

2007 OPEN SPACE AND RECREATION PLAN



UPPER SALFORD TOWNSHIP MONTGOMERY COUNTY, PENNSYLVANIA

(typographical corrections June 12, 2009)

UPPER SALFORD TOWNSHIP

MONTGOMERY COUNTY, PENNSYLVANIA

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UPPER SALFORD TOWNSHIP

**OPEN SPACE AND
RECREATION PLAN**

DECEMBER 2007

(Typographical corrections June 12, 2009)

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The Montgomery County Green Fields/Green Towns Program

Montgomery County Planning Commission

**TOWNSHIP OF UPPER SALFORD
MONTGOMERY COUNTY, PENNSYLVANIA**

RESOLUTION 2008-11

**APPROVING AND ADOPTING THE 2007 OPEN SPACE PLAN OF THE
TOWNSHIP OF UPPER SALFORD**

WHEREAS, Upper Salford Township has prepared a revision to its 1996 Joint Open Space and Environmental Resource Protection Plan which revision is entitled the 2007 Open Space and Recreation Plan and which was prepared with the assistance of the Upper Salford Township Planning Commission and the Open Space Committee as appointed by the Board of Supervisors; and

WHEREAS, the Board of Supervisors wishes to adopt the 2007 Open Space and Recreation Plan as an official plan of the Township of Upper Salford; and

WHEREAS, adoption of a Recreation Plan is a condition to the enactment of legislation authorizing Recreation Impact Fees as permitted under Section 503.11 of the Pennsylvania Municipalities Planning Code, 53 P.S.10503.11; and

WHEREAS, the Upper Salford Township Planning Commission and Upper Salford Township Park and Recreation Board unanimously recommended approval of the 2007 Open Space and Recreation Plan.

NOW THEREFORE, the Board of Supervisors of Upper Salford Township hereby resolve as follows

1. That the Board of Supervisors of Upper Salford Township do hereby adopt the 2007 Open Space and Recreation Plan as the official open space and recreation plan of Upper Salford Township.

2. That this Resolution shall be effective upon adoption.
3. The Township Secretary is hereby directed to provide a copy of this Resolution to the Upper Salford Township Planning Commission, the Upper Salford Township Park and Recreation Board, and the Montgomery County Planning Commission and append a copy to the minutes of this meeting.

RESOLVED this 10th day of June, 2008.

BOARD OF SUPERVISORS
TOWNSHIP OF UPPER SALFORD

BY: 
THEODORE F. POATSY JR., CHAIRMAN


KEVIN C. O'DONNELL, MEMBER


KENNETH S. HAGEY MEMBER

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CHAPTER 1

COMMUNITY PROFILE

COMMUNITY CONTEXT

HISTORICAL BACKGROUND

Upper Salford, founded in 1727, is part of the original Salford Township. In 1741, Salford Township split into Marlborough, Upper Salford, Lower Salford, and part of Franconia Township. In 1892, Upper Salford further split into the present day Salford and Upper Salford Townships.

The village of Woxall was originally known as Kroppestettel, which in Pennsylvania Dutch means Crowtown. The village was later named Mechanicsville. By the end of the eighteenth century, the town contained a hotel and restaurant, town hall, shoe shop, wheelwright, and 12 homes. The village kept the name Mechanicsville until 1888 when a post office was established. A new name needed to be selected for the post office because another Pennsylvania town had the same name. After much discussion, residents submitted the name Noxall, "Knocks All," to postal authorities. The name had been read on the side of a bar of a box of soap in the village store. Evidently, they misread the "N" for a "W" and approved the name Woxall for the post office.

The Village of Woxall grew up near the Old Goschenhoppen Church, erected in 1744, where Lutheran and Reformed congregations met. With the arrival of the railroad in 1868, Salfordville, which prospered without railroad or trolley, grew around an old inn. By 1877 it contained a post office, general store, cigar factory, and 19 homes.

The Village of Salfordville was originally situated on a main route between the "upper country" and Philadelphia, from which it was a distant thirty-five miles, and became an early settlement in Montgomery County. This early route was opened in June 1728 and locally passed through Skippack, Lederachsville, and Salfordville on the way to Sumneytown. Along the northeastern side of Old Skippack Road within the township milestones depicting the distances to Philadelphia may still be seen.

Salfordville was a bustling village in the 1700s and 1800s with a thriving market for livestock and farm goods. Surrounded by farms, the small village had two hotels, a one-room schoolhouse, a cigar factory, a blacksmith livery and a general store. Salfordville was also home to Christopher Dock who was an early German educator, artist, and historian. In fact, the Christopher Dock White Oak tree, estimated to be close to 300 years old, was destroyed by a storm and Upper Salford Township residents replanted a White Oak tree in its place to mark this historic landmark. Finally, genealogy records indicate an early resident, John Michel Weigel, was born here in 1689.

Other villages include Bergey, known in 1893 as Branchville, and Salford, called Rudy in the early 1900s. These two villages along with Woxall and Salfordville were noted for their general stores that sold a variety of items including fine clocks, furniture, barrel molasses, and quilting thread. Along the Perkiomen Creek, the village of Salford was once known as Salford Station when the railroad still came through the township.

Farming, particularly dairy farming, was once a primary occupation in Upper Salford. The number of dairy farmers declined as milking techniques modernized and herds became larger. Today, open space is used primarily for crop farming.

Spring Mountain, once called Stone Hill, was and is a recreation area for the township and the region. At the end of the 1800s, Solomon K. Grimley established an amusement park, named after himself, on the west end of the mountain. Only a short walk from the railroad, the park included an observatory, picnic and playground facilities, dance floor for hoedowns, and areas for horse-shoes and croquet. For a while it proudly dis-

played the clock from the former County Courthouse in Norristown. For years the Spring Mountain House was a widely known resort. The park was abandoned when it was sold in 1901. Even with the close of the park, the area continued as a popular summer destination for railroad passengers. Today, Spring Mountain is the only downhill ski area in Montgomery County. Prior to becoming a recreation area, however, the mountain was quarried on a commercial basis for its black granite rock. Many Belgian blocks cut from the quarry were hauled by the Perkiomen Railroad to Philadelphia to pave the city's streets. The name Stone Hill died out when the quarry was abandoned around the 1920s.

REGIONAL SETTING

The 9.0 square mile township sits in the north western portion of the county and is bordered by Marlborough, Salford, Lower Salford, Perkiomen and Lower Frederick Townships. The township is regionally associated with the Indian Valley (Lower Salford, Salford, and Franconia Townships and Souderton and Telford Boroughs). The area is characterized by rolling open country dotted with timber stands. The land that is "developed" consists of low density residential dwellings (mostly single family detached), recreation areas, farming operations, and crossroads villages.

The major road that runs through the township is State Route 63, better known as Sumneytown Pike. This road runs through the northeast portion of the township and carries traffic west to Quakertown and east to the Kulpville interchange of the Northeast Extension (Pennsylvania Turnpike). There is also a large amount of traffic that crosses the southern portion of the township from Lower Frederick and Perkiomen Townships into Lower Salford via Grubb/Freemans School Road and Schwenksville Road. The traffic going through the township is mostly trying to get to either Route 63 or Route 29 which runs through Schwenksville Borough. There are many other local roads, but for the purposes of regional context, the location of the major arterials (Route 63 and Route 29) is the most important factor in determining access to employment centers and shopping opportunities.

Figure 1
Regional Position



These areas represent regional population centers which offer employment and shopping. On a smaller scale, Upper Salford and Schwenksville have easy access to Quakertown and Sellersville-Perkasie in Bucks County and to areas such as Telford-Souderton, Harleysville, Collegeville, Willow Grove, Norristown, King of Prussia, and Pottstown within Montgomery County. All these areas offer employment and shopping on a county-wide scale. The Montgomery Mall, which is approximately 10 miles to the east, also provides shopping opportunities. The Route 422 corridor, which runs from King of Prussia through Pottstown, should also be mentioned because of the projected employment and residential growth along this route. While not immediately adjacent to the township, the Route 422 corridor links directly to Upper Salford Township via Township Line Road and Route 29 and will undoubtedly have some impact on Upper Salford Township's landscape.

In summation, Upper Salford offers an interesting study area for determining open space needs. The township still retains its rural character, is fairly accessible by major transportation routes, and has some natural features that are truly restrictive to development. The community is not directly in the path of "growth", but at the same time it is not very far removed. As a result, along with acquisition, every effort will be made to identify workable natural resource conservation strategies and innovative ordinances and development regulations that will assist in preserving the township's rural character.

EXISTING LAND USE ANALYSIS

The Existing Land Use Analysis is the second part of the Community Profile Chapter for the Upper Salford Township Open Space Preservation Plan. This analysis focuses on the current land uses within the municipality, enabling a more in-depth focus of municipal land use patterns. In addition, the Existing Land Use Map (See Figure 2) details the acreage of each category and the percent change from 1998 to 2004. These numbers are useful in understanding changes in land use patterns and help to identify potential open space and/or recreational needs.

RESIDENTIAL

Residential land uses represent approximately 40 percent of the township total land use. This is a 4 percent increase since 1998. While an increase of only 152 acres, or roughly 25 acres a year, is not a dramatic increase, it does not reflect the recent increase in land development proposals. For example, there were 4 land developments proposed between 1998 and 2002 and 4 land developments proposed in 2003 alone. Therefore, the township can expect to see an increase in residential land development over the next several years.

The township may also expect to see a reduction in average lot size in the coming years. Currently, the average residential lot size is approximately 2.25 acres for developments utilizing traditional lotting. However, several recent land development proposals have utilized the conservation subdivision option that permits smaller lots in conjunction with open space preservation. The reduction in lots sizes does not result in an increase of residential units, however, since the permitted density (the number of lots) remains unchanged. Therefore, the benefit of the conservation subdivisions and smaller lot sizes is more permanent open space without any increase in the number of lots.

COMMERCIAL/OFFICE

The amount of new commercial/office development in the township has not been as dramatic as the 22.8 percent increase between 1998 and 2004 might suggest. Since the township had only 114 acres of commercial/office development in 1998, the additional 26 acres of development in 2004 results in a large percent change. Considering the new 26 acres of commercial/office development equates to 4 acres per year, Upper Salford Township is not experiencing a tremendous amount of commercial/office development. Once again, however, it is important to note that a recently proposed shopping center will be developed in the township in the near future.

INDUSTRIAL

Industrial development covers only 60 acres, or about 1.1 percent, of the township and has remained unchanged between 1998 and 2004. Given the availability of industrial land in nearby municipalities that are in closer proximity to major

Figure 2
Existing Land Use

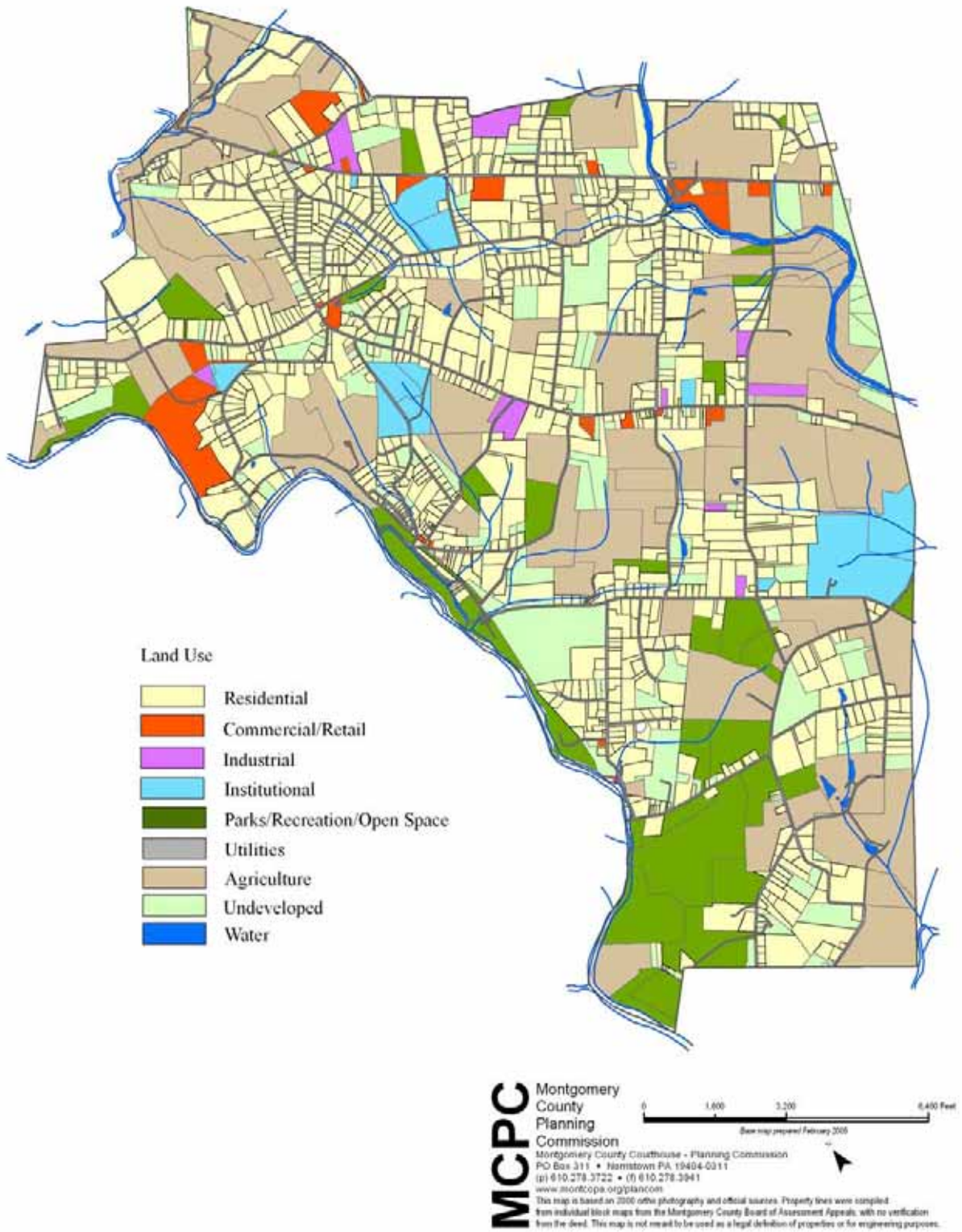
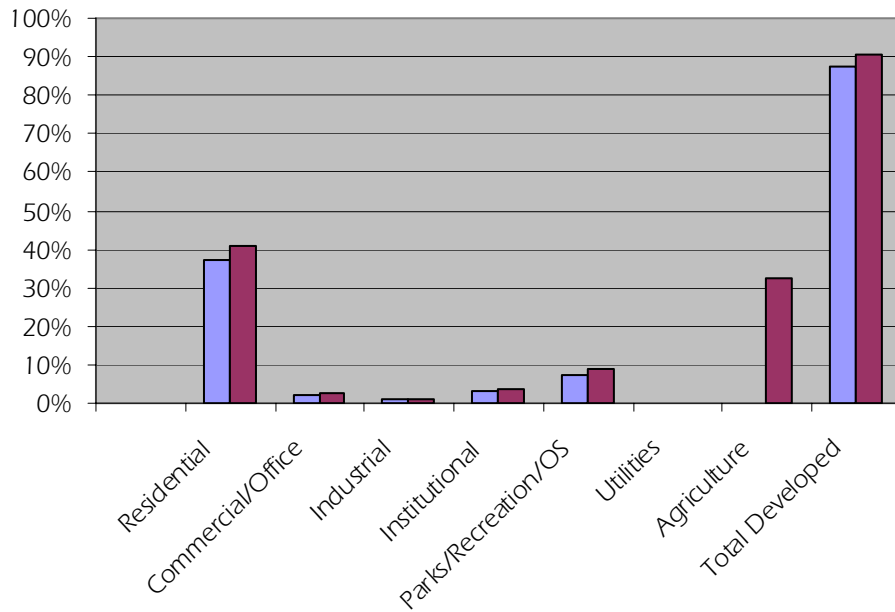


Figure 3
Existing Land Use Comparison: 1998 and 2004

Land Use	1998		2004		% Change
	Acres	% Total	Acres	% Total	1998-2004
Residential	2113	36.9%	2265	40.9%	7.2%
Commercial/Office	114.4	2.0%	140	2.5%	22.8%
Industrial	59.2	1.0%	60	1.1%	1.4%
Institutional	181.8	3.2%	209	3.8%	14.7%
Parks/Recreation/OS	420.5	7.3%	506	9.1%	20.3%
Utilities	10.6	0.2%	3	0.1%	-68.4%
Agriculture	2057	35.9%	1796	32.5%	-12.7%
Water	41	0.7%	41	0.7%	-0.9%
Total Developed	4997.5	87.3%	5020	90.7%	0.4%
Total Undeveloped	724.8	12.7%	516	9.3%	-28.9%
Total Acreage*	5722	100%	5535	100%	-3.3%



Source: Montgomery County Planning Commission Land Use Maps.

* Discrepancies due to digitization of parcel information.

transportation routes and public infrastructure, the township does not anticipate an increase in industrial development within the near future.

INSTITUTIONAL

Institutional land uses comprise 4 percent of the township. There was an increase of almost 30 acres in institutional land between 1998 and 2004. The majority of land uses consist of religious institutions, while the single largest institutional holding is that of New Life Boys Ranch. The Souderton Area School District also operates an elementary school in Upper Salford Township.

UTILITIES

Utilities account for less than 1 percent of the township's land use. This can be attributed to the fact that the township does not have the need to locate infrastructure for public sewer or water systems. In addition, there are not any significant utility corridors since the region's system of high-powered electric transmission lines by-pass the township to the north and east in Salford, Franconia, and Lower Salford Townships.

AGRICULTURE

Agriculture remains a predominant land use in the township occupying almost 33 percent of the land area. However, there was a 13 percent decline (261 acres) in agricultural land. The loss of agricultural land is primarily due to conversion to residential land uses, permanently removing it from agricultural use. However the percentage decrease may also be attributable to the preservation of open space by the township. In this case, it is the ownership of the land that has changed, while the use of the land for agriculture remains. For example, this is the case with the township's Orchard Park, purchased at the end of 1998.

UNDEVELOPED

Slightly less than 10 percent of land in the township is considered undeveloped. Undeveloped land consists primarily of smaller (average size is 5 acres) parcels of vacant land that have no discernable land use. The loss of undeveloped between 1998 and 2004 was 208 acres. As with agricultural land, the loss is primarily due to a conversion to residential land, although new open space and institutional land likely play a role as well.

CONCLUSION

The majority (75 percent) of the township land is used for residential and agricultural uses. Given the township's current zoning and participation in regional planning, it is likely these will remain the township's primary land uses. Therefore, the township should encourage residential development designs that are sensitive to surrounding agricultural uses. This will help to ensure that some level of agricultural production will remain a viable land use option. In addition, the township should continue to encourage the preservation of open space, via both purchase and conservation style development, as a way to maintain the township's rural character and agricultural lands.

In terms of non-residential use, the township will see some limited expansion of commercial/office uses as the result of the proposed shopping center. Over time the township may also see some minor village-commercial development as population increases.

COMMUNITY DEMOGRAPHIC ANALYSIS

Upper Salford' has added approximately 400 persons a decade to its population since 1970. While steady, this has not been a significant amount of growth. This small, but steady, trend is projected to continue over the next 20 years. However, the character of the township's population has been changing over time. This section will briefly discuss shifts in population, housing, education, age and other demographic categories. These specific characteristics and trends may offer some insight into the amount and type of open space that should be provided.

POPULATION

The rate of municipal population change (relative population increase or decrease) is an important measure of the magnitude of population change that has occurred over time. Between 1990 and 2000 the Township experienced a population increase of about 305 people to a total of 3,024 people (see Figure 4). Although a relatively small increase, it continued a steady upward trend that started after the 1970 census, as the population

Upper Salford is approximately 30 miles south of the Allentown-Bethlehem area, 35 miles east of Reading, and 35 miles north of Philadelphia.

POPULATION PROJECTIONS

According to the Montgomery County Planning Commission, Upper Salford is projected to have 3,450 people by 2010, 3,850 people by 2015, 4,000 people by 2020, and 4,750 people in 2025 (see Figure 5). This represents a 57 percent increase in population between 2000 and 2025. However, this only equates to an increase of 1,726 people or 69 people per year. This rate of growth should not result in any population or demographic changes to which the township could not easily respond.

HOUSEHOLD TYPES

Figure 6 summarizes the 1990 and 2000 household types in the township and the changes that have taken place. Overall, the total number of households has increased in the township, consistent with the increase in population. However, the types of households have had some large percentage changes. It is important to recognize that the absolute change for most household

predominant household type. Households having married couples with children has increased almost 4 percent to 368, but it is increasing at a slower rate than married couples with no children.

Non family households increased by 44 percent to 210. This also reflects an aging population, especially the 1 person non-family households. The 1 person non-family households can reflect a single person who has never been married, but more likely reflects an increase in the number of older widows and widowers. The 2+ person non-family households may reflect an increase of couples who choose not to marry or delay marriage. This may also represent households with two or more non-family members who may choose to live together for a variety of economic and social reasons.

Given the increase in married couples with no children and 1 person non-family households the township's average household size has decreased from 2.99 to 2.86. This reduction in household size is reflected in the county as a whole which saw average household size drop from 2.58 to 2.54.

Figure 4
Population Classification

Population	1990	2000	% Change
	Number	Number	1980 to 1990
Total Population	2,719	3,024	11.2%

Sources: U.S. Census Bureau; Census of Population and Housing, 1980, 1990.

types has not been significant, they do represent shift in trends.

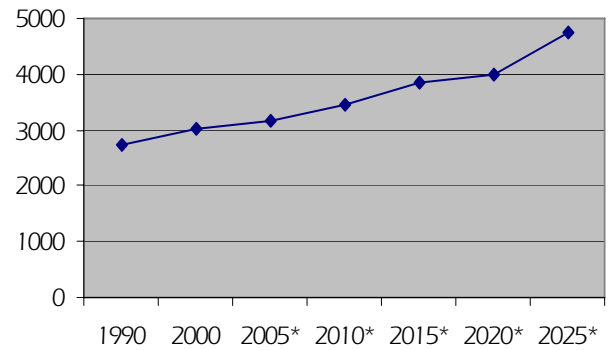
First, the largest absolute change and second highest percentage change involves married couples with no children. This household type increased by 83 or 25.1 percent. This increase may not reflect an insurgence of couples without children, but an increase in empty-nesters. As the township's population continues to age, more households are seeing children go off to college or move away. In fact, this household type has surpassed married couples with children as the

EDUCATION

One of the more dramatic demographic changes involves level of education. Figure 7 depicts changes in education level for the population 25 years and older. In general, the number of those 25 and older having a high school diploma or less dropped 11 percent while the percentage of those having at least some college increased 50 percent. This may reflect an influx of baby boomers during the 1990s who were more likely to have attended collage than their preceding generation. The township still lags behind the county

Figure 5
Population Projection

Year	Population
1990	2719
2000	3024
2005*	3150
2010*	3450
2015*	3850
2020*	4000
2025*	4750



Source: U.S. Census Bureau; Census of Population and Housing, 2000; DVRPC projections.

* Projected population

as a whole, however, with 53 percent of residents having at least some college compared to 61 percent of all county residents 25 and older have some college.

Specifically, the highest increase in educational attainment involves those having acquired a bachelors degree: the number holding a bachelors degree rose 106 percent. The next highest increase (43 percent) involved those having some college or an associates degree. Still, the largest percentage of the total population 25 and older, 31 percent, involves those having only a high school diploma.

AGE

As several other demographics have suggested, the median age of the township population increased from 42.3 to 43.9 between 1990 and 2000 (See Figure 8). This makes Upper Salford considerably older than Montgomery County's median age of 38.2. The highest increases in percentage involved the ages ranges of 35-44, 45-54, and 55-64. The age range of 35-44 had the highest increase and probably represents many of those moving into the township over the last 10 years and corresponds to the 17.7 percent increase in those aged 5-17. The increases for the 45-54 and 55-64 age ranges may involve new

Figure 6
Household Types

Household Types	1990	% Total	2000	% Total	% Change
	Number		Number		1990 to 2000
Married Couples with Children	355	39.7%	368	34.9%	3.7%
Married Couples with No Children	331	37.0%	414	39.3%	25.1%
Single Parent	29	3.2%	24	2.3%	-17.2%
Other Family	34	3.8%	37	3.5%	8.8%
1 Person Non-Family Households	130	14.5%	159	15.1%	22.3%
2+ Person Non-Family Household	15	1.7%	51	4.8%	240.0%
Total No. of Households	894	100%	1053	100%	17.8%
Average People per Household	2.99		2.86		-4.3%

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

residents but most likely reflects the upward shift from the lower age category as the resident population gets older. Lastly, a full 10 percent of the township residents are 65 or older and those aged 75 or more increased by 33 percent between 1990 and 2000.

INCOME

Upper Salford's income levels are slightly higher than most other municipalities in Montgomery County. The township's median (half above and half below) income is \$68,750, compared to the county's \$60,829, and ranks 16th out of 62. In re-

space improvements. This may be especially important for those with disabilities involving mobility. The importance of those over age 65, also 1-in-10 and growing, should be recognized when making open space and recreation decisions. While those aged 18 and under represent a quarter of the township population, and would be a major consideration for open space and recreation needs, the age group is decreasing as a percentage of total population.

HOUSING TYPES

Just as residential uses dominate the township's land use, single-family detached dwellings domi-

Figure 7
Education Level

Educational Level	1990		2000		% Change
	Number	% Total	Number	% Total	1990-2000
Less than 9th grade	123	6.9%	80	3.9%	-35.0%
9th through 12th grade, no diploma	243	13.6%	238	11.7%	-2.1%
High school graduate (includes equivalency)	696	39.0%	627	30.9%	-9.9%
Some college or Associates degree	325	18.2%	463	22.8%	42.5%
Bachelor's degree	219	12.3%	451	22.2%	105.9%
Graduate or Professional degree	177	9.9%	170	8.4%	-4.0%
Total Pop. 25 years and older	1783	100%	2029	100%	13.8%

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

gard to per capita income, the township ranks 30th in the county with a per capita income of \$26,672. This is slightly lower than the county per capita income of \$30,898. The lower per capita income, in relation to county rank, may relate to Upper Salford having an older population that is more likely to be on a fixed income. Both of the income figures represent increases over the last decade. Median household income rose the most, increasing 44.4 percent between 1989 and 1999.

SPECIAL NEEDS GROUPS

Figure 10 indicates that almost 10 percent of township residents between the ages of 16 and 64 have a disability. This 1-in-10 figure is significant enough that the township should always be giving consideration to disabilities when evaluating open space needs and the design of open

nates the type of housing. The overwhelming majority (91.1 percent) of the township's housing stock is single family detached (See Figure 11). A significant portion of these single-family detached dwellings is found in the northern part of the township with close access to Sumneytown Pike (Rt. 63). Only 5 percent of the township's housing stock consists of multi-family and 2.1 percent is comprised of mobile homes. The areas within the township having the most diverse housing mix are found around the historic villages of Salford, Woxall, and Salfordville. While the township has increased the number of housing units by 15.9 percent since 1990 to a total of 1,074 units, the township's mix of housing types has stayed relatively the same.

Figure 8
Age Profile

Age	1990	% Total	2000	% Total	%Change 1990-2000
	Number		Number		
0-4	231	8.5%	151	5.0%	-34.6%
5-17	560	20.6%	659	21.8%	17.7%
18-24	201	7.4%	174	5.8%	-13.4%
25-34	448	16.5%	270	8.9%	-39.7%
35-44	455	16.7%	647	21.4%	42.2%
45-54	354	13.0%	497	16.4%	40.4%
55-64	226	8.3%	318	10.5%	40.7%
65-74	162	6.0%	199	6.6%	22.8%
75+	82	3.0%	109	3.6%	32.9%
Total	2,719	100%	3024	100%	11.2%
Median	42.3		43.9		

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

Age/Sex Pyramid

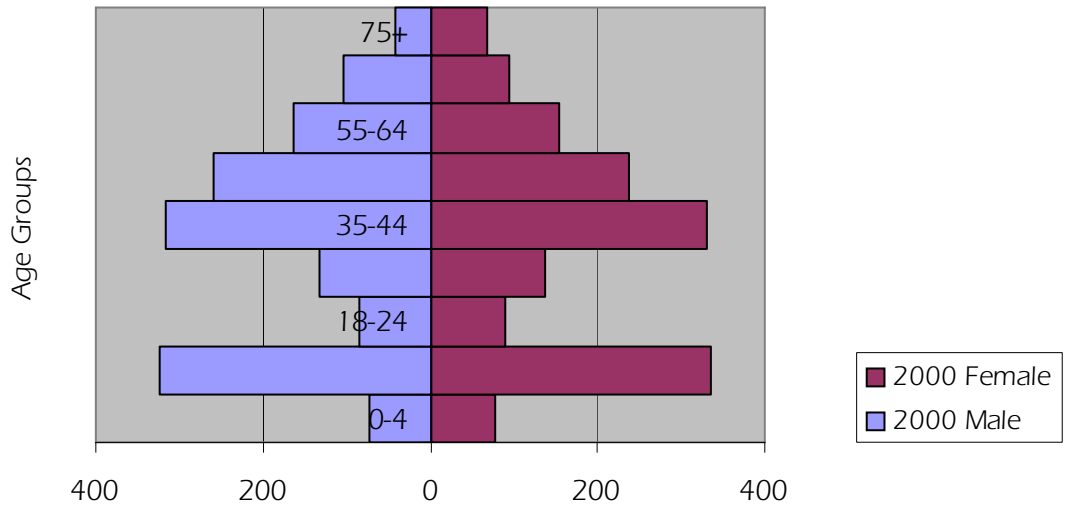


Figure 9
Income Levels (1999\$)

Income	1989	1999	% Change
Per Capita	\$20,720	\$ 26,672	28.7%
Median Household	\$47,617	\$ 68,750	44.4%

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

Of the 1,074 units within the township, 1,053 are identified as occupied units. The remaining 21 units are seasonal/migratory (3 units), available vacant units (4 units), or unavailable vacant units (14 units). Of the occupied units, 86.6% are owner occupied and 13.4% are renter occupied. Given the predominance of single-family detached dwellings within the township, we can assume that a significant portion of the renter occupied units consist of these type of dwellings. However, the percentage of owner-occupied units ranks third among neighboring municipalities behind Salford and Marlborough Townships and is above the county figure of 73.5 percent. The higher percentage of owner-occupied units contributes to a more stable population that will not drastically change its composition over the short-term.

production transportation are considered “blue collar” jobs. Farming and service fall into the general “other” category. In Upper Salford Township 64.1 percent of the resident labor force is employed in a white collar job. The remaining members of the labor force are employed in blue collar jobs (24.7 percent) or Other (11.2 percent). This represents a significant change from the labor force make-up in 1980. In 1980 the majority (44.8 percent) of the resident labor force was employed in blue collar jobs, while only 41.5 percent were in white collar jobs. The biggest decline in the percentage of residents holding blue collar jobs occurred between 1980 and 1990 when white collar jobs increased by 100 percent and blue collar jobs decreased by 24 percent. While the 1990s actually saw an increase in the number of blue collar jobs held by town-

Figure 10
Special Needs Groups

Special Needs Group	1990		2000		% Change
	Number	% Total	Number	% Total	1990-2000
Persons 16-64 with Disabilities			275	9.1%	N/A
Persons 16-64 with Mobility and Self Care Limitations	40	1.5%			N/A
Over 65 Years of Age	244	9.0%	308	10.2%	26.2%
Under 18 Years of Age	791	29.1%	810	26.8%	2.4%
Income Below Poverty Level	46	1.7%	39	1.3%	-15.2%
Total Population	2,719		3,024		11.2%

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

OCCUPATION

Montgomery County increased its resident labor force more than any other county in the Delaware Valley Regional Planning Commission (DVRPC) region between 1990 and 2000. Adding more than 26,000 jobs in the last decade, Montgomery County is second only to Philadelphia in total number with a resident labor force of 384,688. However, Montgomery County has the highest percentage of White Collar jobs of any county in the DVRPC region with 72.6 percent.

Figure 12 summarizes Upper Salford Township’s labor force by occupation. The top four occupations in the figure, management, professional, sales, and clerical/office represent “white collar” jobs. The next two occupations, construction and

ship residents, the percentage of the resident labor force holding blue collar jobs once again dropped due to the growth in white collar jobs outpacing the growth in blue collar jobs,

EMPLOYMENT FORECAST

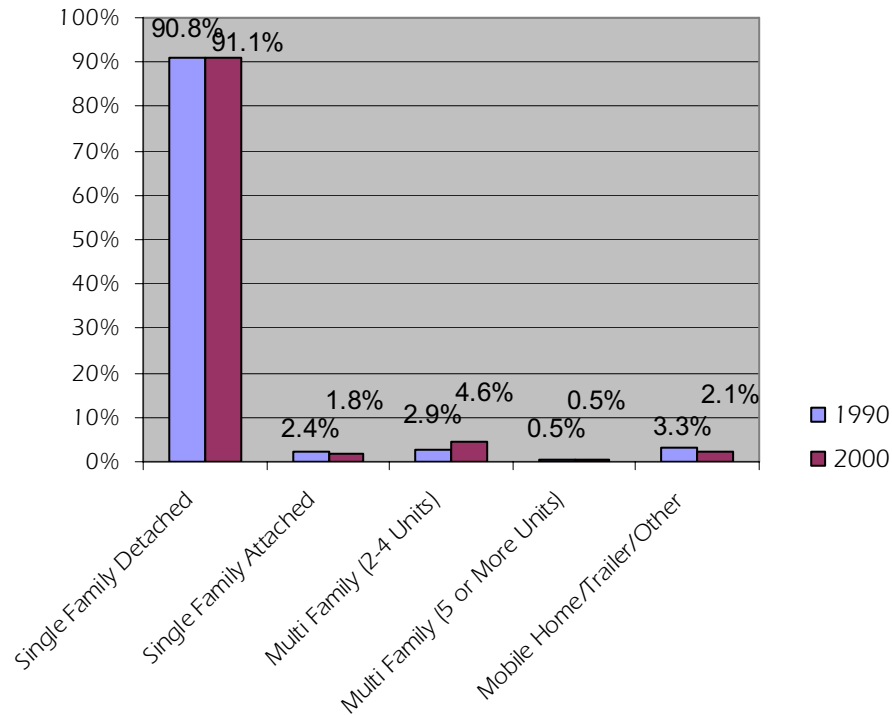
Using census reports, the Delaware Valley Regional Planning Commission estimates existing municipal employment and forecasts for municipal employment. The number of employees working in Upper Salford is estimated to be 600 in 2000 (See Figure 13). It is forecasted to increase to 650 by 2005 and then remain static until 2020 when it is forecasted to be 700. The 2000 employment figure was derived from census reports for commuters that identified Upper Salford as their commute destination. Given the township’s existing

Figure 11
Housing Types

Housing Types	1990		2000		% Change
	Number	% Total	Number	% Total	1990-2000
Single Family Detached	842	90.8%	978	91.1%	16.2%
Single Family Attached	22	2.4%	19	1.8%	-13.6%
Multi Family (2-4 Units)	27	2.9%	49	4.6%	81.5%
Multi Family (5 or More Units)	5	0.5%	5	0.5%	0.0%
Mobile Home/Trailer/Other	31	3.3%	23	2.1%	-25.8%
Total Housing Units	927	100%	1074	100%	15.9%

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

Housing Types Comparison



zoning and participation in regional planning it is not unreasonable to assume employment growth of 100 over the next 20 years.

MAJOR EMPLOYER IN MUNICIPALITY

Upper Salford Township is a rural community, primarily residential in nature. However, the township is home to several small commercial and in-

dustrial uses. The single largest employer in Upper Salford Township is the Souderton Area School District at Salford Hills Elementary School with 61 employees.

STATUS OF RELEVANT PLANS

Upper Salford's Comprehensive Plan was updated in 1995. The main emphasis in the Update is on

Figure 12
Labor Force by Occupation

Occupation	2000	
	Number	% Total
Management	234	14.0%
Professional	344	20.6%
Sales	182	10.9%
Clerical/Office	308	18.5%
Construction	200	12.0%
Production/Transportation	211	12.7%
Farming	10	0.6%
Services	177	10.6%
Total	1666	100%

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

the critical relationship between man, nature, and "progress". Upper Salford is a community that has an abundance of unique natural resources and it is a community that wants to preserve its rural character. While understanding the implications of future development, any areas that are to be dedicated to potential future growth should be done so by first consulting the natural features chapter and maps within the Comprehensive Plan Update.

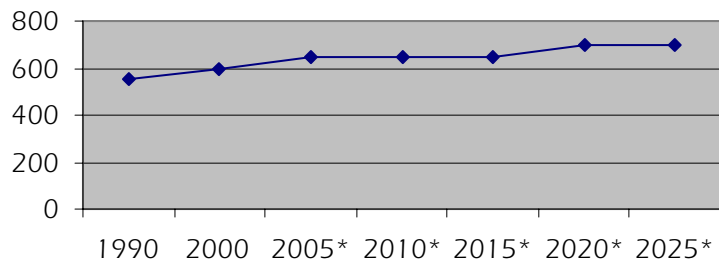
Upper Salford is currently cooperating with the other five municipalities that comprise the Souder-ton Area School District to develop a Regional Comprehensive Plan. The Regional Plan will de-

velop land use policies that balance the natural resource protection needs, including woodlands, steep slopes, water quantity and quality, and agriculture to name a few, with the need to provide housing and commercial opportunities to existing and future residents. The plan will designate growth areas and areas for rural preservation. When adopted Upper Salford will have two years to adjust their ordinances to be consistent with the Regional Comprehensive Plan.

Upper Salford's Zoning Ordinance and Subdivi-sion and Land Development ordinances were comprehensively updated in 1999 and 2000,

Figure 13
Employment Forecast

Year	Total Employment
1990	552
2000	600
2005*	650
2010*	650
2015*	650
2020*	700
2025*	700



*Source: DVRPC Forecasts

respectively. Many of the changes to these ordinances were a direct result of recommendations made in the 1995 Comprehensive Plan and 1996 Open Space Plan. Some of these changes include the creation of a overlay zoning districts that protect steep slopes and riparian corridors. The zoning ordinance also permitted the use of conservation subdivision standards in all the major residential zoning districts in order to preserve open space and maintain rural character. The subdivision and land development ordinance also included design standards for conservation subdivisions. These standards include open space delineation stan-

dards, open space design, requirements for neighborhoods, and an emphasis on sketch plan submissions. The subdivision and land development ordinance also included innovative storm-water requirements that mandate infiltration and water quality measures, and model landscape requirements.

Following the adoption of the Regional Comprehensive Plan and this Open Space Plan the township will begin revisions to its ordinances in order to implement the plans.

CHAPTER 2

GOALS & OBJECTIVES

An integral part of creating an achievable plan is to set goals. These goals will help define objectives to successfully meet, or perhaps exceed, the stated goals. The Plan will further develop specific actions to implement each objective. The following goals and objectives have been adopted to guide the decision making involved with this Open Space and Environmental Resource Protection Plan.

2004 GOALS AND OBJECTIVES

The township's Open Space Committee evaluated the goals and objectives from the 1996 Open Space and Environmental Resource Protection Plan Based upon the success of implementing many of the plan's recommendations the Open Space Committee has revised the goals to focus more upon the role of greenway corridors and the establishment of a township-wide pathway system.

1. PROTECT AND ENHANCE THE TOWNSHIP'S VILLAGE AREAS

- A. Enhance access to township open space from villages.
- B. Increase open space opportunities within the village context.
- C. Relate development to existing village character and maintaining a sense of place.

2. MAINTAIN AND PROTECT THE TOWNSHIP'S RURAL CHARACTER

- A. Implement regional landuse plan to direct growth to identified growth areas
- B. Encourage conservation subdivision for future development

- C. Relate development to the land's capacity to accommodate it without environmental degradation
 - D. Create significant blocks of preserved open space
- 3. PROTECT THE TOWNSHIP'S VULNERABLE ECOLOGICAL RESOURCES**
- A. Direct growth to appropriate regional areas
 - B. Establish greenway connections between preserved resource lands
 - C. Protect the watersheds of the Ridge Valley, Perkiomen, and East Branch, along with their tributaries
 - D. Adopt creative methods of environmental protection during development design and appropriate zoning and development regulations
- 4. EXPLORE ACTIVE RECREATION OPPORTUNITIES**
- A. Create a network of greenways for pathway development and resource protection as a linear park
 - B. Require future development to provide recreational opportunities (or fee-in-lieu) for new residents
 - C. Enhance roadway safety for pedestrians and bicyclists
 - D. Expand and develop new recreational facilities to meet resident needs
- 5. ESTABLISH LINKS OR CORRIDORS BETWEEN SIGNIFICANT DESTINATIONS**
- A. Provide greater and easier access to the township's parkland and recreational facilities
 - B. Develop safe and direct access from residential areas to destination points throughout the township and surrounding communities. These destination points may include schools, stores, and a variety of institutions
 - C. Provide a safe alternative means of transportation to places of employment
- D. Identify areas presently in need of sidewalks, and criteria to be used to evaluate the need for sidewalks in the future
 - E. Work with neighboring municipalities, the county, and the state in creating an interlinked regional network of connections
- 6. PRESERVE SIGNIFICANT FARMLAND AND FARMING AS A BUSINESS**
- A. Encourage farming as a business by supporting the sale of agricultural products and developing relationships between existing farms and township residents
 - B. Identify land appropriate for preservation by Montgomery County
 - C. Preserve important farmland not eligible for preservation by Montgomery County
- 7. IDENTIFY, SEEK TO PRESERVE, AND ENHANCE SCENIC AREAS THROUGHOUT THE TOWNSHIP**
- A. Identify scenic areas and significant viewsheds
 - B. Explore preservation strategies in scenic areas
 - C. Balance scenic protection and property rights
 - D. Ensure that development has a minimal impact on scenic resources
- 8. IDENTIFY AND PRESERVE HISTORIC RESOURCES WITHIN THE MUNICIPALITY**
- A. Protect significant historic resources within their open space context.
 - B. Explore zoning techniques to assist in the effort to preserve historic resources
- 9. SUPPORT ADOPTION AND IMPLEMENTATION OF THE INDIAN VALLEY REGIONAL COMPREHENSIVE PLAN**
- A. Revise zoning ordinance to implement provisions of future land use plan.

- B. Coordinate environmental preservation strategies with surrounding municipalities that expands or enhances existing natural areas
- C. Identify shared areas of natural resources
- D. Coordinate land use planning with adjacent municipalities, in particular Lower Salford, Franconia, Salford, Schwenksville, and Lower Frederick Townships

1996 PLAN GOALS AND OBJECTIVES

The township completed its Open Space and Environmental Resource Plan in 1996. At that time a series of goals and objectives were developed 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 Open Space Program, Upper Salford has evaluated its previous goals and objectives to address whether the goals are still valid and to evaluate why some of the last plan's recommendations were not implemented. Below are listed the previous goals and objectives with accompanying explanation of their status.

- Maintain and protect the municipality's rural character
 - direct growth to identified growth areas
 - use low density/clustering in development prone areas
 - relate development to the land's capacity to accommodate it without environmental damage
 - explore viable options for farmland preservation
- Explore active recreation opportunities
 - potential link-up with existing recreational areas
 - explore potential of having future development provide recreational areas for new residents

- Protect the township's natural environment
 - direct growth to appropriate areas
 - encourage creative methods of environmental protection during development design and appropriate zoning and development regulations
- Identify and preserve the township's vulnerable ecological resources
 - use GIS and other appropriate means to identify areas of natural significance
 - protect the watersheds of the Ridge Valley, Perkiomen, and East Branch, along with their tributaries through riparian preservation ordinances and development regulations
 - direct varying development density to appropriate areas
 - encourage appropriate and desired farmland preservation efforts
- Provide links or corridors between open space and habitat areas
 - explore opportunities along the East Branch, Perkiomen, and Ridge Valley Creeks
- Coordinate environmental preservation strategies with surrounding municipalities that expands or enhances existing natural areas
 - identify shared areas of natural resources
 - coordinate land use planning with adjacent municipalities, in particular Lower Salford, Franconia, Salford, Schwenksville, and Lower Frederick Townships
- Identify, seek to preserve, and enhance scenic areas throughout the Township
 - identify scenic areas
 - explore preservation strategies in scenic areas
 - balance scenic protection and property rights

ensure that development has a minimal impact on scenic resources

- Identify and preserve historic structures/sites within the municipality
 - explore zoning techniques to assist in the effort to preserve historic sites/structures
 - maintain balance between historic preservation and property rights

1996 PLAN ACHIEVEMENTS

Chapter 1 discussed the status of relevant planning and implementation documents, including the numerous changes the township made to its zoning and subdivision ordinances based upon recommendations from the 1996 Open Space Plan. These significant changes include the use of conservation subdivision standards in all the major residential zoning districts in order to preserve open space and maintain rural character, protection standards for riparian areas and steep slopes, design standards for conservation subdivisions, innovative stormwater requirements that mandate infiltration and water quality measures, and model landscape requirements. In regard to the adoption of standards for conservation subdivisions, Upper Salford Township worked directly with the Natural Lands Trust, who developed the concept, and was the first community in Montgomery County to adopt the standards. In addition, Upper Salford Township was a prototype community for the Natural Lands Trust in the development of their Growing Greener Program.

Since the 1996 Open Space Plan, the township formalized regional planning discussions, started in 1988, by committing to the development and implementation of a Regional Comprehensive Plan. Regional Comprehensive Planning will contribute tremendously to the township's open space preservation efforts by directing growth to the most appropriate areas and focusing on the protection of rural character and preserving the region's significant natural resources.

In terms of open space preservation the township preserved five sites totaling more than 90 acres. These acquisitions were evenly distributed throughout the township and involved preserva-

tion for active open space, passive open space, and resource protection. The following is a summary of the acquisition projects:

- Ehst Property - Known as Orchard Park, this 20.99 acres of active and passive open space is located west of Woxall Village.
- Marks Property - Moyer Marks Park is 5.51 acres of passive and active open space serving neighborhoods north of Sumneytown Pike.
- Saylor Property - This 16.48 acres of land expanded Upper Salford Park along Schwenksville Road.
- Spring Mountain House Property - This 36.21 acres of passive open space on Spring Mountain was preserved jointly with Schwenksville Borough .
- Winner Property - Another 12.53 acre property that expanded Upper Salford Park for additional active recreation lands.

Most significantly, however, the township used its own resources to preserve 82 acres on Spring Mountain adjacent to the Spring Mountain House Site. Preservation of this site without County assistance demonstrates the townships commitment to resource protection and open space preservation.

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 and/or for environmental conservation purposes. In addition to municipally-owned areas, it can include land preserved by private conservation groups, farmland, schools sites, and private open space preserved as part of residential or non-residential development.

This chapter identifies existing open and recreational land in municipality and separates it into two categories of protection - permanently and temporarily protected land. The latter category makes an important contribution to the overall recreation base of a community by preserving open space, conserving significant natural features, and/or providing recreation facilities that do 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 so that future generations can also benefit from open space.

PERMANENTLY PROTECTED LAND TOWNSHIP OPEN SPACE

Upper Salford Township's existing system of parks and open space has grown significantly since 1994 when the township owned 3 parks totaling approximately 95 acres in 1994. In 2004, the township's park and open space system includes eight sites totaling over 270 acres. Two of the eight sites offer extensive

active recreation opportunities, including playgrounds, soccer fields, baseball/softball fields, basketball courts, and numerous walking trails. The other six sites are used for passive recreation, trails, and one is leased for skiing. However, each offers community residents important recreational opportunities and scenic amenities. The following is a summary of the township owned land:

- Upper Salford Township Park - The cornerstone of the township recreation system is the Upper Salford Township Park. Located at the corner of Salford Station Road and Schwenksville Road, the 55-acre park contains several multi-use ball fields, a playground, basketball court, pavilion, and walking trails. The park's actively used walking trails also link to an adjacent residential development, and open space owned by the Philadelphia Folk Song Society. Providing additional connections to this walking trail, as well as access to the park facilities in general, is a priority for the Township.
- William Rahmer Memorial Park - Located along the Perkiomen Creek and adjacent to the Upper Salford Township building, this 59.7-acre park is used for both passive and active recreation. The park contains ball fields, a picnic pavilion, and a playground. The park also has direct access to the Perkiomen Trail.
- Spring Mountain - This 82-acre property consists of the ski slopes located on Spring Mountain. This site serves as a primary recreation resource for the township and surrounding areas and buffers some of the most significant resource habitat in the county. The ski slopes are leased to the operators of the Ski Facility.
- Orchard Park - The 20-acre Orchard Park is located in the northwestern section of the township along Perkiomenville Road. The park is used for passive recreation and is planned to contain a walking trail and pavilion. The park is located just outside the Village of Woxall within close proximity of the Perkiomen Trail and has a trail connection to an adjacent development (Stone Hill).
- Spring Mountain House - A 36-acre property near the top of Spring Mountain co-owned with the Borough of Schwenksville. This joint open space property protects an important

butterfly meadow and provides passive recreation.

- Moyer Marks Park - This 5-acre property includes a pavilion and provides passive recreation opportunities to residents north of Sumneytown Pike near the Salford Township border. A trail connection from a proposed subdivision adjacent to the site is currently planned.
- Farringer Property - Located in the Village of Salfordville, this 8 acres of open space is adjacent to the Upper Salford Fire Station and provides passive recreation until it is developed as a park.
- Vaughn Run Property - This 5-acres of open space is located along Perkiomenville Road and adjacent to Vaughn Run Creek, a tributary of the east Branch Perkiomen Creek. The Vaughn Run Property is within the Village of Woxall and will be used for the development of a trail system.

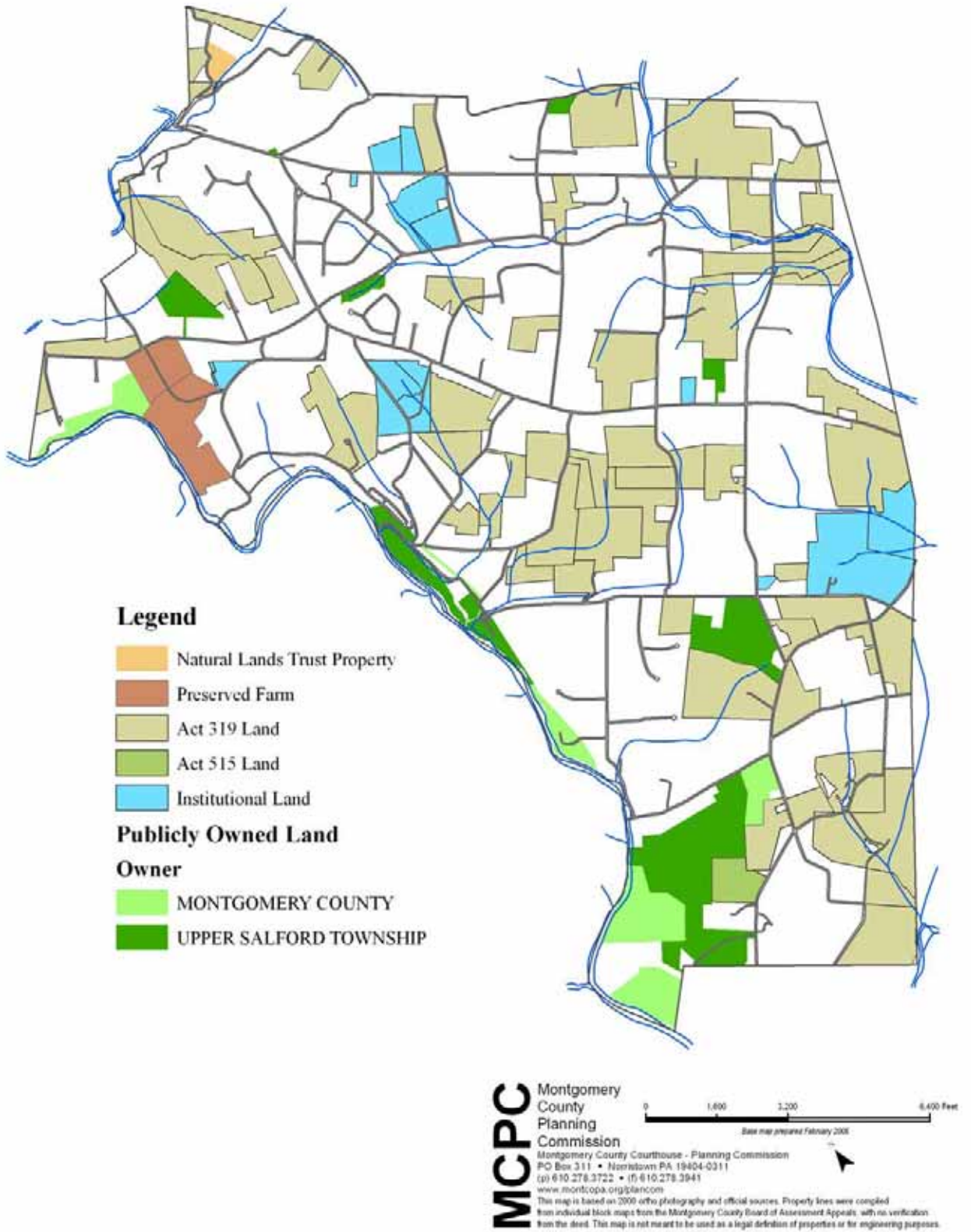
MONTGOMERY COUNTY OPEN SPACE

Given the township's unique natural features, proximity to the Perkiomen Creek, and relationship to the Perkiomen Trail, Montgomery County has an extensive interest in the Townships open space system. The County manages approximately 148 acres within the following three sites:

- Spring Mountain Natural Area - The three properties, totaling 90 acres, preserve significant woodlands around Spring Mountain. These parcels are also adjacent to the township's preserved land on Spring Mountain, creating an 162-acre node of preservation.
- Camp Rainbow - The County owns an 18-acre property along the Perkiomen Creek west of Clemmer's Mill Road. Camp Rainbow is operated as a non-profit camp for deserving children.
- Kratz Road / Hendricks Station Road - Two properties, totaling 40 acres, are traversed by the Perkiomen Trail and serve as a buffer along the Perkiomen Creek.

The County also manages the Perkiomen Trail which travels approximately 3.3 miles through

Figure 14
Protected Land



Upper Salford Township along the Perkiomen Creek. The trail, considered by the county to be a linear park, totals 22 miles in length and connects to the Schuylkill Trail. The County's Trail Plan proposes 16 distinct trails, totaling almost 200 miles.

PRESERVED FARMLAND

Montgomery County has purchased the development rights on one farm in Upper Salford Township. The 81-acre property, located south of Perkiomenville Road west of Hendricks Station Road, is operated as an orchard producing peaches, apples and other small fruits. Any farm within the township's Agricultural Security Area is eligible for the County's Farmland Preservation Program.

LANDS TRUST

One property within Upper Salford Township is owned in-fee by a Land Trust. The Natural Lands Trust owns an 8.24-acre property south of Zepp Road along the Ridge Valley Creek. The Natural Lands Trust has extensive land holdings and easements along both the Ridge Valley and Unami Creeks in Salford and Marlborough Townships, respectively. Both Creeks are considered Special Protection Waters of the Commonwealth and have been designated as High Quality. In addition, several other Land Trusts, including the Montgomery County Lands Trust and the Brandywine Conservancy have obtained easements on approximately 80 acres of land within the township.

TEMPORARILY PROTECTED

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 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. Currently, 70 properties, totaling 1,514 acres are enrolled in the Act 319 program. Primarily farmland, the Act 319 properties are well distributed throughout the township.

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. Only one 23 acre property within the township is enrolled in Act 515. This property does have a unique location, however, adjacent to the townships preserved Spring Mountain lands.

INSTITUTIONAL

Upper Salford Township also has approximately 209 acres owned by several institutions, comprising 4 percent of the township. These include 4 religious institutions, New Life Boys Ranch (currently the single largest institutional holding) and the Salford Hills Elementary School. While most of the institutional land serves as open space, both from a resource protection and rural character perspective, only the Elementary School provides areas of active recreation such as playing fields, playground, and open fields.

These open spaces differ from the municipally owned spaces because they may not remain open forever. Despite their temporary nature, these sources of open space are still important to municipality as they offer residents a greater range of choices to meet their recreational needs.

In total, Upper Salford Township has a significant amount of protected land, with more than 2,251 acres being either permanently or temporarily protected. This land provides municipality residents with many opportunities to enjoy all that open space can offer – recreation, tranquility, beauty, and a sense of community. However, close to three-quarters of this open space could be lost to development in time if the land owners or land use changes. If the township acquires open and recreational land, residents can be assured that municipality will be able to offer them the same or greater level of active and passive open space as they enjoy today.

CHAPTER 4

INVENTORY OF POTENTIALLY VULNERABLE RESOURCES

In Upper Salford Township, the combination of potentially vulnerable resources, such as geology, soils, streams, and woodlands, creates one of the most unique landscapes within Montgomery County. This landscape gives the township a distinct identity and contributes significantly to the overall quality of life. In addition, the township's natural resources serve to provide clean air and water, fresh produce, and wildlife habitat. Therefore, protecting the natural resources will benefit the township by preserving rural character, just as it will protect the natural processes and functions of the individual resources.

PLANNING GOALS

Protect the township's vulnerable ecological resources

- Direct growth to appropriate regional areas

- Protect the watersheds of the Ridge Valley, Perkiomen, and East Branch, along with their tributaries through riparian preservation ordinances and development regulations

- Adopt creative methods of environmental protection during development design and appropriate zoning and development regulations

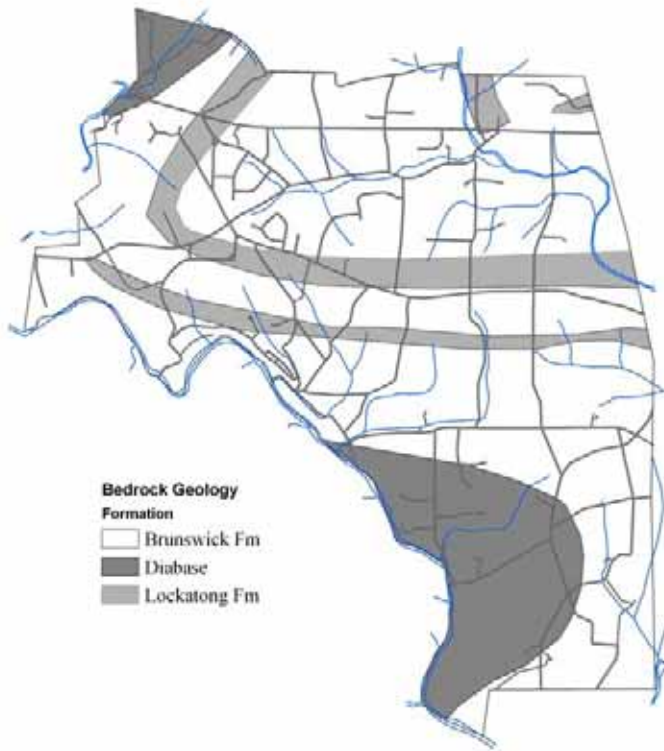
Identify, seek to preserve, and enhance scenic areas throughout the Township

- Identify scenic areas and significant viewsheds

- Explore preservation strategies in scenic areas

- Balance scenic protection and property rights

Figure 15
Geology



PLANNING GOALS (CONT)

- Ensure that development has a minimal impact on scenic resources
- Identify and preserve historic structures/sites within the municipality
- Explore zoning techniques to assist in the effort to preserve historic sites/structures
- Maintain balance between historic preservation and property rights

GEOLOGY

The township’s bedrock geology, 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. For example, the Brunswick Formation consists of red shale, mudstone, and siltstone. The weathering of these mod-

erately hard rocks generally result in somewhat shallow reddish brown soils. Due to lower clay content, these rocks tend to produce soils with good surface drainage.

Bedrock geology and its unique composition is also 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, while formation resulting in soils with higher sand content will have higher rates of infiltration and groundwater recharge. Also, harder rocks, including those that have cooled from liquid rock or magma, will be less likely to form fractures and joints that can contribute to higher groundwater yields. In Montgomery County, the difference ranges from several gallons per minute (gpm) to over 100 gpm.

Montgomery County is located in the Triassic Lowland and Piedmont Upland section of the Piedmont Physiographic Province. Four formations comprise the Triassic Lowlands: the Stockton, Lockatong, Brunswick, and Diabase formations.

The bedrock geology that underlies Upper Salford consists of three formations: Diabase, Brunswick, and Lockatong. This is quite a common mix and is frequently found throughout the entire county.

Diabase: This material is formed from the cooling of magma (rock in its liquid form), and is referred to as igneous rock. Diabase is typically found in association with the Brunswick formation. It was formed when magma seeped through large cracks within and around the Brunswick formation. Within these cracks the magma cooled into narrow bands of rock that is very resistant to erosion, weathering, water infiltration and groundwater movement. Diabase is notorious for low well yields and difficulty in excavation. Most areas of diabase are steeply sloped and wooded with numerous surface rocks and boulders. Since diabase is formed from magma, which is typically high in mineral content, soils derived from this formation can yield quite unique and rare plant species. There are two areas in Upper Salford where this formation is found: Spring Mountain and the vicinity of the Ridge Valley Creek on both sides of Route 63.

Lockatong: This sedimentary formation lies in two large "arcs" that follow the east branch of the Perkiomen from the border with Franconia to the border with Lower Salford. It also follows Route 563, west to Hendricks Road and southeast through Shirks Corner to the border with Lower Salford. This formation is resistant to weathering and often forms ridges that are prevalent throughout the county. Generally, the Lockatong formation exhibits low groundwater yields.

Brunswick: This sedimentary formation underlies most of the northwestern half of the county. The Brunswick formation sustains moderate groundwater yields in most locations. 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 Brun-

wick was super heated by the super hot magma of the diabase intrusions through a process called metamorphosis.

The importance of the underlying geology is centered upon the availability of groundwater and the stability of the bedrock for supporting roads and building foundations. The former becomes extremely important in a municipality that does not have any infrastructure (public water) and needs to preserve the availability and quality of groundwater for its present and future residents. The geological formations also add to the scenic quality that is found within an area because of the hills and valleys that are a result of weathering.

TOPOGRAPHY

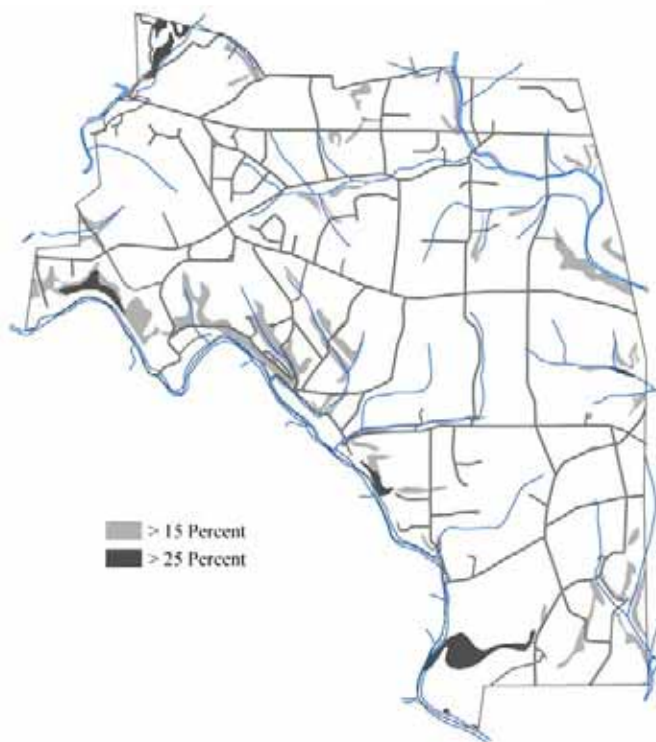
STEEP SLOPES

Steep slopes within Upper Salford 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 resources, 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 (for example from 15% to 20%), 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 most, if not all, steep slopes, while at the same time minimizing the impervious covers on slopes (roofs, drives, etc.) is a township priority.

The steep slopes shown in Figure 16 are derived from the Montgomery County Soil Survey which classifies soils by slope. As the map shows, there are extensive slopes (25% or greater) located along the Perkiomen and Ridge Valley Creeks and on Spring Mountain. There are moderate amounts of steep slopes located around the Vil-

Figure 16
Steep Slopes



lage of Salford, along the East Branch, Vaughn Run, and many of the other smaller watercourses.

WATERSHEDS AND 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 (which can vary) roughly 25% becomes runoff, 50% evaporates or is transpired by plants, and 25% replenishes groundwater supplies.

The area that contributes water to any given water course is called a drainage basin. Upper Salford contributes to three separate minor drainage ba-

sins: Ridge Valley, East Branch, and the Main Branch of the Perkiomen. 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.

The major surface waterways that run through the township are the East Branch of the Perkiomen (which includes the Vaughn Run tributary) and the Perkiomen Creek which forms Upper Salford’s western border.

Groundwater behaves much like surface water, flowing like a stream, only much slower. Groundwater is tapped as a source of drinking water and for industrial purposes. In fact, Upper Salford relies 100% on its groundwater for all uses. The replenishment of groundwater occurs slowly as precipitation and, in some cases, stream water seeps through the soil, down into the underlying aquifer. 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.) from development prevent the infiltration of water into the aquifer and speed up the run-off potential.

**SOILS
PRIME AND 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. Farmland of statewide importance (important agricultural soil) includes soils that will support cultivation, but require careful manage-

Figure 17
Watersheds

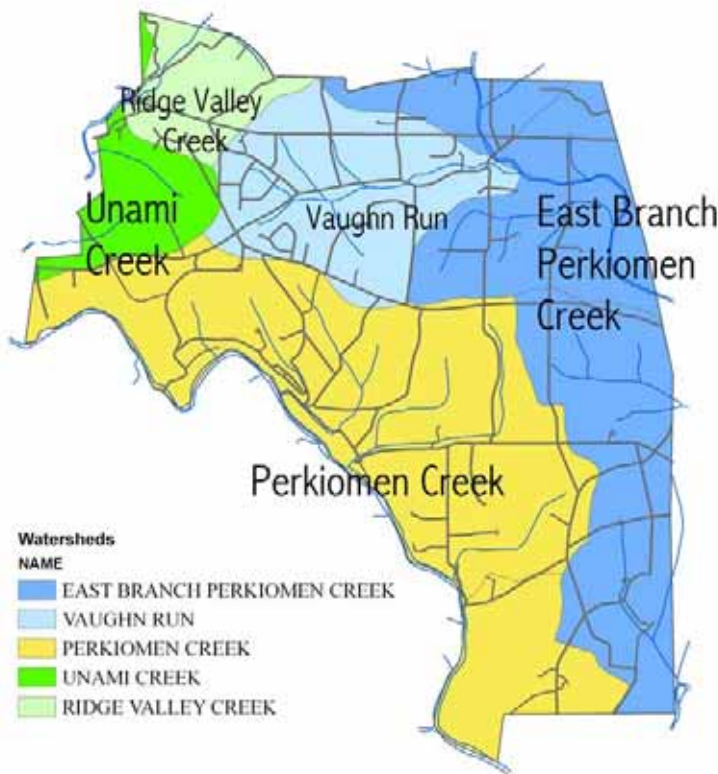


Figure 18
Agricultural Soils



Figure 19
High Infiltration, Alluvial, and Hydric Soils



ment. 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 atop these soils, the community can also preserve open space that provides scenic quality.

HYDRIC SOILS

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 Pa. 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 obvious reasons such as erosion potential, seepage from septic systems into the groundwater, and the inability to build solid foundations

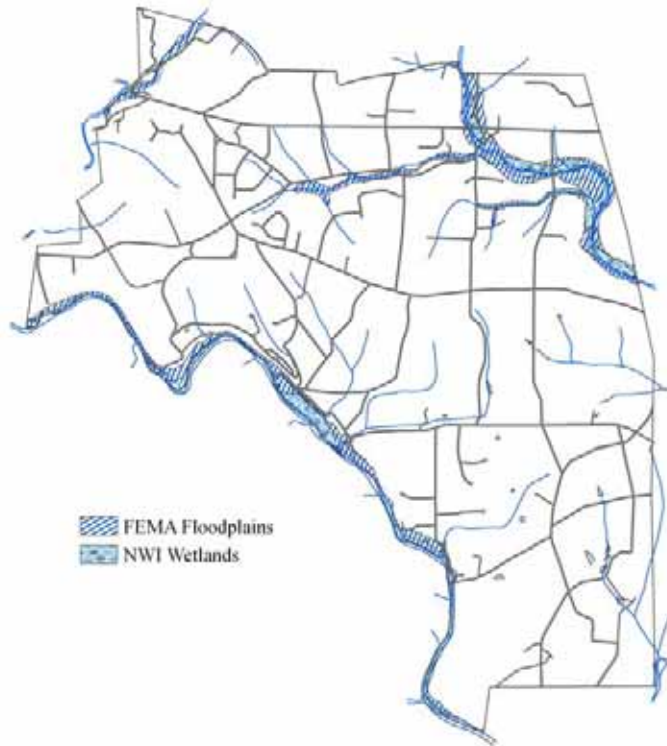
ALLUVIAL SOILS

These soils are frequently, but not always, located within a floodplain. 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

Figure 20
Floodplains and Wetlands



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. Upper Salford does not contain any "A" soils but does contain concentrations of "B" soils north of Perkiomenville Road adjacent to the Unami Creek and south of Schwenksville Road along the township border with Lower Salford. These areas exhibit good drainage and can provide the highest levels of groundwater recharge.

SURFACE WATERS AND HYDROLOGY

FLOODPLAIN AND STREAM CORRIDORS

Water is a valuable resource, consumed by people and industry, enjoyed at recreation facilities, employed in the assimilation of treated sewage, and integral to the landscape. As previously noted, of the 46 inches per year of rainfall ex-

pected 25 percent becomes direct runoff, 50 percent evaporates or is transpired by plants, and 25 percent replenishes groundwater. The surface water that falls on or is carried through Upper Salford affects the topography, soils, vegetation, and groundwater and comes from two natural sources: direct runoff and groundwater. A third, manmade source, may also contribute to stream flow: effluent from sewage treatment plants, which tends to reduce the variation between high and low flow periods.

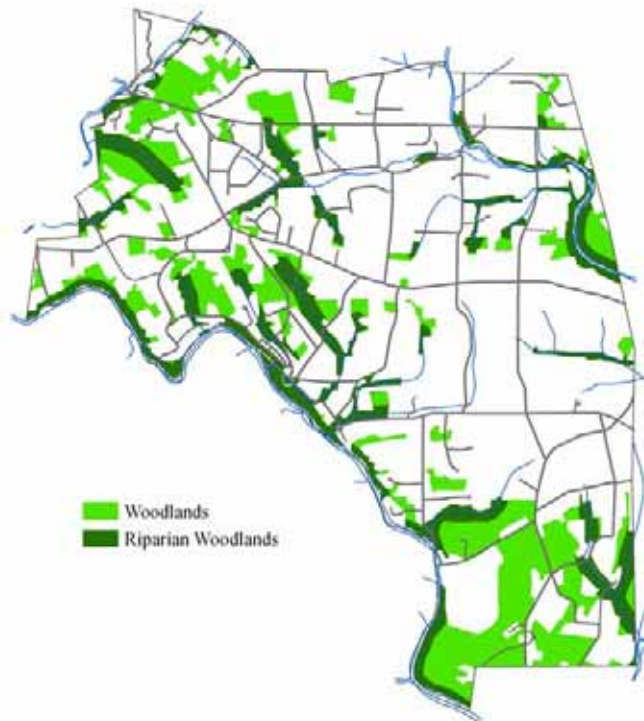
HYDROLOGY

Of particular importance is the 100 year floodplain. This is a hydrological feature that effects the health, safety, and welfare of Upper Salford's residents. Much of the time the floodplain is dry, but during storms the floodplain conveys and stores excess floodwater. Development within this area reduces the carrying capacity of the watercourse and increases the height and destructive ability of floodwater. The most extensive floodplain areas are found along the Ridge Valley, Unami, Perkiomen Creeks, Vaughn Run, and the East Branch of the Perkiomen. According to the Existing Land Use Map, there is some development along the Ridge Valley Creek, Vaughn Run, and The Perkiomen Creek near Hendricks Road within the floodplain. However, this development occurred prior to land use controls and is considered non-conforming. Generally, the floodplain has been respected within the township and any flooding that occurs is not only the result of inappropriate development within the township, but also upstream in other municipalities.

In addition to carrying floodwater, the floodplain and stream corridors are important in minimizing erosion and water pollution, protecting water quality (temperature and velocity), and providing animal habitats and recreational opportunities. Well vegetated "buffers" along stream corridors will filter out "non-point source" pollutants, shade the stream, and provide wildlife habitat. Wetlands that filter and impede stormwater are frequently found along stream corridors. Unconsolidated gravel and stone deposits (soils) are also found along stream corridors and these areas allow for groundwater recharge.

Upper Salford is devoted to protecting its water quality and quantity. For instance, the township

Figure 21
Woodlands



adopted a riparian buffer ordinance as part of a comprehensive zoning update in 1999. The ordinance requires the creation of a protection zone along all waterways. The required "buffer area" is 75 feet from each side a stream and helps to filter out pollutants and sediments from runoff. These riparian areas also protect one of the essential aquifer replenishment areas, the hydric and alluvial soils that are often found along streams.

Because basins are usually larger than one community, an interrelationship exists whereby municipalities that are upstream contribute surface water flow to Upper Salford, while those downstream receive the Township's flow. With this in mind, the Township should aim to maintain the natural conditions of its drainage system, such as through preservation of open space along watercourses.

VEGETATION AND WILDLIFE

WOODLANDS

The original vegetation of Montgomery County was a dense forest of hardwoods which covered

over 99 percent 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. The principle types of woodlands remaining in the county are:

Red Oak - About 60% of all remaining woodlands. Northern Red Oak is predominant, but Black, Scarlet and Chestnut Oak are also abundant.

Ash/Maple/Elm - About 19% of all woodlands. Local mixtures will vary, and include minor species, such as the Slippery Elm, Yellow Birch, Black Gum, Sycamore, and Poplar.

Eastern Red Cedar - 18% of the county's wooded acres are covered with Eastern Red Cedar and associated species: Gray Birch, Red Maple, Sweet Birch, and Aspen.

Sugar Maple/Beech/Yellow Birch - The remaining three percent of woodlands is comprised of this association. Associated species include Red Maple, Hemlock, Northern Red oak, White Ash, and Tulip Poplar.

Woodlands and hedgerows serve many purposes, both functional and aesthetic. Woodlands prevent erosion, provide habitat for wildlife, provide buffers for creeks, and offer recreational opportunities for residents. Hedgerows and wooded corridors prevent erosion also, and provide cover for wildlife movement, shelter, and migration.

The distribution of woodlands in Montgomery County can be described in three different patterns. Small, widely scattered stands can be found east of the central county ridge, often strung along alluvial soils. Long, linear stands along streams and on alluvial soils are typical in the central part of the county. Large forested blocks of land, often hundreds to thousands of acres in size, are found on ridges in the central and northern areas of the county.

Major concentrations of woodlands in the Township are found around Spring Mountain, and along the Unami and East Branch Perkiomen

Creeks. However, with the exception of portions of Spring Mountain, no permanent preservation of these areas exists. 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.

The township's ability to protect woodlands is limited by the Municipalities Planning Code (Act 247) and while the township cannot prohibit forestry, it is permitted to reasonably regulate forestry operations.

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 starting to change as residents realize that scenic beauty is a tangible community resource that has value. The key to protecting visual quality is creating a nexus between environmental protection and natural resource conservation. At present, there is no set way to define "scenic", because it is a very subjective topic. In any case, it is easy to see that Upper Salford's two major types of scenery, farmland and forest, certainly add to its character. If these resources are altered, so too will the sense of community that is inherent to Upper Salford. Significant viewsheds in the township are shown on Figure 22.

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 addition, the resources comprising the viewsheds serve an important ecological functions and provide habitat for wildlife. Of particular importance for Upper Salford are the two previously mentioned landscapes - woodlands and farmland.

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. The County's Comprehensive Plan identified two such roads within the township.

- OLD SKIPPACK ROAD - Between Woxall Village, Salfordville, and Lower Salford. Located on a ridge, this section of road provides significant views and travels through two of the township's main villages.
- CLEMMER'S MILL, SALFORD STATION, AND HENDRICKS ROAD CORRIDOR - Between Spring Mount Road and Kratz Road in Lower Frederick. This winding wooded road travels along the Perkiomen Creek in the western part of the township.

HISTORIC RESOURCES

Complementing the scenic qualities of the farms and woods of Upper Salford, 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 various farm buildings were critical to the agricultural operations on the surrounding land; for housing the extended farm family, draft animals, livestock, equipment and implements, as well as for providing work spaces for domestic tasks such as washing, butchering and food preservation. The self-sufficiency of the family farmstead is still an admired quality in Upper Salford. The farm buildings that remain are visual reminders of valued past lifestyles.

The farmstead buildings, village houses, and crossroad shops also demonstrate the considerable skills of craftsmen working with largely local materials. The proportion and design of these historic, vernacular buildings today are copied and imitated by modern builders with a worldwide source of materials and with extremely sophisticated tools. The functional beauty of the historic architecture of rural Southeast Pennsylvania is widely appreciated by both township residents and by visitors from throughout the United States.

Specifically, the historic resources that have been identified within the township are of architectural, institutional (church), engineering (bridge), or industrial (mill) significance. One area, as opposed to a specific structure, is listed in the National Register of Historic Places because "...[the] bridge and community served as [an] integral part of [the] Sumneytown-Spring House Turnpike" and represents "...small village development in rural Pennsylvania". This area is known as the Bergey Bridge Historical District. One other structure, the Old Goshenhoppen Church, has been deemed eligible by the State Bureau of Historical Preservation for consideration by the National Register for preservation.

An inventory of historical structures was done by the Clio Group in the mid 1980s throughout Montgomery County. This study catalogued sites of historical importance that may be deemed important enough for either local historical group recognition or national recognition. While scattered throughout the township, the primary concentrations of historical places are located in the villages of Salford and Salfordville. The Clio Group inventory identified 38 different sites within Upper Salford, including the two sites previously mentioned. (see Figures 23).

Figure 24 also includes locally designated historic farmsteads, as well as two sites identified in the Spring Mountain Area Conservation Plan completed by the Natural Lands Trust (see Figure 25).

The historic farmsteads include all preferentially assessed open space properties, primarily farmland, having dwellings constructed prior to 1950. While some structures may not have any specific historic value, preservation of these dwellings in the farmstead context is important for maintaining rural and scenic character.

The Natural Lands Trust completed a conservation plan for the Spring Mountain Area in 2001. The study area includes all of Upper Salford Township generally south of Salford Station Road. The two historic sites identified in the conservation plan are the Spring Mountain House Site and the adjacent Rockhurst Estate.

The Spring Mountain House Site was jointly purchased by Upper Salford Township and Schwenksville Borough in May 2000. This site was previously occupied by a famous hotel and resort, housing guests from New York, Washington, and Philadelphia in its 82 guest rooms. Little used since being sold at auction in 1967, the Spring Mountain House was raised in 1990.

Adjacent to the Spring Mountain House Site is the Rockhurst Estate. The estate was built by Joseph H. Fralinger, the "salt water taffy king" from Atlantic City. The nine bedroom landmark was built from black granite blocks quarried on the site. The estate was sold from the Fralinger family in 1948 and has served as a private residence.

Figure 22
Inventory of Historic Resources

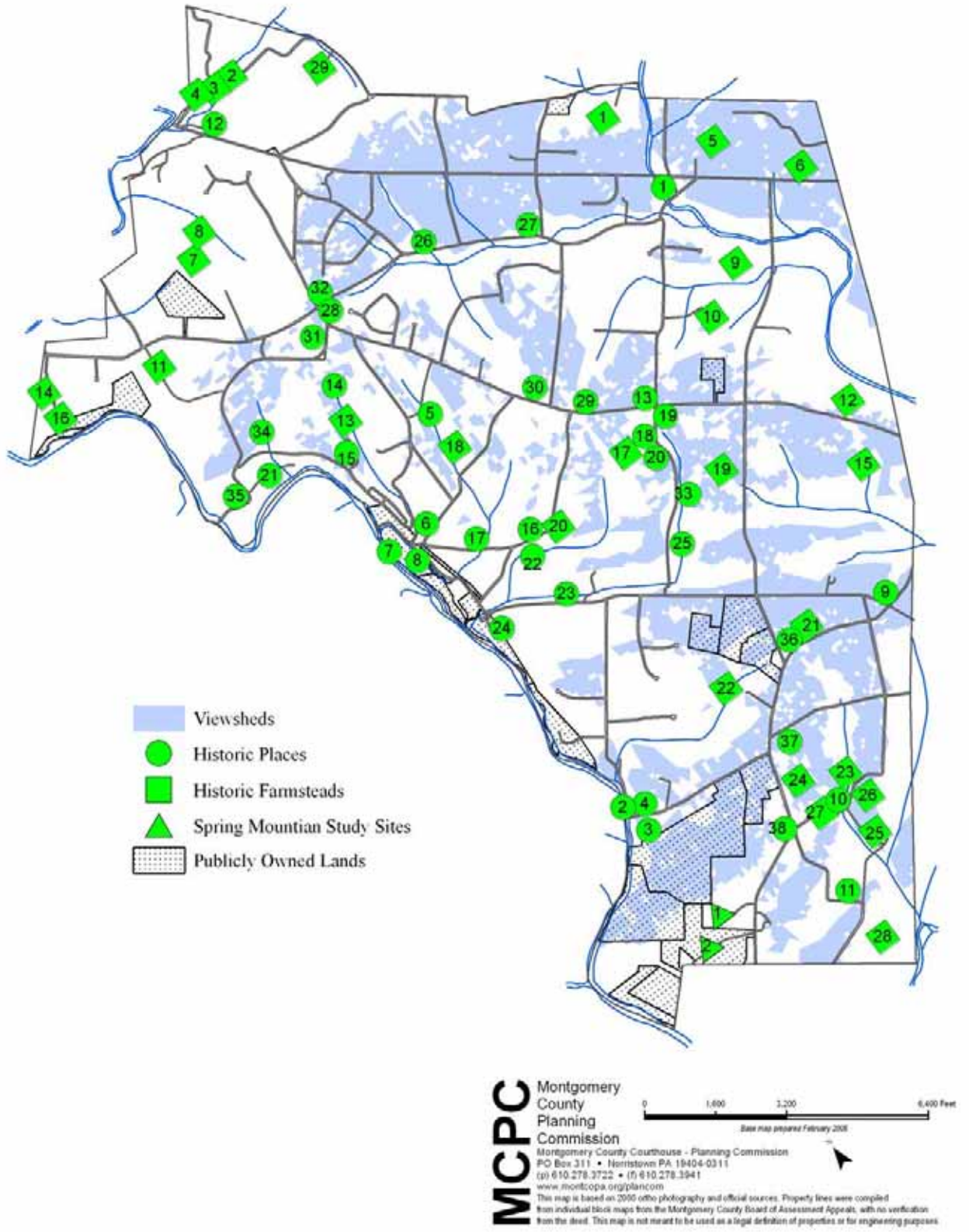


Figure 23
Historic Places

Site Number	Location	Time Period
1	Bergey Bridge Historic District	1800-1819
2	737 Clemmers Mill Road at Spring Mount Road	1850-1879
3	882 Spring Mount Road near Clemmers Mill Road	1860-1879
4	740 Clemmers Mill Road at Spring Mount Road	1880-1899
5	Church Road Old Goshenhoppen Church	1840-1859
6	1780 Baghurst Alley near Old Church Road	1800-1819
7	1728 Salford Station Road near Old Church Road	1800-1819
8	Reading RR at Salford Station Road and Church Road	1900-1919
9	284 Salford Station Road near Larson Road	1840-1859
10	829 Larson Road near Schwenksville Road	1840-1859
11	Hefflin Road near Schwenksville Road	1840-1859
12	Sumneytown Pike at Rostkowski Road	1740-1759
13	902 Skippack Road at Bergey Road	1820-1839
14	2276 Hendricks Station Road near Skippack Road	1820-1839
15	Hendricks Road North of Old Church Road	1920-1939
16	Salford Street near Quarry Road	1860-1879
17	1530 Salford Street near Quarry Road	1860-1879
18	891-893 Skippack Road at Wolford Road	1840-1859
19	865 Skippack Road near Wolford Road	1860-1879
20	887 Skippack Road near Wolford Road	1800-1819
21	Hendricks Station Road near Rail Road	1860-1879
22	Salford Street near Harmon Road	1880-1899
23	Harmon Road near Reading RR	1820-1839
24	Salford Station Road near Reading RR	1840-1859
25	1503 Schwenksville Raod near Salford Station Road	1820-1839
26	1764 Old Sumneytown Pike at Perkiomenville Road	1750-1779
27	1457 Sumneytown Pike at Thompson Road	1820-1839
28	1990 Skippack Road opposite Hendricks Station Road	1740-1759
29	1072 Skippack Road near Salford Street	1900-1919
30	1362 Skippack Raod oppisite Quarry Road	1820-1839
31	2029 Skippack Road at Perkiomenville Road	1850-1879
32	Skippack Road near Perkiomenville Road	1850-1879
33	2005 Wolford Road near Skippack Road	1820-1839
34	1952 Hendricks Station Road at Hendricks Road	1750-1779
35	Hendricks Station Road near Perkiomen Creek	1840-1859
36	1352 Schwenksville Road near Grubb Road	1850-1879
37	Schwenksville Road #445 at Ledrach	1880-1899
38	659 Schwenksville Road near Hefflin and Larson	1900-1919

Figure 24
Historic Farmsteads

Site Number	Location	Time Period
1	1047 Moyer Road	1833
2	3329 Zepp Road	1900
3	3329 Zepp Road	1900
4	3329 Zepp Road	1900
5	726 Sumneytown Pike	1850
6	356 Sumneytown Pike	1800
7	2288 Perkiomenville Road	1800
8	2683 Burton Road	1900
9	2617 Shelly Road	1850
10	2469 Bergey Road	1800
11	2563 Perkiomenville Road	1800
12	141 Old Skippack Road	1800
13	1926 Hendricks Road	1850
14	2116 Kratz Road	1800
15	141 Old Skippack Road	1800
16	2086 Kratz Road	1875
17	2021 Wolford Road	1952
18	1909 Quarry Road	1954
19	Schwenksville Road	1880
20	Salford Street	1800
21	Schwenksville Road	1949
22	1141 Schwenksville Road	1850
23	829 Larson Road	1835
24	Schwenksville Road	1875
25	440 Dieber Road	1900
26	829 Larson Road	1835
27	440 Dieber Road	1900
28	376 Dieber Road	1700
29	1983 Township Line Road	1800

Figure 25
Spring Mountain Study Sites

Site Number	Location	Time Period
1	385 Schwenksville Road	1900
2	331 Schwenksville Road	N/A

CHAPTER 5

PRIORITIZATION OF UNPROTECTED RESOURCES

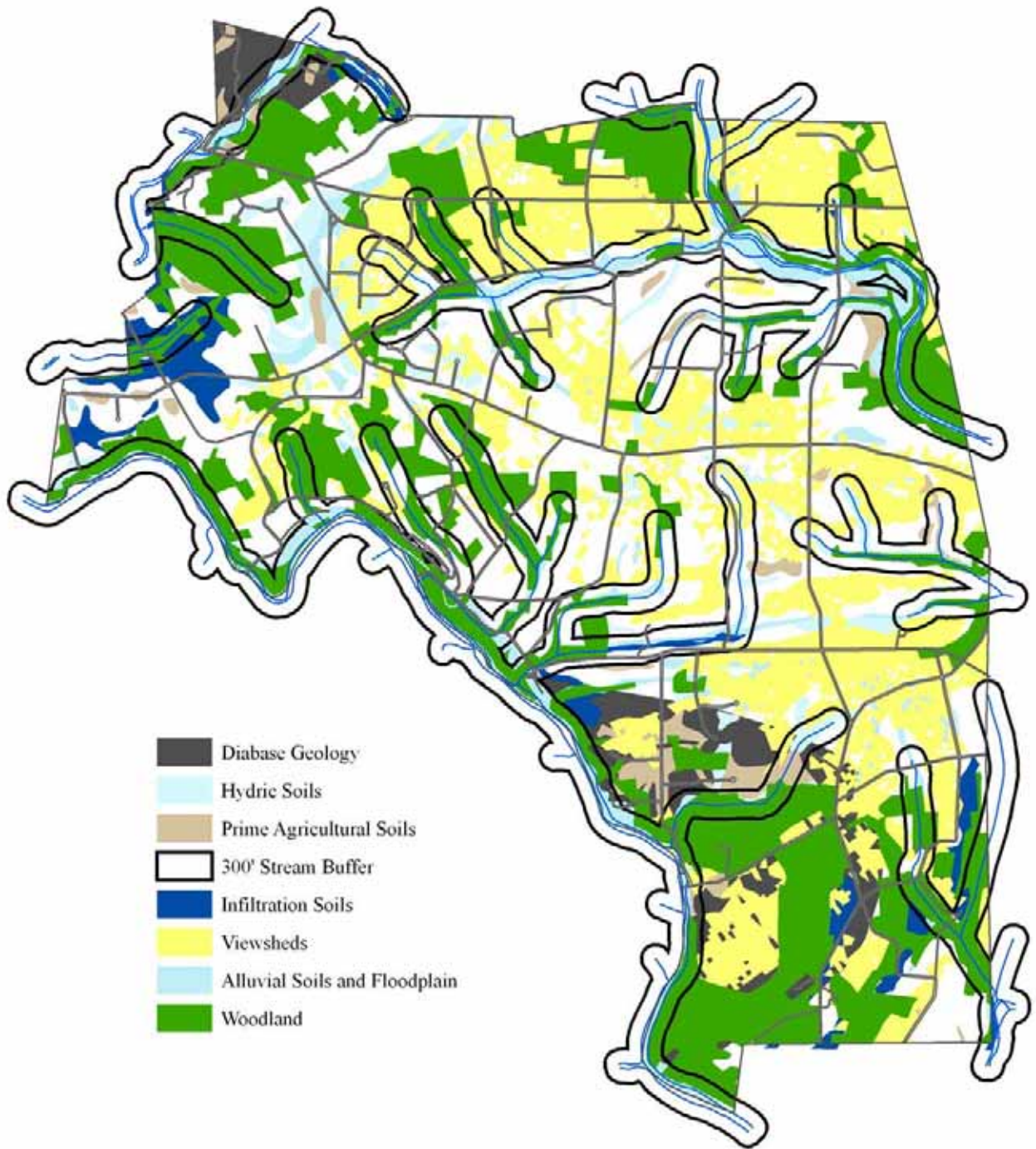
The inventory of vulnerable resources in Chapter 4 details the extensive coverage of lands underlain by bedrock with poor aquifer characteristics, steep slopes, wetlands, high infiltration soils, hydric and alluvial soils, prime and statewide important agricultural soils, woodlands, historic resources, and viewsheds. These cultural and environmental features are mapped as individual features without showing their overlapping, interconnected relationships. Together the resources of the inventory contribute to the whole of Upper Salford's environmental and scenic integrity, and suggest priorities for protection. The following narrative briefly describes the analysis conducted to prioritize the unprotected resources as well as the significance of the individual resources, and its relationship to the township's goals and priorities.

ANALYSIS OF VULNERABLE RESOURCES

In order to analyze the relationship between the township's vulnerable resources and existing protected land, a composite of all the natural features needs to be developed. For the purposes of creating a composite map, only the most vulnerable elements of the individual resources will be used. In addition, several resources that display similar vulnerabilities, such as alluvial soils and floodplain, were combined for the purposes of analysis.

The Composite of Natural Resources Map (Figure 26) shows all of the vulnerable resources individually. The resources appear to be focused around Spring Mountain, within the Unami and Ridge Valley Creek Watersheds, and along numerous streams, including the East Branch Perkiomen Creek. However, at least one of the vulnerable resources can be found in almost every part of the township. This composite map

Figure 26
Composite of Natural Resources



- Diabase Geology
- Hydric Soils
- Prime Agricultural Soils
- 300' Stream Buffer
- Infiltration Soils
- Viewsheds
- Alluvial Soils and Floodplain
- Woodland

MCPC Montgomery
 County
 Planning
 Commission

0 1,000 2,000 4,000 Feet

Base map prepared February 2008

Montgomery County Courthouse - Planning Commission
 PO Box 311 • Norristown PA, 19404-0311
 (p) 610.278.3722 • (f) 610.278.3941
www.mcpc.org/planning

This map is based on 2000 ortho photography and official sources. Property lines were compiled from individual block maps from the Montgomery County Board of Assessment Appeals, with no verification from the deed. This map is not meant to be used as a legal definition of properties or for engineering purposes.

shows the importance of having good resource protection ordinances in place so that as future development takes pace the resources are afforded some level of protection. However, the township may wish to provide more comprehensive protection by having control over the management of resource lands in certain situations. For example, there are instances where two, and sometimes more, of the resources overlap and the township could protect multiple resources within one property. Protection of resource lands may also complement land preservation for other purposes. This may occur when a property that the township may be considering for active recreation or farmland preservation also has a concentration of significant resources worthy of protection.

Therefore, we need to be able to compare the natural resource values between two pieces of property. For example, a property that has three resources overlapping (i.e. alluvial soils, woodlands, buffer area) will have a greater relative value than a piece of property that contains only floodplain. This analysis should also take into account the fact that the township does not value all resource land equally. For example, the preservation of farmland is a significant township goal and, given the protection of floodplains via existing land use regulations, will have a higher priority than the floodplain preservation.

Based upon the goals of the Open Space Plan and discussions of the Open Space Planning Committee, all of the vulnerable resources have been assigned a specific value. The relative values attributed to each vulnerable resource reflect the percentage of preservation capital (time and money) that should be spent on a particular resource. Using this philosophy, the resource values are uniform for each distinct resource and do not make distinctions between similar resources. For example, all woodlands are valued the same and do not reflect potential variations in habitat value or composition. The following section summarizes each of the resources analyzed and the relative value of that resource.

PRIME AGRICULTURAL SOILS

Prime agricultural soils cover approximately 9 percent of Upper Salford Township. These soils are largely located on open and level lands found at the top of gently rolling hills and along streams

especially the East Branch of the Perkiomen. Prime agricultural soils represent the best opportunities for the production of food. These soils are undergoing widespread conversion to developed uses in Montgomery County, with the most significant losses occurring in the townships east and south of Upper Salford.

Prime agricultural soils have been given the relative value of 25 percent.

WOODLANDS

Approximately twenty-seven percent of Upper Salford is wooded, with significant stands in the northern and southern portions of the Township. These areas are underlain by diabase bedrock. Woodlands are also concentrated along all of the larger stream valleys and are particularly important for their contribution to surface water quality. Trees encourage infiltration of surface water, a reduction of run-off, and an accompanying reduction of erosion and sedimentation.

Woodlands provide critical habitat for wildlife; they produce food and forage, provide sites for nesting or denning, and provide greenways for migration to other habitat areas. Woodlands constitute a diverse plant community and provide corridors for the transportation of plant genetic materials.

Trees provide economic benefit as well, either as saw timber for such products as furniture, flooring, or dimensional lumber, or as an enhancement in the sale price of building lots. The scenic contributions that woodlands make is almost impossible to quantify, but recognized by almost all Township residents.

Woodlands were given a relative value of 20 percent.

INFILTRATION SOILS

All soils are classified within one of four hydrologic soil groups. These soil groups, defined as "A," "B," "C," and "D" soils, represent the infiltration capacity and runoff potential of soils. Upper Salford has no "A" soils and only 6 percent of the township is classified as "B" soils. The remaining 94 percent of the township is comprised of "C" and "D" soils. Given the township's reliance on ground water and the importance of maintaining stream base-flow, protecting the areas of highest infiltration

will be extremely important. These areas of high infiltration soils may also serve as good locations for community sewage systems utilizing subsurface disposal.

Infiltration soils were attributed a relative value of 15 percent.

VIEWSHEDS

In general, the scenic quality of an area is associated with views of water bodies, pastoral scenes, woodlands, and unique natural landforms. These views significantly add to the community's sense of place (things which add up to create a feeling that the community is a special place, distinct from anywhere else), which in turn contributes to the resident's overall quality of life. Of particular importance for Upper Salford are the two previously mentioned landscapes - woodlands and farmland. Viewsheds can be protected as part of open space preservation, particularly when other resources are preserved simultaneously or during the development process. Protecting viewsheds as part of the development process can be achieved by increasing setbacks, permitting conservation subdivision design, or via incentives.

Viewsheds have a relative value of 10 percent.

RIPARIAN AREAS

Riparian areas are defined as the land immediately adjacent to streams or other water bodies. In general, riparian areas contain multiple vulnerable resources, such as alluvial soils, woodlands and steep slopes. Riparian areas also serve multiple functions. For example, wooded riparian corridors protect water quality, provide food for aquatic organisms and shade the streams. Riparian areas also serve as significant wildlife corridors, connecting large open spaces and natural habitat. Given the significance of these areas, a riparian corridor of 300 feet on either side of every stream has been identified for protection in addition to any other vulnerable resources found in these locations.

A 10 percent relative value was assigned to riparian areas.

GEOLOGY AND STEEP SLOPES

One geologic formation, in particular, presents a significant limitation to growth and development in Upper Salford. The Diabase bedrock underlies ap-

proximately fifteen percent of the township. This formation is particularly hard, shows minimal fracturing, and consequently has minimal groundwater storage capacity. Since Upper Salford is entirely dependent on groundwater for all of its residential, commercial, institutional, and industrial consumption, minimal groundwater availability presents a serious development limitation, particularly when combined with restricted recharge resulting from increased impervious cover and increased run-off that accompanies development.

In addition to low groundwater yields, Diabase geology is also very resistant to weathering. Since it weathers at a much slower rate than the surrounding Brunswick formation, Diabase geology is also associated with steep slopes, particularly around Spring Mountain. Steep slopes in Upper Salford can also be found along the Perkiomen Creek, East Branch of the Perkiomen and Ridge Valley Creeks.

Another important association between Diabase geology and steep slopes is that they both tend to have significant vegetation, primarily woodlands. This vegetative cover helps slow runoff and holds the soil in place, reducing erosion. The prevention of erosion and stream siltation protects water quality and stream habitat, and maintains the carry capacity of streams, permitting floodwaters to remain confined to existing identified floodplains.

Diabase and Steep Slopes have a relative value of 8 percent.

HYDRIC SOILS

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. Hydric soils cover approximately 15 percent of the township.

A 7 percent relative value was given to hydric soils.

FLOODPLAINS AND ALLUVIAL SOILS

The Floodplains in the township have been identified by the Federal Emergency Management Agency (FEMA) for the purpose of protecting the health, safety, and welfare of Upper Salford's residents. These low-lying areas around streams

are dry most of the time, but during storms the floodplain will convey and store excess floodwater.

Alluvial soils were created as the sediment carried by numerous floods over the years was deposited in these areas as flood waters subsided. Therefore, alluvial soils are indicators of past flooding and the location of floodplains. While alluvial soils are far less extensive than FEMA-identified floodplains, they generally perform the same environmental function, receiving excess run-off that overflows the stream channel during and after storms and rapid snowmelt. Alluvial soils and FEMA floodplains cover approximately 15 percent of the township.

Alluvial Soils and Floodplains have a relative value of 5 percent.

Figure 27 shows the relative value of resource lands within the township and the relationship to publicly owned land. The relative values of resource lands is based exclusively on the convergence and relative value of resource lands. Since the mapping for the resources does not differentiate between developed and undeveloped land, further analysis is necessary.

Figure 28 shows the relative value of resources for undeveloped open and vacant land only. In order to further prioritize vulnerable resources this map also takes the acreage of the open and vacant land into consideration. Therefore, the new relative values depicted on Figure 28 are the product of the relative resource values shown in the previous map (80 percent of the new value) and the acreage (i.e. size) of the open and vacant land (20 percent of the new value).

PRIORITIZATION OF AREAS FOR PRESERVATION

Based upon the relative resource values for the open and vacant lands (see Figure 28), the following preservation priority areas have been established for resource protection:

HIGHEST PRIORITY AREAS

- **SPRING MOUNTAIN AREA**
 - Land north of Spring Mount Road, located between two preserved areas.

- Land east of Heflin Road along a tributary to the east Branch Perkiomen Creek.
- Land adjacent to preserved land on Spring Mountain along the Perkiomen Creek.

EAST BRANCH PERKIOMEN CREEK

- Land north of Old Skippack Pike along the East Branch Perkiomen Creek.

OLD POOL FARM

- Land south of Salford Station Road, known as the Old Pool Farm and home the Philadelphia Folk Festival.

UNAMI / RIDGE VALLEY CREEK

- Land north and south of Sumneytown Pike along the Ridge Valley Creek.
- Land north of Perkiomenville Road along a tributary to the Unami Creek.

HIGH PRIORITY AREAS

SALFORDVILLE VILLAGE

- Land north and south of Old Skippack Road around the Village of Salfordville, particularly between Salford Street and Wolford Road.

SALFORD VILLAGE AREA

- Land east and west of Church Road and Old Church Road, particularly the stand of woodlands west of Church Road.

SCHWENKSVILLE/SHELLY ROAD

- Land south of Old Skippack Road and east of Schwenksville/Shelly Road near the Lower Salford Township border.

Figure 27
Relative Value of Resources

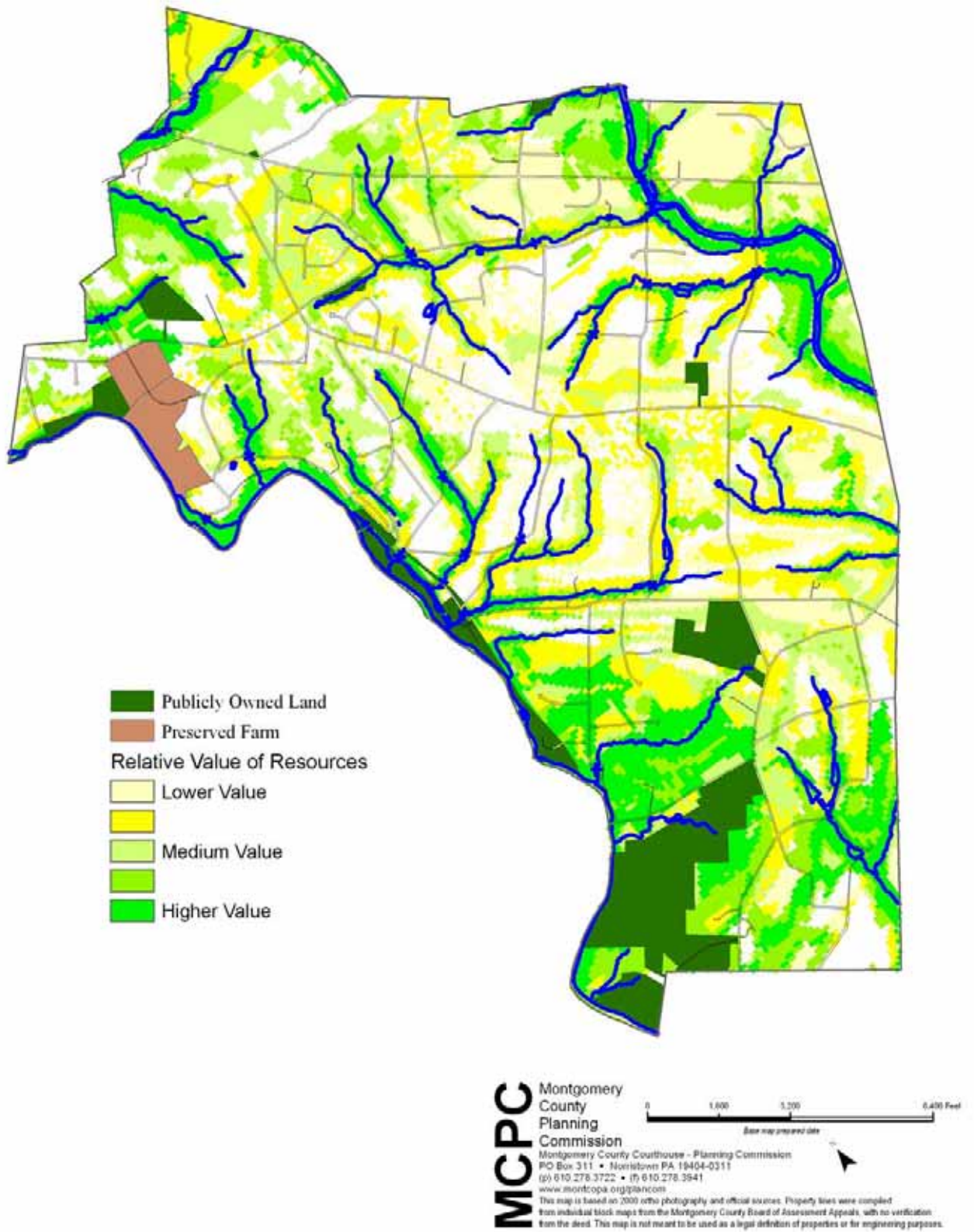
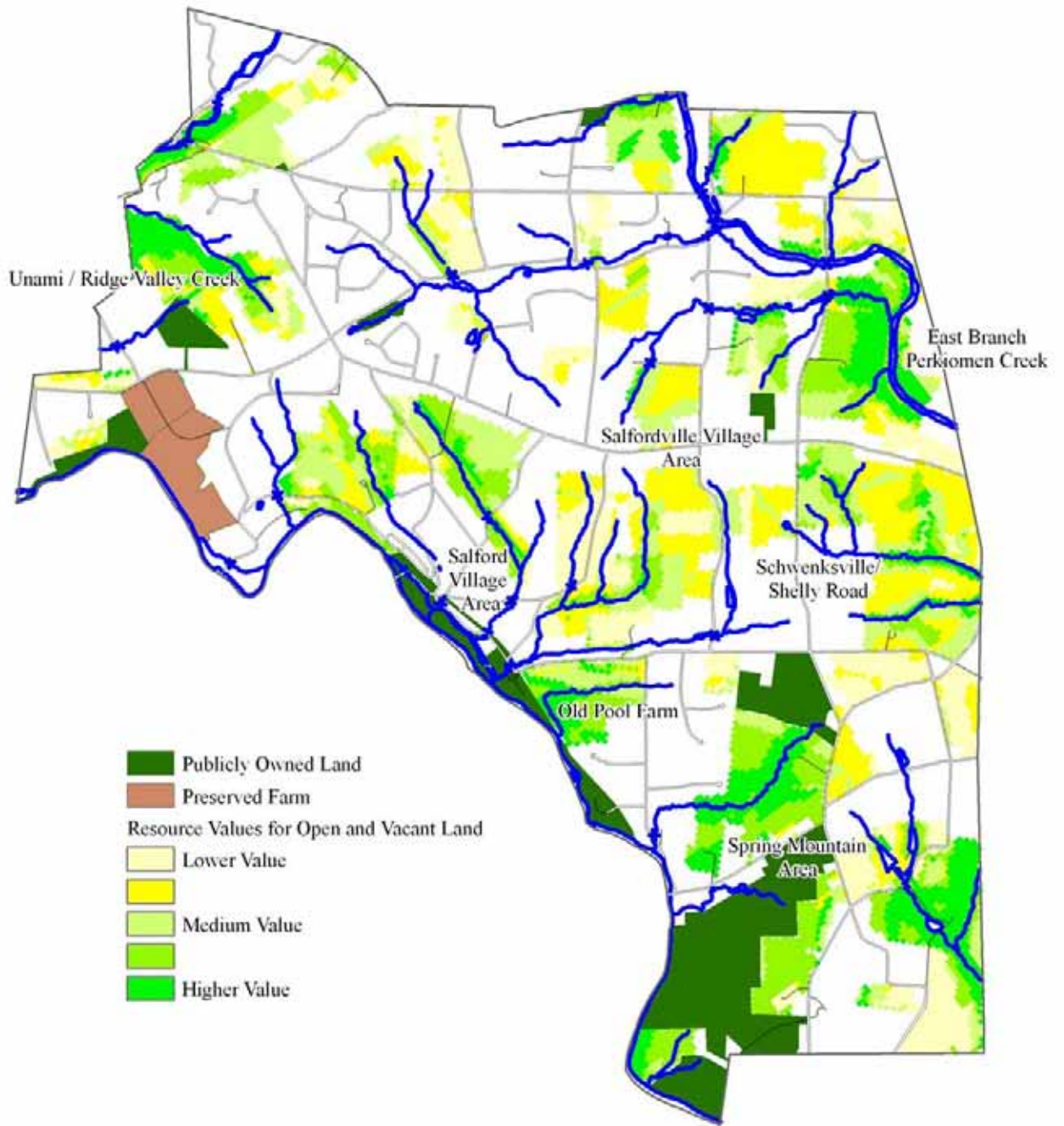


Figure 28
Resource Value for Open and Vacant Land



MCPC Montgomery County Planning Commission
 Montgomery County Courthouse - Planning Commission
 PO Box 311 • Norristown PA 19404-0311
 (p) 610.278.3722 • (f) 610.278.3941
 www.montcopa.org/plans.com

0 1,600 3,200 6,400 Feet
 Date map prepared: 2006

This map is based on 2006 aerial photography and official sources. Property lines were compiled from individual block maps from the Montgomery County Board of Assessment Appeals, with no verification from the deed. This map is not meant to be used as a legal definition of properties or for engineering purposes.

CHAPTER 6

AGRICULTURAL LAND PRESERVATION

In the previous chapter the presence of prime agricultural soils was a key factor in the development of priority areas for natural resource preservation. However, given the importance and vulnerability of agricultural land within Upper Salford Township, a more detailed analysis of important agricultural land should be conducted. Agricultural land uses within the township occupy almost 1,800 acres (32.5 % of the township), which is second only to residential land uses (41 % of the township). In addition, the conversion of agricultural land to other land uses has contributed to a loss of 12.7 % percent since 1998. This additional analysis will highlight priority agricultural land for preservation by both the County and Township .

PLANNING GOAL

Preserve Significant Farmland and Farming as a Business

Encourage farming as a business by supporting the sale of agricultural products and developing relationships between existing farms and township residents

Identify land appropriate for preservation by Montgomery County

Preserve important farmland not eligible for preservation by Montgomery County

IMPORTANCE OF AGRICULTURAL LAND

Prime agricultural soil, and productive agricultural land, is a limited resource that takes thousands of years to develop. Yet across Pennsylvania and in Upper Salford Township, these lands are quickly being converted to other land uses, primarily residential in nature. Figure 29 depicts those areas in Pennsylvania with the highest quality farmland that also is experiencing the highest rates of development. Upper Salford Township falls into this critical area, illustrating the importance of acting now to preserve important agricultural lands.

The American Farmland Trust's January 2003 Fact Sheet "Why Save Farmland?" highlights the following three benefits of protecting agricultural lands:

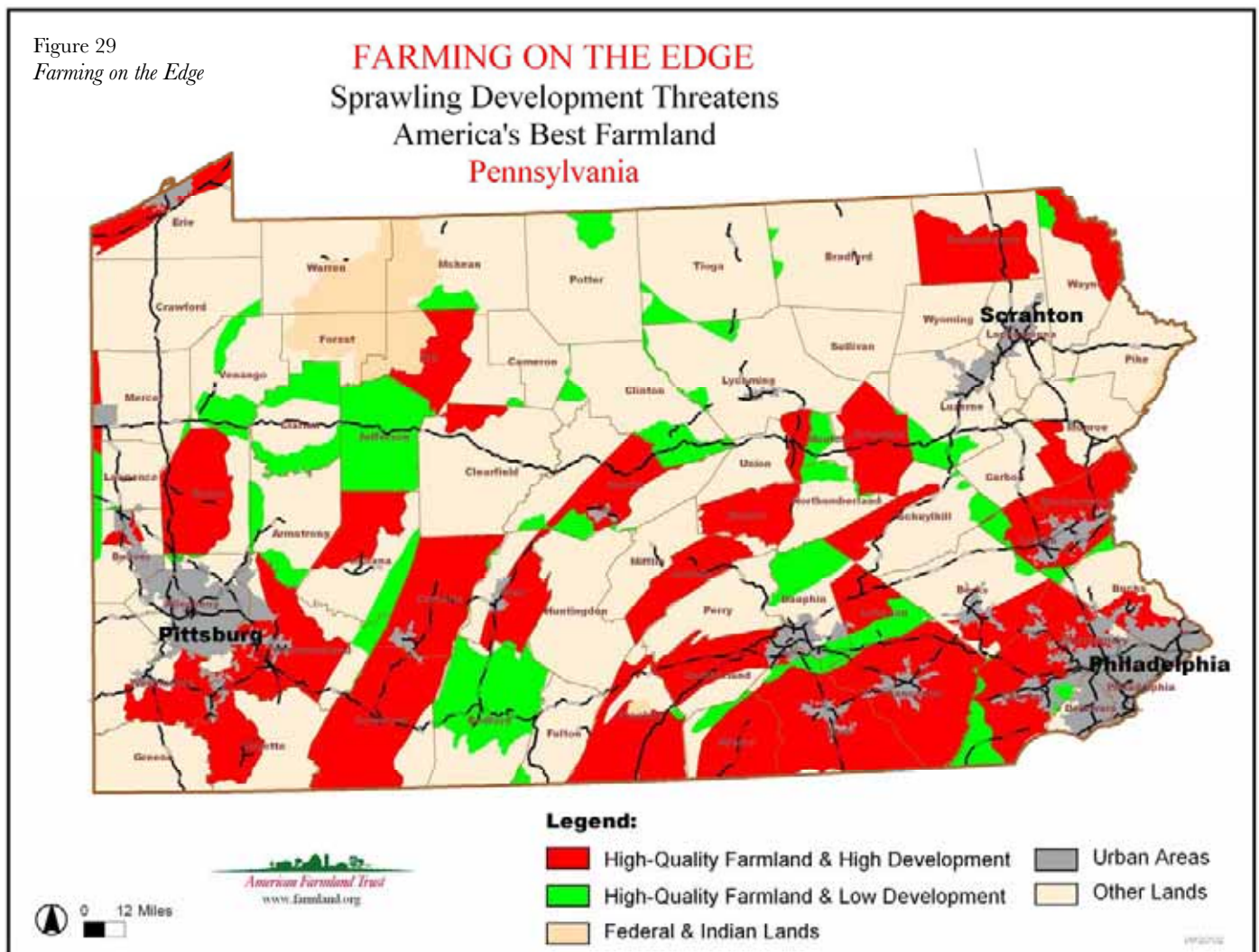
- **Environmental Quality**

Well-managed agricultural lands help control flooding, protect wetlands and watersheds, maintain air quality, and provide groundwater recharge and wild-life habitat.

As agricultural land becomes developed, water pollution and flooding increases. Paved roads and roofs pass stormwater directly into drains instead of naturally filtering it through the soil. Development is also a significant cause of wetlands loss.

Keeping land available for agriculture while improving farm management practices offers the greatest potential to pro-

Figure 29
Farming on the Edge



duce or regain environmental benefits while minimizing negative impacts.

- **Fiscal Stability**

Agriculture contributes to local economies directly through sales, job creation, support services and businesses, and also by supplying lucrative secondary markets such as food processing.

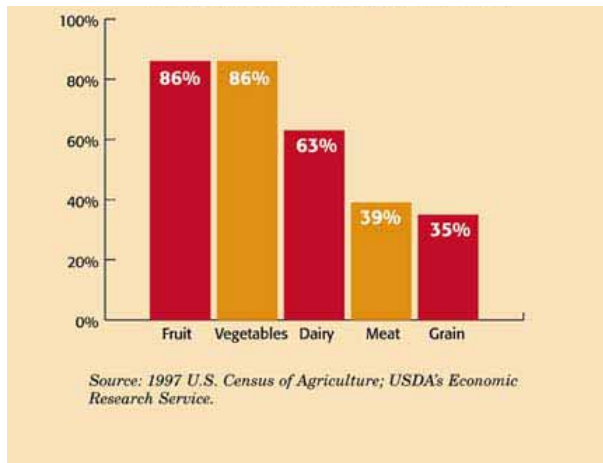
Development imposes direct costs to communities, as well as indirect costs associated with the loss of rural lands and open space. Privately owned and managed agricultural land generates more in local tax revenues than it costs in services.

- **Community Character**

Sometimes the most important qualities are the hardest to quantify—such as local heritage and sense of place. The managed spaces of agricultural land provide beautiful views and opportunities for fishing, horseback riding, and other recreational activities. Farms create an identifiable and unique community character and add to the quality of life.

In addition, the preservation of agricultural lands locally provides us with a safe, fresh, and high-quality food supply. Figure 30 shows us that 86 percent of U.S. fruits and vegetables, and 63 per-

Figure 30
Domestic Food in the Path of Development



cent of our dairy products, are produced in urban-influenced areas.

COUNTY AGRICULTURAL PRESERVATION COUNTY PROGRAM

The Montgomery County Farmland Preservation Program is a state program administered at the county level. Preserving farmland through this program is a two-step process. The first step is to join an Agricultural Security Area (ASA), and the second step is to submit an application for farmland preservation. Joining an ASA does not obligate the landowner to apply for preservation, but any farm applying for preservation must first be in an ASA.

An ASA is acreage formally designated by a municipality for the production of crops, livestock, and livestock products. There is no fee to join an ASA, and there is no financial, zoning, or other such penalty for inclusion in an ASA. Farms in ASAs are protected from new ordinances which would restrict normal farming operations or define farms as nuisances. In addition, an ASA farm receives another level of protection from taking by eminent domain, through additional approvals needed before condemnation. The process for forming ASAs begins with landowners. In addition to Upper Salford Township, ASAs have been established in Douglass, Franconia, Horsham, Limerick, Lower Frederick, Lower Salford, Marlborough, New Hanover, Perkiomen, Salford, Skippack, Towamencin Townships, Trappe Borough, Upper Frederick, Upper Gwynedd, Upper Hanover, Upper Pottsgrove, Upper Providence, West Norriton, and Worcester Townships. Upper Salford Township's ASA consists of 24 farms, totaling 1,031 acres. Land preserved through the Agricultural Conservation Easement Program must be located in an ASA containing at least 500 acres.

Next, a landowner can apply to sell his development rights (establish a conservation easement) to the County and/or State Agricultural Land Preservation Boards. Under a conservation easement, the owner maintains ownership of the property but permanently gives up the right to use it for anything other than farming. Once established, the easement restrictions apply to anyone purchasing or inheriting the land in the future.

Through the program landowners are compensated financially for giving up the right to develop their property.

AGRICULTURAL LAND ANALYSIS FOR COUNTY PRESERVATION

Similar to the analysis of vulnerable resources completed in Chapter 5, a number of resource elements will be analyzed in relationship to open and vacant land in order to identify the relative value of land for preservation under the Montgomery County Farmland Preservation Program. The following section summarizes the resources analyzed and the relative value of that resource element.

PROXIMITY TO ASA LAND

The fundamental requirement for participation in the Farmland Preservation Program is that the land be within an ASA. The proximity analysis will give the highest value to land that is designated as ASA land, with values decreasing as you move away from land designated as an ASA. While it gives precedence to land currently within an ASA, it does not preclude sites that are not currently within an ASA since owners of these properties could be encouraged to have the property added to the township's ASA if it is highly rated based upon the other criteria. The proximity analysis will also give greater value to lands close to other ASAs because concentrations of preserved agricultural land will hold greater importance and value than smaller isolated farms.

Proximity to ASA Lands received a relative value of 30 percent.

FARM ACREAGE

The County Program requires farms to be at least 50 acres in size, unless it is adjacent to preserved land. Land adjacent to preserved land only needs to be greater than 10 acres to be considered. In addition to preserving a larger acreage in a single acquisition, larger farms can take advantage of economies of scale and can provide more land management options than a smaller more constrained farm. While all properties, regardless of size, were included in the analysis, farm values were graded by size.

Farm acreage has been given a relative value of 30 percent.

PRIME AGRICULTURAL SOILS

Prime agricultural soils offer the best opportunities for the production of food. The County Farmland Preservation Program also gives a higher ranking to agricultural lands that have prime agricultural soils.

Prime Agricultural soils were given a relative value of 20 percent.

SOILS OF STATEWIDE IMPORTANCE

One step below prime agricultural soils, soils of statewide importance are still considered to be one of the best soils for agricultural production.

Soils of statewide importance were attributed a relative value of 10 percent.

PROXIMITY TO PRESERVED FARMLAND

Blocks of preserved farms have a greater opportunity to benefit from economies of scale, shared equipment, and common rental, and function generally as large areas of open space. In addition, farms less than the required 50 acres are eligible for preservation when located adjacent to a preserved farm.

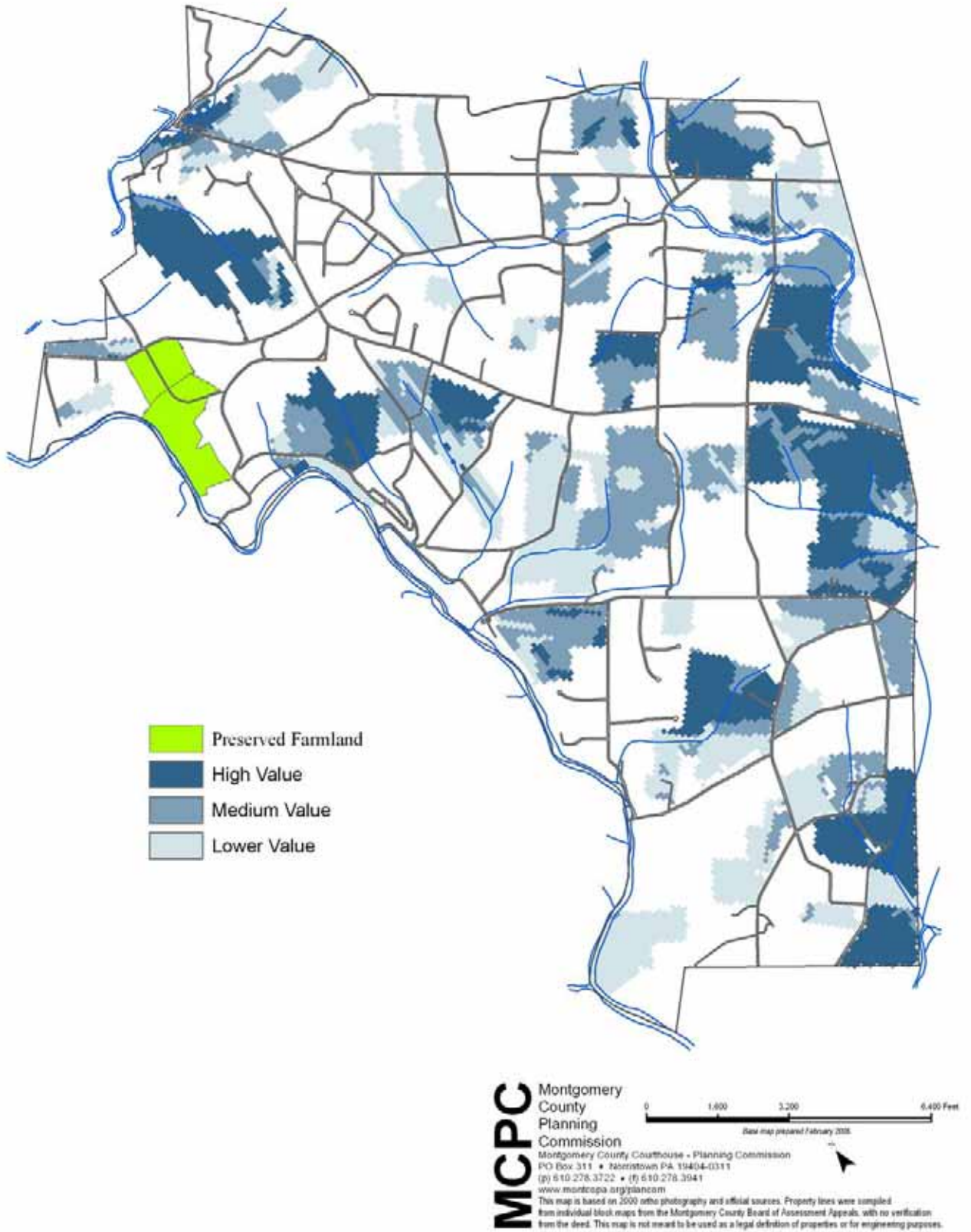
Proximity to preserved farmland has a relative value of 10 percent.

Figure 31 identifies the open and vacant land within Upper Salford and its relative value for preservation under the County's Farmland Preservation Program. While a single property can have multiple values (i.e low and high) it is the preponderance of value that should be considered when looking to encourage landowners to participate in the County Farmland Preservation Program.

TOWNSHIP AGRICULTURAL LAND PRESERVATION TOWNSHIP PROGRAM

Farmland preservation under the Montgomery County Farmland Preservation Program leverages state money and is therefore required to conform with specific procedures and easement requirements. A township preservation program, however, is not subject to the same requirements. Specifically, the township does not have to comply

Figure 31
Relative Value of Farmland for County Preservation



with a minimum acreage requirement, may allow public access as part of the preservation, and may protect less conventional farms, like those used for boarding horses. Township preserved farmland may also provide additional preservation benefits such as the protection of historic structures.

In addition to helping determine acquisition priorities, the following analysis can also be used for determining what properties should be encouraged to use the conservation subdivision process. Not only can the preserved open space within the conservation subdivision continue to be used for agricultural purposes, the conservation subdivision process can protect large blocks of agricultural lands by combining preserved lands from adjacent subdivisions.

AGRICULTURAL LAND ANALYSIS FOR TOWNSHIP PRESERVATION

This analysis is similar to the analysis for the preservation under the County program, but uses several different resource elements and different relative values.

PROXIMITY TO ACT 319 AND 515

Having the property located within or in proximity to ASA land is not necessary for township preservation. On the contrary, land within an ASA should be steered toward the county program when it meets the other eligibility requirements. However, land enrolled in Act 319 or 515 programs reflect the protection of some resource, typically farmland within Upper Salford Township, and the inclination of an owner to protect their property in some way.

Proximity to Act 319 and 515 lands was given a relative value of 20 percent.

FARMACREAGE

While farm size is not a strict requirement for preservation by the township, this element still reflects the value of protecting larger farms over smaller ones, with all else being equal.

Farm acreage has a relative value of 20 percent.

AGE OF PRIMARY STRUCTURE

Since the Township is not subject to the same rules as the County program, the township may wish to protect agricultural lands for multiple

benefits. One specific benefit of interest to Upper Salford Township is the protection of both historic structures and historic farmsteads. In order to establish a value for this element, only properties with structures older than 50 years were considered. The older the structure the more value the property was given. Structures younger than 50 years (constructed after 1955) were not given any value.

Age of Primary Structure was given a relative value of 20 percent.

PRIME AGRICULTURAL SOILS AND SOILS OF STATEWIDE IMPORTANCE

Although the township can be more flexible on the capability class of a property's soils, the township's desire to protect viable farms is still a goal. The viability of a farm for agricultural production is reflected by the amount of prime agricultural soils and soils of statewide importance located on a site.

Prime Agricultural soils were given a relative value of 20 percent.

Soils of Statewide Importance were given a relative value of 10 percent.

PROXIMITY TO PRESERVED FARMLAND

Once again, this does not have to be an element of the township's program, but the township should build on what has already been preserved. This recognizes the many benefits of clustering preserved agricultural lands.

Proximity to preserved farmland has a relative value of 10 percent.

Figure 32 identifies the open and vacant land within Upper Salford and its relative value for preservation by the township.

AGRICULTURAL PRESERVATION SUMMARY

Since the analysis for both county preservation and township preservation use open and vacant land as the properties to assess, the two maps

look similar except for the different relative values. This way the maps can be used individually, depending upon which method of preservation may ultimately be most appropriate for a specific property. However, in order to focus effort and resources, it may be beneficial to assign properties for either county or township preservation. Figure 33

gives precedence to properties that scored highest for preservation under the county program. Given the competition under the County Program it is unlikely that lower scoring properties would be competitive. All remaining properties reflect the relative value for preservation by the township.

Figure 32
Relative Value of Farmland for Township Preservation

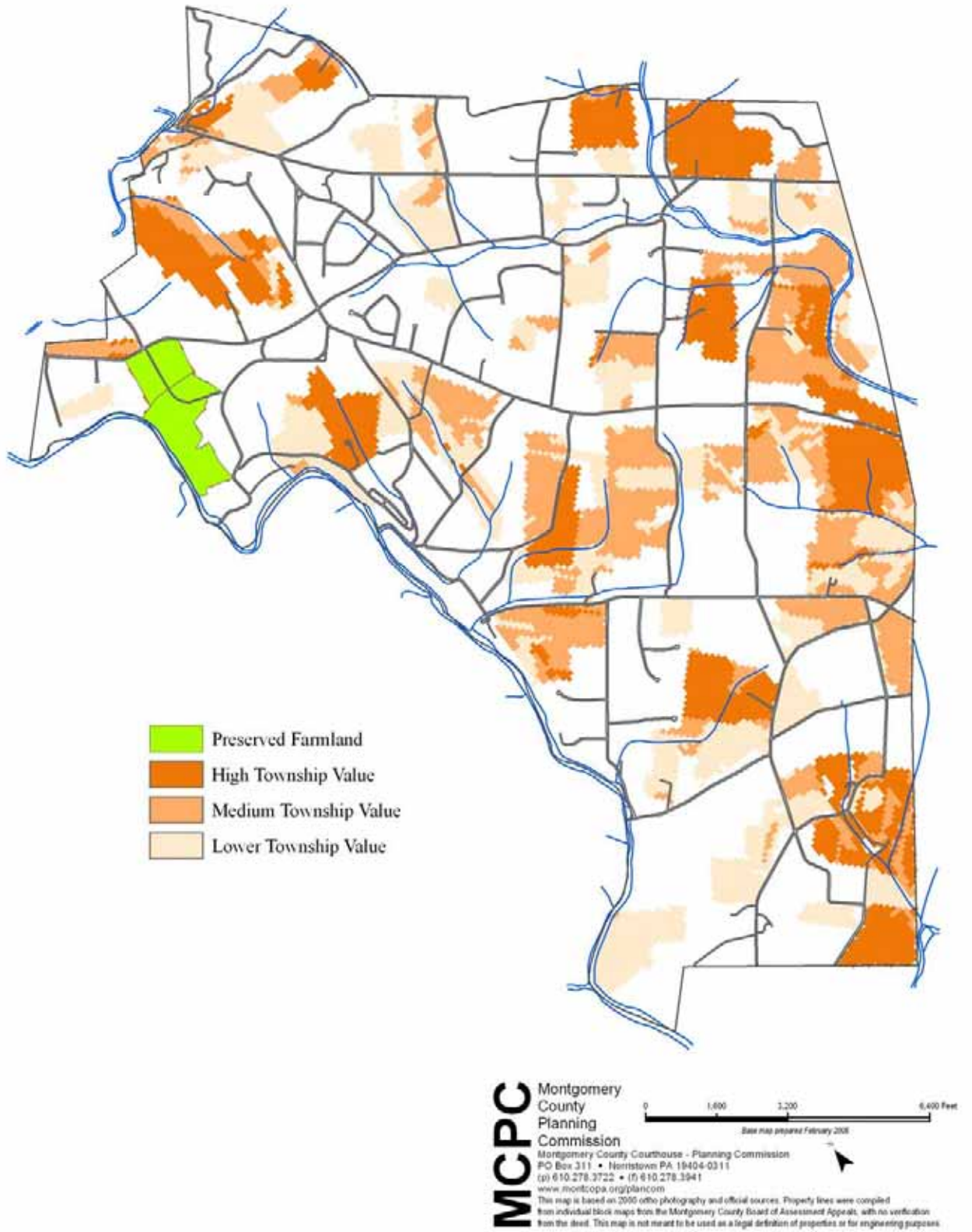
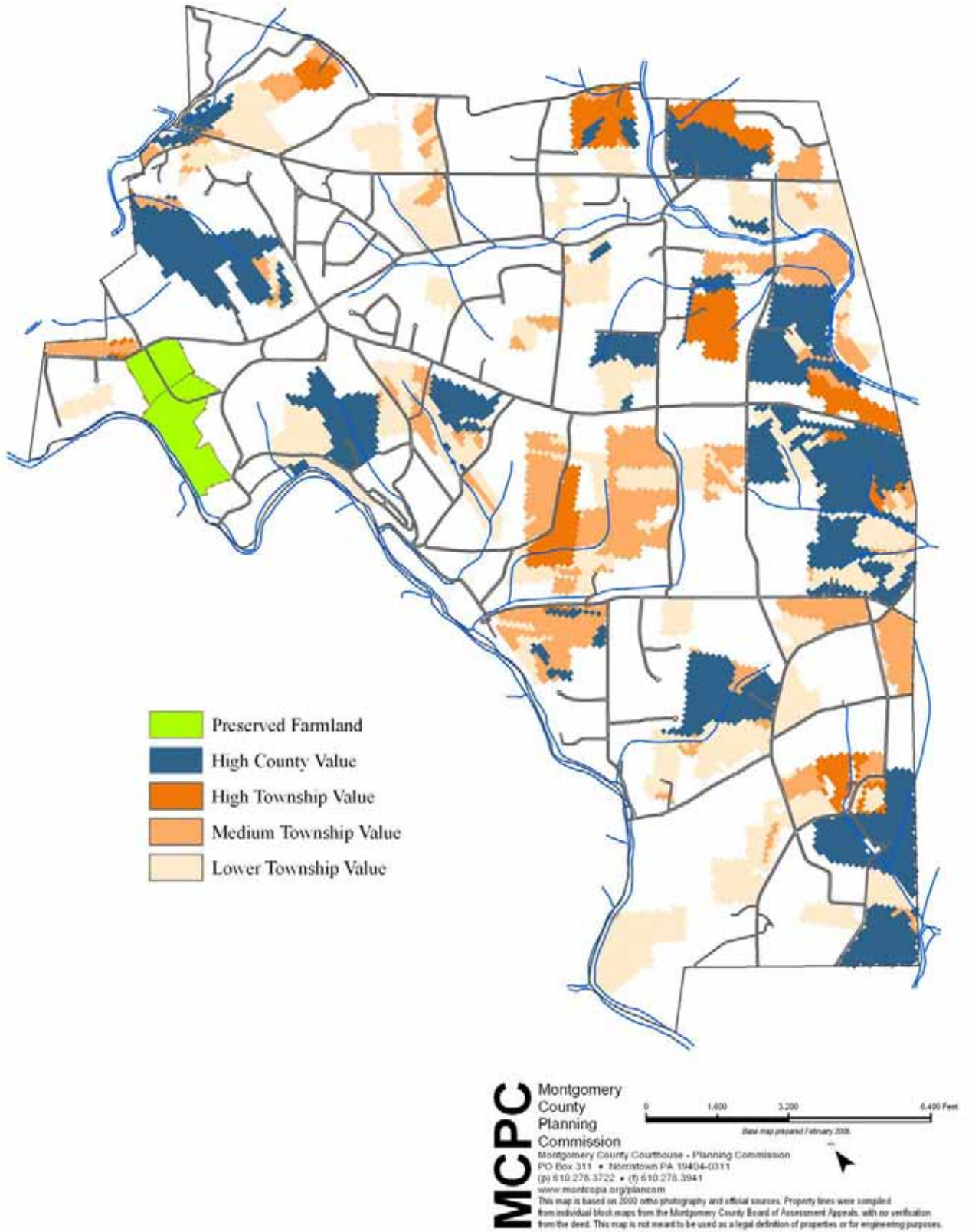


Figure 33
Relative Value of Farmland County and Township Overlay



CHAPTER 7

CREATING GREENWAYS AND PATHWAYS

A greenway is a linear open space established along a natural corridor, such as a stream valley or ridge-line, or a built feature, such as a railroad right-of-way or canal. Greenways connect parks, preserved areas, cultural resources, or historic sites with each other and to populated areas through a natural landscaped corridor. In this way, greenways provide the foundation for creating a system of connected open space. Connected open spaces have greater value than independent open space and provide increased opportunities for wildlife habitat, biodiversity, recreation, and transportation. The primary purpose for maintaining and creating greenways is to protect sensitive natural features, natural processes, and ecological integrity. However, since a greenway links places of public interest, it is also a logical location for pathway development.

PLANNING GOAL

Establish links or corridors between significant destinations

Provide greater and easier access to the township's parkland and recreational facilities

Develop safe and direct access from residential areas to destination points throughout the township and surrounding communities. These destination points may include schools, stores, and a variety of institutions

Provide a safe alternative means of transportation to places of employment

Identify areas presently in need of sidewalks, and criteria to be used to evaluate the need for sidewalks in the future

Work with neighboring municipalities, the county, and the state in creating an interlinked regional network of connections

BENEFITS OF GREENWAYS

While the fundamental objective of the greenway network is conservation oriented, greenways serve many other local and regional needs. Greenways: A Guide to Planning, Design, and Development, published in 1993, identified the following specific benefits of greenways:

- Greenways offer a way to preserve vital habitat corridors and to promote plant and animal species diversity. A greenway also can serve as a critical filtering zone. Its wetlands can absorb contamination in surface runoff. Trees, shrubs, and cover vegetation along the corridor cleanse and replenish the air.
- Greenways can help preserve the rural character of a community or safeguard areas of visual interest by protecting ridgelines, river corridors, and scenic resources. In rapidly urbanizing areas, a greenway offers visual relief. Its wooded breaks can frame and distinguish neighborhoods in an otherwise undifferentiated urban sprawl. In the countryside, greenways can work with programs that preserve farmland and expanses of scenic open space.
- Greenways are community amenities with an economic value. They enhance the quality of life and can increase the value of surrounding properties. Greenways have been shown to draw tourists and have been a catalyst behind new commercial development and the revitalization of former town centers. Greenways planned as elements of subdivisions can benefit homebuyers and developers alike.
- Greenways provide safe, alternative, non-motorized transportation routes for commuters going to work and children traveling to and from school. Greenways link us to our communities and, by lessening our dependence on the automobile, can improve air quality and reduce road congestion.

GREENWAY ANALYSIS GREENWAY ELEMENTS

The most significant greenway element in Upper Salford Township is the network of stream corridors. This will form the spine of the greenway system. However, a number of other environmental amenities are located within stream corridors, making these areas particularly valuable.

WOODLANDS

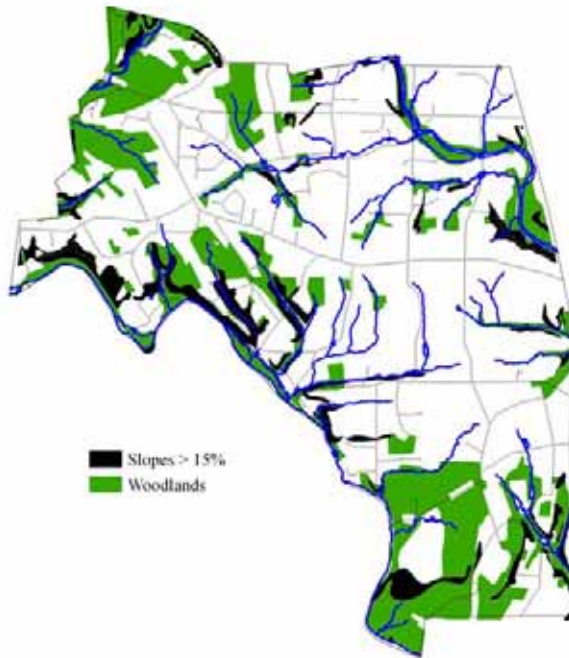
The most significant natural amenity within stream corridors is woodlands. A healthy riparian corridor will contain woodlands and a dense vegetative groundcover. Wooded riparian corridors have been scientifically shown to benefit water quality. The trees and vegetative cover will slow runoff flowing through the corridor, filtering out sediment and nutrients. In addition, the root system of the trees and ground vegetation increase the infiltration capacity of the soil, trapping and utilizing nutrients before reaching the stream. The large root systems of the trees along the streambanks act as an armor, more effectively holding the soil in place. The trees also drop leaves and twigs into the streams, providing food for aquatic organisms. The presence and variety of aquatic organisms increase the possibility of fish propagation and is a primary indicator of water quality. Tree canopy also shades and cools the stream, maintaining higher levels of oxygen for fish and other aquatic organisms.

Wooded riparian areas also provide food and shelter for land animals and serve as “wildlife highways” connecting large open space together. Maintaining a wooded riparian corridor also causes development to be setback from the streams, minimizing the threat and damage of flooding.

STEEP SLOPES

Steep slopes are the result of geology and hydrology, and therefore are closely aligned with stream corridors. Steep slopes are often easily eroded, as the depth of topsoil typically decreases as slopes increase. This means susceptibility to erosion and mass movement of soil may be greater than on nearby less-sloping areas. Maintaining a vegetative cover on steep

Figure 34
Woodlands and Steep Slopes



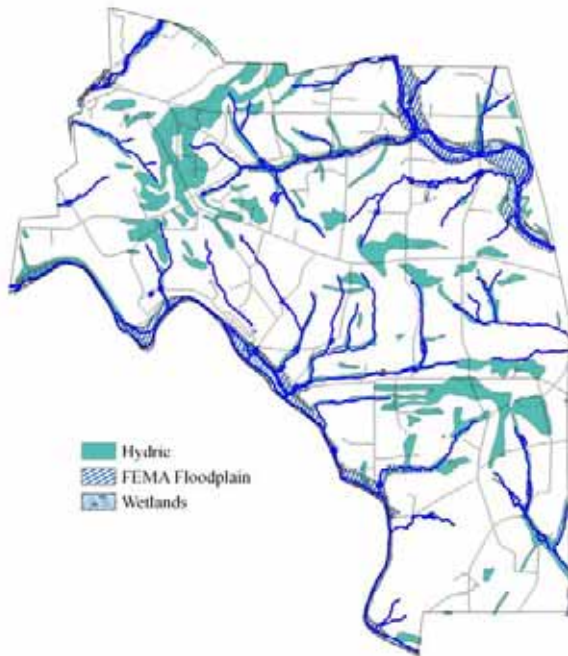
slopes is important to minimizing erosion. Erosion, and the resulting sedimentation of streams, reduces water quality and can contribute to downstream flooding by reducing the carrying-capacity of the streams. Steep slopes also support unique plants and wildlife that are part of the regions biodiversity.

Steep slopes and woodlands are visible features of greenways and provide specific environmental benefits. Figure 34 shows the location of woodlands and slopes in excess of fifteen percent throughout the township.

FEMA FLOODPLAINS

The Federal Emergency Management Agency (FEMA) maintains maps of designated floodplains. Floodplain protection is important since development of the floodplain reduces the carrying capacity of a stream, increasing the downstream height and destructive ability of floodwater, and prevents groundwater recharge. Development within the floodplain also poses a danger to property and human life. Therefore, preservation of stream corridors in a natural state is essential to flood protection efforts. Preserved floodplains can also offer opportunities for trails and other forms of recreation. Due to the rural nature of the township, there is limited development of the floodplain. Maintaining these areas through existing regulation should be an achievable goal.

Figure 35
Floodplains, Hydric Soils, and Wetlands



WETLANDS

The U.S. Fish and Wildlife Service is responsible for maintaining the National Wetland Inventory (NWI). The NWI as a reference tool provides quick and easy identification of wetland areas, including the habitat classification. Wetlands provide important benefits by filtering sediment, nutrients, and other pollutants from water. Wetlands also help with flood control by limiting development adjacent to steams and retaining large amounts of water during storms. They also provide significant natural habitat for numerous plants and animals, including many species that are threatened or endangered. Most of the wetlands with Upper Salford Township are found along the Perkiomen Creek, particularly around Camp Rainbow, and along the full length of the East Branch of the Perkiomen Creek. Many wetlands

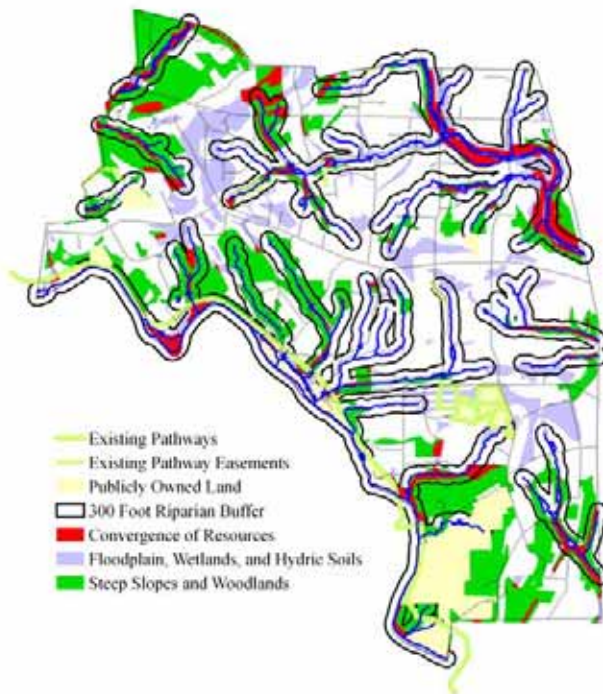
are scattered throughout the township and serve as farm ponds.

HYDRIC SOILS

Hydric soils are periodically wet soils, in an undrained condition, that often support the growth of wetland vegetation. Since only some hydric soils are found in undrained conditions, not all hydric soils exhibit wetland vegetation. Hydric soils that have been drained for agricultural use are one example of this. Soils with major hydric components are a conservative indicator of wetlands. Other soils have hydric components in limited settings, such as depressions, swales, and alluvial soils. Given the water purifying and habitat benefits of wetlands, the value of protecting these areas is well established.

Floodplains, wetlands, and hydric soils, while less visible, are also important environmental amenities worth of protection within greenways. Figure 35 shows the location of floodplains, wetlands, and hydric soils within Upper Salford Township.

Figure 36
Convergence of Resources within 300' Stream Buffer



POTENTIAL GREENWAY CORRIDORS

While the location of the environmental amenities previously discussed is spread throughout the township, those located in the proximity of streams are the most significant for greenway identification. Figure 36 shows the relationship of the natural features to all areas within 300 feet of a stream. In addition, Figure 36 depicts the convergence of woodlands and steep slopes with areas identified as floodplains, wetlands, and hydric soils. The areas of convergence indicate the highest priority greenways.

Given the numerous benefits of wooded riparian corridors, trees and woodlands are the most important feature of a greenway. In Upper Salford, there is also close alignment between woodlands and steep slopes. Therefore, these areas will be defined as vegetated potential greenways. However, the location of floodplains, wetlands, and hydric soils outside of wooded and steep areas still offer significant opportunities for greenways. These areas will be defined as non-vegetated potential greenways. Figure 37 shows the location of these potential greenways, as well as the convergence of resources inside and out of the 300 foot (riparian) buffer area.

These maps not only help to identify significant areas for environmental protection and preservation, but also will direct us in the identification of potential greenway paths.

EXISTING AND FUTURE DESTINATION POINTS

One of the more significant goals of the Community Connections Plan is to “provide safe and direct access from residential areas to destination points throughout the township.” In order to best determine how access can be provided in the most direct and safe way, it is necessary to identify all existing and future destination points.

Figure 38 shows a wide range of destination points within the township. These destination points were previously identified within Chapter 3 in the analysis of existing protected land. While it will be difficult to establish connections to each of the destination points through one particular type of connection, it will be possible to link up many of them through a combination of methods. This is especially true for those destinations most likely to be accessed by pedestrians and bicyclists.

Figure 37
Potential Greenways

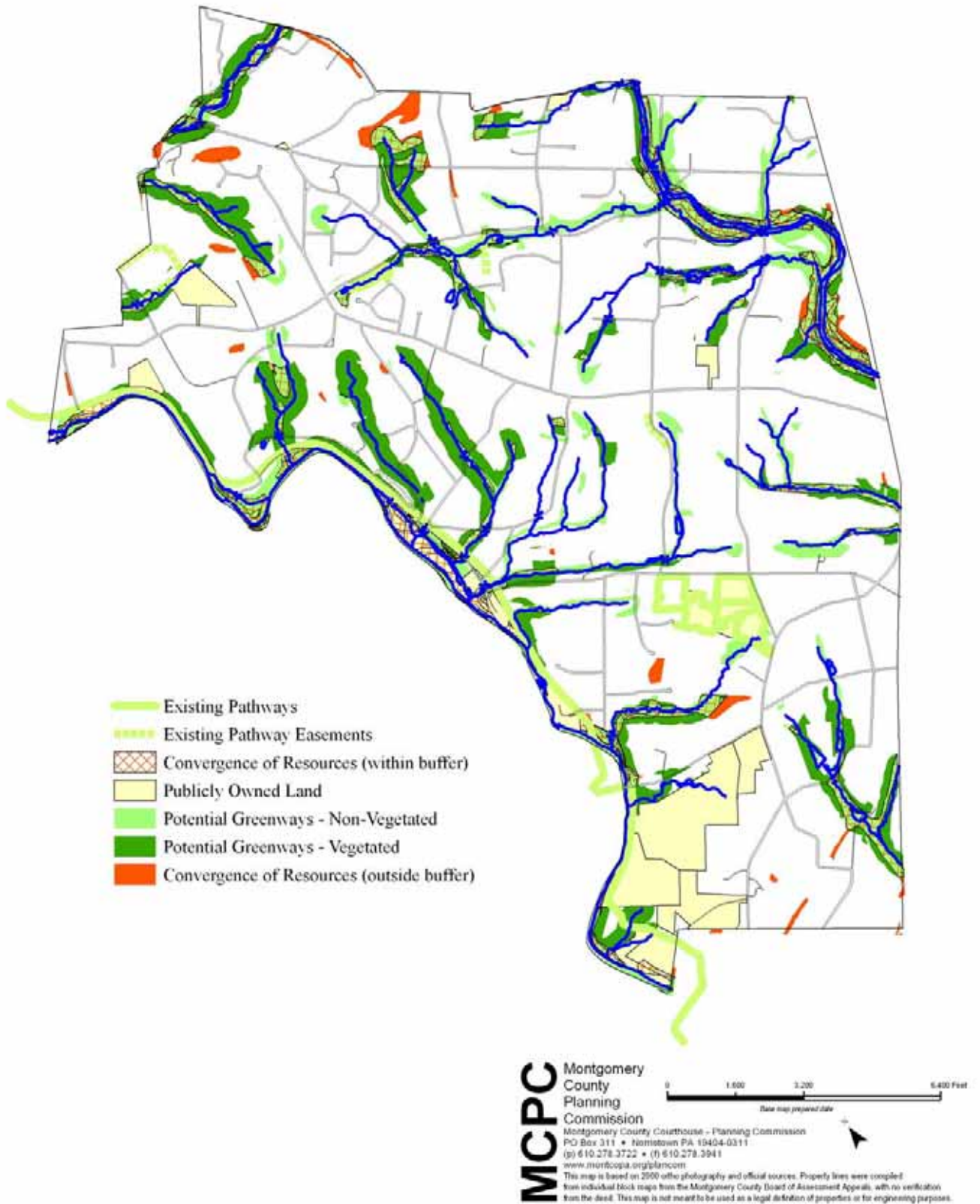
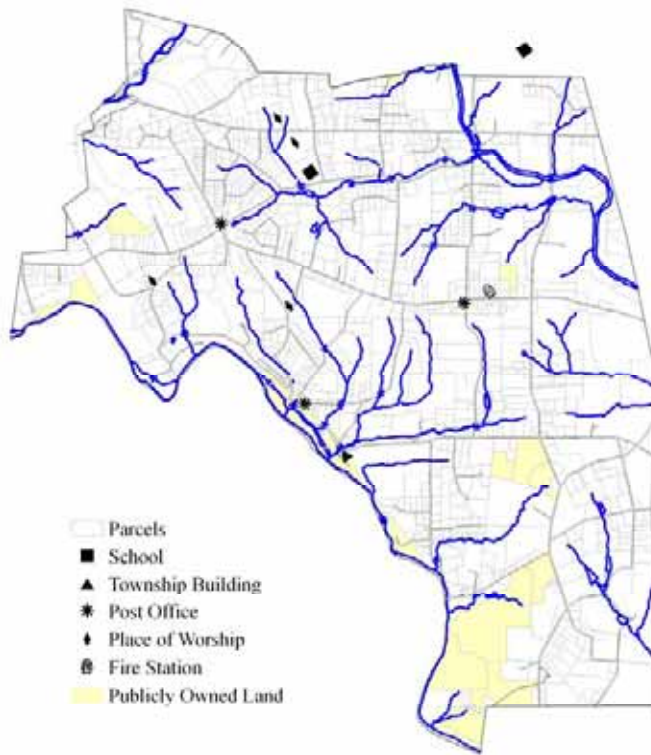


Figure 38
Existing and Future Destination Points



The destinations shown in Figure 38 are divided into the following broad categories:

PARKS AND RECRETION

Several of the township’s parks (Upper Salford Township Park, William Rahmer Memorial Park, Orchard park, and Vaughn Run) are improved to include on-site trails and/or are linked to a larger trail system. There are, however, several other township lands that may serve as future destination points. First there is the 36-acre Spring Mountain House Site that is co-owned with Schwenksville Borough and used for passive recreation. The township also owns a 5-acre property on the corner of Moyer and Thompson Roads that is used for passive recreation and contains a pavilion. Finally, there is an 8-acre property (Farringer) that is envisioned as a future park site.

INSTITUTIONAL

Salford Hills Elementary School, located at the corner of Barndt Road and Old Sumneytown Pike, is the only public school destination within the township. There are, however, three Post Offices within

the township that serve as destination points. A single post office serves each of the Villages of Salford, Woxall, and Salfordville. Both the Woxall and Salfordville Post Offices are located along Old Skippack Road and do not have any direct trail connections. The Post Office within the Village of Salford is located on Salford Street and is directly adjacent to the Perkiomen Trail.

The Upper Salford Township building is located on Salford Station Road, south of Harmon Road, and is adjacent to William Rahmer Memorial Park and the Perkiomen Trail. The township also has a volunteer fire company, located on Old Skippack Road in Salfordville.

Three churches operate in Upper Salford Township. The first, and oldest, is the Old Goshenhoppen Church. Located on Church Road outside the Village of Woxall, the Old Goshenhoppen Church was constructed in 1858 and has been a church and meetinghouse site since 1744. The two remaining churches are The Tabor Church and Church of the Holy Spirit which are found on Hendricks Station Road and Barndt Road, respectively.

As discussed previously, Montgomery County also owns several properties within the township. The 18-acre Camp Rainbow is located between the Perkiomen Creek and Clemmer’s Mill Road and has direct access to the Perkiomen Trail. The county also owns 90 acres on Spring Mountain that is used for resource protection and passive recreation. Finally, the 40-acre Kratz Road/Hendricks Station Road property is found along the Perkiomen Creek south of Kratz Road and west of Hendricks Station Road.

The County also manages the Perkiomen Trail which travels approximately 3.3 miles through Upper Salford Township. A true “rails-to-trails” trail, the Perkiomen Trail uses an old Reading Railroad corridor and was used informally for many years. The fact that the trail is within an old railroad right-of-way means that it has a minimal grade, making it accessible to families and the elderly. The trail right-of-way is primarily owned by Montgomery County and extends north to Green Lane Park in Upper Frederick Township and south to Oaks in Lower Providence Township where it connects to the Schuylkill River Trail.

COMMUNITY CONNECTIONS NETWORK

Currently, Upper Salford Township has an extensive path system within its Township Park. The township has also worked to secure pathway easements as part of the development process, and a limited sidewalk network exists in the vicinity of Salford Hills Elementary School along Barndt Road and Old Sumneytown Pike. Finally, a County trail travels the full length of the township along the Perkiomen Creek within an old Reading Railroad corridor. After identifying potential and existing destination points within the township, potential greenways, and considering the pathway recommendations of adjacent municipalities, the township proposes to expand and enhance the existing pathways. The proposed Community Connections Network is shown on Figure 39. The type of connections comprising the network, and specific locations of the path system, are discussed in further detail below. The complementary role of sidewalks and internal subdivision pathways are also highlighted.

TYPES OF COMMUNITY CONNECTIONS

The development of the pathway system will extensively involve the use of identified greenways. However, to establish the foundation for a township-wide pathway system several types of pathways will need to be utilized. Together the different pathway types will serve as the spine of a completely interconnected system of pathways, providing a significant amenity to existing and future residents of Upper Salford Township.

VILLAGE PATHWAY

To provide safe and direct access to destinations within the Village setting and provide key links between Greenway Paths.

Presently, no formal pedestrian connections exist within villages of Salford, Woxall, and Salfordville. The smaller lot sizes and residential density within each village provides the opportunity for pedestrian movement between residences. In addition, each village is served by a United States Post Office, which serves as the primary mail service for residents. Pedestrian activity within the villages cur-

rently requires the utilization of streets, and street shoulders, where they exist. The front yard areas of existing residential lots may also be used informally. Pedestrian use of the roadway can be particularly dangerous within the villages of Woxall and Salfordville given the higher volume of traffic associated with Old Skippack Pike and Perkiomenville Road.

Development of a typical village pathway system does not require the construction of sidewalks, or walkways on both sides of the street. The Village Pathway will be located on one side of the street only and will range in size between 2 and 4 feet wide as conditions permit. The surface of the pathway will be primarily compacted crushed stone, or asphalt in areas where erosion may be a concern.

Given the developed nature of the villages, implementation of the Village Pathway system will be the primary responsibility of the township. There are, however, several developable properties within the extent of the proposed village pathway system where the path can be constructed through the development process. Funding for the development of the village pathway system is available through several grant programs, including greenway funding offered by the Pennsylvania Department of Conservation and Natural Resources (DCNR) and transportation funding administered through the Delaware Valley Regional Planning Commission. Since the Village Pathway system serves as the foundation or heart of the Community Connections Plan, the township will be able to develop a very competitive grant application.

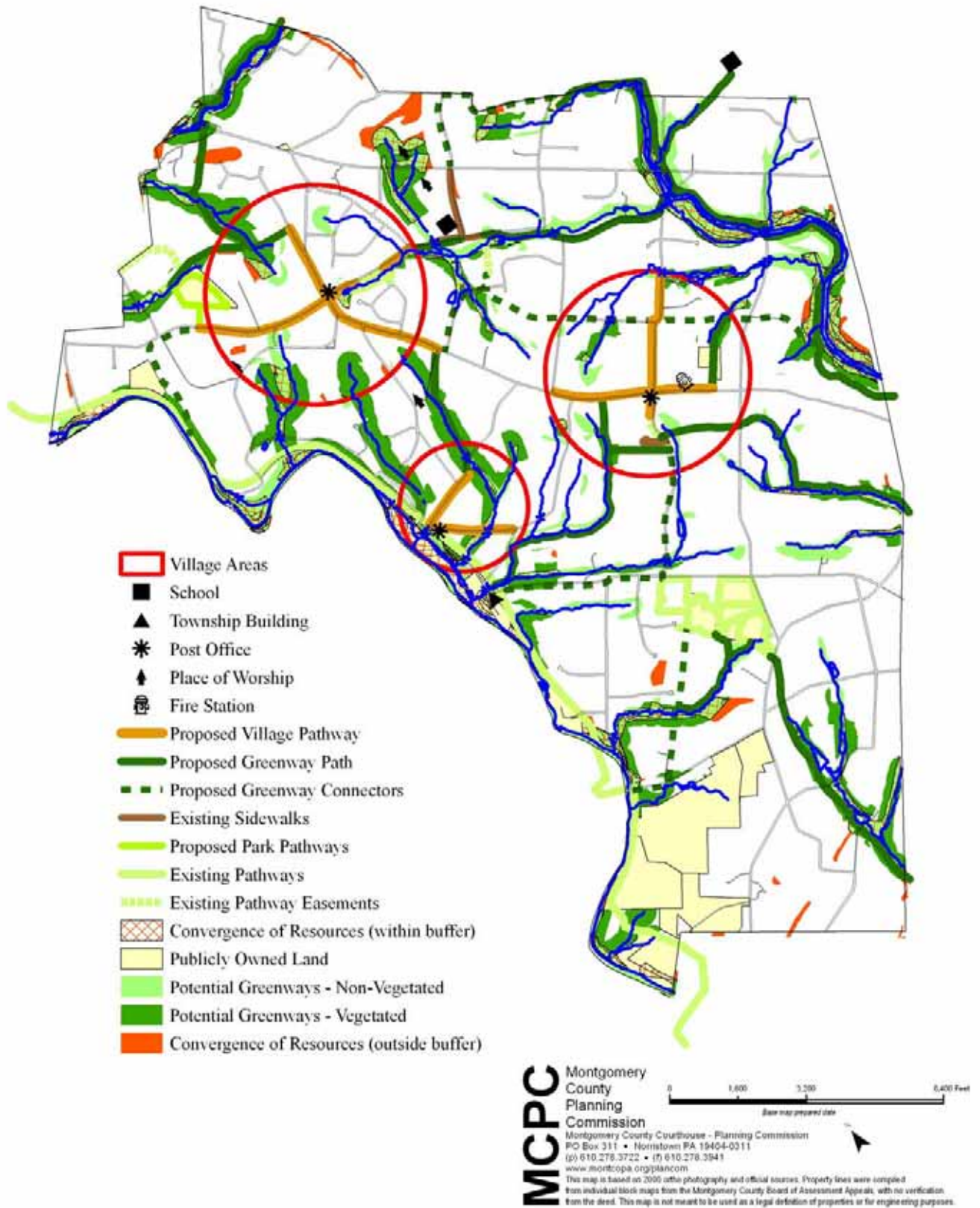
GREENWAY CONNECTORS

To provide greater and easier access to the township's parkland and recreational facilities, meet the recreational needs township residents, and contribute to creating and interlinked regional network of connections.

None of the proposed Greenway Connectors are currently in place. The Greenway Connectors generally cross ridgelines between greenways and form important connections between the proposed Village Pathways and Greenway Paths.

The Greenway Connectors will vary between 4 and 6 feet wide and will consist of compacted crushed stone. The Greenway Connectors will cross ridgelines and involve steeper slopes. In areas of steep

Figure 39
Proposed Community Connections Network



slopes, Greenway Connectors will need to be designed to ease the impact of slopes and minimize erosion.

Greenway Connectors will be established primarily through the land development process. The route of proposed Greenway Connectors was identified in consideration of undeveloped and underdeveloped properties.

GREENWAY PATH

To provide greater and easier access to the township's parkland and recreational facilities, meet the recreational needs township residents, and contribute to creating and interlinked regional network of connections.

The county-owned Perkiomen Trail provides a pathway through the township's most significant greenway. The Perkiomen Trail provides links to points south, including Valley Forge National Historic Park, and north, such as Green Lane Park. Providing several links to this trail in various parts of the township will be a key component of the Community Connections Plan. A second Greenway path has been secured as part of the Stone Hill Subdivision along a tributary of the Unami Creek.

The Greenway Path will vary between 4 and 6 feet wide and will consist of compacted crushed stone. Since the Greenway Paths are closely linked to riparian corridor areas, it will be necessary to set the path back at least 25-feet from the creek, minimize disturbance of existing vegetation, and limit erosion potential.

Development of the Greenway Path will take place primarily through the land development process. Many of the proposed Greenway paths cross undeveloped and underdeveloped properties that may be proposed for development over the next twenty years. While the exact location of the greenway paths will be dependant on site-specific conditions, such as steep slopes and wetlands, and the subdivision layout, construction of the path should occur in conjunction with development. Even if the greenway path will not immediately connect to another path, it easier to implement a path system prior to the establishment of residences rather than after the fact.

PROPOSED COMMUNITY CONNECTIONS BY SUB-AREA

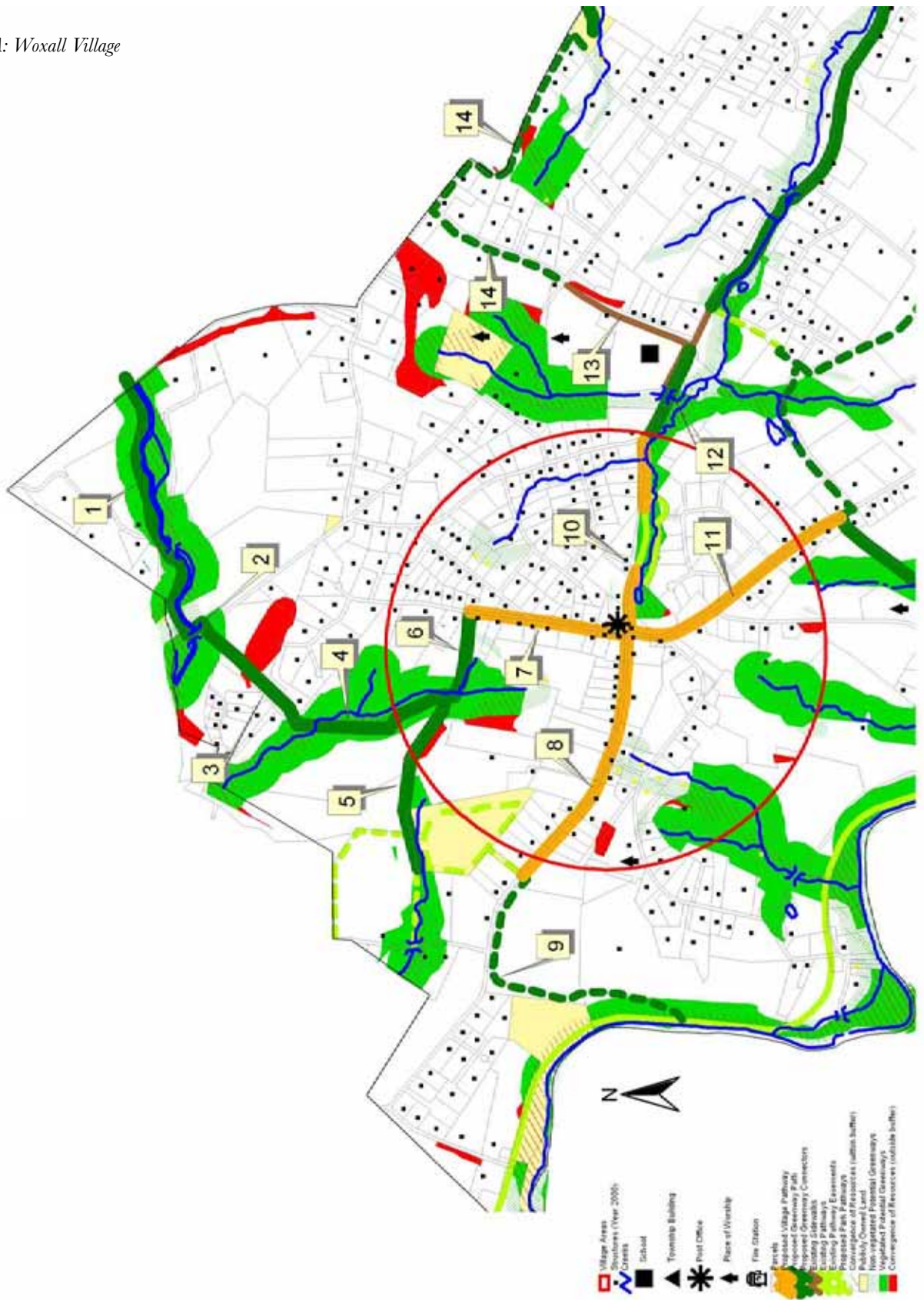
The township has been split into four sub-areas so that specific issues regarding the proposed community connections can be highlighted.

SUB-AREA A: WOXALL VILLAGE

This sub-area covers the area around Woxall Village, generally along Perkiomenville Road and northward toward the township border with Marlborough and Salford Townships. Specific design and locational issues are discussed below and identified on Figure 40.

1. A proposed Greenway Path will begin at the township border with Salford Township and travel along the north side of the Ridge Valley Creek greenway. Portions of this greenway involve steep slopes that will have to be factored into the pathway design. This part of the township is currently Zoned "RA-5" and involves large residential lots. However, the Natural Lands Trust owns a 17+ acre tract in the middle of this segment. Securing the path would involve working with individual landowners. Salford Township, while recommending a connection along the Ridge Valley Creek, does not currently have a trail in this area.
2. The bridge across Sumneytown Pike (Rt. 63) over the Ridge Valley and Unami Creeks will be a key crossing to bring the Ridge Valley Greenway Path from the north side of the Creek south into the township. This crossing will also be important for connecting into Marlborough Township in order to reach points further north (i.e. Marlborough Township Park, and Boy Scout Camps). Working with PennDOT to incorporate a pedestrian crossing as part of any redesign, or constructing a parallel pedestrian bridge will be required to facilitate the crossing.
3. Linking the Greenway Path between Sumneytown Pike and the Unami Creek Tributary will involve crossing two properties, one is very large (32 acres) and the other is 3+ acres. Working with the individual landowners to secure easements may be required. However, the larger has development potential, at which time the path could be incorporated into the subdivision design.

Figure 40
Sub-Area A: Woxall Village



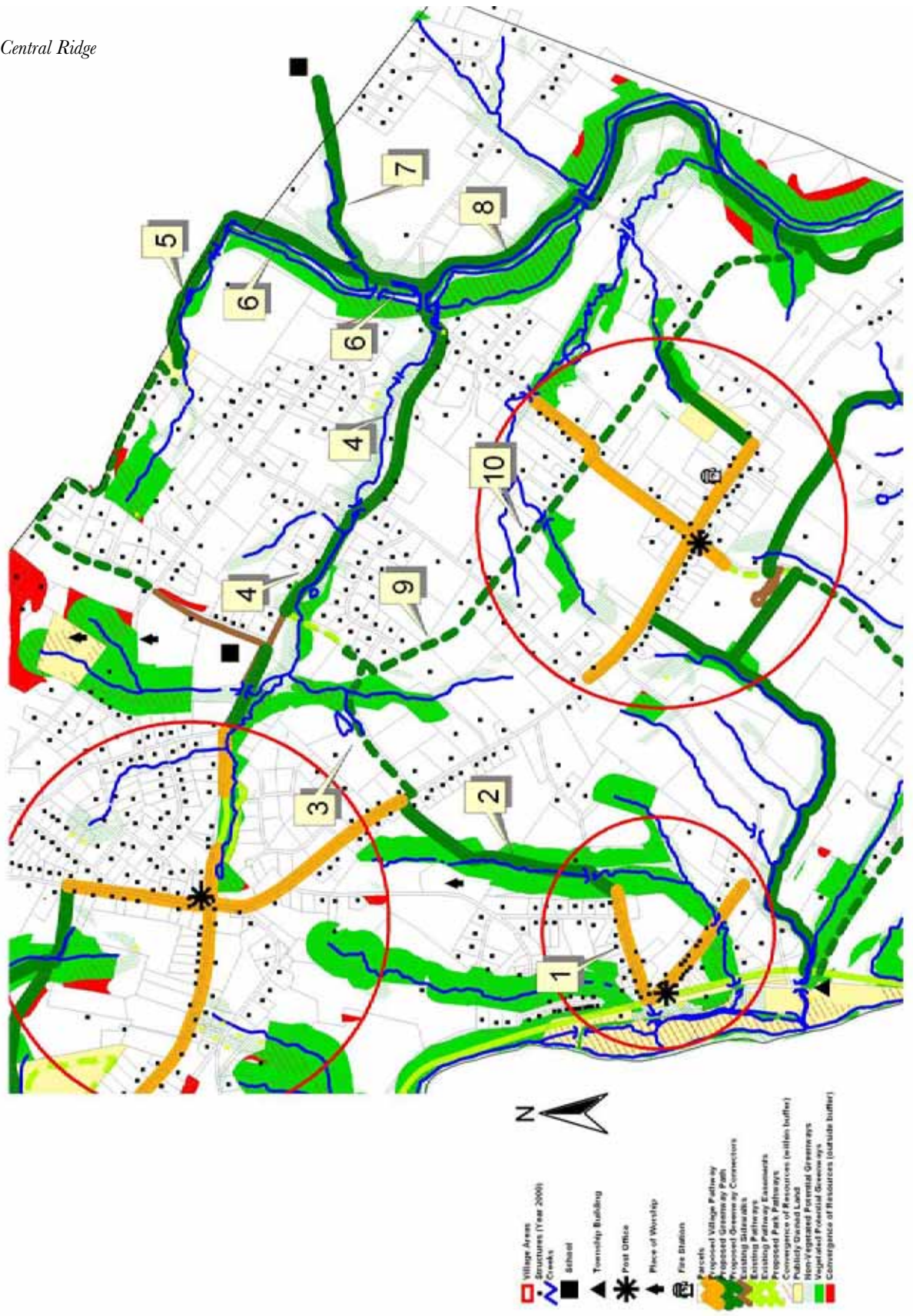
4. This segment of the Greenway Path travels along the Unami Creek Tributary. Steep slopes are not an issue in this section and only two large developable parcels, currently under common ownership, are involved.
5. Linking the Greenway Path along the Unami Creek Tributary to Orchard Park and the Stone Hill Subdivision will directly serve the goals of the plan by creating an interconnected network of pathways and increasing accessibility to township parks and open space.
6. From the Unami Creek Tributary, the Greenway Path will link to the Woxall Village Pathway along Burton Road. This segment involves one of the large developable parcels containing the Unami Creek Tributary. Providing suitable buffers for the Greenway Path as it enters the village area will be important to maintaining the privacy of existing residential uses.
7. The Village Pathway for Woxall will begin on the west side Burton Road and extend down Old Skippack Road to Perkiomenville Road across from the U.S. Post Office at that intersection. As discussed previously, Village Pathways will be smaller than Greenway Paths, having a width of 2 to 4 feet. This pathway will provide increased pedestrian safety within the village. Design of the Village Pathway will be property specific, depending upon the setbacks of existing structures and lot landscaping. Use of the road right-of-way should be sufficient for pathway development.
8. Extending from the intersection of Old Skippack Road and Perkiomenville Road, the Village Pathway will continue west along the north side of Perkiomenville Road to the township's Orchard Park. This segment will provide the dual purpose of increasing pedestrian safety in the village area while providing access to the township park. A loop, beginning and ending at Orchard Park, will also be established by connecting pathway segments 5, 6, 7, and 8.
9. A Greenway Connector will provide a route between Orchard Park and the Woxall Village pathway system to the Perkiomen Trail. This is a significant connection since it is one of only four proposed connections to the Perkiomen Trail. Being the northerly most connection to the Perkiomen Trail it will be key to providing access to the Woxall Village Area. The Greenway Connector will involve securing an access easement across a permanently preserved farm. While some steep slopes are found above the Perkiomen Trail, there does appear to be opportunities for a meandering path or step system.
10. The Village Pathway will extend from Woxall Village east on Perkiomenville Road to the intersection with Old Sumneytown Pike. The majority of this connection exists as part of a pathway within the township owned land along Vaughn Run. Several large residential lots make up the balance of the connection.
11. The Village Pathway also extends south along Old Skippack Road along the east side of the road. The pathway will end near Overlook Lane, providing a connection east toward Salford Ridge development, and west down a Greenway Path into the Village of Salford. Much of this connection can be located along the frontage of Old Skippack Farm.
12. A Greenway Path will extend along Vaughn Run (south side of Old Sumneytown Pike) from the Woxall Village Pathway to an existing sidewalk across from Barndt Road. This will also facilitate a connection to Salford Hills Elementary School and points northeast of the school toward Sumneytown Pike and beyond. Further down Old Sumneytown Pike the sidewalk connects to a continuation of the Vaughn Run Greenway as well as a pathway easement connecting to Salford Ridge subdivision.
13. An existing sidewalk travels along the full length of Barndt Road in front of Salford Hills Elementary School and Church of the Holy Spirit.
14. A Greenway connector will extend along the north side of Barndt Road, east of Sumneytown Pike to the Upper Salford / Salford Township border. The connector will then extend south on Moyer Road to township open space at Thompson Road. Much of the Barndt Road segment involves one large property with ample setback and right-of-way to develop a pathway.

SUB-AREA B: CENTRAL RIDGE

This sub-area extends east to west and encompasses the area between the village of Salford and the Vernfield area. Specific design and locational issues are discussed below and identified on Figure 41.

1. This Village Pathway in Salford Village will be a key connection, linking the Perkiomen Trail to Woxall Village and points east such as Salford Hills Elementary School and residential developments like Salford Ridge. The Village Pathway will begin at the Perkiomen Trail, near the intersection of Quarry Road and Salford Street, and extend eastward along Quarry Road to a Greenway path along a tributary to the Perkiomen Creek. To avoid a pathway road crossing the Village Pathway should ideally be constructed on the north side of Quarry Road. However, the south side of the road has less development and may pose fewer design difficulties. Further design feasibility will need to be conducted.
2. A Greenway Path will extend from Quarry Road along a Perkiomen Creek tributary to Old Skippack Road, connecting to the Woxall Village Path and a Greenway Connector. This path involves three large property owners and utilizes an existing right-of-way from Old Skippack Road. While the majority of this path can be secured via the land development process, a small segment, including the right-of-way from Old Skippack Road, is owned by the Old Goshenhoppen Church. A portion of this corridor involves steep slopes and the exact location of the path will need to be determined in consideration of a detailed site analysis and future subdivision layout.
3. This Greenway Connector will utilize an emergency access road leading to the Salford Ridge subdivision, providing a direct connection to the development and to an existing pathway easement. The existing pathway easement joins to an existing sidewalk along Old Sumneytown Pike and will provide a link to Salford Hills Elementary School and the Vaughn Run Greenway.
4. This segment of the Vaughn Run Greenway, which originates near the village of Woxall, begins at the end of an existing sidewalk and will travel downstream to the confluence with the East Branch Perkiomen Creek. The Vaughn Run crosses Old Sumneytown Pike several times between the existing sidewalk network and the East Branch Perkiomen Creek, making a continuous pathway difficult. Therefore, a dual goal in this area may be to develop the Greenway Path along the south side of Old Sumneytown Pike by continuing the existing sidewalk, and work with landowners on the north side of Old Sumneytown to restore and enhance the stream corridor for water quality and habitat protection.
5. A Greenway Path will extend along Moyer Road, between township open space at Thompson Road and the East Branch Perkiomen Creek. This path will parallel Moyer Road and can easily be located between the road and a farm pond and an East Branch Creek tributary. This greenway path involves only one large property and will be an important connector between neighborhoods north of Sumneytown Pike and the East Branch Greenway.
6. The first segment of the East Branch Greenway Path extends between Moyer Road and Sumneytown Pike. The entire segment is located on a single property, covering both sides of the creek. In order to make a more direct crossing at Sumneytown Pike, it may be beneficial for the Greenway Path described previously to cross the East Branch Perkiomen Creek on Moyer Road and follow the creek along its eastern side. A portion of this land is physically within Franconia Township, but it is still under single ownership with the land in Upper Salford Township. Locating the path on the eastern side of the creek will enable the path to cross Sumneytown Pike at Long Mill Road. The path can then extend along Long Mill Road, south of Sumneytown Pike, until it intersects again with the East Branch Creek at Old Sumneytown Pike.
7. A short Greenway Path along a tributary to the East Branch Perkiomen Creek will connect the East Branch Greenway with the new Vernfield Elementary School in Franconia Township. This path crosses only one large property within Upper Salford Township and intersects with the East Branch Greenway on the west side of Long Mill Road.

Figure 41
Sub-Area B: Central Ridge



8. The second major segment of the East Branch Greenway is located between Old Sumneytown Pike and Shelly Road. The Greenway Path will travel along the east side of the Creek and passes through only two properties. While land along the creek remains available for development of a pathway, both properties are zoned for non-residential development. Actively working with the landowners, rather than waiting for a subdivision or land development proposal, may provide more timely development of the pathway.
9. The Greenway Connector will link the northern portion of the township, including the Village of Woxall, to the Village of Salfordville and points south. This segment of the connector travels between the existing pathway easement at the top of Salford Ridge and Potato Road. The connector will cross one 11-acre property near the rear property line and a 21-acre preferentially assessed (Act 319) parcel before connecting to Potato Road across from Woessner Road. For the purposes of linking the Villages of Woxall and Salfordville, an alternate option to this Greenway Connector would be to connect the Village Pathways between Woxall and Salfordville along Old Skippack Pike. However, there would still be benefits to securing the Greenway Connector should either property be proposed for subdivision and land development.
10. The second segment of the Greenway Connector previously discussed (#10, above), would link Potato Road and Bergey Road, effectively extending Woessner Road to Potato Road for pathway purposes. A right-of-way allowing the extension of Woessner Road currently exists and could be used for development of the Greenway Connector.

SUB-AREA C: SALFORDVILLE VILLAGE

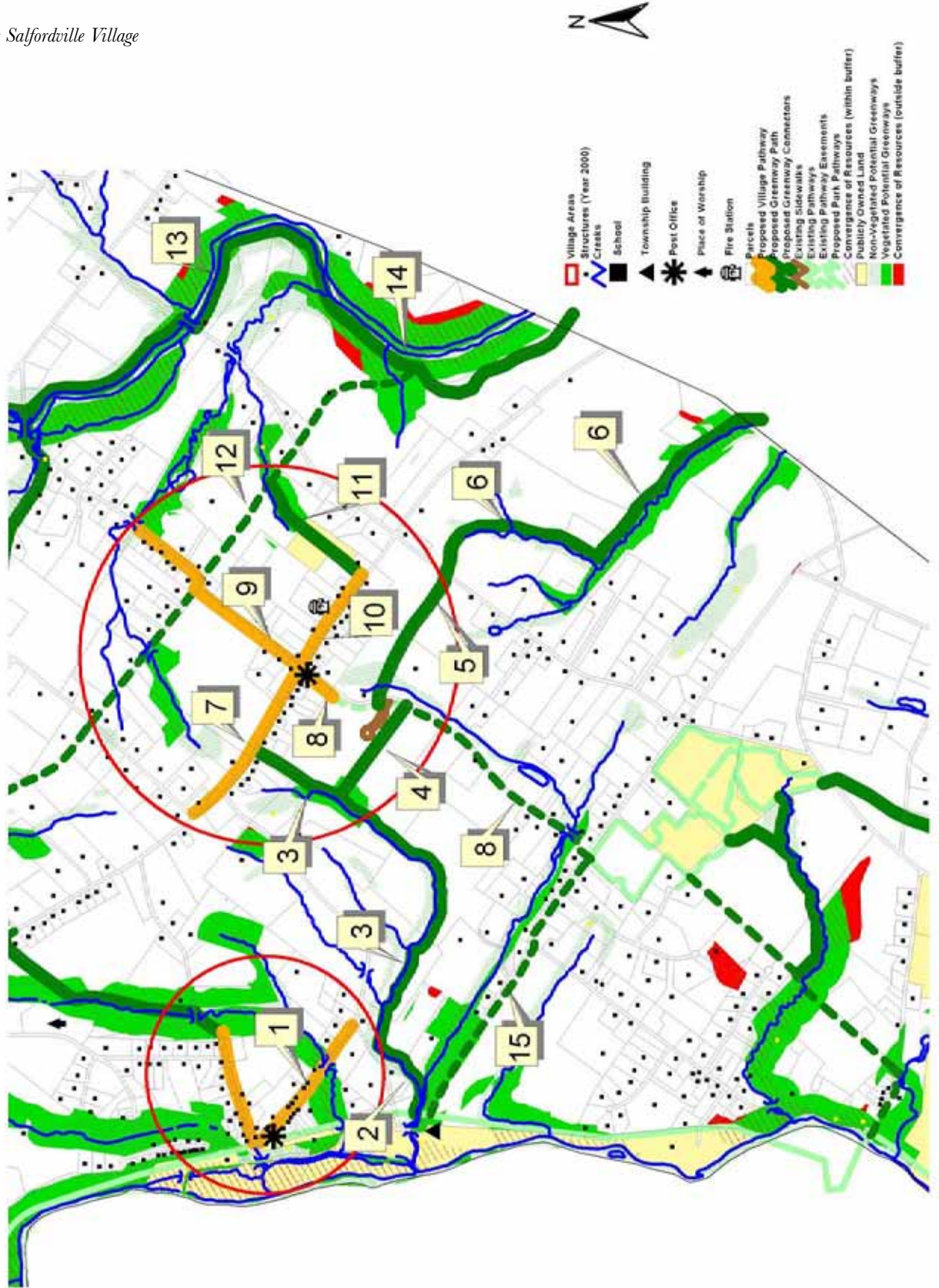
This sub-area highlights the Village of Salfordville and extends westward to the Village of Salford and east to the east Branch Perkiomen Creek. Specific design and locational issues are discussed below and identified on Figure 42.

1. The second Village Pathway segment with the Village of Salford begins at the Post Office and Perkiomen Trail and extends along Salford

Street to Harmon Road. This pathway will not only enhance pedestrian access to the Post Office within the Village, it will link to a Greenway Path connecting to the Village of Salfordville. Given the location of the Post Office and development patterns within Woxall Village, the location of the path would be best suited for the southern side of Salford Road.

2. A Greenway Path will initiate along the Perkiomen Trail between the William Rahmer Memorial Park and the Township building. The Greenway Path will travel along a tributary to the Perkiomen Creek, basically paralleling Harmon Road. A connector in this area will need to link to the Village Pathway emanating from the Village of Salford. An alternative in this area is to extend the Village Pathway from Salford Street down Harmon Road to the Perkiomen Trail within William Rahmer Memorial Park. A link to the Greenway Path could be achieved where the unnamed tributary meanders very close to the edge of Harmon Road.
3. The Greenway Path continues along the stream corridor through three preferentially assessed properties, with all three being greater than 27-acres. The greenway area has vegetation directly adjacent to the stream but could be greatly enhanced by working with and educating the riparian landowners. Securing the Greenway Path via the development process may be possible for these properties over the long term. The only section requiring some landowner cooperation is where the Greenway Path connects to the Salfordville Village Pathway system along Old Skippack Road. The use of an oversize residential lot east of the Salford Street / Old Skippack Road intersection may be an option.
4. In addition to connecting the Greenway Path described above (#3) to Old Skippack Pike, the Greenway Path could be extended through a newly approved subdivision. This will be the start of a Greenway Path that will connect to Lower Salford Township along a tributary to the East Branch Perkiomen Creek. It will also link to an existing pathway easement along Wolford Road that connects with the Salfordville Village pathway system, providing direct access to the village and points north and east of the village.

Figure 42
Sub-Area C: Salfordville Village



5. The Greenway Path will continue between Wolford Road and Shelly Road, crossing two to three properties. All three properties are greater than 10-acres and may be subject to future development. An existing hedgerow through the properties can be used to define the route of the path.
6. The last segment of this Greenway Path is between Shelly Road and the township border with Lower Salford Township.
7. The Salfordville Village Pathway system begins on Old Skippack Road, northwest of the village. The pathway will extend from the center of the village near the Post Office to Potato Road. In consideration of existing development patterns, development of the pathway on the north side of Old Skippack Pike will likely be the most feasible. However, this will require the development of a road crossing in order for the Salfordville Village Pathway to connect with the Greenway Path described in #3. This can be done primarily with signage and road striping.
8. A second segment of the Village Pathway around Salfordville extends south on Wolford Road. If located on the north side of Wolford Road, the Village Pathway will extend approximately 700 feet before connecting to an existing pathway easement. This segment of the pathway will connect to a Greenway Path leading to Salford Village in one direction, and, in the other direction, the East Branch Perkiomen Creek in Lower Salford Township. It will also provide a direct connection to Upper Salford Township Park as the path system is extended south on Wolford Road to Salford Station Road.
9. North from the Village of Salfordville, the pathway will continue on Bergey Road past Woessner Road. In order to form a pathway link at the corner of Old Skippack Road and Bergey Road, the pathway should be located on the west side of Bergey Road.
10. Lastly, the Salfordville Village Pathway will extend east of the Post Office to township-owned open space near the Fire Station. Given the location of the township open space, Fire Station, and the pathway west of the village center, the pathway would be best located on the north side of Old Skippack Road. Signage and road striping will need to be installed in the village center to facilitate road crossings of pedestrians.
11. A short Greenway Path will extend from the rear of the township-owned open space, linking with a Greenway Connector. This path will involve a 40+ acre property and could be secured via the subdivision and land development process.
12. This Greenway Connector will extend from Bergey Road to Shelly Road, across several large properties. The township may need to work with an existing landowner to make the final connection to Shelly Road so that the Greenway Connector can ultimately link to the East Branch Perkiomen Creek Greenway.
13. Directly south of Shelly Road the East Branch Perkiomen Creek Greenway meanders through an oxbow before the creek briefly parallels Shelly Road. Land along the stream is available for pathway development in this area, however, the land passes through four 12-acre lots before reaching a large farm property. It may be necessary to work with existing landowners rather than wait for subdivision and land development. This may particularly important when working out the access point from Shelly Road. At a minimum, working with landowners to maintain and improve the greenway corridor should be a priority.
14. The final segment of the East Branch Perkiomen Creek Greenway involves several large farms. It should be possible to secure this segment via the land development process. The exact location of the path will need to be determined following a detailed site analysis in order to consider issues associated with existing floodplain, woodlands, and steep slopes. This is an important link for connecting the Upper Salford Township pathway system to a larger regional network of pathways and trails.
15. This Greenway Connector will form an important connection between the Upper Salford Township building and the Township Park. The Greenway Connector will generally begin at the township building and extend along Salford Station Road until linking to an existing path system on lands owned by the Philadel-

phia Folk Song Society near the Township Park. In addition, to providing direct access to two township facilities, this pathway will also provide an area for pedestrians to safely access the Philadelphia Folk Festival from the off-site parking areas. Several routes are possible for this pathway. The exact location of the pathway will need to be determined as part of negotiations with individual landowners, especially the owners of the Old Pool Farm and representatives from the Folk Song Society.

SUB-AREA D: SPRING MOUNTAIN

This sub-area focuses on the area around Spring Mountain. This area involves the Perkiomen Trail and several connections to Upper Salford Township Park. Specific design and locational issues are discussed below and identified on Figure 4.3.

1. This important Greenway Connector will link the Perkiomen Trail to Upper Salford Township Park. The connector will start where the Perkiomen Trail intersects Spring Mount Road, near Clemmer's Mill Road. It will travel west approximately 850 feet along Spring Mount Road before crossing Spring Mount Road and heading north to the township park. Establishing the full connection from Spring Mount Road will involve on two landowners. One parcel is vacant and has previously been proposed for development, the second set of parcels, currently under common ownership, are actively being farmed. While the exact location of the Greenway Connector may vary, it is intended to be direct connection along existing property lines.
2. As an additional route to the Greenway Connector discussed in #1, this Greenway Path will parallel an unnamed tributary to the Perkiomen Creek. It will provide visually more interesting route and could be developed in conjunction with riparian and greenway restoration efforts. This segment will essentially expand the township's existing path system in Upper Salford Township Park, while the Greenway Connector will be the major route between the Park and the Perkiomen Trail.
3. The final Greenway Path will begin at the Upper Salford Township Park and travel down an unnamed tributary to the east Branch Perkiomen Creek into Lower Salford Township. The

path will involve three crossings; one at Schwenksville Road, one at Lederach Road, and one at Larson Road. The greenway land south of Lederach Road is well developed with existing woodlands and several ponds intermixed with farmland. Steep slopes are minimal in this area as well. The Greenway Path crosses six properties all greater than 10-acres and can be secured through the land development process over time. In addition, to development of the Greenway Path, this area may be one of the most significant greenway areas in the township and landowners should be encouraged to preserve and enhance these areas.

ROLE OF SIDEWALKS AND OTHER SUBDIVISION LEVEL PATHWAYS

The proposed Community Connections represent just a fraction of the larger system required to completely serve township residents' recreation and transportation needs. It is the intent of the Community Connection Plan to provide the essential connections between significant destinations within the township, and with the regional network of trails provided by the county and adjacent municipalities.

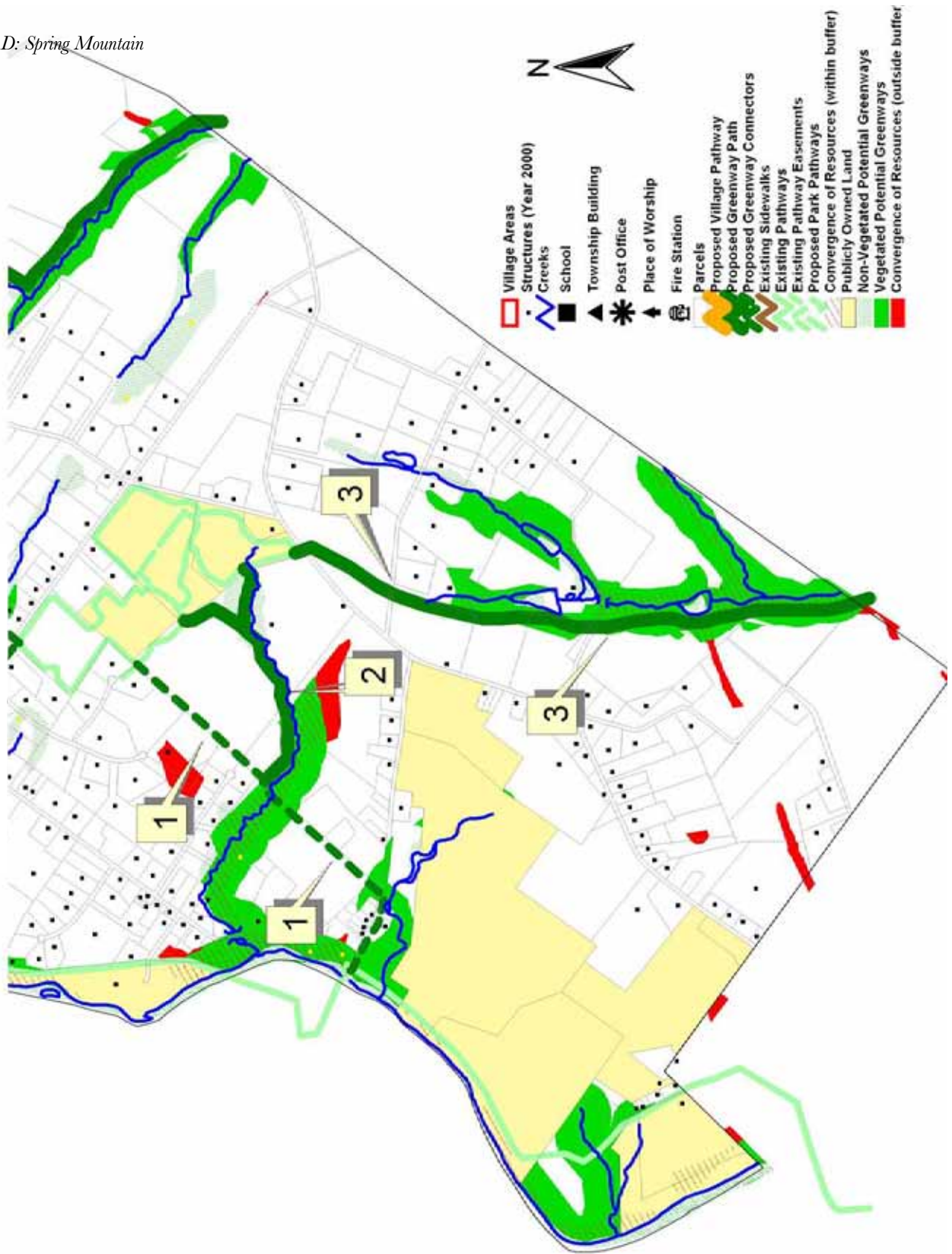
In order to complete the full network of connections, it is essential that all subdivisions and land developments establish sidewalks and/or internal pathways as well as "tie-ins" to the proposed Community Connections.

Sidewalks and Internal Pathways Currently, the township's Subdivision and Land Development Ordinance requires sidewalks to be installed upon recommendation of the Township Planning Commission and Engineer. The Subdivision and Land Development Ordinance provides guidelines for determining the location of sidewalks based upon:

- Residential lot widths less than 135 feet
- Existing or future destinations for pedestrians
- Relationship to existing sidewalk network
- Rural character and density of the proposal
- Size of the proposal

The standards also permit consideration of an alternative pedestrian circulation concept when it can be shown to be more desirable. These alternative

Figure 43
Sub-Area D: Spring Mountain



concepts may involve internal pathways and “tie-ins” to existing or proposed Community Connections, but should not include the Community Connections proposed within this Plan. Connections proposed within this Plan, and discussed in this chapter, should be provided in addition to sidewalks and/or alternative pedestrian circulation concepts (i.e. internal pathways and “tie-ins”).

COMMUNITY CONNECTION DESIGN ISSUES

When selecting the location of the various pathway types the following design consideration should be referenced:

- The path should be separated from traffic as much as possible and minimizing at-grade road crossings.
- The path should be as continuous as possible and not require users to travel on local streets to get from one link to another.
- The path should extend to a destination point. Avoid extensive use of perimeter trails only.
- When part of a subdivision or land development, the paths should be constructed as part of the improvements and in place prior to the construction of individual homes.
- The path should avoid crossing significant streams, whenever possible.
- The path should connect with as many housing developments as possible.
- Road crossings should be done at signalized intersections, where possible, or at intersections controlled by a stop sign. Signage indicating to turning traffic the presence of the path. Any road crossing in the middle of a block should be clearly marked with good sight distances and may need controlled by a warning light or stop sign.
- The path should avoid grades over 5%. Steeper grades may be acceptable for short distances.
- The path should not parallel existing roads for extended periods where the path will be crossed by numerous driveways and/or road crossings.
- For safety, the path should be visible from roads, homes, and businesses.
- The path should be set back from existing homes in order to protect the privacy of the residents.

CHAPTER 8

EVALUATION OF PARK LAND AND RECREATIONAL NEEDS

This chapter of the plan will discuss the existing and projected recreational and open space needs for rural communities. The availability of facilities in relation to existing and projected population growth will be analyzed. National and regional standards for public recreational land will be reviewed and applied to Upper Salford Township . Needs will be assessed for the present and the year 2025.

PLANNING GOAL

Explore active and passive recreation opportunities

- Create a network of greenways for pathway development and resource protection as a linear park

- Require future development to provide recreational opportunities (or fee-in-lieu) for new residents

- Enhance roadway safety for pedestrians and bicyclists

- Expand and develop new recreational facilities to meet resident needs

EVALUATING PARK LAND NEEDS

A 1983 guide by the National Recreation and Park Association (NRPA), Recreation, Park and Open Space Standards and Guidelines, provided strategies for calculating the acreage needs of municipal park systems. The 1983 guidelines suggested a municipal park system include 6.25 to 10.5 acres of land per 1,000 peo-

ple. These standards, as well as standards from Delaware Valley Regional Planning Commission (DVRPC), have been used to calculate park needs for a majority of the Open Space Plans completed in Montgomery County. This publication, however, has been replaced due to the expanded role parks and open space play in local communities.

The newest publication by the National Recreation and Park Association and the American Academy for Park and Recreation Administration titled *Park, Recreation, Open Space and Greenway Guidelines* was produced in 1996. The new title without the word “standards” is indicative in the shift of looking at open space. The more recent publication shifted its philosophy to provide guidance only, ultimately allowing the amount of park, recreation, and open space to be defined by individual communities. The 1996 publication emphasizes a systems approach to park, recreation, open space, and greenway planning that focuses on local values and needs rather than strict formulas.

This new systems approach looks at the level of service provided to the users of the facilities rather than the size of the facilities based upon population. This method reflects, in part, the dual function of municipal parkland: providing recreation opportunities (passive and active) and protecting important natural features. Municipal parks often contain a significant amount of environmentally sensitive land that prevents much of the acreage from being utilized for active recreation. Under these guidelines a 5-acre municipal park that contains few significant natural features and is fully developed may provide the same level of service as a 35-acre park that provides recreation and also protects important woodlands, wetlands, and other environmental amenities. The difference hinges upon the individual goals of the municipality and not a single universal standard.

For larger communities, a meaningful level of service analysis would involve detailed user surveys and facility inventories. While this is a key element for a township recreation plan, it is not necessary for characterizing the general recreation opportunities within smaller communities such as Upper Salford Township. This is especially true given the township’s extensive development of a central Community Park (Upper Salford Township Park) and the distribution of lands for existing and future

neighborhood parks. For smaller communities, a level of service analysis looks at existing conditions and relies upon the empirical knowledge of municipal officials and residents to determine if this amount of parkland is adequately serving the needs of the community. This approach recognizes that each level of service determination carries both social and economic costs, and therefore involves some subjectivity. Based upon how adequately existing parks are serving the needs of residents, Upper Salford Township can define what an acceptable future level of service for parks and recreation should be.

PARK TYPES

The parks and open space within Upper Salford Township have been classified into three general categories based upon the acreage, recreation potential, and natural resources of each park. The first type of park, Neighborhood Park, generally includes lands between 3 and 20 acres having a service area up to ½ mile. These parks may provide playground equipment, or tot lots, but also contain larger areas for athletic fields to allow for both informal and organized recreation. Parks in this classification in Upper Salford Township total 38 acres and include Orchard Park, Moyer Marks Park, the Farringer Property, and 5 acres of active recreation at William Rahmer Memorial Park. While not all of these properties contain the facilities of a full-fledged neighborhood park, they have the size and location potential to be developed into such.

The second classification is Community Parks which includes lands of 20 acres or more in size that serve multiple neighborhoods within a mile and a half of the park. Community parks generally contain numerous athletic fields or hard courts for a variety of sports, serving as a center of recreational activity within the community, and provide a central gathering place for special events. The only park in Upper Salford within this category is Upper Salford Township Park. At 55 acres it is twice the minimum size required of a community park and provides all the necessary facilities with significant room for expansion.

The final category, referred to as Greenway Parks, includes lands that are primarily used for passive

Figure 44A
*Existing Level of Service Analysis
 And Future Needs*

Classification	Existing Acreage	Existing Level of Service*	2015 - 3,850 est. population Demand	2015 - 3,850 est. population Need	2025 - 4,750 est. population Demand	2025 - 4,750 est. population Need
Core Parks:						
Neighborhood						
William Rahmer Memorial Park	5					
Orchard Park	20					
Moyer Marks Park	5					
Farringer	8					
Neighborhood Park Subtotal:	38	12.57	48.38	10.38	59.69	21.69
Community						
Upper Salford Township Park	55	18.19	70.02	15.02	86.39	31.39
Core Parks Subtotal:	93	30.75	118.40	25.40	146.08	53.08
Greenway Parks:						
Spring Mountain	82					
William Rahmer Memorial Park	55					
Spring Mountain House	36					
Vaughn Run	5					
Greenway Parks Subtotal:	178	58.86	226.62	48.62	279.60	101.60
TOTAL:	271	89.62	345.02	74.02	425.68	154.68

* Acres per 1,000 population

recreation and the protection of natural resources. These lands total 178 acres and include Spring Mountain, the Vaughn Run property, the Spring Mountain House Site, and 55 acres of resource lands at William Rahmer Memorial Park. While not available for traditional active recreation uses, these properties are valuable for their protection of natural resources and serve as nodes of passive open space within the township- and county-wide greenway system.

PARK LAND NEEDS

Using the township’s 2000 population and existing park land acreage, an existing level of service

figure was developed for each park classification (see Figure 44A). This level of service figure reflects the township’s understanding that the current configuration of parkland is adequately satisfying the needs of the community and that maintaining this relationship as the township’s population increases will continue to satisfy recreation needs into the future. Based upon the level of service figures, the township will need to increase neighborhood and community park acreages by 10 and 15 acres, respectively, prior to 2015. An additional 49 acres of Greenway Parks should also be preserved. These Greenway Parks may be provided in the form of stand-alone parklands, such as the Spring Mountain House Site, or as complements to neighborhood or community parks, as

with William Rahmer Memorial Park. The importance of Greenway Parks is expanded upon further within an ensuing section discussing Greenway Development and Resource Protection. Acreage needs for Neighborhood, Community, and Greenway Parks increase to 22, 31, and 101, respectively, by 2025.

It must, however, be stressed that these minimum level of service acreage standards are based upon existing conditions and no conclusions can be drawn from the township exceeding these minimum standards. The additional park acreage may be essential for maximizing resource protection, providing optimal access, and meeting future recreation needs. The township should consistently look for opportunities for expansion of the township park system, through both the creation of new parks and expansion of existing parks, in order to provide for a diversity of recreation opportunities.

LOCATIONAL NEEDS

The systems approach to defining open space needs utilizes a level of service analysis that measures how the park facilities meet the demands of the users. However, the systems approach still recognizes the need to provide open space within a uniform proximity of all residents. While there are many factors to consider when acquiring land for open space, identifying those areas of the township outside the basic service area of existing park land may help to further prioritize potential acquisitions. Figure 44B analyzes the service areas for community and neighborhood parks in order to identify areas that are underserved in terms of access to open space, particularly for active recreation.

Overall, the service area analysis indicates that the many residents are within a reasonable proximity to both neighborhood and community parks. The Community Park classification provides service to a significant portion of the township. The only areas underserved for Community Park are located north and west of the village of Woxall and along the Sumneytown Pike corridor. Given the township's current population it is not unreasonable for the township to have a single centrally located community park. However, the township should consider all future opportunities that would allow

for the creation of a community park in the underserved area as the population in those areas increases. In terms of neighborhood parks, the underserved areas include the area southeast of Spring Mountain and a swath of land between the villages of Woxall and Salfordville up to the townships border with Marlborough and Salford Townships. However, the area around Spring Mountain may not have the population levels that would warrant a neighborhood park and the land between Woxall and Salfordville is partially served by Salford Hills Elementary School. Once again, this is an area that the township can focus on as new residential development takes place, possibly securing land via the development process, and as opportunities arise.

RECREATION SURVEY RESULTS

The township's basic park land needs have been established based upon a level of service and accessibility analysis. However, in order to supplement this data with resident-defined needs and preferences, the township also conducted a recreation and open space survey.

A total of 1,065 surveys were distributed to township households in July 2006. A total of 300 surveys were completed and returned, resulting in a 28 percent return rate. Traditional mail surveys typically result in a 10 percent return rate. Therefore, the survey return rate greatly exceeded expected results by nearly a factor of three. In addition, survey re-

Figure 44C
Survey Returns by Service Area

RETURNED SURVEYS	AREA A	AREA B	AREA C	AREA D	AREA E	TOTAL
Surveys Returned	54 18%	55 18%	64 21%	101 34%	26 9%	300 100%
Residents Represented	154 19%	148 18%	198 24%	261 31%	69 8%	830 100%
2000 Census Population	782 26%	550 18%	830 27%	628 21%	234 8%	3,024 100%
Population Represented (% of Area)	20%	27%	24%	42%	29%	27%

Figure 44B
Park Service Areas

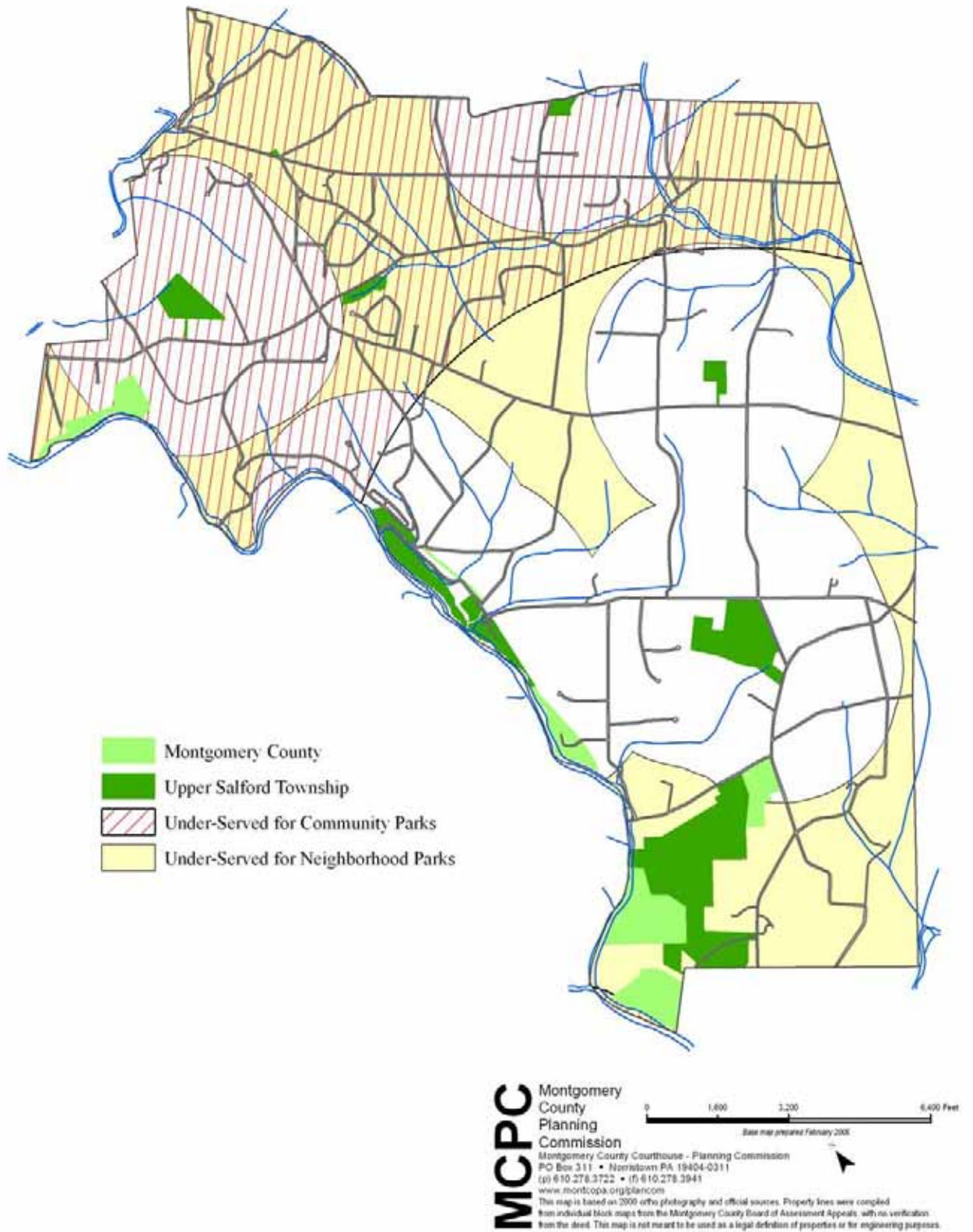
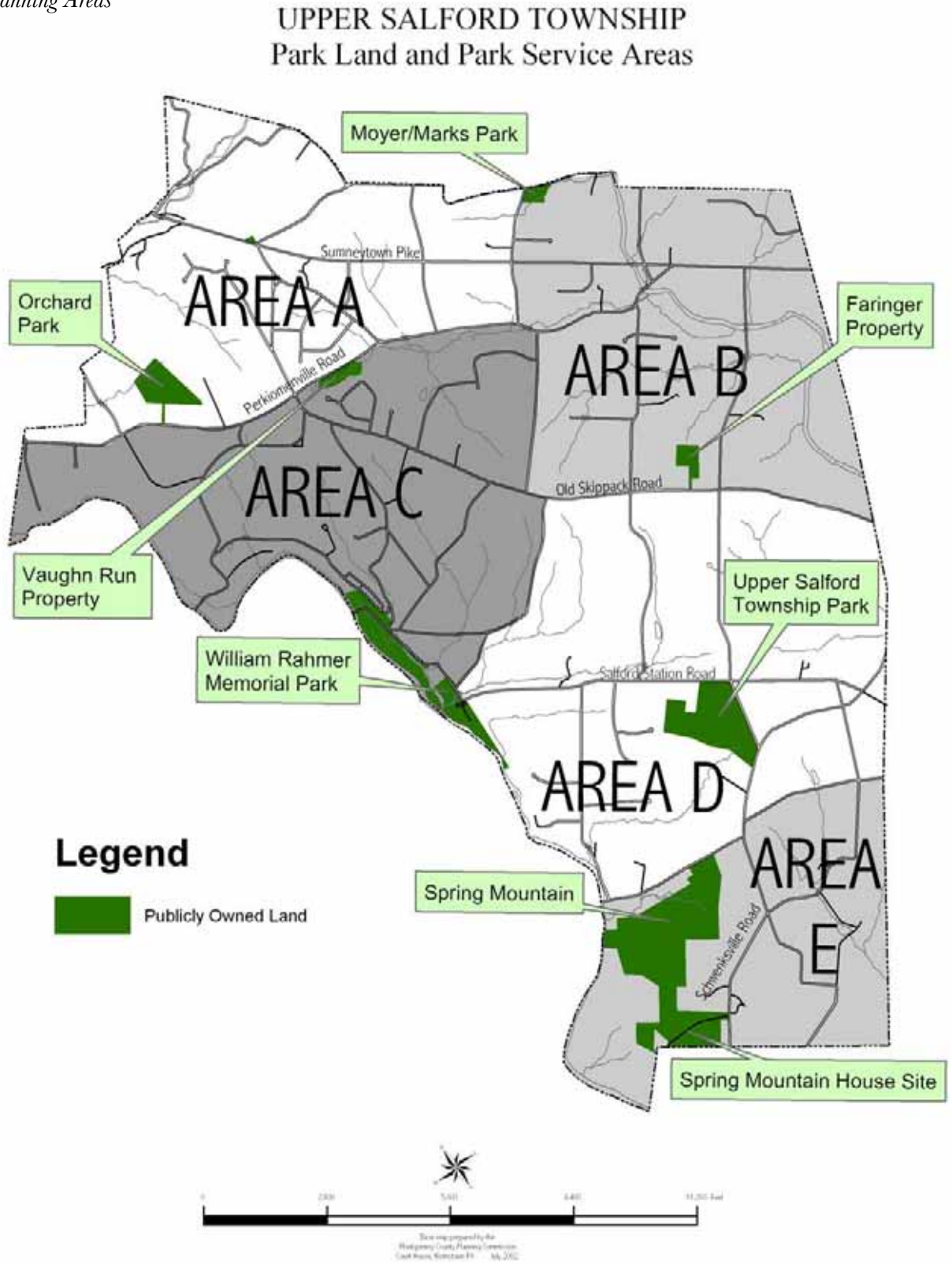


Figure 44D
Park Planning Areas



spondents were asked to answer the questions so that the needs of everyone in their household were reflected. Based upon the household composition data the number of township residents represented by all completed surveys was calculated to be 830, resulting in 27 percent of the township's population being represented by the survey results. Given that the overall survey response rate (28%) directly corresponds to the percent of population represented (27%), we can assume that the family make-up of the respondents are representative of the township as a whole (see Figure 44E). As for the percent of population represented by Park Planning Area (see Figure 44D), each of the five planning areas had responses that represented at least 20 percent of the area's population. However, Area D had the most surveys returned, representing 34 percent of all returns,

Figure 44E
Family Composition

FAMILY TYPE	SINGLE	2 ADULT	1 CHILD	2 CHILD	3 CHILD	1 ADULT/ CHILDREN
AREA A	3	16	13	14	4	2
AREA B	4	21	11	5	9	2
AREA C	8	18	6	16	14	1
AREA D	15	38	7	20	11	7
AREA E	5	7	2	8	2	2
TOWNSHIP	35	100	39	63	40	14

and the most residents represented at 261. Based upon the population of Area D, the 261 residents represented by the returned surveys exceeds 40 percent that area's total population. The surveys returned for Area A represented the smallest number of residents as a percentage of that area's total population (20%).

Figure 44F
Gender and Age Composition

AGE	0-5	6-12	13-18	19-34	35-59	60+
MALE (467)	33 (7%)	63 (14%)	57 (12%)	52 (11%)	191 (41%)	71 (15%)
FEMALE (440)	32 (7%)	46 (11%)	51 (12%)	50 (11%)	195 (44%)	66 (15%)

The gender breakdown for those residents represented by the survey returns (see Figure 44F) was weighted slightly towards males over females. However, there was a direct correlation in the age composition of males and females with slight differences

in the 6-12 and 35-59 age groups. As for overall age composition, almost half of all those represented by the surveys returns were between the ages of 35 and 59. Those over the age of 60 correspond to 16 percent of all those represented by the surveys.

RECREATION USAGE

Figure 44G summarizes the number of times a particular recreation facility is used over the course of a year by families in the township. The results overwhelming show three facilities getting the most use: Upper Salford Township Park, the Perkiomen Trail, and Road walking, jogging, and biking. When consideration is given to the fact that the Perkiomen Trail is primarily used for walking, jogging, and biking, and that even some visitors to the Upper Salford Township Park are there to use the park trail, it

appears that walking, jogging and biking are the primary means of recreation within the township. However, the survey does show that most residents spend about half of their recreation time using facilities outside Upper Salford. So based upon this question alone it, it may not be accurate to conclude that walking, jogging, and biking are what most people prefer to do within the township or whether there are just more opportunities for these activities

in Upper Salford compared to other recreational outlets.

GENERAL PARK AND RECREATION PREFERENCES

The survey asked residents to either agree or dis-

Figure 44G
Recreation Usage

FACILITY	1-4 TIMES	5-12 TIMES	13-24 TIMES	> 24 TIMES	USED AT
					LEAST ONCE
UPPER SALFORD TOWNSHIP PARK	79	51	27	86	211
WILLIAM RAHMER MEMORIAL PARK	48	10	5	11	63
ORCHARD PARK	12	3	0	1	13
MOYER MARKS PARK	17	2	3	1	20
SALFORD HILLS RECREATIONAL AREA	40	21	6	6	60
PERKIOMEN TRAIL	45	64	38	90	198
SPRING MOUNTAIN SKI AREA	61	34	15	30	198
ROAD WALKING, JOGGING, BIKING	32	34	23	93	153

agree with a series of thirteen questions using a score of 1 to 5, with 5 indicating the resident strongly agreed (see Figure 44G). The one question that had the highest average score and highest degree of agreement was the question that asked if the township should preserve more natural areas. This confirms past survey results and what has been an understanding of Township leaders for sometime. It also supports continued efforts on the township's part in regard to greater protection of natural areas and greenways. Furthermore, this question had the highest level of agreement in every Planning Area as well. The next questions that had the highest level of overall agreement asked whether the township should take the primary responsibility for providing recrea-

tion facilities. This may indicate that residents are generally happy with the job the township is currently doing in providing recreation facilities and that residents want to maintain control over the expansion of recreation facilities. The third questions with the highest average score asked if the township should establish a network of pathways. Combined with the recreation usage results, it appears that trails for walking, jogging, and biking are an important recreational outlet for most residents and that expansion of these opportunities would be welcome. It is also interesting to note that one of the lowest scoring questions asked respondent if their family would use a township park more often if one was closer to their home. While the average score for this questions does indicate disagreement, most residents seems to be ambivalent regarding their proximity to a town-

Figure 44H
General Preferences

QUESTION/PLANNING AREA	AREA A	AREA B	AREA C	AREA D	AREA E	ALL	W/CHILDREN
#6 TOWNSHIP SHOULD TAKE PRIMARY RESPONSIBLTY	3.83	3.92	3.84	4.07	3.91	3.93	4.12
#7 USE PARK MORE IF CLOSER TO HOME	3.52	2.9	3.14	3.09	2.85	3.13	3.39
#8 DEVELOP MORE ACTIVE RECREATION FACILITIES	3.44	3.12	3.19	3.34	3.04	3.25	3.65
#9 ESTABLISH A NETWORK OF PATHWAYS	3.91	3.69	3.71	3.78	3.44	3.74	3.95
#10 PRESERVE MORE NATURAL AREAS	4.35	4.29	4.3	4.32	4.19	4.3	4.34
#11 TOWNSHIP SHOULD HAVE A COMMUNITY CENTER	3.33	3.04	3.1	3.3	3.2	3.2	3.55
#12A MORE RECREATION FOR PRESCHOOLERS	3.11	2.92	3.2	3.18	3.06	3.11	3.43
#12B MORE RECREATION FOR CHILDREN (6-12)	3.54	3.15	3.35	3.54	3.6	3.43	3.83
#12C MORE RECREATION FOR TEENS (13-18)	3.81	3.4	3.46	3.74	3.9	3.64	4.08
#12D MORE RECREATION FOR YOUNG ADULTS (19-34)	3.24	3.23	3.09	3.41	3.21	3.26	3.53
#12E MORE RECREATION FOR OLDER ADULTS (35-59)	3.18	3.41	3.11	3.72	3.16	3.39	3.55
#12F MORE RECREATION FOR SENIORS (60+)	2.97	3.32	3.17	3.61	3.26	3.32	3.35
#12G MORE RECREATION FOR HANDICAPPED (ANY AGE)	3.18	3.26	3.16	3.63	3.06	3.32	3.42

ship park. The only planning areas for which this was not the lowest scoring question were Area A and Area C, indicating a slightly higher interest in these areas for a park closer to home, especially in Area A. As for the provision of recreation opportunities, it was felt that more recreation for teens could be provided while there was more ambivalence toward providing more recreation opportunities for seniors.

FACILITY NEEDS

One of the last two survey questions asked respondents to rate the importance of expanding the supply of a variety of recreation facilities. To further the apparent interest in pathways for walking, jogging and biking, the four facilities rated highest for expansion involve pathways and trails. The facility rated highest for expansion is pathways for bicycling, followed by pathways for hiking/walking, natural areas interpretive trails, and fitness/exercise

trails. Picnic area pavilions also scored moderately high overall and requests for a pool were moderately high for families with children. The results also show the “across –the-board” desire for these facilities since the top four facilities were the top received the highest scores in all planning areas. The lowest scoring facilities were baseball fields, in-line hockey courts, and frisbee golf. Skateboard park also scored particularly low in planning areas B and D.

PROGRAM NEEDS

Given the township’s overall population, large-scale township-run recreation programs are particularly feasible. However, the township may be able to work with nearby athletic associations, municipalities, or other entities, to offer a particular recreation program. The highest scoring recreation programs were concerts and environmental education, followed by tennis and sports camps in general. The lowest scoring programs were baseball, golf, and in-line hockey.

Figure 44I
Facility Needs

FACILITIES	AREA A	AREA B	AREA C	AREA D	AREA E	ALL	W/CHILDREN
BASEBALL FIELDS	2.34	2.7	2.31	2.52	2.17	2.45	2.74
POOL	3.27	2.74	2.97	3.17	3.14	3.07	3.48
BASKETBALL COURTS	2.62	2.55	2.45	2.92	2.61	2.67	2.93
PATHWAYS FOR BICYCLING	3.59	4.07	3.6	4.01	3.79	3.84	3.93
ENVIRONMENTAL EDUCATION CENTER	3.23	3.29	2.77	3.23	3.5	3.16	3.25
FITNESS/EXERCISE TRAILS	3.34	3.86	3.19	3.67	3.47	3.53	3.63
HANDICAPPED FACILITIES	2.64	2.68	2.5	2.81	2.78	2.69	2.72
PATHWAYS FOR HIKING/WALKING	3.67	4	3.66	3.8	3.74	3.78	3.81
ICE SKATING AREAS	3.24	2.59	3.21	3.46	3.38	3.2	3.44
INDOOR RECREATION CENTER	2.97	2.56	2.65	3.13	2.86	2.86	3.4
IN-LINE HOCKEY COURTS	2.19	2.4	2.32	2.37	2.1	2.32	2.7
NATURAL AREAS INTERPRETIVE TRAILS	3.33	3.57	3.43	3.59	3.82	3.53	3.45
OUTDOOR AMPHITHEATER	2.73	2.88	2.87	3.14	3.31	2.98	3.12
PICNIC AREAS PAVILIONS	3.32	3.48	2.95	3.14	3.63	3.23	3.51
PLAYGROUND APPARATUS	3.28	2.69	3.05	2.83	3.33	2.98	3.43
SKATEBOARD PARK	2.57	2.32	2.67	2.35	2.5	2.47	2.9
SOCCER FIELDS	2.88	2.86	2.92	2.88	2.92	2.89	3.39
SOFTBALL FIELDS	2.38	2.54	2.43	2.79	2.67	2.58	2.96
TENNIS COURTS	2.68	2.69	2.77	3	3.08	2.84	3.1
VOLLEYBALL COURTS	2.22	2.3	2.3	2.77	3	2.51	2.76
FRISBEE GOLF	2	2.34	2.29	2.24	2.08	2.21	2.66

Figure 44J
Program Needs

PROGRAMS	AREA A	AREA B	AREA C	AREA D	AREA E	ALL	W/CHILDREN
BASEBALL	2.44	2.18	2.1	2.57	2.18	2.34	2.8
BASKETBALL	2.5	2.08	1.96	2.47	2.33	2.28	2.74
CONCERTS	3.39	3.4	2.8	3.34	3.25	3.24	3.43
ENVIRONMENTAL EDUCATION	3.38	3.26	2.79	3.18	3.27	3.16	3.34
FIELD HOCKEY	2.13	2.13	1.93	2.46	2.45	2.23	2.68
GOLF	2.67	2.21	1.96	2.44	2.1	2.31	2.65
GYMNASTICS	2.26	1.88	2.1	2.38	2.4	2.21	2.72
HANDICAPPED PROGRAMS	2.2	2.13	2.12	2.67	2.86	2.38	2.44
ICE SKATING	3.38	2.57	2.81	3	2.83	2.94	3.4
IN-LINE HOCKEY	2.64	1.96	1.92	2.32	2.1	2.21	2.7
LACROSSE	2.1	2	2.12	2.42	2.2	2.21	2.76
SOCCER	3.21	2.85	2.63	2.74	2.58	2.82	3.53
SOFTBALL	2.5	2.61	2.19	2.75	2.67	2.56	3.13
SPORTS CAMPS	2.55	2.58	2.5	2.53	2.72	2.52	3.18
TENNIS	2.8	3.03	2.54	3.2	3.08	2.96	3.3
ULTIMATE FRISBEE	2.33	2.28	2.26	2.37	2.25	2.31	2.83
VOLLEYBALL	2.57	2.46	2.3	2.65	2.58	2.52	2.86

In regard to concerts and environmental education, these are programs the township may be able to address in several ways. In terms of concerts, the township does have several facilities large enough to host small family concerts. In addition, these family-style concerts can often be provided with little or no expense by local and non-professional artists. This program could also be limited to several times per year while still satisfying the demand for this type of program. In terms of Environmental Education, the township has access to environmental education experts at the Perkiomen Watershed Conservancy (PWC) and could easily partner with them to offer educational programs. These programs could involve stream health and water quality using nearby streams as an outdoor laboratory or guided walks nature walks on Spring Mountain. Given the concentration of significant natural resources on Spring Mountain, the township could look to establishing an environmental education center on the mountain in cooperation with PWC as a long-term goal. This type of facility could not only serve township residents whom have indicated an interest in this type of program, but may be able to serve as a regional educational resource as well.

GREENWAY DEVELOPMENT AND RESOURCE PROTECTION

Upper Salford's 1995 Comprehensive Plan Update and the 1996 Open Space Plan both identified the preservation of sensitive natural features, open space, and farmland as overall Township goals. Related goals include the preservation of the unique natural resources that identify Upper Salford, the conservation and protection of surface and subsurface water resources, the protection of floodplains and other sensitive natural areas, and the interconnection, through greenway development, of regional open space and habitat areas.

The maintenance of the rural-residential character of Upper Salford is perhaps the most important goal of Upper Salford. The quality of life currently enjoyed by Township residents is highly valued. It enables many to enjoy informal passive and active recreational activities in quiet, undisturbed woodlands and other natural areas. The Township can not expect to protect all of the sensitive natural features, and open space within its borders, but it

does endeavor to direct development to those areas most capable of accommodating new development without jeopardizing environmental quality.

Greenways should ultimately connect both regional natural resources and recreational sites, such as Green Lane Reservoir and Upper Valley Perkiomen Parks, and Evansburg Park. Coordination with adjoining municipalities and regional plans is important for both resource protection and greenway design. The County's Perkiomen Trail protects an important stream, corridor that can become the central feature of the township's greenway network linking the Township to regional resources.

CHAPTER 9

EVALUATION OF GROWTH AREAS

Once we have established preservation areas and set priorities for resource protection, we must attempt to direct projected township growth to the most appropriate areas. In order to accommodate projected development many municipalities will designate a portion of the municipality for higher density development. Designating areas for higher density development not only meets the township's obligation for "fair share," but will help preserve open space by limiting the amount of land consumed by the new development. However, Upper Salford Township is participating in a regional planning effort that will allow future development to be directed to the most appropriate regional locations. This regional approach allows some municipalities, including Upper Salford, to shift more intense residential and non-residential uses to the most appropriate areas, allowing the township's efforts to be focused upon the preservation of open space and the maintenance rural character.

POPULATION, HOUSING, AND EMPLOYMENT PROJECTIONS

The Delaware Valley Regional Planning Commission (DVRPC), along with Montgomery County Planning Commission (MCPC) projects that Upper Salford will have a population of 4,750 (up 1,726 from a 2000 figure of 3,024) by the year 2025 (see Figure 47). This projection is loosely based upon existing zoning and past development trends. Therefore, it is important to note that this projection will be revised every few years and that implementation of the Regional Plan's future land use policy will likely result in fewer units for Upper Salford Township at ultimate buildout. Should the township increase by 1,726 residents,

approximately 603 new units would need to be constructed by 2025 based upon the township's current average household size of 2.86 persons per unit. This would be 56% more housing units than the township's existing 1,074 units.

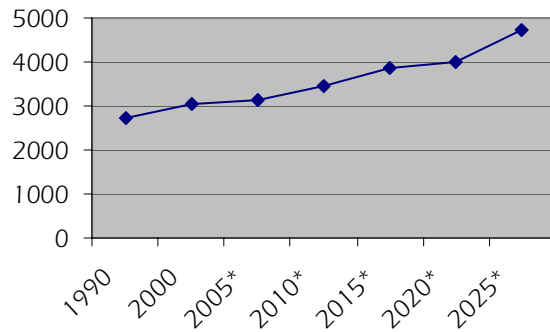
The DVRPC also estimates that there will be 700 persons employed within Upper Salford by the year 2025 (see Figure 46). This represents an increase of 100 employees from the current figure of 600. This projected increase is minimal given the 20 year timeframe and reflects the rural and residential nature of the township (see Figure 47).

DESIGNATED GROWTH AREA

As a participant in the Indian Valley Regional Comprehensive Plan, which includes Franconia, Lower Salford, and Salford Townships and Telford and Souderton Boroughs, Upper Salford Township is able to direct growth to the most appropriate areas within the region. The areas designated for growth will have access to public sewer and water, shopping, employment, and a more developed transportation network. Conversely, those areas of the region designated for rural resource protection will contain the most vulnerable natural features, small villages, and low

Figure 45
Population Projections

Year	Population
1990	2719
2000	3024
2005*	3150
2010*	3450
2015*	3850
2020*	4000
2025*	4750

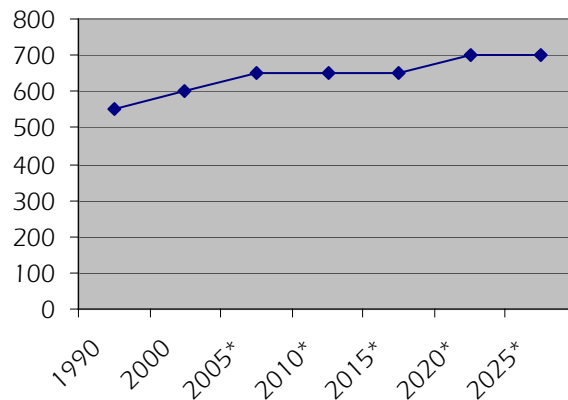


Source: U.S. Census Bureau; Census of Population and Housing, 2000; DVRPC projections.

* Projected population

Figure 46
Employment Forecast

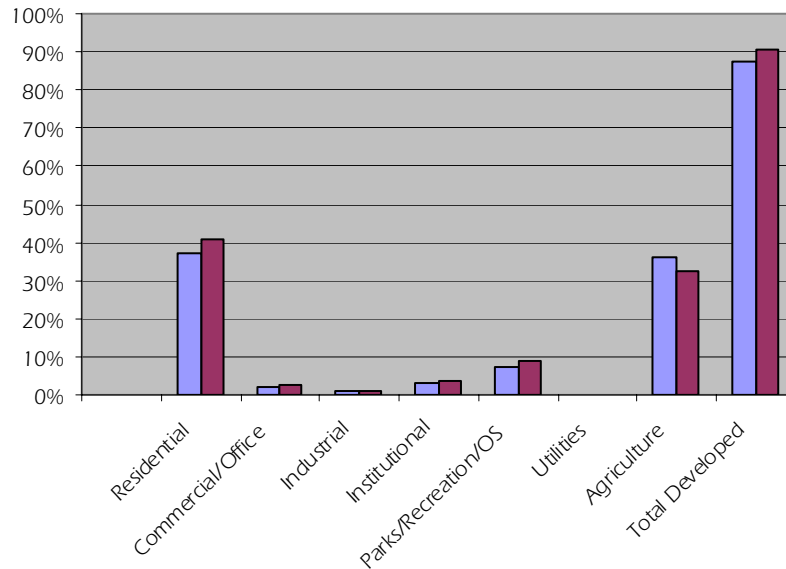
Year	Total Employment
1990	552
2000	600
2005*	650
2010*	650
2015*	650
2020*	700
2025*	700



*Source: DVRPC Forecasts

Figure 47
Existing Land Use Comparison: 1998 and 2004

Land Use	1998		2004		% Change
	Acres	% Total	Acres	% Total	1998-2004
Residential	2113	36.9%	2265	40.9%	7.2%
Commercial/Office	114.4	2.0%	140	2.5%	22.8%
Industrial	59.2	1.0%	60	1.1%	1.4%
Institutional	181.8	3.2%	209	3.8%	14.7%
Parks/Recreation/OS	420.5	7.3%	506	9.1%	20.3%
Utilities	10.6	0.2%	3	0.1%	-68.4%
Agriculture	2057	35.9%	1796	32.5%	-12.7%
Water	41	0.7%	41	0.7%	-0.9%
Total Defined Land Uses	4997.5	87.3%	5020	90.7%	0.4%
Total Undefined Land Uses	724.8	12.7%	516	9.3%	-28.9%
Total Acreage*	5722	100%	5535	100%	-3.3%



Source: Montgomery County Planning Commission Land Use Maps.

* Discrepancies due to digitization of parcel information.

density residential development. In most cases, the rural resource protection areas are not served by community facilities and tend to be further removed from the existing shopping and employment centers.

In the case of Upper Salford Township, the entire township has been designated for rural resource protection and will not be expected to provide areas for high density residential development or significant non-residential uses. Under the Indian Valley Regional Comprehensive Plan future development within the township should take the form of low-density residential development with some limited commercial uses within the existing villages.

Since the future land use element of the Indian Valley Regional Comprehensive Plan will be the basis of the township's future land use policies, a more detailed understanding of the plan needs to be provided and a summary is supplied in the following pages.

INDIAN VALLEY REGIONAL COMPREHENSIVE PLAN

The Future Land Use chapter is the cornerstone of the Indian Valley Regional Comprehensive Plan. Understanding existing land use patterns and properly integrating future land use as part of a single unified plan will result in a more efficient land use pattern that preserves open space, revitalizes business centers 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 growth areas, the primary land use objective is preservation of the region's rural landscape and its natural and cultural resources.

The Future Land Use Plan establishes land use policies for the entire Indian Valley Region. However, implementation of the Future Land Use Plan will rely upon the individual and collective efforts of the six participating municipalities. Specifically, it will be the responsibility of the municipalities to implement the agreed-upon land

use policies via local zoning ordinances and other municipal policies. In order to further the goals and objectives of the Regional Comprehensive Plan, while maximizing municipal control over local zoning decisions, the Future Land Use Plan will rely upon three key elements for implementation:

Future Land Use Map

The future land use map divides the Indian Valley Region into five generalized land use categories: Borough Conservation, Designated Growth, Future Growth, Village Conservation, and Rural Resource. The future land use map depicts the location of the land use categories within the Indian Valley Region and characterizes the relationships between the land use categories.

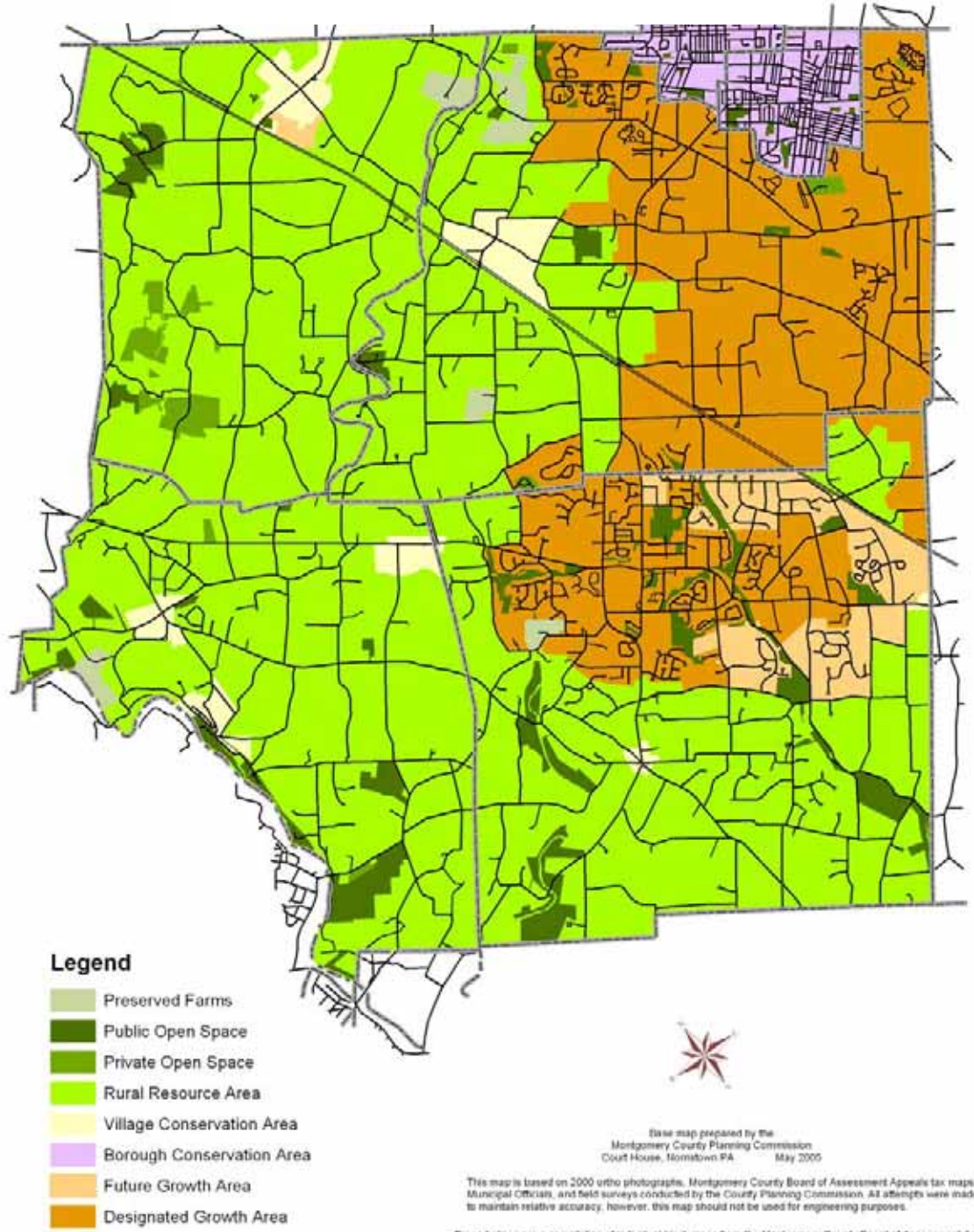
Future Land Use Matrices

Each land use category has a corresponding Future Land Use Matrix. Each land use matrix authorizes municipalities to permit a variety of land uses within seven development classifications: residential, commercial, industrial, institutional, utilities, open space/recreation, and miscellaneous. For each development class, the matrix identifies the primary land use vision, permitted uses, allowable densities and intensities, and specific development policies.

Intergovernmental Cooperative Implementation Agreement

This agreement adopted by each of the six participating municipalities will guide implementation of the Indian Valley Regional Comprehensive Plan, and identified Future Land Use Plan. The Implementation Agreement recognizes the goals and objectives of the Regional Comprehensive Plan, authorizes continuation of the Regional Planning Commission, establishes processes for reviewing subdivisions and land developments of regional significance, comprehensive plan amendments, and local zoning changes, and provides commitments for maintaining higher density residential zoning and zoning for specific non-residential uses.

Figure 48
Indian Valley Regional Comprehensive Plan Future Land Use



FUTURE LAND USE MAP

A fundamental policy of the Indian Valley Regional Comprehensive Plan is to direct new residential and non-residential development to appropriate areas while protecting the region's natural features and rural character. Simplified, this policy results in the establishment of Growth Areas and Rural Resource Areas. Using five land use categories, the Future Land Use Map (see Figure 48) further defines the location of the Growth Areas and Rural Resource Areas.

Growth Areas

With attributes such as large tracts of undeveloped land and access to major roads, new growth is inevitable in the Indian Valley. Growth, if properly managed, can have many positive benefits for the community. It will help to maintain the economic vitality of the community and will provide new opportunities for residents. Growth in the Indian Valley should be complementary to the community's character and should meet the goals of the comprehensive plan. These goals include providing housing for future residents and guiding the development of new non-residential uses to meet commercial needs, expand employment opportunities and promote new industry.

To maximize the positive aspects of growth, it is important to plan for it. By locating new growth around existing growth centers, existing services and infrastructure can be utilized, thereby reducing the need for new infrastructure. Additionally, concentrating growth into suitable locations preserves open space that may have otherwise been sacrificed to accommodate new development.

The Municipalities Planning Code (MPC) recognizes two types of growth areas: designated growth areas and future growth areas. A designated growth area is defined as, "an area that preferably includes and surrounds a borough or village and within which residential and mixed use development is permitted or planned for at densities of one unit to the acre or more; commercial, industrial and institutional uses are permitted or planned for; and public infrastructure services are provided or planned." Future growth areas are similar but recognize that while "public

infrastructure services...may not be [currently] provided, future development at greater densities is planned to accompany the orderly extension and provision of public infrastructure services."

In order to accommodate future growth and development within the Indian Valley the following areas have been identified as designated and future growth areas.

Designated Growth Area

The Future Land Use Map establishes a designated growth areas within Franconia Township between the Boroughs of Souderton and Telford, generally east of Rt. 113 and the Harleysville area, and within Lower Salford Township around the Harleysville area. These areas have been centers of economic and social activity in the region, contain existing infrastructure, and have substantial existing development. Therefore, these areas should be the principal locations for new residential and non-residential growth.

Future Growth Area

The future growth areas, as shown in Figure 46, include a small portion of Salford Township around the Village of Tylersport, and a portion of Lower Salford Township east of the Harleysville area. These areas have also been traditional sites of development in the region, but on a smaller scale than those included in the designated growth areas. The future growth area will serve as an extension of the designated growth area and may or may not currently be provided with public infrastructure. Therefore, the future growth areas are expected to develop at a slower rate and at somewhat lower densities than the designated growth areas.

While both the designated growth area and future growth area are recognized as locations for future development, the timing and intensity of that development will vary. Therefore, in order to incorporate flexibility for local municipal implementation, the expected densities in the growth areas range from one to ten units to the acre. The densities will ultimately be defined by the local zoning ordinances of the respective municipalities based upon the type of growth area and existing development patterns.

Another important element of the Growth Area for the Indian Valley includes the Boroughs of Souderton and Telford. While not expected to accommodate significant amounts of future growth and development, the Boroughs offer a significant stock of housing and commercial opportunities, existing infrastructure, and the potential for redevelopment and downtown revitalization. Therefore, the Growth Area of the Indian Valley Region will also include the following as a third land use category:

Borough Conservation

The Boroughs of Souderton and Telford currently contain most of the regions' high-density residential housing, including apartments, townhouses, twins and small lot single-family detached units found along the "Main Streets" of these boroughs. The boroughs also contain a mix of residential and commercial uses that contributes to their unique historic character.

An identified goal of the comprehensive plan is to preserve and revitalize these areas. Economic revitalization programs should be encouraged and supported by the whole region, for the benefit of the Indian Valley. Revitalization techniques to be pursued could include a market analysis of potential new small businesses, design guidelines, residential conversion regulations, home-based business regulations and historic preservation regulations and incentives.

Rural Resource Areas

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 Indian Valley's natural and cultural resources. As defined in the MPC, a rural resource area is, "an area within which rural resource uses including, but not limited to, agriculture, timbering, mining, quarrying and other extractive industries, forest and game lands and recreation and tourism are encouraged and enhanced. Development that is compatible with or supportive of such uses is permitted and public infrastructure services are not provided for except in villages."

In order to protect the natural environment, rural character, and cultural resources of the Rural

Resource Area, the following two land use categories have been established:

Rural Resource

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 Indian Valley Region. The rural resource category encompasses large parts of Upper Salford and Salford Townships, as well as a portion of Franconia Township generally west of Rt. 113, and south of the Harleysville Area in Lower Salford Township. The intent of the rural resource category can be summarized into farmland preservation, resource conservation, and open space preservation.

The farmland preservation element seeks to preserve the region's prime agricultural soils and retain the local agricultural economy. In addition, Pennsylvania law permits municipalities to enact restrictive agricultural zoning requirements to discourage undesirable development of farmlands. Agricultural zoning is most suitable in areas where farming is a strong and healthy industry and where farmers have made a firm commitment to continuing agricultural activities.

The resource conservation element reflects the importance of land with environmental characteristics that cause significant challenges for development. These challenges include bedrock geology, rock outcroppings, soil limitations, extensive wetlands, steep slopes and floodplain areas. The combination of these environmental features also provides the region with unique natural resource and scenic areas, which the region desires to protect. Therefore, preservation of natural features should be the dominant purpose served by land use regulations throughout this area.

The open space preservation element recognizes some land is more developable and/or closer to infrastructure. However, it was also recognized that preserving open space and natural resources around the

region's growth areas is important. Instead land use regulations such as cluster zoning should be considered in these locations to allow greater flexibility in site design to better preserve open space areas, natural resources and scenic views. While the rural resource area is not intended to be served by community facilities, infrastructure extensions or improvements may be permitted to encourage the innovations in residential development by an increased variety in type, design, layout of structures and by the conservation and more efficient use of open space that cluster zoning provides.

Village Conservation

Several existing villages are categorized as Village Residential. This category recognizes the existence of pockets of village-type development in Earlington, Vernfield, Salford, Woxall, Tylersport, Mainland, and Lederach and continues to provide this option in those areas.

Where village residential uses are proposed, dwellings are anticipated to be primarily single-family detached units, along with some twin or duplex units, built at a density of no greater than three units to the acre. Non-residential uses, consistent with the village character, will be permitted to encourage continued use of existing structures to architecturally maintain the residential quality of the area. Several of the villages covered by this land use category are currently served by community facilities. In these areas the use of public water and sewer will continue. However, any new public sewage facilities provided to Village Conservation areas should only be designed to meet existing needs for the purpose of protecting public health and not as a means of directing future growth.

CHAPTER 10

EVALUATION OF NON-ACQUISITION PROTECTION METHODS

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. The use of these non-acquisition methods of open space preservation may add to the public open space system, but are more commonly used to preserve or protect vulnerable lands that will remain privately held. These tools typically involve land use controls, but also include voluntary agreements with private landowners.

PERFORMANCE ZONING

With performance zoning, the residential lot sizes are directly related to the extent of a site's natural features. 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 in order to allow for development while minimizing disturbance of the vulnerable resources. Sites with less environmental constraints or vulnerable resources can accommodate development on reduced lots, typically no smaller than one or two acres. These provisions are placed in the zoning ordinance.

Basically, performance zoning necessitates that the required minimum lot area be free of vulnerable resources. For example, a lot having 1.5 acres of vulnerable resources (floodplains, wetlands, etc.) in a district having a minimum lot size of 1 acre would have to be 2.5 acres ($1.5 + 1 = 2.5$) in size. This reserves a portion of the lot to be used for residential purposes while being large enough to adequately absorb the vulnerable resources.

Within a zoning ordinance, performance zoning generally applies protection ratios to a wide range of vulnerable resources such as floodplains, wetlands, steep slopes, soils, geology, woodlands, etc. The protection ratios are multiplied by the area of each vulnerable resource on the lot. This area then subtracted from the lot area to yield the net lot area. And the net lot area must be equal to or greater than the required minimum lot size. For example a proposed 3-acre lot containing 1-acre of floodplains, having a 100 percent protection ratio, and 1.5-acres of steep slopes, having a 50 percent protection ratio, would have a net lot area of 1.25 acres as calculated below:

$$1.50 \text{ (acres of steep slopes)} \times 0.50 = .75 \text{ acre}$$

$$1.00 \text{ (acre of floodplain)} \times 1 = 1.00 \text{ acre}$$

$$1.00 \text{ (floodplain)} + 0.75 \text{ (steep slopes)} = 1.75$$

$$3.00 - 1.75 = 1.25 \text{ net acres}$$

Therefore, this lot would be permitted if the required minimum lot size was 1 acre, but would have to increase the size of the lot if the required minimum lot size was 2 acres.

UPPER SALFORD'S PROPOSED ACTION

As the township implements the policies of the Indian Valley Regional Comprehensive Plan, Performance Zoning will be an important tool for protecting the township's vulnerable resources. While Performance Zoning is applicable across the entire township, it may be especially useful within the Unami and Ridge Valley Creek watersheds, as well as the Spring Mount area. Currently, Marlborough and Salford Township's have adopted Performance Zoning in areas adjacent to Upper Salford Township. At a minimum, the consideration of environmental constraints will be used in all zoning districts to determine developable land for subdivisions and land developments.

CONSERVATION SUBDIVISIONS

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 the views, historic landscapes, farmland, or natural features. The open space may then be dedicated to the township as parkland.

Through clustering, up to 75 or 80 percent of the site can be preserved. The open space may be in the developed portion of the site so that the homes have neighborhood open space. While this type of development preserves natural resources, it also benefits the developer by lowering infrastructure costs (reducing road length, storm-water facilities, and utility lines).

UPPER SALFORD'S PROPOSED ACTION

The township currently permits conservation subdivisions within each of its primary residential zoning districts. As zoning is adjusted to implement the Indian Valley Regional Comprehensive Plan, the conservation subdivision option may be expanded and even required within certain districts.

VIEWSHED PROTECTION

Communities can reduce the visual impact of new rural development by encouraging or requiring homes to be located in a way that preserves existing views. For example, the zoning could allow a smaller lot size if homes are located in wooded areas or behind ridgelines. In other ways, the community could require homes that will be located along existing roads to have a larger lot size, including larger setbacks from the road, or screening vegetation between the road and the home.

UPPER SALFORD'S PROPOSED ACTION

In addition to the viewsheds identified in this plan, Upper Salford will conduct a future viewshed and vista study to identify additional sites. These sites will serve as the basis for protection. Protection of the viewsheds will involve either increased lot and building setbacks from tract boundaries or protection of the identified viewsheds as part of preserved open space in conservation subdivisions.

NATURAL RESOURCE PROTECTION ORDINANCES

The ordinances discussed below protect natural features such as floodplains, stream corridors, wetlands, groundwater, steep slopes, and woodlands.

STEEP SLOPES

Development on steep slopes, which are typically slopes of 15 percent or more, can be restricted or prohibited through steep slope ordinances. Development often is permitted on slopes of 15 percent to 25 percent 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 percent or more.

FLOODPLAINS

Floodplain ordinances (which exist in Montgomery County municipalities) 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.

STREAM CORRIDORS AND WETLANDS

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 the 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.

In addition to federal and state governments, municipalities can regulate development that occurs on wetlands. Municipalities can 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 backyard. 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.

GROUNDWATER PROTECTION

There are multiple ways to protect groundwater quality. The first involves stormwater ordinances which include provisions for groundwater recharge and the removal of pollutants from stormwater runoff. Comprehensive stormwater ordinances also require the identification of "hotspots." These "hotspots" are land uses that involve the use of certain hazardous materials. The stormwater ordinance imposes more stringent runoff containment measures that help prevent the release of hazardous material into waterways or groundwater via stormwater.

A second method of groundwater protection involves the identification of wellhead protection areas. Wellhead protection areas consist of the surface area around a well that directly contributes to recharging the well. Wellhead protection ordinances regulate the contribution area by restricting the uses permitted, limiting the intensity of development, and by regulating land management techniques. 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.

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.

UPPER SALFORD'S PROPOSED ACTION

The township's last zoning ordinance update (1999) included several new overlay districts specifically for the protection of steep slopes, and riparian corridors and wetlands. The township also has floodplain regulations consistent with the minimum standards required by the Federal Emergency Management Agency (FEMA). In addition

the township's subdivision and land development ordinance has landscape standards that include significant woodland protections.

In addition, the township was one of the first in the county to adopt stormwater controls that required the integration of infiltration and water quality measures in all new development. The concept of "hotspots" will be added to the ordinance as part of the East Branch Perkiomen Creek stormwater controls required by the Act 167 Plan approved by DEP in 2004.

A community-wide wellhead protection ordinance is not currently applicable for Upper Salford given the lack of public water supply wells within the township. Should new any developments propose a community water system using groundwater, the township will develop standards for a wellhead protection ordinance.

TRANSFER OF DEVELOPMENT RIGHTS

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.

UPPER SALFORD'S PROPOSED ACTION

The Future Land Use Plan within the Indian valley Regional Comprehensive Plan does not designate any portion of Upper Salford Township as a growth area. Since there is minimal applicability of Transfer of Development Rights without an identifiable growth area, Upper Salford will not immediately be considering the use of this option. However, the adoption of the Regional Comprehensive Plan, and the existence of growth areas in other Indian Valley communities, the use of Transfer of

Development Rights across township borders may be something that will be further investigated with the Regional Planning Commission in the future. This may especially applicable for the transfer of residential development rights to the regions industrial district. This will help to preserve open space and protect rural character, without adding more residential units to the Indian valley than would otherwise have been developed, as a TDR program is likely to do. Plus it has the added benefit of encouraging economic development in areas well suited for this type of land use.

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 the township or a nonprofit land conservation group.

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 deed-restricted. 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.

UPPER SALFORD'S PROPOSED ACTION

The township intends to cooperate with multiple conservation organizations to disseminate information regarding the programs these conservation organizations can offer to its citizens. Through mailings and workshops, the township can fully educate the public about the preservation options, and tax advantages, available to them as landowners. Several organizations, including the Natural Lands Trust and Montgomery County Land Trust are already active in the township and will serve as strong partners in the use of conservation easements.

REQUIRING OPEN SPACE IN DEVELOPMENTS OR A FEE IN LIEU OF OPEN SPACE

Municipalities can require developers to provide open space through their zoning and/or the subdivision ordinance.

An open space requirement when placed in the zoning ordinance must be located in specific zoning districts (for example the high-density residential district). The zoning ordinance can specify the percentage of required open space, for example between 15 and 20 percent, and other criteria relevant to the maintenance of common open space. The municipality can not 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 to 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.

UPPER SALFORD'S PROPOSED ACTION

The township intends to enact some form of open space dedication requirement throughout the township and will encourage the fee-in-lieu option as a way to develop an extensive and inclusive park system.

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.

UPPER SALFORD'S PROPOSED ACTION

One of the township's primary goals is to protect and enhance the existing villages. The township's existing Village zoning district provides bonuses for the reuse of existing buildings, permits mixed uses, and includes design standards for the preservation of village character. However, practices to further document or protect historic structures will be investigated.

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.

UPPER SALFORD'S PROPOSED ACTION

The township will continue to support the growth of the ASA by educating landowners about the benefits of such a program. Educational seminars and testimonials regarding the County Farmland Preservation Program will also be provided as a way to encourage all landowners currently within the Township's ASA to consider the submission of an application for preservation. Particular attention will be given to those lands that scored highest in the analysis for County Farmland Preservation in Chapter 6. However, it is up to individual landowners to manage the district.

AGRICULTURAL ZONING

In many communities, especially ones that have a large percentage of their land devoted to agriculture, this type of zoning is often used. Generally, a minimum lot size of 10 acres is required. This minimum acreage is used because a farm operation would need at least this acreage to be profitable. This size is also consistent with the state's Act

319 program which allows farmland to be assessed at a lower tax rate. Often there are anti nuisance clauses written into the ordinance to protect farmers from complaints from neighbors who are unaccustomed to farm practices.

A variation of this type of zoning allows farmers to sell off small lots of their landholdings for residential purposes. This allows the farmer to receive some financial gain from limited development while continuing to make a living from the land. An acceptable method often used to regulate density is called the "sliding scale". A sliding -scale ordinance would set a figure for the amount of dwellings or lots to be subdivided off a property depending on the tract's overall size. It is called a sliding -scale because as the acreage goes up, more lots are permitted. For instance, if a tract of land is under 15 acres, one lot is permitted; if the tract is between 15 and 40 acres, 2 lots are permitted; if the tract is between 40 and 80 acres, 3 lots are permitted to be subdivided off, and so on.

Another variation uses the type of soils found on the tract as a tool for figuring density. For instance, if the soils are prime agricultural or state-wide important the permitted lot sizes (min. 10 acres) would be larger than those tracts of land with different underlying soils (min. 1 - 2 acres). The purpose of this type of regulation is to preserve the good farmland soils and keep them productive.

For any agricultural based zoning to be successful, there have to be areas of prime/state-wide important soils and active farming. The zoning has to be clearly related to protecting agriculture rather than overall rural character. If this nexus is not strong enough, the ordinance could be challenged. One important connection that increases agricultural zoning's strength is the tie between agricultural soils and active farmland.

UPPER SALFORD'S PROPOSED ACTION

The township in the past as considered the use of Agricultural Zoning, particularly in the eastern half of the township. However, the township has relied more recently on the use of conservation subdivisions for the protection of farmland and agricultural soils. In addition, the institution of more comprehensive performance zoning standards may include specific standards for prime agricultural soils.

CHAPTER 11

RECOMMENDATIONS

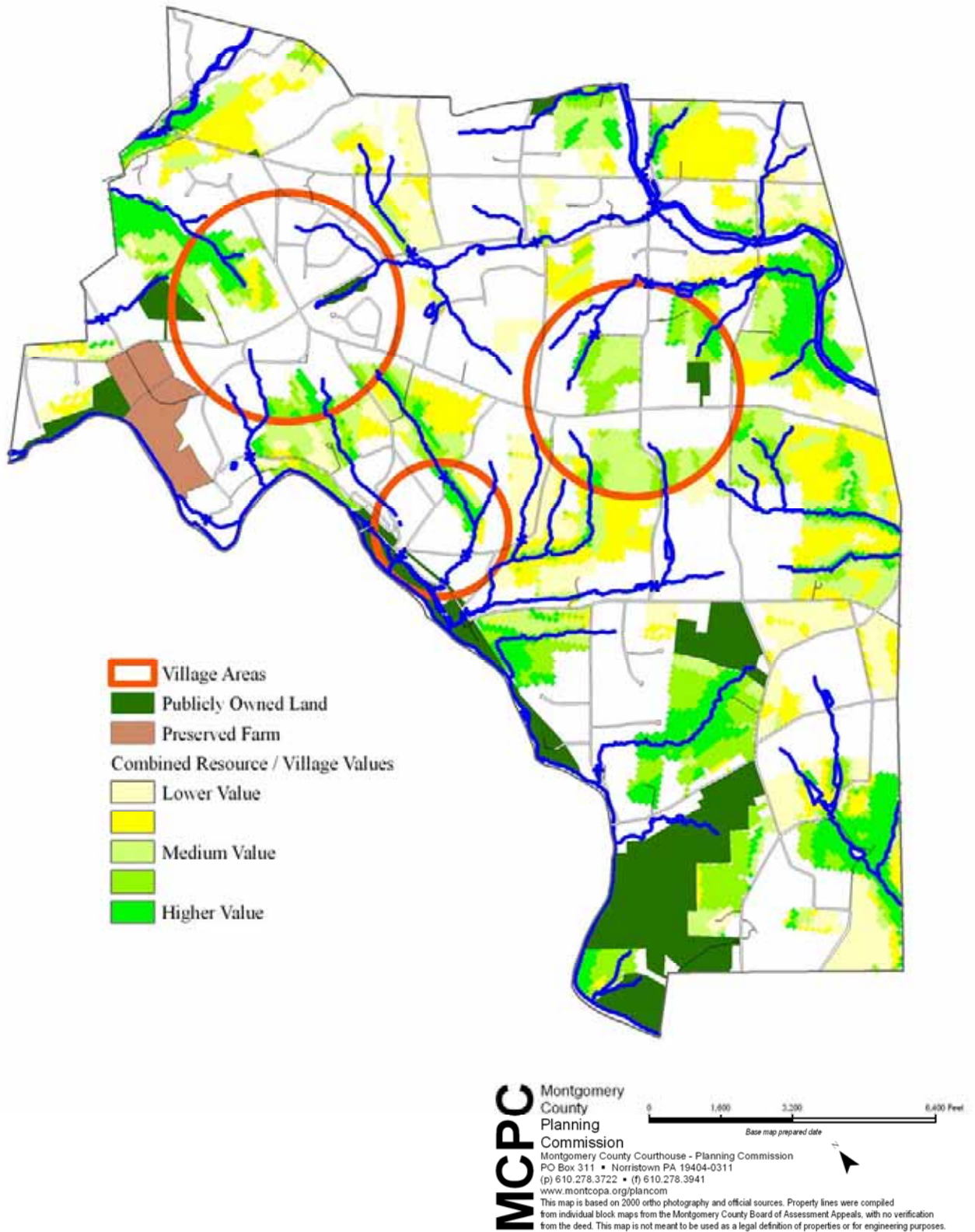
This portion of the Plan details the township's intentions for open space and resource protection. The recommendations of this chapter are a result of the data gathered in the previous sections, the decisions by Upper Salford to locate active recreation areas within close proximity to all residents, and the identification and preservation of lands of ecological importance.

RESOURCE PROTECTION

The township has an extensive park system, eight sites totaling over 270 acres, that is distributed throughout the township. In addition these parks serve multiple benefits, including active recreation, passive recreation, and general resource protection. Based upon the analysis contained in the previous plan chapters, significant open space acquisition opportunities still remain within the township. Figure 49 on page 98 identifies the relative value of resource lands within the township. In addition, this map reflects the township's goal of protecting and enhancing the Village areas by granting a ten percent value enhancement to resource lands remaining within the defined Village boundaries. The Village areas serve a population centers and protection of resource lands will enhance resident accessibility. In addition, the areas around the villages are the most vulnerable to a change in landuse, creating a slightly more urgent need for protection.

Protecting important ecological lands help to protect waterways and stream quality, plant and animal habitat, and provide areas for groundwater recharge. It is the township's intent to protect all of these lands via land use controls, such as riparian corridor protection ordinances, however, larger blocks of resource lands will be preserved for public access and greater control over land management wherever possible. The township will focus upon the following keys areas:

Figure 49
Combined Resource and Village Values



- Resource lands within the Village boundaries of Salford, Woxall, and Salfordville.
- Significant blocks of resource lands within the Spring Mount area, particularly lands adjacent to existing protected lands.
- The Old Pool farm which serves as a significant cultural site also has a considerable convergence of natural resources.
- The Unami / Ridge Valley Creek watershed has several large concentrations of natural resources. Protection of these lands can expand existing township parkland while helping to expand an extensive network of preserved lands within the watershed.
- The East Branch Perkiomen is also a major greenway within the township and contains several large tracts worthy of consideration.

In addition to potential acquisition of these key resource areas, the township intends to follow through on the non-acquisition methods for resource protection outlined in the previous chapter.

PARK LAND CREATION AND EXPANSION

While the township maintains a well established park system, park land accessibility can be improved with new acquisitions and expansion in the northwest and southeastern portions of the township.

The following are the primary park land creation and expansion priorities:

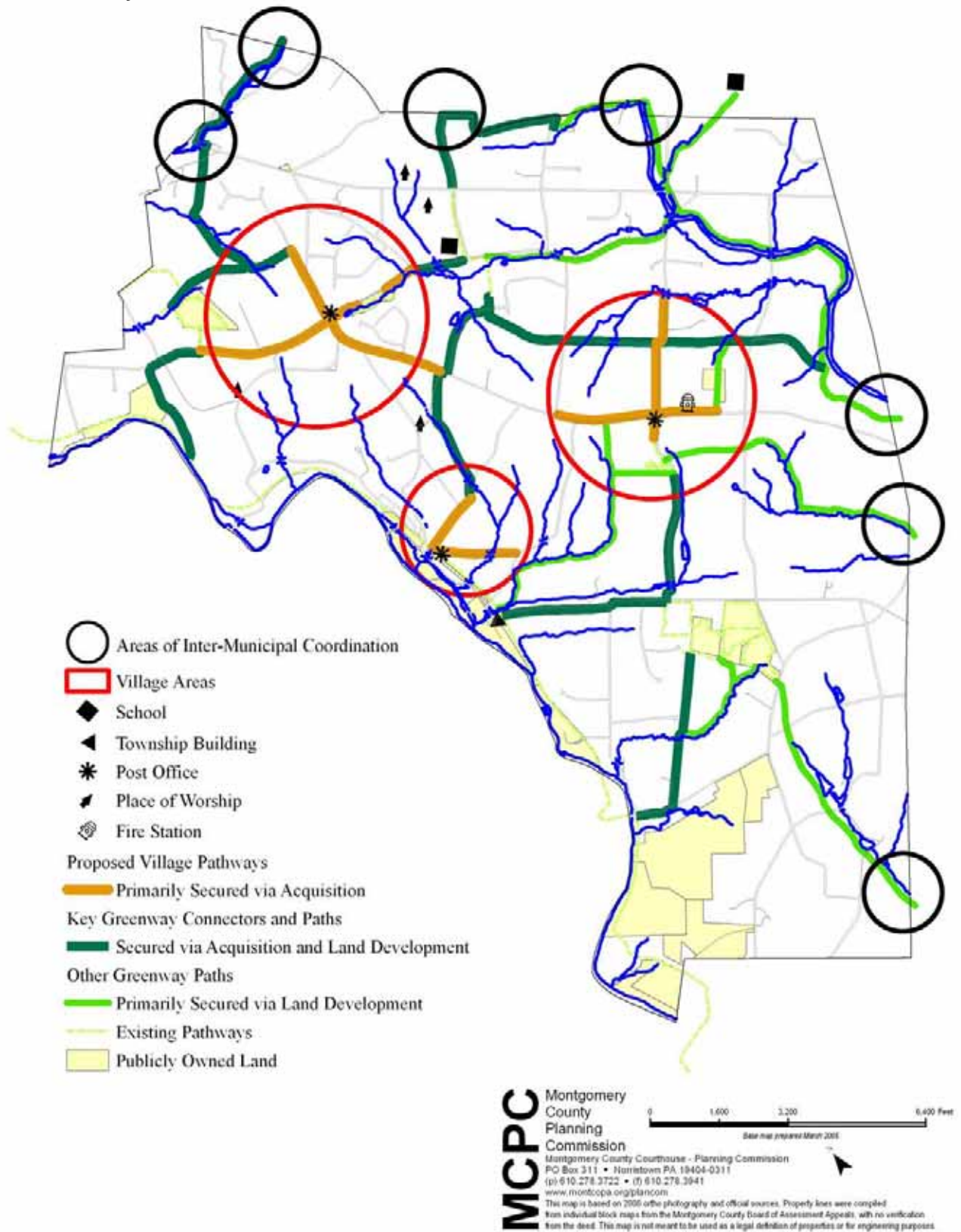
- Upper Salford Township Park has expansion opportunities to the south. Not only will this provide additional lands for active recreation and resource protection, but it will create a larger block of open space by connecting the Township Park with township and county land holdings around Spring Mountain.
- Orchard Park is within the Unami / Ridge Valley Creek watershed and is adjacent to several large parcels of resource-rich lands. Expansion of this park will also provide trail connection opportunities and the preservation of land within the boundaries of Woxall Village.

- The Farringer Property has been underused and could serve as the basis of a larger township park. Concentrations of resource lands to the north of property are not only key for future pathway connections, but can provide for passive and active recreation opportunities within the Village of Salfordville.
- In order to maintain the township's park land supply at the current level of service, the township should require new developments to dedicate park land for greenway preservation and recreation purposes. The land dedication requirement should also include a fee-in-lieu of option, allowing funds to be combined with other monies and earmarked for the provision of more significant greenway and recreation opportunities in the most appropriate areas.

PATHWAY CREATION AND DEVELOPMENT

Chapter 8 summarized the findings of a survey that assessed the open space and recreation preferences of township residents. The survey results clearly demonstrated that the establishment of a network of pathways for bicycling, hiking and walking, and natural areas interpretation is a top priority of township residents. Serving the needs of residents from both a recreation and resource protection perspective, a pathway network essentially becomes an extensive linear park. Given the recreation preferences established by the resident survey, this type of linear park serves the township's park land needs as well as any more traditional core-type park. In order to establish the configuration of this linear-type park, the pathway analysis within Chapter 7 focused on the relationship between pathways and greenways, existing parks and trails, and significant destination points. Chapter 7 also provided a detailed description of a proposed community connections network, defining the types of connections, including its role within the network, and the primary method of establishment. In taking the network proposed in Chapter 7 and developing prioritized recommendations, the pathways were categorized based upon the need for acquisition. The first category includes all the village pathways and will require, in almost all cases, the township to be proactive in the acquisition process. The second category includes all the pathway connectors and several key greenway paths. These paths are vital enough to warrant ac-

Figure 50
Proposed Community Connections Network



quisition where necessary to complete a connection and should be secured via the land development process whenever possible. The final category is comprised of greenway paths that can be primarily secured via the land development process. Figure 50 on page 100 highlights the proposed community connections network established in Chapter 7, factoring in the primary method of establishment.

- Village Pathways serve as the spine of the township pathway system and should be secured and constructed first. The Pathways within the Village of Salford are particularly important given the direct connection to the Perkiomen Trail.

Given the developed nature of the villages, implementation of the Village Pathway system will be the primary responsibility of the township. There are, however, several developable properties within the extent of the proposed village pathway system where the path can be constructed through the development process. Funding for the development of the village pathway system is available through several grant programs, including greenway funding offered by the Pennsylvania Department of Conservation and Natural Resources (DCNR) and transportation funding administered through the Delaware Valley Regional Planning Commission. Since the Village Pathway system serves as the foundation or heart of the pathway network, the township will be able to develop a very competitive grant application.

- The Greenway Connectors generally cross ridgelines between greenways and form important connections between the proposed Village Pathways and Greenway Paths. Therefore, none of the proposed Greenway Connectors are currently in place. The establishment of key Greenway Connectors and Paths will occur through both acquisition and the land development process. The time it takes to secure these connections will be dependant upon the ability of the township to create the Village Pathway system and secure greenway paths via land development. In general, the township should secure these connections via the land development process whenever possible. However, when

these connections will serve to complete a path or traverse already developed lands it will be necessary for the township to pursue direct acquisition of the connection.

- Development of the Greenway Path will take place primarily through the land development process. Many of the proposed Greenway paths cross undeveloped and underdeveloped properties that may be proposed for development over the next twenty years. While the exact location of the greenway paths will be dependant on site-specific conditions, such as steep slopes and wetlands, and the subdivision layout, construction of the path should occur in conjunction with development. Even if the greenway path will not immediately connect to another path, it easier to implement a path system prior to the establishment of residences rather than after the fact. However, there may be opportunities or missing segments that will precipitate the need for the township to take action in order for the pathway system to be completed.

Figure 50 also denotes areas of pathway development that will require inter-municipal coordination. These are proposed pathways that extend into other municipalities, namely Marlborough, Salford, Franconia, and Lower Salford Townships. While detailed coordination will need to take place at the time of trail implementation regarding alignment and crossings, Upper Salford Township has already had discussions with each of the municipalities in order to get concurrence regarding the conceptual location of the pathways. In fact, all five municipalities, including Upper Salford, were assisted in their pathway planning by Montgomery County Planning Commission and coordinated in the development of the regional network. To implement these discussions and coordination, the Open Space Plans of all five communities reflect these same pathway connections.

When selecting the location of the various pathway types the following design consideration should be referenced:

- The path should be separated from traffic as much as possible and minimizing at-grade road crossings.
- The path should be as continuous as possible and not require users to travel on local streets to get from one link to another.

- The path should extend to a destination point. Avoid extensive use of perimeter trails only.
- When part of a subdivision or land development, the paths should be constructed as part of the improvements and in place prior to the construction of individual homes.
- The path should avoid crossing significant streams, whenever possible.
- The path should connect with as many housing developments as possible.
- Road crossings should be done at signalized intersections, where possible, or at intersections controlled by a stop sign. Signage indicating to turning traffic the presence of the path. Any road crossing in the middle of a block should be clearly marked with good sight distances and may need controlled by a warning light or stop sign.
- The path should avoid grades over 5%. Steeper grades may be acceptable for short distances.
- The path should not parallel existing roads for extended periods where the path will be crossed by numerous driveways and/or road crossings.
- For safety, the path should be visible from roads, homes, and businesses.
- The path should be set back from existing homes in order to protect the privacy of the residents.

EXPANSION OF RECREATIONAL OPPORTUNITIES

While the survey results summarized in Chapter 8 recognized the establishment of a network of pathways in the form of a linear park as a top recreational priority, the following additional needs were also identified:

- **Enhance Roadway Safety:** While the establishment of a linear park system will meet many of the demands for hiking, walking, and biking, many residents currently utilize township roadways for these activities. In order to complement the off-road pathway network, roadway safety, including shoulder improvement and stripping, should be improved on the town-

ship's higher classification roads. It may be necessary to coordinate with State and County agencies when ownership dictates.

- **Picnic Areas and Pavilions:** The township has attempted to provide numerous picnic areas and pavilions as part of its recreation strategy. Given the desire for more, the township should identify opportunities for expanding existing picnic areas and establishing new picnic areas within the township park system. In addition, any new township parks should reserve areas for picnicking and pavilions where appropriate.
- **Ice Skating Areas:** A top-five response for Planning Areas C and D, this facility was the number 6 priority overall. While no township park has a pond that could meet this need, consideration could be given to developing an outdoor skating area within Upper Salford Township Park. Design and construction parameters (permanent or temporary) should be researched, including the most appropriate location within the park's setting.
- **Environmental Education Center:** While the township does not currently own any buildings that could serve as an Environmental Education Center, it could be used in the prioritization of future township acquisitions. In particular, acquisitions within the Spring Mountain or Unami Creek Valley areas would provide significant environmental education opportunities. Furthermore, coordination and cooperation with the Perkiomen Watershed Conservancy, which currently operates a successful environmental education program, may benefit the township from an operation and management perspective.
- **Pool:** The provision of a pool did not score in the top-five for any planning area. However, it was the last facility-type to have an overall score above three on a scale of five and did score in the top-five for families with children. Beyond the initial construction costs, pools have extensive operation and maintenance expenses. A special study on this issue, assessing the actual demand and funding issues, would have to be conducted prior to any action by the township.
- The following facilities scored below three on the facility needs survey (from lowest to high-

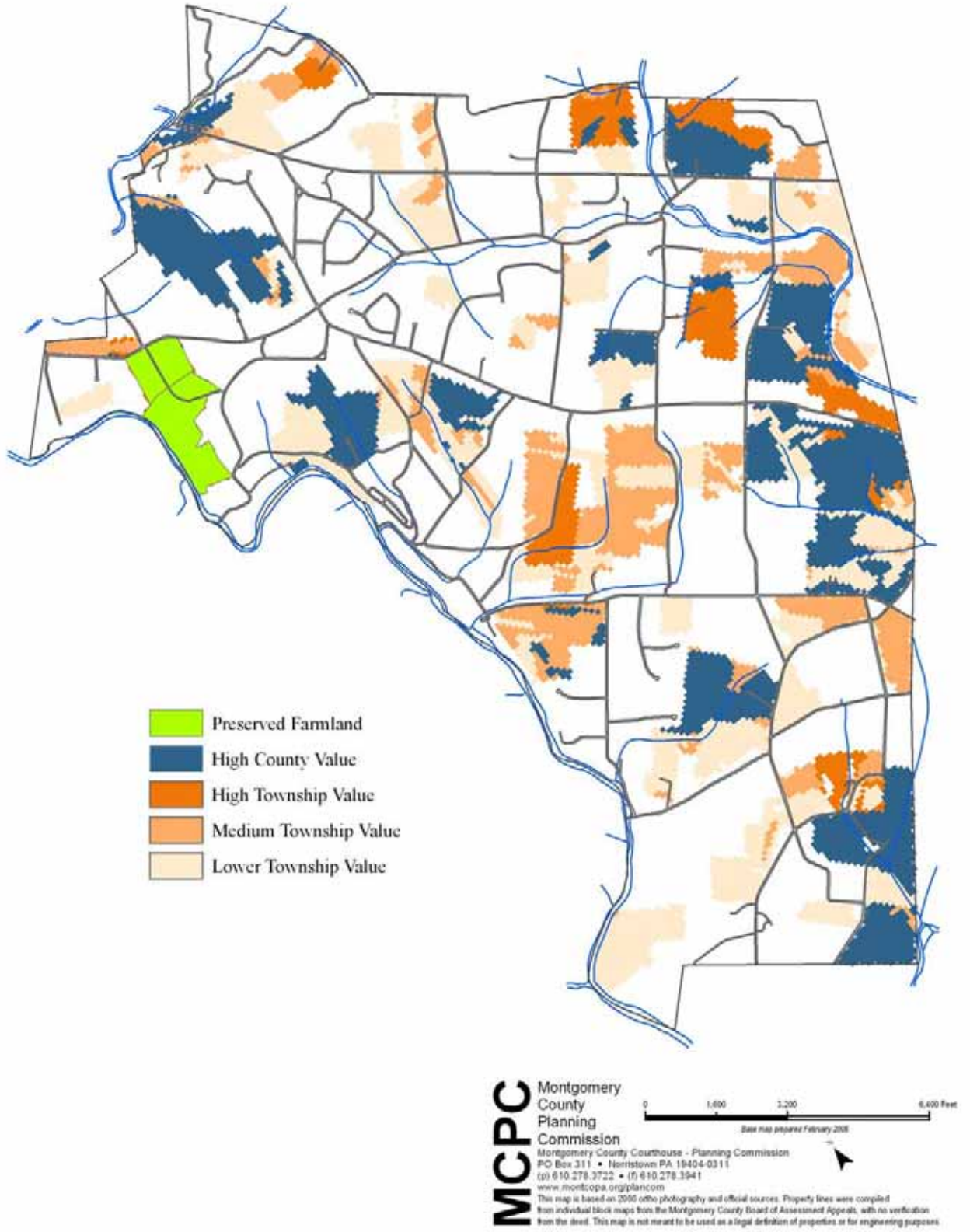
est): frisbee golf (2.21), in-line hockey courts, baseball fields, skateboard park, volleyball courts, softball fields, basketball courts, handicapped facilities, indoor recreation center, soccer fields, playground apparatus, and outdoor amphitheater (2.98).

AGRICULTURAL PRESERVATION

Map 51 on page 101 highlights the value of land for farmland preservation by both the township and the county. It is important to note that many of the lands identified as important farmland are also important resource lands. The method of preservation, however, will vary based upon ownership goals and land management. Preservation for resource value only can be done via land use controls or acquisition if it serves multiple purposes. Land preserved for agricultural purpose should remain in farming and most often will remain in private ownership. The benefit of the township preserving farmland through the purchase of development rights versus preservation by the county is that the township does not need to follow the more stringent guidelines of the State Agricultural Preservation Program. The following are the townships recommendations for farmland preservation:

- The lands that have a high value for county preservation are eligible for county preservation since they are in the Township Agricultural Security Area (ASA). In order to spread the township resources as far as possible, county and state money should be used to preserve these properties for farming.
- The township should focus its resources on lands that have a high value for township preservation. These lands are not within an ASA but have other significant benefits for farming and rural character.
- In both cases the township should work with the county and/or land preservation organizations to ensure land owners understand the opportunities for land preservation.

Figure 51
Relative Value of Farmland County and Township Overlay



CHAPTER 12

EVALUATION OF COUNTY AND ABUTTING MUNICIPAL PLANS

The preceding chapters investigate the resources, needs, and opportunities that exist within Upper Siford Township. With this information, recommendations can be made to effectively serve township residents. However, the land use decisions that Upper Salford Township makes affect the larger region just as decisions made in neighboring municipalities affect Upper Salford. This chapter compares the recommendations of this plan with those in the County comprehensive plan and the comprehensive and open space, plans of abutting townships. The intent is to prevent conflicts between plans and to encourage collaborative efforts. By gaining an understanding of how Upper Salford Township's plan will fit into the larger open space and pathway linkage picture, partners can optimize both the quantity and quality of future open space preservation and management.

COMPARISON TO MONTGOMERY COUNTY COMPREHENSIVE PLAN

In 2001, Montgomery County began updating its Comprehensive Plan. This plan will help guide the growth of housing, transportation, economic development, and natural and cultural resource management, through 2025 and beyond. Each of these factors could potentially bear great significance on open space needs and opportunities in Upper Salford Township.

The foundation of the Comprehensive Plan is the Vision Plan. In addition to specific goals and actions across a variety of planning issues, the Vision Plan outlines five basic issues to be dealt with:

- Directing new development to logical places
- Effectively manage traffic congestion
- Preserving open space and farmland
- Revitalizing main streets and brownfields
- Offering a variety of housing, job, shopping, and recreational choices

Upper Salford's Open Space Plan addresses all of these issues by setting a future course for wise land use, increasing linkages and accessibility, clustering and diversifying new development, and preserving open space.

The draft version of the 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 plan, adding strength to the recommendations set forth in the table below.

In terms of land use, the County Comprehensive Plan complements the Indian Valley Regional Comprehensive Plan, designating Upper Salford as rural area and open space. In fact, Upper Salford is the sole municipality within the County to be comprised of only these two land uses.

MONTGOMERY COUNTY TRAIL SYSTEM

The Montgomery County Trail Plan was adopted in 1996 as part of the County's Open Space Plan and is being updated in the Comprehensive Plan element dealing with Open Space, Natural Features, and Cultural Resources. Prior to adoption of the plan a trail along the Schuylkill River, known as the Valley Forge Bikeway, had been completed between Philadelphia and Valley Forge National Historic Park. However since development of the Trail Plan numerous projects have been completed and initiated. These updates and changes will be reflected in the Comprehensive Plan update.

The only county trail that directly involves Upper Salford Township is the Perkiomen Trail. In fact, the section of the Perkiomen Trail within Upper Salford Township was opened in 2002. The entire trail, traveling between Green Lane Park and Lower Perkiomen Valley Park and connecting to the Valley Forge Bikeway, was completed in 2003. Other proposed trails that may provide opportunities for Upper Salford Township include the Sunrise Trail, traveling along the Swamp Creek through Lower Frederick, Upper Frederick, Limerick, and New Hanover Townships, and the Evans-

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, & 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

- Protect Water Quality

burg Trail, which will loop through Evansburg State Park and the Lower Salford Trail system and connect to the Perkiomen Trail at both ends.

MONTGOMERY COUNTY BICYCLE MOBILITY PLAN

The Montgomery County Bike Mobility Plan was adopted in 1998 and will be updated as part of the Transportation element of the new Comprehensive Plan. The purpose of the plan is to increase bicycling as a valid and safe alternative to automobile transportation. The plan recommends roles and responsibilities, for both public and private sectors, to provide bicycle-supportive facilities and programs, including necessary road improvements. Specifically, the plan identifies roads in the county that should be improved to accommodate bicyclists. These roads are divided into two categories: primary routes and secondary routes. The purpose of the two categories is to match the road difficulty with the skill level of bicyclists. Some roads have high traffic volumes at high rates of speed while others have lower traffic volumes at lower speeds. While experienced bicyclists may be comfortable with all types of streets, the less experienced riders may only be comfortable on local, low-volume streets.

To take into account both the nature of the street and the experience level of bicyclists the FHWA, in its 1994 publication *Selecting Roadway Design Treatments to Accommodate Bicycles*, divided bicyclists into three classes:

- Group A (Advanced) Bicyclists – These are experienced riders who can operate under most traffic conditions. They comprise the majority for the current users of collector and arterial streets. Advanced bicyclists are best served by sufficient operating space on the roadway or shoulder to reduce the need for either the bicyclist or the motor vehicle to change position when passing.
- Group B (Basic) Bicyclists – These are casual or new adult and teenage riders who are less confident of their ability to operate in traffic without special provisions for bicycles. Basic bicyclists are best served by bike paths and other facilities that provide a well-defined separation of bicycles and motor vehicles on arterial and collector streets.
- Group C (Child) Bicyclists – These are preteen riders whose roadway use is initially monitored by parents. As their riding skills develop, child bicyclists are accorded independent access to the system. Like Group B bicyclists, children are best served by bike paths and other facilities that provide a well-defined separation of bicycles and motor vehicles on arterial and collector streets.

Based on practical and professional judgment, the FHWA guidelines prescribe four basic types of road improvements (shared lanes, wide curb lanes, shoulders, and bike lanes) to accommodate the three classes of bicyclists on public roads.

In Upper Salford Township, Sumneytown Pike (Rt. 63) is the only road designated as a Primary Bicycle Route. Old Skippack Road, Broad Street, Perkiomenville Road, Barndt Road, Ridge Road, Schwenksville Road, and Spring Mount Road are designated as Secondary Bicycle Routes.

Finally, as part of PADOT's process for repaving and restriping roads, municipalities and counties are contacted for their review comments. One aspect of this review is the accommodation of bicycles. When feasible, PADOT will restripe a road so that bicycles have more room on the edge of the road. Montgomery County reviews all proposed repavings and restripings and notifies a bicycle committee at PADOT of any change it feels should be made to accommodate bicycles.

RELATION TO PLANS OF ABUTTING MUNICIPALITIES

Six townships abut Upper Salford. The principles from the current zoning map, open space policies, and other pertinent information of each township 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 Upper Salford keep abreast of the continually evolving planning efforts of its neighbors and the county.

Three Upper Salford's neighbors, Franconia, Lower Salford, and Salford Townships are also partners with the township in the Indian Valley Regional Comprehensive Plan. 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.

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 Upper Salford 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 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 paralleling Upper Salford Township. These pathways are proposed along Indian Creek, East Branch Perkiomen Creek, south of Indian Creek Road, and West Branch Skippack Creek. Therefore, Lower Salford has not proposed any direct connections with Upper Salford Township. However, the plan does note that while no connection is currently proposed, a connection could be made along the East Branch Perkiomen Creek if a trail does develop along the creek in Upper Salford Township. Finally, the County Comprehensive Plan identifies Old Skippack Road as an important scenic road. Upper Salford should work cooperatively with Lower Salford to ensure the scenic value of this corridor is preserved between the Villages of Lederach, Salfordville and Woxall.

FRANCONIA TOWNSHIP

Franconia Township adopted an Open Space Plan in 1995 that recognized one regional trail, the Liberty Bell Trail, and six local trails. Of the six local trails, the only one that directly relates to Upper Salford Township is the East Branch trail. This trail was first recommended in the township's 1991 Open Space Plan and would pursue a protected streambank right-of-way along the East Branch

Perkiomen Creek. While the segment of the East Branch Perkiomen Creek between East Branch Park and Branchwood Park would be the first priority, the ultimate plan is to bring the trail down to the Upper Salford border at Cressman Road. Finally the land use in the adjacent portions of Franconia will remain similar Upper Salford, designated as a Rural Resource Area in the Indian Valley Plan.

SALFORD TOWNSHIP

Much like Franconia Township, Salford Township identifies the East Branch as a potential trail link to Upper Salford Township. Given Salford Township's joint ownership of Branchwood Park with Franconia Township, it is likely that any trail along the East Branch would be coordinated between the two municipalities. The township's Open Space Plan also identified Ridge Valley Creek, which converges with the Unami Creek at the corner of Salford, Marlborough, and Upper Salford Townships, and Ridge Road as a potential trail links. While the geology, steep slopes and woodlands along the Ridge Valley Creek, may be difficult for the creek valley to serve as more than a greenway, both these linkages are complemented by the recommendations of this plan.

MARLBOROUGH TOWNSHIP

The Marlborough Township 1995 Open Space Plan included 15 recommendations for open space linkages within the township and connecting to adjacent municipalities. Only one of these recommendations directly involves Upper Salford Township. Linkage number ten, identified on the township's Potential Linkages Map, depicts a connection to Upper Salford Township where the Unami and Ridge Valley Creeks converge near Sumneytown Pike. Based upon potential linkages identified in Marlborough Township's Open Space Plan, this could be an important connection for Upper Salford. A connection to the Unami Creek will provide access along the full length of the Unami Creek through Marlborough Township as well as the Boy Scout Camps and preserved open space within this corridor. It will also provide an opportunity for an additional connection to Green Lane Park and the Macoby Creek corridor, providing access further north into the Upper Perkiomen Valley.

As part of the Upper Perkiomen Regional Planning Commission, the land in Marlborough adjacent to

Upper Salford is designated Environmental Residential and Retail/Office/Residential around the village of Sumneytown and will remain at a similar density as that zoned for Upper Salford.

LOWER FREDERICK TOWNSHIP

Clearly, the Perkiomen Creek serves as a considerable barrier to creating connections between Upper Salford and Lower Frederick Townships. In fact, the Lower Frederick Open Space Plan (1994) identifies only two possible connections with Upper Salford Township. The first involves the Perkiomen Trail as it crosses over the Perkiomen Creek in the vicinity of Spring Mount and Clemmer's Mill Roads. This existing connection will provide a significant connection between the two municipalities. The second is the AT&T telephone cable that crosses into Upper Salford Township near Quarry and Salford Station Roads. However, the Lower Frederick Open Space Plan recognizes that this utility corridor has limited potential as an open space linkage since the easement varies in width and does not connect with any permanently protected land except Sunrise Mill.

PERKIOMEN TOWNSHIP

A portion of Perkiomen Township abuts Upper Salford between the township border to the south and is bounded by the East Branch Perkiomen Creek and the Perkiomen Creek main stem. A significant portion of the area is county-owned land, primarily part of the 142-acre Pennypacker Mills Historic Site. The township's 1994 Open Space Plan did not make any significant recommendations for this part of the township except for making Trail connections along the East Branch Perkiomen Creek.

SCHWENKSVILLE BOROUGH

Schwenksville Borough adopted its Open Space Plan jointly with Upper Salford in 1996. Together the two communities purchased the Spring Mountain Hose site. While there are no formal plans to develop the site, Schwenksville Borough's 2005 Open Space Plan recommends the creation of a loop trail from the Spring Mountain House Site to Spring Mountain and the Perkiomen Trail.

UPPER FREDERICK TOWNSHIP

Upper Frederick and Upper Salford share a very small boundary across the Perkiomen Creek. Given the extensive steep slopes and necessary stream

crossing, this boundary is not adequate for a trail connection. Connection to the Perkiomen Trail via Marlborough Township will serve as the primary link between the two townships. However, both plans show the Perkiomen Creek corridor as an important resource for preservation. Upper Salford's riparian corridor protection ordinance will protect the creek corridor as will the county's significant holdings along the creek in this area.

RELATION TO OTHER PLANS

INDIAN VALLEY REGIONAL COMPREHENSIVE PLAN

The Indian Valley Regional Comprehensive Plan designates Upper Salford Township for rural resource protection. This land use designation is complemented by similar rural resource designations for all of the surrounding communities, except for Schwenksville Borough and the adjacent Spring Mount area in Lower Frederick Township. This similar designation will enhance opportunities to preserve significant blocks of open space and greenway corridors throughout the Perkiomen Creek watershed, including the East Branch Perkiomen and the Unami/Ridge Valley Creeks.

UPPER PERKIOMEN WATERSHED CONSERVATION PLAN

Watershed Conservation Plans as funded by the Pennsylvania Department of Conservation and Natural Resources empower local conservation groups to identify "significant natural, recreational, and cultural resources." The plan for the Upper Perkiomen Region, completed in 2001 is applicable to the Unami/Ridge Valley watershed in Upper Salford. One of the most important principles in this plan highlights the role of municipalities to be active in watershed and natural resource planning.

LOWER PERKIOMEN WATERSHED CONSERVATION PLAN

Expected completion in 2005, this plan, funded by DCNR applies to the East Branch watershed in the township. 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 all of Upper Salford Township generally south of Salford Station Road. 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, Upper Salford Township Park, and Camp Rainbow. The plan also reflects the county's trail recommendations for the Perkiomen Creek and East Branch Perkiomen Creek (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.

CHAPTER 13

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 Upper Salford toward achieving its goals.

In the near term, implementation will principally involve securing funds from Upper Salford's allocation under the County Open Space Program. It also means taking other, non-acquisition actions for natural resource preservation, pathway planning and development, and active recreation. This will generally occur in the first phase of the Green Fields/Green Towns Program ending in Spring 2008. Long term actions will build upon these earlier efforts, and will be implemented in the following five to ten years.

FUNDING SOURCES

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

Upper Salford 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 for conservation organizations. The following section contains a description of possible grant sources.

MONTGOMERY COUNTY OPEN SPACE GRANTS (MCOS)

In 2003, a referendum to fund open space and green infrastructure projects was passed in Montgomery County. Known 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.

Upper Salford is eligible to receive a total of \$693,853 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 Upper Salford 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.

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 goal of 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 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 "non-traditional" 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 community-set 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 AND BOND ISSUE

Upper Salford 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 after being advised by the administration.

DONATIONS

Upper Salford 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. Upper Salford could organize special days during which local citizens and groups could gather to participate in implementing open space projects.

IMPLEMENTATION MATRIX

Figure 52 lists the township's primary actions for plan implementation. The actions to be implemented are categorized based upon the type of action to be taken. This matrix specifies the goal and objective each action addresses as described in Chapter Two, basic implementation timing, the responsible party, and the potential sources of funding. The higher priority "short-term" implementation actions should be acted on, if not achieved, by 2008. The remaining actions should be pursued in the succeeding five to ten years, with some of the actions ongoing over the life of the plan. Other plan recommendations not specifically listed are generally considered long-term priorities, but may be elevated in priority based upon the presentation of specific opportunities.

Figure 52
Implementation Matrix

Category	Action	Target Goal	Timing	Responsible Party	Potential Funding Sources
LAND USE					
	Revise zoning to implement Indian Valley Regional Comprehensive Plan.	2A, 3A, 3C, 9A	Short-term	Planning Commission, Supervisors	
	Revise Subdivision and Land Development Ordinance to require the installation of pathways and pathway connections.	4A, 4B, 5A, 5B, 5C	Short-term	Planning Commission, Supervisors	
	Revise Subdivision and Land Development Ordinance to require the provision of recreational opportunities (or fee-in-lieu) for new residents.	1B, 4A, 4B, 5A,	Short-term	Planning Commission, Supervisors	
	Delineate significant vistas and viewsheds for protection using conservation zoning techniques.	2B, 7A,, 7B, 7C, 7D	Short-term	Planning Commission, Supervisors	
	Develop an integrated resource protection plan in conjunction with the DRBC to protect local groundwater supplies.	2C, 3C, 9C	Long-term	Planning Commission, Supervisors	DRBC, DEP
	Work with the Indian Valley Regional Planning Commission in the development of a TDR program, will emphasis on industrial development.	2A, 3A, 9A, 9B, 9D	Long-term	Planning Commission, Supervisors	
NATURAL RESOURCE					
	Expand resource protection around Spring Mountain, creating an interconnected block of permanent open space and implementing the Spring Mountain Conservation Plan.	2D, 3B, 3C	Short-term, Ongoing	Supervisors	MCOS, DCNR
	Preserve significant resource lands remaining within the Villages.	1A, 4A, 5A, 5B	Short-term	Supervisors	MCOS, DCNR
	Preserve key lands within the Unami/Ridge Valley Creek watershed and along the East Branch Perkiomen Creek greenway.	2D, 3B, 3C	Short-term, Ongoing	Planning Commission, Supervisors	
	Work with the Philadelphia Folk Song Society to ensure continued preservation of the Old Pool Farm.	2B, 2D, 4A	Long-term,	Supervisors	MCOS, DCNR
	Work with other members of the Indian Valley to preserve the East Branch Perkiomen Creek corridor and establish a permanent Greenway.	2D, 3B, 3C, 3D, 5A, 9D	Long-term	Supervisors	MCOS, DCNR
	Protect key stream valleys and natural resources across the township's central ridge between Old Skippack Pike and Salford Station Road.	2B, 2C, 3B, 3D	Long-term	Supervisors	MCOS, DCNR

Figure 52
Implementation Matrix (cont)

Category	Action	Target Goal	Timing	Responsible Party	Potential Funding Sources
AGRICULTURE					
	Encourage eligible higher value farms to apply to the County Agricultural Preservation Program.	2D, 6B	Short-term Ongoing	Supervisors, Land Trust MCFP	MCFP
	Preserve significant farmland not eligible for preservation through County Agricultural Preservation Program.	2D, 6C	Short-term Ongoing	Supervisors, Land Trust	MCOS, Land Trusts
	Educate members of the Agricultural Community regarding opportunities for land preservation and supporting the sale of agricultural products.	6A	Short-term Ongoing	Supervisors, Land Trust, MCFP	
PARK AND PATHWAY					
	Implement pathway recommendations, initially within the Villages of Salford, Woxall, and Salfordville and then connecting to Perkiomen Trail.	1A, 1B, 8A	Short-term Ongoing	Supervisors, Planning Commission	MCOS, DCNR PADOT
	Expand township park lands for the dual benefit of expanded recreation opportunities and resource protection.	1B, 2D, 5A	Short-term Ongoing	Supervisors, Park Board	MCOS
	Implement sidewalk siting criteria to ensure sidewalks are installed as part of new land developments and support the pathway network.	4A, 5A, 5B, 5D	Short-term Ongoing	Supervisors, Planning Commission	
	Expand township park lands for the purpose of protecting the township's scenic and historic resources.	1B, 2D, 7B, 8A	Short-term Ongoing	Supervisors, Park Board	MCOS
	Implement pathway recommendations to ensure a linear park (off-road) connection exists between the township's traditional park land.	3B, 4A, 5A, 5B	Long-term	Supervisors, Planning Commission	MCOS, DCNR PADOT
	Cooperate with surrounding municipalities to complete pathway interconnections and realize the regional pathway network.	3B, 4A, 5C, 9D	Long-term	Supervisors, Park Board	MCOS PADOT

Figure 52
Implementation Matrix (cont)

Category	Action	Target Goal	Timing	Responsible Party	Potential Funding Sources
RECREATION					
	Enhance roadway safety via future roadway improvements.	4C, 5A, 5B, 5C	Ongoing Long-term	Supervisors, Planning Commission	PADOT
	Expand opportunities for picnicking and pavilion use within township parks.	4D	Ongoing Long-term	Supervisors, Park Board	
	Consider the establishment of an environmental education center as part of future acquisition projects.	3C, 4D, 8A	Ongoing Long-term	Supervisors, Park Board	
	Investigate the provision of an ice skating facility and pool for township residents.	4D	Long-term	Supervisors, Park Board	

APPENDIX A

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.

Founded: 1967

Phone: (610) 388-2700

Email: emc@brandywine.org

www.brandywineconservancy.org

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: 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 dedicated to preserving our natural and historic heritage. Founded in 1958, it was concerned 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.

Founded: 1958

Phone: (215) 345-7020

Email: hconserv@heritageconservancy.org
www.heritageconservancy.org

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.

Founded: 1991

Phone: (610) 645-9030

Email: admin@dragonfly.org
www.lmconservancy.org

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.

Founded: 1993

Phone: (215) 513-0100

Email: dflaharty@mclt.org
www.mclt.org

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.

Founded: 1961

Phone: (610) 353-5587

Email: apitz@natlands.org
www.natlands.org

North American Land Trust *PALTA Member*

PO Box 1578
Chadds Ford, PA 19317

Counties where acquisitions completed: **Chester, Delaware, Lancaster, Montgomery**

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.

Founded: 1970

Phone: (215) 657-0830

Email: djrpennypack@cs.com

www.libertynet.org/pert

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.

Founded: 1964

Phone: (610) 287-9383

Email: pwc@perkiomenwatershed.org

www.perkiomenwatershed.org

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: 1957

Phone: (215) 646-8866

Email: wvwa@aol.com

www.wvwa.org

APPENDIX B

REGIONAL OPEN SPACE PRIORITIES REPORT

In 2004 the Greenspace Alliance of Southeast Pennsylvania, with funding from the William Penn Foundation and Pennsylvania Department of Conservation and Natural Resources (DCNR), published a Regional Open Space Priorities Report. The report was developed using a GIS-based analysis and guided by a team of expert advisors for the purpose of identifying, prioritizing, and recommending protection strategies for natural resources, agriculture, and recreational lands in southeastern Pennsylvania. Of particular importance to Upper Salford, especially as it relates to future funding opportunities, is the natural resource element of the report's analysis. This section summarizes the natural resource priorities of the region as they relate to Upper Salford Township.

NATURAL RESOURCE ANALYSIS

The natural resource component of the Regional Open Space Priorities Report was conducted via in-kind services of the Natural Lands Trust using their "Smart Conservation" model. The model was developed using a workgroup process that involved a broad range of scientists and conservationists. The workgroups focused upon three primary components, including habitat potential, aquatic resources and terrestrial resources. For each component, multiple data layers were combined to yield a relative ranking across the region.

The habitat component combined habitat layers for mammals, fish, herps, and birds. The aquatic component integrated wetlands, hydric soils, floodplains, forested water quality, riparian buffer quality and headwaters protection. Lastly, the terrestrial components considered interior forest habitat, natural vegetation habitat

blocks, steep slopes and orphan agricultural soils. For each data layer specific values ranging from 0 to 10, with 10 being the highest, were assigned by the workgroup experts.

The data layers of each component were then added together and the scores normalized back to a 0-to-10 quantile classification system. The quantile classification system identifies what lands scored in the top ten percent (90th percentile) for the region. The regional results for the three primary components (habitat, aquatic and terrestrial) as they relate to Upper Salford are shown in figures 53 through 55. Finally, the values for the three primary components were combined and normalized to establish regional natural resource priorities. The regional priorities within Upper Salford are shown in Figure 56. While not surprising to those who know the area, Upper Salford ranks astoundingly high for natural resource lands within southeast Pennsylvania. Approximately two-thirds of the township is ranked in the top twenty percent of all resource lands within the region. This places the township in a unique position to compete with any municipality in the region for natural resource protection grants from the William Penn Foundation and DCNR.

RELATIONSHIP TO UPPER SALFORD'S RESOURCE PRIORITIES

Chapter 4 of this Plan analyzed the township's natural resources using locally determined priorities. Part of that analysis established the relative importance of resource lands for the township's open and vacant lands. In order to provide a comparison between the township's resource values and the regional priorities, the regional priorities were highlighted as they relate to the township's open and vacant lands (see Figure 57).

When the two maps are compared there is a high correlation between the townships high value resource lands and the regional priorities. The areas of high convergence include the following areas:

SPRING MOUNTAIN AREA

Much of the land around the mountain, particularly to the west along the Perkiomen Creek, to the

north of Spring Mount Road, and along the tributary to the East Branch Perkiomen, received the highest relative ranking both locally and regionally. Preserving a significant portion of these lands will help to establish a significant block of unique and important open space in both Upper Salford and the region

EAST BRANCH PERKIOMEN CREEK

Land north of Old Skippack Road along the East Branch Perkiomen Creek also exhibits correlation between local and regional priorities. This land will be a valuable part of the east Branch greenway.

OLD POOL FARM

Ranking slightly higher overall from a regional perspective, land south of Salford Station Road, known as the Old Pool Farm and home the Philadelphia Folk Festival, is significant from both a natural resource and cultural resource perspective.

UNAMI / RIDGE VALLEY CREEK

Having the highest concentration of regionally important lands (90th Percentile), land north and south of Sumneytown Pike along the Ridge Valley Creek was also identified as high value at the township level. The township's Orchard Park serves as a foothold in this area for continued natural resource protection.

SALFORDVILLE VILLAGE

Land north and south of Old Skippack Road around the Village of Salfordville, particularly between Salford Street and Wolford Road.

SALFORD VILLAGE AREA

Lands east and west of Church Road and Old Church Road, particularly the stand of woodlands west of Church Road, rank high locally and are in the 90th Percentile regionally.

SCHWENKSVILLE/SHELLY ROAD

Land south of Old Skippack Pike and east of Schwenksville/Shelly Road near the Lower Salford Township border.

Figure 53
Terrestrial Resources

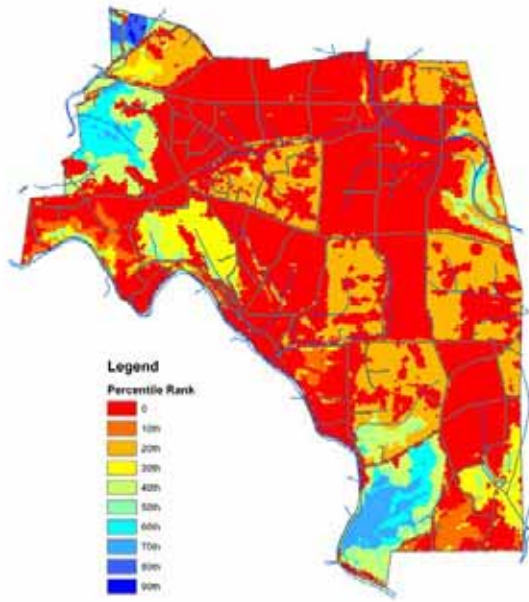


Figure 55
Aquatic Resources

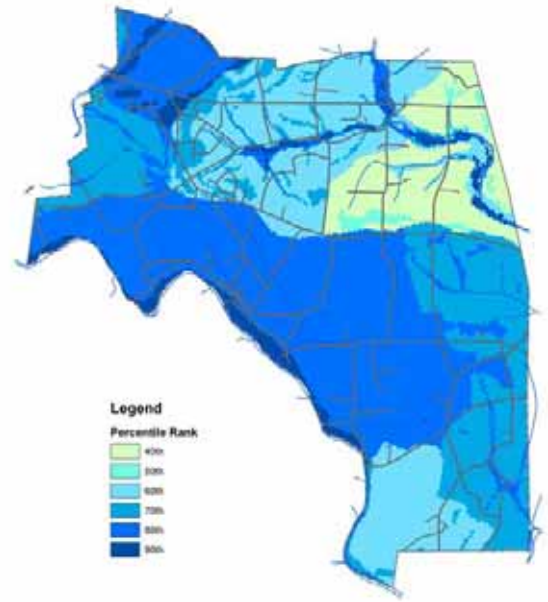


Figure 54
Vertebrate Habitat

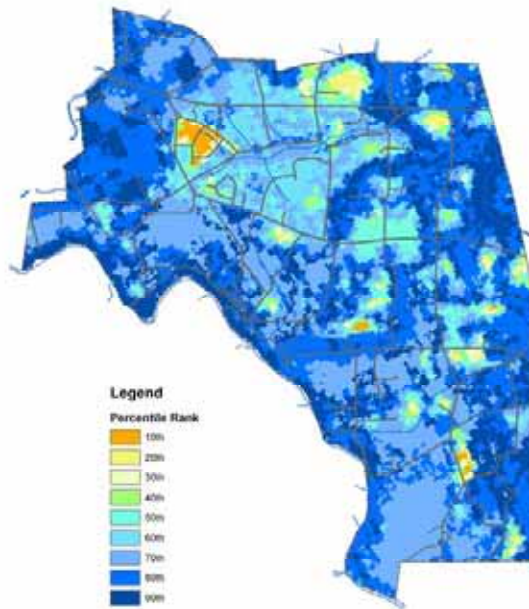


Figure 56
Regional Natural Resource Priorities

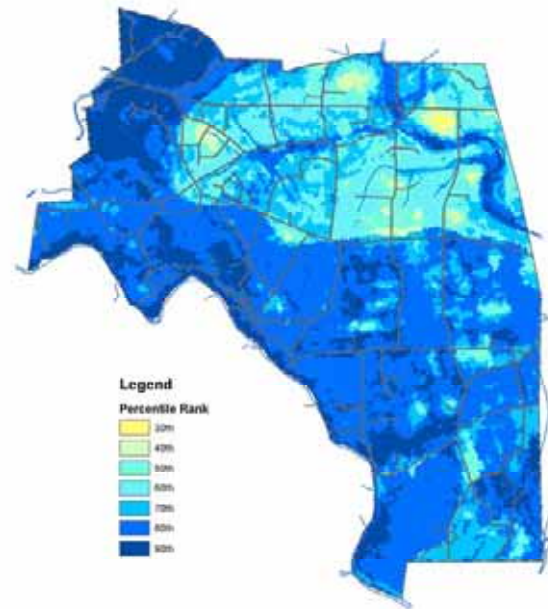
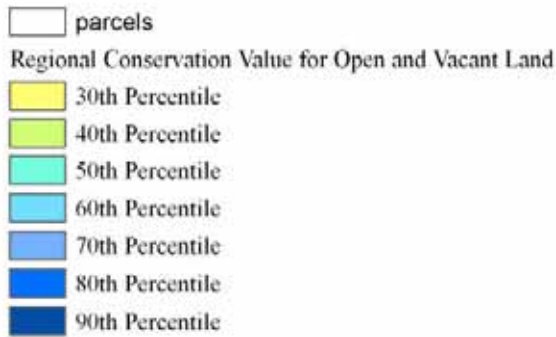
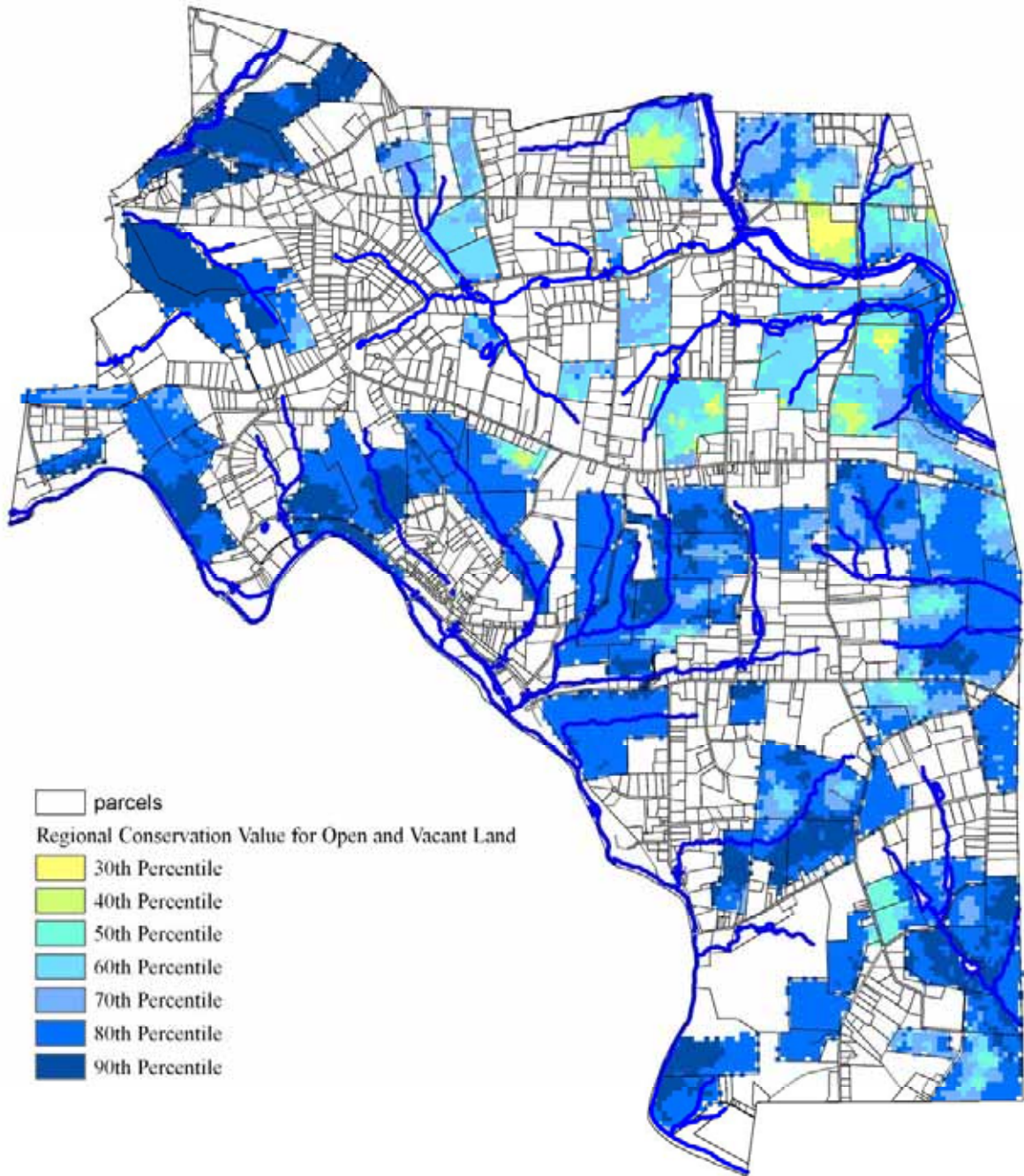


Figure 57
*Regional Percentile Rank for
 Open and Vacant Lands*



MCPC Montgomery
 County
 Planning
 Commission
 Montgomery County Courthouse - Planning Commission
 PO Box 311 • Norristown PA 19404-0311
 (p) 610.278.3722 • (f) 610.278.3941
 www.montcopa.org/plancom

0 1,600 3,200 6,400 Feet
 March 2005

This map is based on 2000 ortho photography and official sources. Property lines were compiled from individual block maps from the Montgomery County Board of Assessment Appeals, with no verification from the deed. This map is not meant to be used as a legal definition of properties or for engineering purposes.

APPENDIX C

POTENTIAL BUILD OUT SCENARIO

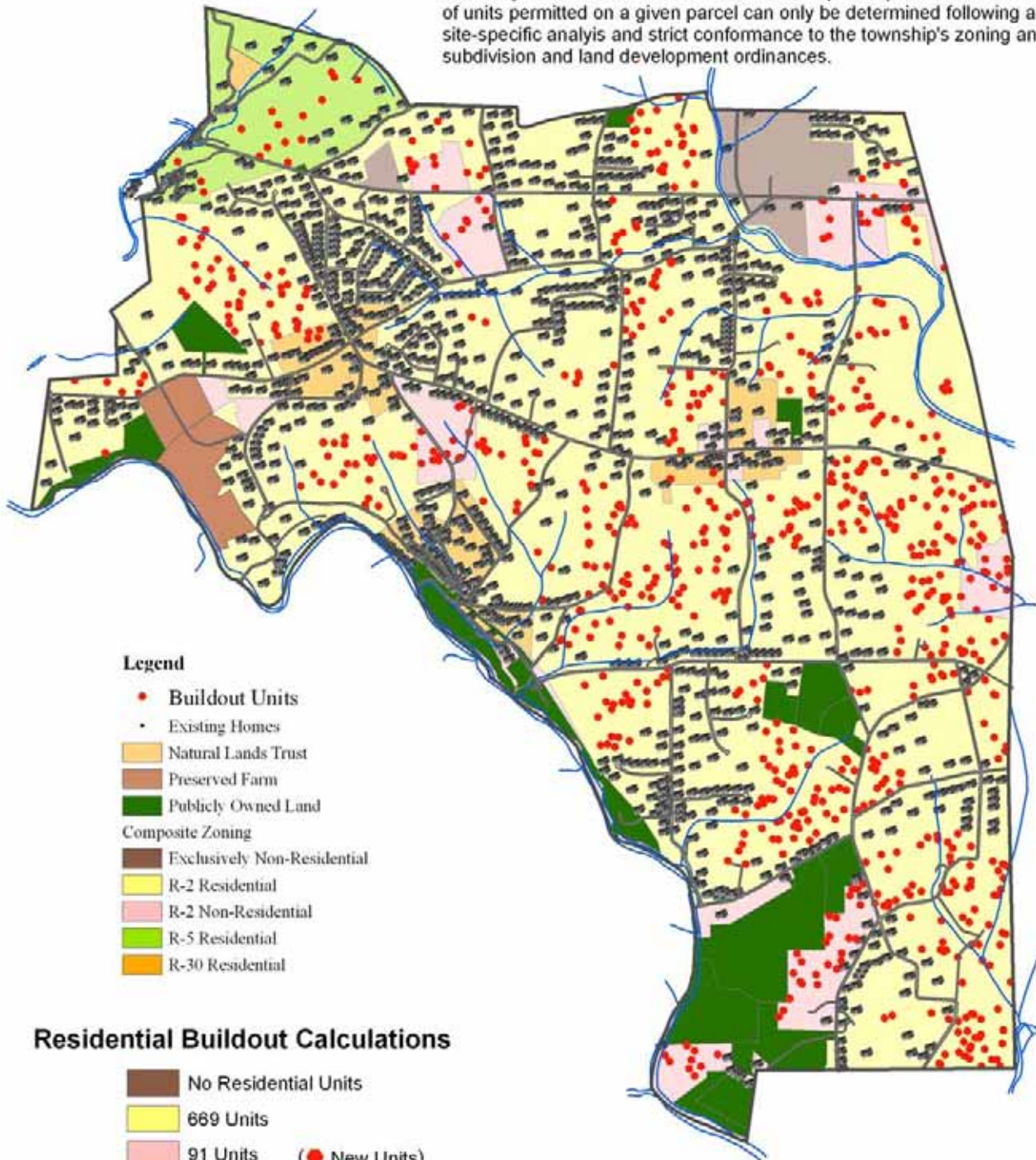
In developing the guidelines for the current open space program, the Montgomery County Open Space Task Force felt that it was particularly important for municipalities to carefully examine the impact of current zoning on future development. As such, a requirement was placed in the plan guidelines for 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 A displays both the existing residences in Upper Salford 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, it is unlikely as property owners or site conditions will not allow for full build out of each parcel. It does not serve as a representation of what current zoning would yield, either for a specific parcel or a designated time period. For instance, based on the average number of new homes built per year from 2000 to 2004, this scenario would take over 65 years to occur.

Instead, Figure A only presents an approximated estimate of the number of potential new units across the township, generalized by zoning district. Furthermore, this estimate assumes the highest possible density permitted by the applicable zoning district. In the case of Upper Salford, this density could only be achieved when units are clustered and sixty percent of the parcel is preserved as open space. This was not reflected in the depiction of buildout due to the difficulty in distributing the units on a parcel by parcel basis. When con-

Figure A
Upper Salford Township Potential Build

NOTE: The residential buildout calculations are the result of a simplified analysis based upon vacant land and zoning. The potential new units are randomly distributed and have no relation to specific parcels. The number of units permitted on a given parcel can only be determined following a site-specific analysis and strict conformance to the township's zoning and subdivision and land development ordinances.



- Legend**
- Buildout Units
 - Existing Homes
 - Natural Lands Trust
 - Preserved Farm
 - Publicly Owned Land
 - Composite Zoning**
 - Exclusively Non-Residential
 - R-2 Residential
 - R-2 Non-Residential
 - R-5 Residential
 - R-30 Residential

Residential Buildout Calculations

- No Residential Units
- 669 Units
- 91 Units (● New Units)
- 16 Units
- 6 Units
- 1,116 Existing Units

Total Residential Buildout 1,898 Units

MCPC Montgomery County Planning Commission
 Montgomery County Courthouse - Planning Commission
 PO Box 311 • Norristown PA 19404-0311
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 www.montcopa.org/plancom



This map is based on 2000 aerial photography and official sources. Property lines were compiled from individual block maps from the Montgomery County Board of Assessment Appeals, with no verification from the deed. This map is not meant to be used as a legal definition of properties or for engineering purposes.

conservation subdivision design is not utilized, lot sizes are required to be a minimum of four acres. This would effectively reduce the potential new units in the R-2 and R-2 Non-residential zoning districts by about half. Therefore actual buildout, either clustered at the density shown and preserving sixty percent open space or at a one dwelling per four-acre density, will involve significantly more open space than depicted. However, as unlikely as this scenario is, it does underscore the importance of conservation subdivision design and the need for the township to ensure the sixty percent open space will provide the resource protection and open space amenities they desire. Further, this depiction of build out highlights the need to preserve and protect land through various open space acquisition techniques.

Figure A 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, floodplains) from undeveloped acreage
5. 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 minimum lot size to determine number of potential new units per district.
7. Points representing dwelling units were randomly placed within the developable acreage to symbolize potential future build out across a zoning district.

The result of this process was an increase of over 780 dwelling units within the township at a built out state. This is in addition to the 1,116 units depicted by existing development.

