



INVENTORY & ANALYSIS



Data Collection & Methodology

In 2020, Lower Providence Township selected the team of Simone Collins Landscape Architecture (SC); Certified Park and Recreational Professional, Patrick Stasio; engineering, environmental, and surveying firm Spotts, Stevens & McCoy (SSM) as the consultants to guide the planning process. The project team also included a Project Committee, comprised of residents, professionals, stakeholders, Township staff and one (1) member from the Board of Supervisors.

Data found within this report was compiled using the best available information. This included Geographic Information System (GIS) data from Lower Providence Township, Montgomery County, Delaware Valley Regional Planning Commission (DVRPC) and Pennsylvania Spatial Data Access (PASDA), which was used to prepare field maps and planning documents consisting of the base aerial photography, municipal boundaries, roadways, parcels, contour lines, and other identifying land features. Other information included previous planning studies, field reconnaissance data, steering committee and public meetings, key person interviews, focus groups, WikiMapping and an online public opinion survey.

Site Reconnaissance

The consultants performed an initial field reconnaissance in July 2020 to inventory, analyze, and document existing conditions of parks, trails, and open space. Additional field reconnaissance was completed as needed to gather further insight for the plan. Field data was recorded by the consultants onto the field maps and photographs were taken for use in the Plan. This information was then used in evaluating planning alternatives in the development of the Plan.

Photo: Eagleville Park

Public Participation

The project was guided by a project study committee that provided critical insight and direction to the consultants in the development of the Plan. The consultants worked with the project committee to review the public participation process, gain clarification of data gathered, and guide the planning process before presenting to the public.

Community input is a critical component of a successful comprehensive plan, so it was important for the project team to hear citizens' observations, needs, and visions, and to incorporate what was learned into the Parks, Recreation and Open Space Plan. The Township placed meeting dates, information from prior meetings, and other relevant information and links on their website and Facebook page.

The public participation process included four public meetings, six committee meetings, four focus group meetings, ten key person interviews, and an online public opinion survey accompanied by WikiMapping, an online interactive mapping tool. Meeting notes and attendance sheets for each meeting, as well as survey results, can be found in the Appendix of this report.





Lower Providence Township is working on a Parks, Recreation & Open Space Plan and would like to know where you want

3 WAYS TO GET INVOLV

Attend a Meeting 🔉

Let your voice be heard. At public meetings we'll discuss the Lower Providence Township Parks, Recreation & Open Space Plan, review progress, and get your feedback. Meetings will be held virtually unless otherwise noted.

Public Meeting #2 will take place Tuesday January 26, 2021 at 7:00pm

 Public Meeting #3 will take place Thursday April 15, 2021 at 7:00pm Join at: https://tinyurl.com/lowerprovid

• <u>Public Meeting #4</u> will take place **Thursday June 24, 2021** at 7:00pm **Join at: https://tinyurl.com/lowerprovidence4**

After joining on the Teams app or website and signing in, you will enter the meeting. For information on accessing the meeting, go to https://tinyurl.com/lowerprovidencedocs

For more information on the project, please visit the Lower Providence Township Parks & Recreation Department project webpage: www.lowerprovidence.org/parks-and-recreation/pages/open-space-plan-update

Take the Survey 🖹

Obtaining feedback from the community is vital to the planning process. We want to know your opinions on how to improve open space & recreation in Lower Providence. The survey can be completed at the web address below. Hard copies of the survey may be picked up and returned completed to the Lower Providence Administration Building, 100 Parklane Dr, Eagleville, PA 19403

surveymonkey.com/r/LowerProvidenceParks

Comment on WikiMapping 🙈



Place comments directly on the easy to use digital map of Lower Providence. Let us know existing & favorite trails, challenging intersections & roadways, important destinations, and desired park and open space improvements.

wikimapping.com/Lower-Providence.html

Public Engagement Poster Used During Study

Lower Providence Parks, Recreation & Open Space Plan

Public Meeting 1 - Brainstorming Exercise

GOALS	FACTS	CONCEPTS		PARTNERS
		Dog Park - form friendships,	greenways can make great	
		others in community, users may	connections to communities	
Provide For All Ages	Many Municipal Parks	maintain parks	and spaces in town	DCNR
			priority-connect LP across	
			Perkiomen to county trail	
		Safe Pedestrian Connections to	system, especially near	
Preserve Resources	Existing Trails	ARA Fields	Collegeville	Montgomery County
		taking Valley Forge into		
Improve Safety for Pedestrians &		consideration - make	strong open space plan - great	
Bicycles	Existing Playgrounds	connections	way to stop overdevelopment	Local Businesses
			great to provide access for kids	
	range of ages for users, diverse	consider "no access" greenways	to safely walk to schools	
	many communities in region		greater access to waterways -	
	encounrage kids to bike/walk to	unusable open space for	rental equipment for water	
	school	solar/wind generation	sports on the creek	
	communities that have safe			
	trails and connections, you can	*check park service areas and	connect with William Penn Fdn	
	encourage kids to walk	times	on the Circuit project	

Brainstorming Exercise - Public Meeting 1, 10.26.2020

Public Meeting 1 – Monday, October 26, 2020

Due to the Covid-19 Pandemic, this meeting was held through a virtual format. The consultants began the meeting by introducing the project team and committee. They noted their experience and reviewed the importance of having a plan. The consultants discussed the project schedule, scope, and purpose. The consultants explained that the online survey and WikiMapping would be available after the public meeting and that public involvement is extremely crucial in the planning process to ensure the plan reflects the needs of the community. The attendees were led through an interactive discussion. The meeting was recorded and placed on the Township's web site.

Public Meeting 2 - Tuesday, January 26, 2021

This meeting was held through a virtual format. The consultants began the meeting by providing survey results and discussing existing information that will be used for the plan. The consultant team then reviewed up to date analysis and introduced concepts for the plan. The meeting was recorded and placed on the Township's website.

Public Meeting 3 - Thursday, April 15, 2021

This meeting was held during a regularly scheduled meeting of the Township Board of Supervisors through a hybrid in-person/virtual format. The consultants reviewed and explained the recommendations of the draft plan. They presented draft plans for the greenways, trails, and proposed open space acquisition. They also discussed recommendations for programming and recreation enhancements to the existing facilities. The plan then was posted on the Township's website for a 30-day public review period.

Public Meeting 4 - Thursday, June 24, 2021

The final plans were presented to the public at the final public meeting.









Screenshots from virtual committee, public, and focus group meetings

Key Person Interviews

The consultants interviewed ten people to discuss the plan and ideas moving forward. The interviews provided some detailed information reflected in the plan. Key takeaways from the interviews are noted below:

Lower Providence Board of Supervisors (x5)- Key Takeaway(s):

- Support for Evansburg connection / Perkiomen Crossing.
- Consider future DCNR/ Evansburg partnership for additional ballfields.
- Consider open space acquisition connecting Dell Angelo Park to Ridge Pike.
- Consider open space acquisition of open area across from Eagleville Park.
- Safe on-road bicycle connections to parks are essential.
- Important to engage all diverse members of the Lower Providence community.
- Skippack Creek Watershed Alliance is an important organization. Lower Providence is one of 7 participating municipalities reducing sediment loading into Skippack.

Valley Forge / National Park Service - Key Takeaway(s):

- Open to further discussion of potential future trail development in Valley Forge parcel north of Route 422.
- There is need for additional river access, potentially at Pawlings Road parking area.

Montgomery County - Key Takeaway(s):

- County-owned open space to remain passive (specifically referring to Knights Field). Not in favor of active recreation on County-owned land.
- County supportive of Evansburg connection / Perkiomen crossing.

Perkiomen Watershed Conservancy - Key Takeaway(s):

• Supportive of the following trail: conceptual Central Perkiomen trail, Evansburg connection / Perkiomen crossing, Valley Forge connector.

John James Audubon Center - Key Takeaway(s):

- Meadows & birding habitat should be a Township priority in areas that can be converted from mown lawn.
- Consider ADA accessible bird viewing locations.

Evansburg State Park - Key Takeaway(s):

• Open to further discussion of potential future trails through Evansburg.

Focus Groups

Four focus groups were created to allow persons to discuss the plan through interest groups. The groups were divided into active recreation, passive recreation, schools and social, religious and senior organizations. These groups discussions were beneficial to the consultants and ensured that the plan was taking into consideration various user groups within the Township. Key takeaways from the focus groups are noted below:

Active Recreation Focus Group (4 attendees) Key Takeaways:

- Improve existing Lower Providence facilities (i.e. fields) before building or adding new facilities.
- Consider converting Eagleville / Evansburg Point Park ballfields to turf.
- Help reduce organization costs and help generate revenue.
- Sports organizations should have quarterly collaborative meetings.

Passive Recreation, Nature, Trails Focus Group (9 attendees) Key Takeaways:

- Evansburg / Hoy Park Perkiomen multi-modal crossing preferred to Yerkes Road bridge crossing.
- Trails should serve recreation and commuter populations.
- County-owned open space to remain passive.
- Consider sidewalks along Arcola Road from Hoy Park to Perkiomen bridge crossing.

Schools Focus Group (4 attendees) Key Takeaways:

- There are no crossing guards in MSD. (Perceived safety concerns)
- Every school student is assigned a designated bus stop.
- Redtail Park is used by student population. Restroom in this location would be beneficial.
- MSD School Board is discussing the future of the Audubon Elementary School property and building.

Social, Community, Seniors Focus Group (9 attendees) Key Takeaways:

- There is limited indoor recreation space, more needed for senior population programming.
- St. Gabriel's should be a priority for partial open space acquisition.
- ADA access at all parks is essential.
- Important to get more kids walking to recreation facilities and school.

Online Public Opinion Survey

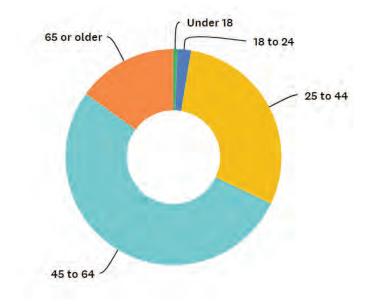
A 66-question public opinion survey was created by the consultant team with Project Committee and Township input to gather important user information related to Lower Providence Township parks, recreation, open space, and trails.

This survey solicited background data from respondents, including:

- Age, location, and length of respondent residency
- Desired park improvements
- Priorities for open space

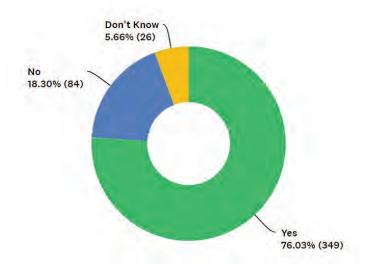
A total of 648 responses were received during the planning process. A sample of survey results are presented in this chapter. Complete survey results can be found in the report Appendix.

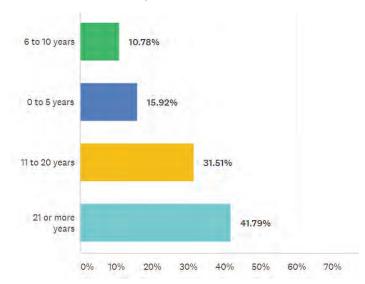




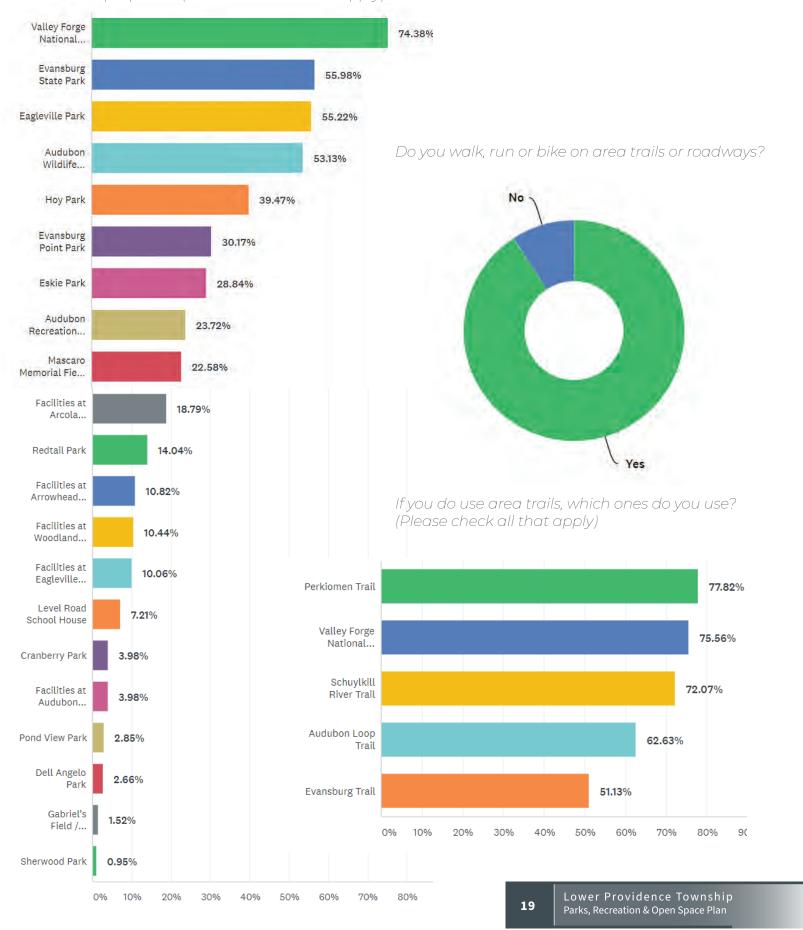
Are your household's recreation and open space If you live in Lower Properties needs being met in or around Lower Providence? lived in the Township?

If you live in Lower Providence, how long have you lived in the Township?

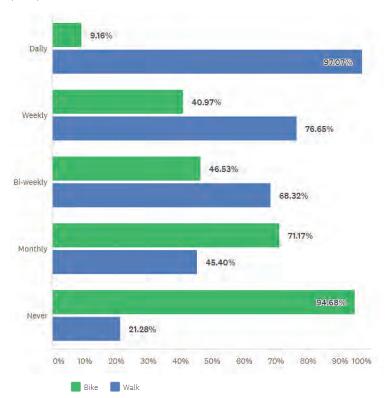




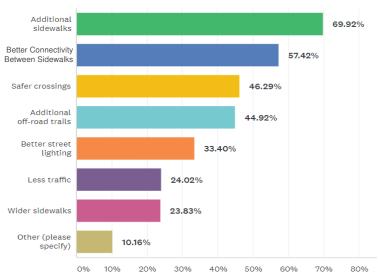
Which parks, natural areas, trails, or facilities do you visit for recreation purposes? (Please check all that apply)



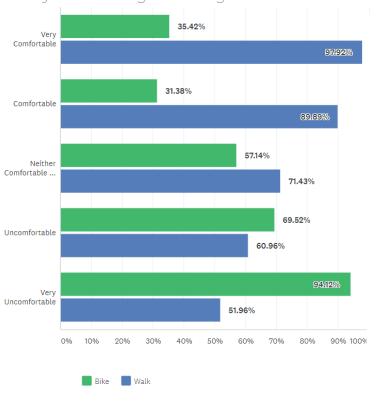
How often do you bike or walk for recreational purposes?



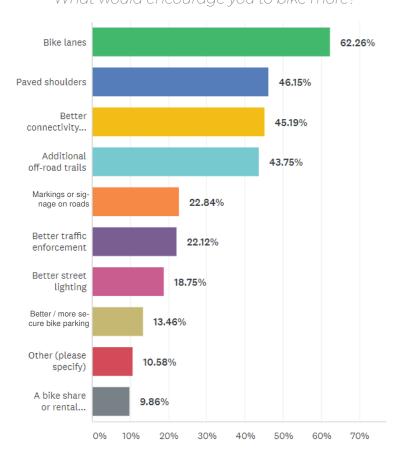
What would encourage you to walk more?



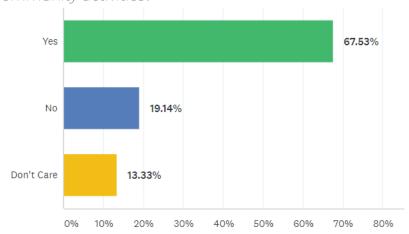
From a traffic safety perspective, how comfortable do you feel biking or walking in Lower Providence?



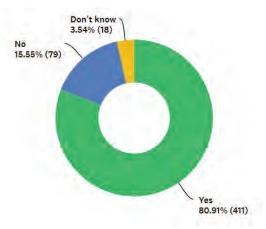
What would encourage you to bike more?



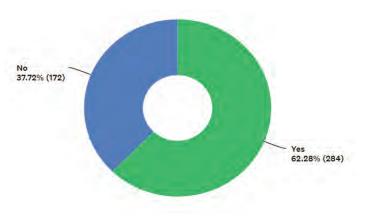
Should Lower Providence Township consider the development of a community center that provides facilities for indoor recreation, fitness and other sports, recreation and community activities?`



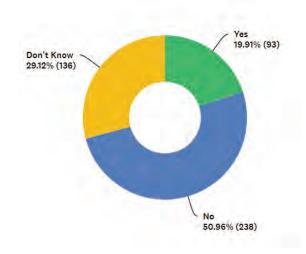
Do you feel that there are an adequate number of parks, natural areas, and trails available to you in or in close proximity to where you live? Do you support increasing taxes to pay for additional recreational and connectivity opportunities such as parks, trails and sidewalks?

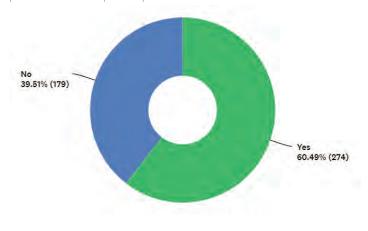


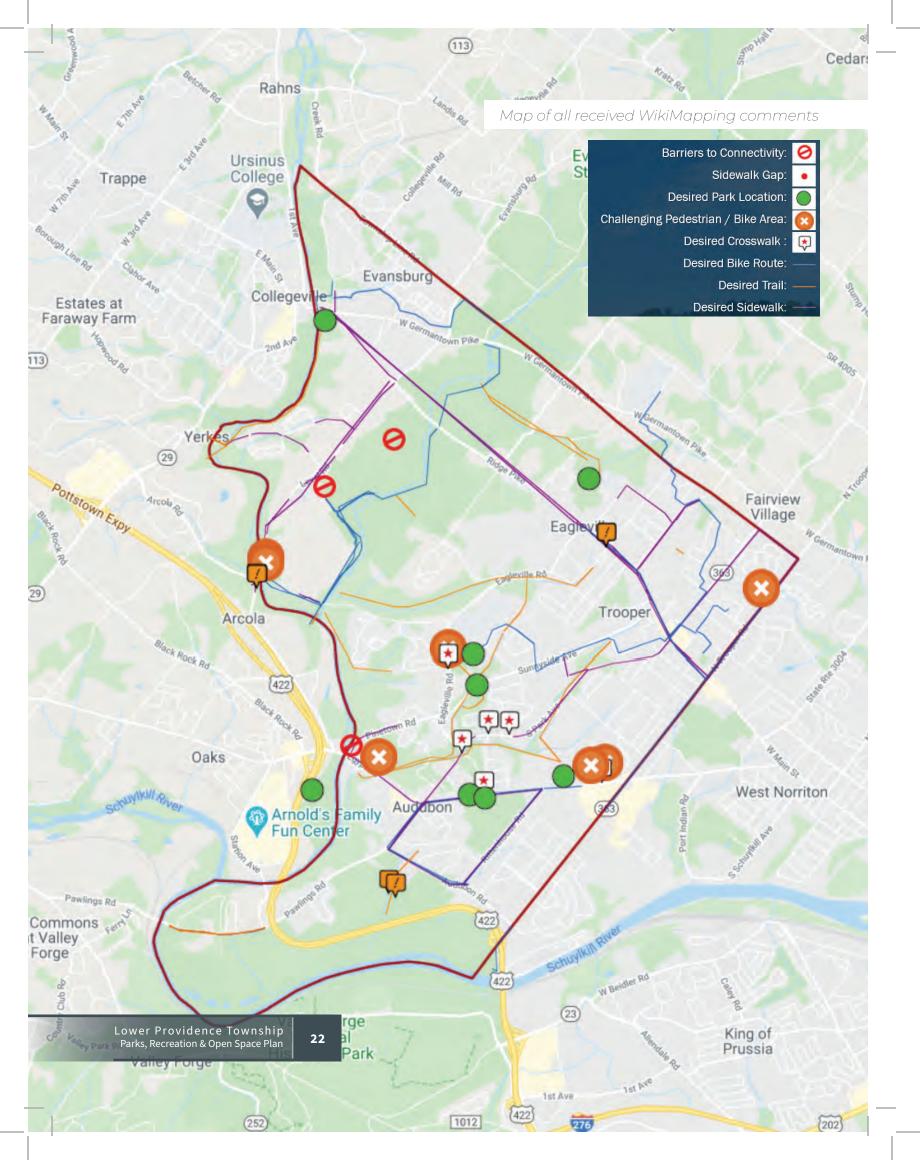
Do you think Lower Providence Township needs more sports fields (soccer, baseball, football, etc.)?



Would you support a referendum in the near future to allow the Earned Income Tax to be increased to finance the acquisition of property to preserve as open space?







WikiMapping

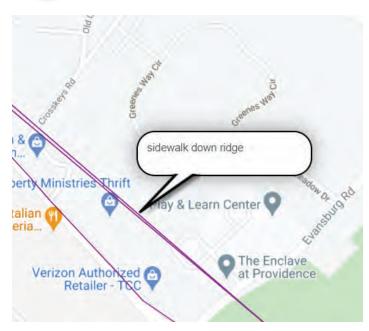
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The consultant team established an online mapping platform in which residents were able to identify important existing conditions (such as destinations, existing trails, sidewalk gaps, etc.) as well as desired improvements (park improvements, trails, etc.) A total of 102 map comments were received during the project process.

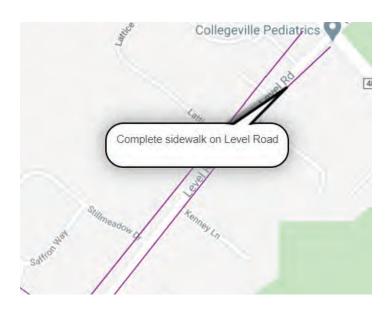
The WikiMapping showed that residents were generally interested in new trail and sidewalk connections and bike routes. Few pointed to having new parks.

Locations for Potential Parks Identified
Desired Locations for Trails Identified
Desired Locations for Sidewalks Identified
Desired Locations for On-Road Bicycle Routes Identified

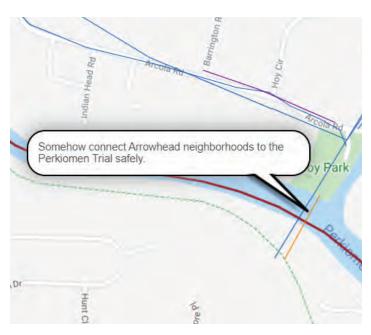
Locations for new crosswalks identified



Typical WikiMapping comments received







Relevant Planning Documents

Lower Providence Township Comprehensive Plan, 2002

Relevant Objectives:

Promote the retention and character of the historic villages in the township through the establishment of clear boundaries and zoning that enforces their distinct characteristics while allowing for appropriate new development.

Establish a dialogue with neighboring municipalities regarding land use, zoning, and development issues.

Establish a dialogue with governmental bodies and institutional uses that own large landholdings in the township to discuss the future planning of these sites.

Ensure the preservation of open space parcels in designated areas of the township by using innovative zoning techniques.

Land Use

 Goal: To promote an orderly pattern of land use that balances the need to utilize land for development with the need to preserve it for recreational and environmental needs.

Transportation

• Goal: To promote solutions to existing road and traffic problems and to encourage transportation alternatives to the automobile.

Natural Features and Cultural Resources

 Goal: To promote the preservation and enhancement of significant natural features and cultural resources that defines and distinguishes the township's unique environment and history.

Objectives

- Enact a riparian buffer ordinance for stream corridor and wetland preservation.
- Adopt stormwater best management practices to promote stream water quality and groundwater recharge.
- Require open space preservation for developments using the Alternative Development Plan in the R-2 District.

Parkland & Recreation

 Goal: To maintain livability in the township, parkland suitable for active and passive recreation should be obtained.

Objectives:

- Implement policies of the 2000 update of the township's recreation plan.
- Work with the county on the establishment of the Schuylkill River Trail.
- Revise the existing (OSRD) Open Space Residential District to require that a percentage of the designated open space be designed for active recreation.

Selective Update of the Lower Providence Recreation Plan, 2002

A selective update of the Township's 1993 Lower Providence Recreation Plan, this plan updated parkland inventory and needs, and it amended the original recommendations, where appropriate. The five Park Zones of the Township (A through E) are described, and park, recreation, and open space resources are inventoried in each Zone. Parkland deficiencies at build out are listed for each, according to NRPA recommendations which were, at the time, 10.5 acres of parkland for every 1,000 residents. This Plan discusses neighborhood vs. community parks, recommending that 76% of be neighborhood parkland and 24% community parkland. Eagleville Park was the Township's sole community park at the time that this plan was published.

The update concludes with a series of recommendations designed to alleviate parkland deficiencies. It also includes recommended policy decisions designed to increase township recreational opportunities, preserve open space and natural amenities, and ensure that future land developments contribute to township park and recreation needs. Also, where appropriate, recommendations from the 1993 Open Space Plan are included, among which is the recommendation that an Official Township Map be created.

Lower Providence Township Open Space Preservation Plan, 2005

This document was an update to the Open Space Preservation Plan- 1995, and followed the Green Fields/Green Towns Open Space Task Force program established in 2003. The purposes of this plan included:

- Providing recreation opportunities including trails.
- · Conserving natural features.
- Preserving historic or cultural landscapes.
- Maintaining scenic quality.
- · Protecting water resources.
- Stimulating the revitalization of developed communities with green infrastructure.
- Shaping the form of land use and development.
- Preserving agricultural land.

Goals and Objectives:

Active Recreation – Provide public parks for a variety of active recreational uses, within reasonable travel time for every Township resident and worker.

- Create a hierarchy of parks: neighborhood greens (small neighborhood parks with tot-lots and fields, walking distance) to community-wide parks (larger parks serving the entire Township with fields and courts, accessible by car)
- Provide active recreation based on park type and facility needs of area to be served; provision of park sites through either outright purchase or development process.
- Preserve open space/natural amenities based on criteria specific to each part of the Township: preserve remaining open tracts in heavily developed areas (ie. Trooper and Audubon) for open space and active recreation; and preserve tracts in less developed areas (ie. Along Skippack and Perkiomen Creeks and Schuylkill River) for environmental preservation and passive recreation.

Pedestrian and Bicycle Mobility – Improve pedestrian and bicycle mobility access for all residents from residential areas to parks, open space, commercial and employment centers.

 Connect parks using multi-purpose trails: walking, bicycling, cross-country skiing, personal mobility; provision through purchase of fee simple titles/easements or development process.

- Connect residential areas, commercial and employment centers with pedestrian/bicycle facilities and recreational trails. Pedestrian/bicycle facilities to be provided along roads as sidewalks or wide, paved shoulders. A comprehensive sidewalk/trail system is a critical component of the Open Space Plan.
- Establish a system of bike routes and bike lanes on roadways.

Natural Features – Promote the preservation and enhancement of significant natural features and cultural resources that define and distinguish the Township's unique environment and history.

- Enact a riparian buffer ordinance for stream corridor/ wetland preservation.
- Adopt stormwater best management practices (BMPs) to promote stream water quality and groundwater recharge.

Parkland and Recreation – Parkland suitable for active and passive recreation should be obtained to maintain Township livability.

- Revise the existing OSR Open Space Residential District to require that a percentage of designated open space be designed for active recreation.
- If Methacton School District should dispose of school sites, the Township should be granted first right to acquire park and recreation assets for permanent preservation.

Agriculture – Preserve agriculture as part of the heritage and rural charm of Lower Providence, and as a valuable resource that may be forever lost to development.

The following areas or parcels were identified as significant in Lower Providence Township. Those properties greater than ten (10) acres are areas that are recommended to be overlaid with OSR Open Space Residential cluster zoning to ensure that if they are developed that a significant percentage of the site would be preserved as open space:

- St. Gabriel's Protectorate. [recommendation still relevant]
- Heyser Property. [recommendation still relevant]
- Eagleville Hospital Open Space [recommendation still relevant]
- IBEW / Pechins Mill Road Area. [recommendation still relevant]
- Camp Hideaway. [recommendation still relevant]
- Lower Providence Rod and Gun Club. [recommendation still relevant]

- Park Avenue, between Woodland Avenue and Shannondell. [recommendation still relevant]
- Cicchiello Agricultural Property [recommendation still relevant]
- KeyBank Agricultural Property [recommendation still relevant]

Additional 2005 Plan Recommendations:

Indoor Recreation Facility. Notwithstanding the ability to use school facilities, the Township should conduct a feasibility study to see if such a center is warranted or if the school buildings will fulfill the need. [recommendation still relevant]

Official Map. A useful planning tool that delineates on a map land that the Township wishes to purchase for public purposes. [recommendation still relevant]

School District Agreement. The Township should negotiate an agreement with the Methacton School District to secure permanent public access to the District's indoor and outdoor facilities. [recommendation still relevant]

Bicycle and Pedestrian Infrastructure Improvement Plan, 2009

The 2009 report by GVF summarized overall recommendations for improved bicycle and pedestrian access within the southeastern section of the Township as well as site-specific recommendations for the following roadways/areas:

- Ridge Pike
- Audubon Square
- · Egypt Road
- Park Avenue
- Pawlings and Audubon Road, and
- Valley Forge Corporate Center

The emphasis of the report was on connecting the existing pedestrian networks to one another, shopping areas and transit routes that currently exist in Lower Providence.

Montco 2040: A Shared Vision The Comprehensive Plan for Montgomery County, 2015

This Comprehensive Plan lays out visions for the County that include management of the County's built and natural environment. It is structured around three interrelated themes and their associated goals, as follows:

Connected Communities – Help people connect to a broader community beyond local municipal boundaries.

- Collaboration among stakeholders
- Improved transportation choices
- Trails and greenways connecting multiple places
- Vibrant downtowns and destinations accessible by everyone

Sustainable Places – Effectively enhance and sustain neighborhoods and communities long term.

- Modernized infrastructure network
- Improved stormwater management
- Protected natural resources
- Opportunities for healthy lifestyles
- Diverse housing choices
- Enhanced community character

Land Use Vision

- Attractive, prosperous, and accessible residential neighborhoods designed for neighborly interaction
- Traditional rural landscapes with preserved farms, wooded valleys, and country homes
- Modern, walkable, green, connected and mixed use commercial and community cores
- Vibrant downtowns and village centers
- · Interconnected greenways, trails, and parks

Transportation Vision:

- Improved public transit access, service, and frequency
- An extensive county trail system that connects with local municipal trails and regional trails
- Improved bikeability of roads and bicycle facilities
- An expanded sidewalk and pedestrian network designed to make walking easy, comfortable, and safe

Natural Areas Inventory Update, Montgomery County PA, 2008

This report inventories important areas of open space and core habitats within them that should be conserved to sustain habitat biodiversity and reduce stress upon threatened species that require more sensitive environments. The report makes recommendations regarding the management of these conservation landscapes and natural areas. Three conservation landscapes relevant to Lower Providence Township are identified: Middle Schuylkill River Conservation Landscape, Pawling Ponds, Skippack Creek Conservation Landscape, and Middle Perkiomen Creek Corridor. The 1995 NAI named Eagleville Woods a high priority site of local significance.

Identification of these core habitat areas, as they exist within or adjacent to Lower Providence Township, provides insight into areas needing special or enhanced protections.

Connections 2045, DVRPC, 2017

This plan's vision for the Greater Philadelphia Region is a prosperous, innovative, equitable, resilient, and sustainable region that increases mobility choices by investing in a safe and modern transportation system; that protects and preserves our natural resources while creating healthy communities; and that fosters greater opportunities for all. The mission is to achieve this vision by convening the widest array of partners to inform and facilitate data-driven decision-making. DVRPC is engaged across the region, and strives to a leader and innovator, exploring new ideas and creating best practices.

The Plan was developed around five integrated core principles:

- 1. Sustain the Environment
- 2. Develop Livable Communities
- 3. Expand the Economy
- 4. Advance Equity and Foster Diversity
- 5. Create an Integrated, Multimodal Transportation Network

Bike Montco, 2018

The Vision: "In Montgomery County, bicycling will be a fundamental part of daily life where all bicyclists can enjoy a safe, convenient ride every time they put their foot on a pedal." It imagines a Montgomery County where every citizen has the freedom to choose bicycling without fear of danger or difficulty

and where bicycling is equal to any other transportation or recreational choice. It is intentionally ambitious and inclusive. Bike Montco is designed around six themes: Connected Communities, Equity, Safety, Education and Enforcement, Health and Environmental Sustainability, and Vibrant Economy. These themes provide a framework for the recommendations contained within the plan and, like the vision, were identified through public outreach, extensive research, and input from a volunteer steering committee.

Municipal Facilities Study, 2018

At the outset of this study, KCBA Architects and their team were tasked with evaluating the existing township building to support the goals of improving township services; identifying and addressing safety, security, technological, and special needs; modernization and replacement of aging and inefficient building systems; and improving layout and overall functionality.

The township building is centrally located on an active campus that also houses a public library and recreational amenities. Hence, it was noted early in the study process that any proposed improvements must address not only the building's interior operations but also consider impact to overall campus circulation and the day-to-day experience of all community users.

This report culminates with a series of illustrations that demonstrate the evolution of the proposed master plan. This entailed the identification and vetting of several potential alternatives, ultimately leading to the recommended scenario to renovate the existing administration building and construct a new stand-alone police facility. This conceptual plan was not officially adopted by the Township.

Neighboring Townships' Plans

The consultants reviewed Open Space and/or Comprehensive Plans of the following neighboring areas: Collegeville Township, East Norriton Township, Perkiomen Township, Skippack Township, Upper Providence Township, West Norriton Township, and Worcester Township. These plans give valuable insight as to how open space in Lower Providence Township connects with open space in its neighboring municipalities and creates connections for residents across municipal lines. These plans helped identify common goals and objectives across the municipalities within the region.

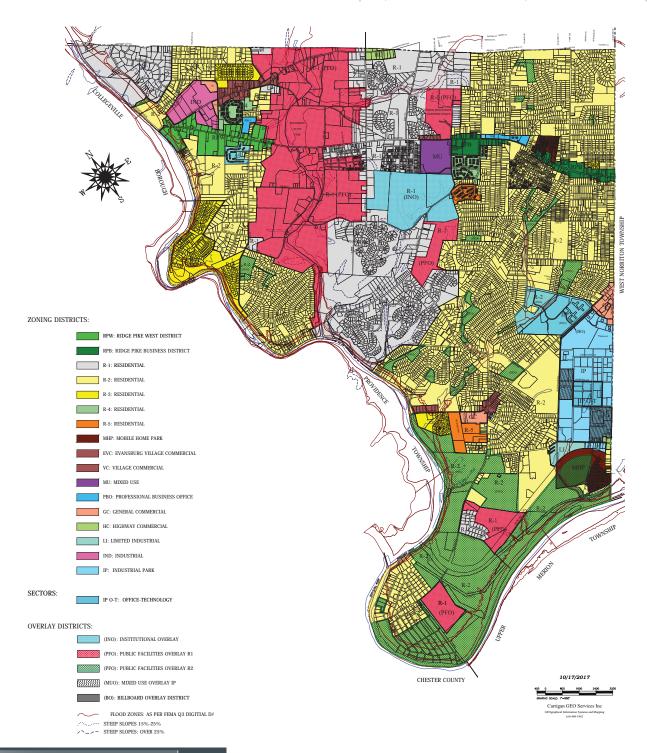
Zoning and SALDO Summary

What is Zoning & SALDO?

In Pennsylvania, a zoning ordinance is a law that may permit, prohibit, regulate, restrict and determine land use, size & height of buildings, density and intensity of land use and protection of natural & historic resources.

SALDO is an acronym that stands for Subdivision and Land Development Ordinance. The SALDO contains the design standards, procedures and other requirements for Subdivision Plans and Land Development Plans within Lower Providence Township

The following is a review of relevant sections of existing Township ordinances that relate to parks, recreation, open space, multimodal connections, and natural resource protection.



Zoning Definitions

BUFFER — An area designed to separate the uses of land which abut it and which functions to ease the transition between them. Unless otherwise specified, buffers may be included as part of the required setbacks and yard areas. Buffers may be comprised of natural and/or man-made materials, depending upon the purpose they are intended to serve.

BUFFER AREA — A strip of land which is planted and maintained in shrubs, bushes, trees, grass or other ground cover material and within which no structure or building is permitted except a wall or fence which meets Township requirements.

CONSERVATION EASEMENT — A legal agreement granted by a property owner that strictly limits the types and amounts of development that may take place on such property. Such easement shall restrict the original and all subsequent property owners, lessees and all other users of the land in a manner approved by the Township Solicitor and Board of Supervisors and shall run in perpetuity.

EASEMENT — A permanent right, including a right-of-way, granted by a property owner for the limited use of his/her private land for public, quasi-public or private purposes. It can be a utility, drainage or public access easement or for other purposes. The owner of the property shall have the right to make any other use of the land which is not inconsistent with the rights of the grantee.

EROSION — The removal of surface materials by the action of natural elements.

BASE FLOOD ELEVATION — The one-hundred-year-flood elevation. Within the approximated floodplain, alluvial soils floodplain or other similarly documented areas, the one-hundred-year-flood elevation shall be established nearest to the construction site in question.

 ${\sf FLOOD}$ — A temporary condition of partial or complete inundation of normally dry land areas.

FLOODPLAIN MANAGEMENT — The application of a program or activities which may consist of both corrective and preventive measures for reducing flood damages.

ONE-HUNDRED-YEAR FLOOD — A flood that has one chance in 100 or a one-percent chance of being equaled or exceeded in any one year.

IMPERVIOUS COVERAGE — That percentage of the total lot area which is covered by impervious surfaces, including buildings as well as all paved areas.

IMPERVIOUS SURFACES — Those surfaces which do not absorb water. All buildings, parking areas, driveways, roads, sidewalks and any areas in concrete and asphalt shall be considered impervious surfaces within this definition.

OPEN SPACE — That portion of a tract that is set aside for the use and enjoyment of residents and the protection of sensitive natural features, farmland, scenic views and other unique features. Open space may be accessible to the residents of the development and/or Township or it may contain areas of farmland which are not accessible to the public.

RIPARIAN BUFFER AREAS — Land immediately adjoining and upgradient from any type of natural watercourse, wetland, fen, river or stream that is vegetated with a combination of trees, shrubs and other herbaceous plants. Riparian buffer areas can include floodplain and wetland areas.

STEEP SLOPE — A grade of 15% or greater as determined by the soil survey or accurate contour mapping.

SWALE — A low-lying stretch of land which gathers or carries surface water runoff.

TOPSOIL — Surface soils and subsurface soils which presumably are fertile soils and soil material, ordinarily rich in organic matter or humus debris. Topsoil is usually found in the uppermost soil layer called the "A-Horizon."

WATERCOURSE — Any natural or artificial swale, stream, channel, drain or culvert in which waters flow continuously or intermittently.

R-1 (INO) R-2 TOWNSH Lower Providence Township 30 Parks, Recreation & Open Space Plan Township Zoning Map

Relevant Zoning Regulations

ARTICLE XXVI: Public Facilities and Open Space Overlay District

(p. 301) § 143-196. Legislative intent. It is the intent of the Public Facilities and Open Space Overlay District to provide appropriate areas for public and private parks, open space and recreational, municipal and educational uses. Specifically, it is the intent of the district to provide:

Suitable areas within the Township to accommodate publicly owned and operated buildings and facilities.

Suitable areas within the Township to accommodate public and private educational facilities.

Suitable areas within the Township to accommodate public parks, recreation areas and open space in order to meet the open space and recreation needs of the Township.

Regulatory standards which will ensure the compatibility of adjacent uses and which will preserve and protect environmentally sensitive open space and recreation areas from incompatible development.

Design and regulatory standards for educational facilities which will ensure the compatibility of adjacent uses.

Public lands held for conservation and open space preservation, including open space dedicated to Lower Providence Township or Montgomery County subject to the following additional requirements:

Open space activities are limited to uses of a primarily passive or non-intensive nature, including hiking, bicycling, forest preserve, watershed protection area, bridle trails, fishing, picnicking and similar uses.

Municipal, county, state and federal parks, including, but not limited to, Audubon Wildlife Sanctuary, Evansburg State Park and Valley Forge National Historical Park, subject to the following additional requirements: Parks are limited to uses of a nonintensive nature, including picnic areas, playing fields, hiking, bicycling, fishing, ice skating, overnight camping, wildlife sanctuary, boating, playgrounds and tennis.

§ 143-202. Development standards. Any use in the Public Facilities and Open Space District shall comply with the development standards below:

A. Traffic and access. The applicant shall demonstrate to the Township Engineer and the Board of Supervisors that satisfactory provisions are made to prevent traffic congestion and hazards to the surrounding area. Provisions shall be made for safe and efficient ingress and egress to and from the development. The Board of Supervisors may require a traffic impact study for any use in this district when they determine, after consulting with the Township Engineer, that such a study is necessary to demonstrate the adequacy of the access points and streets for accommodating the traffic generated by the proposed use. Existing residential areas shall not be infringed upon by the significant volumes of traffic from the proposed use.

B. Sewer and water. On-lot sanitary systems shall only be permitted for uses under 5,000 square feet of gross floor area if approved by the Board of Supervisors. If the Board of Supervisors approves an on-site system, the sanitary system must also be approved by the Township Sewer Enforcement Office (SEO), the Montgomery County Health Department and the Pennsylvania Department of Environmental Protection (PADEP). If public water is not available and if the demand is in excess of 500 gallons per day, the applicant shall demonstrate to the Board of Supervisors that a well on the site will not adversely affect existing water supply systems in the area.

C. Neighborhood impact. The impact of the proposed use on the surrounding properties and neighborhood shall be considered. The use shall not adversely affect the general welfare or orderly development of the general neighborhood in which it is proposed. The scale, form, and appearance of structures and open space should be compatible with the general character of the residential area. The applicant is encouraged to present evidence on the need for the proposed use, including data on the location of other similar uses in the Township and surrounding areas.

§ 143-204. Landscaping. All uses within the Public Facilities and Open Space Overlay District shall be landscaped in accordance with the following standards:

A. Internal landscaping of all parking areas shall be provided in compliance with the Subdivision and Land Development Ordinance.29

B. Perimeter landscaping shall be provided along all road rights-of-way and property boundaries, in compliance with the Subdivision and Land Development Ordinance. Existing landscape material may be used to meet these requirements when possible.

ARTICLE XXIX: Steep Slope Conservation District.

§ 143-235. Legislative intent. In expansion of the statement of community development objectives in § 143-4 of this chapter, the specific intent of the SS Steep Slope Conservation District shall be to conserve and protect those areas having steep slopes, as defined herein, from inappropriate development and excessive grading, as well as to permit and encourage the use of said areas for open space purposes so as to constitute a harmonious aspect of the continuing physical development of Lower Providence Township.

§ 143-236. District boundaries. The SS Steep Slope Conservation District is defined and established as follows: those areas having slopes of 25% or greater as defined by a field-generated topographic survey using two-foot-interval contours and which have an elevation difference of at least six feet.

§ 143-238. Uses permitted. Some of the uses permitted in the Steep Slope Conservation District without the submission of an erosion and sediment control plan include:

Wildlife sanctuaries, woodland preserves, arboretums and passive recreation areas, including parks but excluding enclosed structures.

Game farms or hunting preserves for the protection and propagation of wildlife, but excluding enclosed structures.

Recreational uses such as parks with such activities as hiking, bicycle and bridle trails, camps and picnic areas, but excluding enclosed structures.

ARTICLE XXXIV: Riparian Buffer Overlay Zone.

§ 143-267. Relationship to other zoning regulations. The RBOZ is an overlay to the existing zoning districts within the Township. The provisions of the underlying district shall remain in full force, except where the provisions of the RBOZ differ from the provisions of the underlying district, in which case the provision which is more restrictive and less permissive shall apply. The RBOZ will work with the provisions of the underlying district, as well as other natural resource protection standards, to regulate land use and the siting and engineering of all development within the Township to ensure natural resources are preserved and protected.

§ 143-268. Establishment.

The RBOZ shall include and cover the following watercourses and other bodies of water:

- Schuylkill River and tributaries.
- · Perkiomen Creek and tributaries.
- · Skippack Creek and tributaries.
- Stony Creek and tributaries.
- Indian Creek and tributaries.
- Eagleville Run and tributaries.
- French Run and tributaries.
- Miller Run and tributaries.
- Mine Run and tributaries.
- Rock Run and tributaries.
- · Schatz Run and tributaries.
- All other perennial and intermittent streams.
- Lakes and ponds.
- · Wetlands.

Any other body of water identified by resolution of the Lower Providence Township Board of Supervisors as being included within the RBOZ.

B. The width of the RBOZ shall be and is hereby established as follows:

(1) Zone One. This zone will begin at each edge of a stream channel/waterline/wetland edge (whichever is applicable) and occupy a minimum width of 30 feet measured horizontally on a line perpendicular to the top of the bank/edge of waterline or wetland.

Where the land within 30 feet of the defined edge of a stream channel has an upland slope greater than 10%, Zone One shall include the land from the stream channel edge and the upland slope and shall further extend outward 30 feet from the edge or top of such upland slope; and

(2) Zone Two. This zone will begin at the outer edge of Zone One and occupy a minimum width of 60 feet in addition to Zone One, unless modified herein. Where the one-hundred-year floodplain extends greater than 90 feet from the waterway, Zone

One shall remain a minimum of 30 feet, and Zone Two shall extend from the outer edge of Zone One to the outer edge of the one-hundred-year floodplain.

§ 143-271. Restoration and revegetation of riparian buffers. The requirements of this section shall apply to all those uses in the RBOZ, whether permitted by right or by conditional use, and in cases where a subdivision or land development is proposed. Native vegetation approved by the Township must be used in replanting efforts. Three layers of vegetation are required when replanting the riparian corridor. These three layers include herbaceous plants that serve as ground cover, understory shrubs, and trees that form an overhead canopy. The revegetation plan shall be prepared by a qualified licensed professional, such as a landscape architect or engineer; shall comply with the following minimum requirements; and shall be subject to the approval of the Township Engineer:

A. Ground cover. Ground cover consisting of a native seed mix extending a minimum of 30 feet in width from the edge of the stream bank or waterline, whichever is wider, must be provided along the portion(s) of the RBOZ where little or no riparian vegetation exists or where such vegetation has been removed. Appropriate ground cover includes native herbs and forbs, exclusive of noxious weeds as defined by the Pennsylvania State Department of Agriculture. This thirty-foot-wide planted area shall be designated on the plan as a "no mow zone" and shall be left as natural cover except in accordance with the maintenance instructions stated on a Township-approved maintenance plan

ARTICLE XXV: Floodplain Conservation District.

143-178. Declaration of legislative intent. The specific intent of the regulations of the Floodplain Conservation District is to protect areas of floodplain subject to and necessary for the containment of floodwaters, in order to promote the public health, safety and welfare.

§ 143-179. Definition and establishment of District. The Floodplain Conservation District is defined as those areas of the Township subject to flooding as defined in Subsections A and B of this section. Where the Flood Insurance Study does not extend along a waterway, the regulations of Subsection A shall apply.

A. Those areas subject to inundation by the waters of the onehundred year flood as delineated in the Flood Insurance Study for the Township of Lower Providence, as prepared by the Federal Emergency Management Agency (FEMA), effective December 19, 1996, or the most recent revisions thereof.

B. Alluvial soils (AS). The low area adjoining and including any water or drainage course or body of water subject to periodic flooding or overflow and delineated as alluvial soils or local alluvium by the Soil Conservation Service, United States Department of Agriculture, in the Soil Survey of Montgomery County, Pennsylvania 2008. The boundary for this floodplain must be verified using hydrologic and hydraulic engineering studies.

Relevant SALDO Regulations

ARTICLE IV: Design Standards.

§ 123-33. Sidewalks. [Amended 1-21-2016 by Ord. No. 630] Sidewalks shall be installed along all existing or proposed public or private streets and common parking areas except when this requirement is waived at the discretion of the Board of Supervisors, upon recommendation of the Township Planning Commission and Engineer.

§ 123-50. Landscaping. For development in all multifamily, commercial and industrial districts, the applicant shall, at a minimum, provide landscaping in accordance with the following two categories as required in §§ 143-28B and 143-66 of Chapter 143, Zoning.

A. Internal landscaping. Internal landscaping shall be required for buffering and/or screening purposes. Plants in this category shall include shade trees; shrubs; ground covers, including lawn areas, earthen mounding; and/or other features in compliance with this subsection.

B. Perimeter landscaping. Each multifamily or nonresidential development shall be screened as a necessary safeguard to the character of an adjacent area. Such screening shall be permanently maintained to present an attractive appearance. Screen planting requirements shall be applicable along areas fronting on roads, areas adjacent to other properties, areas along parking lot facilities and areas along mobile home developments. Perimeter landscaping shall consist of the same types of plants and other landscape features as internal landscaping in compliance with this subsection.

C. Screen buffer design. The primary component of a screening buffer shall be a double row of evergreen trees spaced 15 feet apart on center, with the trees in one row offset 7 1/2 feet from the trees in the other row, and the rows shall be at least five

feet apart. These trees shall be not less than six feet in height at the time of planting and shall be of such species that the expected height at maturity shall be not less than 20 feet.

§ 123-51. Natural features; critical impact areas.

A. All subdivisions and land developments shall be designed to preserve and protect the natural features of the land. Natural features include existing grades and contours, bodies of water and watercourses, woodlands or large trees, street shade trees, scenic or historic points, pedestrian walks and bridle trails that have been in public use and other community assets.

B. In addition to the above, plans should be designed to minimize the disturbance of critical impact areas. Critical impact areas are environmentally sensitive features or conditions, including but not limited to stream corridors, streams, wetlands, estuaries, slopes greater than 15%, highly acidic or highly erodible soils, areas of high water table, mature stands of native vegetation and aquifer recharge and required discharge areas.

§ 123-52. Shade trees. Shade trees shall be planted along both sides of all new or existing streets at intervals of no less than 40 feet and no more than 50 feet, except where tree masses have been preserved where shade trees would otherwise be located. Trees shall be placed back of the right-of-way line of street, so as not to interfere with the installation and maintenance of sidewalks, drainage facilities and/or utilities and shall be of two-inch caliper, balled and burlapped, and guaranteed for 18 months after planting. Species selection shall be at the discretion of the Board of Supervisors or as recommended by the Planning Commission. The types of shade trees shall be such that when grown to full maturity the trees shall not impede the utilization of solar energy by neighboring structures.

ARTICLE XVII: Open Space Residential Design Standards (OSR).

§ 123-97. Open space design standards.

A. All lots shall be grouped into areas consisting of a minimum of five lots, but no more than 25 lots.

B. The maximum or minimum number of lots may be increased or decreased, with the approval of the governing body. However, the applicant must demonstrate that such an alternative plan is more appropriate for the tract in question and will meet both the general intent and design standards of this article rather than being intended solely for economic savings.

C. Housing units shall abut common open space to the greatest extent possible or provide direct access to open space for lots and privacy to individual yard areas.

D. A meandering, circuitous eight-foot wide paved macadam walking trail shall be designed and installed within the fifty-foot open space tract boundary buffer. The paved walking trail shall surround the entire development in order to provide an active recreation feature solely for the residents of the development. This walking trail is not intended for use by other residents throughout the Township.

E. Views of neighborhoods from exterior roads shall be minimized by the use of changes in topography, existing vegetation that is preserved and/or additional landscaping, including reforestation.

F. No building envelope shall contain wetlands, floodplains or slopes over 25% and all building envelopes shall be set back at least 20 feet from these sensitive areas unless a greater distance is required elsewhere in the Township's Zoning Code.

G. Active recreation areas, including, but not limited to, golf courses, playing fields, playgrounds and courts. Such active recreation areas shall be set back from the tract boundary a minimum of 100 feet. At a minimum, 15%, or one acre, whichever is greater, of the required common open space must be usable for active recreation. Any areas designed for active recreation must be generally level (finished grade not to exceed 3%), safely accessible to all of the residential lots in the OSR development and shall be designed in conformance with the regulations of § 123-140G of the Township's Subdivision and Land Development Ordinance. Active recreation areas must have frontage or direct access from a road within the proposed development. This requirement for active recreation land may be used to satisfy the prime recreation land requirements of § 123-140 of the Subdivision and Land Development Ordinance, provided that the applicant can demonstrate to the satisfaction of the Board of Supervisors that the active recreation land requirements contained above superseded the regulations of § 123-140.

ARTICLE XIX: Recreation Land and Fees.

§ 123-108. Purpose; applicability; limitations; dedication; fees.

A. Purposes: to provide adequate open spaces, recreational lands and recreational facilities to serve residents and occupants/ employees of new developments, for both active and passive recreation; to recognize and work to carry out the Recreation Plan, Open Space Preservation Plan and Comprehensive Plan for Lower Providence Township.

B. Applicability. This article shall apply to any subdivision or land development for which a preliminary plan or a combined preliminary/final plan is submitted after the enactment date of this amendment. This article shall apply to any subdivision or land development that will eventually result in one or more new dwelling units or new principal commercial, office or industrial building floor area.

D. Land dedication. An owner or developer of any subdivision or land development regulated under this section shall be required to dedicate the specified amount of recreation land, unless there is agreement between the Board of Supervisors and the applicant that recreation fees shall be required in lieu of dedicated land. The land and fee requirements of this section shall be based upon the number of new dwelling units or maximum building floor area that would be allowed on the lots of a subdivision or land development after approval.

E. Fees. If the Board of Supervisors determines that a proposed subdivision or land development is required to pay fees in lieu of dedicating recreation land, this fee shall be as established by Township resolution (\$1,160/dwelling unit as of April 2021).

ARTICLE XXIII: Natural Resources Protection.

§ 123-114. Tree preservation, protection and replacement.

A. Natural resources plan: legislative intent. It is the intent of the natural resources plan to provide protection and preservation to the existing urban forestry canopy as a vital environmental natural resource of Lower Providence Township.

B. Tree protection and preservation. Preplanning conference. Prior to the preparation of formal land development and subdivision plans, the applicant/developer is encouraged to attend a preplanning conference to review the natural resources plan prepared pursuant to this subsection with Township staff.

Every tree determined by the Township Landscape Architect to be living and healthy, with a DBH of eight inches or greater and which is designated to be removed or which is destroyed, shall be replaced with one or more new shade trees of a type approved by the Township and have a trunk diameter of not less than 2.5 inches in caliper.

No heritage tree is to be removed for any reason without approval of the Board of Supervisors and after recommendation of the Township Landscape Architect. Any heritage tree removed without approval by the Board of Supervisors must be replaced with trees of equivalent value calculated by using the Truck Formula Method provided by the International Society of Arboriculture using the most recent issue.

Additional Regulations

ARTICLE III: Stormwater Management.

§ 129-13. General requirements.

A. All applicants proposing regulated activities in the Township that do not fall under the exemption criteria shown in § 129-6B and C of this chapter shall submit a stormwater management site plan, consistent with this chapter, to the Township for review. All applicants proposing regulated activities that fall under the exemption criteria identified in § 129-6C shall submit a simplified stormwater management site plan, consistent with this chapter, to the Township for review. These criteria shall apply to the total proposed development even if development is to take place in stages. Impervious surface shall include, but not be limited to, any roof, parking or driveway areas and any new streets and sidewalks. Any areas designed to be gravel or crushed stone shall be assumed to be impervious unless designed as a BMP (e.g., pervious paver blocks, reinforced turf, gravel-filled grids, etc.).

D. For all regulated earth disturbance activities, erosion and sediment (E&S) control best management practices (BMPs) shall be designed, implemented, operated, and maintained during the regulated earth disturbance activities (e.g., during construction) to meet the purposes and requirements of this chapter and to meet all requirements under Title 25 of the Pennsylvania Code and the Clean Streams Law. Various BMPs and their design standards are listed in the Erosion and Sediment Pollution Control Program Manual (March 2012), as amended and updated.

N. Where a development site is traversed by watercourses, drainage easements shall be provided conforming to the line of such watercourses. The width of the easement shall be adequate to provide for the unimpeded flow of stormwater runoff from the one-hundred-year storm event. Terms of the easement shall prohibit excavation, the placing of fill or structures, and any alterations that may adversely affect the flow of stormwater within any portion of the easement. Periodic maintenance of the easement shall be required by the landowner to ensure proper runoff conveyance, as defined by the Commonwealth of Pennsylvania.

P. Any stormwater management facilities regulated by this chapter that will be located in or adjacent to waters of the commonwealth or wetlands shall be subject to approval by PADEP through the Chapter 105 permit process, or, where deemed appropriate by PADEP, the general permit process. When there is a question as to whether wetlands may be involved, it is the responsibility of the applicant to show that the land in question cannot be classified as wetlands; otherwise, approval to work in the area must be obtained from PADEP.

Inventory & Analysis Mapping

Geology

Bedrock geology is rarely visible and its influence on natural features may often be overlooked. Bedrock geology is the foundation of an area and along with local hydrology, is responsible for the changes in elevation, steep slopes and location of waterways. Geology and soils are relevant and importance factors as they can impact stormwater management, infiltration rates, and vegetation that will grow in certain areas.

Bedrock geology also influences plant communities and soils. Bedrock or parent material has a great influence on the type of soil formed. Igneous bedrock leads to soils with a high stone and boulder content. Montgomery County is located in the Triassic Lowland and Piedmont Upland section of the Piedmont Physiographic Provence. The Triassic Lowlands are primarily red shales and sandstones, with intrusions of diabase. Four formations, Stockton Sandstone/Conglomerate/Shale, Lockatong Argillite/Shale, Brunswick Shale/Sandstone, and diabase, make up the Triassic Lowlands. The Piedmont Upland is comprised of metamorphic and igneous rock (granite and schist), although there is a band of carbonate rock which stretches east from Chester County to Abington Township. Wissahickon Schist/ Granite Gneiss/Hornblende Gneiss, Chickies Quartzite, and Leger/Dolomite/ Elbrook/Conestoga Lime-stone, are the formation found in the Piedmont Upland.

Geologic Formations

Brunswick Formation

• Reddish-brown mudstone, siltstone, and shale, containing a few green and brown shale interbeds; red and dark-gray, interbedded argillites near base.

Lockatong Formation

 Dark-gray to black, thick-bedded argillite containing a few zones of thin-bedded black shale; locally has thin layers of impure limestone and calcareous shale.

Stockton Formation

• Light-gray to buff, coarse-grained, arkosic sandstone; includes reddish-brown to grayish-purple sandstone, siltstone, and mudstone.

Ledger Formation

 Light-gray, locally mottled, massive, pure, coarsely crystalline dolomite.

Soils

Prime and Important Agricultural Soils

Agricultural soils are measured based on fertility, depth to bedrock and groundwater, texture, erodibility, and slope. Based on these characteristics' soils are classified as farmland of statewide importance. Prime farmland includes deep, well-drained, and moderately sloped soils that can support high yields of crops with little management. Lower Providence Township has soils considered to be prime farmland or farmland of statewide importance. One area of prime farmland is the southern part of the Township, south of Sunnyside Avenue and Ridge Pike all the way to the Schuylkill River. Another is the far northwestern part of the Township, between the Perkiomen and Skippack Creeks. Most of the remainder of the Township has soils considered to be farmland of statewide significance.

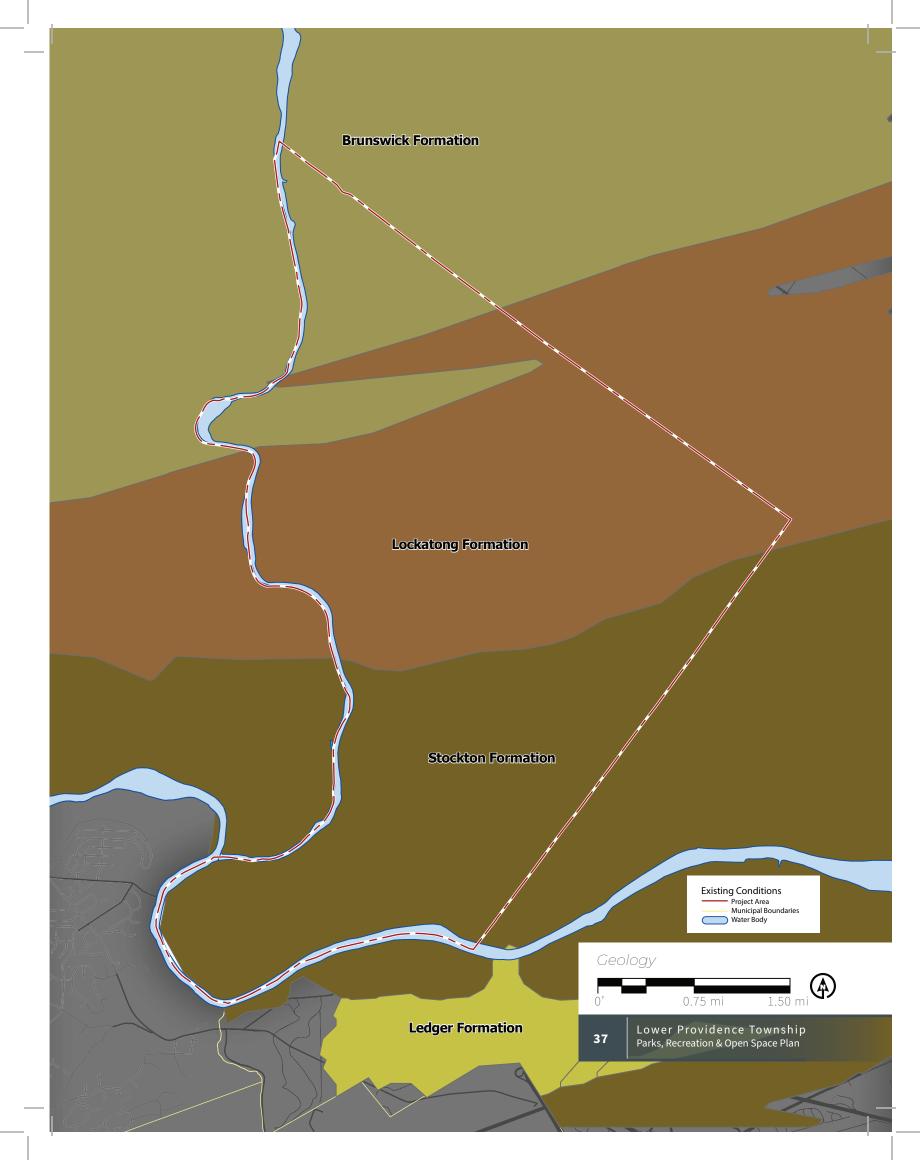
Hydric Soils

Hydric soils are periodically wet soils in an undrained condition that often support the growth of wetland vegetation. Some hydric soils are found in drained conditions; these will not exhibit wetland vegetation. Hydric soils that have been drained for agricultural use are one example of this situation. Soils with major hydric components are a conservative indicator of wetlands. Other soils have hydric components in limited settings, such as depressions, bottom lands, swales, drainage ways, and alluvial soils. These soils have a high water table and frequently pond.

Lower Providence Township has several areas of hydric soils. For the most part, they correspond to the water bodies in the Township: Schuylkill River, Eagleville Run, some parts of the Mine Run, Schatz Run, Miller Run, French Run, Rock Run, and the West Branch of the Stony Creek. Interestingly, most of the land along the Skippack Creek is not hydric soils. There is one large area of hydric soil not associated with a creek. It is on the northwest side of Sunnyside Avenue, from Farmhouse Drive nearly to Highley Road.

Alluvial Soils

Related to hydric soils, alluvial soils are frequently, but not always, located within a floodplain. These soils have been deposited by flowing water and are not stable as a result of their texture and composition. The presence of alluvial soils is only one indicator of a floodplain. Changes in the tributary drainage area or 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 recurrence of a flood (for example, a 100-year flood). An important aspect of alluvial soils is that they often form aquifer recharge.





Topography & Steep Slopes

Topography and steep slopes are naturally occurring, and are results of geology, hydrology, as well as man made development. Topography limits development and steep slopes (slopes over 15%) are classified as environmentally sensitive.

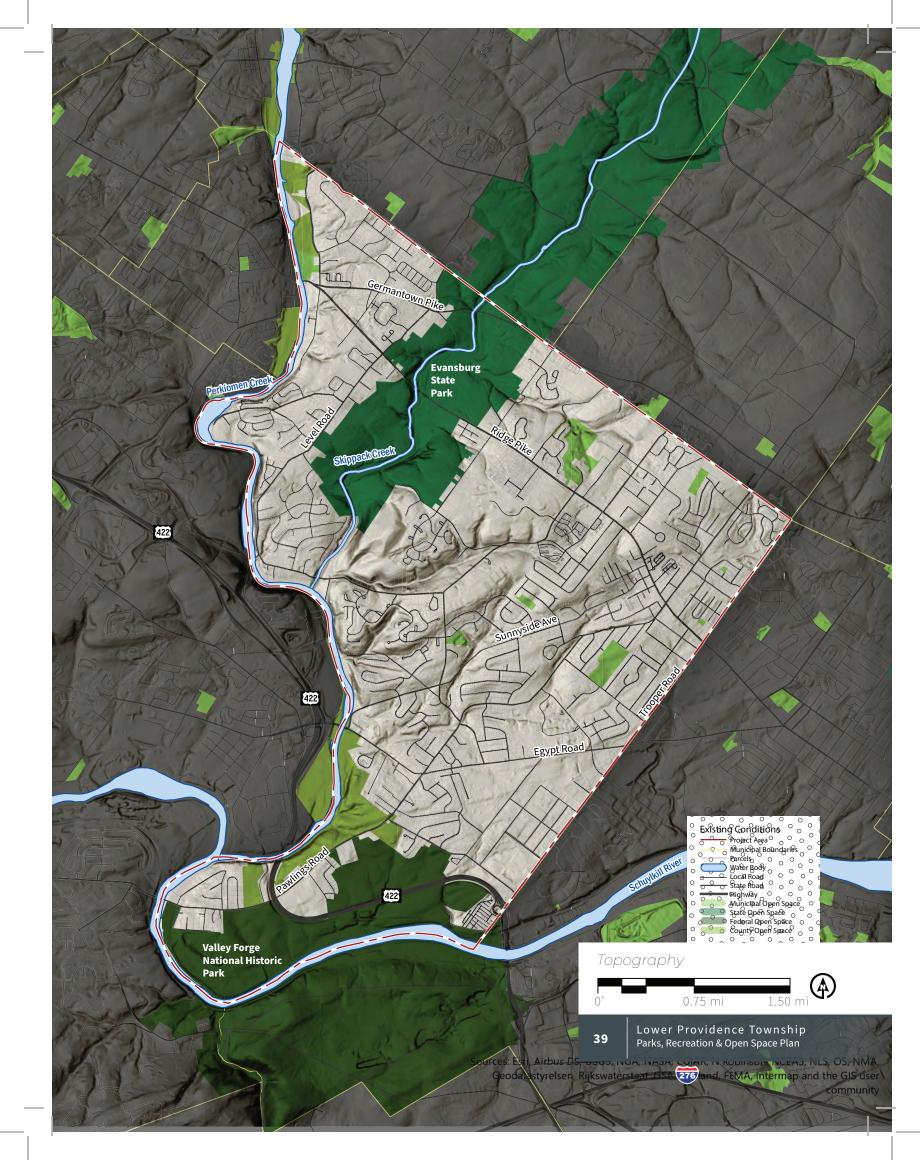
The Soil Conservation Service's Soil Survey for Montgomery County has four classifications for slopes:

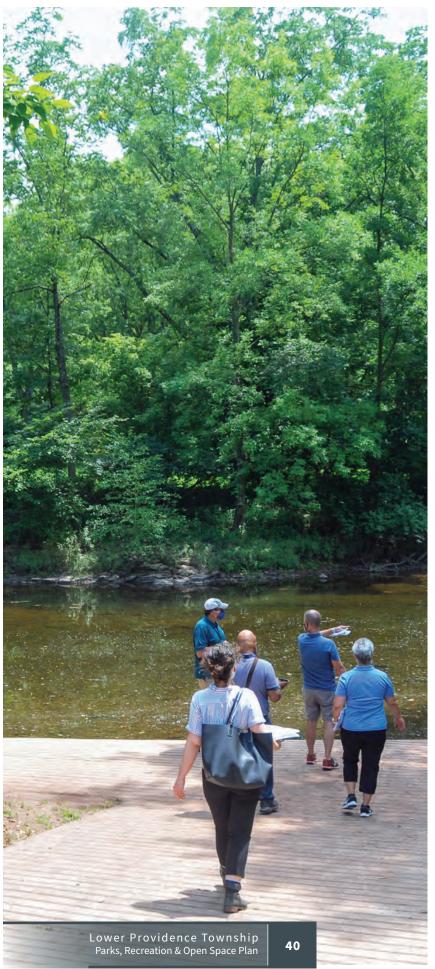
- 0 to 3 percent,
- 3 to 8 percent,
- 8 to 15 percent,
- 15 to 35 percent.

As slope increases, the depth of topsoil and the ability of the soil to support structures decreases. Steep slopes have a combination of vegetation, climate, soil and underlying geology which will differs from the surrounding area. Environmental sensitivity of the steep slope is different from lowland areas. Especially If vegetation is removed from steep slope areas, sediment erosion is a likely result which will lead to increased stormwater runoff.

Lower Providence Township has several steep slope area. Steep slopes are located in all parts of the Township, but are more specifically located along several water bodies: Skippack Creek, Mine Run, Perkiomen Creek, and the Schuylkill River, and tributaries.

Photo: View West Across Perkiomen Creek From Hoy Park





Watersheds

A watershed is an area that drains all rainfall to a common outlet, stream or conveyance channel. Surface water moves across Lower Providence Township via the following watersheds:

Flows to Schuylkill River

- Indian Creek Watershed
- Schuylkill River Watershed

Flows to Perkiomen Creek

- Doe Run Watershed
- Mine Run Watershed
- Perkiomen Creek Watershed

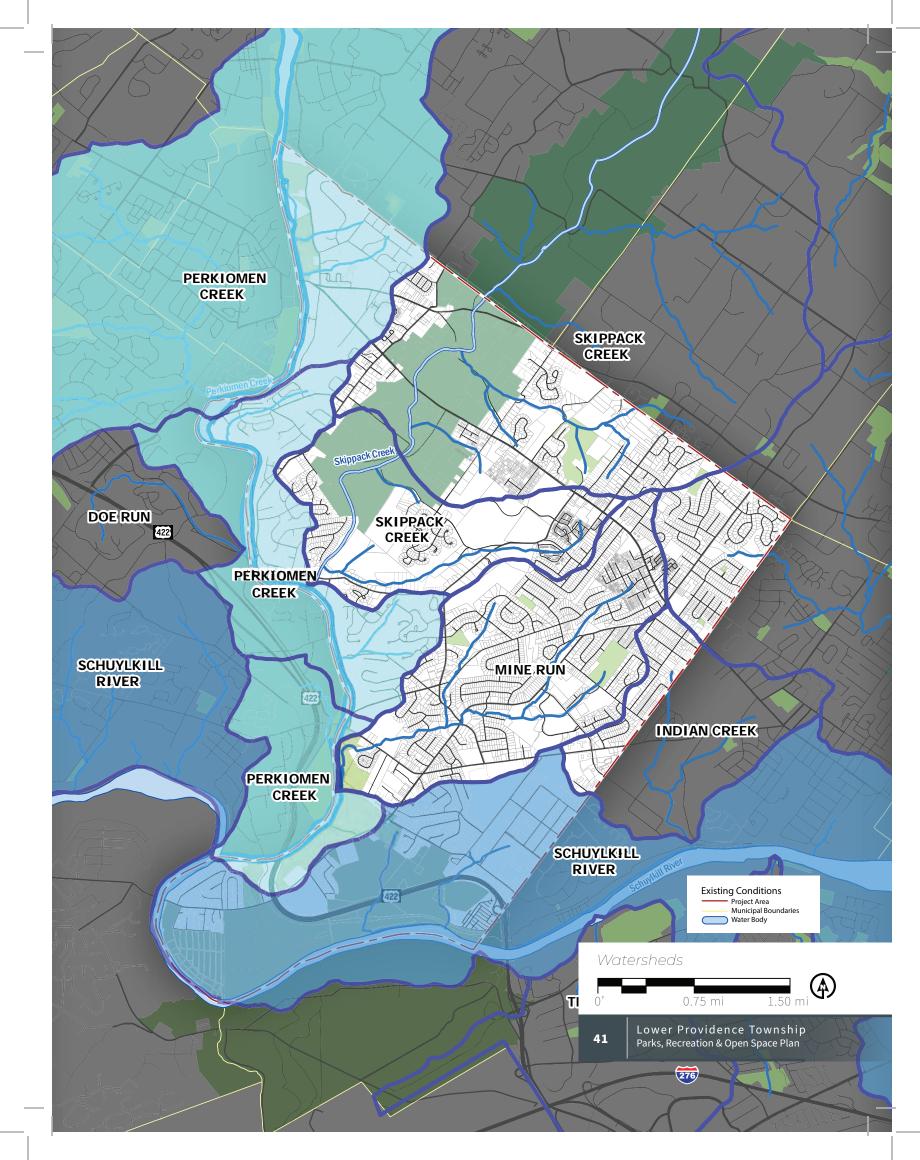
Flows to Skippack Creek

• Skippack Creek Watershed

Stormwater water may run onto and off of impervious surfaces such as parking lots, roads, buildings, and other structures during periods of heavy rain and snowfall. Impervious surfaces are paved surfaces through which water cannot infiltrate ie: sidewalks, driveways, roadways, parking lots, buildings/rooftops, etc. These surfaces usually convey rainwater into storm drains, but can also discharge overland across lands that may be classified as pervious - that can infiltrate water.

Lower Providence Township is within the Schuylkill River watershed. Within the Perkiomen Watershed are several smaller subwatersheds. The largest is the Skippack Creek (runs through the Evansburg State Park). Mine Run drains much of the south-central part of the township, between Egypt Road and Sunnyside Avenue. Smaller creeks drain directly to the Perkiomen Creek, including Schatz Run, Miller Run and French Run. The West Branch of the Stony Creek drains the northeastern corner of the Township. The Stony Creek drains directly into the Schuylkill River at Norristown. Indian Creek drains directly into the Schuylkill River at Port Indian in West Norriton Township.

Photo: Hoy Park



Hydrology

Streams - Streams, rivers, and waterways play important historic, recreational, and environmental roles for people who live in the region. The following waterways run through or adjacent to Lower Providence Township:

- Schuylkill River and tributaries.
- Perkiomen Creek and tributaries.
- · Skippack Creek and tributaries.
- Stony Creek and tributaries.
- Indian Creek and tributaries.
- Eagleville Run and tributaries.
- French Run and tributaries.
- Miller Run and tributaries.
- Mine Run and tributaries.
- Rock Run and tributaries.
- Schatz Run and tributaries.

Floodplains - Floodplains are low lying areas next to streams, rivers, or waterways that are subject to periodical complete or partial flooding during rain events. Floodplains are meant to flood as part of the hydrologic cycle. The boundaries of floodplains are typically irregularly shaped and often meander through communities, unseen. Flooding under normal circumstances is not dangerous, but when development approaches these areas, risk of damages and possible loss of life increases. When these areas are naturally vegetated, it can help trap and reduce the amount of suspended sediment from upland runoff that would otherwise reduce water quality and impair aquatic habitat. Having a healthy floodplain will also create better downstream conditions while storing large amounts of water that helps replenish aquifers. Regulations protect these important areas and help to protect people from property damage and loss of life.

The Federal Emergency Management Agency (FEMA) produces flood zone maps to identify floodways, 100-year flood zones, and 500-year flood zones. These areas are identified on the Hydrology Map. "100-year flood" does not mean that a rain event will cause flooding that will only happen every 100 years, but

rather that there is a one percent chance that a certain amount of rain will fall in a particular location over a set amount of time in a given year. A 500-year flood has a .2% chance of happening within any given year.

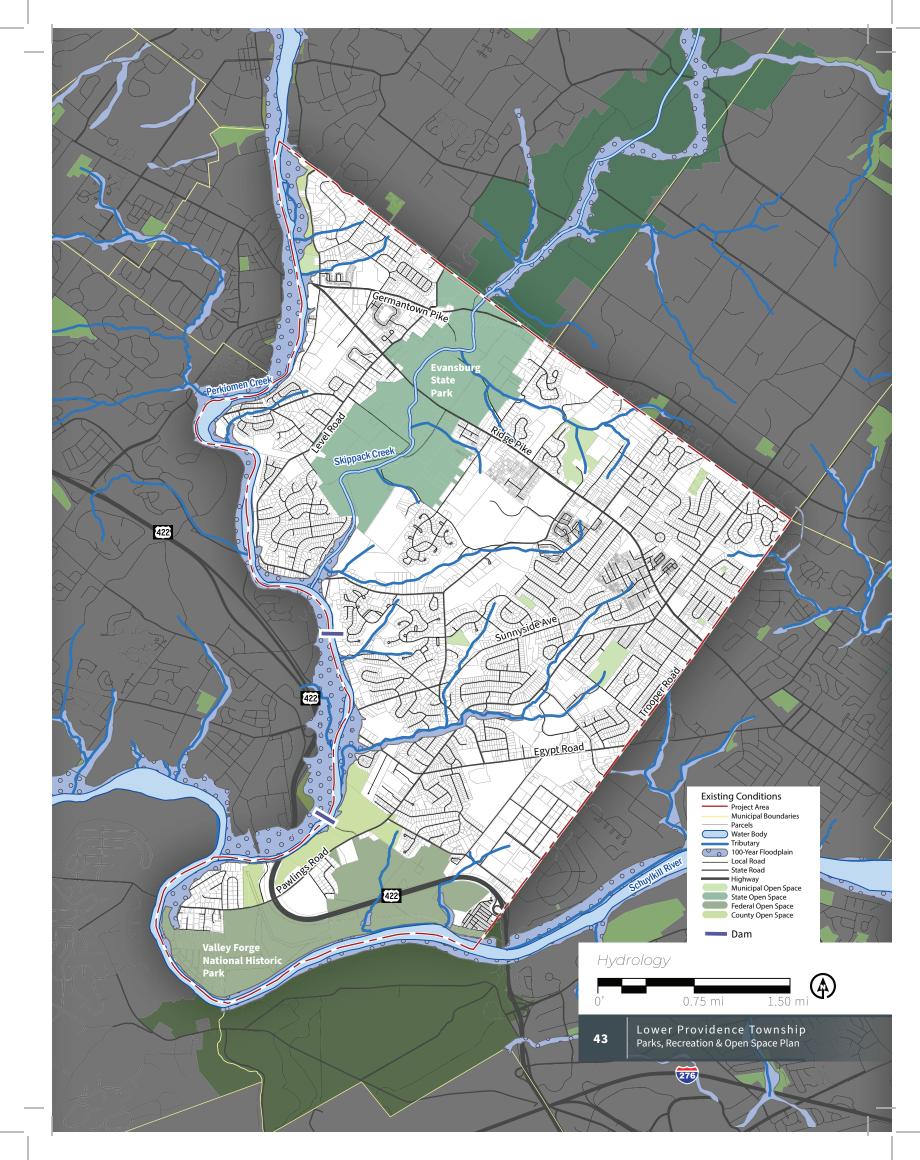
The Federal Clean Water Act requires Pennsylvania to establish water quality standards for all streams and other water bodies in the state. The standards establish criteria that need to be met to protect designated water uses. That means that the streams are evaluated periodically to ensure that the water quality standards that are associated with the uses are met. The higher the standards, the higher the waterway's value for protection and propagation of aquatic life and hence the higher the stream quality.

Below is the federal government's list as it is used in Montgomery County, including a summary of what the water quality criteria are based on. The list is prioritized from the lowest designation (WWF) to the highest (EV).

- WWF Warm Water Fishes Maintenance and propagation of fish species and additional flora and fauna that are indigenous to a warm water habitat.
- CWF Cold Water Fishes Maintenance and/or propagation of fish species including the family Salmonidae and additional flora and fauna that are indigenous to a cold water habitat.
- TSF Trout Stocking Fishes Maintenance of stocked trout from February 15 to July 31 and maintenance and propagation of fish species and additional flora and fauna that are indegenous to a warm water habitat.
- EV Exceptional Value Water A stream or watershed that constitutes an outstanding national, state, regional, or local resource, such as waters of national, state, or county park or forests, or water that is used as a source of unfiltered potable water supply, or waters of wildlife refuges or state game lands, or water that has been characterized by the Fish Commission as "Wilderness Trout Streams," and other waters of substantial recreation or ecological significance.

In Lower Providence, the following waterways have been designated:

- Perkiomen Creek TSF
- Schuylkill River WWF
- Skippack Creek TSF
- Stony Creek WWF
- Mine Run TSF
- Unnamed tributary of Schuylkill WWF
- Unnamed tributary of Perkiomen TSF



Lower Providence Township Parks, Recreation & Open Space Plan

Photo: Agriculture north of Eskie Park

Land Use

Residential uses are the largest land use in Lower Providence. Housing types include:

- Single-family detached dwelling (most comment housing type) and Single-Family Attached (Commonly known as townhouses).
- Mobile Homes (there are three mobile home parks in the Township—Trooper, Sunnyside, and Valley Forge Crossing).
- Multifamily (Apartments) includes Audubon Court, Colony Arms, Eagle Stream, and Mill Grove.
- Continuing Care Residential includes the community of Shannondell and Providence Place Senior Living.

Commercial land uses are concentrated along major roadways (i.e. Ridge Pike) and are categorized by:

- Retail. Consists of strip commercial development, primarily located along Ridge Pike, or in the Audubon area along Egypt Road.
- Office. Located throughout the Township, high concentration of offices are located in the Valley Forge Corporate Center.
- Mixed Use. Typically these units (residential above, commercial below) are in converted older dwellings in or near the villages.

Industrial land use is most visible at Superior Tube in Evansburg. There are additional industrial uses in the Valley Forge Corporate Center.

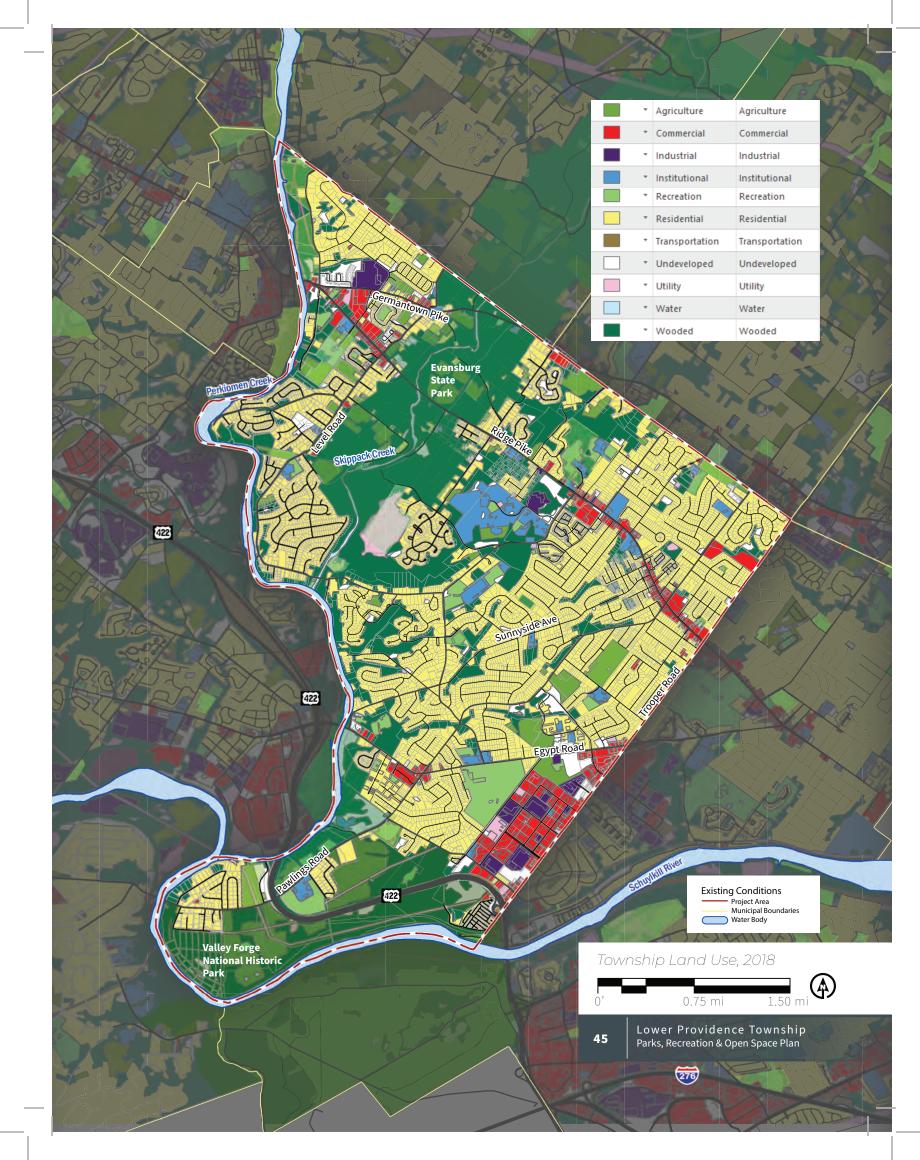
Institutional land uses include religious facilities, the County Prison at Eagleville, Township institutions and Eagleville Hospital.

Utility land uses are public water and sewer pumping stations and the natural gas line, which runs through the southern portion of the Township.

Open Space land uses are divided into two categories—public and private.

- Public: This includes all public parkland located in the Township. Besides the federal-owned Valley Forge National Historical Park and the state-owned Evansburg State Park, it includes the county owned Mill Grove and the Township's park system.
- Private. This land is the private open space owned by homeowners associations.

Agriculture land uses were once the dominant land use in Lower Providence, and now constitutes less than 1 percent of the Township's total acreage.



Lower Providence Township Parks, Recreation & Open Space Plan

Photo: Eagleville Park

Woodlands & Greenways

Woodlands

Before modern times 99% of Montgomery County was once a dense forest of hardwoods: Oaks were the dominant species, but Chestnut, Tulip Poplar, Hickory, Ash, Red Maple, and Dogwoods were also present. Several hundred years of clearing and cultivation, and in more recent times the rapid development of houses and commercial facilities, have drastically reduced all woodlands. Primary remaining woodland types are:

- Red Oak Northern Red Oak is predominant, but Black, Scarlet and Chestnut Oak are also abundant.
- Eastern Red Cedar Includes this species and associated species: Gray Birch, Red Maple, Sweet Birch, and Aspen.
- Sugar Maple/Beech/Yellow Birch Associated species include Red Maple, Hemlock, Northern Red Oak, and Tulip Poplar.

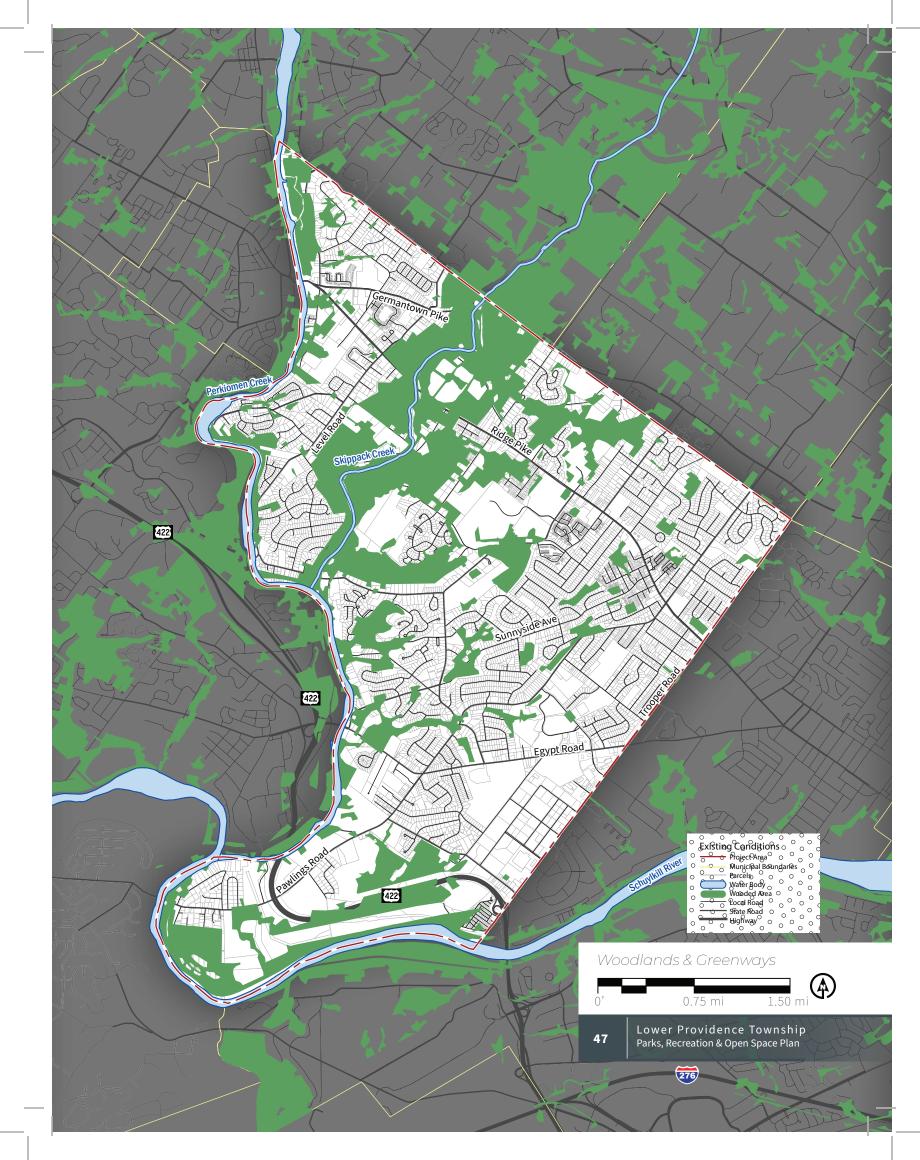
Woodlands and hedgerows serve many purposes - Woodlands prevent erosion, provide habitat for wildlife, provide buffers for creeks, and offer recreational opportunities for residents. Hedgerows and wooded corridors also prevent erosion, and provide cover for wildlife movement, shelter, and migration. Different species of trees attract different types of wildlife. In general, more diversity in vegetation, the more species of animals it can support.

The map on the opposite page shows the wooded areas in Lower Providence Township based on information collected from DVRPC land use data. Portions of Township lands are wooded, especially Evansburg State Park. In addition to land along the Perkiomen Creek and Schuylkill River.

Greenways

Greenways are corridors of land that generally parallel creeks and streams. They often have conservation, ecological, cultural, historic and recreational value. The primary purpose to designate a "Greenway" is to foster the preservation and protection of critical habitats and protect and enhance water quality. Greenways may or may not contain a trail or allow access through them.

In Lower Providence Township they are protected under ARTICLE XXXIV (Riparian Buffer Overlay Zone) This ordinance regulates land use to ensure natural resources are preserved and protected and is described earlier in the chapter.



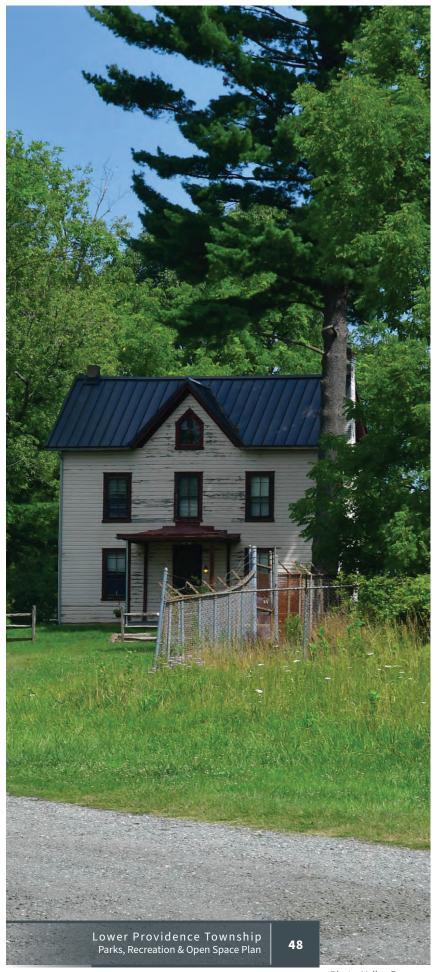


Photo: Valley Forge

Cultural Inventory

The historic and cultural resources in Lower Providence Township are important to the community's sense of place and should be protected, preserved, and maintained for present and future generations.

Listed on the National Historic Register



- Perkiomen Bridge
- Evansburg Historic District
- Skippack Bridge

Eligible for the National Historic Register



- Tyson Mill Complex
- Gambone House
- Heardgrove Property
- Valley Hi-West Farm
- Farmhouse Group A
- Audubon Sunday School
- Crawford farm
- Union Church
- Wallace Property
- Wisler Farm
- Vaux Hill
- St Gabriel's Hall

National Historic Landmark (NHL)



- Audubon Complex at Mill Grove
- Valley Forge National Historic Park