

Open Space and Natural Resources Plan

For an inner ring suburb that was first settled by Europeans more than three centuries ago, Whitemarsh enjoys an unusual amount of public and private open space. While some of this space is the direct result of the six golf courses within the township, a great deal of our open space is the legacy of wise planning by earlier generations. Whitemarsh already enjoys a well developed municipal park system. Local parks are augmented by Fort Washington State Park, which the Commonwealth of Pennsylvania created in the early 1900s in an effort to protect the Wissahickon Creek watershed. Whitemarsh is also home to Montgomery County's Wissahickon Valley Park, which extends the greenway along the Wissahickon Creek. Of equally great importance to Whitemarsh are the open space contributions of private individuals and organizations. The Natural Lands Trust, the Montgomery County Lands Trust, and the Wissahickon Watershed Association collectively own almost 300 acres of protected open space throughout the township. Much of this open space is either along the banks of the Wissahickon Creek at Erdenheim Farm or former pasture land in the Broad Axe section of the township. The majority of this land was given in the form of bequests by generous township residents.

The open space in Whitemarsh stands in marked contrast to many of its neighboring municipalities and helps to make the township a particularly unique place. Beyond its aesthetic and environmental value, the preservation of open space is a proven method of containing congestion, minimizing taxes and enhancing property values. Thus, the township's open spaces, together with the strength of the schools, and the proximity of major highways and mass transit, serves to ensure that even Whitemarsh's older neighborhoods remain vital and desirable.

In recent years, the township has recognized the importance of preserving open space and, responding to recommendations contained in the township's 1996 open space plan, acquired 17 acres of the WFIL property and took title to the 54-acre "Silt Basin" property.

With ever increasing development pressures, Whitemarsh Township recognizes that additional and continuing efforts to preserve open space are necessary in order to remain—and continue the benefit from—the township's remaining open space. However these efforts must take place within the limits of the township's fiscal constraints. Therefore, while some of these efforts will involve preserving additional land for parks, others will involve the preservation of land through the development process itself and still others will involve a wide range of cooperative public and private efforts to preserve open space.

This chapter is divided into three major sections, all related to open space preservation. The first section describes existing parkland and examines, using accepted models, how much additional parkland should be provided for at buildout. It also details proposed improvements for the existing parks as recommended by the township's Park and Recreation Board. The middle section describes the importance of preserving the township's remaining open, undeveloped land and examines what is currently being done. Finally, the chapter concludes with recommendations on preserving natural features and resources.

Parkland

Currently Whitemarsh contains a significant amount of parkland, owned either by the township, the state, or the county. The acreage and ownership totals are shown in Figure 10-1.

Figure 10-1
Existing Parkland - Whitemarsh Township
 (as of 1/31/03)

Park Name	Owner	Acreage
Fort Washington State Park	Commonwealth of Pennsylvania	483 acres
Wissahickon Valley Park	Montgomery County	143 acres
Spring Mill Park	Montgomery County	38 acres
Miles Park	Whitemarsh Township	25 acres
Cedar Grove Park	Whitemarsh Township	25 acres
		(11.75 Leased)
Leeland Park	Whitemarsh Township	3 acres
Valley Green Park	Whitemarsh Township	8 acres
Silt Basin Property	Whitemarsh Township	54 acres
Whitemarsh Meadows:		
Woodbine Road	Whitemarsh Township	10 acres
Wild Flower Road	Whitemarsh Township	6 acre
Buttercup Lane	Whitemarsh Township	1 acre
WFIL Site	Whitemarsh Township	17 acres
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Subtotal:	Commonwealth	483 acres
	County	181 acres
	Township	149 acres
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TOTAL		813 acres

The significance of this total should be related to the recommendations of recreational professionals. The National Recreation and Park Association (NRPA) is a national organization of recreational professionals whose standards are typically accepted by planning professionals and the courts as an appropriate way to measure the amount of parkland that a municipality should have to serve the needs of its residents. Given that federal, state, or county parks are typically designed with a focus on passive recreational pursuits and are expected to serve an entire region, NRPA generally feels that it is the role of the municipality to provide the parkland that serves local needs. (It should be noted that NRPA's recommendations for land are for recreational parkland, not open space.) Therefore, while acknowledging the importance of the state and county parkland for their role in preserving significant open space in the township, only the parkland owned by Whitemarsh has been used for determining how much land is needed to satisfy the standards outlined by NRPA. NRPA advocates the use of population ratio standards to assess the adequacy of municipal parkland. These standards, which are used throughout the country to help communities set their park and recreation goals, are ratios that relate population size to recreational demand. The standards represent what an average group of 1,000 people need in terms of parkland and recreational facilities.

NRPA standards recommend that a township should have between 7.5 and 12.6 acres of parkland for every 1,000 residents. To ensure that Whitemarsh has adequate parkland to meet its future needs, and recognizing that such measurements are estimates at best, the township decided to use the top figure of 12.6 acres.

It is further recommended by NRPA that the total parkland acreage be distributed so that 76 percent of the total acreage is devoted to neighborhood parkland and the remaining 24 percent is devoted to community

parkland. Given the 12.6 acres per 1,000 residents used in this plan, the distribution among neighborhood parkland and community parkland becomes 9.5 acres and 3.0 acres, respectively.

The following park definitions offer a means by which the township can categorize its existing parks and determine how well the park system measures up against these standards. The definitions also provide a framework within which to plan a well-rounded park system in the future.

A neighborhood park ranges in size from 5 to 20 acres. The optimal size is 10 acres. A neighborhood park should serve at least 2,000 and not more than 10,000 persons. Its facilities should appeal to the general population of the township and should be developed according to the site’s constraints. Good pedestrian and bicycle access should be provided since it is intended to be a walk-to and bike-to park.

Neighborhood parks provide both active and passive recreation opportunities. They are well landscaped and attractive with areas designed for quiet, informal recreation, but also contain active play areas for short-term, frequent, and intensive use. The parks may include natural features, which protect areas of environmental sensitivity while providing opportunities for passive recreation.

Given this definition, neighborhood parks in Whitemarsh are as follows:

Leeland Park	3 acres
Valley Green Park	8 acres
Silt Basin Property	54 acres ⁽¹⁾
Whitemarsh Meadows	17 acres <i>(in 3 separate parcels)</i>
WFIL Site	17 acres
<hr/>	
Total Neighborhood Parkland Acreage	99 acres

 (1) While oversized, this open space area is best defined as a neighborhood park, given its proposed use for a walking trail and neighborhood open space. (See Recreation Section)

A community park is larger than a neighborhood park and is generally no less than 20 acres in size. A community park is centrally located to serve the active and passive recreation needs of more than one neighborhood and, if possible, the entire community. Although most residents will likely travel to the park by car, it should also be accessible by walking or bicycling trails linking it with surrounding residential areas. Good accessibility for pedestrians and bicyclists should be assured within at least a half-mile radius from the park, because the site should function as a neighborhood-oriented recreation facility as well as one that serves community-wide needs.

A community park serves all-purpose, year-round active and passive recreational needs, but it is typically a day-use park having no overnight facilities. There is usually a wide array of facilities. Natural areas, such as woodlands, steep slopes, floodplains, and bodies of water are often included. The park’s primary function is recreation, though the preservation of natural features and historical/cultural resources may also be accomplished.

Existing community parks in Whitemarsh are as follows:

Cedar Grove Park	25 acres
Miles Park	25 acres
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Total Community Parkland Acreage	50 acres

Therefore:

Community Parkland	50 acres
Neighborhood Parkland	99 acres
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Total Parkland	149 acres

Presently Whitemarsh has 149 acres of parkland.

Future Needs

For the Comprehensive Plan, a residential buildout analysis was performed for the township. Examining all of the vacant and underdeveloped (primarily large tracts with single-family housing) residentially zoned land, it was determined that approximately an additional 2,673 housing units could be eventually added to the township based on these properties existing zoning densities and permitted uses.

Of these total units, 2,351 would be single-family dwellings constructed primarily for families, the remaining 322 units would constitute the independent living units developed for the age-restricted Hill at Whitemarsh Complex, located on a portion of Erdenheim Farm. The assisted living and skilled care units associated with this development are typically not counted when assessing parkland needs.

The predictions generated by the buildout analysis are useful in determining how much parkland will be needed when the township is buildout.

To determine this need, the following calculations are preformed:

For Family-Oriented Housing

- Estimated houses: 2,351
- Average township household size: 2.62 ⁽¹⁾
 $2,351 \text{ units} \times 2.62 \text{ household size} = 6,159 \text{ additional residents}$

For Age-Restricted Housing

- Estimated houses: 322
- Average township household size: 2.0 ⁽²⁾
 $322 \text{ units} \times 2.0 \text{ household size} = 644 \text{ additional residents}$

(1) Taken from 2000 Census.

(2) When calculating household size for independent units in an age-restricted development, the township average household size is not appropriate. An average household size of 2.0 is a more accurate estimate.

Then using the Year 2000 population total of 16,702, the following was determined:

$$6,803 + 16,702 = 23,505 \text{ (estimated residents at buildout)}^{(3)}$$

The population forecast can also be used in the following manner to determine how much parkland the township will need at buildout:

- Using the 12.6 acres of parkland per 1,000 residents, the following total amount of parkland needed at buildout was reached.

$$23,505 \text{ residents} = 296.0 \text{ acres of parkland needed}$$

The parkland needed to serve the township at buildout can also be used in the following manner to determine how much parkland should be provided per household.

- 12.6 acres X 43,560 square feet/acre = 548,856 square feet.
- 548,856 square feet/1,000 residents = 549 square feet per resident.
- 549 square feet per resident X 2.62 residents per household = 1,438 square feet per household.

Therefore, the goal of providing a minimum of 10 acres of parkland for every 1,000 residents is the equivalent of providing 549 square feet of parkland per resident or 1,438 square feet per household. The per household standard can serve as the foundation for the township to amend its Subdivision and Land Development Ordinance to require that developers dedicate land for public use or satisfy other requirements in lieu of dedicating land as a condition of plan approval.

Given the 149 acres of parkland that currently exists, it can be determined that approximately 147 additional acres of parkland must be added in the township to accommodate the projected population at buildout.

To determine how much of this additional acreage should be distributed between neighborhood and community parkland, the following information was analyzed:

- Using the 9.5-acre distribution requirement for neighborhood parkland to satisfy future projections, it was determined that 224 additional acreage for neighborhood parkland would be required, while 71 additional acreage for community parkland would be required.

It should be stated that these acreage requirements are only a guide, estimates that should be used by the township to help ensure that at buildout there is enough parkland for all residents. NRPA standards are developed to apply uniformly to any community and therefore do not account for the specific values, priorities, and circumstances unique to Whitmarsh Township. Local conditions and development patterns should also be factors in determining the location and development of future parks.

While there is a theoretical need for an additional community level park, the more pressing need, and perhaps the more beneficial one, is to ensure that all neighborhoods are served by convenient neighborhood level parks.

This need has already been recognized by the township's Park and Recreation Board in their long-range planning for the township. They have identified the need for at least three additional neighborhood parks throughout the township. Two of these areas are site specific, the remaining one is more general in its location. The Board desires that if development occurs near the existing quarries and at the Ace Center Golf

(3) *The assumptions contained in this calculation are that no significant residential rezoning changing density will occur and that the 2.62 average household size will remain fairly consistent.*

Course that a portion of the development tract be preserved for neighborhood parkland. The remaining desired neighborhood park would be in the Broad Axe area of the township. Of the three sites, the Broad Axe area is perhaps the most important. As Figure 10-2 indicates, it is one of the two areas of Whitemarsh outside of the service area of the township's two community parks (based on a 2-mile radius recommended by NRPA). The other area, located in the vicinity of Route 73 and Bethlehem Pike, is reasonably served by Valley Green Park (see Figure 10-3, Neighborhood Park Service Area, also based on NRPA standards). Also, as Figure 10-3 demonstrates, Broad Axe is not served by a neighborhood park-although it is adjacent to Fort Washington State Park.

Recreation

Whitemarsh employs a full-time Parks and Recreation Director, who oversees all park maintenance and improvements and administers the township's various recreational programs. The director is guided by a five-member board, that makes policy recommendations and plans for future needs and requirements.

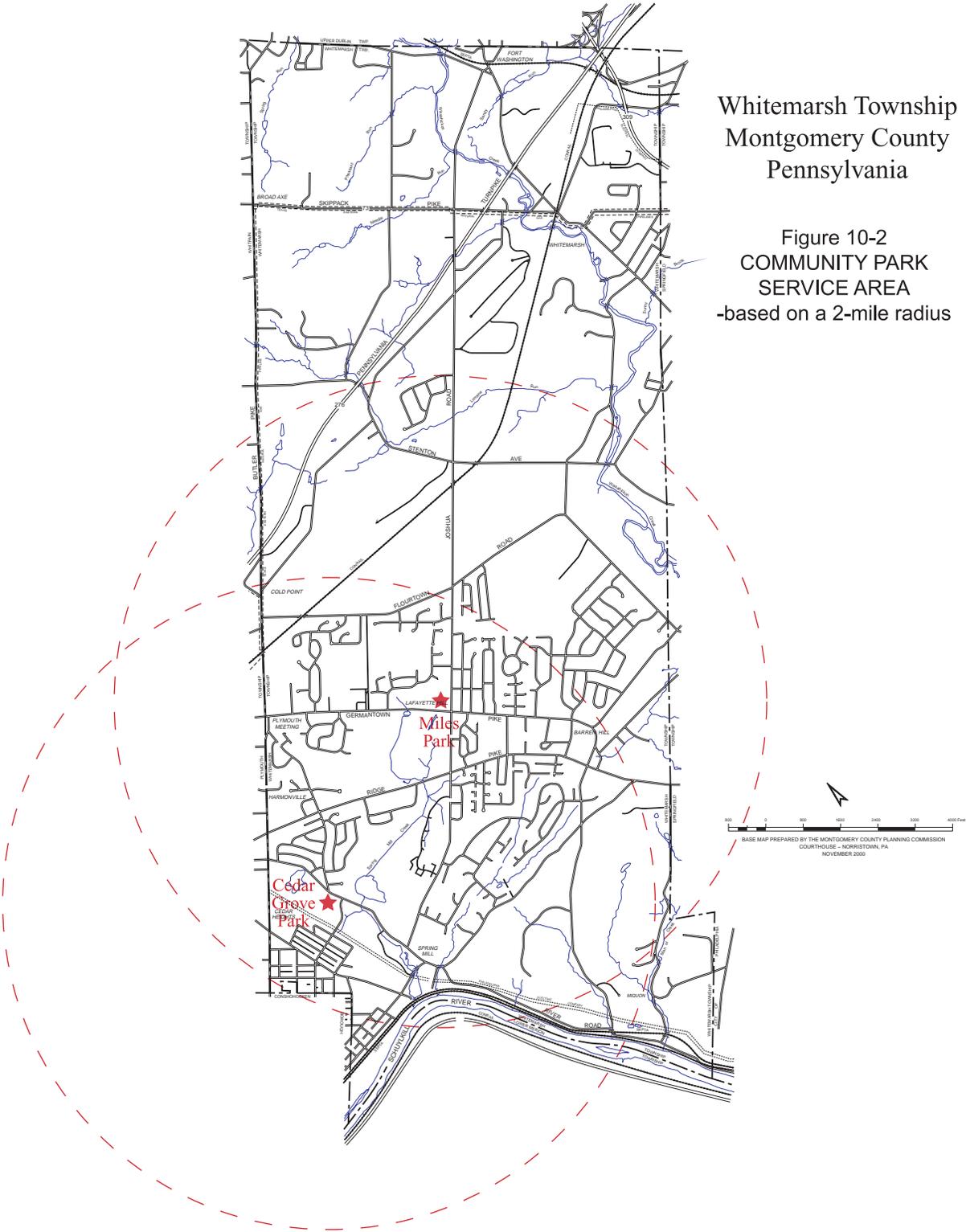
1. **Local Programs.** The township provides a wide variety of recreation programs for residents of all ages. These programs range from learning programs for preschoolers to peewee soccer and tennis for children and adolescents to volleyball and township-sponsored day trips for adults and senior citizens. Whitemarsh also has an informal cooperative agreement with Plymouth Township, which is intended to fill in any gaps between the recreation programs of the two townships (for example: Whitemarsh has a youth soccer league, while Plymouth sponsors the youth football league). It also has an agreement from the school district, which allows township recreational programs the use of school facilities when they are not being utilized by students.

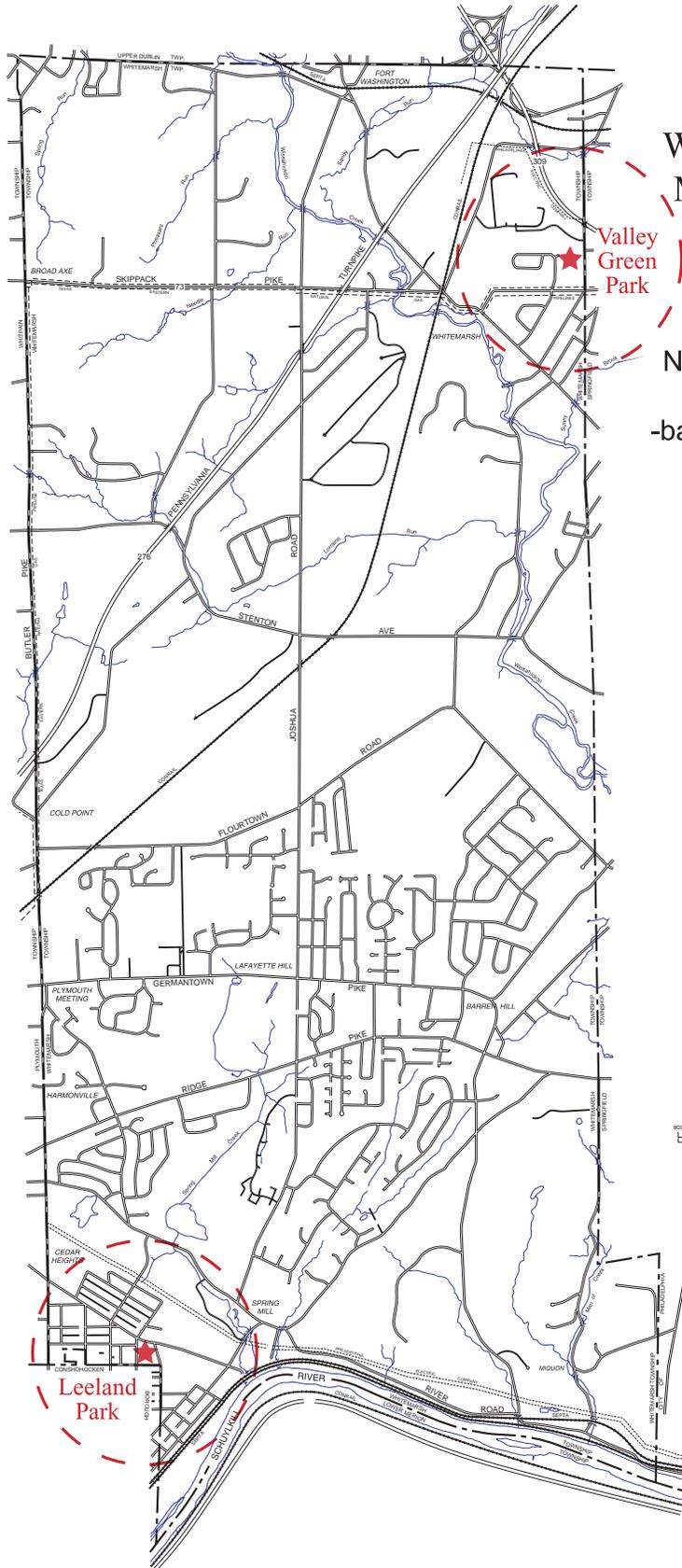
Recent planning efforts by the Park and Recreation Department have a twofold purpose: one is to provide for more neighborhood parkland, the other is to upgrade the existing parks by providing them with new equipment and addressing existing deficiencies. Assisting them in accomplishing these goals is a group known as the "Patrons of Whitemarsh Parks." The Patrons consist of township residents, local business leaders, members from the Park and Recreation Board, and the Park and Recreation Director. Organized in July 1999 they are a nonprofit, tax exempt group that raises funds to help finance long-term and yearly projects beyond the scope of the department's budget. Currently, they are assisting the department in replacing the playground equipment in Valley Green, Miles, Leeland, and Cedar Grove parks.

2. **Neighborhood Parks.** Besides the specified areas of the township where the Park and Recreation Department would like to establish new neighborhood parks, it is also their intention to create smaller neighborhood parks to address the overall township deficiencies of this type of park. Through working with developers or interested property owners, land would be acquired to develop small parks that emphasize passive activities, such as walking trails and picnic groves, but also provide informal multipurpose playing fields, designed to accommodate sandlot games. Following accepted design standards, these parks should be between 2 to 5 acres.
3. **Parkland Improvements.** To continue to serve the township's residents, the Park and Recreation Department desires to make the following improvements to existing or proposed parks.
 - **Miles.** *The following is proposed:*
 - Replace the existing pavilion and restroom facility. The existing facility is too small and antiquated.
 - Extend the existing walking trail an additional half-mile and rehab the fitness station to meet current and projected demand.

Whitemarsh Township
Montgomery County
Pennsylvania

Figure 10-2
COMMUNITY PARK
SERVICE AREA
-based on a 2-mile radius

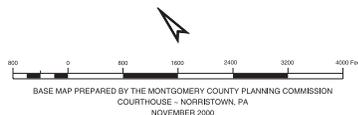




Whitemarsh Township
 Montgomery County
 Pennsylvania

Valley Green Park

Figure 10-3
 NEIGHBORHOOD PARK
 SERVICE AREA
 -based on a 0.5-mile radius



BASE MAP PREPARED BY THE MONTGOMERY COUNTY PLANNING COMMISSION
 COURTHOUSE - NORRISTOWN, PA
 NOVEMBER 2000

- Replace playground equipment. In particular: up to age 5, make the equipment ADA accessible; ages 5-12, replace swing sets and the climbing apparatus.
- **Cedar Grove**
 - Obtain leased acreage (11.7 acres) from the owner. This could be accomplished when the owner's tract across Wells Street is developed.
 - Replace playground equipment.
- **Leeland**
 - Replace playground equipment.
- **Valley Green**
 - Implement master plan. This includes the creation of a practice soccer field, adult fast pitch softball field, and walking trail. Also, the existing pavilion would be replaced and a 31-stall parking lot installed.
- **WFIL Site**
 - Following recommendations of the township's 1996 Open Space Plan, this 47+ acre site was obtained from the owner as open space. Given the value of the land, the site was subdivided and purchased by both the township and the school district. The school district took 30 acres and will develop much of their portion with playing fields and tennis courts. On the 17 acres obtained by the township, the following improvements are envisioned:
 - Creating a loop trail for children bicyclists (expanding upon an existing trail which connects the William Jeanes Library with the school district land).
 - Installing playground equipment.
 - Installing a volleyball court.
 - Installing a roller hockey area (flat, paved surface).
 - The remaining acreage will be devoted to passive recreation.
- **Silt Basin Site**
 - Another acquisition proposed by the 1996 Open Space Plan, 54 acres of the 109-acre site have been obtained by the township as open space. It is envisioned as a passive park, to be left largely wooded and undeveloped. However, a linear walking trail will be installed. This trail would serve to connect the Lafayette Hill section of the township with Cedar Grove Park.
- **Indoor Recreation Center**
 - While no site has been identified, the Park and Recreation Department would like to purchase or build an indoor recreation center. It will primarily house a small gymnasium.

Besides implementing the above recommendations, it is additionally important that the township develop a comprehensive recreation plan. Such a plan, which is recommended in the 1996 Open Space Plan, would examine current needs but more importantly, should be oriented toward serving future residents. While the findings of such a plan may cause some of the above recommendations to be revised, these recommendations should be seen as addressing a current need and should certainly be viewed as the starting point for any comprehensive study.

Park and Recreation Facilities Not Under Township Ownership

Parks

Whitemarsh currently has over 600 acres of passive parkland owned by either the Commonwealth or Montgomery County. Most of the land is undeveloped, wooded and much of it serves to protect the Wissahickon Creek. An exception is the proposed Spring Mill Park on the banks of the Schuylkill River. Regarding this park, in 1983 the county prepared a master plan for it with the assistance of the township. This plan has never been implemented and perhaps its vision is no longer desirable. Therefore, the county and the township should revisit it and develop policy recommendations that are mutually beneficial. The policies in the Schuylkill River Greenway Stewardship Study can serve as an important frame work for planning in this section of the township. Special consideration should be given to enlarging the park by obtaining the land of an adjacent trash recycling business and to obtain conservation easements along River Road between Barren Hill Road and Harts Lane.

Trails

The township is the site of several existing or proposed regional trails. Existing trails include: a portion of the Schuylkill River trail, a hard surface trail which extends from Philadelphia to Valley Forge National Historic Park-with a proposed extension into Berks County; a trail system in Fort Washington State Park; and a Sierra Club Trail which extends from Philadelphia to the Spring Mill area. Proposed trails include the county's Cross County Trail, a multiuse trail which would begin at the Schuylkill River Trail in Conshohocken and extend through Montgomery County to Upper Moreland Township. In Whitemarsh it would largely follow the Norfolk Southern Railroad line before entering the state park and then paralleling the Wissahickon Creek. Other proposed trails are the Wissahickon Trail, whose installation is being facilitated by the Wissahickon Valley Watershed Association and the Morris Arboretum and the Sand Run Greenway and Trail which is being implemented by the Sandy Run Coalition, a partnership of several townships, including Whitemarsh, the Watershed Association, local civic groups and the county. These trails, when combined with the Bike Mobility Plan and the Sidewalk Installation Recommendations, described in Chapter 8, would offer walkers and bikers safe access throughout the township. The trail system along with the sidewalk recommendations delineated in Figure 10-4.

The policies contained in this chapter, when implemented, would guarantee that Whitemarsh has a park system and recreational facilities to adequately serve successive generations of township residents.

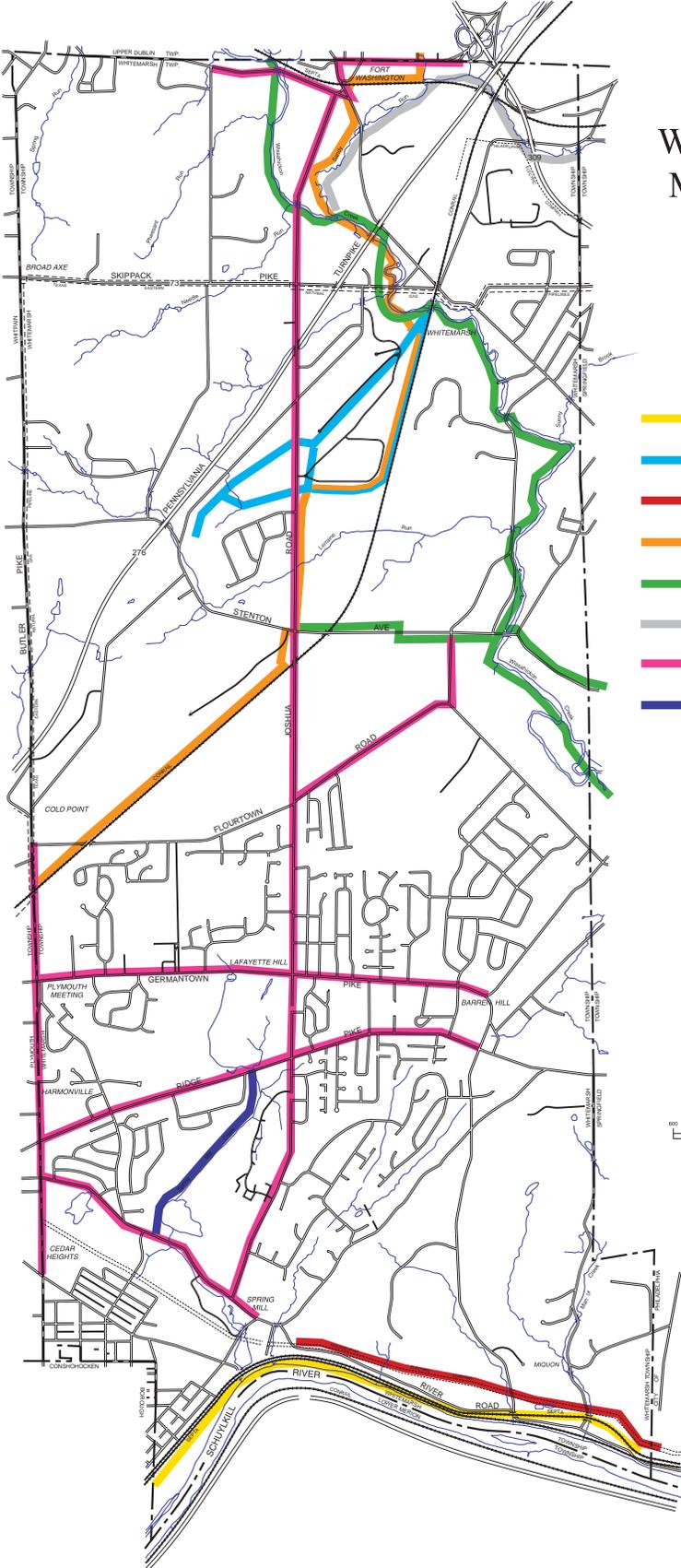
Open Space

Throughout this plan, Whitemarsh has often been defined by its open space. Much of this appearance comes from large tracts of land that is still privately held. Erdenheim Farm, in the center of the township, the large country estates and pasture land in the vicinity of Broad Axe and the wooded valleys of Miquon are all under private control and, subject to the desires of their owners, are developable under the regulations of their respective zoning districts. Within this then, lies an inherent conflict between those who cherish this open space and those who may desire to develop their property.

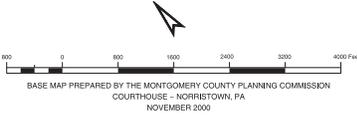
This is not to say that the owners of these tracts do not share the desire to preserve their land. Indeed, Whitemarsh has been blessed that the owners of these properties have generally refrained from developing them. Most of eastern Montgomery County is developed on the large farms and country estates of earlier generations. And this scenario is all too common throughout the United States. The current residents of the township should be appreciative of this private preservation and future residents can be thankful that several of these owners have dedicated portions of their property to local conservation groups. However, the township should not believe that this situation will exist forever. Rising land costs, high taxes and exorbitant

Whitemarsh Township Montgomery County Pennsylvania

Figure 10-4
TRAIL SYSTEM



- Schuylkill River Trail
- Ft. Washington State Park Trail
- Sierra Club Trail
- Cross County Trail
- Wissahickon Trail
- Sandy Run Trail
- Proposed Sidewalk/Pathways
- Proposed Silt Basin Trail



maintenance costs will surely cause some, if not all, of these farms and estates to eventually be sold for development. In fact, since 1963 developable open space (vacant and agricultural land) has decreased from 40% of the township's total acreage to 17% (2003). Yet during much of the same period (1970-1990), the township's population decreased by over 1,000 residents, while its total housing units rose by 650. Sprawl is nothing new in the township. The implementation of the growing greener principles can help to preserve this rural landscape, but will not save all of it. Furthermore, the township would be remiss if it did not take advantage of every opportunity available to preserve these lands, which constitute a very tangible legacy.

How much preserved open space is enough? Unfortunately there is no one measurement such as NPRA's for township parkland. While there are definite spiritual and aesthetic benefits found in open space preservation, even Waldon Pond has not been able to withstand the forces of the marketplace. However, as the opening paragraphs of this chapter indicated, there are many hidden benefits to be obtained from open space preservation. With most of the privately held open space in the township being zoned for single-family detached dwellings, the development of this land would not only cause more congestion on local roads, but would flood the school district with more students. As part of this plan's preparation, a buildout study was done for the township. On the remaining developable portions of Erdenheim Farm over 300 new houses could be built. These could all be detached single dwellings on one-acre lots. This land use pattern has been found to be the single greatest cost to township revenue, let alone the effect that it has had on school taxes. Fewer houses results in lower taxes.

Besides cost, open space provides incalculable environmental benefits. While the benefits of the preserving natural features found on open space parcels is beyond reproach, what is generally not acknowledged, or even known, are the benefits that open space provides for the local climate. The study of local climates, known as microclimatology, looks at the various effects the landscape can have on a climate. Impervious coverage, such as macadam paving, has one of the biggest negative impacts on an area's climate. The sun heats it up during the day, causing the temperature to rise and moisture in the air to be depleted. During the evening the same pavement is still radiating heat into the night air. The radiant heat generated by the city of Philadelphia is so intense, that it has permanently altered the weather patterns of adjacent communities. Conversely, wooded open areas limit the heat cause by the sun. The upper branches of trees lower the temperature by taking the direct impact of the sun's rays. This also keeps the ground cooler and preserves moisture. On dry days, moisture reserves in the tree roots are released and moisten the air. Some species of trees can release 500 gallons a day. ⁽¹⁾

While the benefits of open space can be demonstrated, what can be done to preserve it? There are no simple solutions or one standard answer. However, the following are recommended for consideration.

- **Map of Conservation Features** – This map, a key component of the Growing Greener program, should be used as a guide to create linked greenways throughout developments. This map shows areas constrained by natural features and thus unable to be developed. In conjunction with a riparian buffer ordinance, interlinked greenways could be established. Special consideration should be given to how these greenways could be connected to the Wissahickon Creek corridor and existing parkland.
- **Erdenheim Farm** – This farm, which has land in both Whitmarsh and Springfield Townships, totals 503 acres. Of this total, 405 acres are in Whitmarsh, 53 are in Springfield. One hundred seventeen acres along the Wissahickon Creek have been preserved by a former owner and given to the Natural Lands Trust.

In the past several years, much attention has been focused on this property as its owner, along with a group of investors, petitioned the township to rezone approximately 50 acres of the farm for the construc-

⁽¹⁾ *Building the Future from Our Past, 1975, Old Town Restorations, St. Paul, MN.*

tion of an age restricted community. The great outcry over this rezoning by nearby residents only served to underscore the conflict between private property rights and the community's desire to preserve open space. While the rezoning request was granted, out of the controversy a group was formed, The Whitemarsh Foundation. This group consists of both neighbors and investors in the age restricted community. Seeing a common interest, they are pursuing strategies to save the remaining unprotected lands of the farm. In regards to this plan, it is recommended that the township work with this group and support them in their efforts. If anything, flexibility and innovation should be shown toward such township oriented issues as zoning and land development policies.

- **Local Neighborhood Groups** – Over the past few years several neighborhood groups have been formed, generally as the result of an unwanted land development. While communication problems do on occasion give rise to misunderstandings particularly between residents and township agencies, the community's growing interests and participation in local government creates the many new opportunities for Whitemarsh Township. Since these issues usually revolve around open space and its disappearance, it is recommended that these groups and the various township agencies involved in planning decisions commence a dialogue and begin to work together for the township's benefit.
- **Land Conservation Trusts** – This region has many groups devoted to land preservation. Many are active in the township. However, often they have not had much contact with township officials. Given their expertise in open space preservation, it is recommended that the township either empower an existing group or form a new group to begin a dialogue with them.
- **Update the 1996 Open Space Plan** – Even a cursory glance at this document is enough to realize that it should be updated. Many of its objectives have been achieved or are in the process of being implemented. Therefore an update should be considered. It is recommended that its focus be directed toward the preservation of open space in the Miquon and Broad Axe areas of the township. With individual efforts underway to preserve Erdenheim Farm, it is important not to overlook these areas.
- **Open Space Fund** – Several years ago the township established an open space fund with a grant from a developer. As of yet, no funding process has been implemented to keep this fund solvent and growing. Such a fund could be very beneficial to the township. While, given the high cost of land in Whitemarsh, this fund will probably never be able to buy much land outright, it could be used to purchase conservation easements or to provide matching grants. Therefore it is recommended that funding strategies be explored and the most acceptable enacted. One possibility would be to create groups similar to the "Patrons of Whitemarsh Parks."
- **Trail Easements** – Throughout the township are informal trails and bridle paths that have been enjoyed for generations. All too often these are lost during the land development process. Consideration should be given to drafting regulations that preserve these for the use of future residents.
- **Flexibility** – Finally, the last recommendation is that the township remains flexible and innovative when it comes to open space preservation. Land preservation, especially in an area such as the township, where land values are quite high, is as much an art as it is a process. Therefore flexibility and compromise should always be in the forefront. For example, many an estate has been saved by an institution. When warranted, the township should not hesitate to rezone a parcel for this type of use. Also, conservation easements can often accomplish many of the same benefits as an outright purchase. By remaining flexible, open to compromise and innovation, much can be saved.

The recommendations above should be seen as a beginning point. However, by implementing and then building upon them, an open space legacy can be created. However, the township and its residents must act fast. For land, to paraphrase Mark Twain, is valuable. It is not being made any more.

Natural Resources Preservation

The preservation and enhancement of natural resources is a primary aspect of creating a sustainable community. Realizing that it is impossible to preserve all of the remaining open space in the township and recognizing that regulations can benefit the environment, the township intends to consider the following:

- **Heavy Industrial Zoning District** - This district, which is primarily along the Schuylkill River, adjacent to Conshohocken Borough, would be revised in anticipation of the type of riverfront redevelopment currently occurring in the borough. Standards would be drafted to preserve open space along the river and, in particular, to create a riverfront walkway with scenic overlooks.
- **Riparian Buffer Ordinance** - This recommended ordinance establishes setbacks from stream corridors and wetlands, and is important in promoting surface water quality and protecting important aquifer recharge areas. Also recommended for adoption in the 1996 Open Space Plan, such an ordinance would be in the Zoning Code.
- **Natural Features and Critical Areas Impact Ordinance** - This recommended ordinance requires that all subdivisions and land developments be designed to preserve and protect the natural features of the land. Natural features include existing grades and contours, watercourses, woodland and significant trees, scenic overlooks, pedestrian walks and bridle paths that have been in public use, etc. These ordinances also can include requirements for tree replacement and/or compensation for those lost during the development process. This ordinance would be in the Subdivision and Land Development Ordinance.
- **Institutional Overlay District** - As stated in the 1965 Comprehensive Plan, many of the township's institutional uses contain significant open space areas. While these uses range from churches to children's private day camps, most are governed by one set of dimensional regulations with no provisions for open space. The township should revise this zoning overlay by grouping similar uses into distinct classes, complete with separate dimensional, intensity and open space regulations that are appropriate for each class.
- **Best Management Practices for Stormwater Detention** - These are a series of recommendations regarding stormwater management drafted by the Commonwealth's Department of Environmental Protection (DEP) to promote cleaner streams and aquifer recharge. Working with the township engineer, the township should tailor these to the specifics of the township and include them in the Subdivision and Land Development Ordinance.
- **Mandatory Land Dedication or Fee-in-Lieu Of** - Under Section 503.11 of the Municipalities Planning Code (MPC Act 247), a municipality's Subdivision and Land Development Ordinance can contain provisions regarding the public dedication of land from a developer as a condition of plan approval or a fee-in-lieu of this dedication, provided that the municipality has an adopted recreation plan. It is envisioned that this chapter will function as this plan. The amount of the required land or fee is based upon the number of dwelling units or lots proposed for the development. In order to satisfy the future need for neighborhood parkland, as described above, the township intends to consider implementing this ordinance.
- **Building and Impervious Surface Coverage Requirements** - In many zoning districts, these coverage requirements are either too high or missing. Such requirements are desirable for they prevent the overdevelopment of a lot and ensure that a portion of it remains green space. Therefore, the township should reexamine the existing coverage requirements and add them where they are missing.

- **Revise Parking Standards** - All too often adherence to the regulations found in the Zoning Ordinance results in surplus parking spaces that are never used. Lack of flexibility with these requirements result in a loss of green space and an unnecessary burden to a property owner. Therefore, the township should consider adopting Shared Parking and Parking Held in Reserve standards that provide some flexibility toward the size of parking lots and limit impervious coverage.
- **Revise Required Plant Materials List** - In the Subdivision/Land Development Ordinance are lists of the plants that should be planted as street trees, in buffers and on a site. This list should be updated. In particular, the following needs to be reexamined:
 1. Remove plants from the list that have been determined to be invasive and hence, destructive to native vegetation. An example would be the Glossy Buckthorn Shrub.
 2. Remove plants that are no longer desirable for either their susceptibility to diseases or have been replaced by better cultivars. An example would be the Bradford Callery Pear, an ornamental tree.
 3. Promote the use of native species and mandate that all landscape plans contain species diversity and a mix of plants. This would forestall the creation of an environment where an entire neighborhood could loose all its street trees on its buffer plantings to one disease.
- **Revise and Expand the Landscape Buffer Standards** - In the Subdivision Ordinance the buffer standards should be revised to create more natural and native buffers rather than the traditional double row of White Pines. Also, regulations for buffer should be expanded to ensure that most nonresidential uses are buffered from streets and roads to ensure a more rural appearance and to mitigate the impact of the use on the streetscape.
- **Utility Corridors** - The township should work with the utility companies to landscape these areas as native meadows, through the use of wildflowers, native grasses and low shrubs. These corridors should also be examined in any revised open space plan for their possible uses as trails or greenway linkages.
- **Landscaping along Street Corridors** - Given the benefits of trees and green spaces, particularly in areas of intense impervious coverages, the township should consider a program for landscaping the street corridors that lack these amenities. Particularly, efforts should be directed toward the segment of Germantown Pike in Lafayette Hill and at the intersection of Butler and Ridge Pikes. Such efforts would not only enhance these areas' appeal, but would help to maintain the viability of these older commercial areas.

If implemented, these policies would greatly assist in the creation of a sustainable community.