



2005



Open Space and Environmental Resource Protection Plan

*Pathways to Connect Us
Yesterday and Today with Tomorrow*



Upper Dublin Township
Montgomery County, Pennsylvania

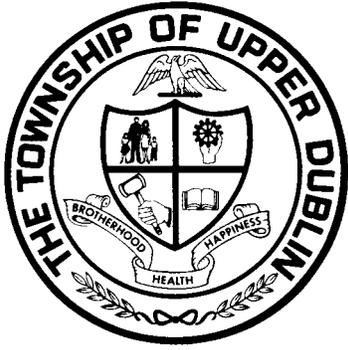


Upper Dublin Township

**Open Space and Environmental
Resource Protection Plan - 2005**

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**Funding for this project provided by the
Montgomery County Planning Commission's
Green Fields / Green Towns Open Space Program
and the Upper Dublin Township Board of Commissioners'
Upper Dublin Township Open Space Fund**



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Resolution No. 1901

A resolution by the Upper Dublin Township Board of Commissioners adopting the *Open Space and Environmental Resource Protection Plan (2005)* as approved by the Montgomery County Open Space Board, Resolution per #2006-4 dated January 10, 2006.

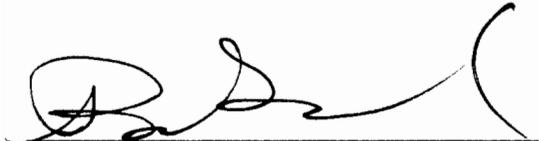
WHEREAS, the Upper Dublin Township Board of Commissioners desires to provide a solid framework and recommendations for short-term and long-range plans and strategies for acquisition, development and maintenance of open space and environmental resources within the community and with neighboring communities; and

WHEREAS, through the efforts of a Citizen's Advisory Committee (CAC), Township staff and professional planners, the *Open Space and Environmental Resource Protection Plan (2005)* has been developed in accordance with guidelines established for the Montgomery County Green Fields / Green Towns Program providing grant funds for open space preservation; and

WHEREAS, the draft and final plans of this planning document have been presented publicly and been available for public review and comment;

NOW, THEREFORE, BE IT RESOLVED that the Upper Dublin Township Board of Commissioners hereby adopts the final draft of the *Open Space and Environmental Resource Protection Plan (2005)*.

Signed this 17th day of April A.D. 2006.



Paul A. Leonard
Upper Dublin Township
Manager / Secretary



Robert J. Pesavento, President
Upper Dublin Township
Board of Commissioners

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Regional Setting

Located in eastern Montgomery County, Upper Dublin Township occupies the suburban inner ring of Philadelphia - an area that had its early settlement in the 1800s. Scattered nodes of settlement known as Fort Washington, Jarretstown, Maple Glen and Dresher grew tremendously following World War II, through the 1950s to the present. Upper Dublin is in a similar class of development history as nearby communities, including Upper Moreland, Abington and Springfield Townships. Today, the Township is over 90% built-out with a population of 25,878 (2000 U.S. Census Bureau). Upper Dublin has an area of 13 square miles, or approximately 8,340 acres. **Figure 1** (see back of plan) shows Upper Dublin Township in its regional setting.

Upper Dublin owes much of its growth to its location: the intersection of State Route 309 (S.R. 309) and the Pennsylvania Turnpike (I-76/276 exits #339, Fort Washington and #340, Virginia Drive). Route 309 is a limited access expressway from Philadelphia, through Upper Dublin, and into the Spring House area of Lower Gwynedd Township. It continues as an arterial through Montgomeryville, Quakertown (Bucks County) and Allentown (Lehigh County). In addition to the PA Turnpike, Route 309 has three intersections in Upper Dublin Township at Butler Pike, Highland Avenue and Susquehanna Road. The expressway portion interchanges with the PA Turnpike at Fort Washington. Within the last three years, a limited access slip ramp for exit and entrance for westbound travel was completed on the north side of the Turnpike providing a second interchange with the Turnpike in Upper Dublin. The interchange occurs at Virginia Drive, a local road within the Fort Washington Office Park.

The SEPTA Regional (R5) Rail Line also provides regional access to Upper Dublin. SEPTA's R5 trains travel through Upper Dublin on their route between Philadelphia, Lansdale and Doylestown, with many intermediate stops including four stations located along the borders of the Township - Fort Washington, Oreland, North Hills and Ambler. Service is predominantly passenger. Bus service operated by SEPTA serves portions of the Township with key connections at the regional rail stations and employment nodes such as the Fort Washington Office Park and Dresher.

In addition to the regional access noted above, Upper Dublin is well served by a local road network. Motorists enter the Township by these roads through "gateways" that impart a sense of place to the community. Among them are Maple Glen (north), Ambler Borough (west), and Oreland and North Hills (south). Commercial uses in these areas are supplemented by business and retail uses in other sections of the Township, among which are Dresher and Jarretstown.

The Fort Washington Office Park, Ambler Borough and Temple University Ambler are three recognized places that help give identity to Upper Dublin Township. The Office Park is one of

the first office parks in suburban Philadelphia, developed about the same time as the King of Prussia Industrial Park (mid-1950s). It has evolved into a combined light industrial and office center with a variety of uses that have become part of a mixed-use pattern, including the Fort Washington Expo Center, satellite facilities for Temple University and Gwynedd Mercy College, DeVry University and LA Fitness. Employment in the Office Park is estimated at 14,000 (2004), the vast majority of workers coming from outside of the Township. These people add to the richness of community, support commercial uses and make use of Township facilities and services, including parks and open spaces. The success of the Office Park is affected by its age and flooding in certain sections, such as by the Fort Washington Turnpike Interchange. Bridge and culvert improvements where the SEPTA line crosses the Sandy Run have relieved some of the flooding that limits access and egress during heavy storm events, but flooding remains a problem and of regional concern.

Ambler is a former industrial (home of Keasbey & Mattison Company) and suburban railroad town. Based on the 2000 U.S. Census, Ambler's population of 6,426 is down approximately 343 people since estimates of the early 1990s. In the last five years, Ambler has had a notable economic upswing and major reinvestment in the commercial center. This includes creation of a "Main Street" program and manager and the introduction of new restaurants, small specialty shops, retail stores, refurbished visual and performing arts theaters and additional housing.

Temple University Ambler has been part of the community since its establishment here as the Pennsylvania School of Horticulture for Women in 1911. The campus (187 acres) is a significant area of land that includes institutional facilities and a high proportion of open space. Temple Ambler is one of many educational and religious institutions in the community that adds diversity and land stewardship of relatively large pieces of land.

Municipal services have increased and been upgraded with growth. Public sewer and water serve nearly all of Upper Dublin Township. The Township sold its sewage collection system to the Bucks County Water & Sewer Authority who continues to operate and maintain it. Aqua Pennsylvania (formerly Philadelphia Suburban Water Company), Ambler Water Authority or North Wales Water Authority supply water to Township residents and businesses. Trash and recyclable materials are collected and disposed of by Upper Dublin Township. The Township hosts and contributes to a new regional recycling center/transfer station that was established in 2003. The Township operates a leaf composting facility. A Township force of 40 officers provides police protection. The trained volunteers of the Fort Washington Fire Company provide fire protection, with two stations located within the Township (Summit Avenue and Burn Brae).

Natural features include the Wissahickon Creek and trail, which are managed by the Wissahickon Valley Watershed Association. This trail is part of the "Green Ribbon Trail" network that extends from Lansdale to Fairmount Park in Philadelphia. Upper Dublin is located within the Wissahickon watershed. The Wissahickon Creek flows through many communities on route to its confluence with the Schuylkill River. Tributaries to the Wissahickon Creek in Upper Dublin include the Sandy Run, Tannery Run, Pine Run, Rose Valley Creek, Honey Run and Rapp Run.

Development has consumed many of the natural areas of Upper Dublin. Remaining open lands are found at the Temple University Ambler campus, three golf courses (two private and one public) and within the extensive public park and open space system. With approximately 538 acres, Upper Dublin is among the top of the 62 townships and boroughs in Montgomery County in municipal open space. Townships with more are: Lower Salford (701.82 acres), Horsham (640.34 acres), Montgomery (606.63 acres) and Lower Merion (588.66 acres). These figures are based on the draft Montgomery County Open Space Plan, *Open Space, Natural Features, and Cultural Resources Plan, Shaping Our Future* (September 2004). Upper Dublin's inventory of open space and parkland totals 538.14 acres in 38 sites including 2 athletic complexes, 1 golf course, 1 community park, 22 natural resource areas, 7 neighborhood parks, 3 recreation nodes and 5 special use areas. These are described further in **Chapter 3**.

Existing Land Use Patterns

A vast majority of the 13 square miles of Upper Dublin Township has already been committed to the following uses: residential (50.5%); commercial, office and industrial (8.9%); and other uses such as institutions, public and private open spaces, agriculture, etc. (40.6%). See **Table 1** below for the 15 categories of land use as of October 2003. Note that it is not possible to compare the information presented here and in the 1994 Open Space Plan because of different sources. What is evident is that the basic pattern of use generally remains the same and the Township is largely developed. Land use is also demonstrated in **Figure 2** (see back of plan).

Table 1: Zoning/Land Use in Upper Dublin	Acres	Acres	% (rounded)
Single Family – attached	97.94		1%
Single Family – detached	3911.07		47%
Country Residence	133.98		2%
Multi-family	25.26		0%
Twin/Duplex	45.29		1%
Subtotal Residential (50.5%)		4,213.54	50%
Mixed Use	64.16		1%
Retail	81.86		1%
Office	341.85		4%
Industrial	251.21		3%
Subtotal Commercial/Office/Industrial (8.9%)		739.08	9%
Institutional	742.82		9%
Public Open Spaces	713.61		9%
Private Open Spaces	920.11		11%
Undeveloped (Vacant)	285.79		3%
Agriculture	186.81		2%
Other (r-o-w, water, utilities)	538.24		6%
Subtotal Other (40.6%)		3,387.38	41%
Total	8,340		100%
<i>Source: Montgomery County Board of Assessment, October 2003</i>			

As evident from **Table 1** and in **Figure 2**, the primary land use in the Township is residential constituting approximately 50% of the total land area of the Township (8,340 acres). Within this use category, the majority is single-family detached units (47% of total land and 93% of the residential use categories). The other residential categories represent a very small proportion of the total residential use in Upper Dublin. The next largest categories are public and private open spaces, which combined represent 20% of the total land area. In descending order, the next largest uses are institutional (9%), office/industrial (7%), vacant land/agriculture (5%) and retail and mixed use (1%). The “Other” category (6%) in the table includes road rights-of-way, water, utilities and some parcels for which no data was available from the County Board of Assessment.

As with the previous Open Space Plan (1994), there is little remaining unused Township land and even less than in 1994. Considering the vacant land and agricultural land categories, the remaining available land for use or open space is approximately 473 acres or 5.7% of the Township’s land resource.

Demographics

Tables 2 through 10 document some characteristics of Upper Dublin’s population and its change since 1990. Information presented in the Tables was obtained from the 1990 and 2000 Censuses and the Montgomery County Planning Commission. Some general observations:

- Upper Dublin Township grew 7.7% between 1990 and 2000, from 24,028 to 25,878 persons. This decade’s increase of 1,850 persons was the 16th highest of all 62 municipalities in Montgomery County. This increase continues the trend found between 1980 and 1990 when there was a 10.4% growth rate. The Township’s level of growth is slowing as the forecast for the year 2025 is 27,370 persons, an increase of only 3.9%.

			Projections					% Change
1990	2000	% change	2005	2010	2015	2020	2025	2005 to 2025
24,028	25,878	7.7%	26,340	26,730	27,010	27,150	27,370	3.9%

This forecast is based on the expectation that fewer new dwelling units will be built as residentially zoned land approaches build-out. A rezoning of some non-residential land to residential or an increase in permitted density would be needed to counter this trend. In addition, a decline in average household size acts against population growth (see **Table 8**).

- Population density (2000) is 1,960 persons per square mile, ranking Upper Dublin 29th among Montgomery County’s 62 municipalities. Neighboring Abington and Springfield Townships, in a similar density range, are ranked 19th and 24th, respectively.

- In 2000, the largest age groups were persons 45 to 64 (28.5% of the total population) and 25 to 44 (25.4% of the total population). Interestingly, the groups with the highest rates of growth since 1990 were senior citizens 65 and older (31.9% increase) and children between 5 and 17 years old (28% increase). There is a dramatic drop in the percentage of young adults as a percentage of the total population. Between 1990 and 2000 the percentage of 18 to 24 year olds dropped 42.4% and the percentage of 25 to 44 year olds dropped by 11.8%. These trends show the Township's population is aging and highlights the need to plan appropriately for open space facilities for all age groups.

Table 3: Age Structure	1990	1990 % of Total	2000	2000 % of Total	% Change 1990 to 2000
0 to 4	1,537	6.4%	1,558	6.0%	1.4%
5 to 17	4,325	18.0%	5,538	21.4%	28.0%
18 to 24	2,214	9.2%	1,276	4.9%	-42.4%
25 to 44	7,460	31.0%	6,580	25.4%	-11.8%
45 to 64	5,808	24.2%	7,387	28.5%	27.2%
65 and older	2,684	11.1%	3,539	13.7%	31.9%
Total Population	24,028	100%	25,878	100%	7.7%

Table 4: Educational Level¹	1990		2000		% Change	
% High School Graduate or Higher	14,757	92.2%	16,229	92.8%		10.0%
% Bachelor's Degree or Higher	7,733	48.3%	10,083	57.6%		30.4%

¹ Population 25 years and over

Table 5: Income Levels	1989²	1999	% Change
Per Capita Income	\$36,145	\$37,994	5.1%
Median Household Income	\$82,713	\$80,093	-3.2%
Median Family Income	\$92,184	\$91,418	-0.8%

² For comparison purposes 1989 income figures are adjusted for inflation

Table 6: Special Needs Groups*	1990	2000	2000 % of Total	% Change 1990 to 2000
Persons 16 – 64 with Work Disabilities	735			
Self Care Limitations	284			
Mobility Limitations	112			
Mobility and Self Care Limitations	79			
65 years of age and over	2,684	3,539	13.7%	31.9%
Under 18 years of Age	5,862	7,096	27.4%	21.1%
Persons Below Poverty Level	785	779	3.0%	-0.8%
Total Special Needs Population	10,541			

* A direct comparison of all this data cannot occur due to changes in the Census definitions for persons with disabilities

- Non-white residents: The total number and percentage of non-white residents in Upper Dublin has been growing. In the 2000 Census there were 3,241 non-white residents, 12.5% of the 2000 population. This figure may not be directly comparable to earlier Census data because the 2000 Census allowed a respondent to select a “two or more races” category and these respondents were categorized as “non-white” residents. In any case, as a general comparison, in 1990 there were 2,201 Black, American Indian and Asian residents, 9.2% of the 1990 population. By comparison, in 1980 there were 1,392 Black, American Indian and Asian residents, only 6.2% of the 1980 population.

Housing Information

Between 1990 and 2000, Upper Dublin’s housing stock increased from 8,403 to 9,344 dwelling units, an 11.2% increase. The bulk of all housing units in the Township (74.2%) is comprised of single detached homes built on minimum lot sizes of 26,000 sq. ft. Although single attached units (town homes and twins) accounted for only 14.7% of all units in 2000, they increased by almost one third, from 1,056 to 1,378 units. Accommodating more attached units in the future would probably entail rezoning as virtually all vacant residentially zoned land is for single detached homes.

- Households increased at a rate one and a half times that of the population between 1990 and 2000. The population increase of 7.7% is referenced in **Table 1** above. Total households grew from 8,206 to 9,174, an 11.8% increase. This is reflective of smaller average household sizes due to a larger single population, changing family dynamics and fewer children per family. In fact, the Township has one of the largest concentrations of married couples without children in the county, which may reflect newly married couples and older “empty nesters”.

Table 7: Housing Types	1990	1990 % of Total	2000	2000 % of Total	% Change 1990 to 2000
Single Family Detached	6,454	77.1%	6,937	74.2%	7.5%
Single Family Attached	1,056	12.6%	1,378	14.7%	30.5%
Multi Family (2 or more units)	857	10.2%	1,022	10.5%	19.3%
Mobile Home/Trailers	0	0%	7	0.1%	-
Other	36	0.4%	-	-	-
Total Housing Units	8,403	100%	9,344	100%	11.2%

- Upper Dublin’s average household size (2.78 persons per household) is relatively high for Montgomery County, ranking 11th. (The county’s average household size in 2000 was 2.54; the national average was 2.59.) However, this size decreased along with all municipalities during this period. The Township’s 1990 figure was 2.86 persons per household and the 1980 figure was 3.24 persons per household.

Table 8: Households	1990	2000	% Change 1990 – 2000
Persons in Group Quarters	536	366	-31.7%
Total Number of Households	8,206	9,174	11.8%
Average People per Household	2.86	2.78	-2.8%

Employment Information

Regional employment forecasts show the Township’s job base increasing by 16.7% between 2000 and 2025, from 21,000 to 24,500 jobs. Currently there are approximately 14,000 jobs located in the Fort Washington Office Park and this concentration is expected to continue in the future.

Most Township residents are categorized as having “White Collar” occupations, employed as professional or technical workers (35.9%), followed by managers and administrators (21.8%), salespeople (14.8%) and Clerical/Office workers (12.1%).

Table 9: Employment Estimate	Forecast					
	2000	2005	2010	2015	2020	2025
Total number of jobs in Township	21,000	21,600	22,400	23,100	23,800	24,500

Table 10: Labor Force by Occupation³	1990	1990 % of Total	2000	2000 % of Total	% Change 1990 to 2000
White Collar	10,662	82.4%	10,790	84.6%	38.1%
Blue Collar	859	6.6%	1,045	8.2%	24.7%
Other	1,418	11.0%	929	7.3%	-5.3%
Total Labor Force	12,939	100%	12,764	100%	-1.4%

³ Persons 16 years and over

Demographic Summary

Upper Dublin’s population was 25,878 in the year 2000, a 7.7% increase above the 1990 Census figure of 24,028. The Township’s growth between 1980 and 1990 was even more substantial – a 10.4% increase (1,850 people) from 22,348 to 24,028. This trend is expected to level out as the Montgomery County projections for 2025 estimate a total population of 27,370, a growth rate of just under 4%.

While the Township’s population is stabilizing, it is also aging. The largest age group is the 45-to-64 year olds while the age group with the highest rate of growth since 1990 is “Senior Citizens, 65-and-older” (31.9%). Contributing to this shift toward an aging population, the percentage of people 18-to-24 years old dropped 42.4% from 2,214 in 1990 to 1,276 in 2000.

The total number of housing units continues to increase (8,206 in 1990 and 9,174 in 2000.) However, the average household size continues to decrease (2.86 in 1990 and 2.78 in 2000.)

In reviewing the demographic data as a whole and based on observations of the community, Upper Dublin Township demonstrates the newest cultural acronym: “GRAMPIes” (Growing, Retired, Affluent, Mobile Population.)

Existing Municipal Plans

The foundation of this plan is the Township's adopted Open Space And Environmental Resource Protection Plan (1994), commonly referred to as the "Open Space Plan (1994)." Other plans used as resources include:

Comprehensive Parks and Recreation Plan, Vision for the 21st Century (1998)

This plan follows-up on the 1994 Open Space Plan with specific recommendations in the areas of Management and Operations, Programs and Services, Facilities and Financing.

Robbins Park for Environmental Studies Masterplan (1995)

Prepared by Habitat by Design, this land management plan meets the criteria established for the PA Bureau of Forestry's "Forest Stewardship Plans." It inventories existing conditions; provides recommendations for preservation, protection and restoration of native flora and fauna; addresses natural habitat improvements; outlines steps to restore Creepy Pond for aquatic diversity; and, suggests ways to improve environmental education areas and programs.

Year 2010 Plan, Fort Washington Office Park (1998)

This report describes development trends in the Office Park and proposes a number of new land uses. The plan includes a description of the Cross-County Trail that is currently in engineering – a pedestrian and bicycle trail that will run through the Office Park and continue to Upper Moreland Township. The plan also proposes additional open space to supplement the Camphill & Highland Field – a project that has since been accomplished.

Mondauk Common Land Management Plan (2000)

This plan, fashioned for the township's 50-acre "flagship park" located in the center of the Township, contains recommendations to sustain and enhance this treasured resource. It provides alternatives and initial priorities to guide changes over time.

Veterans Memorial Park (2000)

Veterans Memorial Park is a "neighborhood park" located on Highland Avenue at Farm Lane in the southwestern portion of Upper Dublin. The plan provides recommendations and priorities to improve the 5.2-acre park over the next 10 years.

Maple Glen Action Plan (2000)

The Maple Glen Plan recommends zoning changes (implemented in 2004) to shape this commercial/residential area to more of a “village” scale of development. This plan will assist the township in identifying connectors to existing parks and open space in the Maple Glen area, as well as potential new areas for preservation.

Aidenn Lair Park Land Management Plan (2002)

Aidenn Lair Park is a “neighborhood park” located off Dreshertown Road in the eastern portion of Upper Dublin. The plan provides recommendations and priorities to improve the 10.2-acre park over the next 10 years.

Long Range Plan for the Upper Dublin Public Library (2004)

One of the objectives in this recently issued plan is to “consider longer term needs for library service to Upper Dublin.” It recommends the establishment of a Building Committee to explore ways in the next five to 10 years “to expand or build a new library to meet community growth and future needs.”

Fort Washington Rescape (1990’s)

The Rescape Committee was established in the Fort Washington neighborhoods to make streetscape improvements, especially to Bethlehem Pike and Pennsylvania Avenue. Their efforts have resulted in new sidewalks, classic-style streetlamps, and a large clock at the entrance to the Fort Washington Office Park. The newly reconstructed Bethlehem Pike bridge over the SEPTA rail line includes these features, thanks to the influence of Rescape.

Zoning Overlay Districts in Dresher and Jarrettown (2005)

These zoning districts provide a wider variety of land uses while requiring improved pedestrian access, thus contributing to better connections to Township parks.

Montgomery County Trail Plan and Open Space Plan (currently in draft)

As part of their Comprehensive Plan, Montgomery County is updating its’ Open Space Plan with a vision that by 2025 the County will have interconnected open space and greenways and preserved natural, historic and agricultural resources. The Trail Plan includes the Cross-County Trail, which will connect Upper Dublin to the established Schuylkill River Trail in Conshohocken. The Township will seek to develop more local connections to the County trail network.

Sandy Run Creek Watershed Conservation Plan (2004)

The Sandy Run Coalition is working with the County, the Wissahickon Valley Watershed Association and four municipalities (including Upper Dublin) to establish a greenway of “preserved lands and appropriate trails between the creek’s headwaters in Abington Township and its confluence with the Wissahickon near Fort Washington State Park” (excerpt from the County Open Space Plan). Upper Dublin recognizes the need to preserve this greenway due to its propensity to flood during major storms.

Wissahickon Valley Watershed Association Plans

The WVWA has a long history of conservation and stewardship of the Wissahickon Creek. Plans recommend continued preservation and trail access to the creek through Upper Dublin and adjacent townships.

U-DIRECT Feasibility Study (2004)

With the support of the Board of Commissioners, a task force of community leaders worked with a consulting team to study the community’s need for indoor recreation facilities. An analysis of needs and the results of a community survey led to a recommendation to construct a facility that includes a running/exercise track, various fitness areas and a leisure pool/aquatics center. The plan provides construction and operating cost projections. A follow-up 9,300 household survey conducted by U-DIRECT ended with 87% of respondents (approx. 4,000) indicating they did not support a \$13 million expenditure for indoor recreation at this time.

Dannenberg Estate Recreation Planning Study (1998)

Land Planners with RETTEW Associates studied the Dannenberg property, a 9.6-acre estate on the east side of Fitzwatertown Road. The Sandy Run intersects the tract. The home and its surrounding grounds are privately owned, but approximately 7 acres are reserved for public use. Among others, the study recommends establishment of a walking trail along the Sandy Run, a park for passive recreation and an arboretum for the exploration of various plants.

YSM Report on Recreation Opportunities at the Prudential Site (1999)

In 1999, the land planning consulting firm of YSM evaluated the proposed office development for the Prudential site at Dreshertown and Welsh Roads. SJP Properties was granted land development approval to construct five new office buildings with an estimated 3,391 employees, but their plans included no recreation facilities while proposing the elimination of seven private recreation fields and courts. YSM recommended the replacement of these facilities with similar ones; a reconfiguration of the parking area to provide open space for recreation; and trail linkages to the proposed Cross County and Powerline Trails. Only one of the five office buildings has been built as of this report.

1. Upper Dublin Township's open space system will be a **model for responsible land management policies**, utilizing Township Codes and demonstrating **best management practices** in order to **preserve and protect** the most sensitive and desirable resources. Upper Dublin Township will:
 - a. *implement land maintenance and management policies, facilities and program activities in a manner to ensure the protection of environmentally sensitive areas, scenic, and heritage features,*
 - b. *manage all open space assets (parks, natural areas, trails and greenways) as an integrated system,*
 - c. *allocate sufficient resources to ensure the most efficient use of funding, personnel and facilities,*
 - d. *develop and maintain parkland guided by standards established by the National Recreation and Park Association (NRPA) and other recognized professional organizations,*
 - e. *regularly communicate, via local newspapers, seasonal newsletters and periodic e-news, cable access channels, the Township website and by links on other agencies' websites, to ensure widespread awareness and understanding of the open space system's many personal, social, recreational and environmental benefits,*
 - f. *interpret, promote and market the open space system to educate the public about the system's unique resources and to attract support from volunteer and civic organizations and public / private funding programs,*
 - g. *partner with other public agencies, non-profit and educational organizations, the business and corporate community, volunteer organizations and other individuals and groups that can provide funding, advocacy and/or stewardship assistance and with those whose open space properties, programs, or activities can enhance the effectiveness of the Township's open space system.*

2. Upper Dublin Township will **identify and permanently protect** lands and resources that support the community's identity, improve quality of life and support activities that foster a healthier public. Upper Dublin Township will:
 - a. *preserve, restore, protect, buffer, expand and connect* those recreational, natural, scenic, historical and cultural resources in the community that are of **broad public benefit**,
 - b. *encourage use of trails and greenways* by residents, employees and visitors to use as a **means of travel**, rather than getting in a car and driving to a destination.
3. The Township's open space system will **use trails and greenways** (open space connectors) to **link** parks, schools, neighborhoods and natural areas (open space nodes) into a **continuous network** of open space resources. Upper Dublin Township will:
 - a. *create, to the extent possible, links* to other municipal, county, state and regional **public** open spaces and trails as well as to **privately owned** conservation lands.
4. Upper Dublin Township will strive to **provide safe access** to at least one public neighborhood or community park to satisfy both active and passive recreation needs; as well as a neighborhood or school playground **within a half-mile of every Township residence**. Upper Dublin Township will:
 - a. *provide for a network* of trails, pathways, sidewalks and crosswalks to be installed where high-volume streets and/or traffic patterns make pedestrian access to parks and playgrounds difficult or dangerous,
 - b. *ensure* its open space system, events and activities are **accessible** to all residents and visitors, providing **reasonable accommodation** according to the individual site's physical features, mission and landscape character.

Township Parklands and Undeveloped Natural Areas

Upper Dublin Township has a vast estate of public parkland. With approximately 538 acres, the Township has among the highest amount of parkland of the 62 municipalities in Montgomery County. Most of the parkland is natural, contributing to the scenic beauty and natural resource protection so treasured by the residents. There are 38 parks, undeveloped and protected natural areas including 16 active sites with facilities ranging from playgrounds, picnic areas, walking tracks, ball fields and game courts to a golf course, environmental education center and an outdoor swimming pool.

Municipal Parks and Open Space Land

Virtually all of the Township's open space protects a variety of resources. The Township's ownership and management of its parkland helps to safeguard groundwater recharge, scenic resources, woodlands, fragile soils and many other natural attributes. Privately held lands also preserve the Township's natural resources. These lands include schools, golf courses, land trust holdings and remaining large estates with their expansive green areas.

Collectively, parkland and undeveloped natural areas contribute greatly to the physical well being of the Township. Typically, these areas mitigate the effects of heavy rain by reducing flooding and enhancing stream and groundwater quality through the natural cleansing effects of water passing through them. In the past 10 years severe flooding in Upper Dublin Township along the Sandy Run and Rapp Run Corridors caused millions of dollars in damage and focused regional attention on the Township. Arguably, flooding might have been even worse were it not for the privately owned lands located along the streams. Conversely, severe flooding might have been avoided if more open space had been protected in this watershed. The value of parkland and undeveloped natural areas as a means to mitigate flooding was dramatically illustrated.

Other positive effects of parkland and natural areas in protecting resources are often more difficult (than flood damage) to quantify, however, they contribute greatly to the quality of life that residents in Upper Dublin Township have come to expect. These other effects include increased real estate values; protection of bird and wildlife habitat; reduced soil erosion; better air quality; a healthier citizenry; and a more positive aesthetic environment.

Upper Dublin's open space and parkland is currently organized into three principal categories: Resource Protection, Passive Recreation and Active Recreation as described below.

Parkland for Resource Protection

Upper Dublin's first **Open Space and Environmental Resource Protection Plan** (1994), *aka* Open Space Plan (1994), indicated that 11.6% of the Township was recreational / open space land and another 9.5% of the land was "vacant" for a total of 21.1% of Township land classified then as "undeveloped". (For current land use patterns see **Table 1**.)

The Open Space Plan (1994) recommended that the Township purchase an additional 10 parcels totaling approximately 114 acres of parkland. Between 1994 and 2003, the Township acquired 54.2 acres of which 21.7 acres are designated for active recreation, 22.7 acres for resource protection and 9.85 acres for passive recreation. While these purchases and acquisitions added to the Township's land holdings, resource protection should continue to be enhanced and expanded by other means as well. Other protection measures include: open space easements for private property owners; the promotion of tax incentive programs such as Act 319 and Act 515 protection; participation in and promotion of regional watershed planning efforts (such as the Wissahickon Valley Watershed Study); participation in and promotion of greenway studies (such as the planned Sandy Run Greenway) and continued public education efforts towards the protection of the Township's natural resources as a means to enhance the quality of life in Upper Dublin.

Existing Township zoning and subdivision ordinances enhance the protection of environmental resources in the Township:

- *Zoning Ordinance Article V - Steep Slopes* - limits development on areas of steep slopes (areas of land having a slope greater than 10%) and thus limits soil erosion, vegetation loss and possible safety hazards.
- *Zoning Ordinance Article XI - Recreation Districts* - designates limited uses for parcels of 25 acres or more used for recreational purposes. The two private golf courses in the Township are thus zoned and the district protects those uses.
- *Zoning Ordinance Article XXII - Floodplain Conservation District* - is an overlay district of all lands within the 100-year floodplain. The district limits use to protect persons and property from flooding and water damage. Recreational use is permitted in these areas.
- *Subdivision and Land Development Ordinance Section 212-31, Natural or Historic Feature Preservation* - sets guidelines to preserve these resources during construction.
- *Subdivision and Land Development Ordinance Section 212-32, Landscaping* - is intended "to promote practical community development by retarding erosion and sedimentation and stimulating groundwater recharge, to retard glare and heat pollution and oxygen regeneration, to provide for noise abatement...to maintain the Township's natural amenities ..." The ordinance promotes retention of existing trees and minimum standards for landscaping and buffering between dissimilar land use.

- *Subdivision and Land Development Ordinance Section 110-13* provides for the dedication of open space as follows:
 1. There shall be paid to the Township as a contribution for the purchase and maintenance of open space, parks and recreation areas, a fee in the amount of fifteen hundred dollars (\$1,500) for each dwelling unit constructed by a developer comprising three or more units.
 2. For these purposes, a dwelling unit includes, but is not limited to, a single-family dwelling, townhouses, apartments, mobile homes and each half of duplexes.
 3. The contribution is made when a building permit is obtained from the Township.
 4. When, at the discretion of the Commissioners, circumstances surrounding the development of a site warrant special consideration, this contribution may be reduced or waived.

Park System Classification: A Framework for Planning

The classification of parkland provides a common, justifiable and consistent framework for systematic planning. This enables a municipality to provide for the orderly development and enhancement of a park system that meets the needs of the overall community.

In 1994, Upper Dublin Township’s open space and recreational land holdings were divided into three classifications: “active,” “passive” and “wildlife preserve.” In 1998, the Township re-categorized its lands based upon the National Recreation and Park Association’s (NRPA) **Park, Recreation, Greenways, and Open Space: Strategic Planning Guidelines and Level of Service Delivery Standards** (1995).

Using these standards enables the Township to plan the park system as part of community development as well as establish and enforce policies for use of facilities based upon clear guidelines and facility definitions. NRPA parkland classifications applicable to Upper Dublin’s open space inventory include recreation nodes, neighborhood parks, community parks, school/community parks, special use facilities and nature resource area/preserves. “Service Area” is defined as the population found within a usual and customary linear distance range that will be served by that type of facility or special use area.

Category - Recreation Nodes

- Definition:* Similar to a neighborhood park with both active and passive facilities designed for a specific purpose.
- Size:* Up to 5 acres
- Service Area:* Less than a 0.25-mile service radius in a residential neighborhood, accessible by way of interconnecting trails, sidewalks and low volume residential streets.
- Facilities:* Based upon public input, facilities can include playgrounds, scenic areas and lunchtime seating areas.

Category - Neighborhood Park

- Definition:* Basic unit of the park system in meeting the active and/or passive needs of the neighborhood. Creates a sense of place for a wide variety of ages living in the service radius.
- Size:* 5 to 10 acres *minimum*
- Service Area:* 0.25 to 0.5 mile service radius uninterrupted by non-residential roads and other physical barriers. Accessible from throughout its service radius by way of interconnecting trails, sidewalks or low volume residential streets.
- Facilities:* Neighborhood parks can be for active or passive recreation or a combination of both. Facilities can include ball fields and game courts, picnic and sitting areas, play equipment, trails and passive areas with natural features.

Category - Community Park

- Definition:* Meets the broader recreational needs of several neighborhoods. Provides for both active recreation and preservation of unique landscapes. Allows for group activities neither desirable nor feasible in neighborhood parks.
- Size:* 30 to 50 acres
- Service Area:* 0.5 to 3.0 mile service radius; served by arterial and collector roads and accessible from throughout its service area by way of interconnecting trails.
- Facilities:* Designed for both active and passive uses, facilities can include: large play structures, game courts, ball fields, ice skating, swimming pools, picnic areas, open space, unique landscape features, nature study and ornamental gardens, parking lots and lighting as appropriate.

Category - School/Community Park

- Definition:* Combines the resources of two public entities to allow for expanded recreational, educational, and social opportunities in a cost-effective manner.
- Size:* Depends upon intended use. Follows same size criteria as those for recreation nodes, neighborhood or community parks. School buildings are not considered in the acreage calculation.
- Service Area:* Based upon distribution of the schools. The location can guide how it fits into the park system classification. Service areas for the site depend upon the site's use.
- Facilities:* Development should be based upon the criteria of other park classifications. If athletic fields are developed, they should be oriented towards youth rather than adults.

Category - Athletic Complex

- Definition:* Consolidates heavily programmed athletic fields and associated facilities in fewer sites to allow for economy of scale, improved management, greater control over impacts to neighborhood and community parks such as over-use, traffic congestion, parking and domination of facilities by those outside the neighborhood.
- Size:* Depends upon intended use. Consideration should be given to acquiring 25% more land than intended for use to hedge against unforeseen circumstances.
- Service Area:* Strategically located community-wide facilities within reasonable driving times; near non-residential uses if possible.
- Facilities:* Development should be based upon the specific types of fields and courts.

Category - Special Purpose Facility

- Definition:* Parks and recreation facilities that are oriented toward a single purpose use such as historic landscapes, social sites, cultural features, indoor recreation facilities, environmental centers, sports facilities such as a golf course, or any other single purpose facility.
- Size:* Facility requirements determine the size required, e.g. a golf course or a community center needs particular acreage.
- Service Area:* Strategically located facilities versus those serving well-defined neighborhoods or areas of the community.
- Facilities:* Unique to the special purpose or program.

Category - Natural Resource Area/Preserve

- Definition:* Parks and recreation facilities that are oriented towards the preservation of significant natural features, open space and special landscapes or areas of buffering and/or visual aesthetics.
- Size:* Dependent upon quality and extent of the resources and opportunity for preservation.
- Service Area:* Areas that when preserved can enhance the livability and character of the community by preserving as much of the area's natural features as possible.
- Facilities:* Resource rather than user based, natural resource areas can provide limited passive recreational opportunities such as trails and nature study areas. They can also function as greenways.

Category - Greenways

<i>Definition:</i>	Linear trail corridors that tie park system components together to form a continuous park environment allow for safe uninterrupted pedestrian movement between the parks and around the community; and provide people with a desired outdoor recreation opportunity. Greenways encourage use to a greater extent than do natural resource areas.
<i>Size:</i>	25' minimum width in a subdivision; 50' acceptable and 200'+ desirable.
<i>Service Area:</i>	Most desirable location is in conjunction with trail system planning.
<i>Facilities:</i>	Developed for particular transportation mode, most commonly for biking, hiking and in-line skating. Greenways can also be developed for use by canoes and cars.

Table 11, Upper Dublin Parkland, presents the current distribution of Upper Dublin's parks, recreation and open space. With land acquisition and development since 1994, the Township now has 561.14 acres of parkland and undeveloped natural areas. Of this total, 301.5 acres or 54% are used for active recreation, 257.78 acres or 46% for passive recreation and natural resource protection, and 1.87 acres or 0.3% is unclassified or special use. The table excludes 100-acres of Upper Dublin School District lands that serve recreational purposes via athletic fields and playgrounds. (See page 3-11 for a discussion of issues relating to School District recreational facilities.)

As stated, Township areas for passive recreation and natural resource protection total 257.78 acres. These include 19 sites with the park classification categories of Natural Resource Area (190.75 acres), Natural Resource Area and Special Use Facilities (Dannenber Arboretum and Robbins Park)(45.1 acres) and one classified as a Natural Resource Area and Greenway (Sandy Run Park) (21.93 acres).

Township areas for active recreation total 301.5 acres. These areas include the park classification categories of Community Park (51.33 acres); Athletic Complex and/or Special Use Facility (142.51 acres); Neighborhood Park (90.08 acres); Recreation Node (11.39 acres); and Special Use Facilities and Recreation Node (6.19 acres).

Included in the active recreation total are two sites owned by agencies other than Upper Dublin Township, but leased to the Township for community recreation uses. One site is the Loch Alsh Reservoir, a 20.97-acre facility owned by Ambler Borough. This facility contains an 8.0-surface-acre lake that is a resource for the borough-owned and operated Ambler Water Company. For years, Upper Dublin Township and Ambler Borough have joined in renewable five-year leases that exchange the Township's routine maintenance of the Loch Alsh Reservoir grounds for open, public recreational use and enjoyment. The PA Fish & Boat Commission stocks and patrols "the Ressie" during fishing season. Ambler Borough maintains responsibility for the maintenance and integrity of the concrete and stone dam wall.

The second site is the 23.0-acre “Fields of Dreams” / Loch Alsh Fields site owned and maintained by the School District of Upper Dublin. A 25-year, three-party agreement between Upper Dublin Township, the School District of Upper Dublin and the PA Department of Conservation and Natural Resources (DCNR) assures availability of the multi-field complex during non-school hours for community use through December 31, 2016. The District in exchange for the Township’s negotiation with DCNR for investment of \$40,000 in state grant funding toward construction of the complex, executed the agreement signed in 1993 but backdated it to January 1, 1992.

Parkland for Passive Recreation

According to **Table 11**, nearly 46% (257.78 acres) of the recreational land under Township control is classified as passive recreation and natural resource protection. Passive recreation satisfies an increasing amount of the public's recreational needs, especially as baby-boomers age and participate in walking, jogging and bicycling - activities that have increased in popularity over the last two decades.

Many passive activities are linear in nature and need not be confined to only Township-owned lands. As suggested in the original Open Space Plan (1994), a Township-wide trail system, which includes hard and/or soft surfaces and on or off road facilities, can both link existing passive and active recreation sites and incorporate otherwise "private" lands through easements or similar agreements. This type of trail system dramatically expands passive recreational opportunities within the park and Township in general and reduces, to some degree, the need to purchase large tracts of open space.

Linking existing park sites with cultural, historic, commercial and workplace locations provides alternative transportation choices to residents when traveling from their homes to any of these destinations. This approach is supported in **Creating Transportation Choices in Montgomery County** (1995), written by the Montgomery County Planning Commission.

Additionally, linking these sites through a trail system creates a public perception that the parks are even larger and more expansive. The development of a trail system directly addresses the Township goals of linking recreational sites and facilities and making recreational facilities and opportunities more accessible to every resident of the Township.

Parkland for Active Recreation

Township parkland for active recreation is organized around standards set by the National Recreation and Park Association (NRPA). Such parks are primarily areas for intense recreational facility development including ballfields, game courts, playgrounds, and swimming pools and picnicking. The NRPA established 6.25 to 10.5 acres of active parkland per

thousand residents as the **minimum** core system of parkland for every community. Using 10.5 acres, this translates to 273 acres for Upper Dublin Township, based on a population of 26,000. Township “active parklands” include Aidenn Lair Park, the Camphill & Highland Athletic Complex (CHAC), the EPI-Center, “Fields of Dreams,” Loch Alsh Fields, Franklin Park, Klosterman Park, the Loch Alsh Reservoir, Mondauk Manor, Mondauk Common, North Hills Park & Community Center, Sheeleigh Park, Three Tuns Park, Veterans Memorial Park, H.L. Willet Park, Williams Park and the E.B. Wright Park/U.D. Community Pool. There is also the Twining Valley Golf & Fitness Club (TVGC), a special purpose golf and fitness facility open to the general public, but managed by a private company. *(Note: If the Twining Valley Golf & Fitness Club is excluded from the total acreage, the Township has a 77-acre deficit relative to the NRPA standard.)*

If the Delaware Valley Regional Planning Commission (DVRPC) open space standard of 8.0 acres per thousand residents is applied, Upper Dublin Township would be required to have a minimum of 208 acres of active recreation space. *(Note: Upper Dublin exceeds the regional standard for active park acreage by 93.5 acres when the Twining Valley Golf & Fitness Club is included in the total; but is deficient by roughly 12 acres, if it is excluded.)*

Active Parkland Needs for Upper Dublin by National Standards - 2005

1. National Standard: 10.5 acres of active parkland *minimum* per 1,000 residents
2. Upper Dublin population = approximately 26,000 residents
3. 10.5 acres x 26 (thousand) = 273 acres (minimum by NRPA Standards)
- 4a. (with TVGC) 301.5 acres of active parkland - 273 acre standard = 28.5 acre **excess**
- 4b. (without TVGC) 273 acre standard - 196 acres of active parkland = 77 acre **deficit**

Active Parkland Needs for Upper Dublin by Regional Standards - 2005

1. DVRPC Standard: 8 acres of active parkland *minimum* per 1,000 residents
2. Upper Dublin population = approximately 26,000 residents
3. 8 acres x 26 (thousand) = 208 acres (minimum by DVRPC standards)
- 4a. (with TVGC) 301.5 acres of parkland – 208 acre standard = 93.5 acre **excess**
- 4b. (without TVGC) 208 acre standard – 196 acres active parkland = 12 acre **deficit**

Protection of School District Facilities for Recreation

School District play fields are heavily used by the Township's recreation program, community youth sports organizations and other local groups. School fields contribute greatly to the ability of the Township to meet the active recreation demands of various sports leagues and teams. Conversely, the School District also uses Township facilities. However, as important as they are to the residents of Upper Dublin Township, the School District's recreational facilities are not permanently protected as open space or for recreation.

As recommended in the original Open Space Plan (1994), School District recreation areas should be permanently protected as open space, specifically for active recreational use. A collaborative process needs to be orchestrated in which the Township and the School District can discuss the permanent protection of these areas. The details and nature of the arrangement should be explored and agreed upon including the use, management and maintenance of the facilities as well as the allocation of resources to support the facilities' operations. This could be an agreement similar to the "Fields of Dreams" in which a lease negotiated between the Township and the School District guarantees the public use of the fields for active recreation for 25 years. In addition, as major users of the athletic fields, community organizations should be a part of this collaborative process, which should include their commitment as to how they will support and properly use the facilities.

The School District's recreational areas would add approximately 100 acres of active recreational space in Upper Dublin Township, based on the School District's calculation of recreation lands alone without school buildings and ancillary facilities. If the 100 acres of School District land can be *permanently* protected, the Township would exceed its standard for public active recreation land according to both NRPA and DVRPC standards, with or without the Twining Valley Golf & Fitness Club in the equation. When the golf club and the School District's unprotected land are excluded from the calculation, then the Township has a deficit of active parkland and additional acquisition of land should be considered.

Distribution of Existing and Planned Recreational Resources

Figure 3, Existing Parks and Open Spaces map illustrates the distribution of recreational lands in the Township. These lands include Township, School District, and institutional and private lands, used for either active or passive recreation. While these lands are generally well distributed throughout the Township, access barriers to some of these facilities do exist in the form of major roads and highways - notably the Pennsylvania Turnpike and Route 309.

Table 11 - Upper Dublin Parkland (2004)

#	SITE NAME	Fig. 3 ref. #	ACRES	SUB- TOTAL	NOTES, FEATURES, IMPROVEMENTS
PASSIVE RECREATION & NATURAL RESOURCE PROTECTION - Total 257.78 acres					
A NATURAL RESOURCE AREA (NRA)				190.75	
1	Aidenn Lair Woods	2	7.27		wooded tract, Pine Run
2	Bub Farm	36	10.70		open field
3	Burn Brae Park	3	13.31		trails, wooded
4	Camphill & Highland	4	12.00		wooded portion of tract
5	Cinnamon Run Open Space	5	2.24		wooded, Small Creek/Rapp Run
6	Dawesfield Open Space	7	2.75		wooded, Pine Run
7	Dublin Chase Open Space	8	34.28		wooded, Rapp Run
8	Dublyn Open Space	10	10.12		wooded, Pine Run
9	Dublin Hunt Open Space	9	43.29		wooded, Pine Run
10	Holly Hill Open Space	12	2.50		wooded
11	John P. Mauchly Park	15	4.15		wooded, Tannery Run
12	Meetinghouse Park	16	5.92		wooded
13	Mondauk Park	21	11.11		wooded, Little Pine Run
14	Mondauk Waters	19	4.33		Wentz Pond
15	Mondauk Woods	20	5.47		wooded, Little Pine Run
16	Susquehanna Woods	27	6.35		wooded
17	Tannerie Run West	28	8.46		wooded, Honey Run
18	Willowbrooke Open Space	37	2.96		wooded, Little Pine Run
19	Woodside Park	34	3.56		wooded
B NRA & SPECIAL USE FACILITY				45.10	
1	Dannenbergh Arboretum	6	7.22		Special Use Facility ; trails, Sandy Run Creek
2	Robbins Park for Environmental Education	23	37.88		Special Use Facility ; trails, education buildings, animal/bird blinds, gardens, Rose Valley Creek
C NRA & GREENWAY				21.93	
1	Sandy Run Park	24	21.93		Greenway ; wooded, Sandy Run Creek

Table 11 continued next page

#	SITE NAME	Fig. 3 ref. #	ACRES	SUB- TOTAL	NOTES, FEATURES, IMPROVEMENTS
ACTIVE RECREATION AREAS					
D COMMUNITY PARK				51.33	Total Active Recreation = 301.50 acres
1	Mondauk Common	17	51.33		playground, 1.0-mile walking track, rest rooms, picnic pavilions, ballfields (5), soccer fields, basketball courts (2.5), Small Creek
E ATHLETIC COMPLEX				142.51	
1	Camphill & Highland Athletic Complex	4	13.99		playground, 0.4-mile walking track, picnic tables, ballfields (2), soccer fields (3L), Little Pine Run
2	UDHS Fields of Dreams / Loch Alsh Fields	FOD	23.00		ballfields (4), soccer fields (3/1L), rest rooms, batting cages (School District owned; 25 yr. use agreement w/ Twp.)
3	Twining Valley Golf & Fitness Club	30	105.52		public golf course and fitness facility
F NEIGHBORHOOD PARK				90.08	
1	Aidenn Lair Park	1	11.16		playground, ballfield, tennis (4), basketball
2	Franklin Park	11	6.43		ballfield, soccer field
3	Loch Alsh Reservoir	14	20.97		fishing lake, Honey Run, (Ambler Borough owned, maintenance & use agreement w/ Twp.)
4	Mondauk Manor	18	23.80		dog park, trails, compost area, Little Pine Run
5	Veterans Memorial Park	22	5.20		playground, 0.25-mile walking track
6	Henry Lee Willet Park	32	17.00		playground, trails, tennis (2)
7	Robert Williams Park	33	5.52		open field
G RECREATION NODE				11.39	
1	Luther Klosterman Park	13	3.07		basketball, open field
2	Sheeleigh Park	26	3.11		playground, ballfield, street hockey, basketball
3	Three Tuns Park	29	5.21		playground, ballfield, tennis (2) soccer
H SPECIAL USE FACILITY / RECREATION NODE				6.19	
1	EPI-Center (East Oreland Park & Intergenerational Center)	25	1.25		playgrounds, basketball, open field, picnicking, indoor meeting & program space
2	North Hills Park & Community Center	31	2.04		playgrounds, basketball, open field, picnicking, indoor meeting & program space
3	E.B. Wright Park & U.D. Community Pool	35	2.90		outdoor pool, basketball, ballfield, picnicking
I UNCLASSIFIED / SPECIAL USE FACILITY				1.87	
1	Ave. G	n/a	0.39		
2	Limekiln Pike North	n/a	1.23		
3	Whitcomb Family Cemetery	38	.025		Twp. Assumed property maintenance in 1999
TOTAL OPEN SPACE ACREAGE			2004	561.14	Total Open Space Acreage = 561.14

Federal, State, County and City Parks, Trails and Open Space Lands

While Upper Dublin Township does not have any parks or open space areas that are protected, owned or maintained by a higher level government agency, many are accessible within a 30-to-60-minute drive. **Appendix A** is a listing summarizing these regional facilities.

Watershed Association / Conservancy Organization Lands

Land conservation organizations are nonprofit institutions that hold open space as part of their primary mission to protect and conserve open land and natural resources. These organizations protect land in a variety of ways: by outright acquisition and ownership of special properties, by temporary acquisition of land to place conservation easements before conveying the property to another owner, or by holding conservation easements on properties whose owners wish to retain the land while restricting future development potential. In addition, conservation organizations often co-hold easements, where one organization is the property owner and the other organization assumes monitoring and enforcement duties for the easement.

A number of private conservation organizations own land or hold conservation easements on properties in Montgomery County. These organizations acquire land or easements in a variety of ways, often receiving the property or easement as a full or partial donation for which the donor receives charitable donation tax benefits. Because conservation organizations are often able to establish a relationship of trust and confidence with property owners who are not comfortable working with governmental agencies, these nonprofit groups may also purchase land or easements at less than appraised value, working flexibly with the property owner over an extended period of time to achieve estate planning goals. Conservation organizations often rely on grants from government programs or foundations such as the William Penn Foundation. Montgomery County's Private Organization Challenge Grant Program has provided grants to a number of conservation organizations for the purchase of 382 acres and conservation easements on about 1,500 acres. Several of these county grants have been matched by grants from Pennsylvania's DCNR Keystone Grant Program.

Land held by conservation organizations in Montgomery County is protected because of its significance as a natural resource area and is kept in its natural state, with property management strategies designed to minimize invasive plant growth and encourage the regeneration of native landscapes. Properties under the direct ownership of the conservation organization are generally available for appropriate public access as long as sensitive natural features are respected. Public access is required to those properties purchased with County open space program funds. Properties held under conservation easements are generally not open for public access, although properties on which County open space funds have been used for easement purchase must provide public use in the form of appropriately located walking

paths or other public access features. Properties that are owned or conserved by land trust and conservation organizations are widely distributed across the County.

The following list identifies some, but not all, local conservation organizations:

- Brandywine Conservancy
- Conservancy of Montgomery County
- Heritage Conservancy
- Lower Merion Conservancy
- Montgomery County Lands Trust
- Natural Lands Trust
- Pennypack Ecological Restoration Trust
- Perkiomen Watershed Conservancy
- Riverbend Environmental Education Center
- Schuylkill Center for Environmental Education
- Valley Forge Audubon Society
- Wissahickon Valley Watershed Association

The Wissahickon Valley Watershed Association owns lands on both sides of Wissahickon Creek, which crosses Upper Dublin Township west of Ambler Borough. The Watershed Association manages this area as a nature preserve and a public trail. This land links four or five municipalities in this area to the city of Philadelphia.

Homeowners Association Open Space

Homeowners' association property has generally been created by a land development project. If not dedicated at that time to the municipality, the resulting land is usually reserved for use by the owners of properties within the development. While some of this property may be in the form of detention basins, utility easements, or required landscape buffer areas, this type of property also often contains valuable woodlands, stream corridors, and areas of steep slopes. These parcels of open space are important for natural resource protection and as linkages within wildlife habitat corridors and they may afford future trail connection opportunities with the cooperation of the homeowners' association.

- A. Arrowhead (HOA) – common open space
- B. Bellaire (HOA) – common open space
- C. Butler Park (HOA) – common open space, swimming pool
- D. Dresherbrooke (HOA) – common open space
- E. Dresher Woods (HOA) – common open space, tennis court, play structure
- F. Dublin Meadows (HOA)- common open space and recreation facilities
- G. Meadowview Estates (HOA) – common open space
- H. Stuart Creek Farms (HOA) – common open space
- I. Tannerie Wood (HOA) – common open space
- J. Willowmere (HOA) – common open space

The above list reflects homeowners associations that have open space set aside for recreation outside of the service areas of the Township's parks. Each is indicated by letter (A-J) on **Figure**

3. The Township can anticipate additional homeowner and community associations as in-fill parcels are developed.

Temporarily Protected Lands

Act 515 Land / Act 319 Land / Golf Courses

Figure 3 illustrates lands in private ownership, which are temporarily preserved through two state programs, Act 319 (Clean and Green Act) and Act 515 (Open Space Covenant Act). Properties preserved under these acts are subject to preferential tax assessment programs that provide tax incentives to keep land undeveloped. These properties remain vulnerable to eventual development.

- Upper Dublin's two private golf courses are covered by Act 515:
 - LuLu Temple Country Club (114.75 acres) in North Hills/Glenside
 - Manufacturers' Golf & Country Club (193.53 acres) in Fort Washington/Oreland
- One parcel shown on **Figure 3** is covered by Act 319
 - Zieger's Roses (38 acres) in Dresher

Private Recreation Lands / Spacious Land Holdings

There are privately owned and maintained properties in the Township with significant outdoor recreation amenities open and available to members, users, residents and/or employees. Some properties are leased to community youth sports groups on a limited basis while others provide opportunities for future partnerships. This list includes but is not limited to the following properties:

- Burn Brae Day Camp of Creative Arts (5.18 acres) – Dresher
- Emlen House Enterprises Properties (64.53 acres) – Oreland
- Fort Washington Day Camp (8.75 acres) – Fort Washington
- Fort Washington Play & Learn (16.379 acres) – Fort Washington
- Fort Washington Office Park (various properties. 24+ acres) – Fort Washington
- Mobile Home Tract (18.258 acres) – Maple Glen
- Open Door Christian Academy (10.5 acres) – Fort Washington
- Phil-Mont Christian Academy (19.24 acres) – Dresher
- Prudential Insurance Company (190.82 acres) – Willow Grove
- St. Mary's Villa for Children (45.5 acres) – Ambler
- Temple University, Ambler Campus (186.67 acres) – *in 2004 opened NCAA-standard fields that serve the men's soccer and baseball as well as the women's soccer and softball teams; other indoor and outdoor campus facilities exist for student and faculty intramural and recreational use*
- Twin Spring Farm Day School (16.393 acres) – Ambler
- Zieger's Roses (38 acres) - Dresher

Township Efforts Toward Permanent Protection of Properties

In 2001, Upper Dublin Township hired a planning and landscape-architectural firm to identify and analyze tracts of land that would address community open space and parkland needs as identified in the Open Space Plan (1994) and the Comprehensive Parks & Recreation Plan (1998). Based on the information collected during this review, the Township proactively contacted property owners by letter indicating an interest in meeting to discuss how their properties may contribute to the community's open space and parkland needs. This effort will continue and will be guided by the recommendations in this study.

A comprehensive open space plan has a thorough inventory of existing features in the municipality, including those pertaining to natural and man-made environments. Among the most vulnerable environments are those containing sensitive natural resources and those features and/or properties that are unique or significantly diminished. These sensitive natural features and cultural resources are highlighted and mapped in this chapter to provide a basis for decisions about future permanent protection and preservation. The resources covered include the Township's physical and natural features, among which are geology, sensitive and valuable soils, topography (steep slopes), hydrology (streams and floodplains), vegetation communities (woodland and wetlands) and cultural assets (historic sites and scenic roads).

Understanding where these vulnerable resources are, and their relationship and context in the surrounding community, is a key factor in determining how they may be protected and preserved in the future. As emphasized elsewhere in this report, outright purchase of land is not always the only or most practical method to protect sensitive resources and open space. Alternative methods such as easements or lease agreements with landowners can help to preserve valued areas. Methods are discussed in a subsequent chapter of this plan.

Physical and Natural Features

Geology

The foundation of physical conditions in the environment is the bedrock geology. The rock characteristics and weathering directly affect soil conditions, landforms, surface water and groundwater movement and chemistry, and plant and animal life that can inhabit a region. **Figure 4** shows the geology that under lays Upper Dublin Township is relatively simple and is typical of the Piedmont Uplands and the Triassic Lowlands. The upland rocks are older, harder metamorphic and igneous rocks such as granite and schist with incorporated bands of carbonate rock such as limestone as evidenced by the quarries and kilns in the region.

In Upper Dublin, the hard, weather-resistant formations found in the southeast corner of the Township, define the ridge that roughly follows Camp Hill Road, Dreshertown Road and Twining Road east of the PA Turnpike. These rocks are found in two assemblages or formations: Chickies Quartzite and Quartz Schist, and Wissahickon Schist, Granite Gneiss and Hornblende Gneiss.

The former are very hard rocks formed from sandstone that weathers slowly, have very little available groundwater, and commonly form steep hillsides. The schist of the latter formation is less hard and more weathered at the surface. Like the quartz and quartzite, the granite and hornblende gneisses are hard and weather-resistant resulting in steep hillsides.

Adjacent to these two formations and located at the extreme south corner of the Township (Oreland Area) are an assemblage of rocks called Ledger Dolomite, Elbrook, and Conestoga Limestone. The topography in this geology is flatter and found within broader valleys with characteristic limestone soils that are fertile and have good groundwater storage and yields. Many of these areas have been quarried for building materials.

The balance of the Township from the PA Turnpike to the municipal borders of Lower Gwynedd and Horsham Townships is a geologic formation called Stockton Sandstone, Conglomerate and Shale that is typical of the Triassic Lowlands. The composition is largely sandstone with good groundwater supplies, and the landform is commonly rolling with gentle slopes.

Soils

All soils are formed from the natural weathering of rock, and the associated characteristics are directly related to this parent or geologic material. The soils that are most valued from an environmental point of view are those referred to as hydric and alluvial and those that are well suited to farming. Soils exhibiting these characteristics are shown on **Figure 5**. The hydric soils are routinely wet with poor drainage and are indicators of shallow water tables (groundwater near the surface) and the presence of wetlands. They are commonly found in low-lying areas. Wetlands have wildlife and water protection values. To minimize potential development impacts such as loss due to filling, the state and federal governments regulate some of them. In Upper Dublin Township, these soils are found throughout the municipality, in both large and small isolated pockets and within linear corridors.

Alluvial soils also are commonly wet soils as they are deposited by floodwaters as a result of storms. These soils are most often found in and are indicative of the limits of the floodplains. Alluvial soils shown on **Figure 5** are distributed throughout the Township in isolated areas and in corridors that coincide with streams and their floodplains.

Besides the soils noted above that are environmentally sensitive, soils that are categorized as prime farmland soils and those of statewide importance are commonly identified and valued. These soils are productive, and because of these characteristics are also often suitable for development. One reason for identifying these areas is to preserve those areas, which in developed communities like Upper Dublin are vestiges of the prior condition where large open areas were occupied by productive soils. The original extent of highly productive farmland soils in the Township is indicated on **Figure 5**, but only a few undeveloped large tracts in these categories remain as noted below.

Among the few remaining areas in the Township meeting the criteria of prime soils or soils of statewide importance are the following:

- Welsh Road south of intersection with Dreshertown Road
(*Prudential - received approvals for an office complex; only a portion constructed*)
- Welsh Road north of intersection with Dreshertown Road (*agricultural use*)
- Limekiln Pike north of intersection with Norristown Road (*undeveloped*)
- Limekiln Pike southeast of intersection with Dillon Road (*undeveloped*)
- Virginia Drive east of intersection with Camp Hill Road (*undeveloped*)
- PA Turnpike to railroad tracks east of intersection with Camphill Road (*undeveloped*)
- Susquehanna Road north of Butler Pike abutting Rt. 309 (*undeveloped*)
- Pennsylvania Avenue southeast of intersection with Camphill Road (*estate property*)
- between Dreshertown & Twining Roads, Manufacturers' Golf & Country Club
(*private golf course*)
- Limekiln Pike south of Jenkintown Road, LuLu Country Club (*private golf course*)
- Twining Road north of Susquehanna Road, Twining Valley Golf & Fitness Club
(*public golf course & fitness club*)

Physiography

Landform or physiography is determined by the topography of the area. It is commonly shown as contour lines and can be used to depict areas that are flat, rolling or steep. Those areas that are steep are among the most environmentally sensitive and when disturbed, result in impacts such as erosion of soils and rapid runoff of precipitation and consequential flooding down slope. Upper Dublin is sensitive to accelerated runoff due to low-lying areas that regularly flood.

The majority of the Township north and west of the PA Turnpike has flat to rolling topography. Steep slopes are characteristic of the primary ridge that runs east-west and parallel to the Turnpike through much of the southern part of the Township. Slopes that are 15% and more are those of greatest concern and are shown on **Figure 6** based on topographic information (10-foot contours). The Township has enacted steep slope and tree protection/replacement ordinances to help preserve these sensitive areas. Undeveloped areas that are steeply sloping and covered with woodland are prime candidates for future protection.

Hydrology

Upper Dublin Township lies primarily within the Wissahickon Creek watershed with numerous smaller streams or tributaries that join this waterway on route to the Schuylkill River. The exception is the northern corner of the Township in the Maple Glen area, which is at the edge of the Little Neshaminy Creek and Pennypack Creek watersheds. Water flows to these creeks in neighboring townships on route to the Delaware River. A small stretch of the Wissahickon Creek flows through Upper Dublin in the far west corner, west of Ambler. Upper Dublin constitutes approximately 20% of the total Wissahickon watershed. Most of Upper Dublin drains by tributaries to the Wissahickon Creek as shown on the base map. All of the tributaries generally flow east to west and include the following: Sandy Run, Small Run, Pine Run, Rapp Run (latter three join the Sandy Run), Honey Run, Tannery Run and Rose Valley Run (join the Wissahickon Creek).

Each of these creeks and streams has associated with it a floodway and floodplain. The floodplains extend beyond the banks of the watercourse and to variable distances depending on flow and the adjacent topography. The floodplain areas of greatest concern for protection and for limited development are those portions identified as the 100-year floodplain - the area that commonly floods with the 100-year storm event. These are shown on Figure 6 and are mapped by FEMA (Federal Emergency Management Agency) for the Federal Insurance Rate Map (FIRM) Program. The current mapping was revised in 1996 and subsequently in areas around the PA Turnpike Interchange at Fort Washington in 2003. Protection of floodplains reduces damage and flooding, and it helps maintain water quality and preserve wildlife habitat.

Vegetation Communities

Among the most important vegetation communities from the viewpoints of protection, environmental value and sensitivity are woodlands and wetlands, which exist throughout Upper Dublin. Each can enhance the quality of the environment as they protect against erosion, sustain high water quality and quantity, provide wildlife habitat, improve air quality, moderate temperatures, provide visual and physical buffers, and offer a varied aesthetic and visual relief from developed land. Shown on **Figure 7**, the remaining woodlands in the Township occupy both wet lowland sites and steep hillsides. The upland woods are dominated by deciduous hardwood species such as oak, hickory, ash and tulip poplars. Wooded slopes provide the best protection from erosion and rapid runoff. Lowland woodlands often have species such as maples, sycamore, elm, cherry, box elder and birch that inhabit wet conditions. Wetlands shown on **Figure 7** are commonly found in isolated pockets, along stream corridors and in floodplains; and range in type from wooded swamps to reed and cattail marshes. State and federal laws protect larger wetlands, and the Township has enacted ordinances that protect all woodland by limiting the clearing of trees and requiring replacement and landscape supplements. Maintaining these natural assemblages in contiguous units with minimal fragmentation enhances their value.

Cultural Assets

Historic Sites and Scenic Roads

The cultural and historic assets in Upper Dublin Township include historic sites and scenic roads as depicted on **Figure 8**. Those segments of roads traversing the Township considered by the 1994 Open Space Citizens Advisory Committee (CAC) to be scenic have significant tree cover and visual qualities that distinguish them and add a desirable quality of life and image to the areas served by these roads. Upper Dublin has a Shade Tree Commission (STC) that monitors changes to the trees lining all of the roads that cross through the Township. Monitoring includes review of land development applications to preserve and replace trees as well as input on routine trimming and pruning of roadside trees as related to maintaining travel lanes and above ground utilities.

Upper Dublin Township is in an historic area of the state and a region of national significance with ready access to major and important sites within a short drive. Note that historic parks and sites are identified in **Chapter 3** and **Appendix A, Federal, State, County and City Parks, Trails and Open Space Lands**, of this plan. Within the Township's border there are many architecturally and culturally significant structures that are considered historic, i.e. those structures which were built by famous architects, were lived in by well known or influential individuals and/or which exemplify a particular era or style of construction. The following 25 historic sites are *examples* of these resources and are considered especially notable. Their locations are shown on **Figure 8**. Additional information on these resources is provided in **Appendix B, Historic Properties**. The Township is currently considering adoption of an historic preservation ordinance to better protect these and other locally significant historic resources and their sites.

1. Brown-Tyson House (1755 and 1770)
875 Welsh Road, Maple Glen
2. Lukens-Moses House (1815)
1425 Welsh Road, Maple Glen
3. Paxson Farm
1704 Dreshertown Road, Dresher
4. Detwiler House (1704)
306 Stout Road, Ambler
5. Upper Dublin Friends Meetinghouse (1814)
1506 Fort Washington Ave., Ambler
6. Dresher Family Cemetery
Dreshertown Rd. at Kirks Lane, Dresher
7. Jarrettown Hotel & Old Wagon Shop (1847)
1425 N. Limekiln Pike, Jarrettown

8. Old Jarrettown School (1896)
1465 N. Limekiln Pike, Jarrettown
9. Dresher Inn
1708 N. Limekiln Pike, Dresher
10. Dannenberg Property
1001 Fitzwatertown Road, Roslyn
11. Susquehanna Road Turnpike Toll House
Pinetown and Susquehanna Road, Fort Washington
12. "Warder's Conquest" (1730)
1165 Pinetown Road, Fort Washington
13. Hospitals for Revolutionary Troops (stone barn)
Pinetown Road south of Wynnemoor Way, Fort Washington
14. St. Mary's Villa & Castle
Bethlehem Pike & Lindenwold Terrace, Ambler
15. Revolutionary War Encampment
Camp Hill Road along border with Springfield Township
16. Thomas Fitzwater's Limekilns
Limekiln Pike and Fitzwatertown Road along the Sandy Run Creek
(LuLu County Club site), North Hills
17. Emlen House
Pennsylvania Ave (900 block), Oreland
18. East Oreland School (1906)
100 Wischman Avenue, Oreland
19. North Glenside Elementary School (1926)
212 Girard Avenue, North Hills
20. Old Fort Washington School
Prospect & Madison Avenues, Fort Washington
21. Whitcomb Family Cemetery
Susquehanna Road, Fort Washington
22. Fitzwater Family Cemetery
Twining Road (800 block), Dresher
23. Atkinson Farm House
1580 Fort Washington Ave., Maple Glen
24. Ellis House (aka Shoemaker House)
Meetinghouse Road, Ambler (Temple University Property)
25. Engard Family Home (1765)
Susquehanna Road & Ft. Washington Ave., Fort Washington

CHAPTER 5

ANALYSIS OF UNPROTECTED RESOURCES

The analysis of unprotected resources in Upper Dublin Township utilizes the information and mapping prepared for **Chapter 1** (Community Background), **Chapter 3** (Existing Protected Land) and **Chapter 4** (Vulnerable Resources) to assess what remaining parcels in the Township are highly valued and should be considered in this Open Space and Environmental Resources Protection Plan (2005) for future protection. The areas considered to be of “high value” are those where there are sensitive natural features and cultural resources. The features used for this evaluation were discussed in detail in **Chapter 4** and include:

- geologic formations
- soils (hydric, alluvial, prime agricultural, statewide agricultural significance)
- floodway and floodplain (100 year)
- steep slopes (>15%)
- wetlands
- woodlands
- scenic roads
- historic/cultural sites

In many cases, the importance of an individual parcel is elevated when several features are observed in the same location. For example, a site containing steep slopes that are wooded is highly valued for its inherent environmental benefit of controlling runoff and reducing flooding, erosion and topsoil loss. A second example is where there are floodplains, hydric soils and wetlands as these three features together buffer stream and creeks, recharge groundwater, maintain wildlife corridors, protect water quality and stabilize stream banks.

Given that Upper Dublin Township is largely developed, as depicted in **Figure 2**, Existing Land Use and supporting tabulations, those areas mapped as valuable and sensitive must be further evaluated from the perspective of current use and availability. For the next step in this analysis, candidate parcels were identified from:

1. A list developed by the Township in 2003 of more than 40 vacant parcels or parcels not used to capacity as currently zoned;
2. further investigation, as part of this Plan, of other large parcels known to be undeveloped or underdeveloped (not developed to zoning capacity). A key attribute evaluated is parcel context, specifically, what are the surrounding land uses and is there the potential to expand open space systems and/or create contiguous natural resource corridors.

Where such parcels coincided with such valued lands, they are identified and mapped as Vulnerable Land (see **Figure 9**, Vulnerable Resources).

The Vulnerable Resources map shows three categories. Existing open spaces, including preserved public land and committed private lands, are shown separately in gray color. These are the same parcels as shown on **Figure 3**, the Existing Parks and Open Spaces map. This category assumes little or no risk that these lands will be converted from their current use in the foreseeable future. Examples of public lands are parks, Township facilities, public schools and a university campus. Examples of stable private lands are private school properties and religious institutions.

The vulnerable parcels are shown by a separate color (orange) on **Figure 9**. They range from large active golf courses to relatively small lots owned by individuals. They are spread throughout the Township, although the largest parcels tend to be located in the southern part of the Township (south of PA Turnpike to the Springfield Township border). Most of the parcels have some environmental constraint such as steep slopes, wetlands and floodplains. Nearly all have frontage on public roads.

A subcategory of vulnerable lands, signified by an asterisk (*) has been identified and appears on specific orange colored parcels. This distinction signifies that at the time of Open Space Plan (2005) preparation these parcels were the subject of land development or zoning applications. Depending on the municipal approval process, these properties will either be removed as vulnerable resources as they will be developed, or they will remain vulnerable lands (orange) with no asterisk.

The results of this in-depth analysis are presented in **Table 12**. The analysis shows that 51 parcels are considered vulnerable and should be protected and/or preserved, as the natural and cultural resources in this largely developed Township are small and dwindling. The size of the parcels ranges from 2.0 to nearly 200 acres. The total amount of land in the vulnerable land category is roughly 813 acres, approximately 9.8% of the total township land resource (based on 8,340 total acres).

Table 12: Vulnerable Land Analysis

Figure 9 Map No.	Street Location	U.D. Parcel No. 54-00-	Size (acres)
1	Welsh Rd.	0540-008	38.000
2	Dillon Rd.	04714-002	6.300
3	Limekiln Pike	10096-002	12.890
4	Susquehanna Rd.	14860-008	7.500
5*	Dreshertown Rd.	05167-008	6.980
6	Dreshertown Rd.	(same)	11.320
7	Twining Road	16054-002	6.260
8a	Woodland Dr.	13177-005	2.500
8b	Woodland Dr.	13105-008	2.680
9	School La.	13972-005	8.500
10	Fitzwatertown Rd.	06316-002	5.380
11	Twining Road	16162-002	3.100
12	Limekiln Pike	09961-002	114.750
13	Dreshertown Rd.	05089-005	193.530
14a	Limekiln Pike	10270-008	6.241
14b	" "	10270-017	0.901
15	Virginia Dr.	16404-201	6.400
16	Virginia Dr.	16404-102	3.650
17a	Camp Hill Rd.	03544-002	36.430
17b	" "	03601-008	14.500
18	Virginia Dr.	16377-003	9.419
19	Virginia Dr.	16376-004	9.000
20	Camp Hill Rd.	03520-008	8.870
21	Camp Hill Rd.	03610-008	3.000
22	Highland Ave.	0281-008	2.250
23	Virginia Dr.	16387-002	2.269
24	Scott La.	14000-004	19.086
25	Shelley La.	" " "	
26	Pennsylvania Ave.	13378-005	11.030
27a	Pennsylvania Ave.	13371-003	21.580
27b	Pennsylvania Ave.	13370-004	2.910
28	Pennsylvania Ave.	13366-008	33.500
29	Pennsylvania Ave.	13363-002	6.540
30	Ft. Washington Ave.	06628-005	4.269
31	Ft. Washington Ave.	06865-002	2.000
32	Ft. Washington Ave.	06862-005	5.969
33	Ambler Rd.	00397-008	3.789
34	Ambler Rd.	00400-005	8.750

Table 12 continued next page

Table 12: Vulnerable Land Analysis - *continued*

Figure 9 Map No.	Street Location	U.D. Parcel No. 54-00-	Size (acres)
35	Ambler Rd.	00403-002	2.690
36	Ambler Rd.	00406-008	9.900
37	Farm La.	00397-008	3.346
38	Butler Pike	03232-008	6.950
39	Susquehanna Rd.	14968-008	26.869
40	Susquehanna Rd.	14971-005	6.060
41	Maple Ave.	11581-002	15.040
42	Tennis Ave.	15394-005	9.200
43	Butler Pike	03316-005	12.700
44a	Butler Pike	03330-009	5.800
44b	Butler Pike	03337-002	2.800
45	Butler Pike	03337-002	3.700
46*	Norristown Rd.	12241-008	18.258
47a*	Limekiln Pike	10396-008	3.250
47b*	Limekiln Pike	10399-005	7.859
48	Dillon Rd.	04867-002	4.922
49	Butler Pike	03349-008	14.680
50	Dillon Road (5 parcels)	04744-008, et al	9.87
51	Limekiln Pike	10384-002	6.8
TOTAL			812.684

* *Designates a vulnerable parcel with pending application.*

Upper Dublin Township residents regard open space as a critically important component of the community. These open spaces include dedicated land such as parks for passive and active recreation, as well as parcels that remain undeveloped. Open Space adds to the livability, quality of life, and property values experienced by a community's residents. A long-standing Township goal has been to join these open spaces with each other and with the neighborhoods and people that they serve. Such connections or linkages are very difficult to add in a municipality that is largely developed, and one that did not incorporate such corridors into the community's land use plan when significant growth began.

The challenge now is one of adding linkages to a partial network of existing trails and sidewalks and effectively retrofitting many developed areas of the Township to complete this network. A second equally important goal is to connect the trail and sidewalk system to those within surrounding municipalities to help broaden the regional system. Such a network will add further to our residents' and neighbors' quality of life, and will provide new opportunities for healthy recreation and exploration of the region with less dependence on vehicles.

The intent is to have one continuous regional system of municipal, county, state and private trails, focused on corridors that are internal and external to Upper Dublin Township. This plan explores the potential for each and has benefited from ongoing communication during the Plan's preparation with each of the Township's seven adjacent municipalities. Although viewed ultimately as one system, trail segments are discussed below in two categories.

Internal Trail System

A vision of the trail system for Upper Dublin Township is depicted on **Figure 10**, Open Space Linkages. The trail system is to be a combination of existing and proposed trails, paths, sidewalks and shared roadways that interconnect and are intended to serve pedestrians and bicyclists. In a retrofit situation as in Upper Dublin, the best way to complete a system is to work incrementally by adding individual segments one at a time whenever the opportunity is available.

As baseline information, **Figure 10** shows preserved public and private open spaces in color recognizing a principal goal of connecting them to each other and to neighborhoods. Five categories of trails are shown in color and include:

- Existing Regional Trail (Wissahickon Valley Watershed Green Ribbon)
- Utility Corridor (TRANSCO pipeline)
- Proposed Trail
- Sidewalk Link (Existing)
- Sidewalk Link (Needed)

The vision is best-presented and understood in map form (**Figure 10**). Although every addition to the system is important, key aspects of the plan are highlighted below.

The primary east-west trail system is the Cross County Trail. First proposed in 1993, when completed this trail will run from the Upper Dublin/Whitemarsh Township border (Pennsylvania Avenue/Commerce Drive) through the Ft. Washington Office Park to the Upper Moreland Township border. It is a share-the-road and sidewalk trail that will primarily use existing infrastructure of the office park. It will follow Commerce Drive, Delaware Drive and Virginia Drive to Susquehanna Road at the Dresher Triangle area, and continue on the Norfolk Southern Railroad right-of-way to Welsh Road. As shown on the map, there are numerous opportunities for Upper Dublin's local trails to connect with this proposed Montgomery County trail (e.g., Camphill & Highland Athletic Complex (CHAC), Susquehanna Road, Pine Run and Limekiln Pike).

A second significant proposed east-west trail would follow the Sandy Run from the Upper Dublin/Springfield Township border to the Abington Township border near Fitzwatertown Road. A major part of this corridor along the Sandy Run is preserved (private and public) open space. This trail will provide important pedestrian access to neighborhoods in the part of the Township south of the PA Turnpike and Norfolk Southern railroad line (Oreland).

A third potential east-west trail is envisioned from Ambler Borough and surrounding area to Maple Glen. This trail will follow a corridor associated with Butler Pike/Rose Valley Creek (South Branch), Temple University Ambler campus and Limekiln Pike. As with the other east-west trails noted above, this corridor will provide multiple opportunities to link neighborhoods in the northwest part of the Township to this corridor and the commercial centers of Ambler Borough and Maple Glen.

A fourth potential east-west trail deserves mention, although it may never become an option or is at best a very long-range one. Upper Dublin Township should consider a "rails-to-trails" initiative if the Norfolk Southern Railway (Trenton Cutoff) were to cease operation. Such a trail would traverse Upper Dublin Township and connect to neighboring Whitemarsh and Upper Moreland Townships.

Two additional east-west trails of lesser scale are partially in place with small segments required for them to be complete. They include a nearly continuous trail from CHAC to Mondauk Common via the Rapp Run. This trail traverses mostly public open space along most of its length (CHAC, Willowbrook Open Space, Mondauk Manor, Mondauk Park, Dublin Chase Open Space, Mondauk Waters and Mondauk Woods). The other is a proposed trail from Fort Washington Elementary School (FWES) to Temple University Ambler campus just east and near Route 309. The trail will utilize primarily public land (FWES, Fields of Dreams, Township Complex, Upper Dublin High School and the Bub Farm). Additions to the trail will be needed through Tannerie Run West Park and the Joel Drive neighborhood. This trail will then link to

the trails on the Temple University Ambler campus and to Maple Glen and Ambler Borough as noted above.

Trail opportunities in a north-south direction are more limited, primarily due to some major physical barriers imposed by the PA Turnpike, the Route 309 Expressway and the Norfolk Southern Railroad line which bisect the Township in many directions. Getting safely over or under these high volume vehicular corridors presents a significant challenge for the Township when working to complete a continuous trail network.

The primary opportunity for a northwest-southwest trail is a share-the-road trail along Susquehanna Road. This trail will incorporate the existing sidewalks and the bike trail proposed for Susquehanna Road by Montgomery County and the Pennsylvania Department of Transportation (PennDOT). This trail will run continuously between the Upper Dublin Township borders with Abington and Lower Gwynedd Townships passing under Route 309, the PA Turnpike and the regional freight line.

The second option for north-south movements would utilize local roads, but ones with high utilization. First is along Limekiln Pike, connecting Dresher and Maple Glen, two important commercial centers utilizing a mixture of sidewalks and share-the-road possibilities. Neighborhoods in the Jarrettown area could easily be connected to this trail providing non-vehicular access to these centers. The design will require a creative approach that would rely on the addition of signage, sidewalk segments and improvements to road shoulders where they are too narrow, especially at the busiest intersections. Additional detailed study will be necessary.

Another route allowing northwest-southwest movement is Highland Avenue from CHAC to the Ambler Borough line, primarily by use of existing sidewalks. This secondary level route will provide access to the Pinetown Road and Elliger Park neighborhoods, Fort Washington Elementary School and Veterans Memorial Park, with a safe crossing under Route 309.

Regional Trail Connections

Connections via the Cross-County Trail and the County/PennDOT bike trail along Susquehanna Road are already noted on previous pages. These trails will link Upper Dublin directly to Springfield, Upper Moreland, Abington and Lower Gwynedd Townships. Upper Dublin Township supports Montgomery County's effort to develop this trail and looks forward to facilitating the trail and connections within the Township's system.

The far west corner of Upper Dublin Township (west of Ambler Borough) is served by the Green Ribbon Trail owned and maintained by the Wissahickon Valley Watershed Association (WVWA). It is a woodland pedestrian trail along the Wissahickon Creek running north-south

providing connection to Whitpain and Whitemarsh Townships with existing and potential new links to Ambler Borough by sidewalks.

The opportunities to connect to trails in neighboring municipalities, both existing and proposed, are significant. These possibilities are noted on **Figure 10**, Open Space Linkages, by the text boxes located along the municipal boundary and are described in detail in **Chapter 10**.

The original Open Space Plan (1994) indicated that new residential development would be characterized as “infill” due to the lack of undeveloped residentially zoned parcels. This means that new development was going to occur by subdividing already developed lots and by utilizing small parcels between existing subdivisions. Specifically the plan anticipated future growth occurring north of Susquehanna Road in areas known today as Three Tuns, Dresher and Dublin Meadows.

This belief became reality as the developments were constructed:

1. in Three Tuns, the Bellaire/Dublin Courts townhome development on Limekiln Pike opposite Howe Lane (181 units – 1999)
2. in the Dublin Meadows/Maple Glen area, the Dawesfield subdivision was built off of Dreshertown Road (113 single homes – 1998)
3. in Dresher, Dresher Woods condominiums near the intersection of Limekiln Pike and Susquehanna Road (128 units – 1999)
4. in Dresher, Dresherbrooke townhome development on Susquehanna Road adjacent to the Norfolk Southern railroad (76 units – 1998)

It is significant that three of these four developments (#’s 1, 3 and 4) were possible because the Board of Commissioners authorized a change of zoning from A-Residential to MD-Multi Dwelling. Currently the trend in Upper Dublin has become developers requesting non-residentially zoned land be rezoned for housing, especially as the housing market remains strong and the office market is soft. It is clear, based on past experience and current trends, that this type of infill development facilitates residential growth in the Township. Utilizing zoning to control and facilitate new development and redevelopment within the community is an important policy decision for the elected officials.

The Montgomery County draft Housing Plan evaluates housing supply and needs through 2025. It acknowledges that Upper Dublin is a developed suburban community and assumes that it will see some additional growth. The Housing Plan estimates that 15% (7,350 units) of the new residential units needed within Montgomery County by 2025 will be built in existing developed areas. There is a regional distribution figure included in the draft report that estimates 3,200 of the new units will be built in the “Ambler Region” which includes Ambler Borough and Upper Dublin, Lower Gwynedd and Whitemarsh Townships.

Therefore, the County Comprehensive Plan and the Township’s expectation compliment each other. For the purposes of this Open Space Plan (2005), future growth in the Township may occur in the following areas.

Dresher

In 2004 the former Selas industrial site (17 acres) on S. Limekiln Pike at Dreshertown Road was rezoned from EC-Employment Center to MD-Multi Dwelling District for the purpose of constructing an age-restricted residential project for persons 55 years old and above. Plans currently before the Township propose 192 units.

Across from the Selas site is a five-acre property currently zoned A-Residential. There was an application submitted requesting that the site be rezoned to MD-Multi Dwelling and the developer's concept was to develop 40 age-restricted residential units. While the Township may be open to rezoning this property the Commissioners did not act on the applicant's request and may be concerned that the housing density be closer to the existing B-Residential neighborhood just west of this site.

If both of these projects are built, the Dresher area could have 220 new housing units in the next couple of years, meaning roughly 385 new residents (assuming 1.75 persons per unit).

Fort Washington

A 50-acre site near the Fort Washington Office Park is proposed for rezoning from EC to MD for the purpose of constructing 220 age-restricted dwelling units.

Prudential/Welsh Road

Another proposed age-restricted development is located on the Prudential site at Dreshertown Road south of Welsh Road. This site is currently zoned OC-Office Center and has an approved development plan for office buildings. An application has been submitted requesting the Commissioners to permit single-family age-restricted dwelling units as a permitted use in the OC District. The application will be considered early in 2005.

Maple Glen

There is an application pending proposing 70 new mobile home pads be developed at the intersection of Limekiln Pike and Norristown Road. The sketch plan is scheduled for discussion before the Board in February or March. There is also a pending residential subdivision adjacent to an existing residential subdivision. If approved, this development could add up to an additional 11 single-family residential units in this neighborhood.

North Hills

In North Hills, a series of zoning variances has enabled developers to construct small single family and twin homes in an area that had been previously overlooked for new development. The two largest projects, Golfview I and II, will create 32 residential units when completed.

Non-Residential Growth

Development and redevelopment will also occur in the non-residential areas of the Township although quantifying the specific amount, beyond what the demographic statistics provide, is difficult. There are two new village overlay districts in the Township, one in Maple Glen and the second in Dresher. Development in accordance with the provisions of these zoning districts could contribute to both residential and non-residential growth. The Township is also considering options to revitalize the Fort Washington Office Park, including encouraging development of a variety of uses and making the area more pedestrian friendly.

An essential element for evaluating future open space needs is a list of the open space resources that exist today and the acreage that comprises them. Detailed information and mapping are presented in **Chapter 3** of this plan and recapped below. Open spaces are defined here as parcels that are in public ownership and available to citizens for active and passive recreational uses. By definition and for the analysis of open space needs based on projected population, the list excludes private open spaces such as sports clubs, camps, golf courses and vacant land with conservation easements. Such open spaces are very valuable to the community as they (1) contribute to community character, aesthetics and visual relief; and, (2) help clean and sustain the environment while providing habitat for wildlife. In most cases, they are not protected from future change.

As presented below, there are three categories of public open space: Township Parks, Existing Open Spaces (not developed with recreation facilities), and Township Playgrounds.

Township Parks

The following lists (A&B) are comprised of 38 existing parks and open spaces as depicted on **Figure 3** (Existing Parks & Open Spaces) and listed in **Table 11** (Upper Dublin Parkland). New parks/open spaces since 1994 include Bub Farm (2001), Dawesfield (1996), Whitcomb Family Cemetery (1999), and Camphill and Highland Athletic Complex (CHAC) North (1997). Since 1994, five existing parks have been expanded in size. For additional information, refer to **Appendix C**, 1994 Open Space Plan Audit.

A. Existing Township Parks (2005)

(Numbers) refer to circled identification numbers, Figure 3 * = parks with playgrounds

Aidenn Lair Park (1)*	Loch Alsh Park/Reservoir (14)	Robbins-Cheston Park (23)
Aidenn Lair Woods (2)	John P. Mauchly Park (15)	Sandy Run Park (24)
Burn Brae Park (3)*	Meetinghouse Park (16)	Sheeleigh Park (26)*
Camphill & Highland Athletic Complex (CHAC) (4)*	Mondauk Common (17)*	Three Tuns Park (29)*
Dannenberg Arboretum (6)	Mondauk Manor (18)	Veterans Memorial Park (22)*
EPI-Center & East Oreland Park (25)*	Mondauk Park (21)	Henry Lee Willet Park (32)*
Franklin Park (11)	Mondauk Waters (Wentz Pond) (19)	Robert Williams Park (33)
Luther Kosterman Park (13)	Mondauk Woods (20)	Woodside Park (34)
	North Hills Park (31)*	Evelyn B. Wright Park (35)

B. Existing Open Spaces (2005)

(Numbers) refer to circled identification numbers, **Figure 3**.

Bub Farm (36)	Holly Hill Open Space (12)
Cinnamon Run Open Space (5)	Susquehanna Woods Open Space (27)
Dawesfield Open Space (7)	Tannerie Run West Open Space (28)
Dublin Chase Open Space (8)	Willowbrooke Open Space (37)
Dublyn Open Space (10)	Twining Valley Golf Club (30)
Dublin Hunt Open Space (9)	Whitcomb Family Cemetery (38)

C. Township Playgrounds (2005)

Many of the Township Parks have playgrounds available to neighbors and residents. The list identifies where playgrounds are located (parks and public school grounds) and what changes have occurred since 1994. Changes include three playgrounds with improvements and/or upgrades and six new playgrounds, including ones recommended in the Open Space Plan (1994).

Public Parks

(Numbers) refer to circled identification numbers, **Figure 3**.

1. Aidenn Lair Park (1) (*existing equipment will be replaced in 2005*)
2. Burn Brae Park (3) (*1994 plan recommendation; new since 1994*)
3. CHAC (4) (*1994 plan recommendation; new since 1994*)
4. EPI-Center & East Oreland Playground (25)
5. Mondauk Common (17) (*upgraded and improved since 1994*)
6. North Hills Park (31) (*upgraded and improved since 1994*)
7. Sheeleigh Park (26)
8. Three Tuns Park (29) (*1994 plan recommendation; new since 1994*)
9. Veterans Memorial Park (22) (*new since 1994*)
10. Henry Lee Willet Park (32) (*new since 1994*)

Public Schools

See dark green spaces on **Figure 3**.

1. Maple Glen Elementary School (*opened in 2000*)
2. Jarrettown Elementary School
3. Thomas Fitzwater Elementary School
4. Fort Washington Elementary School
5. Sandy Run Middle School Annex

It is noted that public school playgrounds are available for public use when not in use by students and in accordance with use policies established by the School District of Upper Dublin. Further, the Public Schools list omits Upper Dublin High School because it does not have a playground. There are, however, some facilities at the high school (such as tennis courts, an all-weather outdoor track and a sand volleyball court, among others) that are available to residents according to School District use policies.

Parks and playgrounds are located and planned in order to serve all 14 neighborhoods. They are the focus for serving the open space and recreation needs of neighborhoods into the future. This plan considers the following as a basis for recommendations:

1. *Every resident should be able to walk safely, within a half-mile radius, to a neighborhood or school playground.*
2. *Every resident should be able to walk safely, within a half-mile radius, to at least one neighborhood or community park to satisfy both active and passive recreation needs. School grounds may be considered if they are open to the public and include open fields or lawns suitable for walking.*
3. *Sidewalks and crosswalks should be installed where high volume streets and/or traffic patterns make pedestrian access to parks and playgrounds difficult or dangerous.*

Comparison of Resources and Needs

The need for active recreational parkland in Upper Dublin Township for 2025 has been assessed later in this chapter utilizing both Regional and National Standards. By 2025, the projected population for the Township is 27,370 people (Montgomery County, 2005). Compared to the 2005 population of 25,878 (Montgomery County Planning Commission, 2005), this number represents an increase of 1,492 people.

Regional Standards are from the Delaware Regional Planning Commission (DVRPC). National Standards are from the National Recreation and Park Association (NRPA).

As quoted, "NRPA suggests that a park system, **at a minimum**, be composed of a "core" system of parklands, **with a total of 6.25 to 10.5 acres of developed open space per 1,000 population**. The size and amount of "adjunct" parklands will vary from community to community, but *must* be taken into account when considering a total, well-rounded system of parks and recreation areas."¹ (*bolded text added for this document*)

¹ National Recreation and Park Association (NRPA)
Recreation, Park and Open Space Standards and Guidelines
Lancaster, Roger A. (editor)
NRPA, 1983; pg. 56

Further, "Over the past 30 years, it has been the accepted practice within the park and recreation profession to adopt a uniform national land standard such as 10 acres per 1000 population."²

Table 13 presents the computations for active parkland, within each "Standards" category (National vs. Regional) according to two scenarios.

Scenario One allows for the acreage of the Twining Valley Golf & Fitness Club (TVGC) to be counted. TVGC is a 106-acre public course at which fees are collected for play and related services. Use of the course is not limited to Upper Dublin Township residents.

Scenario Two assumes that the Twining Valley Golf & Fitness Club acreage is not counted towards the achievement of the standards.

Although the property is zoned "Recreation", no conservation easements apply to the parcels that comprise the Twining Valley Golf & Fitness Club and associated facilities. Consequently, there is no guarantee that it the TVGC will remain open and available to the public for active recreation.

Under National Standards, with TVGC the table indicates that the area of *active parkland* is exceeded by nearly 13 acres; without it, there is a deficit of approximately 93 acres. Similarly, applying the Regional Standards, with TVGC included, the Township would have an excess of *active parkland* of 81.5 acres, and without it a deficit of approximately 24 acres.

Table 13: Parkland Need for Upper Dublin Township 2025

Active Parkland Needs for Upper Dublin by National Standards - 2025

1. National Standard: 10.5 acres of active parkland minimum per 1,000 residents
2. Upper Dublin Population = approximately 27,500 residents
3. 10.5 acres x 27.5 (thousand) = 289 acres (minimum by National Standards)
- 4a. (with TVGC) 301.5 acres of active parkland – 289 acres standard = 12.5 acres *excess*
- 4b. (without TVGC) 289 acre standard - 196 acres of active parkland = 93 acres *deficit*

Active Parkland Needs for Upper Dublin by Regional Standards - 2025

1. DVRPC Standard: 8 acres of active parkland minimum per 1,000 residents
2. Upper Dublin Population = approximately 27,500 residents
3. 8 acres x 27.5 (thousand) = 220 acres (minimum by Regional Standards)
- 4a. (with TVGC) 301.5 acres of parkland – 220 acre standard = 81.5 acres *excess*
- 4b. (without TVGC) 220 acre standard – 196 acres active parkland = 24 acres *deficit*

² National Recreation and Park Association (NRPA)
Park, Recreation, Open Space and Greenway Guidelines
 Mertes, James D. and Hall, James R. (task force co-chairs)
 NRPA, 1996; p. 59

CAC Conclusions

Based on a thorough analysis, the CAC advocates that recommendations included in the Open Space Plan (2005) (see **Chapter 9**) reflect the following findings:

1. The TVGC land should not be used in the calculation of parkland available for public recreation for the reasons articulated above.
2. The active recreational parkland standards are a minimum for a community, and the target for additional open space for Upper Dublin should exceed this amount.
3. The minimum standard for parkland should be that recommended by the National Recreation and Park Association (NRPA). The higher standard (10.5 acres per 1,000 population) was selected because of its advantages to the community in protecting more, rather than less, open space relative to population.
4. Parkland is valued for recreation, but it significantly contributes to the community's quality of life and sense of place, protection of natural features, maintenance of environmental functions, provision of visual relief and aesthetics and sustenance of property values.
5. Land preserved as open space and parkland will save the municipality money that would otherwise be required for municipal services associated with new development.

In the past decade Upper Dublin Township acquired 54.2 acres of parkland. Based on national and regional standards, establishing a range of 8 to 10.5 acres of parkland for every 1,000 residents, it will be necessary for the Township to obtain an additional 24 to 93 acres in order to comply with minimum standards for active parkland as the expected growth in Upper Dublin's population occurs.

Next Steps

The critical next step in the analysis of open space needs is a comparison of those areas served vs. those areas not served by parks and programs, utilizing the half-mile criteria. This analysis is depicted on the Park Service Areas map (**Figure 11**). It is derived from the Existing Parks & Open Space map (**Figure 3**), the Vulnerable Resources map (**Figure 9**), and half-mile radius circle from each park as depicted in yellow on the Park Service Area map (**Figure 11**). Areas with a white background are currently underserved, meaning they do not meet the half-mile criteria. The Township's open space needs are assessed according to the 14 neighborhood areas as defined by the Open Space CAC and shown on the Neighborhood Study Areas map (**Figure 12**). Candidate parcels to be considered toward meeting those needs are shown on the map by properties colored orange. They are further identified by a boxed number (**1 through 51**) that is correlated with the Vulnerable Lands Analysis (**Table 12**) found in **Chapter 5** and the Vulnerable Lands Protection Analysis list (**Table 14**) found at the conclusion of this chapter.

The following pages recommended projects, initiatives and partnerships that would move the Township forward toward achieving **Chapter 2's** Goals & Objectives. The Goal Statements from Chapter 2 are:

Goal #1: Upper Dublin Township's open space system will be a **model for responsible land management policies**, utilizing Township Codes and demonstrating **best management practices** in order to **preserve and protect** the most sensitive and desirable resources.

Goal #2: Upper Dublin Township will **identify and permanently protect** lands and resources that support the community's identity, improve quality of life and support activities that foster a healthier public.

Goal #3: The Township's open space system will **use trails and greenways** (open space connectors) to **link** parks, schools, neighborhoods and natural areas (open space nodes) into a **continuous network** of open space resources.

Goal #4: Upper Dublin Township will strive to **provide safe access** to at least one public neighborhood or community park to satisfy both active and passive recreation needs; as well as a neighborhood or school playground **within a half-mile of every Township residence**.

A. SHORT-TERM IMPROVEMENTS

The Citizen Advisory Committee (CAC) recommends the following improvements. The italicized letters and numbers in parentheses after the recommendations refer to specific goals and objectives listed in **Chapter 2, pages 2-1 and 2-2**.

For any Short-Term Improvement listed below and shown in dark green hexagons on **Figure 13**, implementation should be considered in any land development application before the Township. Although implementation should span the anticipated “lifetime” of this plan, it is expected that work on Short-Term Improvements will be evident in years 1 to 6.

1. Connections

- a. Add sidewalk along northwest side of Highland Avenue connecting existing sidewalks to Camphill and Highland Athletic Complex (CHAC) South by pedestrian bridge or extended a roadway bridge across Rapp Run. *(2a, 3a, 4a)*
- b. Complete the Mondauk Trail from Virginia Drive to Mondauk Common by adding the few remaining links. Indicate with signage trailheads. *(2a, 3a, 4a)*
- c. Add sidewalk or pathway along north side of Highland Avenue from Van Sant Drive to Farm Lane. *(2a, 4a)*
- d. Create loop trails within and between parks and open spaces. *(2a, 3a)*
- e. Develop hiking trails through Mondauk Manor. *(2a)*
- f. Link Temple University Ambler campus to Maple Glen, Ambler Borough and the municipal complex. *(2a, 2b, 3a, 4a)*
- g. Make connections to County trails especially the Cross County Trail and Susquehanna Road Bike Trail. *(2a, 2b, 3a, 4a)*
- h. Connect Aidenn Lair Park to the Dublin Hunt neighborhood with sidewalks from the traffic signal at the intersection of Dreshertown Road and Bantry Drive. *(2a, 2b, 3a, 4a)*
- i. Create a bikeway from Dresher to Maple Glen using on- and off-road trails. *(2b, 3a, 4a)*
- j. Add sidewalk segments along both sides of Limekiln Pike from Ft. Washington Avenue to Maple Glen. *(2a, 2b, 4a)*
- k. Establish additional pedestrian links from the Wissahickon Watershed Green Ribbon Trail to Ambler Borough. *(2a, 2b, 3a, 4a)*
- l. Establish the Sandy Run Trail within the Sandy Run corridor from the Springfield Township line to the Abington Township line. *(2a, 3a)*

2. Potential New Parks / Improvements

- a. Mon-Daug Bark Park – addition to Mondauk Manor *(1a, 1b, 1c, 1d, 4b)*
- b. Sandy Run Park – addition of playfields; playground *(1a, 1b, 1c, 1d, 4b)*
- c. Camphill/Highland Barn Site – playfields, indoor recreation *(1a, 1b, 1c, 1d, 4b)*
- d. EPI-Center Site Expansion – expand building and site use *(1a, 1b, 1c, 1d, 4b)*
- e. CHAC – skate park and Parks Maintenance Shop, more parking, contact building with restrooms *(1a, 1b, 1c, 1d, 4b)*
- f. Mobile Home Tract (Maple Glen) – playfields *(1a, 1b, 1c, 1d, 4b)*
- g. Public School Fields – approach the School District for written agreement to preserve public access and use of fields and indoor recreation facilities, including language for the right of first refusal. *(1a, 1b, 1c, 1d, 4b)*
- h. Schmidt Nursery (Limekiln Pike, Dresher) – open field, playground *(1a, 1b, 1c, 1d, 4b)*

3. Upgrade Existing Play Equipment and Install New Playgrounds

- a. Klosterman Park – resulting from the Montessori School relocation *(1a, 1b, 1c, 1d, 4b)*
- b. Dannenberg Arboretum – located near Fitzwatertown Road to serve the Sandy Run Greenway trail *(1a, 1b, 1c, 1d, 2a, 4b)*
- c. North Hills – possible site near UDCPool and Beechwood Avenue *(1a, 1b, 1c, 1d, 4b)*
- d. Franklin Park – *(1a, 1b, 1c, 1d, 4b)*
- e. Mobile Home Tract (Maple Glen) – *(1a, 1b, 1c, 1d, 4b)*
- f. Zieger’s Roses Tract – *(1a, 1b, 1c, 1d)*
- g. Prudential Tract – higher priority with additional homes on the tract *(1a, 1b, 1c, 1d)*
- h. West side of Bethlehem Pike – possibly Ambler Road *(1a, 1b, 1c, 1d)*
- i. Bub Farm – especially with other recreational development of the site and connections to UD High School *(1a, 1b, 1c, 1d)*
- j. Upper Dublin Sports Club – abuts Robbins Park *(1a, 1b, 1c, 1d)*
- k. Schmidt Nursery (Limekiln Pike, Dresher) – open field, playground *(1a, 1b, 1c, 1d, 4b)*

B. LONG-RANGE IMPROVEMENTS

For any Long-Range Improvement listed below and shown in light green diamonds on **Figure 13**, implementation should be considered in any land development application before the Township. Although implementation should also span the anticipated “lifetime” of this plan, it is expected that work on Long-Range Improvements will require additional groundwork and therefore become more evident beginning in year 4. Changing priorities, emerging needs or park system developments and improvements may impact interest in certain sites. The italicized letters and numbers in parentheses after the recommendations refer to specific goals and objectives listed in **Chapter 2, pages 2-1 and 2-2**. The CAC recommends:

1. Land Banking

Land banking of a portion of the remaining land in Upper Dublin Township is a high priority. The CAC has identified underserved neighborhoods and land with appropriate size and conditions to meet these needs. The potential sites are identified on **Figure 11**, the Park Service Areas map, and on **Table 14**.

Table 14 lists 51 potential parcels with each assigned to a secondary grouping based upon how each addresses specific criteria. Each parcel has also been assigned to one of four categories according to how it meets nine listed criteria, each of which helps to better define that parcel’s significance to meeting Upper Dublin Township’s open space needs and objectives. A key factor is that this list has built-in flexibility. The Township may gain or lose interest in a specific parcel should it become available on short notice or if another parcel that addresses the same need(s) is acquired and/or protected. Changing priorities, emerging needs or park system developments and improvements may impact interest in certain sites. Over time, currently unidentified parcels may be added to the list and identified ones deleted. It is recommended that **Table 14** be reviewed and updated on an annual basis as part of the budgeting process.

Within **Figure 12**, the 14 Neighborhood Study Areas, there is the highest need to add park and open space in neighborhoods #1, 2, 3, 5, 10 and 12. Sites identified by an orange color within these neighborhoods represent the best opportunities. (*2a, 4b*)

2. Community Gateways

The CAC recommends evaluating opportunities to create gateways into various neighborhoods, by creating focal points and enhancing the aesthetics of specific intersections. This is especially effective where there are undeveloped islands that are safely accessible for planting and maintaining the improvements. Installing landscaping and signage that are both sustainable and designed to require little maintenance is one key component to success. The second critical component is to ensure there is a commitment from a consortium of community and business groups to fund and maintain the improvements, especially given the limited human and financial resources and competing priorities of Township staff. An example of business’s commitment to this effort is the corner treatment at the Limekiln Pike and Susquehanna Road

intersection, in front of the convenience store/gas station, currently operated by Cumberland Farms. The property owners were responsible for the installation of the plantings and are committed to maintaining the improvement. Another example of this type of gateway treatment in the Dresher Triangle area is at Limekiln Pike and Susquehanna Road east of the Pennsylvania Turnpike. These plantings were installed and are maintained by a community group. There are other opportunities throughout the Township, including: (1c, 1f, 1g)

- Fitzwatertown Road/Limekiln Pike – triangle to be modified, planned road improvements.
- Mobile Home Tract in Maple Glen – Limekiln Pike and Welsh Road
- Camphill Road/Pennsylvania Avenue – road improvements to realign Camphill Road
- Welsh Road/Dreshertown Road – Prudential and Zieger Rose corners

3. Sustainable Farming Co-ops

The CAC supports the ongoing practice by the Pennypack Farm Education Center for Sustainable Food Systems, which is a co-operative farm in Horsham. This organization has a partnership with the Montgomery County Food Bank and donates food to Philabundance and Hope Gardens. (Information at www.pennypackfarm.org) Application to the few remaining agricultural areas in the Township should be explored. Opportunities are the Zieger's Roses and Prudential tracts that are leased for farming. (1g)

4. Scenic Roads

The CAC recognizes the importance of scenic roads that define the community's character and add visual diversity and interest in the Township, particularly where many newer roads have little or no scenic quality. Scenic roads are identified on **Figure 8**, the Scenic Roads & Significant Historic Sites map. These roads need continued protection by requiring tree replacements and careful land development reviews if the character of these roads is to be maintained and enhanced. This requires acknowledging the natural tension between the needs of a developed community and the desire to retain the character of the original winding country lanes. There needs to be a balance between the requirements to widen roads and install curbs, sidewalks and storm water facilities and the advantages associated with preserving the older, winding, narrow, wooded lanes which provide speed control and micro climate benefits. It is also important to be flexible with both the materials required and the location of public sidewalks. This flexibility will facilitate the preservation of existing mature street trees or trees on private property close to the public right of way. (1a, 2a)

5. Community Center

See notes in the 1994 Open Space Plan Audit (Appendix C, page C-5) as well as the U-DIRECT Feasibility Study summary, page 1-14.

6. Historic Preservation Opportunities

The CAC recommends the Board of Commissioners continue to investigate ways to preserve and protect the existing historic and cultural resources found throughout the Township. These are listed on pages **4-9, 4-10** and in **Appendix B** and located on **Figure 8** found in **Chapter 4**. This may include developing regulations to delay the demolition and encourage the preservation of important local historic resources. Preserving local historic areas, such as the Keasbey and Mattison executive homes along Lindenwold Terrace and/or the original structures built along Limekiln Pike when Jarrettown was settled, is important if the quality and character of the Township is to be preserved for future generations.

Table 14: Vulnerable Land Analysis

# = Fig. 9	Street Location	Size (acres)	Located in Underserved Area	Diversity within System / Special Site Conditions	Meets Identified ACTIVE Open Space Needs	Creation of Overall NETWORK (Trail; Park)	LINKAGES w/in UDT to Neighboring Communities	Twp's Ability to Develop and/or Maintain/Manage	Likelihood of Twp's Ease in Acquiring or Protecting	CURRENT VULNERABILITY	OVERALL SIGNIFICANCE / CRITICAL LINK
CONSERVATION / PROTECTION EASEMENTS											
4	Susquehanna Rd.	7.500		X		X					
5*	Dreshertown Rd.	6.980		X		X	X		X	X	
10	Fitzwatertown Rd.	5.380		X		X	X	X			X
12	Limekiln Pike	114.750		X		X					
13	Dreshertown Rd.	193.530		X	X	X		X			X
15	Virginia Dr.	6.400		X		X				X	
16	Virginia Dr.	3.650		X		X				X	
27a	Pennsylvania Ave.	21.580		X		X	X				
27b	Pennsylvania Ave.	2.910		X		X	X				
28	Pennsylvania Ave.	33.500		X		X	X				
29	Pennsylvania Ave.	6.540		X		X	X				
38	Butler Pike	6.950		X		X				X	
SECTION TOTAL		409.670									
ACTION LIST											
1	Welsh Rd.	38.000	X	X	X			X			X
2	Dillon Rd.	6.300	X					X			
3	Limekiln Pike	12.890	X	X							
6	Dreshertown Rd. **	11.320		X		X			X	X	X
14a	Limekiln Pike	6.241	X		X			X			X
14b	" " " "	0.901	X		X			X			X
19	Virginia Drive	9.000		X	X	X	X			X	
20	Camp Hill Rd.	8.870		X	X	X	X	X	X	X	X
21	Camp Hill Rd.	3.000		X	X	X	X	X			X
22	Highland Ave.	2.250		X	X	X	X	X			X
23	Virginia Dr.	2.269			X			X		X	
24	Scott La.	19.086	X	X	X						
25	Shelley La. (w/#24)	" "	X	X	X						
31	Ft. Washington Ave.	2.000						X		X	X
32	Ft. Washington Ave.	5.969						X		X	X
39	Susquehanna Rd.	26.869		X		X	X	X		X	
40	Susquehanna Rd.	6.060		X		X	X	X		X	
41	Maple Ave.	15.040		X			X			X	X
43	Butler Pike	12.700	X	X	X	X	X	X	X		X
46*	Norristown Rd.	18.258	X	X	X			X		X	X
50	Dillon Rd.	9.817	X	X				X	X	X	
SECTION TOTAL		216.840									

Table 14: Vulnerable Land Analysis - continued

# = Fig. 9	Street Location	Size (acres)	Located in Underserved Area	Diversity within System / Special Site Conditions	Meets Identified ACTIVE Open Space Needs	Creation of Overall NETWORK (Trail; Park)	LINKAGES w/in UDT to Neighboring Communities	Twp's Ability to Develop and/or Maintain/Manage	Likelihood of Twp's Ease in Acquiring or Protecting	CURRENT VULNERABILITY	OVERALL SIGNIFICANCE / CRITICAL LINK
INTEREST LIST											
7	Twining Rd.	6.260		X				X			X
8a	Woodland Dr.	2.500		X				X			X
8b	Woodland Dr.	2.680		X				X			X
33	Ambler Rd.	3.789	X								
34	Ambler Rd.	8.750	X								
36	Ambler Rd.	9.900	X		X			X			
44a	Butler Pike	5.800	X		X		X				
44b	Butler Pike	2.800	X		X		X				
45	Butler Pike	3.700	X		X		X				
SECTION TOTAL		46.179									
WATCH LIST											
9	School La.	8.500			X						
11	Twining Rd.	3.100	X		X						
17a	Camp Hill Rd.	36.430				X	X		X	X	
17b	" " " "	14.500				X	X		X	X	
18	Virginia Dr.	9.419		X		X	X		X	X	
26	Pennsylvania Ave.	11.030		X			X				
30	Ft. Washington Ave.	4.269							X	X	
35	Ambler Rd.	2.690	X								
37	Farm La.	3.346			X						
42	Tennis Ave.	9.200			X	X	X				
47a*	Limekiln Pike	3.250	X						X	X	
47b*	Limekiln Pike	7.859	X						X	X	
48	Dillon Rd.	4.922			X						
49	Butler Pike	14.680	X			X	X				
51	Limekiln Pike	6.800			X		X	X	X	X	
SECTION TOTAL		139.995									
<p>* Designates a vulnerable parcel with pending application for subdivision or land development. ** by easement</p>											

Montgomery County is in the process of updating its Comprehensive Plan. *Vision Plan – Shaping Our Future* was adopted by the Montgomery County Board of Commissioners (September 2004) with other elements currently being written. Among the elements in preparation is the *Open Space, Natural Features, and Cultural Resources Plan – Shaping Our Future* (Draft, September 2004). Among the set of goals in the adopted *Vision Plan* are ones specific to open spaces, natural features and cultural resources. These goals (#11 through #18 of the entire *Vision Plan's* list of 48) are listed below.

- #11. *Preserve Large Interconnected Areas of Significant Open Space*
- #12. *Protect and Manage Wetlands, Streams, Steep Slopes, Woodlands and Natural Habitats*
- #13. *Create a greenway System Along Rivers, Creeks, and Other Sensitive Natural and Historic Features*
- #14. *Develop A County-wide Network of Interconnected Trails*
- #15. *Provide Park Facilities to Meet the Public's Recreation Needs*
- #16. *Preserve Farmland and Farming*
- #17. *Protect Scenic Roads, Vistas and Viewsheds*
- #18. *Protect Historic Resources and Cultural Landscapes*

This *Open Space and Environmental Resources Protection Plan* (2005) for Upper Dublin Township seeks to meet these goals with its recommendations.

The opportunities to connect to existing and proposed trails and dedicated open spaces and natural areas in our seven neighboring municipalities are significant. The possibilities for linkages are noted on **Figure 10** (Open Space Linkages) and are described below.

Because each of our neighboring communities was preparing its updated Open Space Plan at the same time that Upper Dublin Township was formulating this plan, the leadership team for the Citizens Advisory Committee (CAC) hosted a joint-municipal meeting in January 2005. (The purpose was to discuss what linkages could or do bridge our borders.) The goal has been to expand the regional trail and pathway system and link the maximum number of open spaces. The results of that meeting and subsequent communication following that session are reported below.

In the spring of 2005 when the draft plan was in preparation, the following were identified as related to plan preparation for our neighboring communities.

Abington Township – The most direct linkage to Abington Township will be the PADOT bike trail along Susquehanna Road that will continue beyond the Township border towards Easton Road with connections to the existing Roslyn Trail in Roslyn Park adjacent to Susquehanna Road. From the intersection of Susquehanna Road and Fitzwatertown Road, connections will be made to a trail system of sidewalks and share-the-road options proposed by two neighborhood groups – Abington Trails and United Neighbors currently working with Abington Township. These trails will connect Susquehanna Road with Crestmont Park and Willow Grove Mall with associated spur trails to neighborhoods and points of interest along the corridor. It will also extend east beyond Easton Road.

Ambler Borough – The existing sidewalk system provides good connections to the Upper Dublin Township borders that nearly surround Ambler. These will connect to the WVWA Green Ribbon Trail, Temple Ambler and Maple Glen, and to Highland Avenue to CHAC and the Cross County Trail. The Ambler Trail Plan anticipates linkages to Kenilworth Park, Hamilton Park, and Riccardi Park, and additional access to the WVWA Green Ribbon at the west end.

Horsham Township – Upper Dublin Township trails will link to Horsham Township’s trails (by proposed sidewalks and on-road bicycle trails) at Welsh Road and Dreshertown Road and at Welsh Road and Limekiln Pike in Maple Glen.

Lower Gwynedd Township – Besides the Susquehanna Road bike trail, Upper Dublin can be connected to a proposed trail near the border at Route 309/Gwynedd Oaks and adjacent to Robbins Park (#23 Existing Parks & Open Spaces). In the Lower Gwynedd Plan, this is referenced at the Arbor Lane to Springhouse Trail. Linking to the commercial center of Springhouse is an important element.

Springfield Township – Linkages to Springfield Township will be made by a proposed regional trail along the Sandy Run. The connection will be made near the intersection of Pennsylvania Avenue and Camp Hill Road.

Upper Moreland Township – The primary connection to Upper Moreland Township will be the proposed Cross-County Trail at the intersection of the Norfolk Southern rail line and Welsh Road. Connections of local trails with the Cross County Trail will extend access to this municipality.

Whitemarsh Township – The primary links to Whitemarsh Township will be the existing WVWA Green Ribbon Trail and the proposed trail along the Sandy Run that passes first through Springfield Township. Other potential connections include Pennsylvania Avenue and Bethlehem Pike near the Ft. Washington SEPTA rail station, the Cross-County Trail, and road improvements underway with Pennsylvania Avenue associated with the ongoing Route 309 construction.

CHAPTER 11

POLICIES FOR PROTECTING OPEN SPACE

This report identifies over 50 sites for protection, including acquisition of the entire property or a portion of it. Outright “fee simple” acquisition (direct purchase) is not possible for all of this land as funding is limited and some landowners may not be willing to sell. Alternate strategies are needed to meet the goal of setting aside additional land for parks, recreation and environmental protection. Policies to guide Upper Dublin Township in determining what lands should be acquired are suggested below. Criteria as to what types of land, sizes and locations would better be preserved or protected through various methods also are discussed. This chapter also identifies and briefly describes methods of preservation, including those that are appropriate for a developed community like Upper Dublin and others that may be less appropriate here. Among the methods are possible changes to the Township’s zoning and subdivision codes, acquiring easements, encouraging private donations and continuing community education.

Ultimately, acquisition or preservation of any land by Upper Dublin Township will be accomplished following due process, including public review and opportunity for comment.

Policy Ideas

The Upper Dublin Township Board of Commissioners should adopt a policy to guide decisions on whether or not to buy property, obtain some type of easement on a site or accept an offer of dedication from a property owner. Criteria the Board of Commissioners should consider include ensuring the candidate parcel serves an identified need or expands an existing facility or open space. It is important to identify significant, unique or sensitive resources that exist on the site. Financially, there must be a clear understanding of what the initial one time cost of purchasing or easing the property would be and what costs are anticipated for ongoing maintenance obligations. Consideration should also be given to not overextending Township human and financial resources. Therefore, determining possible funding sources, outside of the Township’s general fund, would be helpful and permit realistic expectations. Clearly the decision to or not to buy or ease a property depends upon many factors, including the property owner’s desires, financial resources and characteristics of the property itself such as its location, size and other attributes.

Zoning and Subdivision Code Revisions

The Township adopted an Open Space Preservation District overlay zone that is voluntary in nature. It has been used once since the regulations were adopted in 1997. The Commissioners

could consider amending these regulations to make them mandatory on certain sized residentially zoned properties. Alternatively, the Commissioners could revise the incentives provided in the overlay to increase the likelihood that a developer or landowner will choose it as the preferred regulatory mechanism. This revision could include modifying the density permitted in the developed area in return for preserving a specific resource or amount of land.

Creating a rural or farmland preservation zone is no longer a viable option in the Township as most of the land has been developed. For this reason, it may also be difficult to develop a Transfer of Development Rights (TDR) program.

It is advisable to strengthen some of the Township's resource protection ordinances. For example, the zoning code currently requires density calculations to subtract areas of certain resources to determine the amount of develop-able land existing on a site. This provision only applies to A-Residentially zoned property. As the most develop-able land in the Township has already been built upon, it is appropriate to expand this provision to all the residential zoning districts. In 1995 and 1999 the Board of Commissioners adopted floodplain buffer provisions that regulate disturbance within one vertical foot of the 100-year floodplain. It is appropriate to expand this concept and apply it to wetlands, streambeds and stream corridors. The Township's wooded lot provisions, addressed through land development amendments in 1994, also could be revised and linked more tightly to the subdivision code's minimum planting standards. Another possibility to better manage erosion and storm water runoff problems is to require grading permits for clearing vegetation from a parcel once a certain clearing threshold is met.

An effective way to achieve the goals and objectives of this plan is to incorporate them into the required public development review process. As a parcel of land is going to be developed, it offers the perfect opportunity to discuss identified community needs and encourage applicants to participate in the realization of the Open Space Plan's goals by providing open space set-asides and creating rights-of-way for pedestrians, including trails, paths and sidewalks. All Township staff and advisory boards involved in the review process must be diligent in plan review to achieve these goals and objectives as a basis for feedback to applicants.

A new option for the Township Commissioners to consider is establishing a mechanism that streamlines the development review process and promotes cooperation between developers and municipalities for proposals that meet the community's goals as outlined in this Open Space Plan. This type of process is now available because of amended language in the Municipalities Planning Code. If the Township adopts the Montgomery County Comprehensive Plan and enters into an intergovernmental cooperative implementation agreement, it is eligible to utilize the specific plan provisions. A specific plan is a detailed master plan, developed and adopted by the Township that shows how a given area is to be developed. The specific plan then acts as the zoning code that controls private development in that area, and an applicant who submits a plan complying with the specific plan is entitled to an expedited review and approval process.

The Township already has in place an open space fee-in-lieu requirement. This fee is reviewed and adjusted on an as needed basis.

Acquire Easements (purchased and donated)

The Township should continue to approach landowners with easement proposals when fee simple ownership is either not possible or unnecessary. A prime example would be an easement along scenic roads to protect the views that motorists and pedestrians enjoy along the public rights of way. These easements should require the maintenance of street trees and restrict grading within a strip of land parallel to the right of way. The easements would vary in width and shape, depending upon the particular resource being protected.

Public access easements should be pursued for trails. It is unnecessary for the Township to purchase entire tracts of land to secure enough usable space for a trail, which may only require a 50 to 60 foot wide right-of-way. The Township should maintain the trail right-of-way as part of the easement.

Conservation easements are another type of easement that are a valuable tool to preserving the community's character or quality of life. These easements are developed to preserve specific resources, such as a streambed and its riparian corridor or a steeply sloping wooded hillside. Conservation easements can be publicly or privately held and may permit public access or prohibit it. They are particularly useful if the property owner is uncomfortable about permitting public access, where the resource is too sensitive and may be harmed by public access and/or where the resource in question is inappropriate for Township acquisition because it will be difficult to maintain or it is in an otherwise inappropriate location. More often than not, conservation easements are held by non-profit land conservation organizations. Therefore, establishing partnerships and facilitating open lines of communications with these types of organizations will be beneficial to Upper Dublin Township, residents and non-profit groups.

The Planning Agency Advisory Board (PAAB), the Shade Tree Commission (STC) and/or the Environmental Protection Advisory Board (EPAB) should assist in the effort to obtain easements. Researching examples of such easements, reviewing them with the Township Solicitor and recommending their use when opportunities arise – such as when a property goes through the land development review process or when an application is made for a building permit – are ways to support purchase and/or donation.

Encourage Private Donations

Sometimes, landowners want to preserve their land by donating the full title of the property or by donating their development rights to a non-profit land conservation group. Either of these approaches will permanently preserve land as open space.

At this time, if landowners donate development rights, they receive tax benefits, but the land must be permanently restricted from future development. There are a number of land conservation groups operating in Montgomery County that would be willing to take these donations, including the Montgomery County Lands Trust, The Brandywine Conservancy, The

Natural Lands Trust, The Nature Conservancy, The Conservancy of Montgomery County, the Wissahickon Valley Watershed Association and Heritage Conservancy.

Land conservation groups may be able to help local landowners develop some of their land while keeping a major portion of the property open and deed restricted. With this approach, there would be a limited development designed in a sensitive manner, allowing a landowner to receive some compensation while preserving the most important environmental and cultural resources on the site.

The Township Manager and the Commissioners can refer interested landowners to these conservation groups. They also may welcome proposals to donate land to the Township for permanent open space use.

Community Education

Education programs for children and adults help instill a land conservation ethic in Upper Dublin, which may be more important in the long term than any number of regulatory changes. This ethic recognizes and values the existing parks and open spaces in the Township, encourages volunteers to clean up and maintain parks and trails, and keeps the needs of a sound parks and open space plan always before elected officials.

Upper Dublin Township is already recognized for its community programs offered at the Robbins Park for Environmental Education as well as an overall commitment to conservation, ecology, recycling and environmental stewardship. There is a Friends of Robbins Park group and a Stewardship Plan/Land Management Plan for Robbins Park that was prepared by a consulting firm, Habitat for Design, in 1995. There are other partners developing educational programs within the Township, including the School District of Upper Dublin, where there are already two high school ecology groups, the Wissahickon Valley Watershed Association, Temple University Ambler/Center for Sustainable Communities, Temple University's teaching arboretum, Temple University's regional, annual *Earthfest* celebration, the Township's Environmental Protection Advisory Board and Montgomery County Community College.

The Township's Director of Parks and Recreation will continue to contact and coordinate with these and other organizations to augment Upper Dublin's programs. To date, these groups have done a commendable job, making a positive impact on Upper Dublin Township. Additional and new opportunities to promote good stewardship of our community resources will continually be explored.

As with the previous Open Space Plan (1994), moving any initiative or project in this document from recommendation to reality will require years of work and involve many committed individuals, elected and/or appointed boards and community organizations. Among others on this list of Upper Dublin Township “movers and shakers” are the Board of Commissioners, the Township Manager, the Director of Parks & Recreation, the Shade Tree Commission, the Environmental Protection Advisory Board, the Planning Agency Advisory Board and other citizen committees and task forces. Those with a broader community perspective include Temple University Ambler, the Wissahickon Valley Watershed Association and Montgomery County.

Implementation of recommendations should be considered in any land development application before the Township or contemplated changes to Township policies and procedures.

1. Top Priority: *Land Banking*

As noted in **Table 14, Vulnerable Land Protection Analysis (found in Chapter 9)**, the Open Space Plan Citizen Advisory Committee identified several dozen sites for acquisition, development or protection in perpetuity. **To restate what is found in Chapter 9: each parcel has been assigned to one of four categories according to how it meets nine listed criteria, each of which helps to better define that parcel's significance to meeting Upper Dublin Township's open space needs and objectives. A key factor is that this list has built-in flexibility. The Township may gain or lose interest in a specific parcel should it become available on short notice or if another parcel that addresses the same need(s) is acquired and/or protected. Changing priorities, emerging needs or park system developments and improvements may impact interest in certain sites.** Over time, currently unidentified parcels may be added to the list and identified ones deleted. It is recommended that **Table 14** be reviewed and updated on an annual basis as part of the budgeting process.

Land Banking methods include, among others:

1. Completing Fee Simple Purchase (making use of public and private funding sources)
2. Encouraging Private Donations of Open Space
3. Acquiring Easements (Purchased and Donated)
4. Continuing to apply and amend Natural Resource Protection Ordinances
5. Continuing to apply regulations that apply to Residential Zoning Districts (that require open space set-asides or payment of fees “in lieu of” to purchase open space in new residential development)
6. Encouraging Self-Placement of Protective Easements on Private Lands

Upper Dublin Township will aggressively pursue its options on the “Conservation/Protection Easements” list and the “Action” list to achieve the goal of providing a public park and/or playground within a half-mile radius of each residence. The Township will closely monitor parcels on the Interest and Watch lists.

2. Trails and Connections

The trails, bikeways, pathways, sidewalks and other connections proposed in this plan are many and varied. Trails need to be viewed as long-term projects because of private property concerns, safety, size limited corridors, costs of construction and ongoing maintenance. They have worked in other areas of the County and are increasingly viewed as community and regional assets.

Upper Dublin Township will pursue ways to complete trails and links between existing parks and open space sites, the rest of the community and across municipal borders in order to achieve the goals of (1) providing safe pedestrian access to public parks and playgrounds within a half-mile radius of each residence and (2) effectuating a regional trail network.

- **Sandy Run Greenway**

Montgomery County prepared and administers a plan designed to protect the Sandy Run waterway and floodplains as well as improve its water quality and make it available for public access/use. A combination of land purchase and easements is needed to establish a right-of-way for this trail. Full public access along the stream is the ultimate goal, which might be compromised on certain properties, notably Manufacturers' and LuLu Temple Golf Courses.

Small (less-than-one-acre) lots may be the easiest to purchase outright, since the floodplain, combined with access easement would probably render a small lot unbuildable. The concept is to create a protected, natural area along both sides of the stream.

On larger, private lots (vacant or partly occupied), the next alternative is either a purchased or donated easement from the landowner. The easement should be wide enough to include the 100-year floodplain at a minimum. Adjacent woods and steep slopes should also be included. Samples of this kind of easement can be obtained from the Wissahickon Valley Watershed Association, given their experience with the established Green Ribbon Trail. Where neither fee simple purchase or easements are possible, the Township will propose a voluntary agreement with the landowner whereby the landowner would consent to maintain existing vegetation along the stream banks and plant new trees, shrubs and groundcover where they are sparse.

3. Facility Development and Improvements

Numerous projects identified in **Chapter 9**, covering Recommendations, Short-Term Improvements, Potential New Parks / Improvements and Install New Playgrounds and Upgrade Equipment, fall into this category. Funding for new facilities will most likely come from the Township's Open Space Fund (a Board of Commissioner-controlled rolling fund fueled by developer contributions and an annual property tax assessment) and/or state grant funding sources. Private funding sources will be used as available. Some sidewalk connections may be accomplished when adjacent lands are subdivided and/or developed. Each will be pursued in an ongoing fashion by the Township's Department of Parks and Recreation through its annual

budgeting process in order to achieve the goal of providing at least one neighborhood or community park within a half-mile distance from every Township residence to satisfy both active and passive recreation needs.

4. Community Gateways

Upper Dublin Township staff and advisory boards, in conjunction with community group and local business funding and maintenance partners, will pursue creating gateways into various Township neighborhoods by enhancing the aesthetics of specific intersections. Such enhancements should include appropriate landscape treatments and signage that are consistent in quality and image throughout the Township.

5. Scenic Roads

Upper Dublin Township will continue to recognize the importance of scenic roads that define the community's character and add visual diversity and interest in the Township. Earlier sections of this plan suggest that scenic roads, identified in the Scenic Roads & Significant Historic Sites map (Figure 8), need continued protection by requiring tree replacements and maintenance, as well as careful land development reviews if the character of these roads is to be maintained and enhanced. Upper Dublin Township staff and advisory boards will continue their efforts to protect these resources with careful review of land development plans.

6. Sustainable Farming Co-ops

Sustainable Farming Co-ops have replaced the concept of "community gardens" in the Township. Upper Dublin Township will promote the practices of local groups such as the Pennypack Farm Education Center for Sustainable Food Systems by supporting community education and public information efforts.

7. Community Center

In view of identified community needs for and potential uses of indoor recreation space, Upper Dublin Township maintains an interest in such a facility.

8. Historic Preservation Opportunities

Upper Dublin Township will continue to investigate ways to preserve and protect the existing historic and cultural resources found throughout the Township. One good example is to use the implementation of regulations to deter demolition and encourage preservation of important local historic resources.

Implementation Schedule

Upper Dublin Township will begin immediately to take steps toward realization of the goals and objectives stated in this Open Space Plan (2005). Opportunities will be acted upon when presented. Township planning efforts will result in the commitment of adequate resources appropriated through the Board of Commissioners' annual budgeting process.

Table 15: Implementation and Reporting Responsibilities

#	INIATIVE / PROJECT	LEAD ADVOCATES	LEAD MONITOR(S)
1	Land Banking	BOC MGR SOL ENG P&R UDSD WVWA MCPC PrG/O	MGR P&R
2	Trails and Connections	MGR P&R ENG SOL WVWA MCPC TUA UDSD PAAB EPAB STC CG/O PrG/O	MGR P&R
3	Facility Development and Improvements	P&R MGR BOC UDSD	P&R
4	Community Gateways	MGR CG/O PrG/O STC PAAB EPAB	MGR
5	Scenic Roads	BOC MGR PAAB STC P&R	STC
6	Sustainable Farming Co-ops	MGR P&R TUA CG/O PrG/O EPAB	CG/O TUA
7	Community Center	BOC MGR P&R UDSD CG/O	MGR P&R
8	Historic Preservation Opportunities	BOC MGR HPTF PrG/O TUA	HPTF PAAB PrG/O
9	Land/Easements Stewardship Program, Info. Recorder	MGR P&R PrG/O	MGR
10	Funding Sources	P&R MGR BOC UDSD MCPC CG/O PrG/O	MGR P&R
11	Provide Annual Update on <i>Open Space Plan</i> to BOC	P&R MGR	P&R
12	Provide 5-year Update on <i>Open Space Plan</i> to MCPC	P&R MGR	P&R

KEY - UPPER DUBLIN TOWNSHIP

- BOC = Board of Commissioners
- ENG = Township Engineer
- EPAB = Environmental Protection Advisory Board
- HPTF = Historic Preservation Task Force
- MGR = Township Manager
- OTC = Other Township Committees/Boards
- OTD = Other Township Departments
- PAAB = Planning Agency Advisory Board
- P&R = Dept. of Parks & Recreation
- SOL = Township Solicitor
- STC = Shade Tree Commission

KEY - OTHER ORGANIZATIONS

- CG/O = Other Community Groups/Organizations
- MCPC = Montgomery County Planning Commission
- PrG/O = Private Groups/Organizations
- TUA = Temple University – Ambler
- UDSD = Upper Dublin School District
- WVWA = Wissahickon Valley Watershed Association

The Montgomery County Green Fields/Green Towns Program Recommendations (GF/GT PR) (December 2003) identified in the Scope for Plan Updates (GF/GT PR Appendix, page 61) opportunities for eligible and interested municipalities to seek grant funding for six optional elements:

- A. Green Infrastructure
- B. Heritage Resources Conservation
- C. Municipal Trail and Pathway Development
- D. Farmland Presentation
- E. Floodplain Restoration
- F. Schuylkill River Greenway

Upper Dublin Township qualified to undertake three of these optional elements, (B) Heritage Resources Conservation, (C) Municipal Trail and Pathway Development and (E) Floodplain Restoration.

Heritage Resources Conservation

Upper Dublin Township contains a wealth of historic and architectural resources unique to the Township. This creates an opportunity to enhance the resources, using them as a focal point in planning and economic revitalization activities. For those looking to live and work in communities with unique history and architecture, these resources can help the Township capitalize on its past while ensuring a promising future for its residents. **Chapter 4** lists some of the locally significant historic sites and **Figure 8** shows the general location of these sites and scenic roads.

In 2001 the Conservancy of Montgomery County received a grant from Pennsylvania Historical and Museum Commission (PHMC) and The Arcadia Foundation for the purpose of completing an inventory of local historic structures and sites. The Conservancy, working closely with the Township and The Historical Society of Fort Washington, developed The Historic Resource Survey, which identifies 1,328 resources within Upper Dublin that predate 1950. Numerous architectural styles were identified and approximately 95% of the buildings surveyed retained their architectural integrity and were found to contribute to a potential historic district or districts. The survey findings and recommendations included the following:

- Using the survey as a planning document as it provides tangible and fundamental information on the architecture and history of Upper Dublin Township.

- Conducting further research on those buildings determined to contribute to a potential historic district. Additional information should be compiled on the history of each building, including deed research.
- Working with administrators and educators at Temple University’s Ambler Campus to preserve the Shoemaker House, as it may be the oldest building remaining in the Township. It is unique as a spring runs under the south end of the building. Although it is in very poor condition, it is recommended that the Township and the Fort Washington Historical Society work with Temple University to assess its structural condition and potential stabilization/reuse opportunities.
- Expanding listings on the National Register of Historic Places and creating local historic districts to help protect buildings from demolition and insensitive alterations. National Register Listings and Districts are needed to help attract investors who can benefit from the rehabilitation tax credits available for renovating eligible income-producing buildings. Pending federal and state legislation provides for tax credits on the rehabilitation of private homes, which if enacted, would provide additional incentives to homeowners in a National Register District.

Potential historic districts include:

- Old Fort Washington and Elliger Park areas
- Ambler Road/Orchard Road area
- Oreland, Dresher and Jarrettown sections of the Township
- Fort Washington Avenue between Limekiln Pike and Meetinghouse Road
- Temple University Ambler Campus
- Limekiln Pike/Fitzwatertown Road/Twining Road area near Sandy Run Middle School
- Sections related to the history of the Keasbey and Mattison Company, including Highland Avenue and Trinity Place, Lindenwold Avenue and St. Mary’s Villa.

Given the study findings and recommendations the Board of Commissioners appointed an ad hoc Historic Preservation Task Force to investigate options and recommend next steps. The Task Force began its efforts by developing a Township-wide overlay concept where the Board of Commissioners could potentially delay, deter or, in certain circumstances, possibly deny a demolition permit for a regulated historic resource. Public hearings were held in September 2004 where the overlay concept was presented and questions were answered. There was a great deal of public concern about the potential “taking” of private property. The question of property owners making the decision to include their property on the inventory was considered, but was finally determined to be inappropriate as a zoning code overlay is a public health, safety and welfare provision and the responsibility for this type of regulation rests with the municipality’s elected officials.

Given the community concerns over the broader, more general approach to protecting historic resources, the Task Force is going to work on a smaller scale, directly with residents in specific neighborhoods. If there is sufficient neighborhood support the Task Force will work with the residents and request the Commissioners authorize a study to create a local historic district.

This more focused approach to preservation allows support for the concept of protecting historic resources to grow neighborhood by neighborhood and will also provide evidence of the economic value associated with preserving the aesthetic quality and character of historic neighborhoods.

Upper Dublin Township Commissioners and professional staff will continue to work with interested residents and interest groups, such as the Historical Society of Fort Washington and the Conservancy of Montgomery County

Municipal Trail and Pathway Development

Upper Dublin Township has not previously had a comprehensive trail plan in place. In lieu of a trail plan, the Township has used the Open Space Plan (1994) and a separate Sidewalk and Bicycle Route Map prepared by the municipal engineer. As a result of the Open Space Plan (2005) update, Upper Dublin Township has prepared a comprehensive trail plan that incorporates the 1994 Plan and the route map referenced above, other recent plans such as the Sandy Run Creek Watershed Conservation Plan (November 2001) and draft County Comprehensive Plan (September 2004) along with a series of new pedestrian routes. The stated intent is to complete a system within the municipal borders and one that will be linked to each of the neighboring municipalities. That plan is shown on Open Space Linkages Plan, **Figure 10**. With the Township Board of Commissioners' adoption of the Open Space Plan (2005) and acceptance of it by Montgomery County, the Township will have a trail plan.

Trail Plan Goals

Upper Dublin Township has set a priority on internal trail development and linkages to other existing and proposed municipal, county and state trails. To that end and for this Plan update, the Open Space Plan (1994) has been substantially broadened by the addition of two specific new goals and objectives statements focused on trails and a trail network. These are found in **Chapter 2** of this Plan and are recapped below.

Goal 3: The Township's open space system will use **trails and greenways** (open space connectors) to **link** parks, schools, neighborhoods and natural areas (open space nodes) into a continuous network of open space resources. Upper Dublin Township will: *create, to the extent possible, links to other municipal, county, state and regional public open spaces and trails as well as to **privately owned** conservation land.*

Goal 4: Upper Dublin Township will strive to **provide safe access** to a neighborhood or school park and playground within a half-mile of every township residence. Upper Dublin Township will: *provide for a **network** of trails, pathways, sidewalks and crosswalks to be installed where high-volume streets and/or traffic patterns make pedestrian access to parks and playgrounds difficult or dangerous.*

In developing the Open Space Linkages map (**Figure 10, pg. 6-5**), input was sought by Township staff and consultants from each of the adjacent eight municipalities, Montgomery County and members of the Township's Open Space Plan Citizen's Advisory Committee (CAC) representing the interests of cyclists, runners, walkers, hikers and in-line skaters. A joint meeting with the adjacent municipalities resulted in additions to a draft linkages plan that identified trails and connections beyond the municipal boundaries. To these trails were added other trails and bikeways identified by Montgomery County (Cross County Trail, Sandy Run Greenway) and the Commonwealth of Pennsylvania (Susquehanna Road Bicycle Trail via PennDOT). Additionally, existing and proposed trails known as the Green Ribbon Trail managed by the local watershed organization (Wissahickon Valley Watershed Association, WVWA) were added with connections identified from existing and proposed trails. The composite of these trails is shown on **Figure 10** included in this Open Space Plan (2005). This step is viewed as an important initial step in finalizing Upper Dublin Township's first comprehensive trail plan. Proposed regional trail connections are as follows:

Linkages to Neighboring Municipalities

Key: *(P)* = Proposed *(E)* = Existing

- **Ambler Borough**
 - Trail connections to existing WVWA Green Ribbon Trail & Reservoir *(P)*
 - Municipal Sidewalks *(E)*
 - Trail connections to Temple Ambler Campus *(P)*

- **Abington Township**
 - Bicycle Trail along Susquehanna Road - PennDOT *(P)*
 - Trail to existing Roslyn Park Trail *(P)*
 - Pathway Network per Abington Trails, Inc./United Neighbors Plan *(P)*

- **Horsham Township**
 - Sidewalk/On-Road bicycle trail at Welsh Road/Dreshertown Road and Welsh Road/Limekiln Pike in Maple Glen *(P)*

- **Lower Gwynedd Township**
 - Trail Arbor Lane to Springhouse Center *(P)*

- **Whitpain Township**
 - Trail to Mt. Pleasant Avenue/WVWA Green Ribbon Trail *(P)*

- **Whitemarsh Township**
 - Trail along Sandy Run *(P)*
 - Sidewalk along Pennsylvania Avenue & Bethlehem Pike serving SEPTA's Ft. Washington Station *(E)*
 - Trail along Pennsylvania Avenue to Rt. 309 Corridor *(P)*

- **Springfield Township**
 - Trail along Sandy Run Greenway linked to WVWA Green Ribbon (*P*)
- **Upper Moreland Township**
 - Trail Cross County (*P*)
- **Montgomery County**
 - Trail Cross County (*P*)
 - Trail Sandy Run Greenway (*P*)
 - Bicycle Trail along Susquehanna Road (*P*)
- **Commonwealth of Pennsylvania**
 - Bicycle Trail along Susquehanna Road - PennDOT (*P*)

The internal and regional Trail Plan for Upper Dublin is considered a “work in progress” as each of the neighboring municipalities is working to finalize their *Open Space and Environmental Resources Protection Plans*. All are expected to have trail plans, which at the time of completion of this document existed only in draft form. Upper Dublin’s next step will be to incorporate changes into the trail plan resulting from finalization of the adjacent municipal plans and the County Comprehensive Plan, *Open Space Natural Features & Cultural Resources Plan*, Chapter 4 (draft September 2004).

As a second step, Upper Dublin Township (through the Department of Parks & Recreation) will distribute the **Figure 10**, the Open Space Linkages map to special interest groups in the Township and in particular, organizations that are focused on specific activities such as cycling, running, walking, hiking and in-line skating, etc. Comments from these groups will be requested and incorporated into the trail plan as part of a proposed Open Space Plan audit to be performed annually in Upper Dublin. Other comments to review and consider will be those associated with land and easement acquisition (**See Chapter 12**, Implementation).

Floodplain Restoration

Upper Dublin Township believes that the Floodplain Restoration Option is timely and very much needed. Sites that are particularly ripe for this option are properties in the Fort Washington Office Park affected by flooding from the Rapp Run and Pine Run, located between Camphill Road and Pennsylvania Avenue (Whitemarsh Township), in addition to properties in vicinity of the Sandy Run, extending from Fitzwatertown Road to Pennsylvania Avenue (Springfield Township).

However, Upper Dublin Township notes some difficulty in identifying future impact on our efforts by work completed by other upstream and downstream communities as well as damage created by isolated flooding based on aberrant storm patterns.

Criteria for Evaluation:

History of flood damage

The Township has had three federally declared flood disasters since 1986. The publicity and adverse economic impact of flooding in the Township and particularly in Fort Washington have been significant. For example, during the weekend of tropical storm Allison (June 16 and 17, 2001) there were 33 calls for assistance referred to the Fort Washington Fire Company over a 12-hour period. Of these, 19 calls were for water rescues or for vehicles trapped in water, including a SEPTA bus with driver and seven passengers caught in rising water. Most importantly, each time emergency responders (police officers, firefighters, EMS responders, Public Works and Parks & Recreation crews) perform their duties in reaction to urban stream flooding, their lives and public resources are placed at-risk. Floodplain restoration is critical to solving our flooding problems. Reductions to the frequency and intensity of flooding could save lives, protect vehicles, equipment and supplies.

Properties recommended for floodplain restoration

- 4 Willet Drive, 0.6 acres, tax block 004E, unit 037. This vacant residential lot has never been developed due to floodplain from Rose Valley Creek.
- 1622 E. Butler Pike, 12.7 acres, tax block 004, unit 041. The rear portion of this lot is intersected by Rose Valley Creek and has the potential for a detention basin. It is currently under Act 319 preferential assessment.
- 600 Office Center Drive (portion adjacent to Virginia Drive), tax block 052, unit 033. A portion of this developed property in the Fort Washington Office Park is dedicated open space and could be improved to help alleviate flooding in the northern end of the Office Park.
- Virginia Drive, portion of a 9.4-acre lot, tax block 052, unit 010. This is an open portion of the former AT&T facility located adjacent to DeVry University and the Fort Washington Expo Center.
- 585 Camp Hill Road, 8.7 acres, tax block 052, unit 008. This property at the intersection of Virginia Drive and Camp Hill Road is large enough to be used for both open space and floodplain management purposes.

Proximity to other open space property

The areas upstream of Virginia Drive along the Rapp Run that have open space are prime opportunities for floodplain restoration and storm water detention. Properties along the Sandy Run are located between Sandy Run Park and the Dannenberg Arboretum.

Future open space use potential

The linkages along the Rapp Run between Virginia Drive and Susquehanna Road are critical for establishing a constituency for open space, creating a wonderful connection between two significant township parks – the Camphill and Highland Athletic Complex (CHAC) and Mondauk Common.

Location within a greenway

Floodplain property within the Fort Washington Office Park and the Sandy Run will contribute to the realization of a Sandy Run Greenway / walking trail and the Cross County Trail that is currently in engineering – a pedestrian and bicycle trail that will run through the FWOP and continue to Upper Moreland Township.

Potential new impoundment areas

The Township Engineer and Public Works Director have an ongoing project to identify new areas within the floodplain to detain water during major storms. Sites submitted to the township for subdivision or land development are designed to “over detain” storm water; that is, to handle all of the new runoff created by the development plus ten to twenty percent extra volume.

Other Sources of Funding for Floodplain Restoration Projects

Federal

Through the National Park Service, the *Rivers, Trails and Conservation Assistance Program* offers technical assistance for recreation and conservation projects and can aid in identifying potential sources of funds.

The Environmental Protection Agency offers a variety of grants related to environmental quality and natural resource protection. Both financial and technical assistance are available.

The US Department of Agriculture, Natural Resources Conservation Service (NRCS) sponsors a watershed protection and flood protection grant program for state and local governments and non-profit agencies to carry out, maintain and operate watershed improvements involving less than 250,000 acres. Financial and technical assistance is available to improve watershed protection, flood prevention, sedimentation control and other fish and wildlife or recreation projects.

State

The Commonwealth of Pennsylvania's Department of Environmental Protection will reimburse municipalities for costs associated with the preparation, administration, enforcement, and implementation of ordinances and regulations as required by the Stormwater Management Act.

Also, the PA Department of Conservation and Natural Resources' (DCNR) *Community Conservation Partnerships Program* provides grants to support PA Recreational Trails projects.

More specifically the *Pennsylvania Rivers Conservation Program* may be helpful in providing technical and financial assistance for the development and implementation of plans to conserve and enhance river resources.

The Department of Community and Economic Development (DCED) offers grants through many different programs including the *Floodplain Land Use Assistance Program*, which provides grants and technical assistance to encourage the proper use of land and the management of floodplains.

PennDOT's *Transportation Enhancement Program* is a cost reimbursement (not grant) program that may be useful if the project has a direct relationship to the surface transportation system. The applicant's project must fall into one or more of the 12 categories established in the **Transportation Equity Act for the 21st Century**, including environmental mitigation to address water pollution due to highway runoff. Proposals must be for a complete, identifiable, and usable facility or activity and funding is available for design, acquisition and utility relocation or construction costs.

The Pennsylvania Infrastructure Investment Authority (PENNVEST) offers a low interest revolving loan program administered by the Commonwealth of Pennsylvania to assist municipalities with the installation of new, or the repair and replacement of existing water, sewer, and stormwater management infrastructure. To qualify for any loan the Township must demonstrate need in the form of water or sewer studies and must have stormwater management regulations and/or be implementing its respective Act 167 plan.

The Pennsylvania Department of Environmental Protection (DEP) is the state agency largely responsible for administering the state's environmental laws and regulations. DEP also manages several grant funding programs included within the *Growing Greener* program. One potential program is the *Watershed Restoration and Assistance Program* (WRAP) offering grants providing assistance in the development and implementation of watershed remediation plans. Stormwater management assistance is also available to reimburse townships for costs associated with the preparation, administration, enforcement and implementation of ordinances and regulations required by the Stormwater Management Act.

The Pennsylvania Emergency Management Agency (PEMA) administers the *Federal Emergency Management Agency (FEMA) Hazard Mitigation Grant Program*. This grant pays for projects such

as the acquisition and removal of structures in flood prone areas and the construction of hazard controls. Funding is available after a federally declared disaster has occurred (declared by the President of the United States).

Private

The PECO Energy “*Green Region*” program, administered by Natural Lands Trust, offers municipal grants for up to 75% of expenses associated with the fee simple purchase of properties identified in an open space plan, as well as the purchase of conservation easements. Additionally, up to 50% of the cost of materials and labor to install habitat improvements and capital improvements for passive recreation on municipally owned open space is available.

The Conservation Fund offers a *Watershed Action Grant Program* to protect watersheds, improve water quality and promote watershed stewardship. The funds are distributed to nonprofit organizations and their partners.

The *National Association of Counties Five Star Restoration Challenge Program* provides financial assistance to support community-based wetland, riparian and coastal habitat restoration projects that build diverse partnerships and foster local natural resource stewardship through education, outreach and training. Project sites can be public or private land and grants average \$10,000.

FEDERAL, STATE, COUNTY and CITY PARKS, TRAILS and OPEN SPACE LANDS

Federal

- **Valley Forge National Historical Park** (total of 3,466 acres, with 1,964 situated in Montgomery County) is administered by the National Park Service (NPS) as one of more than 340 sites across the nation that protect the natural beauty and cultural heritage of America. Valley Forge Park is the site of the Continental Army's 1777-78 winter encampment. The location was established as a state park in 1893 and then transferred to the federal government in 1976 as part of the nation's bicentennial celebration. In addition to historic buildings and interpretive exhibits, the park provides bicycle and walking paths, horse trails, and opportunities for fishing, boating, picnicking, and sightseeing. It has major significance to the county's open space system for natural resource protection, passive recreation, and heritage tourism. The park is also a major feature of the Schuylkill Greenway and the junction of several regional trails. The proposed Revolutionary War Museum to be located within the park will dramatically increase the number of park users.

State

1. **Evansburg State Park** (3,349 acres), along with Fort Washington State Park (described below), is administered by the Pennsylvania Bureau of State Parks, which is responsible for the natural, scenic, and recreational areas that comprise the Commonwealth's 116 parks. Evansburg State Park follows the Skippack Creek Valley, encompassing much of the headwater areas in Towamencin and Lower Salford Townships, portions of Worcester and Skippack Townships, and a section of Lower Providence Township that extends almost to the Skippack Creek's confluence with the Perkiomen Creek. Thirty-seven historic structures, including residences, farmsteads, a mill and bridge, and the National Register Evansburg Historic District, are contained within the park. Evansburg Park was originally conceived as a park that would surround a large lake to be developed along the Skippack Creek. As a result of detailed environmental analyses, the development of the lake has been indefinitely postponed. The park's predominantly wooded landscape provides recreational activities including fishing, hunting, nature study and environmental education, and trails for equestrians and hikers. The park also contains a public golf course, an American Youth Hostel, and a central playground area. The park contains significant scenic and natural resources and is also an important location for regional trail and greenway connections.

2. Fort Washington State Park (484 acres) in Whitemarsh Township encompasses woodland and a stream valley, with scenic views across a historic landscape that includes Fort Hill and Militia Hill, a ridgeline occupied in 1777 by Washington’s troops on their way to Valley Forge. Four separate use areas that are interconnected by undeveloped parcels of county parkland form the park. The Wissahickon Creek flows through the park and is part of an almost completed “Green Ribbon” that links the Wissahickon Creek’s headwaters with the Whitemarsh Valley and the Valley Green area of Fairmount Park in Philadelphia. The park is an important trailhead for the future regional multi-use Wissahickon Trail and currently is popular for hiking, dog walking, picnicking, and informal field games. A yearly hawk watch and bird count takes place from a platform overlooking the creek corridor.

3. State Game Lands - The Pennsylvania Game Commission owns two properties in Montgomery County, both located in Limerick Township. Each site is open to the public for small game hunting, with hiking permitted in accordance with safety regulations.

4. Gamelands #234 (155 acres) lie along the Schuylkill River in the Linfield area and gives access to the deteriorating Vincent Dam. This property contains a combination of crop fields, meadows, and hedgerows ideally suited for small game hunting. Access to this site is from Pennhurst Road.

5. (Former) Eastern State Game Farm (350 acres) is located in northern Limerick Township at the edge of the Stone Hill Preservation Area. In addition to crop fields and meadows, this property includes large areas of woodland that connect to natural areas under municipal and private conservation organization ownership. Access points are located along Ryanford Road, State Game Farm Road, and Pheasant Road. The property that was formerly used to raise pheasants is now being converted into gamelands for hunting.

County

Montgomery County owns or manages more than 5,000 acres of permanently preserved open space. Most of this acreage is associated with eight county parks and five historic sites, with additional land located along the Schuylkill River Greenway. An additional site, Spring Mountain, although not maintained with park improvements, is a significant undeveloped natural area. A number of additional properties are held either in fee simple or by trail/conservation easement as part of the county trail system.

1. Graeme Park in Horsham Township (41.72 acres) is one of four state-owned historic sites that are maintained in Montgomery County by the Pennsylvania Historical and Museum Commission (PHMC). The other three sites are described below. PHMC provides exhibits and tours of historic structures and landscapes throughout the state. Many of these

sites also offer special workshops, seminars, and living-history programs, and in the case of the Montgomery County sites, invite visitors to attend musical performances and seasonal events. Each of these historic sites tells “an American story” that includes not only the buildings but also the surrounding landscape. Gardens, fields, and woodlands extend the visitor’s scenic and educational experience. Built by Governor William Keith in 1721-22, Graeme Park is the only remaining colonial governor’s residence in the Commonwealth. The site, and the adjacent historic Penrose/Strawbridge Property, protects a regionally historic landscape for heritage tourism and natural resource preservation.

2. The Highlands (43.3 acres), on Shaeff Lane in Whitemarsh Township, is the 1801 country estate of Anthony Morris. The house is a Georgian manor house whose grounds exemplify 19th and 20th century landscape architecture. The site is a regionally important historic landscape that protects scenic views, rural character, and field and meadow habitat.

3. Hope Lodge (38.8 acres), on Bethlehem Pike in Whitemarsh Township, was built in 1743. This historic site interprets life during two periods, the colonial era of the first owner and the Colonial Revival period of the last private owners. The site is important not only for heritage tourism and the preservation of surrounding fields and meadows, but also as a point of interest along the future Wissahickon Trail.

4. Mather Mill (3.3 acres) is a restored gristmill located directly on the Wissahickon Creek one block from Hope Lodge in Whitemarsh Township. The site is used for meetings, displays, and special programs and, as with Hope Lodge, is an important interest point along the Wissahickon Greenway.

5. Audubon Wildlife Sanctuary/Mill Grove (198 acres) is located on Pawlings Road in Lower Providence Township. This was the first home in America of famed artist/naturalist John James Audubon. Trails for hiking and bird watching meander through fields and woodlands that surround the historic house, barn, and exhibit areas. The site is located along the banks of the Perkiomen Creek directly across from Lower Perkiomen Valley Park. The primary mission of this historic site has been to provide interpretive programs that display nature study from a historical perspective. The site’s trails are intended to provide a quiet experience of woodland and wildlife. High priority should be given to the preservation of the site’s natural character. The county has just begun a partnership with the National Audubon Society, which will lease the historic buildings and 67 acres of the surrounding property in order to establish an art gallery and museum. The house and accessory buildings will be fully restored, and Mill Grove will become a flagship for the society’s network of 80 Audubon centers throughout the country.

6. Central Perkiomen Valley Park (CPVP) (506 acres) is located on Route 29 in Perkiomen, Skippack, Upper Salford, and Lower Providence Townships and Colledgeville Borough. CPVP is a linear series of activity areas along the Perkiomen Creek. These locations are now continuously linked by the Perkiomen Trail, which runs through the park areas. Many traditional park facilities at CPVP, including pavilion and fishing areas, are

accessible to persons with disabilities. A historic mill building overlooking the creek at Plank Road is available for group meetings and private events. Additional facilities include soccer fields, picnic groves, woodland walking paths, and creek access for fishing. Camp Rainbow, a county-owned camp in Upper Salford Township for underprivileged children, is located on CPVP land.

7. Green Lane Park (GLP) (2,342 acres; Fee Title Lands = 1,101 acres; *Water Surface Use Easement = 805 acres; *Land Easement = 436 acres * *Under lease/easement agreement with Aqua, Inc.*) is located on Route 29, adjacent to Green Lane Borough, Upper Hanover, Marlborough, and Upper Frederick Townships. Green Lane Park's mission is to promote the protection of open space, with enjoyment and wise use of the park's natural resources. The park is a combination of lands formerly administered as two separate county parks—Green Lane Reservoir Park and Upper Perkiomen Valley Park. The multi-use park is centered around three major water features: Green Lane Reservoir (a very large system of bays and coves), Knight Lake and Deep Creek Lake. The Perkiomen Creek enters the reservoir at the upper end, forms a narrow neck at the lower end that connects to the other two lakes, and continues downstream from the bottom of Knight Lake. Each of the water areas is used for fishing, boating, and ice-skating. Surrounding woodlands, fields, and wetlands provide opportunities for camping, nature study, riding horses, hiking, cross-country skiing, picnicking, and playing softball. Green Lane Park is the terminus of the Perkiomen Trail, which will connect with the park trail system at the lower end of the park. Green Lane Nature Center is located within the park north of the Borough of Green Lane.

8. Lorimer Park (213 acres) is located on Moredon Road near Huntingdon Pike, Abington Township. Lorimer Park has six miles of hiking trails and bridle paths traversing woodlands and meadows, with cross-country skiing and sledding in winter. A large picnic grove overlooking the Pennypack Creek provides access for fishing and is a popular group photo location. A proposed trail along an abandoned rail corridor will eventually connect Lorimer Park with the Pennypack Wilderness Area to the north.

9. Lower Perkiomen Valley Park (LPVP) (98 acres) is located on Mill Road off Egypt Road near the Oaks Interchange of Route 422 in Upper Providence Township. LPVP has large picnic groves along the Perkiomen Creek, pavilions, playgrounds, a bandstand, and over 20 acres of open fields for informal athletic activities. Lower Perkiomen Valley Park is dedicated to providing traditional park activities such as picnicking, children's play, softball, and band concerts. Intense use puts considerable pressure on the park's natural resources. The park is on the opposite side of the Perkiomen Creek from the 187-acre Audubon Wildlife Sanctuary. The Perkiomen Trail connects this park with Central Perkiomen Valley Park to the north and with the Schuylkill River Trail and Valley Forge Park to the south. Although it sits directly across the Perkiomen Creek from the undeveloped land of Audubon Wildlife Sanctuary, the park has no direct connection to the sanctuary land. Egypt Road, Route 422, and the creek keep the park self-contained, with few opportunities for preserving adjoining open land.

10. Norristown Farm Park (690 acres - this site is leased from the Commonwealth of Pennsylvania is located on West Germantown Pike and Whitehall Road in East Norriton and West Norriton Townships and Norristown Borough). The state and county both contribute funding for park improvement, maintenance, operation, and administration. The park contains 100 acres of woodland, 450 acres of farm fields leased for agriculture, a large dairy barn with associated buildings, a separate hay barn, and six houses. Two branches of the Stony Creek converge at the site. A visitors center, a long paved loop trail with trailheads located at the park headquarters and along Whitehall Road across from Norristown Area High School, picnicking pavilions, nature study paths, and a trout nursery maintained by Stony Creek Anglers are some of the recreational opportunities provided at the park. Fishing ponds and wetlands are interspersed among agricultural fields that provide a demonstration of farming techniques in an urbanized area.

11. Pennypacker Mills (142 acres) is located on Haldeman Road in Perkiomen Township. Pennypacker Mills was the home of Pennsylvania Governor Samuel W. Pennypacker in the early 1900s. The historic mansion is preserved as a turn-of-the-century country gentleman's estate. In addition to tours of the historic house, interpretive events take place on the grounds throughout the year. Although the primary mission of Pennypacker Mills is to provide historical interpretive programs, the mansion is surrounded by open land, which includes traditional estate grounds, meadows, and woodland.

12. Peter Wentz Farmstead (93 acres) on Schultz Road in Worcester Township. The farmhouse was General Washington's headquarters before and after the Battle of Germantown in 1777. The eighteenth century farmstead has been restored to its pre-Revolutionary War landscape and is a popular destination for school groups and heritage tours.

13. Pottsgrove Manor (2 acres) is located on West King Street in Pottstown Borough. Wealthy ironmaster John Potts, founder of Pottstown Borough, built this Georgian manor house in 1752. It is the only county historic site that does not include significant open space. Pottsgrove Manor's programs focus on interpretive activities. The grounds function as a small urban park. The site is constrained by Route 100 and the rail corridor, which separate it from land along the Schuylkill River.

14. Spring Mill Park (38 acres) is located on Station Avenue and Hector Street in Whitmarsh Township. This park is an undeveloped area of wooded floodplain along the edge of the Schuylkill River. The park contains remnants of an 18th century gristmill and millrace. The Schuylkill River Trail crosses through the park, and trailhead parking is shared with commuter parking for the nearby SEPTA train station.

15. Spring Mountain Natural Area (80 acres adjoining municipal open space and Central Perkiomen Park) is located on Schwenksville / Spring Mount Roads and Perkiomen Creek, Upper Salford Township. The county's undeveloped natural lands, in combination with adjoining parcels owned by Upper Salford Township and a commercial ski area, form

the heart of an extremely important conservation area known as Spring Mountain. Identified as one of two Montgomery County sites most critical for protection of biodiversity, Spring Mountain is steeply sloped diabase woodland and a particularly scenic landscape. Informal footpaths meander through boulder-strewn hillsides, while the north side of the “mountain” is an actively used winter sports area. The Perkiomen Trail follows the Perkiomen Creek along the base of Spring Mountain and connects to parking areas near the ski slopes.

16. Sunrise Mill Historic Site (158 acres) is located on Swamp Creek and Neiffer Roads, at the intersection of Limerick, Upper Frederick, and Lower Frederick Townships. Sunrise Mill is on the National Register of Historic Places. The historic site includes a federal period gristmill, remnants of an adjacent sawmill, a farmhouse (circa 1830-1840), and a cantilevered Swiss bank barn built in 1795. The farmhouse and barn are sited close to the mill and Swamp Creek, just above the floodplain. These three buildings, the recently rebuilt mill dam, the mill pond, and an 1840s stone-arched bridge are the historic core of the site. This core area is buffered on all sides by forested parkland that forms an extremely scenic landscape. Although not yet improved for formal park use, Sunrise Mill’s trails are used for hiking and fishing.

17. Upper Schuylkill Valley Park (USVP) (154 acres) is located on Route 113 in Upper Providence Township. This park is located on the north bank of the Schuylkill River and provides access to the river for fishing and non-motorized boating. A picnic grove is located along the riverbank. Several small barn buildings and enclosures house farm animals and a small zoo that showcases wildlife native to Pennsylvania.

18. Wissahickon Valley Park (143 acres) is located on Skippack and Bethlehem Pikes in Whitmarsh Township. This parkland, along with the adjoining Fort Washington State Park, is an important link in the Wissahickon Green Ribbon Preserve. The Wissahickon Valley Parklands are mainly in the floodplains of the Wissahickon and Sandy Run Creeks. These woodland and fields areas buffer the stream banks and form greenways that continue up to the headwaters of each creek. They also create a scenic backdrop for the more actively used state park areas.

City of Philadelphia / Fairmount Park Commission

- **Fairmount Park** (9,200 acres) Few cities can lay claim to the sylvan beauty on the banks of the Schuylkill River known as Fairmount Park. Fairmount Park is the largest landscaped park in the United States. It was the site of the Centennial Exposition of 1876, and several buildings from that fair still stand, notably Memorial Hall. Also one of the world's largest municipal parks, Fairmount Park contains several million trees; the Philadelphia Zoo, the oldest zoo in America; Boathouse Row; cherry blossoms to rival those along Washington, D.C.'s Potomac Basin; Robin Hood Dell, an outdoor venue for soul-filled summer singers;

the Mann Music Center, the Philadelphia Orchestra's summer amphitheater; picnic areas; tennis courts; miles of bicycle paths; bridle paths; an azalea garden; hundreds of statues and monuments; and more than two dozen 18th- and 19th-century buildings. No city resident lives more than a mile from one of Fairmount Park's 62 neighborhood parks; Upper Dublin residents are fortunate to live close by two of them. Pastorius Park is a 10-acre dog-friendly facility located in Chestnut Hill near Lincoln Drive that offers summer concerts and other events throughout the year. Forbidden Drive, is a moderate, five-mile rolling bike/hike/horse/no-auto-traffic route that runs along the Wissahickon Creek from Northwestern Avenue to Lincoln Drive, and then connects with paths that run along the Schuylkill River and into Manayunk. Forbidden Drive runs close to the river through forested gorges and past an old covered bridge, with plenty of opportunities to get off the main trail onto more challenging ones.

Introducing Trails for the 21st Century

In addition to the recreational activities commonly associated with trails, trails offer considerable transportation, health, conservation, community revitalization, and economic development advantages. Throughout the region, especially in highly developed areas, trails present a critical opportunity to connect people, places, landmarks, neighborhoods, and civic and cultural amenities. The County's existing and proposed trails form the spine of a regional dual-purpose network of greenways and alternative transportation corridors. At the same time, these countywide trail corridors extend and connect local path systems, bring regional events and resources within reach of all residents, and provide the opportunity for enjoyment of diverse landscapes, natural features, and scenic vistas.

Trails as a Form of County Park

The results of many studies across the nation indicate that the recreational preferences of Americans are changing. Families that once planned a day at the park now have busy, unpredictable schedules that require conveniently located, interesting opportunities to exercise, keep fit, and enjoy the outdoors at a moment's notice. At the same time, large open parcels suitable for new public parks are becoming scarce and expensive to acquire, especially in heavily populated areas where traffic congestion and development pressure often make getting to the park frustrating and time consuming. Trails are an efficient and cost-effective alternative for bringing the benefits of the park to the people.

The Unique Character of Trails

Trails are pathways for people. Although trails and greenways are often combined as a concept, a trail is a unique and distinctive feature in the open space landscape. Unlike greenways, which may or may not include formal public access, trails are purposefully created and maintained for human activity. No matter what the type, location, length, or use, all trails share several common characteristics that tend to set them apart from other types of parkland. Trails are

amazingly versatile and meant to be used in motion. These special qualities combine to make trails extremely interesting and able to provide a multitude of changing experiences for the trail user. As a result, trails of all types offer an unusually large return in public benefit for a relatively small public investment of money and land area.

The versatility of trails results from the variety of activities they can accommodate, the flexibility with which the trails can be used, and the number of choices that they offer the trail visitor. At any one time, people of all ages may be sharing the trail, some riding, running, or hiking long distances, while others may be strolling with dogs, small children, or physically challenged companions. This flexibility gives each visitor almost endless choices for using the trail in many different ways. The flexibility, variety, and convenience of trails, when coupled with the ability to use trails as alternative transportation corridors and community linkages, also explain why most trails tend to be actively utilized as soon as they are opened.

Trail Benefits

Trails provide many types of public benefits. In heavily populated areas such as Montgomery County, these benefits touch almost everyone in some way.

Recreation

Active forms of exercise, such as running, walking, biking, inline skating, and horseback riding come readily to mind as recreation typically found along trails. Increasingly, however, trail recreation is also understood to include slower-paced activities such as sightseeing, bird watching, nature study, photography, or simply strolling. Other types of recreation, such as fishing, canoeing, and kayaking, may be accessible only from the trail. Depending upon the surface, topography, and access, trail recreation can be available to a broad range of users including young children, residents with disabilities, and older adults. Children learning to ride a bike, babies seeing the sights from strollers, and patients recovering from hospital visits enjoy trails as much as the distance runner or the fitness walker. A major bonus of trail recreation is that it provides a safe environment for activities that might otherwise take place on busy roads.

Transportation

As discussed in the *Transportation Plan* element, trails can be transportation routes as well as recreational corridors. Off-road multi-use trails, which may also include linkages to sidewalks and on road bike lanes, give county residents the option of bicycling or walking to work, school, and shopping areas. Although a relatively small number of residents routinely select these alternative transportation opportunities, even the less than one percent of the workday trips taken by bicycle translate to fewer cars on congested roads, cleaner air, savings of scarce fuel resources, and a potentially fitter population.

Health and Wellness

Trails provide an enjoyable and convenient way of encouraging people to become more active by exercising. This increased activity leads naturally to increased fitness and is the basis for reduction in the incidence of many of our most common serious illnesses. Alarming, obesity among American adults increased 106% between 1980 and 2000. Information available from The Trails and Greenways Clearinghouse points out that “lack of time or access to convenient outlets for healthy transportation and recreation opportunities are reasons commonly cited by all populations as barriers to regular exercise.” Walking, fitness, and related forms of recreation have widespread support from health care providers, employers, and community organizations throughout the country. This support has resulted in the creation of trails on school and corporate campuses, local and regional parks, and in neighborhoods, new developments, and revitalized urban areas.

Conservation and Environmental Stewardship

Trails foster conservation and protection of the environment in several ways. The greenway corridors along which trails are created often parallel natural features that are conserved in acquiring the property for the trail itself. The end result may be a corridor of conserved land that gives continuous connection to otherwise isolated areas of habitat and open space. Trails give the public an opportunity to enjoy these preservation areas in a way that guides public access to appropriate locations. These controlled access opportunities make the public aware of the special qualities of open space, encourage a stewardship ethic, and promote support for additional conservation.

Community Revitalization and Economic Development

Studies provided by organizations such as the National Park Service indicate that trails can provide significant economic benefits for the communities to which they connect. Heritage tourism, jobs created by construction and maintenance of the trail, and new or expanded businesses that provide trail-related services all result in economic growth at the community level and in the region. Recreational amenities and linkages to a wide variety of destinations attract new business investment, maintain and enhance property values, and tend to revitalize older and urban areas by connecting people with a diversity of entertainment and community resources. Developers regularly market new properties as especially desirable because of proximity to trails, and many real estate firms find trails a desirable advantage when listing properties for resale. High-tech companies often seek out local amenities like trails that will appeal to younger, more-active employees.

Community Quality of Life

Trails are important community amenities that enhance the quality of life enjoyed by residents. Overall quality of life for everyone is greater when people work, go to school, and play in

livable communities where residents are connected to each other and to their recreational, cultural, educational, commercial, and governmental resources. Trails create connections and public areas that provide a safe environment for people to meet each other, enjoy community events, and keep in contact with their neighbors.

Cross County Trail (17.5 miles)

The Cross County Trail will stretch from Norristown through Fort Washington, Dresher and Willow Grove into Bucks County, linking densely populated areas of Montgomery County. The trail will use the Schuylkill River Trail from Conshohocken to Norristown and will connect to the Wissahickon Trail near Fort Washington and the Power Line Trail and Pennypack Trail near Willow Grove. When the Cross County and Chester Valley Trails are completed, people will be able to travel from the Willow Grove area all the way to Downingtown in Chester County. The trail will utilize railroad and utility corridors, roadways, and county and state lands. It will provide alternative transportation access to shopping and transit services at Plymouth Meeting and Willow Grove and the downtown area of Conshohocken. A mile section of the trail in Plymouth Township was constructed as part of the development of two large retail-shopping complexes.

Points of Interest: Fort Washington State Park, Wissahickon Valley County Park, Wissahickon Green Ribbon Preserve, Hope Lodge, Pennypack Wilderness Preserve, Conshohocken and Bryn Athyn Boroughs, SEPTA train stations at Conshohocken, Norristown, Fort Washington, and Willow Grove.

Connections: Schuylkill River, Wissahickon, Power Line, and Pennypack Trails, state and county park trail systems, Chester Valley Trail via the Schuylkill River Trail.

Major Public/Private Partnerships: Plymouth, Whitemarsh, Upper Dublin, Upper Moreland, and Lower Moreland Townships, and Conshohocken Borough, PA Bureau of State Parks, Wissahickon Valley Watershed Association, Pennypack Ecological Restoration Trust, adjacent landowners, Norfolk Southern Railroad, PECO/Exelon, Sun Pipeline Company, PENNDOT, PADCNR, and PADEP.

Significant Design Issues: Trail connections to Schuylkill River, Wissahickon, and Pennypack Trails, route selection in Route 73 /Bethlehem Pike area and Willow Grove/Upper Moreland area, separation of trail and railroad uses.

Schuylkill River Trail (22.5 miles)

In 1995, Montgomery County completed the development of the Schuylkill River Trail from Philadelphia to Valley Forge, which passes through Lower Providence, West Norriton, Plymouth, and Whitemarsh Townships, and Norristown and Conshohocken Boroughs. In 2002, an extension was added from Betzwood in Valley Forge National Historical Park to Oaks in Upper Providence Township, where it connects to the Perkiomen Trail. In January 1994, the Schuylkill River Trail was designated a National Recreational Trail and has since received the Outdoor America award for being one of the nation's first 500 rail-trails. The trail will eventually follow the Schuylkill River all the way from its headwaters in Schuylkill County to its confluence with the Delaware River in Philadelphia. A total of 22.5 miles of the trail passes through Montgomery County. At Mont Clare, the main stem of the trail will cross the river to Phoenixville, following the Chester County side until recrossing the river at Pottstown, where it will extend upriver into Berks County. In much of Berks County the Schuylkill River Greenway Association has developed the Schuylkill Trail, called the Thun Trail. A parallel trail, the Schuylkill East Trail, will follow the Montgomery County side of the river between Mont Clare and Pottstown. The Schuylkill River Trail is the main spine of the Schuylkill Heritage Corridor, and it is now a primary feature of the Schuylkill River Valley National Heritage Area. The trail's accessibility to urban and suburban communities makes it an invaluable transportation and recreation resource. It will also connect other larger trails such as the Horseshoe and Appalachian trails.

Points of Interest: Pottsgrove Manor and Audubon/Mill Grove County Historic Sites, Upper Schuylkill Valley, Lower Perkiomen Valley and Spring Mill County Parks, Valley Forge National Historical Park, future Center for the American Revolution, Schuylkill River Water Trail, Schuylkill Canal Recreation Area, Chester County parkland, Phoenixville Borough revitalization area, Schuylkill River scenery and amenities, existing SEPTA transit services and future Schuylkill Valley Metro stations.

Connections: Schuylkill East, Perkiomen, Liberty Bell, Cross County, Chester Valley, Stony Creek, and Manatawny Trails, Valley Forge Park trail system.

Major Public/Private Partnerships: West Pottsgrove, Lower Pottsgrove, Upper Providence, and Lower Providence Townships, Pottstown Borough, Chester County Commissioners, Parks Department, and municipalities, City of Philadelphia, Berks County Commissioners and municipalities, National Park Service, Schuylkill River Greenway Association, Norfolk Southern Railroad, PECO/Exelon, Bicycle Coalition of the Delaware Valley, adjacent landowners, PennDOT, PA-DCNR, and PA-DEP.

Significant Design Issues: River crossings, coordination with active rail use by Norfolk Southern, route selection in Oaks and Pottstown areas, retrofit and rehabilitation of older sections, development of trailside amenities and parking.

For additional detailed information the following web sites may be consulted:

<http://www.nps.gov/vafo/>

<http://www.dcnr.state.pa.us/stateparks/parks/>

<http://www.montcopa.org/plancom/comprehensiveplan/Openspaceplan.htm>

<http://www.phila.gov/fairpark/>

APPENDIX B

A SAMPLE OF UPPER DUBLIN'S HISTORIC PROPERTIES

(Numbers) relate to site locations on **Figure 8, Vulnerable Resources, Scenic Roads & Significant Historic Sites.**

(1) Brown-Tyson House (1755 and 1770)

875 Welsh Road, Maple Glen

Cabin. Determined eligible by state Bureau of Historic Preservation (1987)

(2) Lukens-Moses House (1815)

1425 Welsh Road, Maple Glen

Barn; Carriage House; Farm House; Federal architecture style. Determined eligible by state Bureau of Historic Preservation (1987)

(3) Paxson Farm

1704 Dreshertown Road, Dresher

This farm was part of the Spencer property, received as a grant from William Penn. Charles Paxson moved from Cheltenham in 1826 to this farm purchased by his father. Paxson Farm was determined eligible by State Bureau of Historic Preservation (1987). (*Images of America, Fort Washington and Upper Dublin*; Historical Society of Fort Washington; Arcadia Publishing; 2004; p. 25.)

(4) Detwiler House (1704)

306 Stout Road, Ambler

This house is considered one of the oldest in Upper Dublin. Built by Thomas Syddons, tax collector, it was quite different from the tiny stone houses of his neighbors. Syddons was determined to plant culture in the new world and started by building a home on 500 acres of landscaped countryside that was grander than the one built by Governor Keith in Horsham. For many years this house was associated with the Stout family. (*Images of America, Fort Washington and Upper Dublin*; Historical Society of Fort Washington; Arcadia Publishing; 2004; p. 63. *Yesterday's People, The Upper Dublin Story*; Suzanne Hilton for the Upper Dublin Township Bicentennial Committee; The Winchell Company; 1975; p.15)

(5) Upper Dublin Friends Meetinghouse (1814)

1506 Fort Washington Ave., Ambler

This Quaker meetinghouse was built on land donated by Phoebe Shoemaker. The building has many of its original characteristics, such as the hand blown glass panes in its windows. The Religious Society of Friends still holds weekly worship in the building. Adjoining the meetinghouse is the graveyard where many early residents of Upper Dublin are buried, including Levi Jarrett for whom Jarrettown is named. (*Images of America, Fort Washington and Upper Dublin*; Historical Society of Fort Washington; Arcadia Publishing; 2004; p. 57.)

(6) Dresher Family Cemetery

Dreshertown Road at Kirks Lane, Dresher

The Dresher family came from Silesia, Germany, and arrived in Philadelphia with a group of Schwenkfelders in 1734. Like many settlers at that time, the Dreshers established a small burial ground close to their residence. The cemetery is located on Dreshertown Road just east of Limekiln Pike. The earliest gravestone is marked 1803. (*Images of America, Fort Washington and Upper Dublin*; Historical Society of Fort Washington; Arcadia Publishing; 2004; p. 24.)

(7) Jarrettown Hotel & Old Wagon Shop (1847)

1425 N. Limekiln Pike, Jarrettown

The building was constructed in 1847 by Henry Houpt (Haupt) on three acres of land purchased in 1759 by Samuel Houpt, Henry's grandfather. Henry operated the hotel for 22 years and then sold it to the Marples family. Charles Palmer leased the Marples property and served as innkeeper of the renamed Palmer Hotel until 1902 when the land was sold again. Today the Jarrettown Hotel operates as a restaurant. (*Images of America, Fort Washington and Upper Dublin*; Historical Society of Fort Washington; Arcadia Publishing; 2004; p. 41.)

(8) Old Jarrettown School (1896)

1465 N. Limekiln Pike, Jarrettown

The original one or two-room Jarrettown Public School No. 1 was built c. 1805 at Limekiln Pike and Mundock Road on land donated by Henry Houpt. Heavily damaged and rebuilt after a tornado in 1896, it was one of four schools in the villages of Upper Dublin. Only this (operated as a private day care in 2005) and School No. 4 (corner of Butler Pike and Norristown Road, a private home in 2005) still remain. The present Jarrettown Elementary School opened in 1955 across Limekiln Pike. (*Images of America, Fort Washington and Upper Dublin*; Historical Society of Fort Washington; Arcadia Publishing; 2004; p. 43-44.)

(9) Dresher Inn

1708 N. Limekiln Pike, Dresher

The history of the Dresher Inn is rather sketchy. However, it served in this capacity until the 1970's. Today, the building stands unoccupied. (*Images of America, Fort Washington and Upper Dublin*; Historical Society of Fort Washington; Arcadia Publishing; 2004; p. 32.)

(10) Dannenberg Property

1001 Fitzwatertown Road, Roslyn

This property can be traced back to the Lukens plantation in 1766. The Lukens Family settled on 200 acres in this part of the township early in the 1700's and set up limekilns along Fitzwatertown Road. Lime burning in this area continued into the 20th century. Over time the property was subdivided. In 1938, Dr. Arthur M. & Marion Dannenberg purchased 9.6 acres of the original tract to use as a summer home, naming it "Dannybrook." The Dannenbergs deeded the land to Upper Dublin Township for an arboretum in 1967. They continued to have use of the home throughout their lifetime; Mrs. Dannenberg died in 1978 and Dr. Dannenberg in 1990. After severe deterioration, the house and 2.4 acres were sold privately and restored as a residence. The remaining 7.22 acres is still available as a public park for passive recreation. (*Images of America, Fort Washington and Upper Dublin*; Historical Society of Fort Washington; Arcadia Publishing; 2004; p. 13-16.)

(11) Susquehanna Road Turnpike Toll House

Pinetown and Susquehanna Road, Fort Washington

Resource for which little documentation is available at this time.

www.montcopa.org/plancom/What'sNewTemp/cultural_resource.htm

(12) "Warder's Conquest" (1730)

1165 Pinetown Road, Fort Washington

Englishman Lord John Petty built this residence and fur trading post in 1730. The property owner during the Whitemarsh Encampment opened the house as headquarters for Washington's surgeon general, Dr. J. Cochran. It is also said that this home was used as a hospital during that time, as were other large houses in the area. Donald Gallagher, Esq. extensively restored the home in 1969. Half of the land once called "Warder's Conquest" is now the Fort Washington Office Park. Placed on national register November 21, 1976. (*Images of America, Fort Washington and Upper Dublin*; Historical Society of Fort Washington; Arcadia Publishing; 2004; p. 82. *Yesterday's People, The Upper Dublin Story*; Suzanne Hilton for the Upper Dublin Township Bicentennial Committee; The Winchell Company; 1975; p. 7-11; 108; www.montcopa.org/plancom/What'sNewTemp/cultural_resource.htm)

(13) Hospitals for Revolutionary Troops

Stone barn located on Pinetown Road, south of Wynnemoor Way, Fort Washington

It is noted that various houses and barns in this area served as hospitals for Revolutionary Troops.

www.montcopa.org/plancom/What'sNewTemp/cultural_resource.htm

(14) St. Mary's Villa & Castle

Bethlehem Pike & Lindenwold Terrace, Ambler

In 1882, Dr. Richard V. Mattison and his partner, Henry G. Keasbey, moved their chemical works to Ambler to manufacture quinine and magnesia. The original Mattison home, a stately Victorian called "Lindenwold," was remodeled in 1912 to resemble a Scottish castle. In true Victorian fashion, the estate contained a six-acre lake, Loch Linden, stocked for fishing. Mattison sold the property to the Sisters of the Holy Family of Nazareth in 1936. Since then, it has been used as a home and school for children. Portions of two 1960's family movies, *The Trouble with Angels* and *Where Angels Go, Trouble Follows*, were shot on location at this site or used local sites in the film. (*Images of America, Fort Washington and Upper Dublin*; Historical Society of Fort Washington; Arcadia Publishing; 2004; p. 71-73.)

(15) Revolutionary War Encampment

Camp Hill Road along border with Springfield Township

This area was used for the Whitemarsh Encampment from October 20 – December 11, 1777. This encampment's defensive perimeter extended from Militia Hill on Skippack Pike to the west, across Fort Hill and Camp Hill, now Fellwick, to Edge Hill, just behind the present day North Hills, on the East. "Camp Hill" was so called because it was dotted with the many tents of its defenders. (Grossman, George A.; *The Heritage of Fort Washington*; Tech Pub Services, Inc., 1962; p. 10. www.montcopa.org/plancom/What'sNewTemp/cultural_resource.htm)

(16) Thomas Fitzwater's Limekilns

**Limekiln Pike and Fitzwatertown Road along the Sandy Run Creek
(LuLu County Club site), North Hills**

Thomas Fitzwater and his father, also Thomas, arrived with William Penn on the *Welcome* in 1682. Fitzwater's limekilns were the first built along the creek in one of the earliest settlements in Upper Dublin. Thomas Fitzwater petitioned the Provincial Council for a road from his kilns to Philadelphia. Limekiln Pike became the first road in Upper Dublin in 1693. (*Images of America, Fort Washington and Upper Dublin*; Historical Society of Fort Washington; Arcadia Publishing; 2004; p. 9.

www.montcopa.org/plancom/What'sNewTemp/cultural_resource.htm)

(17) Emlen House (1750)

Pennsylvania Ave (900 block), Oreland

This home was built c. 1750 by George Emlen, a Quaker merchant from Philadelphia. It served as George Washington's headquarters during the Whitemarsh Encampment of Nov. 2 through December 11, 1777 (American Revolution), which was a stop prior to the march to Valley Forge. (*Images of America, Fort Washington and Upper Dublin*; Historical Society of Fort Washington; Arcadia Publishing; 2004; p. 17.)

(18) East Oreland School (1906)

100 Wischman Avenue, Oreland

This former Upper Dublin Elementary School provided education to neighborhood children from 1909 through 1965 when the Sandy Run Elementary School opened. It was then used for special education and school administration. A portion of the facility served as the Upper Dublin Public Library from 1966 through 1977. Since the early 1980's, the upper level has served the Senior Adults Upper Dublin Center (SAUDC). Since the early 1990's, the lower level has undergone renovation to house township recreation programs. The building and parkland surrounding it are now known as the EPI-Center, East Oreland Program & Intergenerational Center. An original cornerstone with the date 1906 is on display in the building. (*Images of America, Fort Washington and Upper Dublin*; Historical Society of Fort Washington; Arcadia Publishing; 2004; p. 20.)

(19) North Glenside Elementary School (1926)

212 Girard Avenue, North Hills

Now the North Hills Community Center with a branch of the Upper Dublin Public Library, this Upper Dublin School District facility served neighborhood children in grades kindergarten through eighth grades until it closed in 1965 when the Sandy Run Elementary School opened. Evelyn B. Wright served as teacher and then principal at the school from 1926-1965. Upper Dublin Township owns and maintains the parkland surrounding the building, which is leased and privately operated. (*Images of America, Fort Washington and Upper Dublin*; Historical Society of Fort Washington; Arcadia Publishing; 2004; p. 22.)

(20) Old Fort Washington School (1891)

Prospect & Madison Avenues, Fort Washington

Built in 1891, the Fort Washington School housed four classrooms until the larger school was constructed next to it in 1917. The older structure was converted into gymnasium space. Upper Dublin School District closed this school in 1969 when the new Fort Washington Elementary School opened. The Township now owns and maintains the property and parkland located across the street. The building is leased to a private school for several more years; other uses are being considered for the future. (*Images of America, Fort Washington and Upper Dublin*; Historical Society of Fort Washington; Arcadia Publishing; 2004; p. 101-102.)

(21) Whitcomb Family Cemetery

Susquehanna Road (800-900 block) west of Ft. Washington Ave., Fort Washington

Located on Susquehanna Road, this small cemetery was the burial site of Whitcomb family members from 1803 until 1873. The first John Whitcomb in the area was born in 1751 and assassinated in Fitzwatertown in 1800. He had two sons. His son John was the first generation to be buried in the cemetery surrounded by land that was once the family estate. (*Images of America, Fort Washington and Upper Dublin*; Historical Society of Fort Washington; Arcadia Publishing; 2004; p. 84. *Yesterday's People, The Upper Dublin Story*; Suzanne Hilton for the Upper Dublin Township Bicentennial Committee; The Winchell Company; 1975; p. 108.)

(22) Fitzwater Family Cemetery

Twining Road (800 block), Dresher

The cemetery has two fieldstones marked with the initials T.F and E.F., with the date 1771 as well as J.F. 1795. These appear to be memorials for Thomas, Elizabeth and John Fitzwater, respectively. The cemetery is still in use. (*Images of America, Fort Washington and Upper Dublin*; Historical Society of Fort Washington; Arcadia Publishing; 2004; p. 12.)

(23) Atkinson Farm House (1793)

1580 Fort Washington Ave., Maple Glen

A Quaker named Williams Atkinson, who arrived from England as a child in 1699, originally purchased this property. He willed the property to his granddaughter who erected the house and barn in 1793 (there were later additions in 1849 and the early 1900s) and donated part of the land to the Friends Meeting for a meetinghouse. In 1998, the property was purchased from the Edwards family by the Upper Dublin School District, and the house and barn were converted for use as administrative offices. (*Images of America, Fort Washington and Upper Dublin*; Historical Society of Fort Washington; Arcadia Publishing; 2004; p. 55.)

(24) Ellis House (aka Shoemaker House)

Meetinghouse Road, Ambler - Temple University Property

In 1706 Cadwalader Ellis bought almost 200 acres of the Heaton property in Ambler and built a one-room log cabin. His basement had a spring running through it, making it the best “refrigerator” in the neighborhood. It is thought that Ellis may have changed the house from a log cabin to the stone house still standing today on the grounds of Temple University’s Ambler Campus. (*Yesterday’s People, The Upper Dublin Story*; Suzanne Hilton for the Upper Dublin Township Bicentennial Committee; The Winchell Company; 1975; p. 15.)

(25) Engard Family Home (1765)

Susquehanna Road & Ft. Washington Ave., Fort Washington

In the mid-18th century, Philip Engard purchased 100 acres at the corner of Susquehanna Road and what is now Fort Washington Ave. The house he built stands at that intersection and is still used as a private residence. The area became known as Engardtwn because of the many family members who resided here and nearby. Fort Washington Avenue was once known as Engardtwn Road. (*Images of America, Fort Washington and Upper Dublin*; Historical Society of Fort Washington; Arcadia Publishing; 2004; p. 85.)

The following status report addresses Upper Dublin Township's performance and accomplishments relative to items documented in Chapters 9 through 11 of Upper Dublin Township's *Open Space and Environmental Resource Protection Plan (1994)*. Although progress in some areas has been delayed, please be reminded that this plan was designed to guide the Township to the year 2020. Chapter 12, *Implementation*, is addressed through the reporting for Chapters 9, 10 and 11.

Note that in 1998 Upper Dublin Township completed another planning document entitled, *Upper Dublin Township Comprehensive Parks and Recreation Plan, Vision for the 21st Century*. This plan combined the elements, findings and recommendations of the 1994 *Open Space Plan* with analysis and recommendations concerning the overall operation and mission of the Department of Parks and Recreation.

There is no doubt that these two plans positioned Upper Dublin Township to move forward and make tremendous strides in recreation and parks service delivery areas such as programming, maintenance, land acquisition, facility development and renovation.

Chapter 9, Recommendations

Short-Term Improvements

1. Access Improvements for Sidewalks, Traffic Signals and Trails

Ordaining sidewalks on existing properties continues to be a sensitive issue for the Board of Commissioners as well as residents. Those identified in Chapter 9 but not completed, such as along Highland Ave. near Veterans Memorial Park (formerly Quarry Park) will continue to be of interest to the Township now and into the future. With land acquisition and/or park development in the past decade, the need for additional trails and connecting sidewalks is evident. At such time that circumstances and/or funding are available the work will be completed.

In the past decade the Township was successful in gaining a combination of limestone and macadam pathways around and through Mondauk Common. Additionally, spur paths connect people into Mondauk Common from Broad Street, Dillon Road and Keisel Lane. The walking/exercise loop trail at Mondauk Common was increased in length to a full 1.0 mile. Additional walking/exercise loop trails were established at Veterans Memorial Park (0.25 mile) and the Camphill and Highland Athletic Complex (CHAC) (0.40 mile).

Wood chip trails in parks have been maintained. Annual maintenance is performed to keep paths clear, wide and safe. Trail cleanup and extensions have been periodically completed at Henry Lee Willet Park, Dannenberg Arboretum and Mondauk Manor Park as part of community service projects through the Boy Scouts, Montgomery County Juvenile Probation and Montgomery County Youth Corps.

2. Install Playground Equipment or Tot Lots on Various Sites

Since 1994, Boards of Commissioners have supported new installations of children's play equipment at Burn Brae Park, CHAC, Three Tuns Playground, Henry Lee Willet Park and Veterans Memorial Park.

Upgraded and/or expanded play areas include Mondauk Common and the East Oreland Program & Intergenerational Center (EPI-Center).

Other existing playgrounds are located at Aidenn Lair Park (new equipment in 2005), North Hills Park (new equipment in 1993) and Sheeleigh Park (planned replacement by 2008).

3. Other Recommendations

- a. A 2000 ruling by the Montgomery County Orphans Court allowed the Township to subdivide and sell 2.5 acres (including the house) of the 9.6 acre Dannenberg Arboretum. With various deed restrictions in place protecting the house and grounds; the Township retained public access to the site. A 1998 recreation study contains recommendations for development of recreational trails and seating areas. Township officials continue to participate in the Montgomery County Sandy Run Greenway Coalition.
- b. Durable maps have not been posted at sites. However, community bulletin boards are located at Robbins Park and Mondauk Common with map and general information postings.

Upper Dublin Township launched its website, www.upperdublin.net in the late 1990's. This site provides timely Township services information as well as downloadable documents, forms and reports. Widespread access to the Internet makes park system maps, directions to sites and visitor information readily available.

- c. Upper Dublin Township's approach to the Upper Dublin School District regarding a written agreement to maintain access to school grounds and indoor recreation areas received a cool reception. At that time the District preferred to relying on "past practice" rather than formal written agreements. For more than three decades the two entities have maintained a strong working relationship and reciprocal access has been achieved. However, increased community demand for facility access, coupled with recent changes in top administration, keeps this issue current and worth revisiting.

Long-Range Recommended Projects

1. Land Banking

The 1994 plan stated:

“Since 1975 the township has not purchased active parks and playground sites, but has acquired passive parks and nature preserves through the subdivision process. This is good from a local tax standpoint, but as the township approaches build out it is time to consider whether additional active parks and playgrounds will be needed and where.” (p. 70)

[Further,] “The total stock of parks and open space in Upper Dublin satisfies both national and regional acreage standards and is estimated to do so through the year 2020. However, further analysis is needed to determine whether the distribution and function of this acreage is suited to meet the township’s needs and desires over this period. It is important to note that the period of this plan – 1994 through 2020 – is probably the last opportunity for the township to acquire any additional significant open space as build out is likely by 2020.” (p.57)

The status of the ten (10) sites totaling approximately 145 acres identified for land banking purposes is shown in the following table. The site number (#) corresponds to the number assigned in the 1994 plan (p. 70).

#	Owner	Acreage	Priority	Status
1	North Wales Water Authority	2.00	High	Acquired by Upper Dublin Township using Montgomery County Grant-in-Aid funding. Annexed onto Three Tuns Park. Playground constructed on site.
2	James & Margaret O'Reilly	16.40	Moderate	Purchased by and being privately developed as the new Beth Or Congregation synagogue.
3	Winston & Myrtle Edwards	44.21	Medium	Acquired by Upper Dublin School District. Historic farm house and out buildings renovated for administration. New elementary school built on open field. Community fields developed.
4	Prudential	42.74	Moderate	Development plans for five separate buildings approved by Township. One building constructed to date. As part of planning process, Township commissioned recreation study for site.
5	Loretta Bub	10.58	Moderate	Acquired by Upper Dublin Township through fee simple cooperative agreement with local retirement community. Partial land swap allows property to abut high school land thereby connecting public property from Susquehanna Road to Highland Ave.
6	Camp Hill Field	6.00	High	Acquired by Upper Dublin Township through donation. This property developed as CHAC "North" with renovation of soccer and baseball fields; parking lot.
7	Portion, Manufacturer's County Club	1.0	Moderate	Initial discussion with Club Manager stalled. Option still of interest as restricted onsite parking issues of the adjacent EPI-Center are addressed.
7B	S. Polekoff	5.28	High	Acquired by Upper Dublin Township through donation. Property fits Sandy Run Greenway plan.
8	Rorer Property	8.13	Medium	Acquired by Upper Dublin Township through the first round of Montgomery County Open Space Grant funding. Additional acreage donated to township as part of deal. This property developed as CHAC "South" with a playground, softball field, soccer fields and walking track.
9	Seltzer Barn Property	8.87	Medium	Initial discussion with owner stalled. Partnership options being discussed with potential developer.

2. Establishment of a Sandy Run Greenway

The Montgomery County Planning Commission took the lead on a study of the Sandy Run Greenway and options for preservation and protection. Upper Dublin Township officials actively participate on this committee.

3. Community Recreation Center

Upper Dublin Township's *Comprehensive Plan for Parks and Recreation* (1998) validated the *Open Space Plan's* stated community need for indoor recreation space. The Department of Parks & Recreation began to address its needs by completing piecemeal renovation of lower level rooms in the former East Oreland School, now the EPI-Center. More rooms remain available for renovation as funds become available. However, larger spaces are needed in order to expand fitness and sports programs.

Upper Dublin School District built a new elementary school that included a regulation size gymnasium and multi-purpose "cafetorium." The district also renovated and enlarged the high school and middle school cafeterias. These facilities are available for community use.

An initiative by Temple University Ambler to interest community partners in sharing costs of building and operating a recreation center did not progress beyond several discussion meetings.

In late 2003, the Upper Dublin Indoor Recreation Taskforce (U-DIRECT) formed, funded and chaired by the independent Upper Dublin Swimming & Diving Foundation. This group's mission was to study indoor recreation and aquatic facility needs in the community for the purpose of advising the Upper Dublin Township Board of Commissioners. A year-long consultant-led process documented community wants and needs; projected construction and operating costs of a facility to house the most highly rated activities; and measured public funding support thresholds. A household survey in late 2004 proved the final leg of the process as 87% of respondents (close to 50% of all township households) voted against a \$13 million expenditure for construction of a full-service Township-operated indoor recreation center.

The Board of Commissioners maintains an interest in this type of facility.

4. Trails

Upper Dublin Township supports Montgomery County's efforts to develop regional trail systems. The Cross-County Trail connects Upper Dublin to its neighbors using established sidewalks throughout the Fort Washington Office Park. Development plans are reviewed for their ability to provide valuable immediate or future links to this trail as well as others.

A trail linking the Cross County Trail with the township's 1.0-mile Mondauk Trail starts at CHAC South and, with only one slight break, continues on public property to Limekiln Pike.

Upper Dublin Township is pursuing acquisition of a parcel that will complete the trail. Once acquired, the trail will be more permanently established.

The Montgomery County Planning Commission took the lead on a study of the Sandy Run Greenway and options for preservation and protection. Upper Dublin Township officials actively participate on this committee. Upper Dublin Township owns property along the Sandy Run Creek including the Dannenberg property, Sandy Run Park and the recently acquired Polekoff Property.

Plans for establishing a trail along the TransContinental Pipeline linking Upper Dublin High School with Robbins Park have not been pursued.

Reiterating a statement in the 1994 plan (p. 81): *“Site-specific trails, such as at Mondauk Common, are proven successes given today’s desire for recreation facilities that can be enjoyed alone or with others and are flexible – available many hours of the day.”* In 1994, the only site-specific trail in Upper Dublin was a .95-mile loop at Mondauk Common. Ten years later, that limestone screenings pathway loop has been lengthened to a full 1.0 mile and two others have been constructed at other parks. The first is a 0.25-mile loop at Veterans Memorial Park and the second is a 0.40-mile loop at CHAC.

5. Community Gardens

Robbins Park continues to maintain and improve its demonstration gardens. The sale of 2.5 acres at the Dannenberg Arboretum included the gardens surrounding the house and some of the trees therefore restricting public access to them. Temple University Ambler recently enhanced its horticulture program, which included a major investment in campus gardens.

The more commonly viewed “Community Gardens” have not been pursued or requested.

6. Scenic Roads

Land development plans are reviewed and commented upon by the Department of Parks & Recreation relative to any impact on scenic roads.

Land development plans are reviewed and commented upon by other Upper Dublin elected and appointed boards including the Shade Tree Commission, Environmental Protection Advisory Board and Planning Agency Advisory Board.

The Township’s Board of Commissioners acts as the Township Planning Commission.

The Shade Tree Commission has earned “Tree City USA” honors for Upper Dublin for the past five years. This group has also taken advantage of Montgomery County tree funds and other grant money to complete planting of hundreds of trees, a large portion of which have been planted at various parks and public properties.

Chapter 10, Comparison with Other Communities

The *Open Space Plan* (1994) comments on potential linkages and partnerships connecting Upper Dublin with neighboring communities including Ambler Borough, Abington Township, Springfield Township, Lower Gwynedd Township, Horsham Township and Whitemarsh Township. It seems that in the past decade, like Upper Dublin, each municipality has successfully concentrated on park and open space enhancements to their respective community.

In terms of Regional Cooperation during the past 10 years, inter-municipal funds have been dedicated to solving traffic and flooding issues.

Chapter 11, Policies for Protecting Open Space

The *Open Space Plan* (1994) correctly states, "...alternate strategies are needed to meet the goal of additional land for parks, recreation and environmental protection. Five techniques are proposed: acquire easements, enact natural resource protection ordinances, revise residential zoning districts to require the set-aside of open space or payment of fees in lieu of, encourage private donations of open space, and continue community education." (p. 87)

1. Acquire Easements (Purchased and Voluntary)

In 2001, Upper Dublin Township hired a land-planning consultant to develop a database identifying tracts of land that may be helpful in addressing community needs for open space and parkland. When completed, this database included 47 parcels ranging in size from 0.20-acres to almost 200-acres. The Township manager drafted a letter that was mailed to each property owner indicating the Township's interest in the potential use of the property. The Township Manager further stated the Township's intention to further assess each property's potential for public acquisition either through the direct purchase of land *by* the Township or, by a conservation easement granted *to* the Township. Finally, the Township indicated its desire to obtain a "right of first refusal" on the property, which would give the municipality an initial option to purchase land should the owner decide to sell it in the future.

This list is not exhaustive and remains active.

2. Enact Natural Resource Protection Ordinances

The 1994 plan discussed ordinances local municipalities use to protect natural resources, including floodplains, stream corridors and woodlands. The Township has actively amended its ordinances over the past 10 years to protect these and other sensitive natural resources. The following is a brief summary of the Township's activities to date:

- a. **Floodplains** – Zoning Code Article XXII is entitled the Floodplain Conservation District. This Article was substantially amended in 1995 and in 1999 and now includes provisions for a horizontal floodplain buffer area. This buffer prohibits buildings or structures filling or excavating within a one foot horizontal buffer area, established at one foot above the base flood elevation (255-161.E).

At this time the Township has not adopted a 25-foot building setback along the 100-year floodplain boundary.

- b. **Stream Corridors** – The Township has not adopted a specific stream bank setback requirement, also known as a riparian buffer. However, there have been other regulations adopted that directly protect the quality of the water in streams such as:
 - Grading provisions in the SD code adopted in 1998 address topsoil preservation and control excavations and fill activities near watercourses or constructed channels. (212-23)
 - Drainage provisions are in both the subdivision code and in the storm water management code (Chapter 212-24 and Chapter 206.) Design requirements in the Subdivision Code include provisions to control changes to natural streams (212-24.C)
 - Erosion and sediment control provisions in the subdivision code require plans to include techniques for minimizing erosion and sedimentation. (212-25) There is a provision in this section of the code that requires a drainage easement or right-of-way along the watercourse to preserve natural drainage. (212-25.D.6)
- c. **Woodlands** – the Township amended the Landscaping provisions in the subdivision Code in December of 1994 and included requirements to provide information on the location and caliper of existing trees with trunks 8 inches or more in caliper. If a lot contains 20 or more trees, then a tree survey plan must be included as part of the application. A schedule listing existing trees to be destroyed by development and another schedule detailing the new plant material to be installed must be included. (212-32.E). This Code section also encourages the preservation and protection of existing trees by allowing preserved trees to be counted towards minimum planting requirements. (212-32.G). There is also a requirement that if more than 25% of the number of existing trees 8 inches in caliper or greater are removed, they must be replaced on a one-to-one basis (212-32.H).

3. Revise Residential Zoning Districts (to require open space set-asides or payment of fees “in lieu of” to purchase open space in new residential development)

In 1997 the township added the “Open Space Preservation District” to its Zoning Code. It is an overlay district, which can be applied to residentially zoned land in compliance with its provisions. Depending on the design option selected, either 30 percent or 40 percent of the total tract area is required to be set aside as protected common open space. The district allows

single-family detached homes, open space and agricultural uses. Non-intensive open space uses are also permitted, such as picnic areas, playing fields, and golf courses.

One development – Gentry Manor on Susquehanna Road – has been built using the OSP overlay district.

4. Encourage Private Donations of Open Space

Upper Dublin Township’s Open Space Inventory totals 538.14 acres (excluding the 23-acre “Fields of Dreams” / Loch Alsh Fields complex). The first open space acquisition was in 1957, the most recent in 2001. Donated property accounts for 278.79 acres of this public land, or 51.8%. Most was acquired through developer donations during the construction boom of the 1970’s and 1980’s. The Township invested a total of \$2,045,713 for the remaining 259.35 acres; an average of \$7,900/acre. Overall, the cost of parkland currently in the Township’s inventory is \$3,800/acre.

Since 1994 Upper Dublin Township has acquired several open space parcels through donation totaling 34.511 acres.

- 1997 6.0-acres Camphill & Highland “North” field (CHAC)
- 1997 0.071-acres Francis J. & Helen M. Fox (Robbins Park)
- 1997 5.28-acres Siy & Bernice Polekoff (Sandy Run Park)
- 1998 17.06-acres Novartis Corporation (CHAC)
- 1998 6.1-acres Gwynedd Chase, Inc. (Dublin Hunt)

In July 1999, John Malcolm Dunn gave by gift a Conservation Easement on approximately 4.27 acres of land located at 1322 and 1328 Limekiln Pike. The easement area has been maintained as a natural area and supports a variety of native and horticultural plant species. The house and grounds are representative of a Pennsylvania accumulated farmhouse together with an ancillary barn and shop. The easement area contains historic buildings, wooded areas, lawn, vineyard trellis and a drainage swale. The easement is a perpetual easement exclusively for conservation purposes. The Grantee and recipient of the conservation easement is The Conservancy of Montgomery County.

For additional information on this topic, please see “Acquire Easements.”

5. Continue Community Education

Community education regarding environmental stewardship is a priority worldwide. Upper Dublin School District and Upper Dublin Township promote this initiative through ongoing support of the year-round programs, maintenance and staff at the Robbins Park for Environmental Education, 1419 E. Butler Pike, Ambler, PA. The Township has also appointed an Environmental Advisory Committee to serve as its advisory body. The membership consists of interested residents who volunteer their time and expertise to advise the elected officials and the community at large about environmental issues.

In promoting environmental stewardship Robbins Park staff works cooperatively with, among others, the Wissahickon Valley Watershed Association, the Penn State Cooperative Extension, the Schuylkill Center for Environmental Education, the Montgomery County Environmental Education Center, the Pennsylvania Fish & Boat Commission, the Pennsylvania Game Commission and The Friends of Robbins Park. The Environmental Advisory Committee also works with local schools to educate students about the environment and to promote participation in efforts to preserve and enhance the sensitive natural resources that add to the quality and character of the community.

A “Build-Out Analysis” was requested by Montgomery County, outlined in a memorandum to Group C Municipalities dated September 6, 2005. The products included in this *Open Space Plan* Board include a **Figure 14**, Build-Out Map and **Table 16**, Build-Out Analysis.

The process to develop both the **Figure 14** and **Table 16** was as follows. In that Upper Dublin Township is substantially built-out, many of the areas have no capacity for further development under existing zoning. These areas are shown as white on the map with lot lines and roads as they appear on our base map for the *Open Space Plan*. Further, the public lands protected from further development are shown in green on the map.

Those areas that have not been developed were identified in the *Open Space Plan* as Vulnerable Land (orange parcels, **Figures 9 and 11**). These parcels and several additional institutional parcels subject to possible sale and redevelopment (e.g., private schools, golf courses) were included for evaluation of development yield. The analysis map has been updated to reflect changes since the draft *Open Space Plan* was completed in May 2005. For example, some parcels that were the subject of land development review have subsequently been approved, and therefore removed from the vulnerable land list.

For each vulnerable parcel, constrained areas were mapped using the data in the Township’s *Open Space Plan*, including FEMA floodplains and floodways, hydric and alluvial soils, steep slopes, and wetlands. These areas were measured from the composite environmental features maps and subtracted from the total parcel area. An additional 20% of the land was deducted to reflect land needed for roads, layout inefficiencies, stormwater management facilities, and other infrastructure. The resulting net usable area was used to calculate yield based on the existing zoning. We assumed no change in zoning from the current zoning. In cases where parcels have been the subject of recent or current development applications, the yield identified in the application was utilized. The steps of the analysis and results are compiled in **Table 16**.

The findings have been mapped on the same base map as used for the *Open Space Plan* at a scale of 1”=1000’. Previously built-out and preserved areas are shown as noted above (white and green). Vulnerable parcels have been highlighted in yellow. Yields for residential have been depicted on the (yellow) vulnerable parcels as red houses with numbers inside reflecting the resulting number of dwelling units. For office space, red rectangles have been used on the yellow parcels with the total square feet (sf) yield shown within them. Some parcels are not zoned to allow residential or commercial development other than expansion of current uses (e.g., institutional), and these have been identified by letters with explanatory footnotes and assumptions based on the Township Code.