

Lower Mount Bethel Township Recreation, Park, and Open Space Plan

Lower Mount Bethel Township, Northampton County, Pennsylvania



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1. Executive Summary



In 2003, Lower Mount Bethel Township began work on the Recreation Plan as part of the Comprehensive Plan update. In 2006, the Township hired the plan consultants to work with the Township Recreation Board to complete a Recreation, Parks and Open Space Plan a format recommended by the Pennsylvania Department of Conservation and Natural Resources (DCNR). The Lower Mount Bethel Township Recreation, Park, and Open Space Plan provides recommendations for administering the recreation and park system, upgrades and additions to existing parks, and a focus on the major improvements proposed at the Township Recreation Complex.

Currently, Lower Mount Bethel Township owns three parks which provide active recreation facilities for Township residents. Large natural areas owned by PP&L and Northampton County provide passive recreation, visual open space and environmental education for Township residents. Two boat launch areas provide access to the Delaware River.

The Plan makes recommendations for improvements and limited expansion of the above facilities to provide better usability for Township residents, future inhabitants, and visitors. No land acquisition is proposed by this plan. Recreation land area currently available is expected to be adequate for the next ten to fifteen years. In regards to recreational programming, beyond youth sports, hiking opportunities, and river access, there are few programs for other age or interest groups. The Plan recommends expanding current recreational offerings by taking advantages of outside contractors, portable programs, volunteers, and recreational training programs.

The Plan anticipates significant improvements to the Township Recreation Complex as part of a sizeable grant. The Complex will link to the PPL Environmental Preserve, serve as a Park & Ride for commuters, and include a Visitors/Environmental Education Center. Subsequent to the completion of these projects, the Township will enhance and expand recreational facilities at this site.

Lower Mount Bethel Township contains three watershed areas, all tributaries to the Delaware River, with significant natural features. These incredible natural resources contribute significantly to high quality of life for the Township, Northampton County, and state residents.

This plan provides background and current information to support the Township's efforts to meet the needs of its residents. By understanding the recreational, cultural, and natural and resources, the local community, and the surrounding region, Lower Mount Bethel Township can plan to continue to ensure the quality of life now and in the future for the township residents.

2. Developing the Plan

The development of the *Lower Mount Bethel Township Recreation, Park, and Open Space Plan* was initiated in 2003 with Carter Van Dyke Associates working with a recreation committee and in concert with revisions to the *Lower Mount Bethel Township Comprehensive Plan*. This planning effort was resumed in 2006 by Pandl & Associates, the Wildlands Conservancy, and Judy Houck functioning as the consultant team. The Plan scope and organization was expanded and revised to bring it into compliance with the requirements of Pennsylvania Department of Conservation and Natural Resources (PA DCNR) Community Partnerships Program scope of work guidelines for Comprehensive Recreation, Park, and Open Space Plans. Its timing again is intended to compliment the draft Comprehensive Plan under review by Lower Mount Bethel Township at the time of this writing.

Mapping was accomplished using GIS technology with GIS data supplied by the Lehigh Valley Planning Commission (LVPC) and prepared by Wildlands Conservancy. The LVPC's Natural Resources Plan and individual park data was incorporated into the data collection and reporting of this plan.

The Township Recreation Board and Environmental Advisory Committee have provided guidance and information on current conditions, efforts underway and future goals. This collaborative approach supplements and updates the key person interviews and committee meetings undertaken at the beginning of the planning process in 2003.

The Plan was prepared in four phases:

Phase 1: Current Conditions – a profile of the Township's current public recreation, parks and open space system, socioeconomic features, land uses, and natural and historic features.

Phase 2: Assets and Issues – an analysis of the current conditions with the goal to identify existing opportunities in the Township recreation, parks, and open space system.

Phase 3: Goals for the future – goals and objectives to establish how the recreation, parks, and open space system could look and function over the next ten years.

Phase 4: Implementation Action Plan – a list of recommended actions that elected officials, staff, and volunteers could take over the next ten years in order to realize the Townships goals and objectives.

3. Plan Overview

The *Lower Mount Bethel Township Recreation, Park, and Open Space Plan* ('Plan') is an in-depth study that provides a framework to retain and enhance the quality of life in the Township through parks and recreation and preservation of the Township's natural features. The Plan includes an assessment of the Township's parks and recreation system, goals and implementation strategies and a time frame for implementation. The Plan recommends the future direction for Township recreation and parks services and identifies necessary tools for successfully achieving those improvements.

The Township has created a variety of recreational opportunities with an emphasis on youth sports. With the addition of a neighborhood park created as a result of a recent development, there is a park facility within two miles of each resident in the Township. Access to the Delaware River is available at the northern and southern ends of the Township. An Environmental Center adjacent to and operated by PPL Utilities provides a passive recreation, environmental education, and hiking resource that serves the entire region. Recently, the Township has received approval of several Township and State Roads as designated Federal Scenic By-ways, underscoring the historic and scenic attributes of the Township, and directing federal and state resources to increasing the attractiveness of the Township for tourism. The County and Delaware River Joint Toll Bridge Committee have committed funds to expand trails, construct an environmental and welcome center, and expand the recreational facilities at the Lower Mount Bethel Recreation Complex.

The Township is responding to the increasing and interrelated aspects of providing recreation facilities that are tied to transportation, trails, river access, and natural resource protection to meet the needs and enhance the quality of life of its residents. The *Lower Mount Bethel Township Recreation, Park, and Open Space Comprehensive Plan* knits these various components together to form a framework for future actions by the Township, and as a way to communicate its goals to potential future partners. The Township will continue to pursue a cooperative relationship with local and state agencies, as well as local business partners, to provide high quality recreational experiences, attractive parks, and conservation of unique Township natural areas to its residents.

4. Plan Purpose and Goals

The *Lower Mount Bethel Township Comprehensive Recreation, Park, and Open Space Plan* is a detailed study that provides a framework to improve the quality of life in the Township through parks, recreation, and open space. The Plan consists of an assessment of the Township's park and recreation system, establishment of goals and implementation strategies, and creation of an action plan with a timeframe for implementation. The Plan, together with the soon to be adopted 2006 *Lower Mount Bethel Township Comprehensive Plan*, creates a future vision of the Township as a green and connected community with year-round recreation opportunities for its residents, preservation of significant natural features, and connections through trails and roads with regional greenways. It is also intended to help plan for future park improvements, expand existing programs and maintenance, and prioritize natural resources for protection over the next

fifteen years. The Plan will also offer an implementation strategy with funding options and possible partners that will aid the Township in meeting its stated goals.

The Township of Lower Mount Bethel has undertaken preparation of this Plan in order to:

1. evaluate the effectiveness and sufficiency of existing park facilities and recreation programming;
2. provide for unmet needs of Township residents and recreation and park needs of future residents;
3. identify natural resources that should be protected; and
4. provide for high quality recreation and environmental education for Township residents and visitors from outside of the community.

The goals of this Plan are:

1. Park Development and Open Space Conservation: Provide a mix of active and passive recreation facilities and park areas that meet the needs of Township citizens of all ages and organized groups on a year round basis by:

- 1) Recommending future acquisition and development of park areas and recreation facilities, trails and greenways, and preservation of significant natural features;
- 2) Improving existing areas and facilities to ensure their optimum use; and
- 3) Increasing access to the Delaware River.

2. Maintenance, Safety, Security, and Accessibility: Ensure that Township park areas and recreation facilities and programs are accessible to all, well-maintained, and meet current safety and security standards.

3. Recreation Administration: Assess existing administrative procedures, staffing, and volunteer resources for the maintenance of park areas and recreation facilities, as well as the provision of recreation programs and recommended improvements necessary to implement this Plan.

4. Cooperation and Partnerships: Strengthen existing relationships and recommended partnerships that expand and improve park areas, recreation facilities, and programs and provide new opportunities for recreation to Township residents.

5. Finance: Pursue the Township's allocation of funds and development of income sources to maintain existing parks, acquire, and develop additional park areas and recreation facilities, and programs for the benefit of its residents.

6. Public Relations and Communications: Recommend methods to promote the value and importance of parks and recreation services, encourage awareness of existing programs, and encourage volunteers.

**GOAL STATEMENTS
FOR THE LOWER MOUNT BETHEL TOWNSHIP
COMPREHENSIVE RECREATION, PARKS AND OPEN SPACE PLAN**

GOAL A - Recreation Administration. Operate the Township's parks and recreation system effectively and efficiently through volunteer and staff leadership.

Immediate	Short Term	Long Term	Strategies for Action
x	x		A1 Board of Supervisors – Ensure effective communication with the Board of Supervisors by appointing a member of the Board of Supervisors to the Recreation Board.
	x		A2 Expand the Recreation Committee's recreation programming focus beyond youth sports.
x			A3 Join the Pennsylvania Recreation & Park Society (PRPS).
x			A4 Adopt a Mission Statement for the Recreation Board.
x			A5 Schedule a DCNR Park and Recreation Committee Training Seminar training seminar for the Recreation Board.
	x		A6 Develop written rental/lease agreements for facility usage

GOAL B - Park Land and Recreation Facilities. Enhance existing park areas and recreation facilities and set aside adequate parcels of land for future park development.

Immediate	Short Term	Long Term	Strategies for Action
	x		B1 Investigate acquisition of the property surrounding Martins Creek ball field to provide a minimum of 10-15 acres true community park.
x			B2 Install benches, recycling receptacles to Kiefer Field. Additional facilities that should be included:
	x		* Small pavilion and driveway access to the concession stand.
		x	* Playground equipment, picnic tables and accessible path.
			B3 Continue to improve facilities at the Centerfield school including the following:
x			* Check play equipment for conformity with playground safety standards, especially the safety surface and fall zone area surrounding swings and climbers. Refurbish bench and replace signs on tennis courts.
	x		* Provide handicapped access to the playground, replace slides, refurbish swings and orbit climber
		x	* Replace merry-go-rounds as they age, construct skateboard facility, provide pedestrian access from Martin's Creek.
	x		B4 Complete the master plan for the community recreation complex which includes: a site plan; development costs; funding sources; operations and maintenance plan. Facilities that should be considered for addition to the site plan include:
		x	* Band shell for community concerts and events

	x		* Picnic areas for individuals and groups
	x		* Playground equipment
	x		* Community center with full size indoor recreation facilities, gym and recreation board offices
x			* Accessible trails connecting facilities, PPL trails parking, and support facilities
x			* Permanent restroom facilities
		x	* Field lighting
x	x	x	B5 Continue making improvements and adding facilities to the recreation complex with the goal of making it a true community park.
		x	B6 Pursue a partnership with the Delaware and Lehigh National Heritage Corridor to develop a water trail access area at the Sports Complex.
		x	B7 Pursue a partnership with the PA Fish and Boat Commission and Northampton County to annex and improve a boat access area on the property adjacent to the Sports Complex.
x			B8 Pursue a partnership with PPL to connect trails with the Sports Complex and also investigate construction of joint facilities.
	x		B9 Provide unified park signage design and installation in all Lower Mt. Bethel Township Parks.

GOAL C – Recreation Programs. Provide a variety of year-round quality program opportunities for youth, teens, adults, and families.

Immediate	Short Term	Long Term	Strategies for Action
x	x	x	C1 Expand recreation programming beyond youth sports. Recommendations include:
			* Exercise classes to include kickboxing, yoga, aerobics, weight training, cardio-vascular fitness
			* Dance classes such as swing, ballroom, salsa, and line dancing
			* Special holiday events for children with their parents, such as Breakfast with Santa, Halloween Costume Party, and Valentine's Day Party that include food, entertainment, and an arts and crafts project
			* Revenue-producing summer day camp program for school-age children at Centerfield School
			* Youth and adult tennis lessons at the Centerfield School courts
			* Adult education programs at the Centerfield School
			* Summer outdoor music concerts at the community park/sports complex
		x	C3 Open the Centerfield School gymnasium for open gym nights during the winter months.
	x		C4 Work with the LMBT Senior Center to offer fitness and wellness programs in the Centerfield School gymnasium.
	x		C5 Put an evaluation process in place for each recreation program to get participant feedback.

		x	C6 Implement the processing of state police and child abuse background clearances for volunteers and staff as a condition of volunteering or employment.
x			C7 Establish goals for the recreation program.
	x		C8 Pursue contractual services to offer expanded programs and develop a cooperative relationship with recreation providers.
GOAL D – <u>Finances</u>. Secure adequate financing to support the maintenance, development, and future acquisition of park areas and recreation facilities, and the operation of recreation programs.			
Immediate	Short Term	Long Term	Strategies for Action
x			D1 Update the mandatory dedication ordinance to increase the fee-in-lieu-of dollar amount and land dedication acreage amount to reflect current land value.
x			D2 Develop a budget process that includes the involvement of the Recreation Board in requesting the operating and capital expense funding.
	x		D3 Develop a business sponsorship package for businesses to contribute financially towards specific recreation programs, special events, and park projects in return for public recognition.
x			D4 Develop a budget for this account yearly, with revenue and expenses budgeted separately. Have the account audited with all other Township accounts.
x	x	x	D5 Increase the per capita dollar amount spent on parks and recreation from the Township General Fund.
	x		D6 Examine the possibility of floating a bond issue or other long term borrowing to pay for capital improvements at the community park/sports complex.
x			D7 Set up a meeting with the DCNR Regional Recreation Advisor to visit the Township, tour the park areas, and meet with the Recreation Board, Township elected officials, and staff to discuss grant project funding.
	x		D8 Purchase strategic properties or place conservation easements on open space, as reflected in the adopted map of potential conservation lands.
x			D9 Pursue the Northampton County Municipal Park Development and Open Space acquisition Grants, that are part of the County open space initiative.
x			D10 Participate in regional grant applications and programs with other organizations.
x			D11 Identify strategies for use of Earned Income Tax funds with a high priority for Open Space acquisition..
	x		D12 Schedule DCNR “Financing Municipal Parks & Recreation” training seminar for the Recreation Board.

GOAL E - Maintenance, Safety, Security, and Accessibility Ensure that park areas and recreation facilities are attractive, well-maintained, safe, secure, and accessible to all visitors, at the most economical cost.

Immediate	Short Term	Long Term	Strategies for Action
	x		E1 Adopt a uniform set of rules and regulations for all Township park areas and install signs at the sites to inform the public and allow police enforcement.
x	x		E2 Improve facility access for persons with disabilities by making annual improvements to park areas and recreation facilities to make them barrier-free.
		x	E3 Develop a safety checklist for the park areas and recreation facilities and conduct routine safety inspections on a regular basis.
	x		E4 Establish the standard of maintenance for each park site on an annual calendar for all routine maintenance duties and Schedule the necessary work to correct the deficiencies identified during the site inspections conducted for this Plan.
x			E5 Pursue RecTAP funding for management projects to train the Recreation Board, maintenance staff

GOAL F - Open Space, Greenways, and Trails Protect significant cultural and historical resources as well as sensitive natural resources, and establish a system of greenways and trails.

Immediate	Short Term	Long Term	Strategies for Action
	x		F1 Acquire key parcels to provide greenway linkage throughout the Township.
x			F2 Participate in the Martins- Jacoby Watershed Association - watershed plan and audit.
	x		F3 Participate in Lower Delaware Wild and Scenic River program for the recommended section of the Delaware Riverfront in the southern portion of Lower Mount Bethel Township and in the Delaware River Green Partnership.
x			F4 Coordinate information activities and grant applications with the EAC.
x	x	x	F5 Work with Northampton County to continue purchase of conservation and agricultural easements.
	x		F6 Incorporate recommendations of the Corridor Management plan being developed through the Delaware River Valley Scenic Byways program.

GOAL G - Cooperation and Partnerships. Develop partnerships and strengthen relationships, through coordination and cooperation, to improve park areas, recreation facilities, and recreation program opportunities for citizens.

Immediate	Short Term	Long Term	Strategies for Action
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x	x		G1 Work with the PA Fish and Boat Commission and Northampton County Department of Parks to coordinate and improve river access and recreation activities.
	x		G2 Pursue private-public partnerships with local industries such as PPL and Eastern Industries.
	x		G3 Develop an adopt-a-park program to help with improvements and maintenance to park areas.
x	x		G4 Work with the Delaware and Lehigh National Heritage Corridor to preserve open space and develop trails along the Delaware River.
	x		G5 Meet twice a year with the adjacent municipalities, both school districts and to coordinate regional recreation efforts.
	x		G6 Coordinate resource and agricultural preservation activities with Northampton County Conservation District.
	x		G7 Work with regional watershed association, State Department of Fish and Game and Trout Unlimited to upgrade stream quality classifications for streams in the Township.

GOAL H - Public Relations and Communication. Build community awareness in the Township to ensure that all residents are aware of all township parks, recreational opportunities, and natural areas available to them.

Immediate	Short Term	Long Term	Strategies for Action
x			H1 Improve the Township website with a link to the Recreation Board that includes information on parks and recreation opportunities as well as targeted conservation areas.
x	x	x	H2 Expand current publicity efforts to make Township residents more aware of park and recreation offerings, as well as those recreation facilities available to Township residents from neighboring communities, private and commercial entities.
x	x		H3 Develop maps of the Township park system and regional recreational opportunities in the Township newsletter.
x	x	x	H4 Continue to provide avenues for communication and opportunities for interaction between residents and local government officials.
	x	x	H5 Increase outreach to get volunteer assistance, and increased participation, including local chapters of Boy Scouts and Girl Scouts, Trout Unlimited, Lehigh Valley Greenways, Audubon Society and Sierra Club.
		x	H6 Expand awareness of the Natural History of the Delaware River and Region by building on the PPL Outdoor Education Program.
		x	H7 Publicize area bird watching as a means to bringing as means for increasing awareness of the Township's natural resources.

GOAL I - Recreation and Transportation . Promote and pursue opportunities for transportation alternatives the complement the resource protection and scenic quality goals of the Township.

	x	x	I1 Link to other regional hiking and bicycling trails.
	x		I2 Pursue partnerships for bicycle trails with local agencies; including Wildlands Conservancy. I3 Pursue construction of a widened pedestrian walkway on the bridge over Route 611.

5. Community Background

Lower Mount Bethel Township is a township of the second class in Pennsylvania with a five-member elected Board of Supervisors. Daily operational functions and staff oversight are the responsibility of a part-time professional Township Manager. The Recreation Board guides the recreation and park system and programs. The Board of Supervisors appoints the seven members of this board. The Recreation Board submits program and equipment requests to the Township for action and for consideration as part of the capital budget.

Township Population

The population of Lower Mount Bethel Township has grown slowly, and at a measured pace since the 1960s. The prior period from 1980 to 1990 was marked by intensive growth of the Township and a change in character from completely rural to a mixture of land intensities. Since 1990, growth has slowed until recently. The 2000 Census measured the Township's population at 3,228 persons. Findings of the 2000 U.S. Census indicate that the average household size in Lower Mount Bethel Township is 2.63 persons and the Township had, at that time, 1,223 households. The average age of Township residents was 40 years old. The Lehigh Valley Planning Commission has predicted a continued slow rate of growth with a total population gain of 471 persons or 182 households by 2020. However, these figures were reviewed and updated during the 2006 Comprehensive Plan revision to reflect trends toward increased growth throughout Northampton County. The draft *Lower Mount Bethel Township Comprehensive Plan* looks for a population increase of closer to 1,000 residents or 250 households in the next fifteen years.

Population Trends and Numbers*

Year	Population	Population Increase	Percent Increase
1960	2,307		
1970	2,531	224	9.7%
1980	2,745	214	8.5%
1990	3,187	442	16.1%
2000	3,228	41	1.3%
Estimate 2004	3,293	65	2%
Projected Population Growth** from 2000 population			
2010	3,389	161	4.7%
2020	3,538	310	4.2%

Year	Number of Persons	Increase in Number of Persons	Percent Increase
2010	3,535	287	12.4%
2020	4,173	663	15.8%

Projected Population Growth - Number of Households

Year	Number of Households	Increase in Number of Households	Percent Increase
2000*	1,223	N/A	N/A
2010**	1,332	108	12.3%
2020**	1,584	252	15.9%

* Source: U.S. Census 2000

** Source: Lower Mount Bethel Draft Comprehensive Plan, 2006

Age Grouping of Lower Mount Bethel Township Population: 2000 Census

Age Range (in years)	Number Of Persons	Percentage Of Population
0-4 years	167	5.2
5-17 years	617	19.2
18-59 years	1,872	58.0
60-64	139	4.3
65 + years	433	13.4
Total	3,228	100.0

While approximately 24 % of the Township residents were under the age of 18 at the time of the 2000 Census, of the 1,223 households within the Township, 900 (73.6%) are family households. Additionally, 388 households (31.7%) include children younger than 18 years of age, 76 % of the Township residents are older than 18 years old, and the majority of the residents falling into the active adult category of 18 to 59 years old. This clearly indicates that there is a substantial adult population to be served recreationally, and that child-centered recreational activities serve approximately one-third of the Township households.

Planning Policies

The *Lower Mount Bethel Township Comprehensive Plan*, adopted in 1992, plans for the growth and preservation of Lower Mount Bethel Township. The updated, draft Comprehensive Plan, under consideration at the time of this writing, reduces the area available for development and emphasizes village development around Martins Creek and in the Del Haven areas. This matches the current development pattern. The overall Plan goals include:

1. Protecting environmentally sensitive areas and agricultural soils;
2. Requiring new development to respect natural features of the Township;
3. Preserving lands physically unsuitable for development in open space; and
4. Providing adequate public opportunities for both active and passive recreation, distributed adequately throughout the Township.

Ordinance Requirements

Land Dedication of Recreation Purposes: The Pennsylvania Municipal Planning Code [Article V, Section 503 (11)] permits each municipality to require in its Subdivision and Land

Development Ordinance (SALDO) public dedication of land or payment of fees to provide suitable park or recreation facilities accessible to new development. The Lower Mount Bethel Township SALDO was adopted in 1990. It contains Land Dedication standards to provide needed open space and recreation lands and facilities for new residents of the Township. Lower Mount Bethel Township SALDO, Section 9.2 (o) regulations require that dedicated land be comprised of land suitable for recreation. The recreation land must be free of steep slopes, wetlands, and other constraints and accessible from a Township Road.

Fee In Lieu of Land Dedication: The Township has established an in lieu fee for recreation purposes to be imposed on new development in order to pay for recreation needs of the future residents of the development. Currently the recreation fee is \$1,500 per unit. The fees are to be used for the following purposes:

- Acquisition of open space; and
- Development and/or redevelopment of existing or proposed public recreation facilities.

Historic Features Profile

The colony of Pennsylvania was founded by William Penn in 1681, offering inexpensive land, religious freedom, and liberal government to its first settlers. Good relations with the Lenni-Lenape Indians and trade with Dutch travelers helped establish the rich culture existing in Pennsylvania today. Settlers came to the Lehigh Valley in the early 1700s, and Lower Mount Bethel Township was erected from Mount Bethel Township on March 11, 1787.

Named after one of its earliest settlers, the town of Martins Creek was the first permanent settlement in the Township, and quickly established itself economically through farming the prime agricultural land. Saw-milling, carpentering, weaving, clothes making, wheelwrighting, blacksmithing, tanning, grist milling, and inn keeping were other industries that supported the community. Many of the buildings in which these trades thrived still exist.

The Presbyterian Church of Mount Bethel of Forks North was founded in 1738, the church building itself built in 1838 and still standing. The oldest gravestone, carved in 1763, lies in the Church Hill Presbyterian cemetery. It is recorded that the first school house was built circa 1803. By 1870, Lower Mount Bethel held two post offices, three hotels, and several cotton factories along Martins Creek.

Lying in the area known as the Cement Belt, in junction with the Slate Belt, Lower Mount Bethel was soon caught up in the quarrying industry. Currently, Eastern Industries, once operational in limestone and cement production in the Township, hopes to obtain a permit for a new quarry. Parts of the original Alpha Cement plant buildings (acquired by ConAgra), are being used for storage by other industries. Several industrial companies have passed through the Township, and a freight railroad is still used to haul coal, food milling industry products, and grain.

The quarrying and cement industries in Lower Mount Bethel attracted Italian immigrants to the area in the early twentieth century, and the Italian Social Hall is listed as a historical site on the Northampton County Historic Resource Survey. In the 1950s, Pennsylvania Power and Light (PPL) constructed the largest, single-turbine generator on their system in the Martins Creek Steam Electric Station. This plant also pioneered the company's community development

program, and was one of the first “outdoor” types, steam electric stations built in the Northeast as PPL’s first plant designed for bituminous coal.

The Hunter-Martin Settlement Historical Society of Lower Mount Bethel enjoys a membership extending into many states, following the westerly path of many of the original settler families that passed through the Township. Most properties in Lower Mount Bethel were constructed more than 50 years ago and are considered historic sites.

Key Findings

- The minimal amount of development in Lower Mount Bethel has preserved a high percentage of historic buildings, including some of Pennsylvania’s oldest, and many remain in original historic context.
- A large number of potential Lenni-Lenape archaeological sites remain in the Township.
- The many historical buildings of the Township are an important reminder of the industry that brought prosperity to the area.

References

- *Lower Mount Bethel Draft Comprehensive Plan.* Carter Van Dyke, Assoc., Doylestown, PA, 2004.

Cultural Features

The students living in the Township attend either Bangor Area, north of the Township, or Easton Area School District, south of the Township, with most students attending Bangor Area schools. There are no school facilities located in Lower Mount Bethel Township.

6. Mission Statement and Goals

The Pennsylvania Department of Conservation and Recreation (DCNR) recommends that each municipality establish the mission and goals of the Recreation Board, as a part of the *Recreation, Recreation, Park, and Open Space Plan*. Proposed goals and mission statement are provided below for review and adoption by the Recreation Board.

Proposed Mission Statement

The mission of the Lower Mount Bethel Township Recreation Board is to provide advice and recommendations for consideration by the Board of Supervisors relating to parks and recreation facilities, and organized recreation programs to enhance the quality of life for the residents of Lower Mount Bethel Township.

Proposed Goals

The goals of the Recreation Board shall be to provide the Board of Supervisors with such advice and recommendations as may be necessary or desirable:

1. To maintain the highest quality of parks and recreation services;
2. To ensure that opportunities are provided for full parks and recreation participation by all Township residents;

3. To protect, preserve, use or develop as appropriate the Township's natural, historic, and man-made resources according to their capacity;
4. To recommend the acquisition of private or public property for the purpose of creating, enlarging, and improving public parks, recreation areas and facilities within the Township;
5. To improve the quality, and encourage the expansion and addition, of organized recreation programs;
6. To assist in establishing a sound fiscal plan and budget for parks and recreation;
7. To foster community awareness regarding the role that parks and recreation play in developing a high quality of life in Lower Mount Bethel Township; and
8. To periodically evaluate and assure that the services of the parks and recreation system are relative to its goals and objectives.

7. Public Participation

Public participation in preparation of this plan and development of its goals included three components:

- a study committee;
- key person interviews; and
- a public meeting.

Study committee meetings were held with the Township Recreation Board. Key individuals in the community were interviewed one-on-one to solicit their opinions. A public workshop meeting on the draft document was held on November 15, 2006 to solicit comments and recommendations from the community-at-large and review findings from the Recreation Committee and consultants.

The Lower Mount Bethel Recreation Board served as the study committee for this Plan. The Board met regularly throughout the planning process. Key Township stakeholders were identified by the Recreation Board as interview subjects. They included Township Supervisors, Recreation Board members, Easton and Bangor School Board members, PPL Nature Center personnel, Delaware and Lehigh National Heritage Corridor staff, active community volunteers, business owners, members of the Township Environmental Advisory Council and other Township residents.

Findings of the Public Participation Process

Overall, the public participation process revealed a great deal of enthusiasm for parks and recreation. The following points summarize the findings:

1. Citizens have an appreciation for parks and recreation in the Township;
2. Access to the Delaware River and more riverfront recreation opportunities are important;
3. Development of trails and pathways is a high priority;

4. Natural resources should be protected from development;
5. Neighborhood parks are needed, particularly in Martins Creek;
6. As evidenced by the recently adopted Earned Income Tax referendum, there is support for additional municipal funding of parks and recreation programs;
7. Provision of year-round recreation opportunities is a priority;
8. Centerfield School should be better utilized;
9. Parks should provide more facilities than sports play fields;
10. Recreation programs should be expanded to serve people of all ages and interests;
11. Youth sports are well-coordinated;
12. Promoting parks and recreation is important to the community; and
13. Partnerships are important to accomplishing parks and recreation goals.

The Township has recognized the importance of parks and recreation activities and the value that they add to the lives of residents through the recreation opportunities that they offer, the open space they preserve, and the pride and community identity they inspire. It is in the beginning phase of providing park and recreation opportunities for all of its residents. Looking to the future, this Plan's intent is to guide Lower Mount Bethel Township to continue providing its citizens with high quality recreation opportunities as well as addressing future park and recreation needs and opportunities to protect its unique natural resources.

8. Administration and Personnel

Recreation Administration

Recreation and parks services in Lower Mount Bethel Township has become more of a priority for local government, and citizen involvement has been encouraged and welcomed on a greater level.

The seven-member Lower Mount Bethel Township Recreation Board, originally formed by ordinance in 1966, was rejuvenated in 1999. Members are appointed by the Township Supervisors for five-year terms. A Township Supervisor serves as the liaison to the Board and attends its monthly meetings. The Recreation Board is a hands-on group that organizes and offers its own programs and coordinates park improvements.

The Board does not have an official name which accurately reflects the role and authority of the Board. Different terms imply various levels of authority, and confusion can result from incorrect usage. For example, a Commission may have more authority than a Committee, but not as much as a Board. Additionally, this municipal body is involved in park maintenance and development along with recreational activities, but this is not reflected in their official name. The Recreation Board does not have an adopted mission statement. A mission statement is often beneficial when writing grant applications and being awarded the grant funds. The members of the Board do not have defined roles and responsibilities, which are necessary for efficient operation of services in absence of full-time staff

The Recreation Board is not a member of the Pennsylvania Recreation and Park Society (PRPS), the statewide association for recreation and parks boards and staff. Being a member would the Board access to training opportunities and grants (RecTAP). The Board would benefit from the

Pennsylvania Department of Conservation and Natural Resources' (DCNR) Park and Recreation Committing training seminar. This three-hour workshop, developed by DCNR and PRPS, was offered throughout the state in 2005 in cooperation with the Pennsylvania State Association of Township Supervisors (PSATS). This seminar can be scheduled at any location for a nominal fee.

In addition to the Recreation Board, an active Civic Association, Lions Club, and volunteer fire company organize and offer community activities. Overall, volunteer involvement in recreation and parks in the Township is high.

Recreation and Parks Staff

The Township has no separate recreation and parks staff. One part-time maintenance worker cuts the grass and maintains the Centerfield School building. The Township road crew does other park maintenance work and minor construction as needed. All other work is performed by volunteers.

Public Relations and Marketing Efforts

The Township publishes a newsletter twice each year that is mailed to all homes and businesses. Each issue contains information on recreation and park facilities and programs. The Township has developed a website, and keeps it up-to-date. The *Easton Express Times* and *Allentown Morning Call* newspapers are utilized to promote recreation programs. Flyers about program sign-ups are also distributed in classes to students in the Bangor School District and on school buses to those children who attend Easton Area Schools.

Township/School Cooperation

At the present time there is little contact between the Township and the two school districts that serve it, the Easton Area and Bangor School Districts. Both school districts allow community use of school buildings and grounds, and offer adult education programs for residents. Unfortunately, there is no school facilities located within Lower Mount Bethel Township.

Community Involvement Opportunities

In 1999, the Township Recreation Board was revitalized. It has been inactive for a number of years. A significant step was the merger of the youth sports association with the Recreation Board. Volunteers coach each sport offered by the Recreation Board.

Policies and Procedures for Recreation and Parks

Township office staff coordinates the use of the picnic pavilion and Centerfield School building. Fees for use of the building go to the Senior Center. Proof of insurance is required, as is a \$250 cleaning deposit. The pavilion rental fee is \$25.00; the building rental fee is \$50.00. Alcohol is not permitted at either facility. No written rental contract exists. The development of such an agreement is vital if the Township wished to maintain control and track usage of facilities. It will also increase revenue through usage charges. Rules and regulations are in place for gymnasium use; however, there are no park rules and regulations. Record keeping, such as attendance at and revenue generated by recreation programs is done by the Recreation Board.

Administration Recommendations

1. Consult the Township's Solicitor and establish an official name;
2. Develop a mission statement for the Recreation Board (draft Mission Statement included in this Plan);
3. Develop roles and responsibilities for Board members (Refer to sample definitions of Recreation Board duties in appendices);
4. Join the Pennsylvania Recreation & Park Society (PRPS);
5. Schedule a DCNR Park & Recreation Committee training seminar; and
6. Develop written rental/lease agreements for facility usage (See sample agreements in appendices).

9. Facility and Open Space Inventory and Analysis

Park and Recreation Facilities Assessment

The citizens of Lower Mount Bethel Township have a variety of recreational areas available for public access. These include privately-owned, municipally-owned, and state-owned facilities. The way people spend their leisure time and the activities they enjoy changes over time. Trends emerge and factors change that impact the parks and recreation facilities that are needed in communities. The following trends emerged as part of the analysis of the Township's parks and recreation facilities:

- Citizens have expressed a strong desire to preserve agricultural land and open space;
- Youth sports leagues continue to grow in participation;
- Adult recreation opportunities are limited due to a lack of available facilities;
- Trails are very popular; and
- Citizens have expressed their desire for additional opportunities to access the Delaware River.

Details on the uses surrounding each site, the availability of parking, the ability to walk to the site, and the overall condition of the Township-owned park areas and recreation facilities follow.

Township-owned Facilities

The Township owns 33.9 acres of parkland. PPL recently donated a 27-acre parcel to the Township which is being developed as a community park / sports field complex. Strong business support has helped to make the first phase of field development possible. Other Township sites include the three-acre Kiefer Little League Field and the five-acre Lower Mount Bethel Township - Centerfield School property, which was given to the Township by the Easton Area School District. In addition to outdoor tennis courts, bocce court, picnic pavilion, basketball court, and playground, the Centerfield School building has a small gymnasium, a Senior Center operated by the Northampton County Area Agency on Aging, and an office area for the Recreation Board. Township-owned recreation facilities are comprised largely of sports fields used by the youth organized league programs.

Other Facilities

- The Martins Creek Pacchioli Ballfield, which is owned by Eastern Industries, is primarily used for adult baseball.

- The 750-acre Martins Creek Environmental Preserve borders the Martins Creek power plant, one of PPL's largest facilities. The Preserve has a five-mile network of four wooded hiking trails with views of the Delaware River. The Delaware River has been designated by Congress as a Wild and Scenic River. Parking is available at both ends of the trail system. PPL maintains a boat launch and picnic area downstream of the Martins Creek power plant. Facilities include a parking lot, picnic tables, charcoal grills, and toilets.
- The Pennsylvania Fish and Boat Commission provides a river access area in the Township at Sandt's Eddy, off Route 611. In addition to the boat launch ramp, the site has a parking lot for shore fishing access. The Delaware Water Gap is 16 miles upstream.
- Route 611 through the Township is part of the Delaware River Scenic Drive designated by the Commonwealth.
- Northampton County owns a 10-15 acre parcel of unimproved open space along lower Mud Run. There are no plans to improve this passive recreational area at this time. It is considered a significant archeological site.
- The Delaware River through Lower Mount Bethel Townships is part of the water trail designated by the Delaware and Lehigh National Heritage Corridor. Water trail access points in the Township are located at the PPL and the Sandt's Eddy boat launch facilities.

Residents must travel outside of the Township to access commercial recreation facilities of all types. Bowling alleys, golf courses, driving ranges, campgrounds, movie theaters, health clubs, dance studios, go-cart tracks, ice and roller skating rinks, and indoor playgrounds are located within a 10-mile drive in Easton, Bangor, and/or across the river in New Jersey. In addition, the Township does not have a public library or indoor or outdoor swimming pools within its boundaries.

Some facilities are referred to by various names in different documents. There are no park rules or regulations established for the use of Township-owned park facilities. The establishment, adoption, and enforcement of regulations are vital for the effective management of the parks and recreational facilities.

The majority of the park sites do not have master site plans. Grant funding is available for the development of such plans. Additionally, the Centerfield School site, although completely developed, is not in compliance with the Americans with Disabilities Act (ADA) and upgraded to current safety standards.

Park and Recreation Facilities Recommendations

- Develop facility names and officially adopt them;
- Develop park facility rules and regulations, and post at each facility;
- Develop a master site plan for the Recreation Complex;
- Develop a master site plan for Kiefer Little League Field; and
- Update the development plan for Centerfield School – Municipal Center to be in compliance with ADA and current safety standards.

Recreation and National Recreation and Park Association Standards

In order to determine if the parks and open space in the Township meet existing and projected needs, the first step is to classify the existing facilities. Park classification includes park facility resources and resident service area. (See Table 9.1.)

TABLE 9.1 NRPA PARK STANDARDS - PARK AND OPEN SPACE DESCRIPTIONS					
<i>Type of Park</i>	Park Use	Desirable Site Characteristics	Desirable Size	Service Area	Lower Mount Bethel Township & Regional Parks
<i>Mini-Park</i>	Specialized facilities that serve a concentrated or limited population or specific group such as tots or senior citizens.	Within neighborhoods and in close proximity to apartment complexes, townhouse development or housing for the elderly.	1 acre or less	less than 1/4-mile radius	
<i>Neighborhood Park /Playground</i>	Area for intense recreational activities, such as field games, court games, crafts, playground apparatus area, picnicking, wading pools, etc.	Suited for intense development. Easily accessible to neighborhood population - geographically centered, with safe walking distance and bike access.	15+ acres	1/4 to 1/2-mile radius	Kiefer Field, Martins Creek Boat Access, Mud Run, Municipal Senior Center, Pacchioli Fields, Sandt's Eddy Boat Access
<i>School Park</i>	Depending on circumstances, combining parks with school sites can fulfill the space requirements for other classes of parks, such as neighborhood, community, sports complex, and special use.	Determined by the location of school district property.	Variable		Center Field School

Community Park	Area of diverse environmental quality. May include areas suited for intense recreation facilities such as athletic complexes, large swimming pools. May be an area of natural quality for outdoor recreation, such as walking, viewing, sitting, picnicking. May be any combination of the above.	May include natural features, such as bodies of water, and areas suited for active recreation. Easily accessible to area served.	25+ acres	1/2 to 3-mile radius	Lower Mount Bethel Recreation Complex
Regional/Metropolitan Park	Area of natural or ornamental quality for outdoor recreation, such as picnicking, boating, fishing, swimming, camping, and trail uses; may include active play areas.	Contiguous to or encompassing natural resources.	200+ acres	Within 1 hour driving time	
Regional Park Reserve	Area of natural quality for nature-oriented recreation, such as viewing, and studying nature, wildlife habitat, conservation, swimming, picnicking, hiking, boating, fishing, camping, and trail uses; may include active play areas. Generally, 80% of the land is reserved for conservation and natural resources management.	Diverse or unique natural resources, such as lakes, streams, marshes, flora, fauna, and/or topography.	1,000+ acres; sufficient area to encompass the resource to be preserved and managed.	Within 1 hour driving time	Jacobsburg Environmental Education Center
Linear Park	Area developed for one or more modes of recreational travel, such as hiking, biking, snowmobiling, horseback riding, cross-country skiing, and canoeing. May include active recreation areas.	Built or natural corridors, such as utility rights-of-way, bluff lines, vegetation patterns, and roads that link other components of the recreation or community facilities, such as schools, libraries, commercial	Sufficient width to protect the resource and provide maximum use. Hundred feet to miles long.	Local or regional	

		areas, and other park areas.			
<i>Greenways</i>	Lands set aside for preservation of significant natural resources, remnant landscapes, open space, and visual aesthetics/buffering.	Resource availability and opportunity.	Variable	Local or regional	
<i>Sports Complex</i>	Consolidates heavily programmed athletic fields, associated facilities to larger, and fewer sites strategically located throughout the community.	Strategically located community-wide facilities.	Determined by projected demand. Usually a minimum of 25 acres, w/ 50 to 80 acres being optimal.	Local or regional	
<i>Special Use</i>	Areas for specialized or single purpose recreational activities, such as golf courses, nature centers, marinas, zoos, conservatories, arboreta, display gardens, gun ranges or downhill ski areas, or areas that preserve, maintain, and interpret buildings, sites, and objects of historical or archeological significance.	Local	Variable	Local or regional	Martins Creek Boat Access, Sandt's Eddy Boat Access
<i>Private Park/Recreation Facility</i>	Parks and recreation facilities that are privately owned yet contribute to the public park and recreation system.	Variable – dependent on specific use.	Variable.	Local	

Park Trail	Multipurpose trails located within greenways, parks, and natural resource areas. Focus is on recreational value and harmony with natural environment.	Type I: Separate/single-purpose hard-surfaced trails for pedestrians or bicyclists/in-line skaters.	Variable.	Local or regional	Jacobsburg Environmental Education Center
		Type II: Multipurpose hard-surfaced trails for pedestrians, bicyclists/in-line skaters.			
		Type III: Nature trails for pedestrians. May be hard- or soft-surfaced.			
Connector Trails	Multipurpose trails that emphasize safe travel for pedestrians to and from parks and around the community. Focus is as much on transportation as it is on recreation.	Type I: Separate/single-purpose hard-surfaced trails for pedestrians or bicyclists/in-line skaters located in independent r.o.w. (e.g., old railroad r.o.w.). Type II: Separate/single-purpose hard-surfaced trails for pedestrians or bicyclists/in-line skaters. Typically located within road r.o.w.	Variable.	Local or regional	Jacobsburg Environmental Education Center
On-Street Bikeways	Paved segments of roadways that serve as a means to safely separate bicyclists from vehicular traffic.	Bike Route: Designated portions of the roadway for the preferential or exclusive use of bicyclists.	Variable.	Local or regional	
All-Terrain Bike Trail	Off-road trail for all-terrain (mountain) bikes.	Single-purpose loop trails usually located in larger parks and linear parks.	Variable.	Local or regional	
Cross-Country Ski Trail	Trails developed for traditional and skate-style cross-country skiing.	Loop trails usually located in larger parks and linear parks.	Variable.	Local or regional	

<i>Equestrian trail</i>	Trails developed for horseback riding.	Loop trails usually located in larger parks and linear parks. Sometimes developed as multi-purpose with hiking and all-terrain biking where conflicts can be controlled.	Variable.	Local or regional	
<i>Conservancy</i>	Protection and management of the natural/cultural environment with recreation use as a secondary objective.	Variable, depending on the resource to be protected.	Sufficient width to protect the resource.	Local or regional	Martins Creek Environmental Preserve

Source: Lehigh Valley Planning Commission

For more than 40 years, the National Recreation and Park Association (NRPA) has advocated the importance of local park systems, the opportunity for all Americans to lead healthy, active lifestyles, and the preservation of great community places. The mission of the National Recreation and Park Association is "To advance parks, recreation, and environmental conservation efforts that enhance the quality of life for all people." The NRPA advocates that that parks and recreation:

- Enhance the human potential by providing facilities, services, and programs that meet the emotional, social, and physical needs of communities;
- Articulate environmental values through ecologically responsible management and environmental education programs;
- Promote individual and community wellness that enhances the quality of life for all citizens;
- Utilize holistic approaches to promote cultural understanding, economic development, family public health, and safety, by working in coalitions and partnerships with allied organizations; and
- Facilitate and promote the development of grassroots, self-help initiatives in communities across the country.

The Goals of the National Recreation and Park Association are:

- To promote public awareness and support for recreation, park and leisure services as they relate to the constructive use of leisure and thereby to the social stability of a community and the physical and mental health of individuals. NRPA strives to promote public awareness of the environmental and natural resource management aspects of recreation and leisure services.
- To facilitate the development, maintenance, expansion, and improvement of socially and environmentally relevant public policy that supports recreation, parks and leisure programs and services.
- To enhance the development of parks, recreation, and tourism professionals and to provide services that contributes to the development of NRPA members.

- To promote the development and dissemination of the body of knowledge in order to improve the delivery of service, increase understanding of leisure behavior and expand the body of knowledge relative to parks and recreation programs and services.

In 1983, the NRPA published minimum recreation facility standards based on population. By 1995, the NRPA decided that these calculations created a starting point for discussion, but sometimes provided results that did not relate to community needs. As a result, the NRPA removed population-based standards and suggested utilizing community input to determine local recreation needs. The *Recreation, Park and Open Space Standards and Guidelines* states “This classification system is intended to sever as a *guide* to planning – not as an absolute blueprint. Sometimes more than one component may occur within the same site (but not on the same parcel of land), particularly with respect to special uses within a regional park.”

The original standards, although generalized, serve as one of several indicators of need, and are the most commonly accepted park standards in the nation. Recreation trends do change over time, and population growth most significantly affects recreation needs. Population growth proportionally increases demand in number of users and requested diversity.

Township parks are classified into four (4) National Recreation and Parks Association (NRPA) classifications for analysis (see Table 9.2). The map of Lower Mount Bethel Township Parks illustrates the location and service area of mini, neighborhood, and community parks along with greenways/trails, and natural resource areas/preserves within and adjacent to the Township.

TABLE 9.2 LOWER MOUNT BETHEL TOWNSHIP - NRPA STANDARDS			
Park Name	Type Of Park	Total Acreage	Landowner
Kiefer Field	Neighborhood	2.8	Lower Mount Bethel Township
Lower Mount Bethel Municipal Center	Neighborhood	4.1	Lower Mount Bethel Township
Martins Creek Ballfield	Neighborhood	3.4	Eastern Industries
Lower Mount Bethel Recreation Complex	Community	27.0	Lower Mount Bethel Township
Martins Creek Boat Access	Special Use	4.2	PPL
Sandt's Eddy Boat Access	Special Use	5.3	Commonwealth of Pennsylvania
Martins Creek Environmental Preserve	Conservancy	187.6	PPL
Mud Run	Conservancy	9.6	Northampton County
	TOTAL	250.0	

The NRPA basic standards recommend that a municipality should provide 6.25 to 10.5 acres (for an average of 8.38 acres) of local/close-to-home, developed open space for every 1,000 residents. Based upon this standard, the recommended average amount of developed parkland for the 2000 population for Lower Mount Bethel Township is 46.8 acres (omitting Martins Creek Environmental Preserve and Mud Run due to their lack of park development). Comparing the park and recreational acreage with the population of the year 2000 and the projected population for the 2020, the Township will need to provide additional parkland by 2020 as the population grows.

TABLE 9.3 LOWER MOUNT BETHEL TOWNSHIP - POPULATION AND NRPA STANDARDS				
Population		Total Average Acreage of Developed Parkland required per 1000 Residents (Based on an average of 8.38 acres per 1000 residents)	Total Existing Recreational Acreage within Township	Deficit (-) or Excess (+)
2000 U.S. Census	3,228	27.05	46.80	+19.75
2020 projected pop.	4,173	34.96	46.80	+11.84

When the park land acreages are compared to the average NRPA recommended acres per 1,000 residents, the following conclusions can be drawn:

- The Township currently has a sufficient amount of developed parkland to meet the average 8.38 acres per 1,000 residents.

- The future population projections indicate that the Township will have a surplus of 11.84 acres of developed parkland. With this surplus, the Township has enough land with the capacity for an additional 1,412 residents.

Recreation facilities should be provided within a community to meet the demand of individuals of all ages and abilities, community groups, organized sports groups, etc. As stated above, the appropriate number of park facilities in a community should be based on the need as defined by current facility usage and local trends and recreation and leisure activities.

Each park site was viewed during a tour of the facilities and subsequent field work. Generally, the parks are in good condition from a facility and maintenance perspective, and offer inviting settings for recreation. Details on the uses surrounding each site, the availability of parking, the ability to walk to the site and overall condition of the Township - owned park areas and recreation facilities follow. Township-owned recreation facilities are comprised largely of sports fields used by the youth organized league programs. Facility trend and observations in the region illustrate the need for additional recreation facilities designed to provide a mix of recreation opportunities for all ages.

Lower Mount Bethel Township has proposed installing a skateboard area in the Lower Mount Bethel Township Municipal Center, adjacent to park facilities. Approval is pending. Additionally, a 2.0-acre neighborhood park is proposed as an area for active recreation as part of the proposed development in central Lower Mount Bethel Township.

Location of Parks

Lower Mount Bethel Township is a rural area with a few established neighborhoods. The Lower Mount Bethel Township Parks map (Map 8) illustrates the current location of the parks throughout the Township and the associated service area for each type of park. Transportation corridors traverse the Township dividing it into distinct areas. These corridors are barriers that limit easy convenient access to recreation facilities. It is important to consider the location of future parkland in relation to the neighborhoods and roadways, and how the roadways serve the neighborhood areas.

RECOMMENDATIONS



Lehigh Valley Planning Commission Park Inventory

Name: KEIFER FIELD

Type: Ball Field (baseball/softball)

Class: Mini-Park, Neighborhood Park/Playground, Community Park

Owner: Municipality

Municipality: Lower Mt. Bethel

Calculated Acreage: 2.9

Original Acreage: 2.8

Public: Yes

Last Update: 07/26/2000



1" = 288'

Prepared By: Lehigh Valley Planning Commission

Kiefer Field

Description: Neighborhood park
Access: off Bush Drive
Landscape Character: Ball fields in residential area and adjacent to farmland
Size: 2.8 acres

Recommendations – Kiefer Field:

Immediate add benches and recycling receptacle(s)
Short Term install standard Lower Mount Bethel Township park sign and policy sign; install driveway access to concession stand; construct pavilion
Long Term expand playground for younger children; install walking path; increase handicap access



Kiefer Field

<u>Facility Name</u>	<u>Surrounding Uses</u>	<u>ADA Compliance Issues</u>
Lower Mount Bethel Township Sports Complex – Kiefer Little League Field	Residential area; access is off Del Haven Road, adjacent to homes. Agricultural fields are off first base side of field	No handicapped access exists to the field, spectator areas or play equipment
<u>Ownership</u>	<u>Parking Facilities</u>	<u>Acreage</u>
Lower Mount Bethel Township	Small stone parking area beyond the outfield fence	2.8 acres
<u>Amenities</u>	<u>Description/Condition of Facilities</u>	<u>Additional Comments</u>
<p>1 baseball field</p> <p>2 bleachers</p> <p>1 concession stand</p> <p>1 “bullpen area”</p> <p>1 play structure</p>	<p>60 foot baselines; grass infield with skinned base paths; drop-in bases; pitcher’s mound; completely fenced in; fence in good condition with protective covering on top rail; covered, aluminum players’ benches with safety fence on all four sides on first and third base sides; concrete surface under players’ benches poses tripping hazard; large electrical scoreboard in outfield; field is not lighted</p> <p>Portable aluminum bleachers on first and third base side; five rows high; no railings</p> <p>Small wooden building; behind backstop; has electric</p> <p>Located behind first base side bleachers; small fence behind pitcher and catcher areas; no protection from spectators</p> <p>Equipment in good condition; safety surfacing in place but not adequate in depth; no usage sign</p>	<p>No rules and regulations posted.</p> <p>No park sign exists at the site.</p> <p>Directional signs to site are adequate.</p> <p>Portable restrooms on site during baseball season.</p> <p>No driveway access to concession stand.</p> <p>No storage facility for tools and maintenance equipment.</p> <p>No drinking fountain exists.</p>



Lehigh Valley Planning Commission Park Inventory

Name: LOWER MOUNT BETHEL TOWNSHIP MUNICIPAL CENTER

Type: Sub Neighborhood park (Mini- Park)

Class: Mini-Park, Neighborhood Park/Playground, Community Park

Owner: Municipality

Municipality: Lower Mt. Bethel

Calculated Acreage: 4.1

Original Acreage: 3.9

Public: Yes

Last Update: 07/26/2000



1" = 470'

Prepared By: Lehigh Valley Planning Commission

Lower Mount Bethel Township Municipal Center - Centerfield School

Description: Neighborhood park
Access: off Rt. 611
Landscape Character: Former school building and grounds converted to a park and community center; surrounded by woodland
Size: 4.1 acres

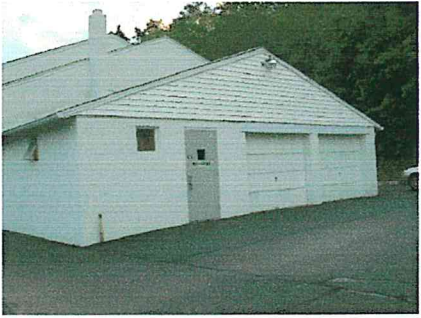


Recommendations – Centerfield School:

- Immediate** add recycling receptacle(s) in key locations and a trash receptacle in the tennis court area; check metal slides for conformity to playground standards; replace basketball backboards; refurbish bench in tennis area; refurbish or replace signs on tennis court fencing; replace all belt swings and separate tot and youth swings into different bays; place surfacing under slides, whirl, climber, and rocking toy
- Short Term** develop a re-development plan designed to bring the site into compliance with the Americans with Disabilities Act (ADA) and upgraded to current safety standards; provide handicap access to the playground; install standard Lower Mount Bethel Township park policy sign; replace slides with compliant ones if needed; refurbish swings and orbit climber as needed
- Long Term** as the merry-go-rounds age, replace them with other, safer playground equipment; provide a separate toddler area; provide pedestrian access for residents of the Village of Martins Creek; construct skateboard facility



Lower Mount Bethel Township Municipal Center - Centerfield School

<p><u>Facility Name</u> Lower Mount Bethel Township Municipal Center – Centerfield School</p>	<p><u>Surrounding Uses</u> Access is from Route 611; surrounded by wooded area; No pedestrian access</p>	<p><u>ADA Compliance Issues</u> No ADA compliant access exists to the play structures, picnic pavilion, tennis courts, basketball court, batting cages, volleyball court or bocce court</p>
<p><u>Ownership</u> Lower Mount Bethel Township</p>	<p><u>Parking Facilities</u> Paved parking lot for approximately 20 cars plus 4 handicapped parking spaces; lot lines need to be repainted</p>	<p><u>Acreage</u> 4.1 acres</p>
<p><u>Amenities</u> 1 outdoor basketball court 2 tennis courts 1 bocce court 1 picnic pavilion 1 grass volleyball court 1 batting/pitching cage</p>	<p><u>Description/Condition of Facilities</u> Paved, lighted court; small size; lines are painted; backboards need to be painted; no nets were installed; court is fenced on two sides; footers for each pole are exposed Completely fenced; had padlock; nets taken down and courts are locked for the winter; fairly new surface; puddle area on Court #1 with grass growing through cracks; fence needs repairs; signs hanging on fence are completely faded, need to be replaced; wooden bench needs to be replaced Wood side rails; court is lighted; clay mix surface; no roller visible for use by players to prepare court for play Concrete floor surface, 15' 9" x 46'; shingled roof covers slab to 36'; seven picnic tables; two grills outside pavilion; has electric service and interior lighting; edge of pavilion surface is trip hazard; no accessible path from parking area to pavilion Located behind tennis courts; footers on standards are exposed; no nets installed; no clear visible access Located beside tennis courts; completely fenced in sides and top; top is damaged; area inside is overgrown with weeds; unit is padlocked</p>	<p><u>Additional Comments</u> The building is open when the picnic pavilion is reserved. Security lights exist at the playground, parking lot and on the building. A flag pole, lighted monument, and sitting area are located at the entrance to the facility. No rules and regulations are posted. Six park benches and four trash receptacles are located throughout the playground and pavilion area. A chain link fence is along the highway side of the playground area. Fence is covered with vegetation which hides the institutional appearance of the fence. Chin-up bar located beside the basketball court should be removed. Could use trash receptacle at tennis courts.</p>

amenities	Description/Condition of Facilities	Additional Comments
swing sets	<p>Cracked, peeling paint; visible corrosion; inadequate surfacing beneath swings. Single bay swing set had three swings in the bay (should be only two); belt swings should be inspected for cracks and signs of wear. Double bay swing set mixes tot and youth swings in each bay (should not mix uses). Trash receptacle within fall zone of swing set.</p>	<p>The Township's public meetings are held in this building.</p> <p>Possible area to expand site to the left side of the building</p>
3 sliding boards	<p>Inadequate surfacing beneath equipment; visible corrosion on side rails of two large eight-foot slides; neither have a hood or guard rail at the top; smaller, four-foot slide has visible corrosion</p>	
1 whirl	<p>No surfacing; some edges are beginning to split on wood floor surface.</p>	
1 climber	<p>Inadequate surfacing and insufficient fall zone between play structure rules sign and climber</p>	
rocking toy	<p>Surfacing eroded; inadequate fall zone</p>	
1 new Miracle play structure	<p>Unit is in good shape; has small rules sign; inadequate surfacing</p>	
1 gymnasium		
1 senior center area		
1 Recreation Board Office area		
1 garage area		



Lehigh Valley Planning Commission Park Inventory

Name: MARTINS CREEK BALLFIELD

Type: Ball Field (baseball/softball)

Class: Mini-Park, Neighborhood Park/Playground, Community Park

Owner: Other

Municipality: Lower Mt. Bethel

Calculated Acreage: 6.4

Original Acreage: 4

Public: Yes

Last Update: 07/26/2000



Prepared By: Lehigh Valley Planning Commission

Martins Creek Ballfield

Description: Neighborhood park
 Access: Abruzzi Avenue
 Landscape Character: surrounded by residential development, tree rows and agricultural fields
 Size: 6.4 acres

Recommendations – Martins Creek Ballfield:


Immediate add benches; designate parking area
Short Term
Long Term Township negotiate for ownership; provide driveway access to concession stand; increase handicap access



<p><u>Facility Name</u> Martins Creek Ballfield – Pacchioli’s Field</p>	<p><u>Surrounding Uses</u> Accessed from Abruzzi Avenue; surrounded by residential development, tree rows and agricultural fields</p>	<p><u>ADA Compliance Issues</u> No ADA compliant access from parking area to ball field or spectator area; no identified handicap parking areas; players’ benches and spectator area are not accessible</p>
<p><u>Ownership</u> Eastern Industries</p>	<p><u>Parking Facilities</u> Grass area between first base side and agricultural field</p>	<p><u>Acreage</u> 6.4 acres</p>
<p><u>Amenities</u> 1 ball field 1 spectator area</p>	<p><u>Description/Condition of Facilities</u> Ball field fenced with grass infield and skinned baselines Covered bleachers are located behind home plate; safety fencing in front of bleachers</p>	<p><u>Additional Comments</u> No park sign No identified parking area No rules and regulations posted No driveway access to concession stand No lights – security or athletic Portable toilets available on site Drinking fountain not accessible</p>



Lehigh Valley Planning Commission Park Inventory

Name: PPL MARTINS CREEK ENVIRONMENTAL PRESERVE		 1" = 2003'
Type: Open Space		
Class: Conservancy		
Owner: Other		
Municipality: Lower Mt. Bethel		
Calculated Acreage: 187.6	Public: Yes	
Original Acreage: 197.7	Last Update: 10/29/2003	
<small>Prepared By: Lehigh Valley Planning Commission</small>		

Lower Mount Bethel Recreation Complex

Lower Mount Bethel Recreation Complex:

Description: Community park
 Access: off Mt. Bethel/ Belvidere Highway
 Landscape Character: open field surrounded by mature hedgerows
 Size: 27.0 acres

Recommendations – Lower Mount Bethel Recreation Complex:

Immediate add benches, recycling receptacles, and one more bleacher
Short Term develop master site plan; install standard Lower Mount Bethel Township park sign and policy sign; negotiate additional land acquisition; install welcome center with restrooms, parking lot, park & ride area, boat access, and nature trails; expand environmental education programs
Long Term increase handicap access; install indoor recreation facility and lights for fields

<u>Facility Name</u> Lower Mount Bethel Recreation Complex	<u>Surrounding Uses</u> Accessed from Mt. Bethel/Belvidere Highway; surrounded on four sides by mature tree rows	<u>ADA Compliance Issues</u> No ADA compliant access from parking area to ball fields or spectator areas; no identified handicap parking spaces; parking lot not accessible
<u>Ownership</u> Lower Mount Bethel Township	<u>Parking Facilities</u> Large stone parking area located on north side of the site	<u>Acreage</u> 27.0 acres
<u>Amenities</u> 1 softball field 1 little league field 1 storage shed 4 soccer fields bleachers	<u>Description/Condition of Facilities</u> Fenced field, fence in good condition; skinned infield; players benches have protective safety fencing along first and third base sides Field has 60' baselines with grass infield and skinned baselines; no pitchers' mound, material was in place but not constructed; sign on fence "Closed Until Further Notice" Storage shed with overhead garage door and entry door; very good condition; centrally located between existing fields Soccer fields are level grass areas with homemade soccer goals Portable, aluminum bleachers; 4 rows; along first and third baseline of softball field	<u>Additional Comments</u> No lights exist on site, security or athletic Memorial tree program has been started Although surrounded by mature shade trees, no shade exists within the complex Site should be master planned before additional facilities are added





Lehigh Valley Planning Commission Park Inventory

Name: PPL MARTINS CREEK PUBLIC BOAT ACCESS AREA

Type: Fishing (public access)

Class: Special Use

Owner: Other

Municipality: Lower Mt. Bethel

Calculated Acreage: 4.2

Original Acreage: 5

Public: Yes

Last Update: 01/08/2003



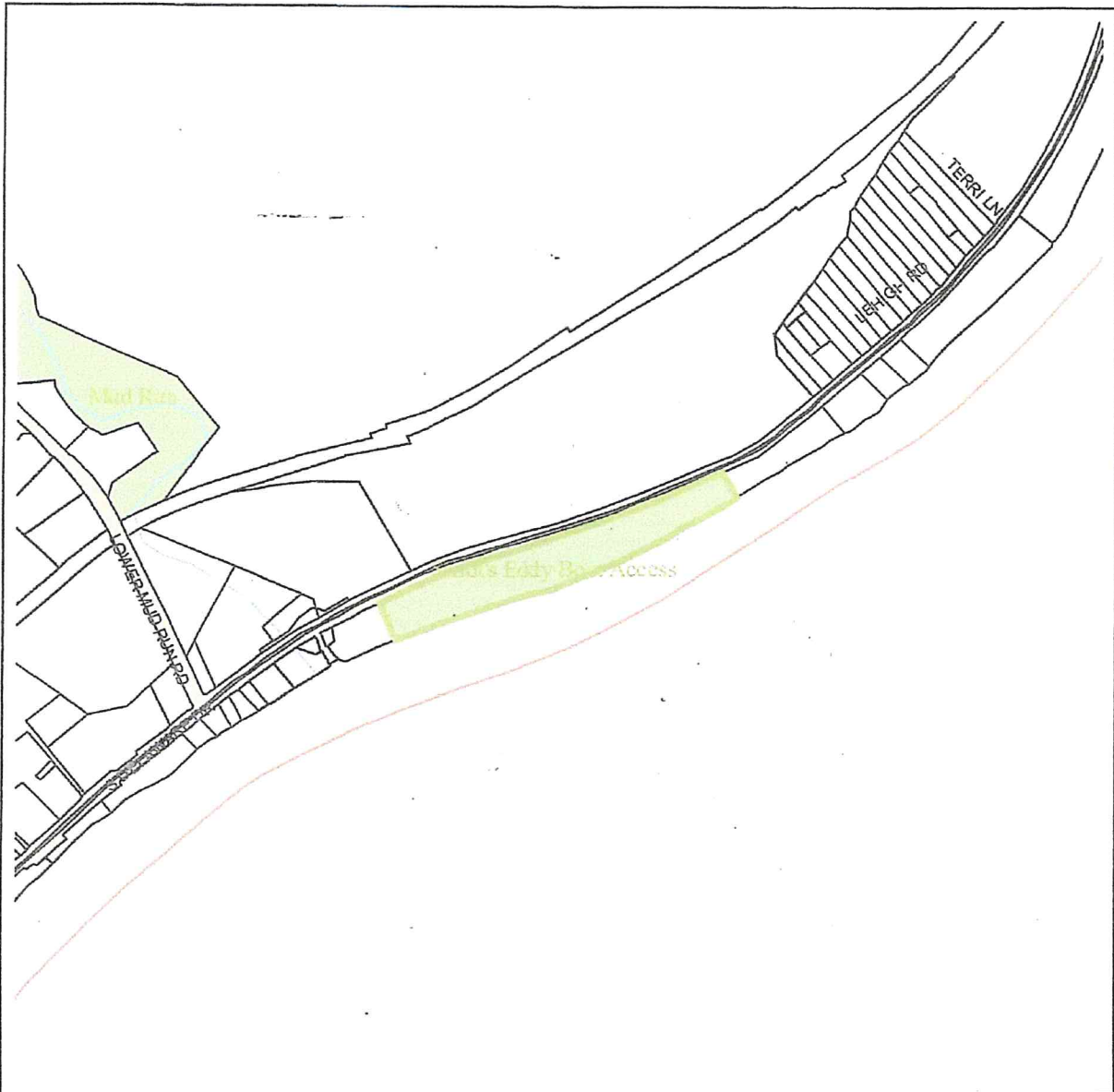
1" = 532'

Prepared By: Lehigh Valley Planning Commission

Martins Creek Boat Access

Description: Special Use
Access: off Depues Road
Landscape Character: access to the Delaware River
Size: 4.2 acres





Lehigh Valley Planning Commission Park Inventory

Name: SANDT'S EDDY BOAT ACCESS

Type: Fishing (public access)

Class: Special Use

Owner: State

Municipality: Lower Mt. Bethel

Calculated Acreage: 5.3

Original Acreage: 3

Public: Yes

Last Update: 07/26/2000



1" = 514'

Prepared By: Lehigh Valley Planning Commission

Sandt's Eddy Boat Access

Description: Special Use
Access: Route 611 South
Landscape Character: lawn area adjacent to parking; wooded between parking and boat launch
Size: 5.3 acres





Lehigh Valley Planning Commission Park Inventory

Name: MUD RUN

Type: Open Space

Class: Conservancy

Owner: Northampton County

Municipality: Lower Mt. Bethel

Calculated Acreage: 9.6

Original Acreage: 11.9

Public: Yes

Last Update: 07/26/2000



1" = 717'

Prepared By: Lehigh Valley Planning Commission

Mud Run

Description: Conservancy park
Access: off Lower Mud Road
Landscape Character: natural area – wooded and undeveloped
Size: 9.6 acres





Lehigh Valley Planning Commission Park Inventory

Name: PPL MARTINS CREEK ENVIRONMENTAL PRESERVE

Type: Open Space

Class: Conservancy

Owner: Other

Municipality: Lower Mt. Bethel

Calculated Acreage: 187.6

Original Acreage: 197.7

Public: Yes

Last Update: 10/29/2003



1" = 2003'

Prepared By: Lehigh Valley Planning Commission

Martins Creek Environmental Preserve

Description: Conservancy park
Access: Martins Creek-Belvidere Highway and Depues Ferry Road
Landscape Character: varies – wooded and open areas; developed trail loop; parking and picnicking facilities
Size: 187.6 acres



Lower Mount Bethel Township Inventory of Existing Recreation Lands and Facilities

Level of Maintenance	Kiefer Field	Lower Mount Bethel Municipal Center - Centerfield School	Martins Creek Ballfield	Lower Mount Bethel Recreation Complex	Martins Creek Boat Access	Sandt's Eddy Boat Access	Martins Creek Env. Preserve	Mud Run
Size - Acreage	2.8	4.1	6.4	27.0	4.2	5.3	187.6	9.6
Type of Park	Neighborhood	Neighborhood	Neighborhood	Community	Special Use	Special Use	Conservancy	Conservancy
Ball Fields	1	1	1	4			no	
Multi-purpose field	1			2				
Basketball Court(s)		1						
Tennis Court(s)		2						
Volleyball Court(s)								
Bating Cage(s)		1	pitcher practice area					
Horseshoe pit pairs		1 bocce ball court						
Fitness Trail								
Trail							5	
Bike Racks								
Tot Lot w/ apparatus		1						
Play Structure		7						
Spring Rocking Animals								
Swing Set		2						
Child Swing Set								
Parking	Small stone parking area	Paved lot for 20 cars + 4 HC spaces				2 HC spaces		
Portable Potties			1			1	6	
Restroom Facilities (men/women)	None	2 - one on each level of school house						
Structure(s)		1 senior center - 1 rec. comm. Room - 2 meeting rooms - 1 small gymnasium	2 dugouts				1 Concrete boat launch to Martins Creek	

Covered Pavilion	proposed	1						1 - accommodates 72, handicap accessible	
Storage Bldg.		1		1				yes	
Trash Receptacles		3 garbage cans + 1 dumpster		8 (2 recycling)	dumpster			yes	
Concession Bldg.	1			1					
Picnic Tables		6						yes	
Elevated Grills				1				2	
Water Spigot/Hydrant				1					
Water Fountain		1		1				No running water	
Benches		6							
Bleachers	2			large & covered					
Flagpole		1							
Kiosk									
Park Sign				Pacchoih				yes	
Regulation Signage								yes	
Entrance Gate								no - access road to Delaware River	
Fence	Fence around field in good condition	Around tennis courts	Fence around field - in good condition	limited					
Park Master Plan	no	no	no	yes	no	no	no	no	no

Natural Features

When the natural resources of a community are reviewed together, areas that are appropriate for development and conservation can be identified. The existing natural resources can be used to help frame a logical pattern of development and open space within the Township. Geology, topography, soil type, and the presence of wetlands or floodplains can provide constraints and challenges to development. Other natural resource features are worth conserving for their benefit to the community, including woodlands and productive agricultural soils. The following inventory locates and evaluates Lower Mount Bethel Township's natural resources.

Geology

Analysis of the geology of an area is important from both a landform and community development perspective. In addition to explaining the shape of the landscape, geologic information is used to determine the availability and safety of groundwater supplies, the presence of mineral resources, and the ability of bedrock to support development.

Lower Mount Bethel Township lies on rock laid down over 400 million years ago during the Lehigh Valley Sequence of the Ordovician geologic period. Much more recently, glaciers covered the entire Township and extended as far south as Easton. Workable deposits of glacial sands and gravel are generally sparse with the exception of areas along the Delaware River. For example, substantial deposits of gravel and sand are present in a terrace on the Delaware River, north of Martins Creek, where deposits 40-50 feet thick lie upon limestone bedrock. Other minor deposits are found within the Delaware River's floodplain.

As shown on Map 4, five basic geologic formations underlie Lower Mount Bethel Township:

- *Jacksonburg Limestone (Ojk)* – The presence of this high grade crystalline limestone, which underlies approximately 3,526 acres of the Township, has had a major impact on the community's physical and economic development. Varying in width from 2,500 to 7,500 feet, it runs in a northwesterly direction from Lower Mount Bethel Township's border with Forks Township to Riverton. Pure Jacksonburg limestone typically ranges from 75 to 200 feet in thickness, but depth in this part of Northampton County can range from 250 to 600 feet. Due to its carbonate composition, limestone has an extensive subsurface drainage system and carries significant potential for sinkhole formation. Small quantities of groundwater are available in zones of weathered material or cleavage openings. It is possible to drill down into pure limestone to find more reliable groundwater supplies. The presence of solution channels in Jacksonburg limestone makes groundwater susceptible to contamination. Also known as "cement rock," Jacksonburg limestone provides the basis for Lower Mount Bethel Township's limestone quarrying activities. It also underlies much of the Township's prime agricultural soils.
- *Epler Limestone (Oe)* – Abutting the southern edge of the Jacksonburg limestone band, Epler limestone is one of two elements of the Beekmantown Group of the Lehigh Valley Sequence. Underlying roughly 2,745 acres of the Township, the Epler formation is comprised of thick-bedded, finely crystalline limestone. Deposits of iron ore can be found where limestone is closely folded or faulted. As with the Jacksonburg limestone, the Epler formation's carbonate geology makes it prone to sinkhole formation and groundwater contamination. Groundwater obtained from the Epler formation is generally known for having high mineral content and poor clarity.

- *Rickenbach Dolomite (Ori)* – Two areas of Rickenbach dolomite totaling 438 acres lie between the Delaware River and the Epler limestone. This formation consists of gray, finely to coarsely crystalline laminated dolomite. Potential water supplies exist within Rickenbach dolomite. It has been quarried extensively for crushed stone.
- *Martinsburg Shale (Om)* – By far the largest and most economically important geologic formation in the Township, Martinsburg shale is the basis for Northampton County’s successful slate industry. This “slate belt” contains two elements present in Lower Mount Bethel Township: the *Bushkill Member* (8,909 acres) and the *Ramseyburg Member* (143 acres). Martinsburg shale consists of black to gray carbonaceous fissured shale that has metamorphosed to slate in some areas of the Township, particularly in the northwest. It ranges from 2,000 to 3,000 feet in depth and contains relatively reliable supplies of groundwater. While wells in slate generally yield larger quantities of groundwater, the chances of obtaining a producing well in shale are better.

Carbonate geology presents unique challenges to planning and development. Carbonate rocks – limestone and dolomite – contain minerals that will dissolve in weak acidic solutions, such as runoff percolating through rich organic soils. This may result in the creation of caves, cavities, pinnacles, irregular bedrock surfaces, and other voids in bedrock which greatly impact landform and the flow of surface water. Sinkholes form when soils collapse or are eroded into bedrock openings. For example, Mud Run (a “vanishing stream”) does not directly enter the Delaware River, but drains through a series of sinkholes.

Valleys underlain by carbonate geology are considered to have “karst” topography. Contaminants introduced at or below ground level in karst valleys can rapidly migrate and damage groundwater supplies. In addition, sinkhole formation can seriously damage or destroy buildings, utilities, and other structures. With its recent shift towards infiltration, carbonate geology poses significant challenges to stormwater management. If infiltration best management practices (BMPs) are proposed, additional testing may be required to determine the infiltration capacity of soils. Special buffers from carbonate geological features may also be necessary to prevent groundwater contamination and sinkhole formation.

Key Findings

- There are five basic geologic formations within the Township. Limestone and shale are the predominant bedrock types.
- Carbonate geology underlies approximately 40 percent of the Township.
- Limestone is conducive to groundwater recharge, yet groundwater in carbonate areas is highly susceptible to contamination due to the presence of solution channels.
- Limestone formations are subject to sinkholes which are hazardous to development.
- The presence of limestone improves the ability of agricultural crops to acquire needed nutrients and counteracts the acid-intensifying effects of soils, producing higher crop yields with the use of less fertilizer.
- Most of the geological formations in the Township provide adequate water supplies for domestic use.

References

- *Geologic Survey of Pennsylvania, 1980.* Commonwealth of Pennsylvania, Department of Environmental Resources, Topographic and Geologic Survey.

- *Soil Survey of Northampton County, Pennsylvania.* United States Department of Agriculture Soil Conservation Service in cooperation with the Pennsylvania State University College of Agriculture and the Pennsylvania Department of Environmental Resources State Conservation Commission.

Topography

Lower Mount Bethel Township is bounded to the southeast by the Delaware River. The relatively flat plain along the river is narrow from the Forks Township boundary to just east of Martins Creek, where it then widens into a broader plain. Steep slopes rise up from the Delaware River, Martins Creek, and Mud Run to flatter upland areas. The highest point in the Township is in its northern corner, roughly 820 feet above sea level. (See Map 5.)

A delicate balance exists between slope, soil type, and vegetation. Maintaining this balance reduces the threats to public health and safety posed by disturbed hillsides. Generally, as slope increases, soil depth and the ability of soil to support structures and sustain re-vegetation decreases. Because of this delicate balance, steep slopes are more susceptible to erosion than other areas. In addition, certain species of flora and fauna are endemic to the unique environment created by steep slopes.

Slopes are measured as a ratio of vertical rise over horizontal distance. A 15-foot vertical rise across a horizontal distance of 100 feet equals a 15 percent slope which, for the purposes of this plan, is considered a steep slope. Moderate slopes are considered to be between 8 percent and 15 percent. Gentle slopes are considered to be any slope less than 3 percent.

Table 9.4 lists the amount of Township land in each slope category. Slopes were derived from 5-foot contour data provided by the Lehigh Valley Planning Commission (LVPC). A relatively large proportion of the Township, just over one quarter, is steeply sloping. These areas are concentrated in the valleys adjacent to Mud Run, Martins Creek, and Oughoughton Creek.

Key Findings

- Roughly 28 percent of the Township contains slopes greater than 15 percent.
- Slopes greater than 15 percent are highly susceptible to erosion.
- Slopes greater than 15 percent provide unique habitats for plants and wildlife.
- Though susceptible to erosion, moderate slopes provide opportunities for agriculture, development, and groundwater recharge.

Table 9.4: Slope Analysis, Lower Mount Bethel Township

Slope Category	Acreage of Township	% of Township
0 to 3 percent	2,835	18.0
3 to 8 percent	4,269	27.1
8 to 15 percent	4,258	27.0
15 to 25 percent	2,534	16.1
25 percent and greater	1,847	11.7

Source: LVPC, 2005

References

- Geographic Information Systems (GIS) data published by LVPC, 2005.

Soils

The Soil Survey for Northampton County identifies over 50 distinct soil types in Lower Mount Bethel Township. Many of these soil types cover only a few acres and are located in a handful of locations. (See Map 6.) The majority of the Township's soils (roughly 80 percent) are components of the following major soil groups or "series:"

- *Berks Series* – This series is generally found in uplands and is characterized by moderately deep, well drained soils. Formed in material weathered from till or frost-churned shale, Berks series soils have moderately rapid permeability and moderate to low moisture capacity. Shallowness to bedrock and high content of coarse fragments limit Berks soils for many uses.
- *Conotton Series* – This series is generally located in the Delaware River floodplain between Riverton and Oughoughton Creek. It consists of deep, well-drained soils formed in stratified glacial drift. Conotton soils have low available moisture capacity and rapid permeability. Lower Mount Bethel Township's Conotton soils have slightly greater moisture capacity than Conotton soils found elsewhere in Northampton County.
- *Ryder Series* – Found primarily in upland areas south of Martins Creek, this series consists of moderately deep, well drained soils formed from weathered limestone and shale. Ryder soils have moderate available moisture capacity and moderate permeability.
- *Smartswood Series* – Also common in uplands, Smartswood soils are well-draining soils formed in compact glacial till composed of weathered shale, quartzite, siltstone, sandstone, and limestone. They are primarily found over shale and slate uplands. Smartswood soils have low available moisture capacity and moderate permeability.
- *Washington Series* – This series is found along the Delaware River floodplain south of Oughoughton Creek. Washington soils are well-drained soils formed in mildly karst uplands. They have high available moisture capacity and moderate permeability.
- *Weikert Series* – An upland series generally found between Martins and Oughoughton Creeks, Weikert soils are shallow and well-drained with low moisture capacity and moderately rapid permeability. Formed in material weathered from glacial till and frost-worked shale, they are somewhat limited for agricultural and development uses because of their shallow depth to bedrock and high coarse fragment content.

Prime Agricultural Soils

The agricultural capability of soil is based on a combination and physical and chemical factors including fertility, depth to bedrock and water table, texture, erodibility, and slope. The term "prime agricultural land" is used to distinguish soils that are especially productive for agricultural use from other, less productive soils. As defined in the Municipalities Planning Code, prime agricultural land is, "land used for agricultural purposes that contains soils of the first, second, or third class as defined by the United State Department of Agriculture natural resources and conservation services county soil survey" (Municipalities Planning Code, Article I, Section 107).

These classes – identified by the attribute “Capability Class” in the County Soil Survey – group soils according to their productivity. Generally, Class I, II, and III soils (“prime agricultural soils”) are well-drained and are gentle to moderately sloping. These soils have the combination of physical and chemical properties and growing conditions needed to sustain high crop yields when farmed in accordance with acceptable farming practices.

Most of Lower Mount Bethel Township (62 percent) consists of prime agricultural soils. The Class I soils are concentrated in the lowlands along the Delaware River in the Oughoughton Creek watershed. While Class I soils comprise only 4 percent of the Township’s land area, this percentage is high in comparison to statewide figures.

Table 9.5: Prime Agricultural Soils, Lower Mount Bethel Township

Capability Class	Acreage	% of Township
Class I	689	4
Class II	4,352	28
Class III	4,768	30

Source: Soil Survey of Northampton County

Class I soils are the most productive and have the least limitations in terms of their use for agriculture. Class II and III soils, also highly productive, face more limitations and may be better equipped for certain crops or require specific conservation practices.

Hydric and Alluvial Soils

Hydric soils are found in upland depressions and along the fringes of floodplains, generally within or adjacent to wetlands. They exhibit shallow depth to water table and occasionally display standing water. Many hydric soils support the growth of wetland vegetation. Those that do not may have been drained for agricultural use. More than an indicator of wetland conditions, hydric soils often indicate former wetland locations.

Alluvial soils are frequently, but not always, located within a floodplain. These soils have been deposited by flowing water and are generally unstable as a result of their texture and composition. They often form aquifer recharge areas.

The presence of alluvial soils is only one indicator of a floodplain. Changes in tributary drainage or the slope of the adjacent stream may create a floodplain that is either larger or smaller than the area of alluvial soils. Also, alluvial soils do not indicate the probability of flood recurrence (e.g. the one hundred year flood).

Hydric and alluvial soils in Lower Mount Bethel Township include: Brinkerton (BtA, BtB); Chippewa (ChA, ChB, CkB); Clarksburg (CmA, CmB); and Holly (Ho). These soils comprise approximately 966 acres and generally coincide with stream corridors and floodplains.

Soil Suitability for On-Lot Sewage Disposal

In many areas of Lower Mount Bethel Township, on-lot sewage disposal poses a problem due to its potential for ground water contamination. Contamination of wells in the villages of Martins Creek and Riverton – both of which rely entirely on on-lot disposal to meet their wastewater needs – attests to this potential.

The suitability of soil for on-lot sewage disposal is a function of soil depth, drainage, and permeability. Generally, the deeper and better draining the soil, the more suitable it is for subsurface disposal. However, soils that drain rapidly and/or have high permeability may fail to treat effluent before it reaches groundwater supplies. Similarly, soils with high water tables are already saturated and lack the capacity to retain and treat effluent. Steep slopes also pose challenges to on-lot disposal because of their implications for drain field design.

The design of on-lot sewage disposal systems should be tailored to the unique characteristics of each soil type. While the County soil survey may be used as a general guide to determine suitability, on-site soil tests will always be required to ensure soils are capable of treating wastewater and that on-lot systems are designed to respond to particular soil characteristics.

The areas of the Township with the fewest soil limitations for on-lot sewage disposal are generally those that are the most productive for agricultural use. The installation of on-lot systems in areas of hydric soils, alluvial soils, and steep slopes should generally be avoided.

Key Findings

- The six major soil associations found in the Township can be characterized as moderately deep to deep, well-drained soils.
- The majority of the Township (62 percent) consists of “prime agricultural land,” as defined by the Municipalities Planning Code.
- The soils most conducive to agriculture are also the most suitable for groundwater recharge and on-lot sewage disposal.
- Hydric soils are indicative of wetland conditions and former wetland locations. These environmentally-sensitive resources should be protected from disturbance.
- Alluvial soils are unsuitable for development because they are unstable and flood-prone.
- Soil suitability for on-lot sewage disposal is a function of soil depth, drainage, and permeability. On-lot sewage disposal systems should not be installed in areas with high water tables, steep slopes, hydric soils, or alluvial soils.

References

- GIS data published by LVPC, 2005.
- *Soil Survey of Northampton County, Pennsylvania*. United States Department of Agriculture Soil Conservation Service in cooperation with the Pennsylvania State University College of Agriculture and the Pennsylvania Department of Environmental Resources State Conservation Commission.
- *Pennsylvania Municipalities Planning Code, Act of 1968, P.L.805, No. 247 as reenacted and amended*. Pennsylvania Department of Community and Economic Development, 2005.

Streams, Rivers, and Watersheds

Lower Mount Bethel Township has approximately 49 linear miles of streams, including 8.5 miles of frontage on the Lower Delaware River. (See Map 7.) Part of the broader Martins/Jacoby Creek watershed, the Township straddles 6 sub-watersheds of varying size and land use, all of which empty into the Delaware River. The Oughoughton Creek sub-watershed occupies the largest area in the Township (4,681 acres), followed closely by the Martins Creek (4,328 acres) and Delaware River (4,106 acres) sub-watersheds. The Mud Run sub-watershed (1,621 acres) and the watersheds for two intermittent streams (339 acres) drain the rest of the Township's land area.

With the exception of Martins Creek and the Delaware River, all streams in the Township are classified by the Pennsylvania Department of Environmental Protection (DEP) as Cold Water Fisheries (CWF). Martins Creek and its tributaries (excluding Little Martins Creek) are designated as Trout Stocking Fisheries (TSF). The portion of the Delaware River adjacent to the Township is classified as a Warm Water Fishery (WWF). DEP considers these designations when evaluating permit applications.

Unfortunately, none of the Township's streams receive DEP's most stringent water quality designations: High Quality (HQ) and Exceptional Value (EV). HQ and EV streams are "special protection waters" subject to specific anti-degradation rules. Anecdotal data suggests that many of the Township's streams could be upgraded to HQ status, provided more thorough biological or chemical assessments are completed and submitted to DEP. Upgrading water quality designations could become a focus of the Martins Jacoby Watershed Group, a new watershed association formed with the help of the Northampton County Conservation District.

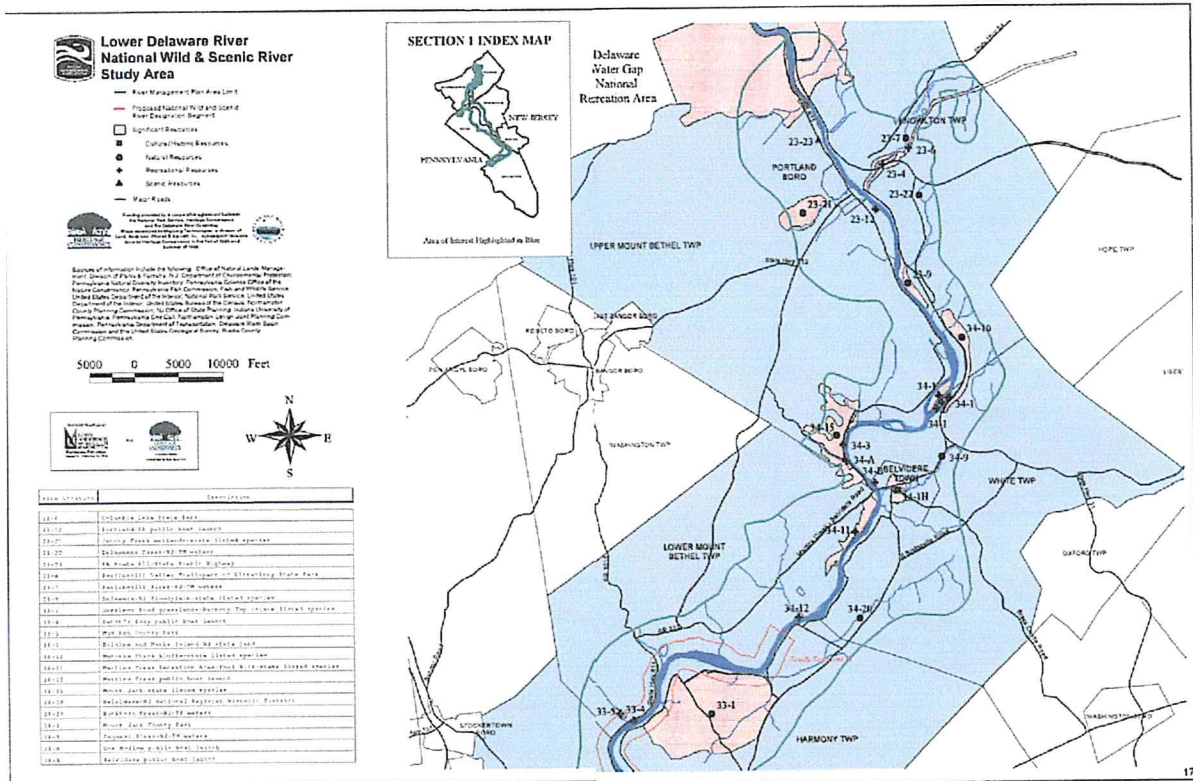
Mud Run and Oughoughton Creek are intermittent streams that do not drain directly into the Delaware, but percolate into groundwater through sinkholes and other carbonate geologic features. Ghost lakes, which rise and fall with the water table, are also present in the Township. Residents have noted that the channel and riparian corridor of Little Martins Creek has changed substantially over time as a result of erosion and inadequate stormwater management on farms.

Wild and Scenic Rivers

Lower Mount Bethel Township's most valuable natural resource is its 8.5 miles of frontage on the Lower Delaware River. On November 1, 2000, President Clinton signed legislation designating 67 miles of the Lower Delaware River, including the portion adjacent to the Township, as a National Wild and Scenic River (qualifying under the "Recreational" category – recreational rivers are more developed, accessible, and may have been subject to hydrologic alterations in the past). Wild and Scenic designation was the outcome of the Lower Delaware River Management Plan, a series of studies conducted to determine the eligibility of the Lower Delaware for listing in the National Wild and Scenic River Program. Various sections of the River were identified as special study areas based on their natural resource and recreation value. These include Foul Rift, Sandt's Eddy, and Northampton County's Mud Run Park.

The Lower Delaware River National Wild and Scenic Rivers Management Plan Area extends west of the river corridor in a band 3,000 to 8,500 feet wide. The designated area contains

Martins Creek, Little Martins Creek, Oughoughton Creek, and Mud Run, as well as a few unnamed and intermittent streams. The River is classified by the National Park Service as a “Partnership” Wild and Scenic River. Though Wild and Scenic status prohibits the Federal government from assisting in water resources projects (issuing permits, funding, construction, etc.) that would have an adverse effect on the river or its “outstandingly remarkable resources,” management of Partnership Rivers is the joint responsibility of local, state, and federal authorities.



Storm Water Management Practices

Present storm water management practices in the township are not adequate to handle existing conditions. Modern farming practices lack strip-cropping, an effective erosion-fighting practice of planting crops like clover, lespedeza, alfalfa, and grass in strips along the natural contours of the land between clean tilled crops like corn and potatoes. Erosion has also been accelerated by the presence of three large agricultural fields where there were once 40 small fields separated by stone rows and hedgerows. Large expanses of corn or beans are linked with heavy storm water runoff.

Key Findings

- Lower Mount Bethel Township has 49 linear miles of streams, including 8.5 miles of frontage on the Lower Delaware River, a National Wild and Scenic River.
- The Township is part of six, largely agricultural, sub-watersheds.
- Martins Creek is a designated Trout Stocking Fishery. Other streams are designated as Cold and Warm Water Fisheries.

- Anecdotal data suggests many of the Township's streams could be receive High Quality designation, yet runoff from agricultural operations appears to be a significant water quality concern.
- A major portion of the Township lies within the Lower Delaware River National Wild and Scenic Rivers Management Plan Area. Wild and Scenic designation offers protection from potentially adverse projects involving federal permits or funding.

References

- *Comprehensive Plan: The Lehigh Valley...2030*. Lehigh Valley Planning Commission, 2005.
- *Lower Delaware River Management Plan and Lower Delaware River Study Report*, The National Park Service, U.S. Department of the Interior.
- *Lower Mount Bethel Comprehensive Plan*. Carter Van Dyke, Assoc., Doylestown, PA, 2004.

Floodplains and Wetlands

Floodplains and wetlands provide valuable ecological services and pose significant constraints for development. Though they often coincide geographically, they may be found in entirely different environments. Wetlands, for example, may be present in upland depressions, far from the flood-prone areas adjacent to streams and rivers. Both floodplains and wetlands function as surface water storage areas, helping mitigate the erosive impact of peak storm flows and encouraging groundwater recharge. They also provide habitat for the variety of plants and animals that rely on their unique hydrologic regimes. Wetlands play a major role in improving water quality by allowing for the deposition of sediment and plant uptake of nutrients and other contaminants. The value of floodplains and wetlands for stormwater management will only increase as development occurs in once pristine watersheds.

Floodplains in Lower Mount Bethel Township may be found adjacent to almost every watercourse. Federal Emergency Management Agency (FEMA) designated Special Flood Hazard Areas are mapped and encompass roughly 8 percent (1,274 acres) of the Township. Special Flood Hazard Areas include lands inundated by the 100 and 500 year floods and lands protected by levees from the 100 year flood. Flood hazard areas are most prevalent along the Delaware River, particularly at Sandt's Eddy, Kiefer Island, Martins Creek, Mud Run, and Depue's Ferry.

The location of wetlands is far more variable, in part due to the regulatory definition of wetlands. The Environmental Protection Agency and Army Corps of Engineers have defined wetlands as, "Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions." Some wetlands are easily recognizable because the presence or influence of water is obvious. Certain types of vegetation are only found in wetlands, which can also make identification easy. Yet many wetlands are subject only to seasonal flooding or may never be flooded at all, but have soils that are saturated long enough to support the growth of wetland or "hydrophytic" vegetation. Ultimately, it takes a professional to properly delineate wetland boundaries.

Wetlands identified in the National Wetland Inventory (NWI) show that wetlands occupy 457 acres (2.9 percent) of the Township, including the Delaware River. Most of Lower Mount Bethel Township's wetlands are concentrated along the Delaware and, to a lesser extent, Martins Creek, Little Martins Creek, Oughoughton Creek, and Mud Run. Identified and mapped by the U.S. Fish and Wildlife Service through the manual interpretation of aerial photography, the NWI generally underestimates the true extent of wetlands. For planning purposes, hydric soils are better indicators of wetlands than the NWI.

Key Findings

- Floodplains and wetlands provide critical habitat for wildlife and are important areas for controlling the effects of streams erosion and promoting groundwater infiltration.
- FEMA Special Flood Hazard Areas encompass 8 percent of the Township. Development should be limited in these areas due to their environmental sensitivity and inherent safety concerns.
- NWI wetlands occupy 2.9 percent of the Township, though the actual extent of wetlands is probably much larger. Wetlands should be left undisturbed because of the unique ecological functions they provide.

References

- GIS data published by the LVPC, 2005.

Woodlands and Natural Areas

Woodlands and hedgerows serve many purposes, both functional and aesthetic. Woodlands prevent erosion, provide habitat for wildlife, provide buffers for creeks, and offer recreational opportunities. Hedgerows and wooded corridors provide windbreaks, prevent erosion, and provide cover for wildlife movement, shelter, and migration. The species of tree found within woodlands depends on soil type, slope, and orientation. Different species of trees attract different types of wildlife.

The spatial configuration of woodlands also has important implications for biodiversity. The smaller and narrower the woodland, the more likely it will suffer from "edge effects" such as sunlight, noise, wind, and predation by domestic animals. Edge effects encourage invasive species growth.

Woodlands encompass approximately 20 percent of Lower Mount Bethel Township. They are found primarily on steep slopes, adjacent to watercourses, and in wetlands; places where agriculture is generally not productive. There are three major woodland associations in the Township:

- *Floodplain Association* – This woodland association occurs primarily on floodplain soils. Mature trees typically consist of silver maple/black walnut/sycamore, ash/red maple/elm, red maple/white oak/ pin oak, silver maple/red birch, or silver maple/sycamore/elm.
- *Meisic Association* – This woodland association occurs on poorly drained soils. Beech trees will dominate the canopy over time. Mature trees include sweet gum/red maple, red maple/ash/tulip poplar, oak/sweet gum/red maple, oak/red maple/ash/tulip poplar, or oak/hickory/beech.

- *Upland Association* – This woodland association occurs on slightly drier and better draining soils. Over time they will consist primarily of mixed oaks. Mature trees include black locust or oak/hickory.

Changing agricultural practices have resulted in the loss of hedgerows as smaller fields were consolidated into larger, more economically viable fields. Roughly 55% of the Township's riparian buffers – defined as a 100-foot buffer on either side of a watercourse – are completely un-wooded. Forested riparian buffers are one of the simplest and most effective water quality BMPs available.

Lower Mount Bethel Township has two Natural Areas Inventory sites (NAI sites) of Statewide Significance located adjacent to the Delaware River. These sites were identified by the Pennsylvania Science Office of The Nature Conservancy as areas supporting several plant and animal “species of special concern.” The identification of these natural areas is used to help protect and sustain the populations of rare or threatened plants, animals, and natural communities. Species are listed by code to ensure the protection of their undisturbed habitat.

Foul Rift – This site sustains a Northern Appalachian Calcareous Cliff Natural Community with features of exposed and eroded limestone bedrock occurring along the Delaware River. The southern portion of this area harbors 30-foot high vertical cliffs adjacent to a turbulent stretch of the Delaware River and forested uplands. The northern portion of the area is an eroded sloping limestone bank. The cracks and crevices within the bedrock support a unique occurrence of plant species, such as big blue stem, switch grass, Virginia creeper, and asters. White heath-aster, a PA-Rare plant species, is found along the outcrops. The adjoining reach of river is habitat for a G4S2S3 animal species. Additional surveys are suggested to determine the size of this animal population, as well as verifying the existence of other potential species of special concern.

Oughoughton Creek Near the Delaware River – The area is habitat for a population of osprey, which is an S2B animal species of concern. A large amount of waterside habitat is needed for the population to remain viable. Measures for protection from shooting and contamination of aquatic ecosystems must also be employed. LVPC actively encourages municipalities to prepare and review plans with the protection of these areas in mind.

Lower Mount Bethel Township has one environmental preserve. Martins Creek Preserve was established in July 2001 by Pennsylvania Power & Light (PPL), providing opportunities for hiking, nature study, birding, picnicking, fishing, and boating. The 215-acre preserve contains five miles of hiking trails along a reach the Delaware River extending from the Martins Creek power plant and the village of Riverton. Each of the four trails is blazed with blue, orange, red, and yellow markings; parking areas are available at each end of the trail system. The trails traverse through scenic views of rocky outcroppings, farm fields, old-growth forests, and the Foul Rift rapids of Martins Creek. A boating access area was established downstream of the Martins Creek power plant for canoeists, kayakers and fishermen to access the Delaware River. This section of the river has been known habitat for shad, smallmouth bass, walleye, pickerel, and muskie. The preserve also boasts a picnic area that can accommodate 72 people, containing tables, charcoal grills, handicap access, and portable toilets.

Key Findings

- The largest woodlands in Lower Mount Bethel Township are associated with stream corridors, wetlands, and steep slopes. These areas are unsuitable for development.
- Though they once covered the entire Township, woodlands occupy approximately 20 percent of the Township's land area.
- Hedgerows have been lost as farms expand.
- Over half of the Township's riparian buffers are not forested.
- The Township has 2 Natural Areas of Statewide Significance containing PA-rare, threatened, and endangered species. The Township should encourage the conservation of these areas wherever possible.

References

- GIS data published by LVPC, 2005.
- *Lehigh and Northampton Counties Natural Areas Inventory Summary*. Lehigh Valley Planning Commission, 2005.
- *Martins Creek Preserve*, PPL, 2005

Natural Resource Summary

Based upon the above data the following general findings have been made:

- The geologic formations that contain limestone – underlying 40% of the Township – are highly beneficial for groundwater recharge. Because limestone bedrock is easily susceptible to contamination, provisions should be made to protect recharge areas from development.
- Over one quarter of the Township consists of slopes 15% or greater. These slopes are prohibitively steep for land development and should be left undisturbed.
- Most of the Township's soils are well or moderately-well draining, making them attractive for both development and agriculture.
- 62% of the Township is comprised of prime agricultural soils. Protection of these soils is essential to the continued viability of local agriculture.
- Many of the soil types in Lower Mount Bethel, including hydric and alluvial soils, pose significant challenges for land development and the siting of on-lot sewage disposal systems.
- Lower Mount Bethel Township is part of the Martins Jacoby Creek Watershed and has six sub-watersheds of varying land use. The Martins Jacoby Watershed Group has recently formed to further water resources protection in the area.
- DEP's water quality designations for the streams traversing Lower Mount Bethel Township may not be accurate. Further tests are needed to assess the feasibility of upgrading surface waters to HQ status.
- The portion of the Delaware River adjacent to the Township is a National Wild and Scenic River. Lower Mount Bethel should actively participate in the implementation of the Lower Delaware River Management Plan to ensure the success of the "partnership" management concept.
- Roughly 20% of the Township is wooded. Forested riparian buffers are missing along more than half of the Township's surface waters.
- A variety of unique and rare plant and animal species may be found within the Township, particularly within the Delaware River corridor.

- The use of native plants in the landscape significantly increases the success rate, thus reducing the need for maintenance and/or replacement. Native plants also promote biodiversity and contribute to the natural heritage of the township.

References

- *Geologic Survey of Pennsylvania, 1980.* Commonwealth of Pennsylvania, Department of Environmental Resources, Topographic and Geologic Survey.
- *Soil Survey of Northampton County, Pennsylvania.* United States Department of Agriculture Soil Conservation Service in cooperation with the Pennsylvania State University College of Agriculture and the Pennsylvania Department of Environmental Resources State Conservation Commission.
- GIS data published by LVPC, 2005.
- *Pennsylvania Municipalities Planning Code, Act of 1968, P.L.805, No. 247 as reenacted and amended.* Pennsylvania Department of Community and Economic Development, 2005.
- *Comprehensive Plan: The Lehigh Valley...2030.* Lehigh Valley Planning Commission, 2005.
- *Lower Delaware River Management Plan and Lower Delaware River Study Report,* The National Park Service, U.S. Department of the Interior.
- *Lehigh and Northampton Counties Natural Areas Inventory Summary.* Lehigh Valley Planning Commission, 1999.

Conservation

Conservation Mapping

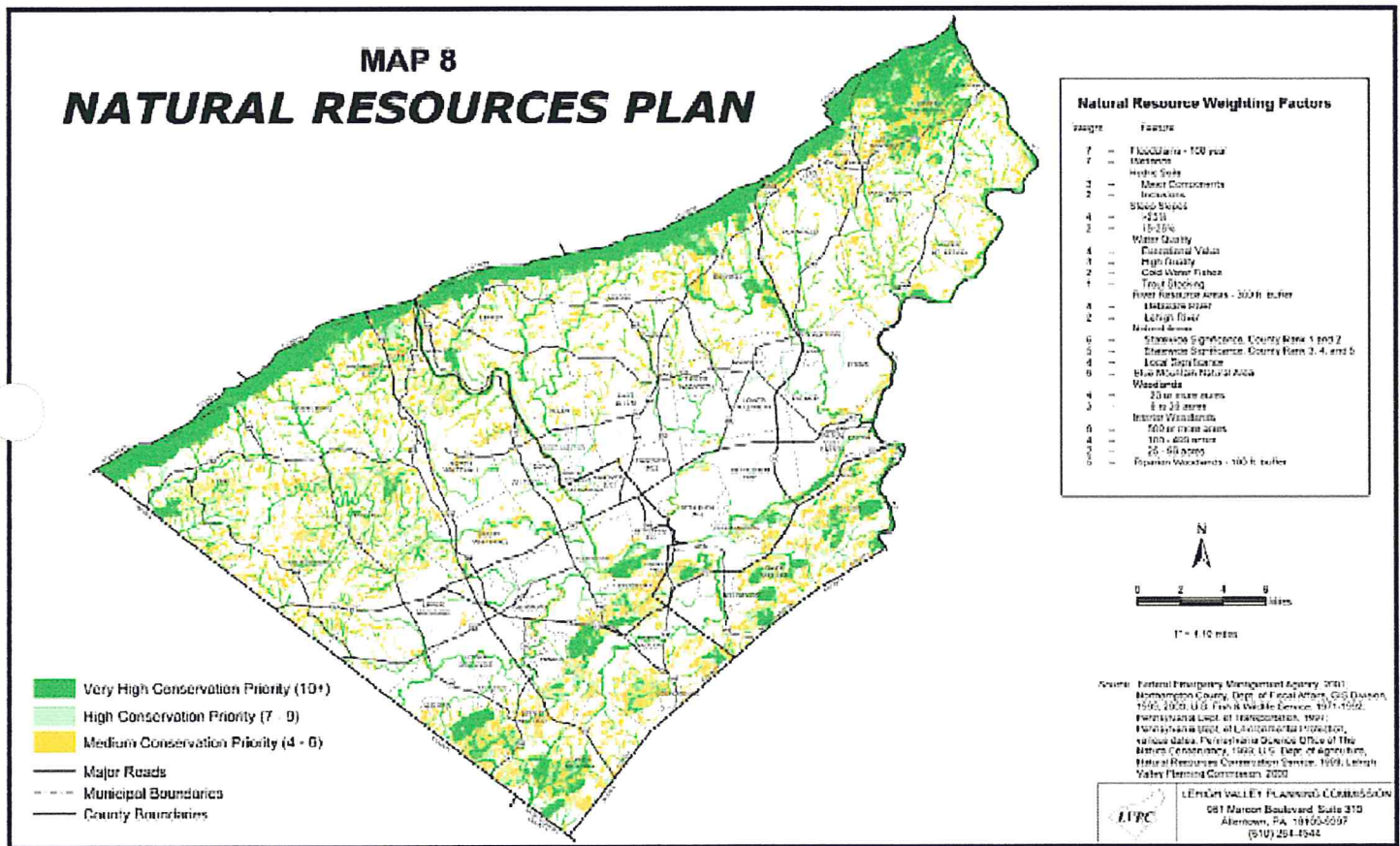
The recently adopted *Comprehensive Plan – The Lehigh Valley ... 2030*, developed by the Lehigh Valley Planning Commission (LVPC), deals with the future physical environment of the Lehigh Valley between 2000 and 2030. Contained within the plan is Map 8 - Natural Resources Plan (see below), which is a compilation of natural resource information for the Lehigh Valley, including surface terrain, stream quality, floodplains, wetlands, hydric soils, steep slopes, carbonate geology, woodlands, and important natural areas (NAI sites). Areas were weighed and prioritized to assure that the areas with the greatest combination of important natural resources was given the highest priority for future conservation activities.

The goal for natural resources in the *Comprehensive Plan, the Lehigh Valley ... 2030* is to protect and preserve top priority natural resources in the Lehigh Valley, and includes the policies of

- Protect significant, high, and very high priority projects through acquisition or conservation easements;
- Manage county-owned significant natural areas to maintain the health and quality of the site and to regulate public access.
- Where appropriate consider natural areas in park and recreation plans.
- Support county funding raised by bond issues or other sources for the conservation of natural resources; and
- Advocate conservation design techniques and transferable development rights programs to conserve natural resources.

Implementation of these policies include:

- Conduct research on significant natural areas, based on state, federal and local agency listings of species and sites;
- During subdivision, land development, and Act 537 reviews, LVPC staff will comment on potential impact of proposals on significant, high, and very high priority projects.
- During review of municipal comprehensive plans or park and open space plans, the LVPC will encourage officials to include information on significant, high, and very high priority natural areas and will recommend policies for protecting these sites.
- Collaborate with conservation organizations in the preservation of important natural resources in the Lehigh Valley.



The LVPC Comprehensive Plan - Natural Resources Plan (Map 8 above) served as a checkpoint for the *Recommended Conservation Lands Map* for Lower Mount Bethel Township. Both maps serve as the basis for natural resource preservation in Lower Mount Bethel Township, and identify a network of open space and greenways for conservation throughout the Township and surrounding municipalities. Natural systems do not follow parcel boundaries, so these maps do not delineate parcels for land acquisition. Instead, they outline and connect these natural systems based on their organic boundaries and further serves to inform the Township and landowners of natural systems on a particular site and that site's connection to a larger green network.

This map indicates that the areas of Very High Conservation Priority follow the Delaware River and its tributaries. The High Conservation areas are adjacent to the tributaries and represent a small portion of the identified conservation areas. The Medium Conservation areas include the NAI sites and the very steep slopes (over 25%). Currently, there are no conservation easements protecting natural resources in the Township; however, some of the parks and protected farmland do include protection of natural resources within the designated conservation areas. The Township's Zoning Ordinance contains a natural resource overlay district which requires a larger minimum lot size for steep slopes and water courses.

Existing Protected Lands

The initial step in preparing the *Recommended Conservation Lands Map* requires identification of existing protected lands in Lower Mount Bethel Township. Township, county, and privately owned lands which are secured open spaces have been identified. Lower Mount Bethel Township currently has 1.6% of the Township acreage designated for park and recreational use.

Naturally and Publicly Constrained Lands

The *Naturally and Publicly Constrained Lands Map* locates natural areas, including steep slopes (over 25%), quarries, wetlands, floodplains, and flood prone soils, considered unbuildable and which currently restrict development.

Natural Resource Lands with Development Potential

The *Natural Resource Lands with Development Potential Map* identifies future possible lands for open space preservation, based on steep slopes of 8-15%, 8-25% and 15-25%, soils (prime farmland), flood prone areas, riparian buffers of 200' (100' each side of a waterway), and NAI sites. Privately and publicly owned park and recreation areas are included on the map to set up a framework for potential greenways and trails.

Recommended Conservation Lands

The *Recommended Conservation Lands Map* combines data from the previously mentioned plans to create a greenway network of natural systems throughout the Township. This map can be used as the foundation for the creation of an official map.

Growth Management

As projected by LVPC population statistics, the Township will grow by 5% between 2000 and 2010.

Growing Greener

First released in 1996, *Growing Greener* became a statewide conservation planning initiative designed to guide local municipalities in managing growth. The \$625 million bond, entitled *Growing Greener II*, which passed in the spring of 2005, will provide funding to

- Clean up rivers and streams affected by runoff from abandoned mines and other pollution, restoring these waters to full use for our communities and our businesses, as well as anglers and boaters;

be created amongst conservation developments. Establishing a dispersal corridor and avoiding fragmentation will substantially increase the potential for species survival by maintaining gene flow within the populations.

The Recommended Conservation Lands Map and the *Conservation by Design* approach allow municipalities to more effectively plan for the developments of the future while ensuring more livable communities and natural-resource conservation. The Township may consider requiring conservation design on parcels identified on the Map of Potential Conservation Lands to ensure future greenway connectivity.

Official Map

As a way of initiating smarter growth, municipalities can help protect areas of natural and scenic significance through use of an official map ordinance. The map can serve as a tool to determine which properties should be acquired and preserved or to designate areas in need of public improvements. The official map allows a municipality to keep private land for future public purposes. It does not influence land ownership or the sale of property; however, if a landowner applies for a building permit on a parcel included in the official map ordinance, the township may delay the permit for a year to collaborate acquisition of the property or revise the development plans. Also, the official map has priority over succeeding land development plan applications submitted to raise the value of land in hopes of a taking of condemnation.

The official map should contain standard map features such as utilities, future road connections, and road widenings. Wellhead protection areas, parks, playgrounds and other public sites can also be included. Environmental features to be protected by ordinances, such as critical natural areas and riparian woodlands, should be incorporated as well. Features identified are encouraged to exhibit a correlation with water quality. The official map should be created by a Geographic Information System software professional with assistance from the township supervisors, engineers, manager, recreation board, and/or Environmental Advisory Committee. The key to developing an official map is flexibility. It will not be feasible to completely avoid all impacts; the objective is to minimize as much degradation as possible. Mitigation measures should be allowed for, such as replanting a woodland area of equal or greater size in another location.

The official map requires a formal adoption process, as it is an ordinance under the PA Municipalities Planning Code. The governing body must adopt the official map by municipal ordinance, following public notice and a public hearing, and see that once adopted that the document is recorded at the County Recorder of Deeds. Further ordinance work may be needed to support the implementation of what the map displays and to coordinate and revise older ordinances. One year from the time of the plan submittal is given to the township to establish a means for protecting the identified resource.

Conservation Easements

Sometimes also referred to as a conservation agreement, conservation easements are tools that help protect environmental areas, farmlands, woodlands, meadows, riparian corridors, greenways, and scenic vistas into perpetuity. A conservation easement is a legal agreement between a landowner and a land trust (a private, non-profit conservation organization) or government agency that permanently limits a property's uses, usually development, in order to

- Strengthen Pennsylvania's boroughs, towns, and cities by preparing for reuse contaminated industrial sites known as "brownfields" - an effort that improves the environment and creates jobs;
- Protect working farms and preserve natural areas and open spaces while making improvements to state parks and fish and game properties;
- Direct funds to revitalize Pennsylvania's towns by investing in community park and riverfront restoration, preserving historic properties, housing and mixed-use development and offering incentives to promote "smart growth" planning; and
- Support investments in energy production to promote diversification, including funding for wind farms, solar cells and alternative fuels, promoting the reuse of coal waste and encouraging reductions in carbon emissions.

Conservation Planning

This innovative land-development method, called *Growing Greener: Conservation by Design* is receiving attention from planners, developers, conservationists, government officials, and homebuyers. Utilizing state grants, the Natural Lands Trust in Media, Pennsylvania, developed a four-step process, which yields a livable community with open-space preservation, natural-resource conservation, and attractive, extremely marketable property. (For more information, go to www.natlands.org .)

Unlike conventional residential development, the first step with *Conservation by Design* is to:

- 1) "Read the land," inventory the special natural assets, and set these areas aside for open space. This open space supplements the areas that are set aside as unbuildable (wetlands, floodplains, and steep slopes). The property's characteristics determine if the open space could be neighborhood squares, commons, greens, playing fields, greenway trails, farmland, meadows, and/or forest preserves;
- 2) Position the homes to take full advantage of the natural assets;
- 3) "Connect the dots" between the homes with streets and walking trails; and
- 4) Draw in the building lot lines. Benefits of this approach for developer, the homebuyer, and, the municipality include shorter streets, sewer, and water lines, which saves money for all. Additionally, the reduced front-yard setback requirements create larger, more usable backyard areas, and the single-loaded streets (homes on one side of the street only) provide unobstructed views of protected natural features and open space.

The goal of Conservation by Design is to set aside a minimum of 50% of the development for shared open space, while the smaller building lots allow the developer to achieve the same number of homes as a conventional design would yield. The open space is permanently protected with a conservation easement, which is monitored and/or maintained by the local conservancy, municipality, or homeowners' association using funds collected and put in escrow in advance from the developer. Communities interested in permitting these types of developments need to update their land-use ordinances to allow or even encourage this preferred development review and style. Ordinances can be adopted that discourage conventional large-lot developments and reward conservation developments.

It is also important to assess the location of open space within adjacent developments for establishing a connected greenway. Through careful planning, a contiguous wildlife corridor can

protect its conservation values. Landowners have rights associated with their property (i.e., to build structures, harvest timber, and cultivate fields) and each right has a monetary value. Conservation agreements remove specific activities by selling or donating those rights in order to restrict future occurrence of these activities on a particular parcel. As examples, both a conservation easement designed to protect wildlife habitat and an easement on a farm designed to perpetuate continued farming would prohibit commercial and/or residential development. The conservation easement terms remain in effect for current and future owners of the land into perpetuity.

Also used for land protection, deed restrictions are placed on privately owned lands, often when the property passes to a new owner. Deed restrictions document particular limitations as to the land development or use on the deed itself. There is no specific organization responsible for monitoring and enforcing deed restrictions, unlike conservation agreements.

Act 319

'Clean and Green' or Act 319 provides a method for landowners who makes use of their land in one of three qualifying uses to have the value of the land for property tax assessment purposes determined based on its use rather than based on its fair market value. This approach to determining the assessed valuation often yields a lower value than fair market value and a lower tax bill results as the tax millage rate is applied to a lower assessed value. This enrollment protects the property further because rollback taxes for seven years would be due immediately should the qualifying use change.

Local Funding Initiatives

Local Municipalities have the ability to raise funds for purchase of land or conservation easements through self-taxing actions. The municipality or other local entity could sponsor a vote for approval of residents to agree to an additional tax millage dedicated to an open space fund. Typically, this is an additional percentage on the Earned Income Tax (E.I.T.) or Real Estate tax already imposed by the Township. Those funds can be used for purchase of land or easements, as a pledge of local match for local matches for county, state, and/or federal grants, or as repayment for bonds.

The Township recently voted to increase its E.I.T. to raise money for the purchase of open space. Similar self-taxing for open space acquisition has occurred in nearby Williams Township.

Resource Protection Funding Sources

Transportation Grants

The Pennsylvania Department of Transportation offers Enhancement grants for projects pertaining to pedestrian and bicycle trails, archaeology, historic preservation, landscape beautification, and similar projects all relating to surface transportation. These grants are offered bi-annually.

State and Federal Grants

A list of state and federal grants is summarized in the appendix of this report. The reader should understand that grant application processes, amounts, and deadlines change annually and the descriptions should be used as a guide to locate up-to-date information.

Northampton County 21st Century Open Space Initiative, Open Space and Natural Space Program Under Northampton County's open space initiative, \$14 million has been allotted to an Open Space and Natural Areas Program. The purpose of the program is to protect the county's important natural features by assisting municipalities and nonprofit organizations acquire and permanently preserve land where these resources are found. The Open Space and Natural Areas Program is a competitive grant program. A grant application submitted by a municipality, school district or nonprofit organization will be compared to other applications using a series of application evaluation criteria developed for the program. The most important criterion in evaluating an application is the importance of a property's natural features. Other important criteria range from the applicant's strategy for managing the property's natural resources after acquisition to the site's potential for development.

10. Facilities and Equipment Maintenance, Security and Accessibility

Maintenance Program

The Township's Road Master supervises park maintenance work. A part-time worker on the Township road crew cuts the grass at park areas and cleans the Centerfield building once each week. Other Maintenance work is scheduled for completion by staff or volunteers when they are available. Staff and volunteers decide what work to do based on their past experience, current requests received, and personal observations. There is no listing of specific routine tasks that need to be accomplished. There are also no written standards of care established that describe how park areas and facilities are to be maintained or schedules for task completion. The level of maintenance is left up to the employee or volunteer who is assigned the work. The overall level of care observed during site inspections was average.

Maintenance Equipment

Equipment owned by the Township for park maintenance is part of the inventory of the road department. The Township has the basic equipment needed to perform routine maintenance functions; it is reported to be in good condition. Township staff completes routine repairs and preventative maintenance; larger repairs are sent out. There is no formal replacement schedule for major equipment. The Township annually reviews equipment needs as part of the budget process.

The Township Municipal Garage and Salt and Cinder shed is located at North Delaware Drive. The Township acquired the existing garage structure in 1990 (100x60) and added newly built cinder and fuel sheds. The facility is staffed by two road department and one general maintenance worker. The municipality's vehicles stored at the Garage are:

<u>Vehicle</u>	<u>Year Manufactured</u>
Mack Dump Truck	1998
GMC Dump Truck	1986
GMC Dump Truck	1988
Trailer	1989
John Deere Backhoe	2001
Chipper	2003
Roller	2003

Tar Buggy
Snow Plow
John Deere Tractor – brush mower
2 mowers (John Deere)

2003

The Township also has assorted garden tools housed at the garage and has an additional International Truck on order. Garbage from Township parks is collected and brought to a dumpster at this facility. Lower Mount Bethel has no formal agreements or informal arrangements with neighboring communities for shared or loaned equipment

Safety and Security

Park areas and recreation facilities need a variety of safety and security measures to protect park visitors and the resources themselves. Current safety and security issues and comments are:

- The Township uses fencing around baseball fields to provide player and spectator safety.
- General area, drive, and parking lot lights are provided at the Centerfield School site.
- No alarm or surveillance systems are in use.
- Vandalism is not reported to be a problem. Incidents are infrequent and minor in terms of repair expense. The Pennsylvania State Police respond to calls and follow up on reported incidents of vandalism at park sites.
- The Township maintains insurance for all of its park areas and recreation facilities.
- Rules and Regulations are not posted at most of the park sites. Rules and regulations must be passed by ordinance to provide police with enforceable regulations in the event they are needed.
- The Township has no playground safety inspection program. The most important way to improve play area safety is through a routine inspection and maintenance program. The playground environment is constantly changing due to weather conditions and participant use. Regular inspections are necessary to insure that these much used facilities are safe for the Township's children.

Accessibility

The Americans with Disabilities Act of 1990 (ADA) specifies that reasonable accommodations must be provided to people with disabilities who are interested in participating in community recreation programs. The ADA also requires all public facilities to be accessible to all people. This includes the following: barrier-free entries and exits, barrier-free access to seating areas, service areas such as restrooms and concession stands, exits near vehicle parking spaces, designated parking spots for users with physical disabilities, and accessible drinking fountains. The ADA was written to guarantee equal opportunities for persons with disabilities. Under the ADA, if any new park areas or recreation facilities are constructed, or any alterations are made to existing areas and facilities, they must be made accessible. Also, the Township must ensure that persons with disabilities are not excluded from services because existing park areas and recreation facilities are inaccessible. It is the responsibility of the Recreation Board to ensure that all of its services are accessible to everyone in the community. The park areas and recreation facilities are currently not accessible.

Park Maintenance and Security Recommendations

- Schedule Maintenance Staff training for

- Ball field maintenance
- Pesticide/herbicide application
- Play equipment safety
- Develop a formalized maintenance plan
- Facility renovation plans
 - Ensure facility compliance with ADA and consumer safety guidelines

11. Recreational Programming

Recreation incorporates a unique combination of social, physical, biological, and managerial characteristics for each individual, and thus, has personal value. Preferences range from loosely structured activities to modern and intricately designed, large-group activities, and occur individually, with pairs, or small and large groups. In the recent statewide recreation plan for 2004-2008 developed by the Pa. Dept. of Conservation and Natural Resources (DNCR), it is observed that Pennsylvanians largely recreate individually or in small groups. Both bicycling and horseback riding have declined in the number of participants since 1990. Bird/wildlife watching has experienced the greatest increase in number of participants since 1990 with nearly

TABLE 11.1 PARTICIPATION RATES FOR THE TEN MOST POPULAR ACTIVITIES FOR DCNR PLANNING REGION 2	
Walking	65.2
Sightseeing	54.7
Swimming	52.7
View Nature	52.7
Visit Wild Areas	46.0
Picnicking	40.0
Nature Walks	36.4
Hiking	31.8
Fishing	30.2
Jogging	27.2

one million more participants. Bicycle riding remains a popular activity for children and young adults until age 17, but from age 18 and above, the popularity of bicycling declines. All ages enjoy walking and swimming. The trends indicate a greater interest in lower-impact activities such as walking and wildlife observation rather than more intense or higher-impact activities such as competitive sports or motor sports.

The DCNR Recreation Plan for 2004-2008 also documented that almost half of Pennsylvanians felt that their outdoor recreation activities would increase over the next five years. A quarter felt that their indoor recreation activities would increase during the same period. Younger, better educated, and higher-income people were more likely to anticipate a recreation increase. Facilities managed by local government accounted for the largest portion (43%) of recreation activity. State-run facilities accounted for 20% of recreation activity, federal 10%, and private 28%. People with higher incomes and more education were more likely to use private facilities (DCNR, 2004).

Northampton, Lehigh, and Berks counties comprise Region 2. Table 11.1 lists participation rates for the ten most popular activities in this region. Viewing nature and wildlife account for four of the top ten outdoor activities. Notably missing from this list is bicycling; however, this does not necessarily hold true for Lehigh County and/or the Lehigh Valley due to the Aerodrome and many mountain biking organizations.

As with park and recreation acreage, the National Recreation Park Association provides guidelines to help determine the need for specific recreation facilities, and they, too, are based on population. Communities vary, and the recreation needs and desires of residents vary as well.

In addition to Township-owned facilities, recreational areas located at county parks and schools may be available for use by Township residents, although these facilities may not be available at the times the Township residents need them. School functions, activities of school-related groups, and requests for use by other organizations compete for the use of many of the facilities, especially at the junior high and high schools. County parks accommodate demand from a larger service area than Lower Mount Bethel Township, which creates more competition. To reflect limited availability, one-third of the facilities at county, high school, and junior high school sites are included in this analysis. All elementary school facilities are included due to their greater availability.

Township Recreation Facilities

Potential for Expansion of Park Land and Recreation Facilities

Eastern Industries owns land adjacent to two Township park sites, the Centerfield School, and Kiefer Field. It also owns the Martins Creek Ballfield. The potential exists to negotiate a lease for this ball field and to acquire property from Eastern Industries to add to the acreage of the other two sites. Another possibility for the Township is to work with St. Rocco's Roman Catholic Church to develop the festival property into a small neighborhood park. The Pennsylvania Fish and Boat Commission also owns six acres of riverfront property adjacent to the 27-acre sports complex owned by the Township. A cooperative venture to create a boat access area and share the parking lot on the Township property is being discussed. The Fish and Boat Commission would lease the acreage surrounding the river access area to the Township. The Delaware and Lehigh National Heritage Corridor is also interested in working with the Township and the PA Fish Commission at the Sports Complex to create another access point in the Township for the Water Trail.

Recreation Programs

Providing park land and recreation facilities are important municipal functions. Another equally important function is the provision of recreation programs. Recreation programs build self-esteem, strong families, and a sense of community by providing positive and meaningful experiences and events.

Several groups exist in Lower Mount Bethel Township whose purpose is solely or partially to provide recreation opportunities to their members or to the public. Township government is one of these providers. The Township Recreation Board merged with the former youth sports association and now organizes and conducts successful soccer, baseball, softball, and basketball team programs for Township boys and girls. This coordination of all youth sports activities is a major plus for residents. Township teams play in various area leagues such as the Warren County (NJ) Little League, Easton Community Basketball, and Soccer Leagues, and Eastern Lehigh Valley Softball League.

The Lower Mount Bethel Township Senior Center is housed in the basement of the Centerfield School. Open weekdays for those 60 years of age and up, the center is a place to socialize, enjoy lunch, and participate in recreation and educational programs. It is partially funded by the Northampton County Area Agency on Aging. Township residents receive free van transportation to the center if they need it.

PPL hosts monthly environmental education programs at its Martins Creek Environmental Preserve. The Pennsylvania Fish and Boat Commission also conducts free workshops at the preserve on boating safety and fishing. The Martins Creek Civic Association and the Lioness Club host community special events like the Easter Egg Hunt, Memorial Day Parade, and Tree Lighting Ceremony. A summer festival is held at St. Rocco's Roman Catholic Church that attracts large crowds. A local history museum, the Hunter-Martin Museum, hosts lectures and is known for its genealogy resources.

Both the Easton Area and Bangor School Districts sponsor adult education programs on subjects such as computer software, woodworking, ceramics, and digital cameras. Programs are held at each high school, neither of which is located in the Township. The Minis Trail Boy Scout Council and the Great Valley Girl Scout Council host troops that serve Township children. The Lower Mount Bethel Rod and Gun Club has an active membership that enjoys outdoor recreation pursuits.

The Township needs to establish program goals. Since it is impossible to go from the current level of program offerings to hosting recreational activities for every age group in every area of programming within several months or even years, the Township needs to determine their program priorities. Since there is no full-time recreation staff, contracting program services is the most viable option for the Township. Using program vendors allows the Township to offer various recreational programs without a tremendous time commitment. The Township could set the logistics of the programs, advertise them, and accept registrations, and the program vendor could provide the supplies, equipment, instructors, and course curriculums. Examples of program vendors include the United States Tennis Association, UK Elite Soccer, Mad Science of the Lehigh Valley and the Penn State Cooperative Extension Office.

Recreation Program Analysis

- The Township has no duplication of recreation programs.
- There is no municipal recreation program staff.
- The Recreation Board serves as an umbrella organization for youth sports, which also improves communication to parents and the coordination of volunteers and facilities.
- As the Township's major recreation program provider, the Recreation Board should try to integrate all other providers into a comprehensive system. Often, joint sponsorship of programs and shared use of facilities are the best methods for offering specific recreation activities. Collaborative efforts should be actively pursued.
- The Township allows those not living within its boundaries to participate in its programs, and thus there is potential for recreation programs to expand regionally.
- One of the major limitations of a recreation program for the Township is a lack of indoor recreation facilities. Usually schools are important sources of indoor facilities; however, there are no schools located in the municipality.

- Except for youth sports and older adults who choose to attend the senior center, the citizens of the Township lack recreation programs. There are areas where expanded recreation programming is needed. A major plus for the Township is having the Centerfield School building as an indoor site for programs.

Recreation Programs Recommendations

- Establish program goals.
- Use contractual services to offer programs.
- Develop cooperative relationships with area recreation providers.

TABLE 11.2				
LOWER MOUNT BETHEL TOWNSHIP - SUGGESTED PROGRAMS/ACTIVITIES				
Spring	Summer	Fall	Winter	Programs/Activities
X	X	X	X	Information displays on Township recreation, youth, and senior services
X	X	X	X	Festivals in the Parks
X	X	X	X	Exercise Safely
X	X	X	X	Informational displays on health, nutrition, preventable diseases
X	X	X	X	Free blood pressure and fat composition booths
X	X	X	X	Be kind to your joints (stretching, injuries and treatment)
X	X	X		River walk
X	X			Wildflowers and birds
X		X		Walk/run - designated cause and/or length
X		X		Coaches Clinic – preventing sports injuries and putting together a first aid kit for team sports
X		X		Helmet check and sales of helmets
X		X		Bicycle safety (turn signals, direction of travel on streets)
X		X		Inflate tires, check brakes
X		X		Include BIKE Works (donations of used bicycles for youth services)
X		X		Skateboard demonstration and safety
	X			Children’s activities (i.e., make a birdhouse, plant a sunflower playhouse)
	X			Fishing derby
	X			Water safety
	X			Bicycle Rodeo
		X		Walk safely to School
		X	X	Historic Lower Mount Bethel Township
			X	Climbing wall
			X	Ski and Snow board safety
			X	Cross-county skiing
			X	Ice skating or sledding in parks

Chapter 12 - Financing

Budget Process

The Township finances its park areas, recreation facilities, and programs using the General Fund and Capital Fund. Most of the revenues and expenses used for the operation of the Township pass through the General Fund. The Capital Fund is utilized for major capital projects. The Township Supervisors prepare a tentative budget in October and adopt the budget no later than December 31 each year. The Recreation Board has its own checking account. All revenue is deposited into and expenses are paid out of this account for recreation programs. Fees are charged to participants to take part in Recreation Board programs. Non-residents pay \$10 extra for each program. The Township reimburses the Recreation Board for its prior year net expenses.

The Township has enacted a mandatory dedication ordinance to assist with the capital expenses of creating park areas and recreation facilities to serve the future residents of new housing developments. The ordinance requires that \$1,500 is collected from developers/sub-dividers for each new residential lot approved in the Township. Those funds are placed in a special maintenance fund. The Recreation Board must request use of those funds from the Board of Supervisors. Currently there is \$6,000 in the Special Maintenance Fund.

Five-Year Comparison of Tax Support

Table 12.1 contains a five-year summary of General Fund revenue activity for the Township. Figures for 2000 through 2003 are actual year-end totals, while the 2004 numbers are the current budgeted figures. The Township General Fund receives a little revenue from picnic pavilion rentals and rental of the Centerfield School building for parks and recreation. Only 0.7% of its General Fund expense budget is spent on parks and recreation. The income and expenses for the programs offered by the Recreation Board are handled in a separate bank account. The Township reimburses the Recreation Board for its net expenses at approximately \$6,000 each year.

Table 12.2 includes a five-year summary of expenditure activity and Table 12.3 summarizes the Township Capital Fund expense activities. Both the general fund and capital fund are used to fund recreation activities and park improvements and maintenance.

Table 12.3 compares 2004 funding of parks and recreation programs in nearby Class 2 Townships. It provides a "snapshot" of parks funding, which may be variable over the years due to one time capital projects that may be underway.

Table 12.1 General Fund Revenue Activity Summary

General Fund	Actual 2000	Actual 2001	Actual 2002	Actual 2003	Budget 2004	% of Budget 2004
Revenue						
Real Estate Taxes	\$231,149	\$225,859	\$287,283	\$258,728	\$369,000	45.0%
Occupation Taxes	\$6,740	\$5,778	\$6,605	\$3,516	\$6,500	0.8%

Earned Income Taxes	\$328,962	\$297,471	\$323,473	\$354,905	\$329,000	40.2%
Interest	\$14,781	\$7,667	\$1,725	\$1,431	\$1,000	0.1%
Fees, Licenses, Permits	\$78,106	\$80,352	\$90,204	\$67,305	\$97,125	11.8%
Miscellaneous	\$8,478	\$7,997	\$6,858	\$1,107	\$1,000	0.1%
Transfer	\$0	\$0	\$0	\$1,500	\$16,150	2.0%
Total	\$668,216	\$625,124	\$716,148	\$688,492	\$819,775	100%

Table 12.2 General Fund Expenditure Activity Summary

General Fund Expenditures	Actual 2000	Actual 2001	Actual 2002	Actual 2003	Actual 2004
General	\$269,523	\$241,130	\$268,867	\$282,471	\$376,550*
Government					
Public Safety	\$73,655	\$56,409	\$58,055	\$59,342	\$59,150*
Planning and Zoning	\$55,396	\$83,186	\$66,828	\$82,250	\$211,075*
Roads	\$168,286	\$188,131	\$141,671	\$171,3893	\$162,400
Recreation	\$18,846	\$6,845	\$4,5448	\$2,533	\$6,100*
Misc.	\$2,506	\$3,213	\$7,494	\$5,562	\$4,500*
Transfer	\$25,000	\$0	\$135,000	\$0	\$0
Total	\$613,212	\$578,913	\$682,423	\$603,562	\$819,775*

Table 12.3 Capital Fund Expenditure Activities

Capital Fund	Actual 2002	Actual 2003
Parks and Recreation	\$113,489	\$17,210 (8.3%)
Expenses		
Other	\$153,299	\$190,522
Expenses	(57.5%)	(91.7%)
Total	\$266,788	\$207,732

In addition to the annual appropriation from the Township general fund, a combination of traditional and more creative financing methods are needed to put this Plan into action. The Township citizens have recently passed a referendum to use additional earned income tax proceeds to purchase open space.

Grants and Outside Funding

Northampton County has grant funds available to the Township through the County Council's Open Space initiative. The funding flows from municipal bond proceeds to be utilized in one of three ways. The first is a Municipal Park Development Grant, in which the County has allocated a set amount of funding for each municipality based on current population. Lower Mount Bethel Township has been allocated \$81,889. This grant requires a 50% match from the Township. The second funding option is the Open Space and Natural Areas Grant which is competitive and based on accumulated points for conservation priorities set in the Lehigh Valley Planning Commission's Natural Features Map. The grant funding may pay for up to 50% of the purchase price for land or conservations easements, with a ceiling of \$300,000. The last funding track is

to supplement the existing Northampton County Farmland Preservation program and provide more matching funds for State funding in order to purchase additional agricultural easements.

Pennsylvania has its own funding source for local government recreation and parks projects under the Department of Conservation and Natural Resources (DCNR) Community Conservation Partnerships Program. The program is intended to assist local municipalities with technical assistance, funding for planning or development of recreation facilities. Through the Community Conservation Partnerships Program, several funding sources and grant programs are “bundled” by DCNR and used to fund local projects. The grants are competitive, and not all applicants are selected for funding. Due to the Township’s population, which is less than 5000, the Township is eligible for a Small Communities Grant. The grant requires a 20% local match, which may include donated materials or labor. The grant applications are classified into four project types:

1. Planning grants to fund local comprehensive park recreation and open space plans, feasibility studies, master site plans, trails planning, rivers conservation plans and greenways plans;
2. Technical Assistance Grants to provide education and training to staff or recreation boards, study specific problems using a peer experienced park and recreation professions and circuit rider approach;
3. Acquisition Grant Project to assist in the purchase of land for parks, recreation, conservation, trails or river conservation projects; and
4. Development Grant Projects to assist in funding park rehabilitation or development, greenway and trail construction, rails to trails and river conservation projects.

For additional information, the DCNR website, at www.dcnr.state.pa.us features a publication entitled *Financing Recreation and Parks*.

The Pennsylvania Rails-to-Trails Program Grants provide funds to develop and maintain recreation trails and trail related facilities for motorized and non motorized recreation trail use. Match requirements are 80% grant money, up to a maximum of \$100,000, and 20% project applicant match. Acquisition projects require a 50/50 match. Funding is provided through the Federal Highway Administration and the Transportation Equity Act for the 21st Century.

Pennsylvania Department of Environmental Protection (PA DEP) is also a potential funding source through Growing Greener Program grants for environmental protection projects such as preserving farmland, preserving open space, acid mine clean up, and watershed restoration.

Pennsylvania’s Department of Community and Economic Development (DCED) utilizes a single application for assistance; a one step online form that allows a community to apply simultaneously for one or more of Pennsylvania’s community and economic development financial assistance programs. A comprehensive list of community resources is provided to assist in identifying the best financing program to meet the Township’s need on their website, www.newpa.com. Depending on requirements for economic development or income criteria, DCED grant funds may be combined with other grant fund sources to finance recreation projects, but cannot be used for the local match.

The Pennsylvania Recreation and Park Society (PRPS), founded in 1935, is the principal organization promoting quality recreation and park opportunities for all citizens of the

Commonwealth through education, training, technical assistance and other support to local, county, state and federal recreation and park providers. RecTAP, the Recreation and Parks Technical Assistance Program, is designed to help organizations get expert advice with recreation and park problems. RecTAP matches recreation and park professionals with Pennsylvania municipalities to provide advice and assistance on specific issues that can be addressed within a limited amount of time. RecTAP is a state-wide technical assistance service focused on helping municipal recreation and park agencies that do not have the in-house expertise or time to resolve specific questions or problems. RecTAP's team of professionals has extensive knowledge and experience in recreation and parks at all levels of government. Grants have a maximum value of \$1,500. No matching funds are required. For more information, visit www.prps.org.

The Pennsylvania Council on the Arts provides a number of funding opportunities for local governments. Arts in Education, Local Government, Preserving Diverse Cultures and Professional Development and Technical Assistance grants are available to local communities. Pennsylvania Partners in the Arts (PPA) is a program of local grants of \$3,000-\$5,000, which is paired with a local partner in each County. For information on funding arts related recreation programs visit www.pacouncilonthearts.org.

The Center for Rural Pennsylvania has a comprehensive list of state, federal and private funding possibilities for rural communities entitled *The Rural Access Guide* that is available online at www.ruralpa.org. A chart listing Federal, State, and foundation grants sources is located in the Appendices.

Funding Recommendations

- Schedule DCNR “Financing Municipal Parks & Recreation” training seminar
 - 3 hr. workshop developed by DCNR and PRPS
 - Provided through DCNR & PSATS
 - Trainer can come to your location
 - Nominal fee
- Pursue RecTAP funding through PRPS for management projects
 - Training of Committee
 - Maintenance Staff training
 - Development of formalized maintenance program
 - Facility renovation plans
- Apply for Northampton County’s Municipal Park Development Grant and leverage funds to match DCNR funding for a development grant to upgrade and improve existing municipal parks.
- Apply for Northampton County’s Open Space and Natural Areas Grant to acquire and/or place a conservation easement on very high or high priority conservation areas indicated on the Lehigh Valley Planning Commission’s Natural Resources map (See Map 8 above.).

Chapter 13 – Suggested Implementation Measures RECOMMENDED IMPLEMENTATION SCHEDULE

Recommendations

Entity
Responsible

Immediate Actions (with in 1 year)

Training and Technical Support

- | | |
|---|--|
| <ol style="list-style-type: none"> 1. Join the Pennsylvania Recreation & Park Society (PRPS). | Recreation Board (Rec Board')
Rec Board |
| <ol style="list-style-type: none"> 2. Schedule a DCNR Park and Recreation Committee Training Seminar training seminar for the Recreation Board. | Rec Board |
| <ol style="list-style-type: none"> 3. Set up a meeting with the DCNR Regional Recreation Advisor to visit the Township, tour the park areas, and meet with the Recreation Board, Township elected officials, and staff to discuss grant project funding. | Rec Board |
| <ol style="list-style-type: none"> 4. Pursue RecTAP funding for management projects to train the Recreation Board, maintenance staff. | Rec Board,
Township |

Organization and Administration

- | | |
|--|---|
| <ol style="list-style-type: none"> 1. Adopt a Mission Statement for the Recreation Board. | Rec Board,
Board of Supervisors (Supervisors') |
| <ol style="list-style-type: none"> 2. Establish goals for the recreation program to expand recreation programming beyond youth sports | Rec Board
Supervisors |
| <ol style="list-style-type: none"> 3. Update the mandatory dedication ordinance to increase the fee-in-lieu-of dollar amount and land dedication acreage amount to reflect current land value. | Supervisors/
Twp. Mgr. |
| <ol style="list-style-type: none"> 4. Develop a budget process that includes the involvement of the Recreation Board in requesting the operating and capital expense funding. Develop a budget for this account yearly, with revenue and expenses budgeted separately. Have the account audited with all other Township accounts. | Rec Board,
(Environmental Advisory Council (EAC))
EAC |
| <ol style="list-style-type: none"> 5. Pursue the Northampton County Municipal Park Development and Open Space acquisition Grants, that are part of the County open space initiative. | Rec Board,
(Environmental Advisory Council (EAC))
EAC |
| <ol style="list-style-type: none"> 6. Identify strategies for use of Earned Income Tax funds with a high priority for Open Space acquisition. | Rec Board,
(Environmental Advisory Council (EAC))
EAC |

7. Improve the Township website with a link to the Recreation Board that includes information on parks and recreation opportunities as well as targeted conservation areas. Township, Rec Board

Implementation and Improvements

1. Ensure effective communication with the Board of Supervisors by appointing a member to the Board of Supervisors to the Recreation Board. Supervisors

Township

2. Install benches, recycling receptacles at Kiefer Field. Township

Township

3. Check play equipment for conformity with playground safety standards at Centerfield School site, especially the safety surface and fall zone area surrounding swings and climbers. Refurbish bench and replace signs on tennis courts. All

All

4. Complete the master plan for the Lower Mount Bethel Township Recreation Complex which includes: a site plan, development costs, funding sources; operations and maintenance plan, accessible trails connecting facilities, PPL trails parking, and support facilities; and permanent restroom facilities. EAC

EAC

5. Pursue a partnership with PPL to connect trails with the Sports Complex and also investigate construction of joint facilities. EAC

EAC

6. Participate in the Martins- Jacoby Watershed Association - watershed plan and audit. EAC

7. Work with Northampton County to continue purchase of conservation and agricultural easements. Coordinate information activities and grant applications with the EAC. EAC

8. Substitute non-native plants with native plants in planting plans and construction whenever possible. All

EAC

All

Short Term Actions (1-5years)

Training and Technical Support

1. Schedule DCNR "Financing Municipal Parks & Recreation" training seminar for the Recreation Board. Rec Board

Rec Board

Organization and Administration

1. Develop written rental/lease agreements for facility usage. Supervisors

Supervisors

2. Adopt a uniform set of rules and regulations for all Township park areas and install signs at the sites to inform the public and allow police enforcement Township

Township

3. Put an evaluation process in place for each recreation program to get participant feedback. Rec Board

Rec Board

4. Develop a business sponsorship package for businesses to contribute financially towards specific recreation programs, special events, and park projects in return for public recognition. Rec Board

Rec Board

5. Examine the possibility of floating a bond issue or other long term borrowing to pay for capital improvements at the community park/sports complex. Supervisors

Supervisors

- | | |
|--|---------------|
| 6. Establish the standard of maintenance for each park site on an annual calendar for all routine maintenance duties and Schedule the necessary work to correct the deficiencies identified during the site inspections conducted for this Plan. | Township |
| 7. Work with the LMBT Senior Center to offer fitness and wellness programs in the Centerfield School gymnasium. | Rec Board |
| 8. Develop an adopt-a-park program to help with improvements and maintenance to park areas. | Rec Board |
| 9. Work with regional watershed association, State Department of Fish and Game and Trout Unlimited to upgrade stream quality classifications for streams in the Township. | EAC |
| 10. Pursue partnerships for bicycle trails with local agencies; including Wildlands Conservancy. | EAC Rec Board |

Implementation and Improvements

- | | |
|---|-----------|
| 1. Improve Kiefer Field to construct a small pavilion and driveway access to the concession stand. | Township |
| 2. Provide handicapped access to the playground, replace slides, refurbish swings and orbit climber at Centerfield School site. | Township |
| 3. Install picnic areas for individuals and groups, playground equipment and a community center with full size indoor recreation facilities, gym and recreation board offices at the Township Recreation Complex. | Township |
| 4. Provide unified park signage design and installation in all Lower Mt. Bethel Township Parks. | Rec Board |
| 5. Pursue contractual services to offer expanded programs and develop a cooperative relationship with recreation providers. | EAC |
| 6. Purchase strategic properties or place conservation easements on open space, as reflected in the adopted map of potential conservation lands. Acquire key parcels to provide greenway linkage throughout the Township. | EAC |
| 7. Participate in Lower Delaware Wild and Scenic River program for the recommended section of the Delaware Riverfront in the southern portion of Lower Mount Bethel Township and in the Delaware River Green Partnership. | EAC |
| 8. Incorporate recommendations of the Corridor Management plan being developed through the Delaware River Valley Scenic Byways program. | Rec Board |
| 9. Work with the PA Fish and Boat Commission and Northampton County Department of Parks to coordinate and improve river access and recreation activities. | EAC |
| 10. Work with the Delaware and Lehigh National Heritage Corridor to preserve open space and develop trails along the Delaware River. | All |
| 11. Work with the Dept. of Environmental Protection and the Northampton County Conservation District to promote the use of plants in the landscape in general and riparian zones in particular. | All |

Long Term Actions (5 to 15 years)

Training and Technical Support

1. Participate in PRPS training for playground safety inspections.

Organization and Administration

- | | |
|---|-------------|
| 1. Pursue a partnership with the Delaware and Lehigh National Heritage Corridor to develop a water trail access area at the Recreation Complex. | EAC |
| 2. Pursue a partnership with the PA Fish and Boat Commission and Northampton County to annex and improve a boat access area on the property adjacent to the Recreation Complex. | EAC |
| 3. Implement the processing of state police and child abuse background clearances for volunteers and staff as a condition of volunteering or employment. | Rec Board |
| 4. Increase the per capita dollar amount spent on parks and recreation from the Township General Fund. | Supervisors |
| 5. Develop a safety checklist for the park areas and recreation facilities and conduct routine safety inspections on a regular basis. | Township |
| 6. Develop a safety checklist for the park areas and recreation facilities and conduct routine safety inspections on a regular basis. | Rec Board |
| 7. Expand current publicity efforts to make Township residents more aware of park and recreation offerings, as well as those recreation facilities available to Township residents from neighboring communities, private and commercial entities. | EAC |
| 8. Expand awareness of the Natural History of the Delaware River and Region by building on the PPL Outdoor Education Program. | EAC |
| 9. Publicize area bird watching as a means to bringing as means for increasing awareness of the Township's natural resources. | EAC |

Implementation and Improvements

- | | |
|---|---------------------|
| 1. Expand on existing playground equipment and install picnic tables and an accessible path at Kiefer Field. | Township, Rec Board |
| 2. Replace merry-go-rounds as they age, construct skateboard facility, provide pedestrian access from Martin's Creek at the Centerfield School site. | Township |
| 3. Install a band shell for community concerts and events at the Township Recreation Complex. | Township |
| 4. Open the Centerfield School gymnasium for open gym nights during the winter months. | Rec Board |
| 5. Work with Northampton County to continue purchase of conservation and agricultural easements. | EAC |
| 6. Pursue construction of a widened pedestrian walkway on the bridge over Route 611. | Township |
| 7. Amend the zoning ordinances and SALDO to require protection of riparian zones and the use of native plants in the landscaping in general and riparian zones in particular. | Township, EAC |

