widely accepted, although they are viewed only as a guide for planning, not as an absolute standard. The NRPA estimates that a total of 6.25 to 10.5 acres of municipally owned and developed open space per 1,000 people is a useful guide. Generally speaking, the more densely populated an area is the higher the ratio should be, so a developed township like Perkiomen would apply a higher ratio than a designated rural resource area like Lower Frederick. For the purposes of this plan, however, both the low and high ratios are used to create a range for evaluating existing conditions and to perhaps establish an acreage goal for the community. Figure 38 shows the results of applying the NRPA acreage standards to accessible and useful open spaces managed by the township.

As the role of parks and open space expands in local communities, these standards have become a smaller part of the open space needs equation. Satisfactory acreage does not equate to a complete open space system. Many times municipallyowned lands contain areas preserved to protect natural resources that may provide little recreational use to the community. Therefore, the optimal acreage amount for the region and each municipality should include all of the various community needs discussed in this chapter and be determined based on the goals of the community, not simply an acreage calculation.

AN OPEN SPACE NETWORK IS JUDGED ON HOW WELL IT SERVES THE COMMUNITY, NOT JUST TOTAL ACREAGE.

# **NEEDS SUMMARY**

Perkiomen Township is an attractive place to live in the Central Perkiomen Valley. The township has become a core area of the Central Perkiomen Valley, because the location of the Perkiomen Valley School District Campus and the Perkiomen Trail. By understanding how growth will occur, it is easier to understand the future needs of the community. Based on the discussion above, the following needs exist in Perkiomen Township to maintain the quality of life residents enjoy.

- Protect the rural character of the township using a variety of tools, including zoning, landscaping, and regional planning.
- Link existing public and private open spaces to increase walkability across the township.
- Increase active recreation facilities through

#### Figure 38 Minimum Open Space Acreage Needs

	2000   2015     7,093   8,870		5	2030		
Projected Population*			8,870		10,000	
	Recommended Acreage**					
Range	From	То	From	То	From	То
Community Park Acreage	35	57	44	71	50	80
Neighborhood Park Acreage	9	18	11	22	13	25
ACREAGE RANGE	44	74	55	93	63	105
	Existing Acreage					
Community Park Acreage	104.6					
Neighborhood Park Acreage	302.0					
TOTAL ACREAGE	406.6					

Sources: U.S. Census Bureau; MCPC; NRPA

\* Projected Population

\*\* Recommended Acreage - Range per 1000 persons as follows:

Community Level = 5.0 - 8.0 acres; Neighborhood Level = 1.25 - 2.5 acres; Total = 6.25 - 10.5 acres acquisition of new parks or expansion of existing open spaces.

- Increase active recreation opportunities by working with neighboring municipalities, the Perkiomen Valley School District, and others.
- Link commercial districts, neighborhoods, and other pedestrian destinations.
- Create pedestrian, bicycle, and canoe/kayak connections with surrounding municipalities.
- Develop a plan to maintain and enhance existing green infrastructure on public and private lands.
- Preserve agriculture in the township.
- Protect water quality and native habitat areas.
- Protect and enhance the character of the villages through historic resource protection and appropriate Streetscaping.



Meadow along the Lodal Creek

# Chapter 9

# EVALUATION OF COUNTY AND ABUTTING MUNICIPAL PLANS

The preceding chapters investigate the resources, needs, and opportunities that exist within the municipal bounds of Perkiomen Township. With this information, recommendations can be made to effectively serve township residents. However, the land use decisions that Perkiomen makes affect the larger region just as decisions made in neighboring municipalities affect Perkiomen. Therefore, this open space planning effort should not be performed in the vacuum of the municipal borders, but should consider surrounding planning efforts.

This chapter compares the needs and goals of this plan with those in the County Comprehensive Plan and the comprehensive, open space, and development plans of abutting townships and boroughs. The intent is to prevent conflicts between plans and to encourage collaboration of efforts. By gaining an understanding of how Perkiomen's goals will fit into the larger open space and trail linkage picture, the township can cooperate to optimize the quality of future open space preservation and management.

### COMPARISON TO THE MONTGOMERY COUNTY COMPREHENSIVE PLAN

In 2001, Montgomery County began updating its Comprehensive Plan. Adopted in September 2005, this plan will guide the growth of housing, transportation, economic development, and natural & cultural resource management, through 2025 and beyond. Each of these factors could potentially bear great significance on open space needs and opportunities in Perkiomen Township. Within this plan is the Vision of the County in 2025. This Vision sets up four issues as the highest priority for action:

- Controlling sprawl
- Controlling traffic congestion
- Preserving open space/natural areas
- Revitalizing older boroughs and townships

This Perkiomen Township Open Space Plan addresses each of these four issues by setting a future course for wise land use, increasing linkages and accessibility, working under a regional plan to guide growth into the township, and developing the economic plans of its central business district.

The draft version of the County Comprehensive Plan lists 48 goals that describe and expand upon the Vision of the County in 2025. Several of these goals parallel those in this open space plan, adding strength to the recommendations set forth in the table below.

The County Comprehensive Plan identifies the township as having Existing Suburban Development and Designated Growth Areas. This plan anticipates Perkiomen to see continued development, although not at such a pace as seen since the 1990s. Of note is the land area within the township above the Perkiomen Creek that is proposed as either Open Space or Rural Area in the County Plan.

## PLANS OF ABUTTING MUNICIPALITIES

Nine municipalities abut Perkiomen as shown in Figure 39. The pertinent principles from the current zoning map, open space policies, and other information of each municipality are briefly summarized below. Adjacent, yet incompatible, land uses may result in conflicts while potential linkages could lead to cooperative partnerships between municipal neighbors.

To participate in the Montgomery County Open Space Program in 1993, each of these municipalities developed open space plans. In the ten years since these open space plans were written, parcels have been preserved, trails proposed and developed, and the needs of the communities have changed. It is therefore vital that Perkiomen keep abreast of the continually evolving planning efforts of its neighbors and the county.

Four of Perkiomen's neighbors, Lower Frederick Township and Schwenksville, Trappe, and Collegeville Boroughs are partners with the township in the Central Perkiomen Valley Region. As described in Chapter Seven, this region works together to plan better land use for the future. This should also include planning together for a better park, recreation, and open space system.

#### Selected County Comprehensive Plan Goals

#### LAND USE

- Direct Development to Designated Growth Areas
- Preserve Rural Resource Areas
- Encourage Sound Land Use Planning and Design
- Preserve and Create Community Identity and a Sense of Place

# OPEN SPACE, NATURAL FEATURES, AND CULTURAL RESOURCES

- Preserve Large Interconnected Areas of Significant Open Space
- Protect and Manage Wetlands, Streams, Steep Slopes, Woodlands, and Natural Habitats
- Create a Greenway System along Rivers, Creeks, and Other Sensitive Natural and Historic Features
- Develop a Countywide Network of Interconnected Trails
- Provide Park Facilities to Meet the Public's Recreation Needs

- Preserve Farmland and Farming
- Protect Scenic Roads, Vistas, and Viewsheds
- Protect Historic Resources and Cultural Landscapes

#### TRANSPORTATION

 Increase Opportunities to Take Public Transit, Walk, Ride a Bike, or Other Nonautomotive Transportation Means

#### WATER RESOURCES

- Provide an Adequate Supply of Water for Both Consumption and Natural Habitats
- Protect Water Quality
- Effectively Manage Flooding
- Create Attractive Stormwater Facilities that Control Flooding, Recharge Groundwater, and Improve Water Quality

#### **COLLEGEVILLE BOROUGH**

The border of Collegeville and Perkiomen lies between the township's Limited Industrial District and the borough's preserved Hunsberger Woods. The township should continue to work with the developer of the Iron Bridge Corporate Center to create a trail that would connect offices and industrial buildings to the Perkiomen Trail. Connections could be made through Hunsberger Woods from this local trail. Collegeville has listed the enhancement of existing trails within Hunsberger Woods that network with sidewalk connections to Trappe Borough, Main Street, and Ursinus College as high priorities in its 2005 Open Space Plan update.

Another proposed trail in Collegeville's Open Space Plan is a connection between Main Street and the Perkiomen Trail via Bum Hollow. This ravine, located near existing borough and private open spaces, currently is the site of an informal trail. Enhancements to this trail could allow Perkiomen residents to access Collegeville's Main Street or travel an attractive three-mile loop through a variety of settings.

#### LIMERICK TOWNSHIP

The draft of the Limerick Township Open Space Plan Update lists one recommendation that affects Perkiomen Township. A linkage is proposed from the Bradford Woods development on Graterford Road to connect to the Mine Run corridor towards the Perkiomen Trail. Such a route travels through state gamelands and the campus of the Western Center for Technical Studies.

Also of interest to Perkiomen Township is the Lodal Creek corridor which has its origin in Limerick Township at the Municipal Building on Ridge Pike. This stream system enters Perkiomen Township below Mayberry Road to its eventual confluence with the Perkiomen Creek above the Perkiomen Valley High School. The corridor within both townships has significant private open space protecting it. Extensions of this greenway into Limerick should be considered to help protect this valuable natural resource.

Adjacent to Perkiomen Township within Limerick are the Central Perkiomen Youth Association's baseball fields. Linkages to this site, for instance along the Boyer Run, could improve the access to this facility from Schwenksville and the Perkiomen Trail.

#### LOWER FREDERICK TOWNSHIP

Lower Frederick adopted its Open Space Plan in 1995. Their last plan discussed the Perkiomen Trail and Sunrise (Swamp Creek) Trail connections. The Sunrise Trail location will be of particular interest to Perkiomen as local residents could access it through the Perkiomen Trail in Schwenksville to travel towards Pottstown. Lower Frederick will likely recommend this trail extension in their new open space plan.

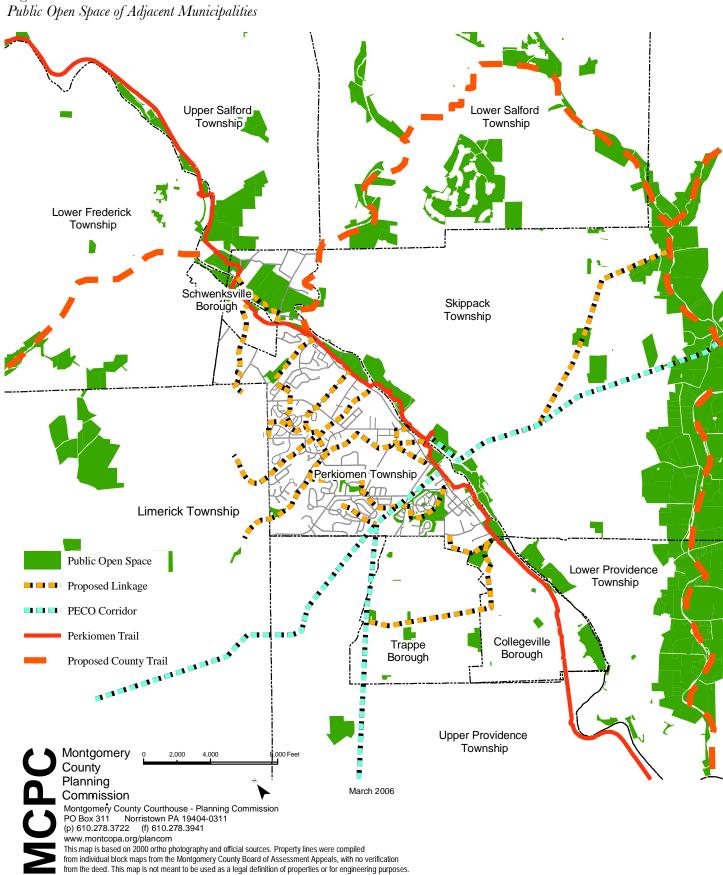
Future land use in the township is described by the Central Perkiomen Valley Regional Comprehensive Plan. The land area adjacent to Perkiomen in Lower Frederick predominantly within the Rural Resource Conservation Area. The townhomes that extend into Schwenksville are included into the Borough Conservation area.

#### LOWER SALFORD TOWNSHIP

Lower Salford Township adopted an Open Space Plan and a Comprehensive Community Path Plan in 1994 and 1998, respectively. The Open Space Plan identified the area adjacent to Perkiomen as a high priority area for rural preservation and the establishment of a greenway along the East Branch Perkiomen Creek. The Community Path Plan developed extensive recommendations for on- and off-road community pathways, bikeable roads, and sidewalks. The majority of the township's recommendations, especially off-road paths, involve pathways running north and south toward Perkiomen Township. One of these pathways is proposed along the East Branch as an extension of the county's proposed Evansburg Loop. As part of the Indian Valley Regional Comprehensive Plan efforts, the area in Lower Salford adjacent to Perkiomen Township is located in the Rural Resource Area.

#### SCHWENKSVILLE BOROUGH

Schwenksville Borough adopted the update to its 1996 Open Space Plan in 2005. This plan recommends several open space actions that could benefit from inter-municipal cooperation. The first is the creation of a loop trail from the Spring Mountain House Site to Spring Mountain and the Perkiomen Trail. Perkiomen Township has supported this effort by adding to the open space in the Spring Mount region with the purchase of the Demeno tract. Figure 39



The second relevant recommendation is a pedestrian bridge across the Perkiomen Creek that would add a connection across the Perkiomen Creek to Pennypacker Mills in Perkiomen Township. Perkiomen Township submitted a letter of support to Schwenksville Borough from to encourage efforts to procure PADOT funding for pedestrian safety improvements over the Route 29/73 bridge.

The third recommendation is natural resource protection along the Boyer Run. This proposed greenway parallels a stream that originates in Perkiomen Township near Limerick Road and flows into the borough.

#### SKIPPACK TOWNSHIP

Skippack Township adopted an Open Space Plan in 1996 and is currently working on an update. The border between the two townships is made up of the Perkiomen Creek and the East Branch. The Open Space Plan identifies the desire to create a trail along the PECO power line from Evansburg Park to River Road, then north along the road and crossing the Perkiomen Creek to the village of Graterford meeting the Perkiomen Trail. This would effectively extend the County's Power Line Trail from Evansburg Park to the Perkiomen Trail. A spur of this trail could also connect the Village of Skippack to the Perkiomen Trail. Further, this trail could potentially extend all the way to Willow Grove along municipal trails.

The proposed East Branch greenway also extends south from Lower Salford into Skippack towards Perkiomen Township.

#### TRAPPE BOROUGH

The border between Trappe and Perkiomen Township is just over one mile in length. Increased connections between the municipalities along sidewalks and through open space are active considerations of Trappe's planning efforts. Trappe is specifically looking at two potential linkages with Perkiomen. The first is a trail connection from Trappe to Hunsberger Woods through the Oak Road cul-de-sac or possibly some adjacent agricultural land. This connection could then lead on to the trail around the perimeter of the Iron Bridge Corporate Center in Perkiomen. The second is the PECO corridor that would require cooperation from Perkiomen and Upper Providence Townships. This corridor could create access from the Perkiomen Trail to the proposed Schuylkill River Trail extension.

#### UPPER PROVIDENCE TOWNSHIP

Upper Providence is placing a high priority on trail connections in its Open Space Plan update. The township is placing great emphasis on development of a trail on the PECO corridor as described above in cooperation with Trappe and Perkiomen Township.

#### UPPER SALFORD TOWNSHIP

Upper Salford adopted its first Open Space Plan jointly with Schwenksville Borough in 1996. Together the two communities bought the Spring Mountain House Site. The Spring Mountain Area Conservation Plan prepared by the Natural Lands Trust in 2001, discusses the Spring Mountain House site as a part of the overall publicly-owned Spring Mountain Natural Area. Acreage exists within Perkiomen Township to extend this preserve and protect natural resources.

Upper Salford also adopted a trail plan entitled, "Crossroads and Greenways: A Community Connections Plan for Upper Salford Township" in May 2003. The Community Connections Plan looks at greenway connections, connections within villages, and greenway connectors. One of the focus areas is around Spring Mountain. Connections are discussed from the Perkiomen Trail to Upper Salford Township Park and along tributaries of the Perkiomen Creek and a connection to the East Branch greenway with Skippack and Lower Salford.

The Indian Valley Regional Comprehensive Plan designates the area of Upper Salford adjacent to Perkiomen as part of the Rural Resource Area. Therefore, the land use located there will remain consistent with the land use in the portion of Perkiomen it lies adjacent to

## RELATION TO OTHER PLANS

#### **REGIONAL PLAN**

The Central Perkiomen Valley Regional Plan, adopted in June 2005. This plan involves the communities of Collegeville, Lower Frederick, Perkiomen, Trappe, and Upper Frederick. The plan highlights the importance of investment in open space and regional economic development. Specifically, some of the plan's objectives include:

- Preserving and protecting the environmentally sensitive areas and natural resources in the region.
- Coordinating open space and recreational opportunities between the member municipalities.
- Encouraging linkages between public open space and the Perkiomen Trail.
- Developing active and passive recreational opportunities in the region.

#### LOWER PERKIOMEN WATERSHED CONSERVATION PLAN

Expected completion in 2006, this plan is funded by DCNR. Preliminary drafts show that this plan will shed light on the future management of groundwater resources.

#### SPRING MOUNTAIN AREA CONSERVATION PLAN

The Natural Lands Trust completed the Spring Mountain Area Conservation Plan was completed in 2001. The study area includes the portion of Perkiomen Township above the Perkiomen Creek. The plan included an inventory of natural and cultural resources, a summary of threats to the study area, potential conservation strategies, and implementation recommendations. The recommendations focus upon land protection, connections, land stewardship, environmental education, and zoning and land development. The connections recommend connections between the preserved lands within the conservation area, including Spring Mountain, Pennypacker Mills, and the Perkiomen Trail. The plan also reflects the county's trail recommendations for the Perkiomen Creek and East Branch Perkiomen (Evansburg Trail). The Plan also provided very valuable assessments and inventories of the woodlands, flowers and plants, and birds and butterflies found within the study area.

#### **ROUTE 113 HERITAGE CORRIDOR**

The website of the Route 113 Heritage Corridor as sponsored by the Regional Improvement Consortium describes this project as follows.

As a daily commuting route, Route 113 stretches 28 miles from the Schuylkill River in Upper Providence, Montgomery County to the edge of Tinicum, Bucks County, along the Delaware River. As a trail of history, Route 113 showcases preserved farmland, unique barns, and churches dating back to the 1700s. This former Lenape Indian path became planting grounds for farmers from the Rhineland, Germany area when William Penn encouraged Anabaptist farmers to come and build a life that included religious freedom. Many of today's Route 113 communities have been built on farms that once supplied food to the Philadelphia region. Canals are located at each end of the Route 113 Corridor, formerly used to deliver coal from the local mountains to Philadelphia.

The Route 113 Heritage Corridor Partners work together to promote "Planned Preservation, Thoughtful Growth." A \$250,000 study is underway by regional transportation planners to make the Route 113 Corridor a safe transportation route while preserving its unique geographical features and historical elements. Transportation studies do not often include land use studies, but because land development significantly affects the transportation infrastructure of a community, the Regional Improvement Consortium secured Federal funding for this project.

When complete, this study will provide local communities with:

- Current traffic counts and projections at 30 intersections to 2030
- A design vocabulary for trees, bushes, fencing, signage, and lighting that will distinguish the Route 113 Heritage Corridor
- Recommendations to calm traffic going through local villages
- Zoning and land use recommendations to help manage traffic growth along the corridor

# CHAPTER 10 Recommendations: acouisition

This portion of the plan details the township's specific intentions for open space and resource protection. These recommendations are informed by the data gathered in the previous chapters and Perkiomen's decision to identify and preserve lands of ecological, agricultural, and community importance while creating recreational opportunities.

This chapter defines target areas for acquisition of new public open space and preserved lands. These areas correspond to the township's overall open space goals and focus on creating a sustainable network of synergistic open space parcels. Because a number of properties could potentially be considered for acquisition, criteria to guide land acquisition are included in this chapter. Figure 40 shows those parcels that are currently undeveloped, underdeveloped, or agricultural. Also described are a number of acquisition methods available to the township in addition to outright purchase.

## ACTIVE RECREATION OPPORTUNITIES

Active recreation areas, as defined here, include parks with facilities for sports such as tennis and soccer, a band shell for cultural activities, or play equipment. This contrasts passive recreation which correspond with recreation opportunities that generally require less maintenance and have a smaller impact on the natural environment. New parks should be developed to have a mix of uses to provide for a variety of activities, including active recreation, walking trails, gathering places, and natural resource protection. Well maintained parks that have high accessibility, allow for a variety of uses, and are integrated into surrounding neighborhoods, build a sense of place within a community. As part of the open space planning process, the Open Space Committee toured two dozen sites across the township that have potential to serve the community as open space. Landowners were contacted and discussions were held concerning their willingness to work with the township to preserve these lands for open space and recreational uses. These parcels were evaluated considering the following criteria.

- Landowner cooperation Perkiomen Township has established that it will not set a parcel as an acquisition priority unless a landowner is willing to sell the property. The township will remain in contact with owners of desirable sites in order to maintain awareness of preservation opportunities.
- Natural constraints Active recreation areas that can accommodate multi-purpose fields should have significant areas relatively free of constraining features. The construction of fields should not require extensive grading or clearing of mature vegetation.
- Acreage Parcels must be of an appropriate size to allow for a variety of activities to occur on the site, including field sports, tennis and basketball, picnic areas, parking, and natural resource protection.

- Access In order to serve the greatest number of residents, active recreation parks should be accessible from arterial and/or collector streets. Further, trail access into neighborhoods and to the local trail system will increase the usefulness of the park.
- Proximity Open spaces are more effective when they are part of a larger block of preserved land. Parcels with close proximity to existing preserved lands should receive greater consideration.

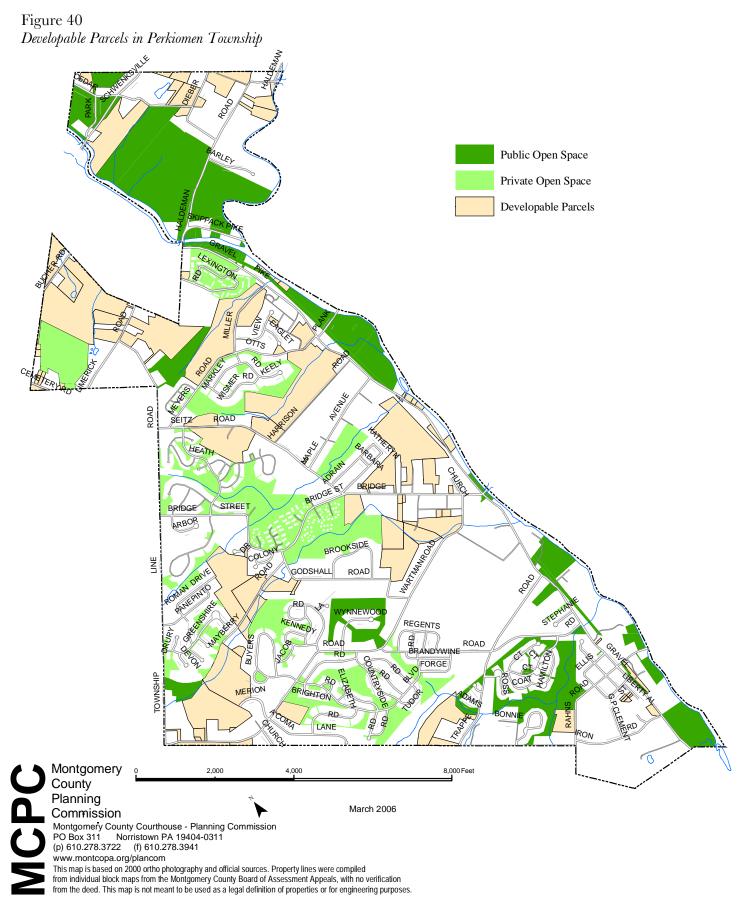
Below are some more specific recommendations for active recreation acquisition.

#### PROVIDE OPEN SPACE FACILITIES FOR UNDERSERVED AREAS

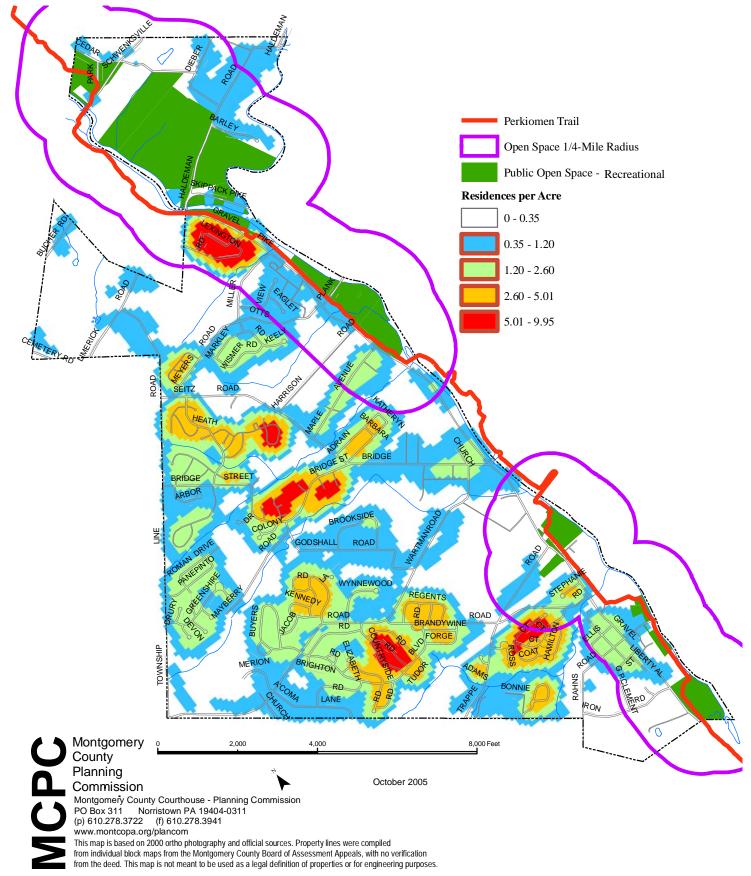
As described in Chapter Eight, some areas of the township, although in close proximity to permanently preserved lands, are not adequately served by useful public open space. As the majority of the township lies in the regionally-designated growth area, population is likely to grow moderately here in the years to come. Figure 41 shows the areas of the township where the greatest density of houses exist. Also shown here is a quarter-mile radius around Perkiomen's most valuable active



Lodal Creek



#### Figure 41 Residential Density & Proximity to Recreation Facilities



recreational open space. The lack of publicly accessible open space with playing fields and courts should be addressed where the level of service of open space is insufficient.

Two options exist to fill this need. First, an open space parcel that lies at a centralized location in the midst of these developments would increase accessibility to open space from several underserved neighborhoods. A second option would be to locate new open space for recreational areas where population densities are the greatest. Two developments with high densities are Maple Hill and Cranberry.

# ACQUIRE ACREAGE IN DEVELOPING AREAS

In preparation to serve future residents, open space could also be preserved in areas where population densities may grow. New development could increase residential densities in areas above Seitz Road where considerable undeveloped acreage remains. In order to serve this potential growth area, open space available for active recreation acquired here could complement open space acreage preserved through the development process.

#### ACQUIRE ACREAGE ADJACENT TO EXISTING PARKS

Taking inventory of existing facilities, the township has insufficient playing fields and courts for its growing population of families with children. However, open spaces that are permanently protected, both public and private, are found throughout the township. Therefore, to improve the level of service provided by existing parks, the township should remain aware of lots adjacent to existing open spaces for potential acquisition.

Figure 42 displays the value of acquiring an undeveloped or agricultural parcel based solely on that parcel's proximity to existing permanently preserved open space. This analysis was based on the assumption that publicly owned open space is twice as valuable to the public as private owned permanent open space. Parcels containing a high preservation value should be given stronger consideration for acquisition. As parcels become available, the township should consider acquiring adjacent parcels and form cooperative agreements with homeowner's associations.

## RURAL CHARACTER PRESERVATION

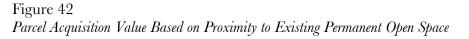
The rural and agricultural landscape remaining within the township, primarily located in the northern third of the township, occupies a significant land area. In Chapter Six the need to preserve rural and agricultural lands emerged as an open space priority of the Perkiomen Township Open Space Committee. The preservation of these lands helps maintain the agricultural heritage of township and the greater Central Perkiomen Valley.

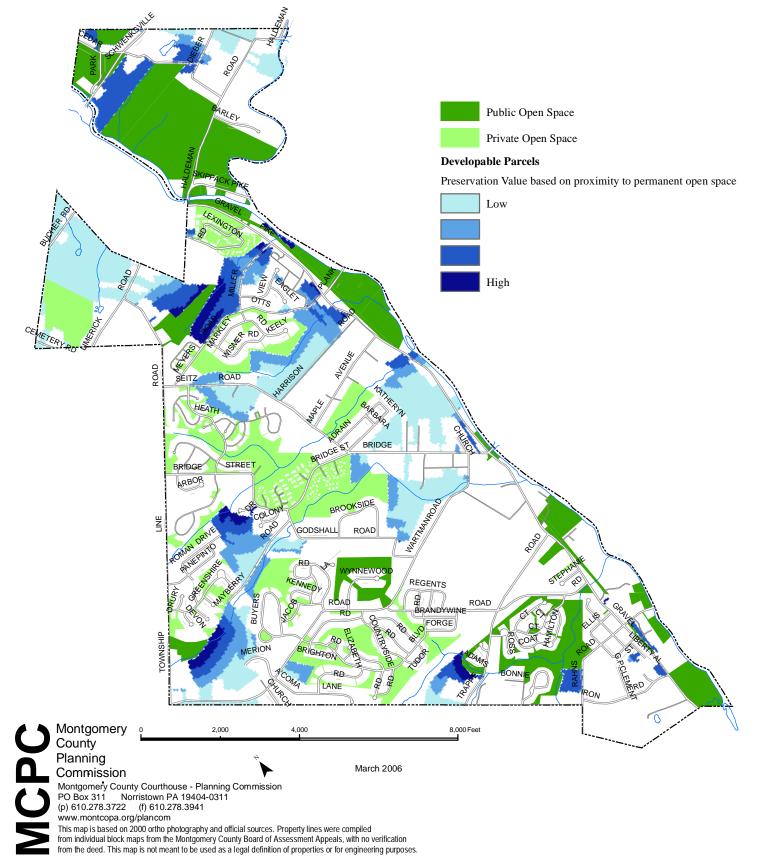
However, only five times has a Perkiomen Township farm applied to the Montgomery County Farmland Preservation Program. Never has an application for preservation received funding. This is because most farms in the township do not score well on requirements of the state program. A township preservation program, however, is not subject to the same requirements mandated by the state. Specifically, the township does not need to comply with a minimum acreage requirement, may allow public access as part of preservation, and may protect less conventional farms, such as those used for boarding horses. Farmland preserved by the township may also focus on additional preservation benefits such as the protection of historic structures.

The following are the criteria to be used to select parcels whose preservation is consistent with the township's goals of preserving rural character.

- Proximity to the path of growth
- Contribution to rural character
- Potential for trail access
- Parcel size
- Presence of agricultural soils
- Profitability potential of agriculture operation

Figure 40 also shows the existing farmland and undeveloped parcels that are not permanently protected. Special consideration for farmland preservation should be given to those parcels in the northern third of the township above Seitz Road. Without intercession by the township, these lands will likely be lost to development in time.





# NATURAL RESOURCE PROTECTION

A great need in the township is to preserve those lands on which significant natural resources lie. Already, great strides have been taken to fulfill this goal that were supported by the township's 1995 Open Space Plan and efforts by the county and other municipalities to establish the Perkiomen greenway and the Spring Mount Conservation Area. The township should consider how a tract meets the following criteria when making acquisition decisions that protect natural resource lands.

- Presence of unique and naturally constraining features
- Proximity to preserved lands
- Ability to connect existing preserved tracts
- Proximity to the path of growth
- Cooperation from partners (land trusts, neighboring municipalities, private organizations, DCNR, etc.)

• Potential for trail access

### Preserved fields below Spring Mount

By concentrating efforts based on these criteria, not only could large areas of environmentally sensitive land be preserved in a sustainable form, but reasonable public access could be available to large and unique natural areas within the township and region. The following are more specific recommendations for natural resource protection through land acquisition.

#### EXPAND EXISTING PERMANENT OPEN SPACES TO INCREASE CONTI-GUITY & ENHANCE VALUE

Habitat quality for both flora and fauna is best preserved when fragmentation is prevented. When large blocks of contiguous habitat are preserved, the species that use that area are less affected by external factors and are more often successful accessing vital resources. When available for acquisition, parcels should be considered that could expand the Perkiomen greenway.

#### PERMANENTLY PRESERVE LARGE TRACTS OF OPEN SPACE THAT POSSESS SIGNIFICANT NATURAL FEATURES

In the past, development in the township was partially limited due to land uses that kept the land open and relatively undeveloped. However, the use of the land is growing in intensity. The township is experiencing greater numbers of applications for development of parcels with greater natural constraints. Although development is constrained on many of parcels by the presence of natural features, any development on these tracts could affect the character of the township and the quality of the environment. Parcels with significant natural features and habitat value as described in Chapter Four could be preserved through conservation easements or acquisition.

#### ACOUIRE PARCELS TO EXTEND THE GREENWAYS OF PERKIOMEN TRIBU-TARIES

Several streams run parallel to each other in the township as they flow towards the Perkiomen Creek. Open space, both public and private, currently protects long stretches of these streams. The largest of these tributaries is the Lodal Creek. The Lodal watershed extends from Ridge Pike near the Limerick Township municipal building to its confluence with the Perkiomen Creek below the village of Graterford. The heart of the creek as it exists in the township is preserved permanently within the Birchwood community. However, only one half mile of its nearly two and a half mile course through the township is permanently protected. Figure 43 displays the parcels that could contribute to the Lodal Creek greenway as well as to the greenways of the other streams in the township.

## VILLAGE CHARACTER PRESERVATION

The residents of Rahns and Graterford could benefit from well placed open space in the village areas. As infill development and redevelopment occur within these village areas, easily accessible open space opportunities should be developed to serve residents.

The township should consider the acquisition of parcels to create small parks or village plazas in and

around these villages. These should be designed within the context of the immediate surroundings to add continuity to the local streetscape and build a sense of place.

Parcels considered for village plazas should fit the following criteria:

- Within the village area with sufficient street access.
- At least 2,500 sq ft to accommodate a variety of public uses. This area can also include surrounding trail and sidewalk areas.
- Able to accommodate landscaping and street trees.
- Promote pedestrian activity and sense of place.

## ACQUISITION METHODS FEE SIMPLE ACQUISITION

The most direct and sometimes most appropriate means of obtaining land for parks and open space is through fee simple purchase. The main advantage of this procedure is that an entire parcel of land belongs to the organization purchasing the land. However, the expense of fee simple purchase can sometimes exceed available funding sources.

#### CONDEMNATION

Acquisition can occur by exercising the right of eminent domain: where public purpose is well defined, where fee simple acquisition is desired but not possible at a fair price and where the owner is reluctant to sell. It is legally prudent to view condemnation as a last resort when acquiring land for parks or open space preservation.

# PURCHASE OF AND LEASE-BACK OR RESALE

In certain cases, it is appropriate for a municipality to purchase land in fee simple, place restrictions on the deed prohibiting certain uses (e.g. residential development) and lease it back to interested parties. One advantage of this method is that the municipality can purchase land for future use (before the price increases, perhaps prohibitively so) and, and through leasing, recoup some or all of the purchase price. In this way, land is maintained in open space and can be developed as a

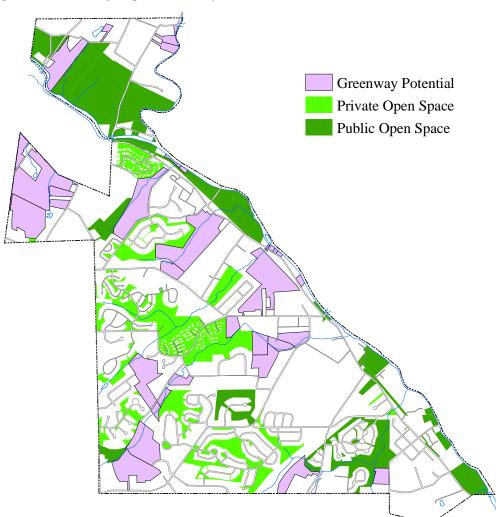


Figure 43 Developable Parcels Along Proposed Greenways

park when future demand warrants. Resale of some or all of the land (after placement of deed restrictions) would maintain open space while also relieving the municipality of maintenance obligations and returning the land to the tax rolls.

#### **CONSERVATION EASEMENTS**

Conservation easements are used to preserve land as a relatively low cost without acquiring it. With a conservation easement, the land remains privately-owned. The easement involves the property owner voluntarily agreeing to donate or sell the right to develop the land. The property owner agrees to place a restriction in the deed of the property, which then becomes binding on all future owners of the land. The easement can be written in many different ways to restrict or not restrict certain types of activities. Most conservation easements prohibit the construction of new buildings and cutting down woodlands. Often, the granting of a conservation easement can result in federal income tax and local property tax advantages to the property owner.

#### PEDESTRIAN EASEMENTS

A conservation easement can also be combined with a pedestrian easement to allow the public the right to walk or hike along a specific area, provided users follow a careful set of rules. These easements can be particularly useful in connecting two or more greenway segments.

#### DONATIONS OF PROPERTIES FOR PERMANENT OPEN SPACE

Landowners can preserve their land by donating the full title of their property or by donating their development rights to a nonprofit land conservation group. These two methods permanently preserve open space.

Landowners who donate development rights receive tax benefits and their land must be permanently restricted from future development. Land conservation groups that operate in this region of Montgomery County and who receive donations include: Montgomery County Lands Trust, Natural Lands Trust, and Heritage Conservancy. Some land conservation groups can also help local landowners to develop some of their land while keeping the majority of the land open and deedrestricted. This approach ensures that land is developed in a sensitive manner yielding the landowner some monetary compensation, while also preserving the most important environmental amenities on the site.

The township intends to study means of disseminating the programs of these conservation organizations to its citizens. This idea is to educate the public about the preservation options available to them as landowners.



A sycamore tree shading the Lodal Creek

# CHAPTER 11 Recommendations: NON-ACQUISITION

Acquisition provides the most control over land use, but can also come at a high financial cost. An important part of open space planning involves understanding and using preservation techniques that are not dependent upon land acquisition. Communities can use these to preserve vulnerable resources, better develop existing parks, and enhance local aesthetics. Such preservation might add acreage to the public open space system, increase permanently preserved private open space, or add to the community's green infrastructure. Other land preservation tools which are appropriate to a township with the qualities of Perkiomen Township are described below.

## ACTIVE RECREATION OPPORTUNITIES

The population of the township is expected to grow and may become younger. Already, many Perkiomen residents that participate in active recreation use facilities located outside the township. As the population modestly grows in the next several decades, the need for open space with active recreation amenities will also grow.

# ENHANCE AMENITIES AT EXISTING PARKS

Perkiomen has four parks that are, or could be, developed with recreation equipment, fields, walking trails, or other facilities. Many of those parks could be enhanced by adding more facilities and expanding the existing ones. Specifically, Perkiomen would like to enhance the facilities of its existing parks in the following ways to make the parks safe, accessible, and usable.

#### **MYERS PARK**

- Park & street trees
- Connection to PECO corridor
- Landscaping

#### HUBER PARK

- Parking
- Trail reaching to surrounding open space and communities

#### MAYBERRY ROAD

- Playing courts
- Amphitheater
- Natural resource protection

#### WYNNEWOOD DRIVE

- Tot lot
- Trail reaching to surrounding open space and communities

#### FACILITATE USE OF INSTITUTIONAL, COUNTY, & PRIVATE RECREATION FACILITIES

Perkiomen Valley School District - Perkiomen Township is the site of the Perkiomen Valley School District campus which occupies a large land area and contains a broad spectrum of recreation amenities. However, demands on these facilities for school district use allows only limited open space and recreation opportunities to residents. Generally, as the intensity of active recreation activities increases, more is demanded from existing facilities both public and private. As public access is not guaranteed at this site, the township should facilitate a forum that brings together residents that may desire to utilize the facilities with those that manage them to ensure full and sustainable use.

**Montgomery County Parks Department** - The county is one of the largest landowners in the township. Working to establish more active recreation facilities on these existing open spaces could help strengthen the regional network.

**Landowners** - Several properties with good access from arterial roads are currently underutilized.

Conversations with these landowners to use these underutilized areas could allow for a partial solution to increase active recreation opportunities.

**Evansburg State Park** - Located two miles from the township, this is another area where local residents could enjoy all types of recreation. As this park is currently underdeveloped to serve active recreational needs of the growing community, the township and other municipalities should consider approaching the Pennsylvania Department of Conservation and Natural Resources (DCNR) to create partnerships.

#### PARTICIPATE IN A REGIONAL OPEN SPACE COUNCIL

As limited opportunities are available to expand the existing park network, the township should look outside its borders to find adequate parkland for use by its residents. At a regional level, the population exists that could support an increase in organized active recreation. Existing regional open spaces such as Evansburg State Park and parkland owned by surrounding municipalities should be considered for joint cooperative agreements in the future to serve this growing need.

# REQUIRE GREATER OPEN SPACE IN LAND DEVELOPMENTS

Municipalities can require developers to provide open space through their zoning ordinance. The zoning ordinance can specify the percentage of required open space and other criteria relevant to the maintenance of common open space. The municipality cannot require the open space to be dedicated or open to the public or to include specific recreational facilities. However, the community can require that the land meet specific standards such as being flat, open land suitable for playing fields.

The subdivision ordinance can also require developers to provide open space but it also allows further provisions. The ordinance can require the land be dedicated to the township. If a developer does not want to provide the land, the ordinance can require fees in lieu of land. An adopted recreation plan must be in existence in order to have this requirement and must follow the provisions within the Pennsylvania Municipalities Planning Code. A community needs to make a decision of whether fees in lieu of should be accepted so as to create larger central parks for a number of neighborhoods or if there should be smaller scale open space within developments. Requiring developments to provide open space allows municipalities to meet the needs of new residents without building additional municipal parks. The provision of requiring open space or a fee in lieu of allows for a community to have flexibility in establishing their open space priorities.

The township has enacted open space dedication requirements in the R-4, R-5, ER, and CR Districts. However, even though open space requirements in the Zoning Ordinance will help provide recreational areas for the incoming population, the land development process cannot be relied upon to fill existing needs in the open space system. The township should include more open space requirements in the updated Zoning Ordinance when gaining compliance with the Central Perkiomen Valley Regional Comprehensive Plan. The township should also consider including a fee-in-lieu of option as a way to help develop a park system that meets the community's needs. This would require a complete township recreation plan.

## TRAIL NETWORK OPPORTUNITIES

Just as habitat value increases when natural resource areas are networked together, so does the value of community recreation facilities.

#### PARTICIPATE IN REGIONAL TRAIL NETWORK EFFORTS

Perkiomen should maintain a regional perspective and work with neighbors to increase residents' accessibility to opportunities afforded to them by local and regional open space. As mentioned in Chapter Five, most of Perkiomen's neighbors have trail plans with implementation campaigns at varying levels of activity. Perkiomen should develop its trail recommendations with consideration to the points at its border to which neighboring trails are proposed. These are also shown in Figure 44 and described in detail in Chapter Five. A regional open space council would be an appropriate forum at which to discuss an integrated trail system.

- PECO Corridor
- Hunsberger Woods Loop
- Iron Bridge Corporate Center



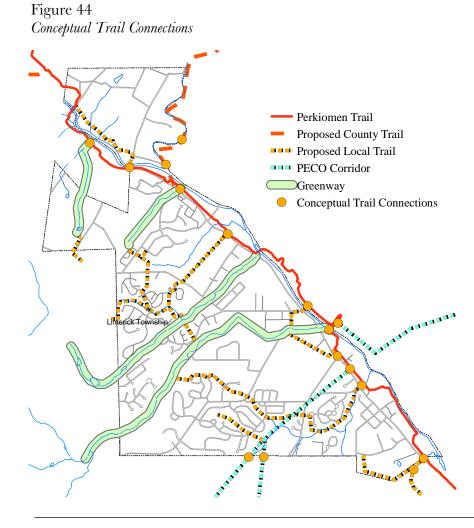
Pennypacker Mills

- Evansburg Loop
- Boyer Run Greenway

# INCREASE LOCAL ACCESS TO THE PERKIOMEN TRAIL

To allow for greater access to the Perkiomen Trail and to attract through-travelers on the Trail to visit the township, strong connection points should be made. Specific connections include those listed below and as displayed in Figure 44.

- Gorski Tract
- Stephanie Lane
- Myers Park
- Trappe Road & Perkiomen Valley High School
- Landis Market & Harrison Avenue
- Huber Park & Myers Riparian Corridor
- Pennypacker Mills



#### DEVELOP TRAIL & PATHWAY LINKAGES WITHIN PERKIOMEN TOWNSHIP

Individual open space parcels should not be isolated from other parts of the landscape. Besides clustering open space parcels, trails are one way in which a network can be established. Any addition to the open space system should create better linkages between existing open space and neighborhoods within a municipality. The township should also work together with landowners such as PECO, Perkiomen Valley School District, County Parks, and private homeowners associations to use existing open space and underutilized land to build trail corridors that interconnect neighborhoods.

#### RURAL CHARACTER PRESERVATION REDUCE RESIDENTIAL DENSITIES IN THE RURAL HERITAGE & NATURAL RESOURCE AREAS

The Central Perkiomen Valley Regional Comprehensive Plan gives freedom to the participating municipalities to reduce intensity of land use and density of dwelling units in certain areas of the region. As described in Chapter Seven, the township lies in the Designated Growth Area and the Rural Resource Area. Options exist in the Perkiomen Township to reduce residential densities within the limits of the regional plan.

Zoning amendments should be considered to guide growth to where it is most appropriate in the township and region. Residential density in the Rural Resource Area may not exceed one dwelling unit per two acres. Density in the Designated Growth Area may range from one to 12 units per acre. Applicable areas for reductions in density are the Rural Heritage and Natural Resource Areas as described in this open space plan.

### **CLUSTER ORDINANCE**

One method to preserve open space is to cluster homes within one portion of a development and reserve the rest for permanent open space. The overall density of the site is about the same, while the homes are on smaller lots. The open space area might preserve viewsheds, historic landscapes, farmland, or natural features. The open space may then be dedicated to the township as parkland. Through clustering, significant portions of the site can be preserved as much as 75% or 80%. The open space may be in the developed portion of the site so that the homes have accessible neighborhood open space. While this type of development preserves natural resources, it also benefits the developer by lowering infrastructure costs by reducing road length, stormwater facilities, and utility lines.

Perkiomen currently has provisions to allow clustering in the R-1 and R-2 zoning districts through the Open Space Residential Overlay District. The township will investigate changes to the existing cluster ordinance that could increase the amount of land preserved to protect sensitive natural resources or offer recreational open space opportunities.

#### ADOPT INCENTIVE ZONING

Communities can encourage developers through incentive zoning to provide open space, recreation facilities, trails, and parkland. The incentives are placed in specific zoning districts, and might allow a developer to build at a higher density or a create smaller lot sizes than permitted. The ordinances should be crafted so that the cost for providing the amenity does not exceed the benefit received from the incentive. The township will investigate the benefits and applicability of incentive zoning throughout the township, especially near areas with proposed linkages and pathways.

#### INTEGRATE CONSERVATION BY DE-SIGN CONCEPTS

Applying this methodology as developed by the Natural Lands Trust, communities create zoning and subdivision ordinances that enable the land development process to best protect important landscape features. The process "respects the private property rights of developers without unduly impacting the remaining natural areas that make our communities such special places in which to live, work, play and invest." Specifically, the four step process includes the following:

- 1. Identify the land to be permanently protected
- 2. Locate proposed houses in order to maximize open space potential
- 3. Design road network and other infrastructure
- 4. Assign lot lines to individual parcels

The township intends to consider the strengths of this methodology and include those appropriate to the land development process.

#### PARTICIPATE IN A TRANSFER OF DE-VELOPMENT RIGHTS PROGRAM

This method of preserving rural land transfers development from rural areas to growth areas. With a transfer of development rights program, rural landowners can sell their development rights to developers in the township's growth areas instead of developing their rural land.

For example, a rural landowner who has 50 acres might normally be allowed to subdivide them into twenty 2-acre lots. Instead, with a TDR program, the landowner sells the right to build these 20 lots to a developer in a growth area. The developer adds those 20 units, or more as appropriate, to the number of units normally allowed to be built. The rural landowner, who has been paid for these development rights, is then required to deed restrict the land against any future development.

As part of the Central Perkiomen Valley Region, the opportunities to transfer development rights between parcels are increased. Opportunities are possible for the township to act as both a sending and receiving area.

#### ADOPT SCENIC RESOURCE PROTECTION ORDINANCES

Communities have several tools available to help maintain rural character. Land development regulations can reduce the visual impact of rural development by encouraging or requiring homes to be hidden from view. For example, zoning could allow a smaller lot size if homes are located in wooded areas or behind ridgelines. On the other hand, the community could require homes that will be located on existing roads to have a larger lot size, bigger setbacks from the road, or screening buffers between the road and the home.

Often, municipalities require rural subdivisions to provide curbing and to widen the road, even though these improvements may not be necessary. It is necessary to widen streets and provide curbs in some areas. However, when these improvements are required in locations that do not need them, the historic rural character of the roadway is changed. Sometimes, special features of the landscape, such as historic bridges, tree rows, fences, and hedges, are also destroyed in the process. Landscape buffer and tree and hedgerow preservation standards in the subdivision ordinance are other tools.

A Rural Residential model zoning district is being developed to specifically address this issue. The township will investigate this zoning model that protects scenic roads and viewsheds where development could significantly affect rural character, especially in the designated rural resource area.

#### SUPPORT THE LOCAL AGRICULTURAL SECURITY AREA

State law allows groups of farmers, with municipal approval, to create agricultural security districts. These districts must comprise at least 500 acres, although the farms do not have to be contiguous. If a municipality has farms but cannot meet the acreage requirement, it can join another municipality's district. Landowners who join one of these districts have absolutely no obligations whatsoever, but they do receive three distinct benefits.

First, farms in agricultural security areas are protected from new ordinances that would restrict normal farming operations or define farms as nuisances. However, the farm operation must use acceptable farming practices that do not threaten the public health, safety, and welfare.

Second, condemning land in agricultural security areas is more difficult. Land condemnations by the Commonwealth or local municipal authorities, school boards, and governing bodies must be reviewed and approved by a state agricultural board before any action can be taken.

Third, farms in an agricultural security area can apply to sell their development rights to the county and state. When development rights are sold, farmers receive the difference between the development value of their property and the farm value of their property. In return, a conservation easement is placed on the property, permanently restricting any non-farm development on the property. This program permanently preserves farms.

The township will support the growth of the ASA by educating landowners about the benefits of such a program. However, it is up to individual landowners to manage the district.

#### NATURAL RESOURCE PROTECTION ENSURE LAND PROTECTION STATUS MEETS TOWNSHIP STANDARD

As described in Chapter Three, nearly 300 acres that remain in private management have been protected through the development process. This land area protects natural resources across the township and makes up almost 10% of the total land area. Because of the important role these lands play in developing the character of the community, Perkiomen Township should consider researching the strength of land protection these sites have.

#### UPGRADE RESOURCE PROTECTION ORDINANCES

The ordinances discussed below protect natural features to help maintain soil structure, water quality, and aesthetic values.

Steep Slopes - Development on steep slopes, which are typically slopes of 15% or more, can be restricted or prohibited through steep slope ordinances. Development often is permitted on slopes of 15% to 25% if the minimum lot size is increased and/or the percent of the lot disturbed is limited. Some steep slope ordinances prohibit all development, although typically development is prohibited on extremely steep slopes such as 25% or more. The township will keep abreast of updates they can make to their existing Steep Slope Conservation Overlay District in the Zoning Ordinance to protect soil and water resources.

Floodplains - Floodplain ordinances restrict or prohibit development within floodplains, especially development within the 100-year floodplain. There are typically three types of floodplain restrictions in the county. One type allows development within the floodplain provided that buildings are flood-proofed. Many ordinances do not allow building within the floodplain. This type of ordinance protects properties from flood damage, protects the environment within the floodplain, and also reduces the possibility of raising the flood level. A third type of ordinance not only restricts development within the floodplain but also requires a minimum setback from the edge of the floodplain. This type of ordinance protects the unique wooded habitat, or riparian woodlands, of the floodplain. The township will keep abreast of updates they can make to their existing Floodplain Conservation District in the Zoning Ordinance to protect this natural resource.

Stream Corridors - Stream corridor protection ordinances go beyond floodplain ordinances to protect the water quality of the stream in addition to plant and animal habitats. These ordinances have a minimum setback requirement from the stream bank where no development can occur. A minimum setback of 75 feet from each stream bank, for example, will help stabilize the stream bank, control sediment, remove nutrients that would pollute the stream, moderate stream temperature, and preserve wildlife habitat. The area within the setback should be left in its natural state. The township will keep abreast of updates they can make to their existing Riparian Corridor Conservation Overlay District in the Zoning Ordinance to protect soil and water resources.

Wetlands - In addition to federal and state governments, municipalities can regulate development that occurs near wetlands. Municipalities should prohibit development on wetlands and require wetlands to be shown on development plans. While developers can locate homes right next to wetlands (after receiving all the federal and state permits needed), such location might lead to future problems. Homeowners might decide to fill in the wet areas behind their home to have a more usable back yard. To prevent this, local municipalities can require a minimum building setback from wetlands. While federal and state regulations address only the filling of wetland and not the destruction of vegetation within the wetlands, municipalities can take the extra step and require the replacement of destroyed wetlands vegetation. The township should consider adding wetland protection language into their subdivision & land development and zoning ordinances.



Mill House dam

Groundwater - Wellhead protection ordinances can help protect groundwater guality. Stormwater ordinances which include provisions for groundwater recharge also help protect groundwater quality, non-point source pollution, and the impact on stream temperatures. Wellhead protection areas are identified by a number of methods, such as a hydrogeologic survey. Wellhead protection ordinances can restrict certain uses such as gas stations, limit the intensity of development (such as limiting the density of single-family detached homes with individual septic systems), and/or by controlling how a land use activity occurs (such as farming with specific types of pesticides and other chemicals) within wellhead protection areas. A municipality can also impose design standards that would not allow, for example, hazardous materials containment structures or large impervious areas such as parking to limit potential groundwater pollution. To protect public drinking water wells the township should investigate the benefits of wellhead protection ordinances that limit certain land uses near community wells.

The township subdivision ordinance and Act 537 Plan should also require that wastewater treatment and stormwater facilities meet a high standard to protect groundwater quality.

Woodlands - Protection of existing trees and woodlands can be accomplished with woodland preservation ordinances. Some ordinances provide minimum standards that must be followed during construction for trees that will remain. Other ordinances, when existing trees are preserved, allow developers to put up fewer street trees, buffers, or individual lot trees. Tree replacement is another requirement of some ordinances. Woodland and vegetation management ordinances should be developed and updated periodically to ensure this natural resource is better protected. This may include a fee in lieu of tree replacement.

Further, the township should encourage the preservation and installation of trees as trees maintained in residential districts benefit individual landowners and the entire community aesthetic. Wellplaced mature trees can reduce air-conditioning costs up to 30% and evergreen trees acting as windbreaks can significantly reduce heating costs. Tree canopies reduce heat islands by providing shade to paved surfaces, filter air, and buffer sources of noise, increasing walkability.

#### INTEGRATE PERFORMANCE ZON-ING STANDARDS

With performance zoning, the minimum lot size is directly related to the natural features of the site. The lot size corresponds to such features as: high water table soils, floodplains, and steep slopes. When many of these features exist on a site, the minimum lot size must be increased. If these features are not present, the minimum lot size can be smaller, such as 1 acre. These provisions are placed in the zoning ordinance.

An example of performance zoning is where the environmental constraints of a lot are subtracted from the net lot area. If the zoning district allowed a minimum of 1-acre lots and the applicant proposed a 2acre lot and the lot contained 1.5 acres of floodplain, then the application would not be permitted because the net area would be 0.5 acres.

Performance zoning ordinances can also apply ratios to a wide range of environmental constraints such as floodplains, wetlands, steep slopes, soils, geology, woodlands, etc. The ratio is multiplied by the constrained portion of the lot. This is then subtracted from the lot area to yield the net lot area. For example for a 5-acre lot with a ratio of 100 percent for floodplains and 50 percent for steep slopes that contains 1 acre floodplains and 1.5 acres of steep slopes:

- 1.50 (acres of steep slopes)  $\times 0.50 = .75$  acre
- 1.00 (acre of floodplain) x 1 = 1.00 acre
- 1.00 (floodplain) + 0.75 (steep slopes) = 1.75
- 5.00 1.75 = 3.25 net acres

The township will investigate the specific benefits performance zoning could offer to guide development to where the land can best accommodate it.

#### VILLAGE CHARACTER PRESERVATION UPGRADE STREETSCAPES & MAINTAIN STREET TREES

Street trees give relief to the village or urban landscape and help create a more livable, walkable environment. When strategically placed and maintained in redevelopment areas, commercial districts, parking lots, and neighborhoods, they add aesthetic appeal, filter air, and provide shade. Also important to the township's efforts, the Wharton School's Real Estate Department found that minimal investments in street trees can increase property values by as much as 10%.





The Pennsylvania Horticultural Society's Green City Strategy is a model program currently used by Philadelphia's Neighborhood Transformation Initiative (NTI). The program focuses on abandoned or underutilized tracts, bringing green space and gardens into urban districts. The NTI Green City Strategy is shown in Figure 45. Many of the concepts applied and lessons learned in Philadelphia are applicable at lesser scale to the efforts of Perkiomen to create an image of a green community.

Also, when street trees are coupled with regulation concerning façade treatments, public amenities, and building design standards, a complete streetscape aesthetic can be created. This adds continuity to the streetscape, especially when standards are periodically reviewed.

To ensure long term viability of street trees, species diversity should be part of planting considerations. The business community should also be included in the tree selection process to increase available funds and to ensure species suitability. Figure 46 describes the specific areas in which street trees are needed and streetscape efforts should be focused.

#### ADOPT HISTORIC PRESERVATION ORDINANCES

While not directly related to open space preservation, historic preservation ordinances help save historic properties that add to the character of an area. There are a number of techniques that communities can use for historic preservation.

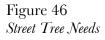
One possibility is that communities can amend their building codes to require a review before demolition permits are issued. This method delays demolition and allows for community input. Communities can also amend their zoning ordinance to encourage historic preservation. One way of encouraging historic preservation is the creation of a village ordinance that gives development bonuses for preserving buildings or restricts the uses within the district. Incompatible uses with historic areas, such as gas stations, are not permitted in these districts. The zoning ordinance can also encourage historic preservation by allowing historic buildings to have more uses than normally permitted in a particular district. For example, apartments, bed and breakfast establishments, or offices might be permitted in historic homes located in a single-family detached residential district.

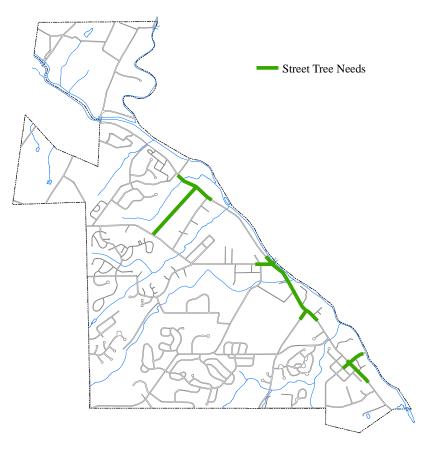
A third possibility is that communities can create historic districts with approval of the Pennsylvania Museum Commission. This approach is more restrictive than the previous approaches discussed. Once a historic district is created, townships or boroughs have stringent control over design and preservation of facades. A township or borough architectural review board is required to be created to review all proposed changes to historic buildings.

The township's Zoning and Subdivision & Land Development Ordinances encourages the preservation of the character of historically or culturally significant structures. However, methods of further documentation or protection of historic structures will be investigated.

# IMPLEMENTATION

In the next chapter, Figures 46 and 47 displays those recommendations with specific geographic settings. The following chapter defines the priority level of these recommendations is describes and an implementation schedule is presented.





# CHAPTER 12 Implementation

Implementation is perhaps the most important part of the open space plan. Having identified and examined the open space issues important to the township, a list of prioritized actions is established here to guide Perkiomen toward achieving its goals. This chapter is Perkiomen's action plan.

In the near term, implementation principally involves securing funds from the township's allocation under the County Open Space Program for projects of the highest priority. It also means taking other, nonacquisition actions for open space preservation and recreation network planning and development. This will generally occur in the first phase of the Green Fields/Green Towns Program ending in Spring 2008. Long term priorities will build upon these earlier efforts, and will be implemented in the proceeding five to ten years. For each proposed action, primary responsibility is proposed among specific parties.

## **FUNDING SOURCES**

In addition to the funds allocated through the County Open Space Program, Perkiomen Township is eligible for funds from a variety of sources including grants, general revenue funds, bond issues, and donations (of cash, materials, or labor).

Perkiomen will pursue other grants available from Montgomery County, the Department of Conservation and Natural Resources (DCNR), and others. These grants can be used in conjunction with the County's Open Space grants to help defray the cost of the township's match. To further leverage funds and preserve more acreage, the township will work with conservation organizations. A sampling of possible grant sources is described below.

#### MONTGOMERY COUNTY OPEN SPACE GRANTS (MCOS)

In 2003, a referendum to fund open space and green infrastructure projects was passed in Montgomery County. Know as the Green Fields/Green Towns Program, this funding was allocated to municipalities, private non-profit conservation organizations and the county to preserve more open space and enhance the livability of existing communities throughout the County.

Perkiomen is eligible to receive a total of \$672,261 for open space acquisition and enhancement. This grant requires matching funds equal to 20% of project costs from the municipality. The County grants come with several conditions. The most important condition is that any land purchased with grant money must be permanently preserved as open space or for active recreation. Another condition is that Perkiomen must complete and adopt the Open Space Plan. This plan must be approved by the County's Open Space Board before grant money can be disbursed.

# PERKIOMEN TOWNSHIP EARNED INCOME TAX

In November 2004, Perkiomen Township residents approved a referendum that allowed for the increase in the local earned income tax by 1/8%.



Open space preserved through the land development process

This tax collects approximately \$250,000 for the township per year for open space acquisition. These funds are valuable in that they can be used to help leverage funds from other sources described here in this section.

#### MONTGOMERY COUNTY FARMLAND PRESERVATION PROGRAM (MCFP)

The Farmland Preservation Program purchases agricultural easements from productive farms in Montgomery County. When the rights are sold, the owner keeps the land, but no longer has the right to build non-agricultural buildings. It must remain in farming in perpetuity. The farmer may sell the land, but the new owner must continue to grow productive crops or pasture on it.

#### PENNSYLVANIA DEPARTMENT OF CONSERVATION & NATURAL RESOURCES (DCNR)

DCNR manages a variety of grant and technical assistance programs concerned with a variety of issues. DCNR annually awards about \$30 million in planning, acquisition, and development grants for parks, recreation, rivers conservation, trails, greenways, and protection of open space and critical natural areas. Most DCNR grants require a 50/50 match. DCNR also provides pre-application workshops to assist applicants in the preparation of their application forms.

A priority goals of the these programs is to develop and sustain partnerships with communities, non-profits, and other organizations for recreation and conservation projects and purposes. With this in mind, the Community Conservation Partnerships Program (C2P2) was established. It is a combination of several funding sources and grant programs, including the Commonwealth's Keystone Recreation, Park and Conservation Fund (KEY 93, described below), the Environmental Stewardship and Watershed Protection Act (Growing Greener, also described below), Act 68 Snowmobile and ATV Trails Fund, the Land and Water Conservation Fund (LWCF) and the Recreational Trails component of the Transportation Equity Act for the Twenty-First Century (TEA-21).

#### PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP)

The Growing Greener program has funded efforts to clean up Pennsylvania's rivers and streams, reclaimed abandoned mines and toxic waste sites, invested in new alternative energy sources, preserved farmland and open space, and developed watershed restoration programs. Thus far, Growing Greener has generated nearly \$1.50 in matching funds for the environment for every \$1.00 in state money. As the Growing Greener program evolves, it will focus on brownfield redevelopment, farmland and open space preservation, water quality improvements, enhanced state and community parks, and an upgraded fish and wildlife infrastructure. Growing Greener II will accomplish these goals while making critical investments in community revitalization and the promotion of the use of clean energy.

# KEYSTONE RECREATION, PARK, & CONSERVATION FUND

The Keystone Recreation, Park and Conservation Fund Act was signed into law in 1993. It directs a portion of the state's Real Estate Transfer Tax to the Keystone Fund, establishing a dedicated and permanent funding sources for recreation, parks, conservation, and other programming. Grants from this program require a minimum 50% match from the recipient municipality or nonprofit organization. As of 2002, \$144 million had been granted to more than 2,100 projects. The demand on the Keystone Fund already outstrips resources by a 4 to 1 margin.

#### PENNSYLVANIA DEPARTMENT OF COMMUNITY & ECONOMIC DEVELOPMENT (DCED)

 The mission of DCED is "To foster opportunities for businesses and communities to succeed and thrive in a global economy, thereby enabling Pennsylvanians to achieve a superior quality of life." Therefore there are several assistance and grant programs available to Pennsylvania municipalities. Often, local economic and community revitalization efforts are supported by the implementation of green infrastructure and open space plans.

#### PENNSYLVANIA HISTORICAL & MUSEUM COMMISSION (PHMC)

Many communities value their historic resources and work to preserve them for future generations. These resources can then be integrated into the open space network and cultural amenities of that community to enhance local image and aesthetics. The PHMC offers several programs that aid municipalities in these efforts.

- Certified Local Government Grant Program -Provides funding for cultural resource surveys, national register nominations, technical and planning assistance, educational and interpretive programs, staffing and training, and pooling CLG grants and third party administration
- Keystone Historic Preservation Grant Program - Funding for preservation, restoration, and rehabilitation
- Pennsylvania History and Museum Grant Program - Funding under this program is designated to support a wide variety of museum, history, archives and historic preservation projects, as well as nonprofit organizations and local governments. There are 10 types of grants.

#### DELAWARE VALLEY REGIONAL PLANNING COMMISSION (DVRPC) TRANSPORTATION AND COMMUNITY DEVELOPMENT INITIATIVE

The TCDI program is intended to assist in reversing the trends of disinvestment and decline in many of the region's core cities and first generation suburbs by:

- Supporting local planning projects that will lead to more residential, employment or retail opportunities;
- Improving the overall character and quality of life within these communities to retain and attract business and residents, which will help to reduce the pressure for further sprawl and expansion into the growing suburbs;
- Enhancing and utilizing the existing transportation infrastructure capacity in these areas to reduce the demands on the region's transportation network; and
- Reducing congestion and improving the transportation system's efficiency.

#### CONGESTION MITIGATION AND AIR QUALITY IMPROVEMENT PROGRAM (CMAQ)

This program seeks transportation-related projects that can help the region reduce emissions from highway sources and meet National Clean Air Act standards. The program covers the DVRPC region of Bucks, Chester, Delaware, Montgomery, and Philadelphia counties in Pennsylvania; and, Burlington, Camden, Gloucester and Mercer counties in New Jersey.

# TRANSPORTATION ENHANCEMENT PROGRAM (TE)

Transportation Enhancements is a set-aside of Federal highway and transit funds, mandated by Congress in the Transportation Equity Act for the 21st Century (TEA-21) for the funding of "nontraditional" projects designed to enhance the transportation experience, to mitigate the impacts of transportation facilities on communities and the environment, and to enhance community character through transportation-related improvements.

#### NATIONAL PARK SERVICE RIVERS, TRAILS, & CONSERVATION ASSISTANCE PROGRAM

The program offers technical assistance only to nonprofit organizations, community groups, and local or state government agencies. Rivers and Trails technical staff offers the following types of assistance for recreation and conservation projects:

- Building partnerships to achieve communityset goals
- Assessing resources
- Developing concept plans
- Engaging public participation
- Identifying potential sources of funding
- Creating public outreach
- Organizational development
- Providing conservation and recreation information

#### PECO ENERGY GREEN REGION OPEN SPACE GRANT PROGRAM

PECO Energy, a subsidiary of Exelon, is currently involved in several environmental partnerships including "TreeVitalize," with DCNR, clean water preservation with The Nature Conservancy, and environmental education initiatives with the Schuylkill Center for Environmental Education and Green Valleys Association. Green Region grants are available to municipalities in amounts up to \$10,000. The grants can be used with other funding sources to cover a wide variety of planning and direct expenses associated with development and implementing open space programs, including consulting fees, surveys, environmental assessments, habitat improvement, and capital improvements for passive recreation.

# GENERAL REVENUE FUNDS & BOND ISSUE

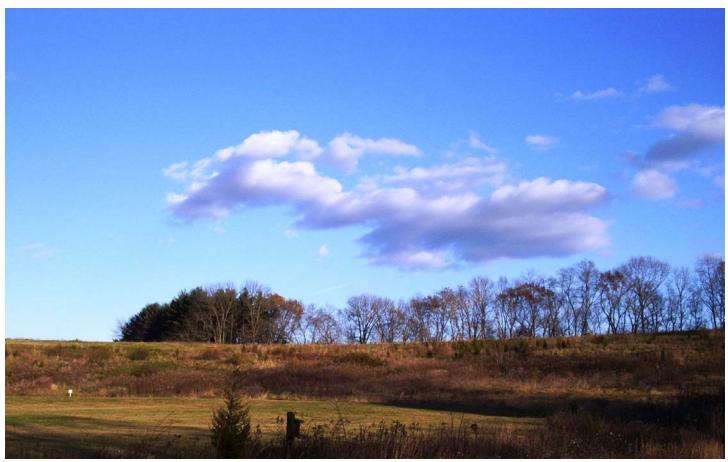
Perkiomen has the option of using general revenue funds for open space and recreation purposes. It also has the option of issuing a bond to pay for the capital costs of parkland acquisition and development. The decision to pursue these options rests with the township supervisors.

#### DONATIONS

Perkiomen should encourage donations from individuals, businesses, and groups to help pay for parkland acquisition, development, and tree planting. The donations may be cash, materials, or labor. Perkiomen could organize special days during which local citizens and groups could gather to participate in implementing open space projects.

# IMPLEMENTATION MATRIX

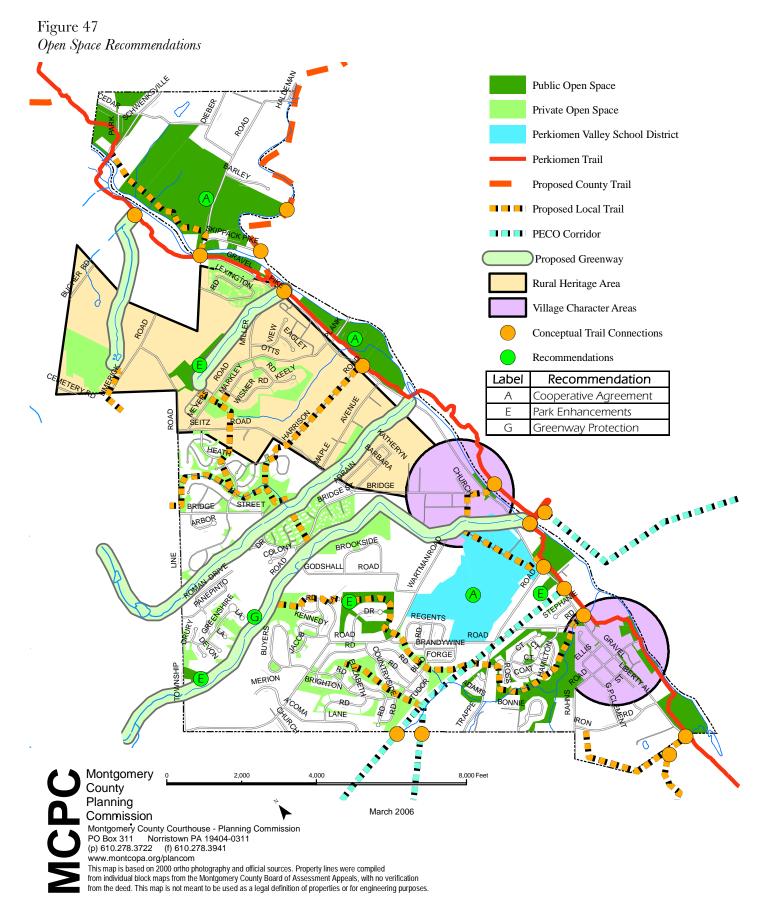
Figure 47 displays those recommendations with specific geographic settings. Figure 48 lists each recommendation based on its priority level. This matrix specifies the general category, the propose action, the responsible party, and potential sources of funding. As stated before, the recommendations of highest priority should be acted on, if not achieved by 2008. The remaining recommendations should be considered and acted on in the succeeding five to ten years. Unless specified in Figure 48, the recommendations are applicable township-wide.



Bluff between Pennypacker Mills and the East Branch

### Key of responsible parties and partners

BOS	Board of Supervisors
CB	Collegeville Borough
CPVRPC	Central Perkiomen Valley Regional Planning Commission
HOA	Homeowners associations
MCP	Montgomery County Parks
PC	Planning Commission
PECO	Philadelphia Electric Company
PVSD	Perkiomen Valley School District
ST	Skippack Township
TB	Trappe Borough
UPT	Upper Providence Township



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## Figure 48 Implementation Matrix

Category	Action	Responsible Party
	HIGHEST PRIORITY	
	Provide open space facilities for underserved areas	BOS
Active Recreation Opportunities	Enhance amenities at existing parks	BOS
	Facilitate use of institutional, county, and private recreation facilities	BOS, PVSD, MCP, Landowners
	Require greater open space in land developments	PC
Trail Network Opportunities	Participate in regional trail network efforts along the PECO corridor	BOS, CB, ST, TB, UPT, PECO
Rural Character	Preserve farmland	BOS
	Preserve undeveloped lands	BOS
Preservation	Consider reduction of residential densities in the Rural Heritage and Natural Resource Areas	РС
	HIGH PRIORITY	•
Active Recreation Opportunities	Acquire acreage in the Rural Heritage Area	BOS
	Acquire acreage adjacent to existing parks	BOS
Trail Network	Develop trail linkages within Perkiomen Township using the PECO corridor	BOS, PC, PECO, HOA
Opportunities	Increase local access to the Perkiomen Trail	Bos, MCP, Hoa
Rural Character Preservation	Adopt Incentive Zoning	РС
	Consider Performance Zoning standards	PC
Natural Resource	Acquire parcels to extend the greenways of Perkiomen tributaries	BOS
Protection	Ensure land protection status meets township standard	BOS
Village Character	Acquire parcels to create village plazas	BOS
Preservation	Upgrade streetscapes and maintain street trees	BOS, PC, Landowners
	PRIORITY	
Active Recreation Opportunities	Participate in a regional open space council	BOS, CPVRPC
	Update Cluster Ordinances	PC
	Integrate Conservation by Design concepts	PC
Rural Character	Adopt scenic resource protection ordinances	PC
Preservation	Participate in a transfer of development rights program	BOS, PC, CPVRPC
	Support the Agricultural Security Area	BOS
Natural Resource Protection	Expand existing permanent open spaces to increase contiguity and enhance value	BOS
	Permanently preserve tracts of open space that possess significant natural features	BOS
	Upgrade resource protection ordinances	PC
Village Character Preservation	Adopt historic preservation ordinances	РС

Perkiomen Open Space Plan

# Appendix A

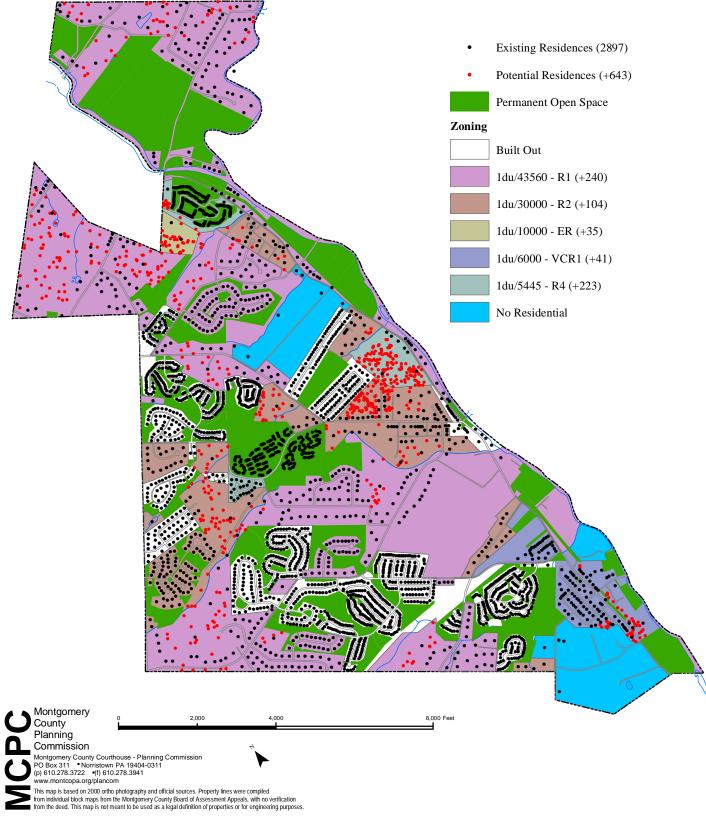
## PERKIOMEN TOWNSHIP POTENTIAL BUILD OUT SCENARIO

In developing the guidelines for the current open space program, the Montgomery County Open Space Task Force felt that it was particularly important for municipalities to carefully examine the impact of current zoning on future development. As such, a requirement was placed in the plan guidelines for municipalities to perform a build out analysis which would project potential residential development under current zoning. By doing this, township residents are better able to understand the implications of current growth policies so that future efforts are better targeted to protect the resources that mean most to the community.

Figure 49 displays both the existing residences in Perkiomen Township as well as the potential new dwelling units that could be built based on current zoning. This map offers a scenario in that every developable parcel within the township is built out to its fullest extent. This development pattern is not imminent. Although this is a possible scenario, property owners or site conditions may not allow for full build out of each parcel. Figure 49 serves as a representation of what current zoning could ultimately yield, but not for any specific parcel or for any designated time period.

Generalized by zoning district, Figure 49 only presents an approximated estimate of the number of potential new units across the township. However, even as this scenario may be unlikely, the zoning ordinance should be evaluated taking this possible growth into account. Further, this depiction of build out underscores the need to preserve





and protect land through various open space acquisition techniques.

Figure 49 was created through the following process.

- 1. Identified existing developed land
- 2. Symbolized existing residences
- 3. Calculated acreage undeveloped or underdeveloped land
- 4. Subtracted natural features that constrain development (steep slopes, wetlands, flood-plains) from undeveloped acreage
- Multiplied remaining developable acreage by a coefficient to allow for irregular lot configurations, the development of roads and infrastructure, or other constraining features. A factor of 0.8 was used generally across the township.
- 6. For each zoning district that allows residential types of land use, developable acreage in that district was divided by allowable density to determine number of potential new units per district.
- 7. Points representing dwelling units were randomly placed in the developable acreage to symbolize potential future build out across a zoning district.

The result of this process was an increase of 643 dwelling units within the township at a built out state. This is in addition to approximately 3,000 units that existed in the year 2004. Based on the average number of homes built in the township in each of the last five years, the total number of homes needed to be built to reach a built out state could be built by 2020. However, as of the date of this plan, Perkiomen is actively working on its zoning ordinance to bring it into compliance with the Central Perkiomen Valley Regional Comprehensive Plan. These amendments could effectively reduce the overall density of the township from what is displayed here.

## Appendix B

## SOUTHEAST PENNSYLVANIA LAND CONSERVATION ORGANIZATIONS

#### Brandywine Conservancy PALTA Member

PO Box 141 Chadds Ford, PA 19317

## *Counties where acquisitions completed:* Bucks, Chester, Delaware, Lancaster, Montgomery, Philadelphia

*Mission:* The mission of the Brandywine Conservancy's Environmental Management Center is to conserve the natural and cultural resources of the Brandywine River watershed and other selected areas with a primary emphasis on conservation of water quantity and quality.

#### Conservancy of Montgomery County PALTA Member PO Box 28

#### Ambler, PA 19002-0028

*Counties where acquisitions completed:* **Montgomery** *Mission:* The business and purpose of this organization shall be to advocate the preservation of historic and natural resources in Montgomery County to ensure their protection for future generations. The main functions of the organization shall be to identify and protect historic structures, open space and natural resources; sponsor educational preservation programs; conduct survey and planning studies; promote, assist with and accept conservation easements; and provide an information network and clearinghouse for preservation information for county residents, businesses, schools, municipalities and organizations. *Founded:* 1967 *Phone:* (610) 388-2700 *Email:* emc@brandywine.org www.brandywineconservancy.org

*Founded:* 1990 *Phone:* (215) 283-0383 *Email:* cmcpreserve@hotmail.com Heritage Conservancy PALTA Member 85 Old Dublin Pike Doylestown, PA 18901 *Counties where acquisitions completed:* Bucks, Montgomery, Susquehanna, York *Counties where acquisitions anticipated:* Northampton *Mission:* Heritage Conservancy is a nonprofit organization dedi-

cated to preserving our natural and historic heritage. Founded in 1958, it was concern for the rapid loss of open space in Bucks County which led to the formation of the Bucks County Park Foundation, known today as Heritage Conservancy.

#### Lower Merion Conservancy PALTA Member

1301 Rose Glen Rd.

Gladwyne, PA 19035

*Counties where acquisitions completed:* **Delaware, Montgomery** *Mission:* The Lower Merion Conservancy acts to protect our area's natural and historic resources, open space, and watersheds for area residents and future generations. Through education, advocacy, and research, the Conservancy promotes collective responsibility for these resources.

Montgomery County Lands Trust PALTA Member

PO Box 300

Lederach, PA 19450

Counties where acquisitions completed: Montgomery

*Mission:* " It is the mission of Montgomery County Lands Trust to permanently preserve land and to foster the wise stewardship of open space of our county by: Acquiring easements and encouraging donation of land to appropriate stewards. Helping to facilitate the creation of open space and natural amenities in existing communities. Promoting environmentally sensitive, sustainable development which preserves open space, significant natural resources and our unique sense of place. Providing educational programs that strategically advance its mission.

Natural Lands Trust PALTA Member 1031 Palmers Mill Rd. Media, PA 19063 *Counties where acquisitions completed:* Bucks, Chester, Delaware, Montgomery, Philadelphia

*Mission:* Natural Lands Trust is a non-profit, regional land conservation organization working to protect the most critical remaining open lands in the greater Philadelphia region.

North American Land Trust PALTA Member PO Box 1578 Chadds Ford, PA 19317 *Counties where acquisitions completed:* Chester, Delaware, Lancaster, Montgomery *Founded:* 1958 *Phone:* (215) 345-7020 *Email:* hconserv@heritageconservancy.org www.heritageconservancy.org

*Founded:* 1991 *Phone:* (610) 645-9030 *Email:* admin@dragonfly.org www. Imconservancy.org

Founded: 1993 Phone: (215) 513-0100 Email: dflaharty@mclt.org www.mclt.org

*Founded:* 1961 *Phone:* (610) 353-5587 *Email:* apitz@natlands.org www.natlands.org

Founded: 1992 Phone: (610) 388-3670 Email: info@nalt.org info@nalt.org www.nalt.org

## **Pennypack Ecological Restoration Trust** *PALTA Member* 2955 Edge Hill Rd.

Huntington Valley, PA 19006 *Counties where acquisitions completed:* **Montgomery** *Mission:* The mission of the Trust and its membership is to protect, restore and preserve the lands of the central Pennypack Creek valley so that they \* remain an enhancement to the quality of visitors' lives, \* remain a vibrant and diverse natural landscape supporting native plant and animal life, and \* become the standard of excellence for innovative restoration and stewardship practices to be shared with other individuals and organizations joined in common commitment to the environment.

#### Perkiomen Watershed Conservancy PALTA Member

1 Skippack Pike

Schwenksville, PA 19473

*Counties where acquisitions completed:* **Montgomery** *Mission:* The Perkiomen Watershed Conservancy is a nonprofit organization founded in 1964 by local citizens to combat pollution in the Perkiomen Creek and its tributaries. We provide an integrated approach to environmental issues of the Perkiomen Watershed area through environmental education, Watershed stewardship and conservation programs.

### Wissahickon Valley Watershed Association PALTA Member 12 Morris Rd.

Ambler, PA 19002

Counties where acquisitions completed: Montgomery

*Mission:* Since 1957, the Wissahickon Valley Watershed Association has been the leader in protecting the open space of the Wissahickon Valley, in enhancing its water quality, and in educating people of all ages about environmental concerns.

*Founded:* 1970 *Phone:* (215) 657-0830 *Email:* djrpennypack@cs.com www.libertynet.org/pert

*Founded:* 1964 *Phone:* (610) 287-9383 *Email:* pwc@perkiomenwatershed.org www.perkiomenwatershed.org

Founded: 1957 Phone: (215) 646-8866 Email: wvwa@aol.com www.wvwa.org

## APPENDIX C developable parcels

Figure 40 in Chapter 10 displays the developable parcels that exist in the Perkiomen Township. These parcels are labeled here in Figure 50. These labels correspond to descriptive information found in Figure 51. This is a table that lists these parcels, their ownership, acreage, unit and block number, and existing use. This information, maintained by the Montgomery County Board of Assessment (BOA), was last updated in January 2005.

This list of parcels is only a starting point for from which to begin making decisions about parcels to potentially acquire for permanent preservation and/or public use. Access issues, natural constraints, specific land uses, and other site conditions will likely remove many of these parcels from consideration for municipal preservation efforts. Further, as this list is merely the product of a database search based on specific parcel criteria, parcels may exist that are attractive candidates for acquisition but do not occur on this list.

### PARCEL SELECTION

The Montgomery County Planning Commission has divided every land use in the county into one of 17 uses. Based on these categories, four are generally regarded as having development potential. These four categories, as described below and identified under the MLanduse heading in Figure 51, were selected from the 3,200 parcels in Perkiomen Township. This selection process yielded 89 tracts of land generally considered developable.

**Country Residence** - These are residential parcels that include a single family detached dwelling unit on a lot greater than 5 acres.

**Undeveloped** - The land use on these parcels is often woodlands, old fields, or constrained by natural features.

**Private Open Space** - Of the private open spaces in Perkiomen Township, those with no permanent protection were included in this inventory. Included here is the local golf course.

**Agriculture** - These lands are actively farmed or have been so historically.

#### PARCEL DESCRIPTORS

Another descriptor of each parcel is the BLanduse categorization. This is provided by the County Board of Assessment (BOA) and sheds greater light on the parcel's land use. This categorization is described in the table below.

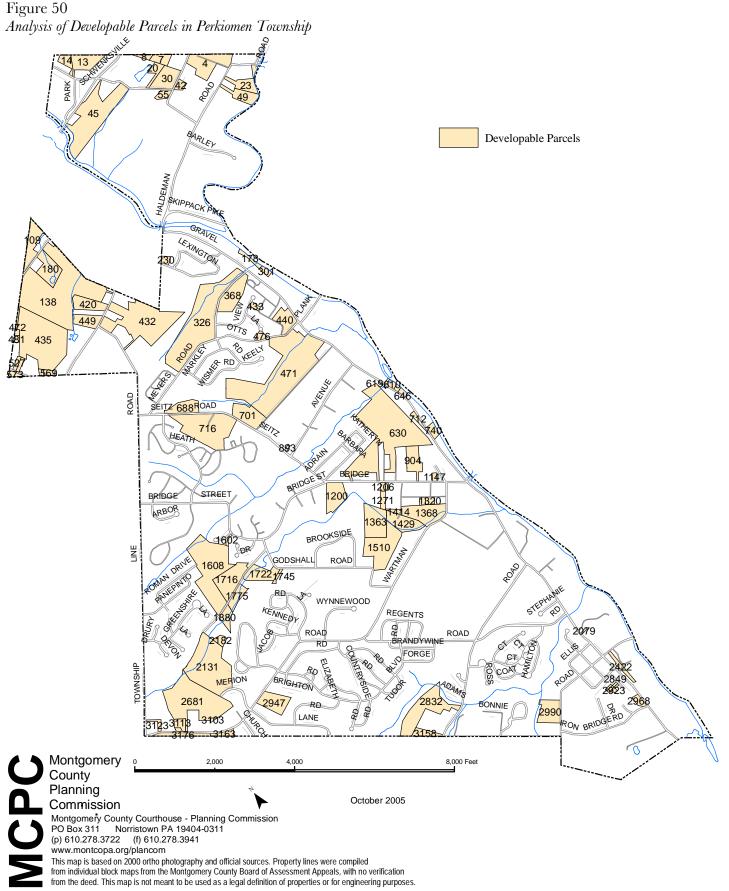
Many of the 89 developable parcels as defined by these categories are shown in Figure 49. Because of the resolution of the parcel map, several of the smaller parcels located near each other are not labeled. However, all 89 parcels are listed in Figure 50 with BOA data.

Further investigation of attractive parcels should be carried out by the township. In this Figure 51, data, if present, is accurate as of January 2005. However, some data is not included for some parcels and some parcels are repeated. This is because the digital mapping software recognizes parcels divided by roads and parcels existing predominantly in neighboring municipalities differently than the BOA source.

1	
BLanduse	Description
319	Preferential assessment
515	Preferential assessment
1101	Single family
1108	More than 1 house, detached
2100	Residential vacant land assessed in other municipality
2102	Residential vacant land 5,000 - 10,000 sq ft
2103	Residential vacant land 10,001 - 20,000 sq ft
2104	Residential vacant land 20,001 - 30,000 sq ft
2105	Residential vacant land 30,001 - 40,000 sq ft
2106	Residential vacant land 40,001 - 60,000 sq ft
2107	Residential vacant land 60,001 - 87,120 sq ft
2108	Residential vacant land 2.00 - 4.99 acres
2308	Industrial vacant land 2.00 - 4.99 acres
2900	Assessed with

Description of BLanduse & MLanduse fields in Figure 51

MLanduse	Description
6	Country Residence
13	Undeveloped
15	Private Open Space
16	Agriculture



				ľ				
Parcels_ID		Block	Unit	BLanduse	MLanduse	Acres	Owner	Address
3166	5 480000580002	001	14	1101	9	8.24	Gates thomas V & ann I	00180 DIEBER RD
2681	1 480000581001	001	52	1101	9	6.04	THOMSON MARK C & JILL H	00181 DIEBER RD
2755	5 480001657104	001	12	2100	13	0	CLEMMER H LEROY & CHARLENE	MILL RD
2748	3 480001768002	001	10	2108	13	m	DEMENO ROBERT TRUST	PENNYPACKER RD
2742	2 480000418002	001	20	2108	13	4.57	CLOUSER ROBIN A & MARCIA A	CEDAR RD
2682	2 480001761009	001	48	2108	13	2.19	SPAGNOLETTI ANTHONY J &	PENNYPACKER RD
3167		001	44	1101	9	7.08	HESS JANE C	00170 HALDEMAN RD
3163	3 480000583008	001	29	1101	9	3.25	ALDERFER CHRISTINE M	00125 DIEBER RD
3116	5 480000583008	001	29	1101	9	3.25	ALDERFER CHRISTINE M	
2730	0 480001777506	001	33	319	16	28.65	BELTZ EDNA K	PENNYPACKER RD
3152		1	42	1101	9	5.93		00166 HALDEMAN RD
2679	9 480000584025	001	84	2106	13	1.2	LIS CONNIE JOY & EDWARD V	DIEBER RD
2688	3 480000439008	004	20	319	16	2.31	renninger franklin h & barbara S	CENTENNIAL ST
2689		004	17	319	16	62.63	Landis richard a & Kenneth r &	CENTENNIAL ST
2925	5 480000000013			0	13	0		
2704			27	1101	9	6.59	EAST COAST REAL ESTATE DEV LLC	00501 CENTENNIAL ST
3028	3 480000820005	005	58	2104	13	0.33	O'NEILL JOHNN E & FRANCES G	GRAVEL PIKE
2924	4 480000000013			0	13	0		
2808	3 480001642002	005	8	319	16	41.24		00141 MILLER RD
2902	2 480001642002	005	8	319	16	41.24	MEYERS JOHN W TRUS REV LIV TRUST	00141 MILLER RD
2705		004	9	1101	6	5.73		
2714	4 480001825008	005	16	319	16	28.23	BANYACSKY SUZANNE D	00375 LIMERICK RD
2923	3 480001276206	005E	11	2105	13	0.81	SIMMONS DARRYL E & CARMELLA Y	00012 EAGLE VIEW LN
2684	4 480001390002	004A	25	515	15	30.16	Manning Warren & Edith Trustees	LIMERICK RD
3104	4 480001276008	005	32	1101	16	5.4		00901 GRAVEL PIKE
2703	3 480001797009	004	7	2108	13	3.96	DEREMER HOWRD R & IRENE L	LIMERICK RD
1952	2 480001267008	005	64	319	16	45.28	OTTS EXOTIC PLANTS INC	00861 GRAVEL PIKE
2691	1 480002152509	004A	26	2100	13	0	VAUGHN TERRY & SUSAN M	00032 SMITH RD
2887	7 480001277052	005E	17	2106	13	1.07	Sparango perkiomen associates	EAGLET LN
2694	4 480002152005	004A	1	2105	13	0.85	Manning Alfred e trust	SMITH RD
171	1 480001381002	004A	4	2105	13	0.82	Manning Alfred e trust	LIMERICK RD
170	0 480001384008	004A	5	2105	13	0.81		LIMERICK RD
166		004	26	2103	13	0.46	Manning warren & edith trustees	LIMERICK RD
190	0 480001396005	004	14	1101	15	1.29		00210 CEMETERY RD
168				0	13	0		
1997		009	2	2102	13	0.14	Deshong nelson e & wanda a	GRAVEL PIKE
352	2 48000000013			0	13	0		
1996	5 48000000013			0	13	0		
1895		010	51	1101	9	0.21	Leeser norman C & elaine	00620 GRATER AVE
351	1 480000000013			C	13	C		
	•			, ,	)	S		

646   25/41   6000000013   0   13   0     688   15/7   8000000013   0   13   0   0   03.051   5417     710   1657   80001973208   005   2   110   13   0   03.041   00215   5417     710   1657   80001973003   019   12   2105   13   147   GuldLER RCM   00215   5417     740   26/3   80001970003   019   15   2107   13   147   GuldLER RCM   068VLL   0146   BR0     740   26/3   80001970003   010   12   2107   13   05   DMMUR KENMEN   068VLL   DMML PRE     740   26/3   8000175003   011   12   15   DOMUR MMM   DMML PRE   068VLL   DMML PRE	Parcels_	Parcels_ID	ParcelID	Block	Unit	BLanduse	MLanduse	Acres	Owner	Address
1577   48000000013   0   13   12   GAUGLER ROY     2663   480001975308   005   2   1101   6   5   KREBEL VICLE   K     2664   4800001975308   005   1   101   1   1.2   GAUGLER ROY   K     2664   480000756002   015   2   107   16   1   1.47   GAUGLER ROY   K     2661   480000756002   010   12   2107   13   0.50   CHUR   K     2610   480000755006   012   2   100   15   2104   13   0.51   CMUR <alb< td="">   K   K     2610   48000141006   012   2   101   6   4.03   D</alb<>	646		-			0	13	0		
11637   480001973308   1005   12   0.101   6.6.5   KIREBEL VICLET R CN H & NANCY ANN     1612   480001922003   109   12   2106   13   1.12   GAUGLER R CN H & NANCY ANN     1612   480001928002   109   15   2107   13   1.47   GAUGLER R CN H & NANCY ANN     2673   480001928003   101   0   13   0.56   KRPAK KENNEH G & LIZABETH J     2610   480001970003   101   12   2104   13   0.56   KRPAK KENNEH G & EUZABETH J     2627   480001730003   101   12   2104   13   0.56   KRPAK KENNEH   KANCY ANN     1703   480002052069   112   43   2104   13   0.56   KRPAK KENNEM     1805   48000141009   12   2103   13   0.56   KRPAK KENNEM   KANN     1806   48000141009   12   2104   13   0.56   KRPAK KENNEM   KANN     2556   48000141009   12   2104   13	689					0	13	0		
2668   49000122008   009   12   2106   13   1.12   GAUGLER ROY H & NANCY ANN     1617   480001958002   007   13   112   GAUGLER ROY H & NANCY ANN     1617   480001958002   010   13   10   141   GAUGLER ROY H & NANCY ANN     1840   4800000013   0   13   0   3   0   141   GAUGLER ROY H & NANCY ANN     2610   4800017008   010   12   2104   13   0.5   INMAY KANNY     1703   4800277008   012   41   2104   13   0.55   IOWNE ANDREW F & SHAWN     1893   48000141009   012   41   2104   13   0.55   IOWNE ANDREW F & SHAWN     2584   48000141009   012   41   2104   13   0.57   IOWNE ANDREW F   SHAWN     2584   48000141009   012   41   2104   13   0.57   IOWNE ANDREW F   SHAWN     2584   48000141009   012   31   0.71 <td< td=""><td>701</td><td>1657</td><td></td><td>005</td><td>2</td><td>1101</td><td>9</td><td></td><td>KRIEBEL VIOLET K</td><td>00215 SEITZ RD</td></td<>	701	1657		005	2	1101	9		KRIEBEL VIOLET K	00215 SEITZ RD
1612   40001994002   015   3   319   16   2822   MMNUS RONALD & LINLA     2517   480001921803   010   15   0   13   1   6   4.03   OTT TIMOTHY P     2610   480001921803   010   66   1101   6   4.03   OTT TIMOTHY P     26217   480001921803   0112   12   2104   13   0.66   RRPAK RENNETH G & ELIZABETH J     26217   48000192003   012   42   2103   0.55   CARR MRAM M     1893   4800025669   012   43   2103   13   0.55   CARR MRAM M     1893   4800021009   012   43   2104   13   0.51   DOWNE ANDEW F & SHAWN M     1893   4800012009   012   43   2103   13   0.55   DOWNE ANDEW F MARAM M     1893   4800014009   012   43   2104   13   0.51   DOWNE ANDEW F MARAM M     2584   4800014009   012   41   2104   <	712	2	\$ 480001222008	600	12	2106	13	1.12	GAUGLER ROY	GRAVEL PIKE
2673   480000558002   107   113   147   GAUGLER ROY H & INANCY ANN     1840   4800010913   0   1110   6   3   0   11100FH7P     2610   480001930002   10   6   1101   6   3   0.66   KIRPAK KENNETH G & ELIZABETH J     2510   48000193002   010   12   2104   13   0.66   KIRPAK KENNETH G & ELIZABETH J     1703   48000205206   012   42   2103   13   0.55   TOWNE ANDREW F & SHAWN M     1866   48000205206   012   43   2104   13   0.55   TOWNE ANDREW F & SHAWN M     2584   48000141000   012   21   13   0.55   TOWNE ANDREW F & SHAWN M     2584   48000141000   012   2104   13   0.55   TOWNE ANDREW F & SHAWN M     2584   480001300013   12   2104   13   0.55   TOWNE ANDREW F & SHAWN M     2584   480001300013   12   21   1015   TOWNE ANDREW F & SHAWN M	716	161	-	015	3	319	16	28.82	MANNS RONALD & LINDA	
1840   4800000013   0   13   0     2610   48001921803   010   15   100   15   1100   15   1100   15   1100   15   1100   15   1100   15   1100   15   1100   15   1100   15   1100   15   1100   15   1100   15   1100   15   1100   15   1100   15   1100   15   1100   15   1100   15   1100   15   1100   10 <td>740</td> <td>267</td> <td></td> <td>600</td> <td>15</td> <td>2107</td> <td>13</td> <td>1.47</td> <td>GAUGLER ROY H &amp; NANCY ANN</td> <td>gravel pike</td>	740	267		600	15	2107	13	1.47	GAUGLER ROY H & NANCY ANN	gravel pike
Zol10   480001921803   010   60   1101   6   4.03   OTT TIMOTHY P     2101   480001730002   010   12   2104   13   0.66   KRPAK REANNETH G & EUZABETH J     1702   480001730002   012   12   2103   0.36   KRPAK REANNETH G & EUZABETH J     1703   480002057069   012   42   2103   13   0.55   FOWN REANNETH G & EUZABETH J     1893   480002057006   012   42   2103   13   0.55   FOWN REANNETH M     1864   480001410009   012   33   2104   13   0.67   JONES DROFE & KATHRIN M     2586   480001410008   012   33   2104   13   0.67   JONES DROFE & KATHRIN M     2586   480001410008   012   33   2104   13   0.67   JONES DROFE & KATHRIN M     2586   480001410008   012   33   016   JONES DROFE & KATHRIN M     1861   48000205005   012   1010   DOES DROFE DRARCARET A	893	1	48000000001			0	13	0		
2627   480001930002   010   12   2104   13   0.66   KRPW KENNETH JG & ELIZABETH J     1703   480002077008   012   8   7101   6   6.95   CLARK MIRIAM M     1894   480002050008   012   8   2103   13   0.55   CLARK MIRIAM M     1864   4800025006   012   43   2104   13   0.55   TOWNE ANDREW F & SHAWN M     2584   480001410009   012   41   2105   13   0.51   JONNE ANDREW F & SHAWN M     2584   480001411008   012   21   11   0   12   14   NOTE     2584   48000154100   012   21   11   1   0.61   ANDREW F & SHAWN M     2589   48000153100   012   21   101   1	904			010	60	1101	9	4.03	TIMOTHY	00146 BRIDGE ST
1703   480002077008   014   9   1101   6   6.95   CLARK MIRUM M     1893   480002052006   012   42   2103   13   0.51   EONYD MICHAEL & MATYANN M     1864   480002052006   012   43   2103   13   0.51   EONYD MICHAEL & MATYANN M     2584   48000141009   012   41   2105   13   0.91   JONES DAVIEN K   SHAWN M     2584   48000141009   012   33   2104   13   0.67   JONES DAVIEN K   SHAWN M     2584   48000141009   012   33   2104   13   0.67   JONES DAVIEN K   SHAWN M     2584   48000141008   012   33   2104   13   0.67   JONES DAVIE K   MATHEN M     2589   48000157006   012   101   0   6.7   MATELHENVEY   GROUN SUSANT     410   48000057208   016   13   0.61   13.2   0.4   MACELHENVEY   GROUN SUSANT     67	1147		480001930002	010	12	2104	13	0.66	KRIPAK KENNETH G & ELIZABETH J	Seitz Rd
1893   480002052609   012   42   2106   13   1.15   TOWNE ANDREW F & SHAWN M     1894   480002050008   012   43   2103   13   0.36   BOYD MICHAEL & MARYANN M     2584   480001410050   012   41   2104   13   0.51   JONES D AVID REW F & SHAWN M     2584   48000141008   012   33   2104   13   0.51   JONES D AVID REW F & SHAWN M     2584   48000141008   012   33   2104   13   0.51   JONES D AVID REW F & SHAWN M     3589   48000262005   012   33   2104   13   0.61   DAVID REW F & SHAWN M     3589   48000153005   012   1   1101   6   8.72   UMSTEAD JAMES T & CAPOLYN SUE     3581   48000153005   012   1   319   16   10   CASEY EDWARD R & MARGARET A     48000153005   012   1   319   1   13   0.61   BAVID R PROLINET A     41917   48000157005   012	1200		\$ 480002077008	014	6	1101	9	6.95	Clark Miriam M	00283 BRIDGE ST
1894   80002050008   012   8   2103   13   0.36   BOYD MICHAEL & MARYANN     1864   480002552006   012   43   2104   13   0.55   TOWNE ANDREW F & SHAWN M     2584   480001410009   012   33   2104   13   0.55   TOWNE ANDREW F & SHAWN M     2584   48000141008   012   33   2104   13   0.57   JONES DROGE & MARPEN M     2584   48000262005   012   33   2104   13   0.57   JONES MARD R & MARGARET A     349   480002062005   012   21   1101   6   8.72   JUMSET R & MARGARET A     347   480001354005   012   1   1101   6   8.72   JUMSET R & MARGARET A     1197   48000152008   014   7   1101   6   6.65   RWN JACOB L & JANET L     1197   480000757005   014   7   101   6   6.65   RWN JACOB L & JANET L     1197   480000757005   014   7 <td< td=""><td>1206</td><td></td><td>\$ 480002052609</td><td>012</td><td>42</td><td>2106</td><td>13</td><td>1.15</td><td>TOWNE ANDREW F &amp; SHAWN M</td><td>Seitz RD</td></td<>	1206		\$ 480002052609	012	42	2106	13	1.15	TOWNE ANDREW F & SHAWN M	Seitz RD
1866   480002652006   012   43   2104   13   0.55   TOWNE ANDREW F & SHAWN M     2584   480001410007   012   41   2105   13   0.61   JONES DAVID R KATHRYN M     2584   480001410007   012   33   2104   13   0.61   JONES DAVID R KATHRYN M     1861   180   33   2104   13   0.61   JANES T & CAROLYN SUE     349   480001367005   012   1   1101   6   8.57   JUMSTEAD JAMES T & CAROLYN SUE     349   480000757008   012   1   1101   6   6.65   RAWN JACELHENNEY   RARCELHENNEY     712   480001591008   016   1   1101   6   6.65   RAWN JACELHENNEY   GROUNA K TRS     712   480001591008   016   7   1101   6   6.65   RAWN JACELHENNEY   GROUNA K TRS     712   480001591008   016   7   1101   6   1.57   BACELHENNEY   GROUNA K TRS     712   4	1207	1	1 480002050008	012	8	2103	13	0.36	BOYD MICHAEL & MARYANN	Seitz Rd
2584   480001410009   012   41   2105   13   0.61   JONES DAVD R KATHRYN M     2586   480001411008   012   33   2104   13   0.67   JONES D ROGER & KATHRYN M     1861   480002368005   012   33   2104   13   0.67   JONES D ROGER & KATHRYN M     2589   480002368005   012   26   1101   6   10   CASEF EDWARD R & MARGAREL A     2434   48000020013   1   1101   6   8.72   UMSTEAD JAMES T & CAROLYN SUE     21197   480000757005   013   1   0   A   ACCLHENNEY A GORDY NG     704   48000757005   014   1   2103   13   0,4   MACELHENNEY A GORDY NG     712   48000159108   016   7   1101   6   5.48   DAMEGHENNEY A GORDON & SUSAN T     712   48000159108   016   7   1101   6   5.48   DAMECHENNEY A GORDON & SUSAN T     712   48000159108   016   7   1101 <td< td=""><td>1271</td><td>1866</td><td>480002052006</td><td>012</td><td>43</td><td>2104</td><td>13</td><td>0.55</td><td>TOWNE ANDREW F &amp; SHAWN M</td><td>Seitz RD</td></td<>	1271	1866	480002052006	012	43	2104	13	0.55	TOWNE ANDREW F & SHAWN M	Seitz RD
2586   480001411008   012   33   2104   13   0.67   JONES DROGER & KATHRYN M     1861   480002062005   012   3   319   16   10   CASEY EDWARD R. MARGARET A     2589   480002368005   012   26   1101   6   8.72   UMSTEAD JAMES T & CAROLYN SUE     349   48000020013   2   1   101   6   8.72   UMSTEAD JAMES T & CAROLYN SUE     349   480001359005   012   1   1010   6   8.72   UMSTEAD JAMES T & CAROLYN SUE     349   48000133005   012   1   1010   6   8.72   UMSTEAD JAMES T & CAROLYN SUE     1197   48000159106   012   1   1101   6   6.65   RAWN JACOBER T & VIRGINIA K TRS     712   48000159106   016   7   1101   6   13.9   0.4   MACELHENNEY GORPON & SUSAN T     682   48000159103   016   7   1101   6   12.78   MACELHENNEY GORPON & SUSAN T     681   48000159103	1320			012	41	2105	13	0.91	Jones david r kathryn m	LODLE ST
1861   480002062005   012   3   319   10   CASEY EDWARD R & MARGARET A     2589   480002368005   012   26   1101   6   8.72   UMSTEAD JAMES T & CAROLYN SUE     349   4800000013   1   1101   6   8.65   RAWN JACOB L & JANET L     414   480001369005   012   1   1101   6   6.65   RAWN JACOB L & JANET L     704   48000152208   016   14   2103   13   0.4   MACELHENNEY AGORDON     704   48000157008   016   7   1101   6   12.78   MACELHENNEY AGORDON   SUSAN T     676   480001594005   016   7   1101   6   12.78   MACELHENNEY AGORDON & SUSAN T     681   480001594005   016   7   1101   6   12.78   MACELHENNEY AGORDON & SUSAN T     681   480001591008   016   7   1101   6   12.78   MACELHENNEY AGORDON & SUSAN T     681   480001591008   016   7   11	1323				33	2104	13	0.67	Jones d roger & kathryn M	LODLE ST
Z589   480002368005   012   26   1101   6   8.72   UMSTEAD JAMES T & CAROLYN SUE     349   4800000013   1   10   1   10   1     414   480001369005   012   1   1101   6   6.65   RAWN JACOBL & JANET L     414   48000752008   013   1   319   16   13.9   GINTHER ROBERT A & VIRGINIA KTS     704   4800075208   016   14   2103   13   0.4   MACELHENNEY GORDON     676   480001594005   016   7   1101   6   12.78   MACELHENNEY GORDON & SUSAN T     683   48000157005   014   5   1101   6   12.78   MACELHENNEY GORDON & SUSAN T     612   48000057005   014   5   1101   6   12.78   MACELHENNEY GORDON & SUSAN T     612   480001594005   016   7   1101   6   12.78   MACELHENNEY GORDON & SUSAN T     612   480001594005   016   7   1101   6 <td>1363</td> <td></td> <td></td> <td>012</td> <td>3</td> <td>319</td> <td>16</td> <td>10</td> <td></td> <td>Seitz RD</td>	1363			012	3	319	16	10		Seitz RD
349   4800000013   0   1   0     414   480001369005   012   1   1101   6   6.65   RAWN JACOB L & JANET L     1197   48000727008   013   1   319   16   13.9   GINTHER ROBERT A & VIRGINIA K TRS     704   48000752208   016   1   2103   13   0.4   MACELHENNEY GORDON     676   480001591008   016   7   1101   6   1.2.78   MACELHENNEY GORDON     683   48000157005   014   5   319   13   28.87   MACELHENNEY GORDON & SUSAN T     712   48000057005   014   5   1101   6   5.48   DAHMS DANIEL EDWARD     612   1   101   6   5.48   DAHMS DANIEL EDWARD   SUSAN T     712   480001591008   016   7   1101   6   5.48   DAHMS DANIEL EDWARD     612   480001591008   016   7   1101   6   5.48   DAHMS DANIEL EDWARD     623	1368	2			26	1101	9	8.72	UMSTEAD JAMES T & CAROLYN SUE	00014 WARTMAN RD
414   480001369005   012   1   1101   6   6.65   RAWN JACOB L & JANET L     1197   48000727008   013   1   319   16   13.9   GINTHER ROBERT A & VIRGINIA K TRS     704   48000757208   016   14   2103   13   0.4   MACELHENNEY GORDON     676   480001591008   016   7   1101   6   13.8   MACELHENNEY GORDON   SUSAN T     683   480001594005   016   7   1101   6   5.48   MACELHENNEY GORDON & SUSAN T     712   480001594005   016   7   1101   6   12.78   MACELHENNEY A GORDON & SUSAN T     681   480001594005   016   7   1101   6   12.78   MACELHENNEY A GORDON & SUSAN T     681   480001594005   016   7   1101   6   12.78   MACELHENNEY A GORDON & SUSAN T     681   480001591008   016   7   1101   6   12.78   MACELHENNEY A GORDON & SUSAN T     681   480001591008 <td>1414</td> <td></td> <td></td> <td></td> <td></td> <td>0</td> <td>13</td> <td>0</td> <td></td> <td></td>	1414					0	13	0		
1197   48000727008   013   1   319   16   13.9   GINTHER ROBERT A& VIRGINIA K TRS     704   48000752208   016   14   2103   13   0.4   MACELHENNEY A GORDON     676   480001591008   016   7   319   13   28.87   MACELHENNEY A GORDON   SUSAN T     683   480001594005   016   7   1101   6   5.48   MACELHENNEY A GORDON & SUSAN T     712   480001594005   014   5   1101   6   5.48   MACELHENNEY A GORDON & SUSAN T     683   480001594005   014   7   1101   6   5.48   MACELHENNEY A GORDON & SUSAN T     681   480001594005   014   7   1101   6   12.78   MACELHENNEY A GORDON & SUSAN T     681   480001594005   014   7   1101   6   12.78   MACELHENNEY A GORDON & SUSAN T     681   48000159108   016   7   1101   0   12.78   MACELHENNEY A GORDON & SUSAN T     7249   18	1429		1 480001369005	012	1	1101	9	6.65	RAWN JACOB L & JANET L	00095 KOONS ST
704   48000752208   016   14   2103   0.4   MACELHENNEY GORDON   GODSH     67   480001591008   016   5   319   13   28.87   MACELHENNEY GORDON & SUSAN T   MAYBER     683   480001594005   016   7   1101   6   12.78   MACELHENNEY GORDON & SUSAN T   00422     712   480001594005   014   5   1101   6   12.78   MACELHENNEY GORDON & SUSAN T   00422     712   480001594005   016   7   1101   6   12.78   MACELHENNEY GORDON & SUSAN T   00422     681   480001594005   016   7   1101   6   12.78   MACELHENNEY GORDON & SUSAN T   00421     681   480001594005   016   7   1101   6   12.78   MACELHENNEY GORDON & SUSAN T   00421     681   480001594005   016   7   1101   0   12.48   MACELHENNEY GORDON & SUSAN T   00421     7250   480001630005   016   7   1101	1510		48000727008	013	1	319	16	13.9	GINTHER ROBERT A & VIRGINIA K TRS	00102 CODSHALL RD
676   480001591008   016   5   319   13   28.87   MACELHENNEY GORDON & SUSANT   MAYBER     683   480001594005   016   7   1101   6   12.78   MACELHENNEY A GORDON & SUSANT   00422     712   48000057005   014   5   1101   6   5.48   DAHMS DANIEL EDWARD   00261     425   4800000013   01   7   1101   6   5.48   DAHMS DANIEL EDWARD   00251     681   48000057005   016   7   1101   6   12.78   MACELHENNEY A GORDON & SUSANT   00422     681   480001594005   016   7   1101   6   12.78   MACELHENNEY A GORDON & SUSANT   00422     681   480001594005   016   7   1101   6   12.78   MACELHENNEY A GORDON & SUSANT   00422     681   480001594005   016   7   1101   6   12.78   MACELHENNEY A GORDON & SUSANT   00422     7291   48000163008   018   10   28.87 </td <td>1602</td> <td></td> <td>1 480000752208</td> <td>016</td> <td>14</td> <td>2103</td> <td>13</td> <td>0.4</td> <td>MACELHENNEY A GORDON</td> <td>godshall rd</td>	1602		1 480000752208	016	14	2103	13	0.4	MACELHENNEY A GORDON	godshall rd
683   480001594005   016   7   1101   6   12.78   MACELHENNEY A GORDON & SUSAN T   00422     712   480000757005   014   5   1101   6   5.48   DAHMS DANIEL EDWARD   00261     425   4800000013    1   0   13   0    00261     682   480001591008   016   7   1101   6   12.78   MACELHENNEY A GORDON & SUSAN T   00261     681   480001591008   016   7   1101   6   12.78   MACELHENNEY A GORDON & SUSAN T   00422     681   480001591008   016   7   1101   6   2.8.87   MACELHENNEY A GORDON & SUSAN T   00451     72491   480001591008   016   7   110   2103   0.24   LODA INVESTMENT LLC   RAVEL     7255   480001636008   018   16   21.6   01.6   15.49   RARELHENNEY GORDON & SUSAN T   0455     7256   480001636008   018   16   28.03   0.24<	1608			016	5	319	13	28.87	MACELHENNEY GORDON & SUSAN T	MAYBERRY RD
712   480000757005   014   5   1101   6   5.48   DAHIMS DANIEL EDWARD   00261     425   4800000013   1   0   13   0   0   0422     682   480001594005   016   7   1101   6   12.78   MACELHENNEY A GORDON & SUSANT   00422     681   480001591008   016   5   319   16   28.87   MACELHENNEY A GORDON & SUSANT   00422     681   480001591008   016   5   319   16   28.87   MACELHENNEY A GORDON & SUSANT   00455     72491   480001630005   018   1   319   0.24   LODA INVESTMENT LLC   6RAVEL     7525   480001630005   018   1   319   0.24   DDA INVESTMENT LLC   00455     7526   480001636008   018   16   2106   13   1   DRUMHELLER DONALD B   00451     7526   480000247101   024   2308   13   213   MY CONSTOO & RAMNS CONST MAT LC   80045	1716			016	7	1011	9	12.78		00422 MAYBERRY RD
425   4800000013   0   13   0   0   0   2     682   480001594005   016   7   1101   6   12.78   MACELHENNEY A GORDON & SUSAN T   00422     681   480001591008   016   5   319   16   28.87   MACELHENNEY A GORDON & SUSAN T   00422     7   10   2103   10   2103   15   0.24   LODA INVESTMENT LLC   MAYBR     7254   480001630005   018   1   319   16   15.49   CARLTON JOHN M & GENEVIEVE M   00455     780   480001636008   018   1   319   16   17.49   CARLTON JOHN M & GENEVIEVE M   00455     781   480001636008   018   16   2106   13   21.3   HY K CONST CO % RAHNS CONST MAT   00451     781   480000247101   024   2308   13   21.3   HY K CONST CO % RAHNS CONST MAT   00451     781   480000247008   018   31   21.3   21.3   HY CONST CO % RAHNS CONST MAT	$\sim$	71		014	5	1011	9	5.48	DAHMS DANIEL EDWARD	00261 GODSHALL RD
682   480001594005   016   7   1101   6   12.78   MACELHENNEY A GORDON & SUSAN T   00422     681   480001591008   016   5   319   16   28.87   MACELHENNEY GORDON & SUSAN T   MAYBER     2491   480001591008   016   5   319   16   28.87   MACELHENNEY GORDON & SUSAN T   MAYBER     2491   480001630005   013   10   2103   13   0.24   LODA INVESTMENT LLC   MAVEN     525   480001630005   018   1   319   16   15.49   CARLTON JOHN M & GENEVIEV   00455     483   480001636008   018   16   2106   13   1   DRUMHELLER DONALD B   00451     2500   480000247101   024   39   2308   13   21.3   HY K CONST CO % RAHNS CONST MATLCO   BRIDGE     487   480000247101   024   39   23.13   HY K CONST CO % RAHNS CONST MATLCO   BRIDGE     487   480000247008   018   319   16   29.87<	1745					0	13	0		
681   480001591008   016   5   319   16   28.87   MACELHENNEY GORDON & SUSAN T   MAYBER     2491   480000862008   023   10   2103   13   0.24   LODA INVESTMENT LLC   RAVEL     525   480001630005   018   1   319   15.49   CARLTON JOHN M & GENEVIEVE M   00455     483   480001636008   018   16   2105   13   1   DRUMHELLER DONALD B   00451     2500   480000247101   024   39   2308   13   2.13   HY K CONST CO % RAHNS CONST MATL CO   BRIDGE     487   480002167008   018   39   2308   13   2.13   HY K CONST CO % RAHNS CONST MATL CO   BRIDGE     487   480002167008   018   3   319   16   29.87   FONTAINE BRIAN S & FONST MATL CO   BRIDGE     2102   480000216000   018   3   319   16   29.87   FONTAINE BRIAN S & FONST MATL CO   BRIDGE     2102   480000216000   018   3	1775		_	016	7	1011	9	12.78	MACELHENNEY A GORDON & SUSAN T	00422 MAYBERRY RD
2491   480000862008   023   10   2103   13   0.24   LODA INVESTMENT LLC   GRAVEL     525   480001630005   018   1   319   16   15.49   CARLTON JOHN M & GENEVIEVE M   00455     483   480001636008   018   16   2106   13   1   DRUMHELLER DONALD B   00451     2500   480000247101   024   39   2308   13   2.13   HY & CONST CO % RAHNS CONST MATL CO   BRIDGE     487   480000247101   024   39   2308   13   2.13   HY & CONST CO % RAHNS CONST MATL CO   BRIDGE     487   480000247101   024   39   2308   13   2.13   HY & CONST CO % RAHNS CONST MATL CO   BRIDGE     487   480000247101   024   33   319   16   29.87   FONTAINE BRIAN S & PONY L   00420     2102   4800002167008   018   319   16   17.91   DIDOMENICO LOUIS M & CHRIS A   00420	1880		480001591008	016	5	319	16		MACELHENNEY GORDON & SUSAN T	MAYBERRY RD
525 480001630005 018 1 319 16 15.49 CARLTON JOHN M. & GENEVIEVE M 00455   483 480001636008 018 16 2106 13 1 DRUMHELLER DONALD B 00451   2500 480000247101 024 39 2308 13 2.13 HY K CONST CO % RAHNS CONST MATL CO BRIDGE   487 480002167008 018 31 16 29.87 FONTAINE BRIAN 5 & PENNYL 00420   2102 480000316005 021 8 319 16 11.91 DIDOMENICO LOUIS M & CHRIS A 00182	2079			023	10	2103	13	0.24	LODA INVESTMENT LLC	GRAVEL PIKE
483   480001636008   018   16   2106   13   1   DRUMHELLER DONALD B   00451     2500   480000247101   024   39   2308   13   2.13   HY K CONST CO % RAHNS CONST MATL CO   BRIDGE     487   480002167008   018   3   319   16   29.87   FONTAINE BRIAN S & PENNYL   00420     2102   480000316005   021   8   319   16   11.91   DIDOMENICO LOUIS M & CHRIS A   00182	2131	525	480001630005	018	1	319	16	1	CARLTON JOHN M & GENEVIEVE M	00455 MAYBERRY RD
2500   480000247101   024   39   2308   13   2.13   HY K CONST CO % RAHNS CONST MATL CO   BRIDGE     487   480002167008   018   3   319   16   29.87   FONTAINE BRIAN S & PENNYL   00420     2102   480000316005   021   8   319   16   11.91   DIDOMENICO LOUIS M & CHRIS A   00182	2182			018	16	2106	-	1	DRUMHELLER DONALD B	00451 MAYBERRY RD
487   480002167008   018   3   319   16   29.87   FONTAINE BRIAN S & PENNY L   00420     2   2102   480000316005   021   8   319   16   11.91   DIDOMENICO LOUIS M & CHRIS A   00182	2422	2	480000247101	024	39	2308	13	2.13	HY K CONST CO % RAHNS CONST MATL CO	BRIDGE ST
2102 480000316005 021 8 319 16 11.91 DIDOMENICO LOUIS M & CHRIS A 00182	2681	487	_	018	ε	319	16	29.87	FONTAINE BRIAN S & PENNY L	00420 WARTMAN RD
	2832		_	021	8	319	16	-	DIDOMENICO LOUIS M & CHRIS A	00182 TRAPPE RD

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