UPPER SAUCON TOWNSHIP

Comprehensive Recreation & Open Space Plan

August 2020

UPPER SAUCON TOWNSHIP
LEHIGH COUNTY
RESOLUTION NO. 2022-20

A RESOLUTION ADOPTING THE COMPREHENSIVE RECREATION AND OPEN SPACE PLAN FOR UPPER SAUCON TOWNSHIP, DATED AUGUST 2020

WHEREAS, Upper Saucon Township (hereinafter, "Township") has various parks, trails and open space lands for residents to enjoy; and

WHEREAS, the Upper Saucon Township Board of Supervisors (hereinafter, "Supervisors") desire to enhance recreation opportunities for residents and to preserve farmland and open space to the extent possible; and

WHEREAS, the Supervisors recognize the benefits of planning for the community's future park, recreation and open space needs; and

WHEREAS, the Township's current Comprehensive Recreation and Open Space Plan dates back to 2006 and needs to be updated and modernized; and

WHEREAS, the Supervisors established a Steering Committee (hereinafter, "Committee") to guide the process of preparing a new Comprehensive Recreation and Open Space Plan for the Township; and

WHEREAS, after a series of public meetings and with assistance from the planning firm of Simone Collins, the Committee developed the Comprehensive Recreation and Open Space Plan for Upper Saucon Township, dated August 2020 (hereinafter, "2020 Recreation Plan"); and

WHEREAS, the Committee recommended approval of the 2020 Recreation Plan to the Supervisors; and

WHEREAS, pursuant to the requirements of the Pennsylvania Municipalities Planning Code ("MPC"), copies of the 2020 Recreation Plan were distributed for review and comment to contiguous municipalities, the Lehigh Valley Planning Commission ("LVPC"), the Southern Lehigh School District and the Upper Saucon Township Planning Commission ("PC"); and

WHEREAS, at a public meeting on July 6, 2022, the PC unanimously recommended approval of the 2020 Recreation Plan to the Supervisors; and

WHEREAS, the LVPC offered comments and recommendations concerning the 2020 Recreation Plan in a review letter dated June 24, 2022; and

WHEREAS, pursuant to Section 302(b) of the MPC, the Supervisors held a public hearing on July 11, 2022, for the purpose of accepting public comment and input concerning the adoption of the 2020 Recreation Plan; and

WHEREAS, the Supervisors find the 2020 Recreation Plan to be consistent with the Township's recreation and open space needs and goals; and

WHEREAS, the Supervisors desire to adopt the 2020 Recreation Plan as a companion and supplement to the Township's Official Comprehensive Plan which was adopted on April 11, 2022; and

WHEREAS, the 2020 Recreation Plan contains the following chapters: Introduction (Chapter 1), Inventory and Analysis (Chapter 2), Recommendations (Chapter 3), Implementation (Chapter 4) and Appendix (Chapter 5); and

WHEREAS, a true and correct copy of the 2020 Recreation Plan, including all maps, charts and textual matter, is attached hereto, made a part hereof and identified as Exhibit "A."

NOW, THEREFORE, IT IS HEREBY RESOLVED by the Board of Supervisors of the Township of Upper Saucon, Lehigh County, Pennsylvania, as follows:

1. Pursuant to Sections 302(a) and (c) of the MPC, the 2020 Recreation Plan, including all maps, charts, textual matters and other matters forming a part of the 2020 Recreation Plan, is hereby adopted as a companion and supplement to the Township's Official Comprehensive Plan.

2. On matters relating to parks, recreation and open space planning, the Supervisors shall be guided by the 2020 Recreation Plan, however, it shall not be obligated to strictly implement the recommendations contained in the 2020 Recreation Plan.

3. The 2020 Recreation Plan shall supersede all previously adopted recreation and open space plans which are hereby deemed repealed.

4. A true and correct copy of this Resolution shall be formally and officially appended to the 2020 Recreation Plan.

DULY ADOPTED, this 11th day of July, 2022, by the Board of Supervisors of the Township of Upper Saucon, Lehigh County, Pennsylvania, in lawful session duly assembled.

UPPER SAUCON TOWNSHIP
BOARD OF SUPERVISORS

CHAIRMAN

VICE CHAIRMAN

SUPERVISOR

SUPERVISOR

SUPERVISOR

ATTEST:

SECRETARY

TABLE OF CONTENTS

Board of Supervisors

Brian Farrell - Chairperson

Philip Spaeth- Vice Chairperson

Dennis Benner

John Inglis

Stephan Wagner

Township Contacts

Patrick M. Leonard - Special Projects Coordinator

Patricia Lang, AICP - Director of Community Development

Project Committee

Phil Spaeth - Township Supervisor, Vice Chair

John Inglis - Township Supervisor

Kimberly Stehlik - Park and Recreation Commission

Todd Bergey - Southern Lehigh School District

Thomas Gettings - Environmental Advisory Council, Chairperson

Robert Kassel - Resident

Lloyd Ohl - Resident

Bridget Graver - Resident (Soccor League)

Chris Wayock - Resident (Lacrosse League)

SIMONE LANDSCAPE ARCHITECTURE COLLINS

Pat Stasio, Certified Park and Recreation Professional

SC# 19042.1

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CHAPTER 1

INTRODUCTION

CHAPTER 1 INTRODUCTION

Study Purpose

Upper Saucon Township is one of the fastest growing municipalities in the region and planning projections predict that the population will continue to steadily grow through 2040. With the recent growth that has already occurred, land use change has created strong developmental pressure on much of the valuable undeveloped lands and the natural, agricultural and cultural resources in the Township.

Open space is widely recognized to give communities a "sense of place" through unique habitats, scenic viewsheds, trails, recreational facilities, and protected farmland. Additionally, preserved open space has been shown to be a wise public investment since open space can: add value to residential properties; provide ecological benefits; provide recreational opportunities and facilities; and keep residents and jobs in communities since the quality of community life is enhanced.

The Comprehensive Recreation and Open Space Plan is a companion to the recently completed Township Comprehensive Plan and will serve as a blueprint for open space and natural resource protection for the next 10 to 20 years.

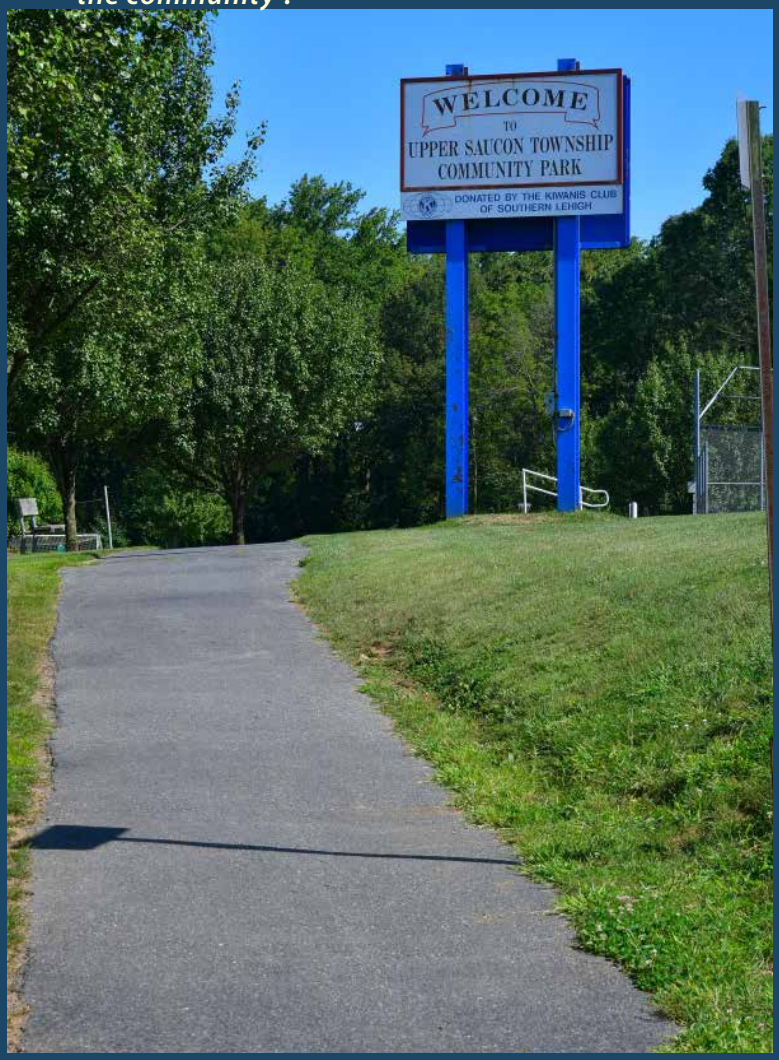
The Comprehensive Recreation and Open Space Plan:

- examines greenway and trail development and recommends enhancements to existing trails and trail plans,
- recommends a methodology for open space preservation and acquisition;
- suggests methodologies for improved park facility operations, maintenance and staffing;
- suggests options for potential new recreational programs and activities
- provide an implementation and funding strategy.

Mission Statement

The mission of Upper Saucon Township's Comprehensive Recreation and Open Space Plan is to:

"Enhance access and opportunities to a wide range of recreational and open space facilities and resources toward the benefit of the environment and the community".



Plan Goal and Objectives

The Comprehensive Recreation and Open Space Plan goal is to:

"Create a sustainable plan for parks, recreation and open space that will provide equitable access and opportunities to all residents while preserving the cherished rural, agricultural and suburban characteristics and valued natural resources that make Upper Saucon Township a unique community".

To achieve the mission and goal of the plan, objectives are as follows:

- **Survey area residents to determine current perceptions and needs regarding park, recreation, and open space facilities and programs in the Township;**
- **Conduct public meetings to gather information, comments and suggestions from residents, local organizations, and other stakeholders;**
- **Inventory existing parks, recreational facilities, preserved open space, trails, schools, private sector recreation providers and other important recreation destinations within the Township;**
- **Compare the existing inventory of park facilities with other similarly sized communities;**
- **Analyze current active and passive recreational facility use;**
- **Suggest ways to enhance existing and planned trails with additional connections to area recreational, employment, residential, shopping, and other destinations;**
- **Develop a phased implementation and funding strategy to make the plan a reality.**

Municipal Background

Upper Saucon Township is located in Lehigh County, Pennsylvania, approximately 60 miles north of Philadelphia and approximately three miles south of the City of Allentown. Upper Saucon Township has a total area of 24.6 square miles with very distinct areas of residential and commercial development. Large rural areas and agricultural land use surrounds the more densely populated areas. A large portion of the northern border is primarily part of the South Mountain Conservation District. Additional large parcels of land are owned by DeSales University, Lehigh University and the Saucon Valley Country Club.

Township residents enjoy a number of Township-owned outdoor recreational facilities including the Saucon Rail Trail and the Upper Saucon Township Community Park. A new community park, Hopewell Park, is currently under construction.

The Township is served by the Southern Lehigh School District with the middle school, high school, and Hopewell Elementary located in the Township.

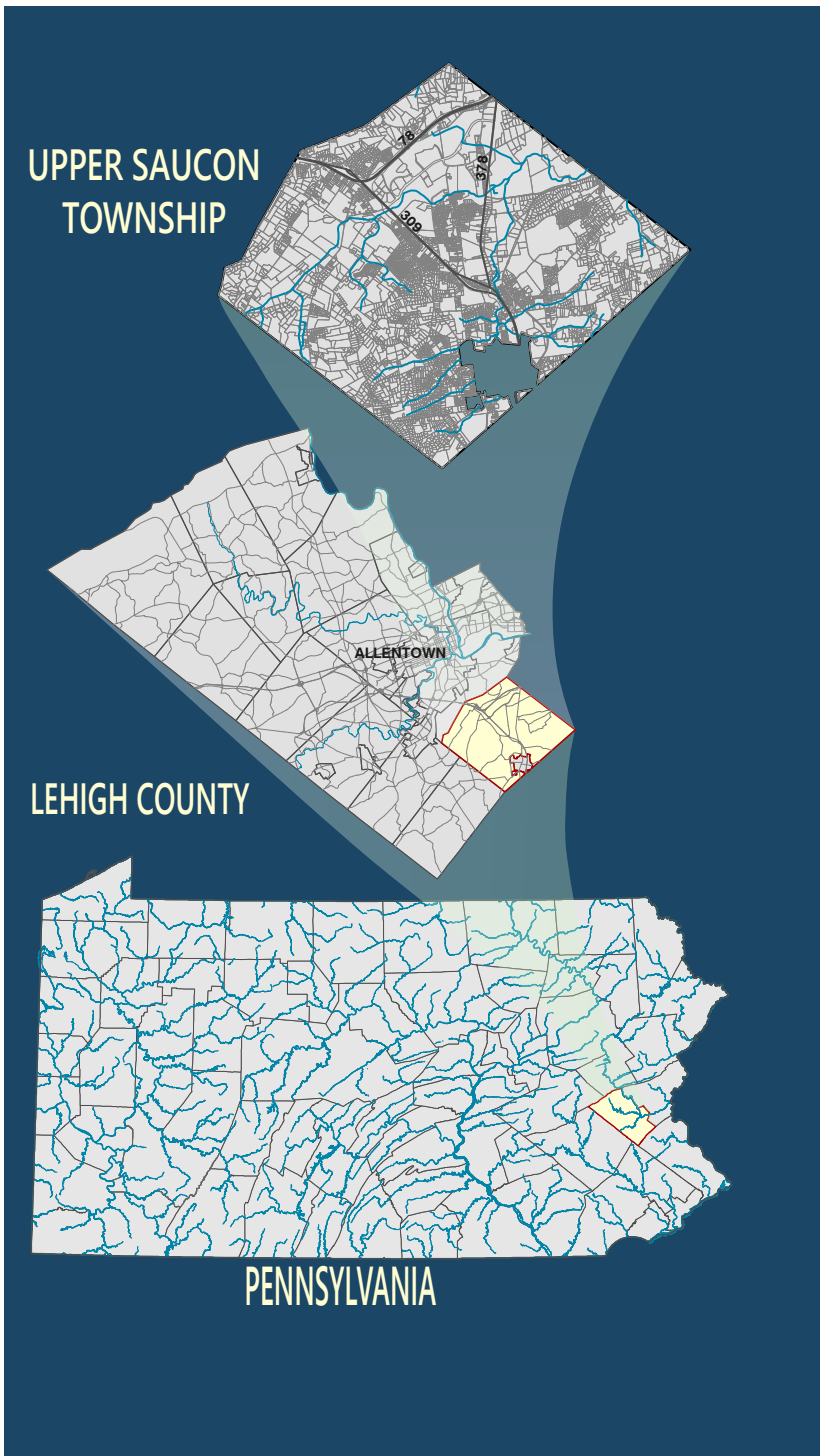
The Township is governed by a five-member Board of Supervisors who have staggered six-year terms. The Board of Supervisors is assisted and advised by commissions and boards appointed by the Board of Supervisors. The Township Manager is responsible for day-to-day operations of the Township and is assisted by an Assistant Township Manager and the Special Projects / Communications Coordinator. Upper Saucon Township has organized several departments around certain functions that report to the Township Manager. Further details of Upper Saucon Township Government can be found at https://www.uppersaucon.org/township-info/form-of-government/.

Regional Context

The regional context map shows the relationship between Upper Saucon Township, Lehigh County and the State of Pennsylvania. Upper Saucon Township is bordered by Salisbury Township to the northwest, Upper and Lower Milford Township to the southwest, Springfield Township, Bucks County to the southeast, Lower Saucon Township, Northampton County, to the northeast, and surrounds Coopersburg on the west, north, and east sides.

The Township is bisected east / west by PA Route 309 which connects the Township to Allentown to the north and Quakertown to the south. The northern end of PA Route 309 connects to Interstate 78, that runs from New York City to Harrisburg, PA., PA Route 378 connects to PA Route 309 at Center Valley and provides connection to Bethlehem and Lehigh Valley Thruway (Route 22).

The Township lies in a valley of the South Mountains within the larger Appalachian Mountain Range. The Saucon Creek bisects the Township running west to east and is a tributary of the Lehigh River. The Saucon Rail Trail runs through the eastern part of the Township and provides residents with recreational connections to Living Memorial Park, Upper Saucon Township Community Park, and Saucon Park in Hellertown.



Demographics

According to the U.S. Census and American Community Survey, Upper Saucon Township has one of the fastest growing populations in the region. The following information focuses on the demographics within Upper Saucon Township and Lehigh County. More information can be found in the Upper Saucon Comprehensive Plan and U.S. Census Bureau

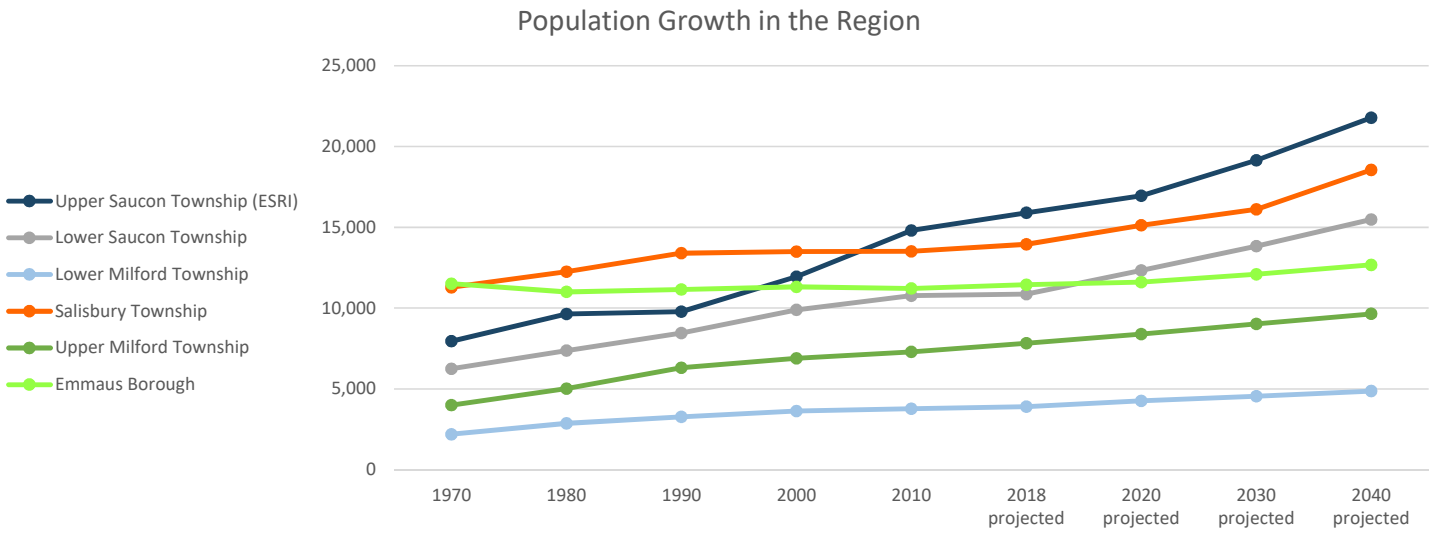
https://www.census.gov.

Population and Projections

According to the 2017 Census estimates, Upper Saucon Township had a population of 16,143 which was an increase of 35% from the 2000 Census of 11,939. Lehigh County experienced a population increase of 18% within the same time period.

Using the 2017 Census estimate, the Township has a population density of 656 inhabitants per square mile while Lehigh County is denser with 1,058 people per square mile, with most of the population residing in Allentown and surrounding areas. The average Township household size is 2.65 compared to Lehigh County having 2.56 inhabitants per household.

Upper Saucon's population is projected to be 21,793 by 2040, according to Environmental Systems Research Institute (ESRI) projections. This is a 30% increase from the current population. Lehigh Valley Planning Commission is projecting the County's population to be 458,997 by that year. This represents a 24.7% increase with the largest growth in the City of Allentown, Upper Macungie Township, Upper Saucon Township, North Whitehall Township and Whitehall Township.



Data Source: US Cencus Bureau, 2013-2017 American Community Survey (ACS), Lehigh Valley Planning Commission (LVPC), and ESRI

Age

The largest age group in the Township is 35-54 year-olds followed by the 15-19 age cohort. The largest increase of population by age group from 2000 to 2017 was in people who are 60 and older. The population of people aged 60-64, for example, grew by almost 150% during that time. The median age is 42, which is higher than the County's median age of 38.5. This demographic information suggests that the population is aging and that this plan needs to account for recreational needs of both older and younger residents.

Population by Age Group			
	2000	2017	% of Change
under 5	632	547	-14%
5 to 9	823	1151	40%
10 to 14	897	1106	23%
15 to 19	1106	1505	36%
20 to 24	730	1134	55%
25 to 34	1035	1279	24%
35 to 44	2081	2036	-2%
45 to 54	1975	2260	14%
55 to 59	741	1453	96%
60 to 64	526	1308	148%
65 to 74	813	1435	77%
75 to 84	466	598	28%
85+	114	331	190%
total pop	11939	16143	35%

Source: American Community Survey(ACS) 5 year estimate 2012-2017, United States Census Bureau

Source: From Web

Race

Both Upper Saucon Township and Lehigh County are predominantly Caucasian. Within Upper Saucon Township, 94.5% of the population identifies as Caucasian. The remaining populations are African American (.7%), Hispanic (6.4%), Asian (3%), American Indian (.2%), Native Hawaiian or Pacific Islander (.1%), Some other Race (1.1%), and those that identify with two or more races (.4%). The Hispanic population has grown 117% from 2010. This information suggests that recreational programming should consider racial diversity.

In Lehigh County, 78.7% identify as Caucasian. Black or African American make up 6.7%, Hispanic 21.8%, Asian, 3.3%, American Indian .2%, Some other Race 8.2% and Two or More Races 2.9%.

Race & Ethnicity				
	Upper Saucon Township		Lehigh County	
	Total	Percent	Total	Percent
White	15,032	94.5%	282,360	78.7%
Black/African American	117	0.7%	24,174	6.7%
American Indian/Alaska Native	32	0.2%	701	0.2%
Asian	473	3.0%	11,680	3.3%
Native Hawaiian/Pacific Islander	8	0.1%	134	0.0%
Some Other Race	180	1.1%	29,356	8.2%
Two or More Races	62	0.4%	10,387	2.9%
Hispanic/Latino	1,010	6.4%	78,318	21.8%

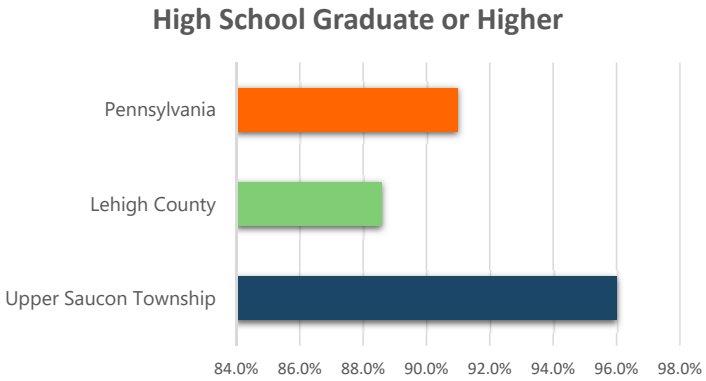
Source: American Community Survey(ACS) 5 year estimate 2012-2017, United States Census Bureau

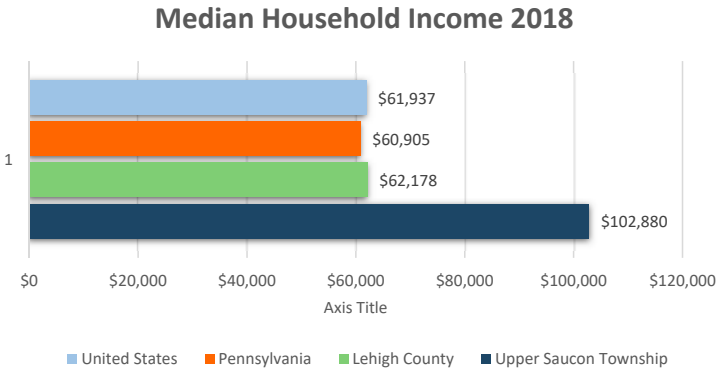
Income

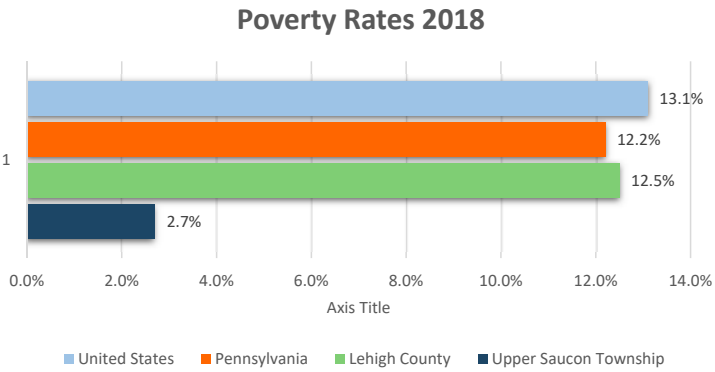
The median household income in Upper Saucon Township is $102,880. This is roughly 40% more than the Lehigh County median household income of $62,178. Lehigh County's median household income is slightly higher than the state and national average.

Only 2.7 % of the population in Upper Saucon live below the poverty rate (defined as people who lack sufficient income or material possessions for their needs). This is considerably lower than Lehigh County with 12.5% living below the poverty rate.

The income demographic information suggests Township residents may have larger disposable incomes for recreational purposes and related purchases.







Source: American Community Survey(ACS) 5 year estimate 2013-2018, United States Census Bureau

Education

The majority of the population within Upper Saucon received some college education, with over 44.8% of the population obtaining a bachelor's degree or higher. In comparison, much of the Lehigh County population did not receive any college education and only 31.9% obtained a bachelor's degree or higher.

Of the school age population, 39% are in elementary school, 16% are in high school, and 31% are in college or graduate school. According to the PA Department of Education, the Southern Lehigh School District is projected to grow 7% by 2027-2028.

Educational Attainment

	High School Graduate	Some College, no degree	Bachelors Degree	Graduate or professional degree	High School Graduate or Higher
Upper Saucon Township	26.7%	14.3%	24.0%	20.8%	96.0%
Lehigh County	32.9%	17.0%	17.9%	11.5%	88.6%
Pennsylvania	34.6%	15.9%	19.2%	12.7%	91.0%

Source: American Community Survey(ACS) 5 year estimate 2013-2018, United States Census Bureau

CHAPTER 2

INVENTORY AND ANALYSIS

Data Collection and Methodology

In August 2019, Upper Saucon Township selected Simone Collins Landscape Architecture (SC) and Certified Parks and Recreation Professional Pat Stasio, the Director of Parks & Recreation in Upper Moreland Township, Montgomery County, as the consultants to guide the planning process. The project team also included a project committee, comprised of residents, professionals, stakeholders and Township staff. Figure 1-1 shows the timeline of the planning process.

Data found within this report was compiled using the best available information. This included Geographic Information System (GIS) data from Upper Saucon Township, Lehigh County, Lehigh Valley Planning Commission, 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, committee and public meetings, key person interviews, WikiMapping and two online public opinion surveys.

The consultants performed an initial field reconnaissance in September 2019 to inventory, analyze and document existing conditions of parks, trails, and open space. 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.

The project was guided by a study committee that provided critical insight and direction to the consultants in the development of the Plan. A series of committee and public meetings were held throughout the entire planning process that provided additional feedback as to what individuals and organizations would like to see incorporated into the Comprehensive Park, Recreation and Open Space Plan. In addition, two online surveys were available to the public. The first was available from October 2019 to January 2020, and the second from January to March 2020, and were used to obtain feedback on recreational habits, usage, needs and support. The first survey received 467 responses and the second survey received 104 responses. These surveys are discussed later in this chapter. Additionally, a WikiMapping survey was provided. WikiMapping is a public engagement tool that allows users to provide routes, mark points, and add pictures and comments on a map to show consultants existing conditions, desired connecting routes, and spaces for preservation or recreation. 13 people accessed the WikiMapping tool. Information provided is addressed with the survey results.

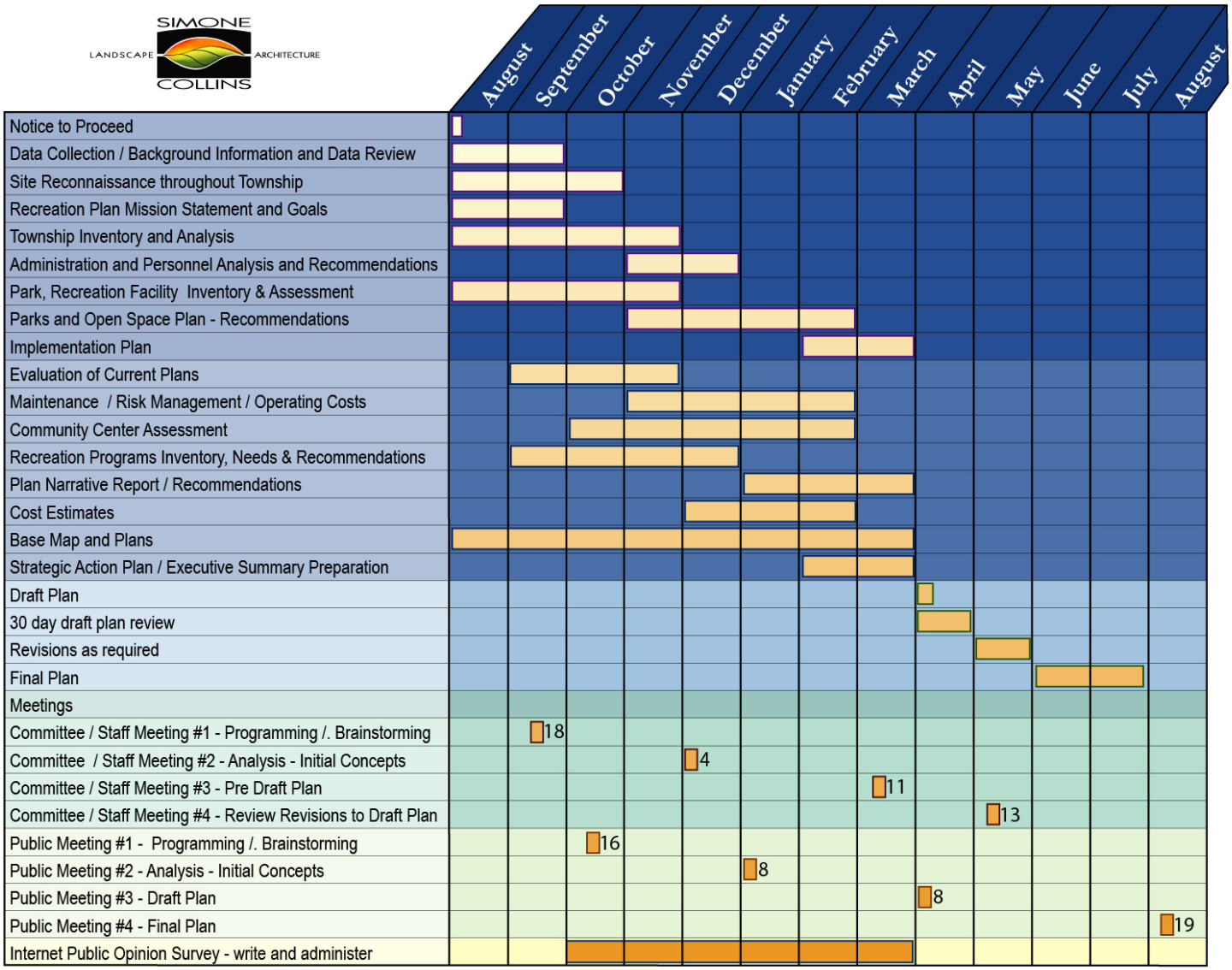


Figure 1-1: The timeline schedule for the planning process

Public Participation Summary

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. Receiving 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 incorporate what was learned into the Comprehensive Park, Recreation and Open Space Plan. The Township placed meeting dates, information from prior meetings, and other relevant information on their website and Facebook page.

The public participation process included four public meetings, four committee meetings, key Township Staff interviews by Pat Stasio, and two online public opinion surveys with accompanying

WikiMapping. Meeting notes and attendance sheets for each meeting as well as survey results can be found in the Appendix of this report.

Public Meetings

October 16, 2019 - Public Meeting #1

The consultants began the meeting by introducing the project team and how the team was selected to prepare the plan. They reviewed the importance of having an open space plan and provided an overview of the project background. The consultants discussed the project schedule, scope and purpose. Consultants mentioned that the online survey and WikiMapping would be available after the public meeting and public involvement was extremely crucial in the planning process to assure the plan reflects the needs of the community. The consultants summarized existing parks and open space and data that was gathered thus far. The attendants were led through an interactive discussion to brainstorm goals, facts, concepts, and partners. The meeting was then opened for general discussion and ended with a review of the next steps to be taken.

January 8, 2020 - Public Meeting #2

At the second public meeting, the consultants presented draft mission statement and plan goals for review and comment. The consultants then reviewed Township demographics and concept ideas generated from the first committee and public meetings. They addressed initial survey and WikiMapping data before providing an overview of ongoing recreation and open space projects. Key ordinances and maps of existing conditions were explained, and data on current open space types and sizes was also presented, with the consultants pointing out the value of preserved open land. They then reviewed public park services and connections and showed how the Township's recreational facilities compared with communities of similar population and density. The meeting was then opened for general discussion and ended with a review of the next steps to be taken.

April 8, 2020 - Public Meeting #3

Public Meeting 3 was held virtually through a Microsoft Teams live event due to the Covid 19 Pandemic. 40 residents joined the online meeting. The consultants reviewed their suggestions for open space acquisition, recreational programming opportunities, and improvements for the Township that were in the draft report and explained that the draft report was open to the public for a 30 day review. The consultants urged the public to read and share the draft document and provide any comments to the consultants.

August 19, 2020 - Public Meeting #4

The last public meeting was held both in person and virtually. Seven residents attended the meeting in person with another nine residents joining online. The consultants reviewed the final recommendations presented in the report and noted next steps for the plan to be adopted by the Board of Supervisors. Very little comment was provided by attendees. The consultants noted that the final report would be available through the Township website.

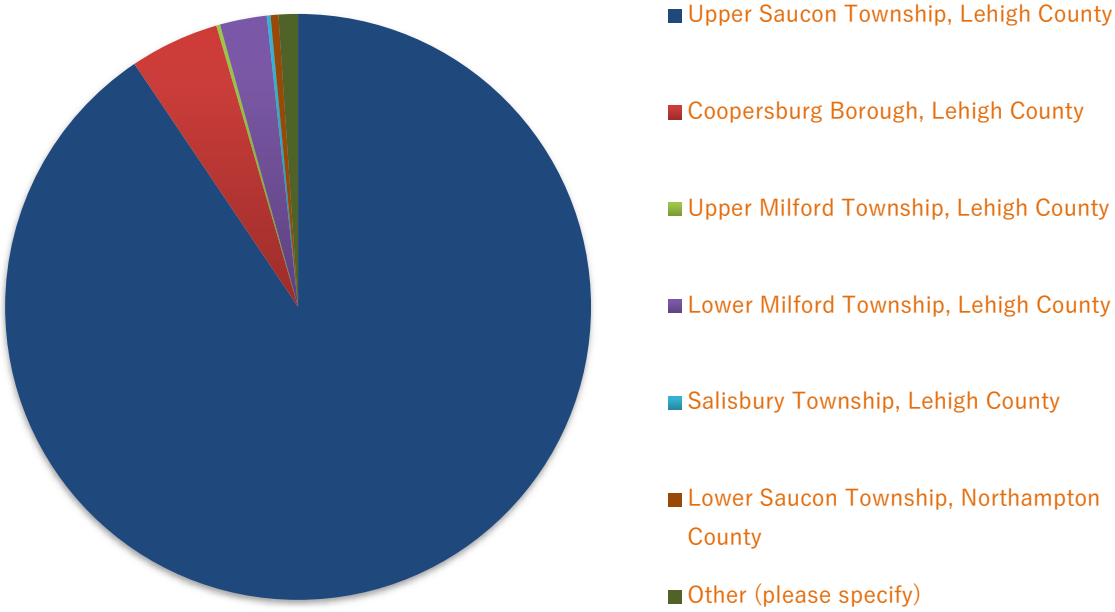
Online Survey and Wikimapping

A 30 question online public opinion survey and WikiMapping was open to the public from October 16, 2019 to January 15, 2020 as an additional way of obtaining comments and ideas from the public about park, recreation and open space needs. The survey received a total of 467 responses. Respondents were kept confidential and responses were compiled together and analyzed. A second three question survey pertaining to costs associated with park development and land preservation and management was open from January 31, to March 31, 2020. The additional survey received a total of 104 responses. Survey results are found in the Appendix of the report. Select responses are shown.

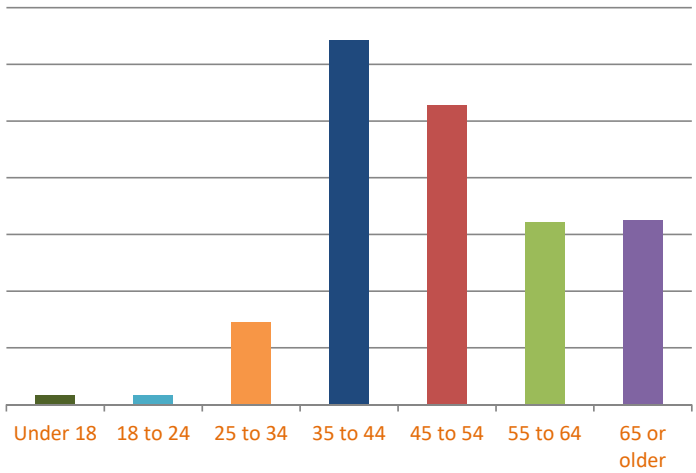
From the first survey, 91% of the respondents live in Upper Saucon with 32% being between the ages of 35-44. Practically all responded with having participated in recreational activities in the last year in the parks in or around Upper Saucon. Over ¾ of respondents felt that the Township needed more public parks, natural areas and open space, with nearly 90% expressing that these spaces are very important to the well-being and quality of life in Upper Saucon. Nearly 75% think that Upper Saucon should consider developing a community center and over half think it should be funded through local tax dollars. Considering agricultural land, 85% view these lands as valuable to the quality of life and nearly the same number of respondents noted local food production as important to the Township's quality of life.

The results from the survey mirror what was heard at the public and committee meetings and from previous surveys given for other reports. They reflect the need to provide activities and facilities for all ages and abilities, preserve open space and provide safe connections to these spaces.

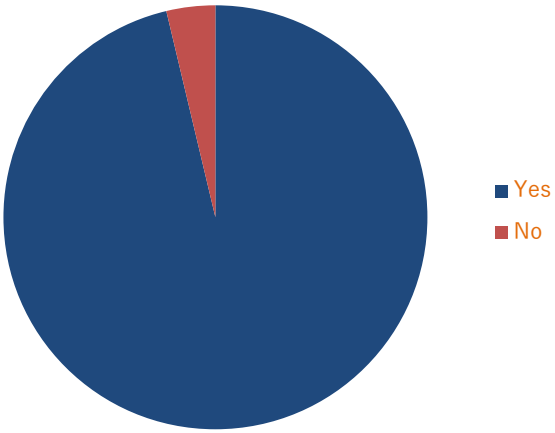
What is the name of the municipality that you live in?



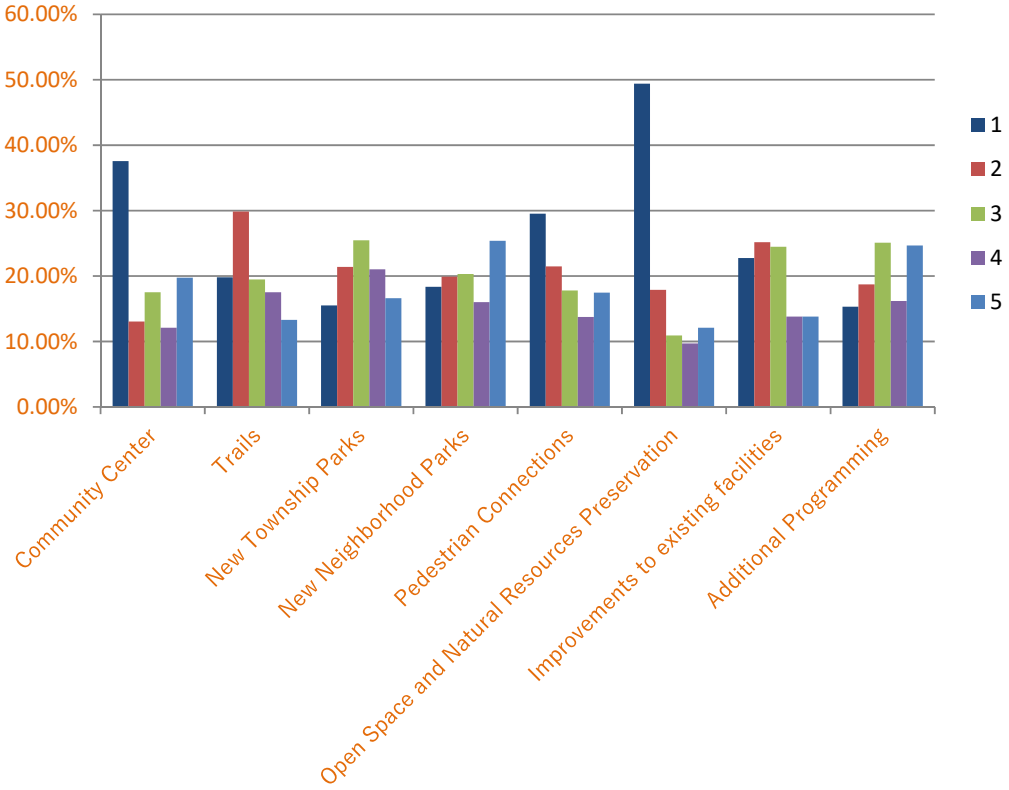
What is your age?



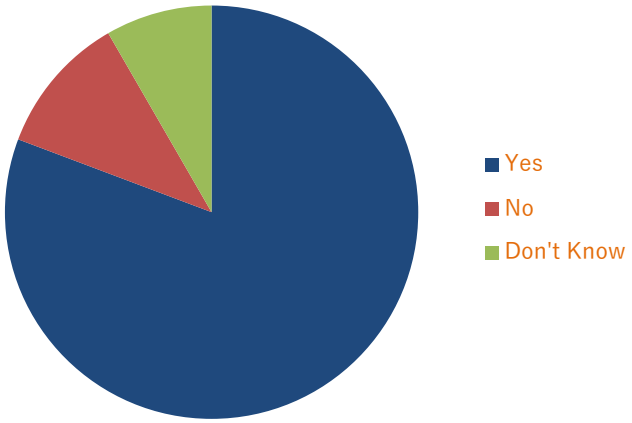
In the past 12 months, has any member of your household participated in any activities in parks, natural areas, or open spaces in or around Upper Saucon Township? This would include any recreational activity, such as walking, biking, participating in team sports, swimming, bird watching boating, etc.



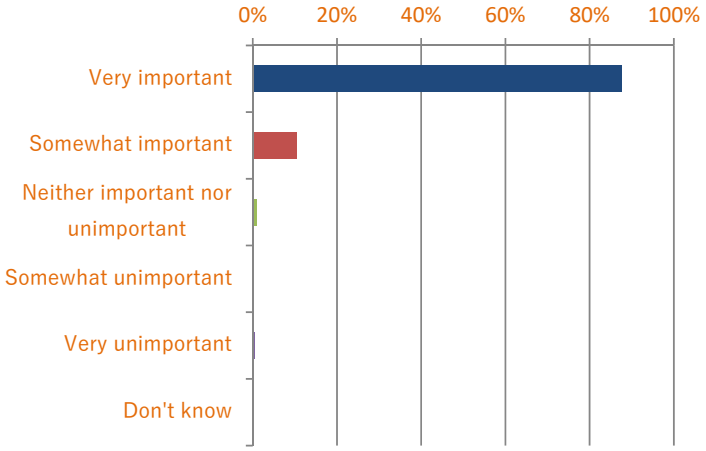
Please rank the top 5 priorities that you feel Upper Saucon Township should focus on this plan. 1=highest, 5=lowest



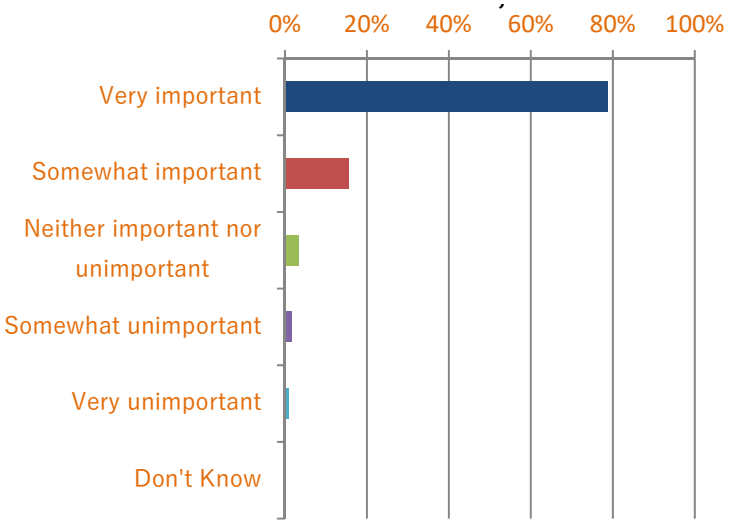
Open spaces are areas of land and water designated for use as active or passive recreation or for natural resource protection. Please note that these are not vacant, undeveloped lands. Do you think that more public parks, natural areas, and open spaces are needed in Upper Saucon Township?



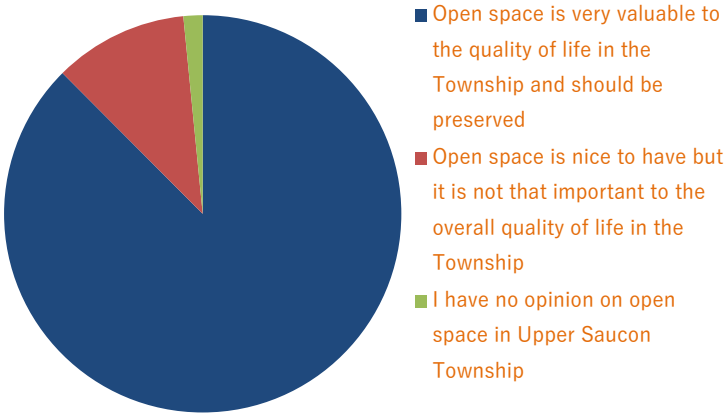
In general, how important do you feel public parks, natural areas and open spaces are to the well-being and quality of life in Upper Saucon Township?



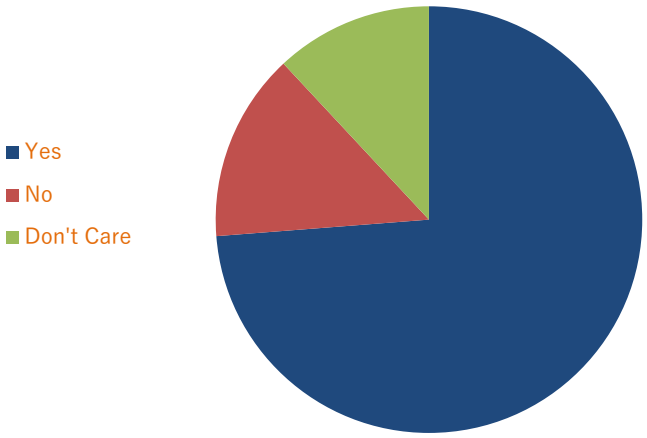
How important is the conservation of natural open space such as wetlands, marshes, woodlands, etc.?



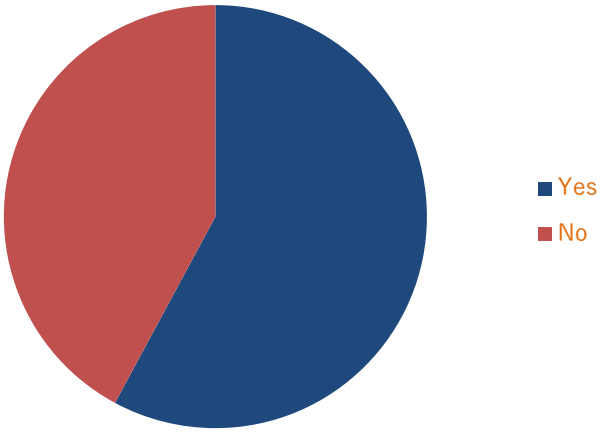
Concerning open space, how do you view these lands in Upper Saucon Township?



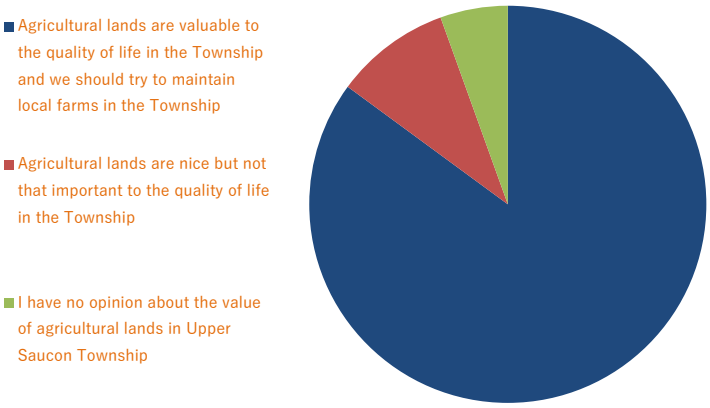
Should Upper Saucon Township consider the development of a community center that provides facilities for indoor recreation, fitness and other sports, recreation and community activities?



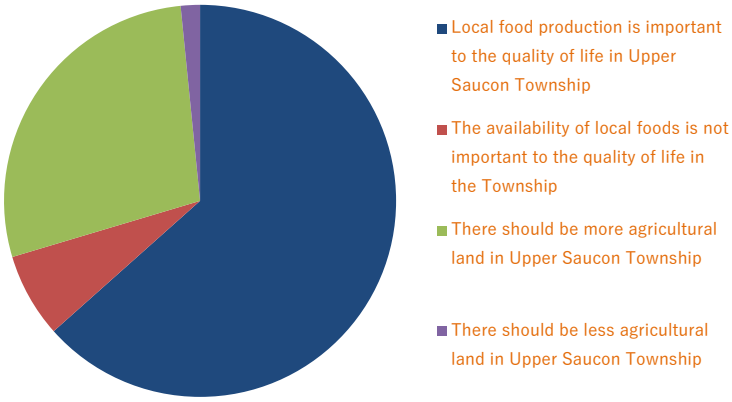
Do you think that a new community center in Upper Saucon Township should be funded by local tax dollars?



Concerning agriculture lands, how do you view these lands in Upper Saucon Township?

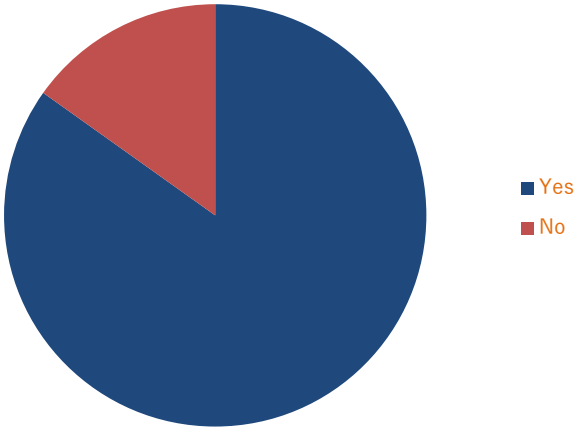


Regarding agricultural lands in Upper Saucon Township, which of the following statements most closely reflect your views. (please check all that apply)



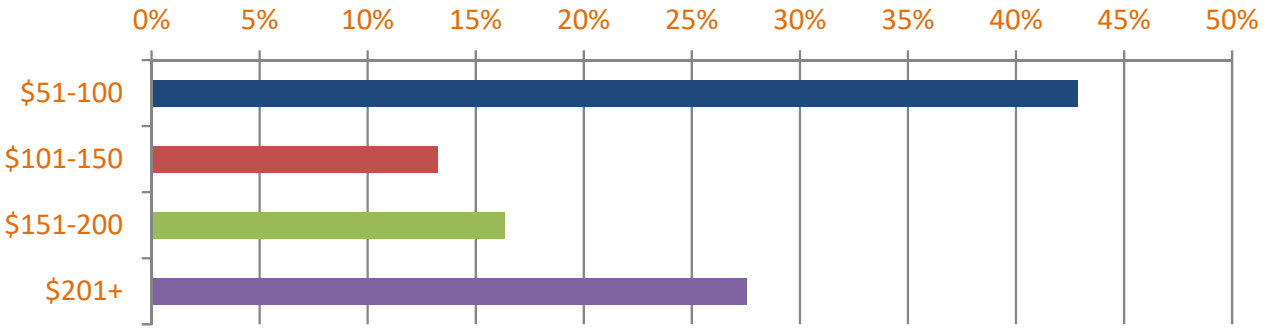
The second survey gauged respondents' views on a future referendum measure that would raise the Earned Income Tax to finance the acquisition of land for open space. In 2008, a referendum measure that would have allowed the EIT to be raised in order to finance the acquisition of property as open space was narrowly rejected, but from the survey, 85% of respondents felt the Township should place a similar measure on the ballot in the near future. Respondents also felt that the priority for these funds should be toward land acquisition for parks and open space. 43% of respondents said they would be willing to pay $51-100 annually to make sure the Township has the funds needed to build or acquire these facilities, followed by 28% who said they would pay $201 or higher.

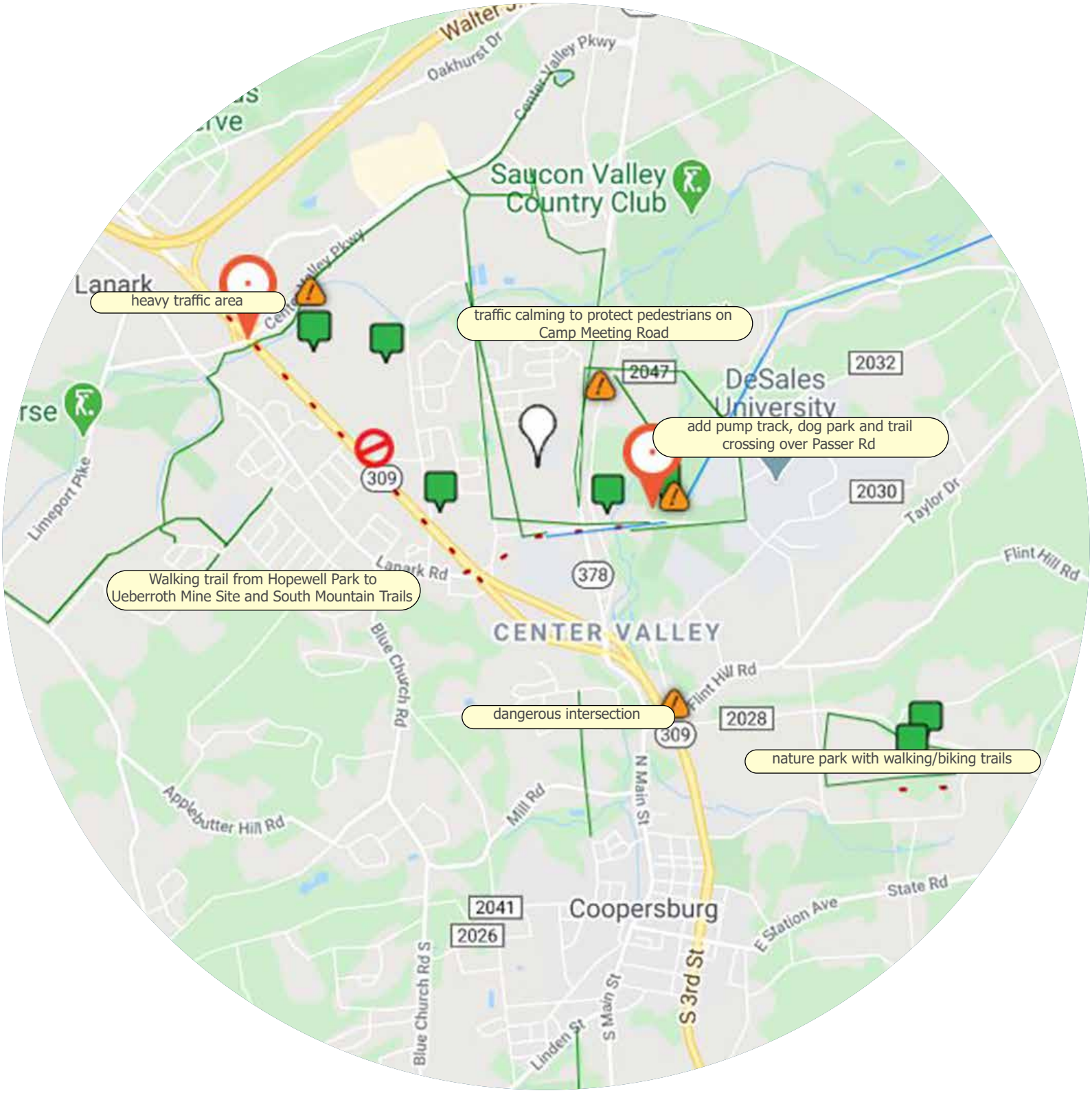
Should the Township place a similar measure on the ballot in the near future?



Please indicate how much you might be willing to pay annually to make sure the Township has the funds needed to build or acquire these types of facilities. Please keep in mind that the community may wish to pursue multiple projects at one time.

I would be willing to spend the following amount per year to accomplish improvements to Upper Saucon Township's Park, Recreation and Open Space system:





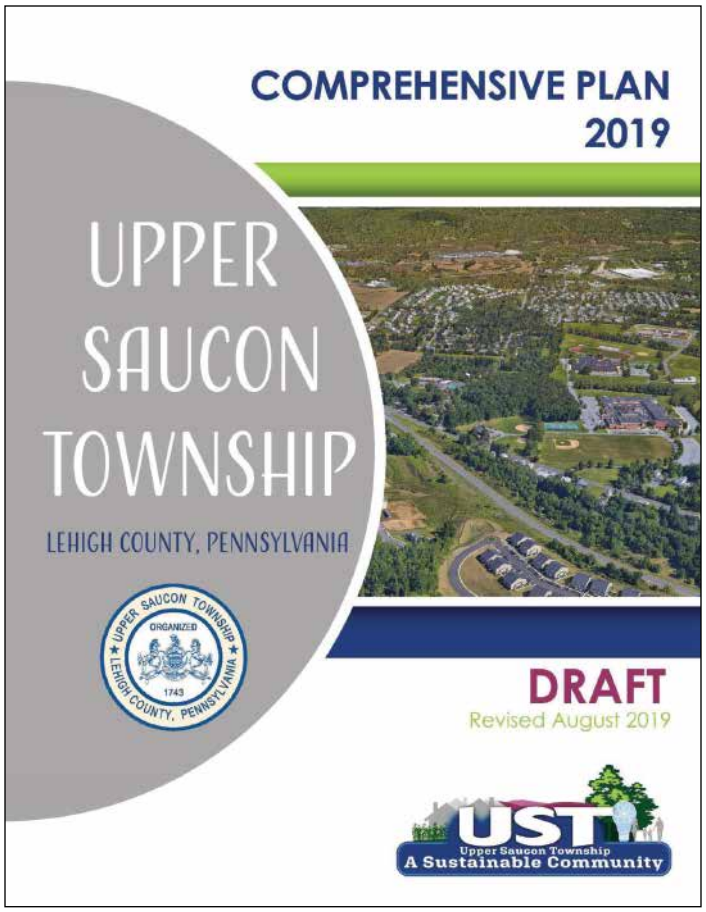
The WikiMapping showed that people desire pedestrian and bicycle friendly pathways to parks and recreational facilities. The challenge of crossing Route 309 was marked, with respondents noting locations where safe crossings could occur. Other users marked spaces they felt should become new park space. Some commented on amenities, such as a pump track or dog park, that could be included in existing park space. The green lines represent trails and green markers represent possible park locations.

Summary of Existing Planning Documents

Upper Saucon Township Comprehensive Plan – DRAFT 2019

When the consultants started working on the Comprehensive Recreation and Open Space Plan, the Township had already contracted JMT Engineering to complete the Township Comprehensive Plan. It was still in the draft form when the consultants started work and provided updated information about the Township and the direction they are heading in terms of future growth. In the Draft Comprehensive Plan, natural and cultural resources are addressed and one of the suggestions is to update the Township's Comprehensive Recreation and Open Space Plan. Goals expressed for natural and cultural resources include:

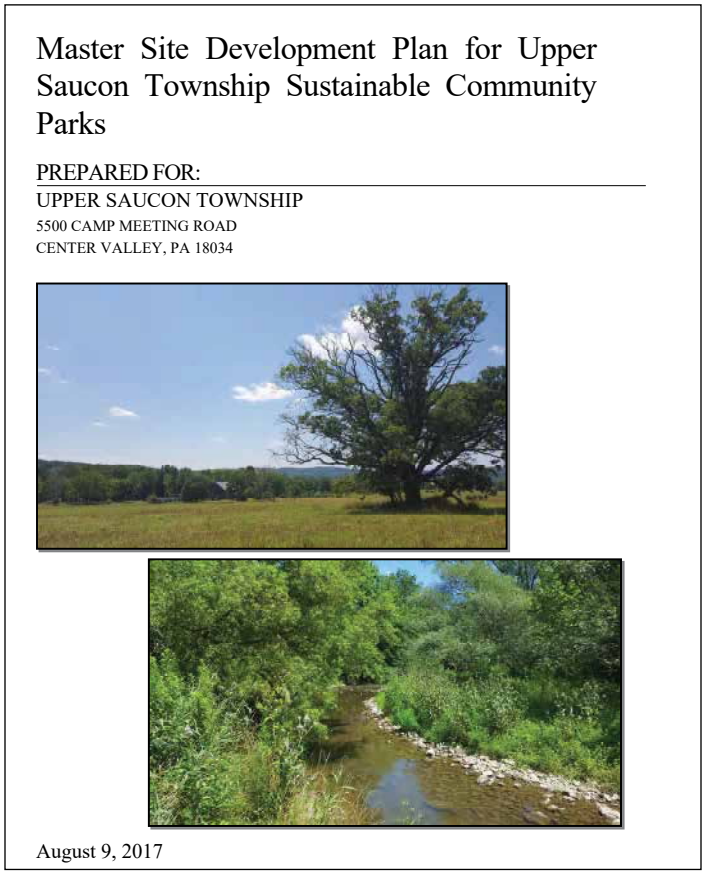
- Maintain the health of the environment and the community by protecting and preserving natural landscapes in the Township,
- Maintain and preserve cultural landscapes that help define community character, and
- Preserve agricultural land to protect economic base and rural character.



The Draft Comprehensive Plan also addresses park and recreation and bicycle and pedestrian guidelines. Because the draft plan includes survey information and other important details, the consultants were able to see what, if any, attitudes had changed during their own survey and information gathering. This draft plan provided a framework for the consultants on which to build.

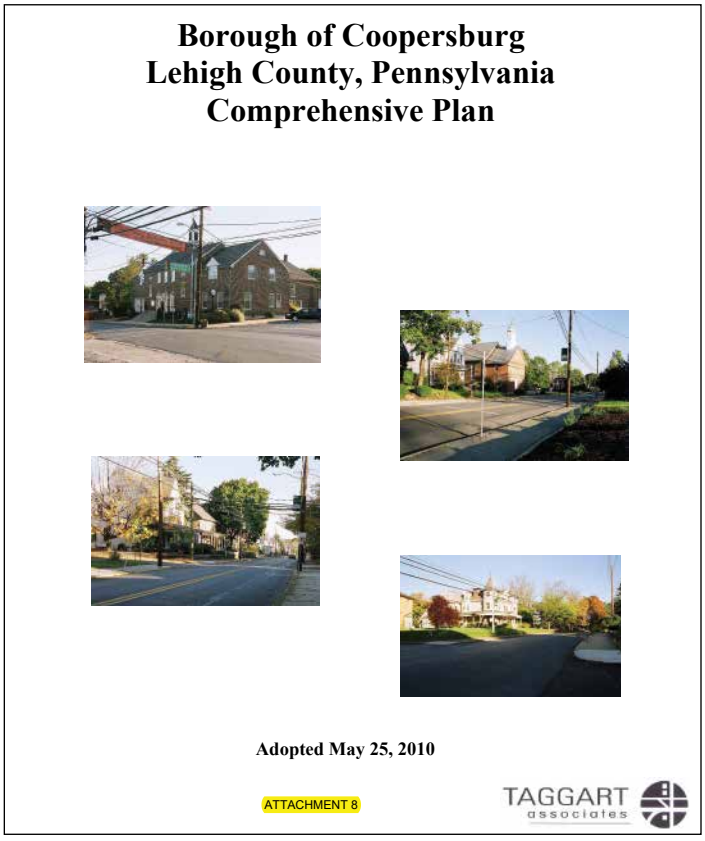
One Lehigh Valley – by Lehigh Valley Planning Commission - Oct 23, 2014

This document serves as an update to the Comprehensive Plan, The Lehigh Valley ··· 2030 adopted in 2005. The Lehigh Valley Sustainability Consortium (a fourteen-member regional alliance) organized ten plans around economy, environment,


Master Site Development Plan for Upper Saucon Township Sustainable Community Parks

PREPARED FOR:
UPPER SAUCON TOWNSHIP
5500 CAMP MEETING ROAD
CENTER VALLEY, PA 18034

August 9, 2017



transportation, and livable communities. The Lehigh Valley Planning Commission (LVPC) assessed these different reports and developed the goals within this document to guide the Lehigh Valley through growth and development.

This report provided the consultants with an understanding of land planning throughout the region.

Master Site Development Plan for Upper Saucon Township Sustainable Community Parks – by Boucher & James, Inc. Aug 9, 2017

This report details a Master Site Development Plan for the Benckini and Haring Tracts in Upper Saucon Township. It also provides background information and analysis that coincides with the Township's need for additional amenities for its growing population.

The report provides detailed analysis of each site and proposes each site to preserve and restore large natural areas. These two sites can assist with opportunities to make important connections to the growing network of open space throughout the Township. The consultants used this report for confirmation as to the needs and desires within the community.

Borough of Coopersburg Lehigh County, Pennsylvania Comprehensive Plan – by Taggart Associates May 25,2010

Since Coopersburg is surrounded on three sides by Upper Saucon Township, understanding how the residents of this Borough interact and connect with the surrounding open space attuned the consultants to the needs of all population centers within the area of study.

Future LV The Regional Plan – by Lehigh Valley Transportation Study and Lehigh Valley Planning Commission

This report combines the land use planning from LVPC and the transportation planning of LVTS to guide future decision making within this fast-growing region. In the report, people identified protection and preservation of natural resources and having

recreational opportunities to be very important. The plan sets to stress the importance of protecting, preserving, and connecting natural, cultural, historical and scenic open space to promote the health, safety and welfare of the residents through inclusive and livable communities. The report gave additional insight to the consultants for Lehigh Valley's future land planning goals and how they correspond with the needs of Upper Saucon Township. The plan also shows the lack of connections and where sidewalks are needed in the region. This is important when considering how people within a community will access open space.

Livable Landscapes – A Park, Recreation, Open Space, Agriculture and Historic Lands Plan for Lehigh County May 2018 – by LVPC

The purpose of this plan is to provide guidance for development of an open space network that will assist in conserving, restoring, and enhancing valuable natural and cultural resources within Lehigh County. The goal is to promote vibrant and healthy quality of life for residents, while maintaining the unique character of the natural resources throughout the area. The report presents the valuable benefits of open space to the community, economy, and health referring to the findings in the Lehigh Valley Return to Environment study and the Health Care Council of the Lehigh Valley study The Road to Health.

The benefits of open space as expressed within the report include:

- Community - Reduction of crime and delinquency, better family and social support networks, places for youth engagement, and providing lifelines to the elderly
- Economy – increased tourism, increase in land and property value, increased business retention and attraction, revenue generation, and cost mitigation for services provided by open space
- Health and Wellness – Reduced stress, increase in life expectancy, improved air quality, promotion of physical activity and socialization, improved mental and physical health, and reduced pressure on local health system

The plan gives recommendations for Lehigh County and the municipalities to achieve the six goals expressed in the plan.

1. Conserve, restore and enhance natural resources;

2. Provide and maintain an accessible, interconnected park, trail and recreation system;

3. Conserve, restore and enhance greenway and blueway networks;

4. Preserve farmland and farming to meet food production, economic and open space needs;

5. Preserve historic, cultural and scenic resources and landscapes;

6. Advance County natural, recreational, agricultural and historical resources and usage through funding, promotion, education, partnerships and other strategies.

These goals assisted in guiding the consultants in making sure the plan provided for the Township will coincide with the recommendations of the County.

Official Comprehensive Recreation & Open Space Plan – Saucon Region Upper Saucon Township, Lehigh County & Lower Saucon Township, Northampton County – October 24, 2006 by Roth Plan and Recreation & Parks Solutions

This joint plan between Upper and Lower Saucon Townships provides guidance with decision making concerning the development of recreational services and open space preservation and restoration within the two Townships. It recommends partnerships to help achieve the goals expressed in the report. It also provides an in-depth inventory and analysis of the existing parks at the time of its release. Since then, Lower Saucon Township had completed its own open space plan update. This allowed the consultants to see the changes that were implemented in the 14 years since its adoption.

Lehigh Valley Greenways Plan – A Regional Greenways Plan for Lehigh and Northampton Counties – 2007 LVPC

This plan looks at greenways that can be best described as corridors of open space, whether narrow or wide, that integrate diverse natural, cultural and scenic features. Connectivity is an important component of greenways, linking together a variety of open space. These greenways can be used as cultural/recreation, conservation, multi-use, or scenic corridors. The plan builds on the goals expressed by the 2001 State Greenway Plan. Two greenways exist in the Township, the Pennsylvania Highlands, which is a national recognized scenic greenway, and the Saucon Creek Greenway, a mixed-use greenway that has local importance. Both greenways will be discussed further in the report.

Lehigh Valley Return on Environment – 2014 LVPC

The Lehigh Valley Planning Commission studied the estimated values of open space by measuring impacts across natural system services, air quality, outdoor recreation, and property value. For example, natural system services can save municipalities money through better water quality and storm water management. Additionally, homeowners who live near open space will experience higher property values. The study also identifies how open space has a beneficial impact on life including supplying basic needs for health and well-being, jobs, food, and supporting a diversity of plants and animals. This report was helpful to the consultants by showing the additional increased benefits of open space in the Township.

Neighboring Townships Plans

The consultants reviewed neighboring Open Space and/or Comprehensive Plans such as Southwestern Lehigh County Comprehensive Plan – 2017, Salisbury Environmental Conservation Plan, Springfield Township Open Space Plan Update -2010, and Lower Saucon Township Open Space Action Plan-2007. These plans give valuable insight as to how open space in Upper Saucon Township connects with open space in its neighboring municipalities and creates open space connection as residents' cross municipal lines. These plans helped identify common goals and objectives across the municipalities within the region. Through the reports, a common theme is the desire from residents to conserve open space and create sustainable development that will not interfere with the quality of life that everyone enjoys and wishes to maintain.

Summary of Relevant Township Zoning and SALDO Ordinances

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

Conservation Zoning Districts

South Mountain Conservation Zone (SMC)

This Zone intends to protect the large concentrations of sensitive environmental and recreational features prevalent on South Mountain which is an important natural area within the Township and the larger Lehigh Valley. Permitted uses have been selected to encourage the most appropriate conservation/recreation activities for this unique geological and topographical feature and avoid defoliation, deforestation, and destruction of ground cover. In addition, limitations on the development and disturbance of this area's steep slopes will help to minimize storm water runoff, flooding and soil erosion.

Agricultural Preservation Zone (A)

The purpose of this Zone is to protect areas within the municipality possessing prime agricultural soils (Class I, II, and III soils) which are highly productive soil types most capable of supporting agricultural activities, so that agriculture as an on-going economic activity in the municipality is preserved. The Township acknowledges animal husbandry as an agricultural operation as defined by the Pennsylvania Municipalities Planning Code (MPC). Agricultural operations are enhanced by permitting only those land uses and activities which are either agricultural in nature or are in direct support of agricultural activities.

Open Space Residential Zone (OSR)

The purpose of this Zone is to blend low density residential uses amid environmentally sensitive lands that have no or limited access to public

infrastructure. This Zone seeks to permanently preserve open spaces characterized by woodlands, steep slopes and stream valleys. In addition, this Zone will promote the preservation and enhancement of historical and cultural resources that contribute to the character and heritage of the community. Conservation design developments are encouraged to offer the greatest density and design flexibility so that proposed developments can partner in the protection of sensitive and/or valuable natural and cultural features of the site. Conventional developments that do not engage the conservation design process will be subject to density penalty.

Open Space Requirements

Section 316.B.: Required Open Space Design

Required open space shall be designed and arranged to achieve at least one of the following objectives, and the applicant shall demonstrate those specific measures employed to achieve these objectives:

1. Protection of important natural resources (e.g., streams, ponds, wetlands, steep slopes, woodlands, unique geologic features, wildlife habitats, aquifer recharge areas, etc.);
2. Protection of important historical and/or archaeological sites;
3. Provision of usable play and recreation areas that are conveniently accessible to residents within the development and the Township; and,
4. Integration of greenbelts throughout the development that link residences with on-site or adjoining parks, schools or other similar features.

Section 316.D.: Permanent Protection of Common Open Space

Required common open space shall be subject to permanent conservation easements in a form that is acceptable to the Township Solicitor. Such conservation easement shall, unless waived by the Board of Supervisors, limit future development and define the range of permitted activities. (For example, the clearing of woodland habitat shall generally be prohibited, except as necessary to create trails, active recreation facilities, and/or to install subsurface septic disposal systems or spray irrigation facilities.) The determination of necessity shall lie solely with the Board of Supervisors.

Section 320: Road Classifications, Scenic Roads & Front Yard Setbacks

The following roads are identified as Scenic Roads with a required 90-foot Right of Way width.

- Beverly Hills Rd. between Chestnut Hill Rd. & Blue Church Rd. S.
- Chestnut Hill Rd. between Beverly Hill Rd. & Blue Church Rd.
- Blue Church Rd. between Chestnut Hill & Lanark Rds.
- Wards Ln. between Flint Hill Rd. & Taylor Dr.
- Flint Hill Rd between Wards Ln. & Wimmer Rd.
- Wimmer Rd. between Flint Hill Rd. and L. Saucon Twp.

Section 427.A (141-P): Conservation Design Developments

427.A. Within the (OSR, R-1, R-2 and R-3) Zones, conservation design developments are permitted by right if applicants demonstrate compliance with the following requirements during the applicable subdivision and /or land development approval process. Regardless of the availability of municipal water and/or public sewer, parcels ofland located in whole or in part with the (A) Agricultural Conservation, (OSR) Open Space and Recreation, and (SMC) South Mountain Conservation Zones shall not be eligible for consideration for inclusion within a Conservation Design Development.

427.B. Purpose - This use is intended to blend various residential development types amid substantial areas of the Township that are characterized by natural sensitivity and/or public parklands. It is the express purpose that this Section will offer the highest densities and the most flexible design standards available within each respective Zone as enabled in the Act when a proposed development successfully

integrates the preservation and protection of natural-cultural features and/or the provision of public accessible common open space.

427.I Delineation of Common Open Space - Conservation Design Developments are characterized by the required preservation of common open space defined herein.

1. Common Open Space shall be set aside for each Conservation Design Development and shall comprise no less than 50% of the acreage of the overall development tract, regardless of the underlying zoning district.

2. In the case of conservation developments that abut the (A) Zone and/or properties subject to permanent agricultural easement, applicants may opt to provide for continued agricultural use of the common open space provided that the planning considerations of Section 20I.F of this Ordinance are followed and suitable permanent agricultural preservation easements are recorded in a form acceptable to the Township solicitor.

3. Acreage designated as required common open space shall be integrated throughout the development and not entirely consolidated in a single location. An improved trail shall be incorporated throughout the overall development tract that links with, and is part of, a larger community trail system identified within the Saucon Region Comprehensive Recreation and Open Space Plan, the Comprehensive Plan, the Official Map, or, as determined to be suitable by the Board of Supervisors. Such trail shall provide pedestrian and bicycle linkages to the required common open space and be designed in accordance with Section 507.B of the Township's Subdivision and Land Development Ordinance.

4. With Township approval, land area containing storm water management facilities designed and constructed as wet ponds or shallow basins and which incorporate natural features, landscaping, and/or recreational uses may be attributable to the common open space requirement of this Section.

427.J Protection of Common Open Space

1. The developer shall include on the record plan for the development and within the governing association document or management corporation document a depiction of all required common open space necessary to satisfy the requirements of this Ordinance. In addition, the developer shall include on the record plan and within the governing association document or management corporation document a statement that no buildings, structures, or other impervious surfaces shall be permitted to be built in the required common open space.

2. The applicant shall be required to include a note on the record plan for any approved conservation design development that perpetually limits the use of all required common open space(s) for their approved purpose(s).

3. Required common open space shall also be subject to permanent conservation easement(s) and agreement(s) in a form that is acceptable to the Township Solicitor. Such conservation easement and agreement shall limit future development and define the range of permitted activities. (For example, the clearing of woodland habitat shall generally be prohibited, except as necessary to create trails, active recreation facilities, and/or to install subsurface spray irrigation facilities. The determination of necessity shall lie solely with the Board.) The ownership and maintenance of required common open space shall be governed by Section 316 of this Ordinance and shall be detailed in the agreement.

427.K Content of Required Common Open Space - As part of the site planning process for the Conservation Design development, the applicant shall be required to demonstrate compliance with Article 5 of this Ordinance. Features inventoried during that process shall become all or part of the required common open space. Qualified experts must identify, describe and plot each of the following found on the proposed site:

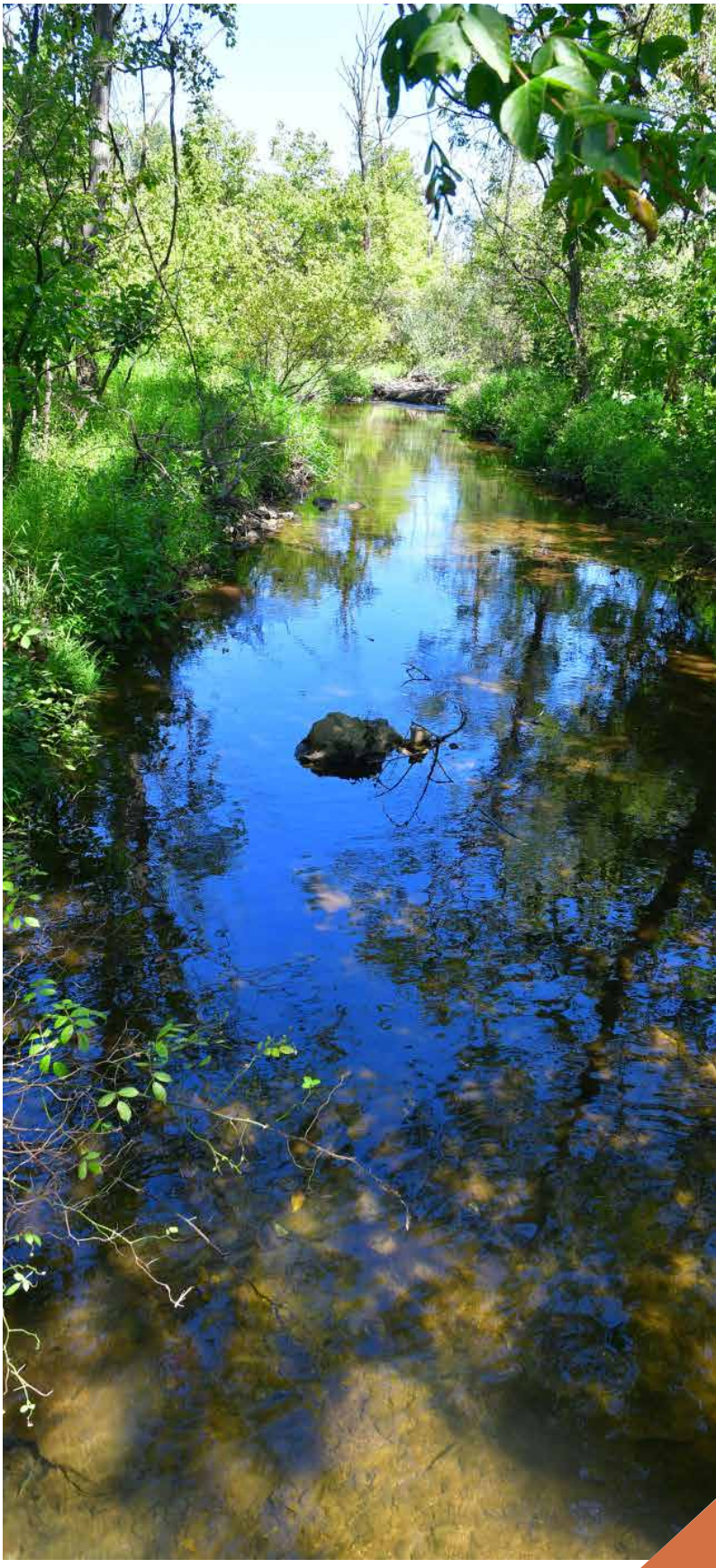
1. Mandatory conservation features - the following features must be undisturbed and integrated within the Conservation Design development's required common open space:

- Floodplains;
- 500 square feet of areas with very steep slopes (greater than 25%); Wetlands and buffers, streams, ponds, or other waterways; Sinkholes, caves or rock outcroppings;
- Riparian buffers, as regulated by Section 511 of

this Ordinance; and,

- Threatened or endangered species habitats as required by the PNDI
- Suggested conservation features - the following features shall be undisturbed and integrated within the Conservation Design development's required common open space when necessary to meet the required minimum percentage of required common open space:
- Steep slopes (greater than 15%);
- Significant geologic features;
- Scenic vistas;
- Threatened or endangered species habitats, not already required by the PNDI;
- Historic and archaeological resources; and Significant stands of mature trees.

2. The required common open space shall be sized and configured so as to accommodate its intended uses. Sufficient lot width/depth dimension shall be provided so as to accommodate, where applicable, ball fields, courts, or open play areas. Where a development is proposed at a location contiguous to an existing park, any common open space shall be provided as an expansion of the existing facility except where not practicable to do so.
3. The required common open space shall be sized and configured so as to accommodate its intended uses. Sufficient lot width/depth dimension shall be provided so as to accommodate, where applicable, ball fields, courts, or open play areas. Where a development is proposed at a location contiguous to an existing park, any common open space shall be provided as an expansion of the existing facility except where not practicable to do so.
4. No part of the required common open space shall be located in front of or between any building or dwelling unit nor shall it include any part of any required setback, yard and/or open space for adjoining lots or uses as regulated by the Zoning Ordinance. Additionally, the area within twenty-five feet (25') of the rear wall of any structure shall be specifically excluded from the calculation of required common open space.
5. The developer shall comply with Section 522 of the SALDO, which compliance shall be in addition to, and not in lieu of, compliance with the provision



of required common open space.

427.L Pedestrian Circulation System - A pedestrian circulation system shall be provided as an integral part of any Conservation Design development in accordance with the following:

1. Pedestrian sidewalks, a minimum of five (5') feet in width, shall be provided on a minimum of one (1) side of all interior public or private streets, and along off street parking areas where pedestrian usage is anticipated. All pedestrian sidewalks shall be concrete.

2. Pedestrian sidewalks shall be set back a minimum of five (5') feet from the curb line of all interior streets where street trees are placed between the sidewalk and the curb. Where street trees are placed between the sidewalk and building facade, the distance between the curb and sidewalk may be reduced to four (4') feet.

3. Pedestrian sidewalks may adjoin off-street parking, however off-street parking shall not encroach upon the pedestrian sidewalk. Provision shall be made to prevent vehicles from overhanging pedestrian sidewalks.

4. Pedestrian sidewalks and trails shall be ADA compliant.

Environmental Protection

Section 510: Floodplain Zone

The intent of this Section shall be to protect areas of floodplain subject to and necessary for the containment of flood waters, and to permit and encourage the retention of open space land uses which will be so located and utilized as to constitute a harmonious and appropriate aspect of the continuing physical development of the Township.

Section 511: Riparian Buffers

Any application for subdivision and/or land development for property adjoining any channel of conveyance of surface water having a defined bed and banks, whether natural or artificial, with perennial or intermittent flow shall provide a riparian buffer.

As an alternative the applicant shall clearly depict

upon the natural and cultural features site plan the proposed riparian buffer comprised of the following three separate Zones:

A. Zone 1: The landward area located between the streambank edge under typical flow conditions, or the high-water level for pond or lake shorelines and twenty (20'), as measured directly perpendicular from the streambank/shoreline edge.

B. Zone 2: The area beginning at the inland edge of the above-described Zone 1 and the largest combined width of all of the following:

1. sixty-five feet (65'), as measured directly perpendicular from the streambank/shoreline edge;

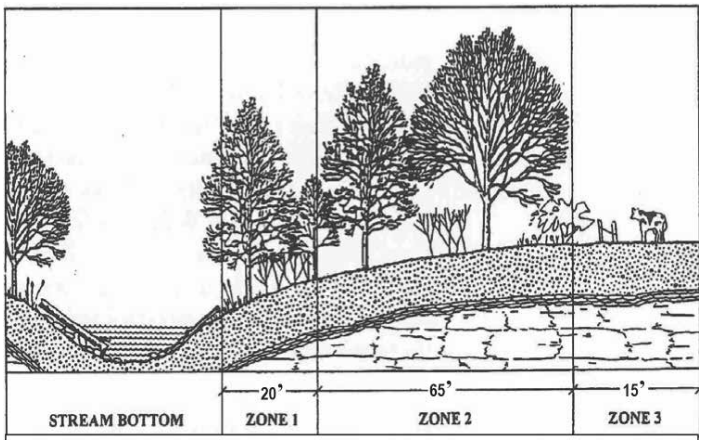
2. the 100-year floodplain;

3. any adjoining identified wetlands; and/or,

4. any adjoining area characterized by slopes exceeding twenty-five percent (25%).

C. Zone 3: The area beginning at the inland edge of the above-described Zone 2 and extending at least fifteen feet (15') inland therefrom. Where a pasture is proposed just beyond the above-described Zone 2, no Zone 3 is required

Section 512: Wetland and Wetland Buffers



Cross-Section of Typical Streamside Riparian Buffer

Any property containing a wetland and/or wetland buffer, or portion thereof, shall clearly depict such area upon the natural and cultural features site plan. Such area shall be permanently protected from filling, grading, clearing, water diversion and/or development.

Wetlands buffers shall be established using the combination of the following methods that delineates the greatest land area:

A. A width of fifty (50) feet from the outside edge of that identified wetland as described in the above Section 512.C.1.

B. Any area adjoining a wetland that possesses upward slopes in excess of ten (10%) up to a maximum of fifty (50) feet from the outside edge of the identified wetland.

Section 513: Steep Slopes

A topographic map of the site which depicts and distinguishes those areas that possess slopes exceeding fifteen percent (15%) and twenty-five percent (25%), respectively shall be incorporated into the natural and cultural features site plan.

Section 514: Pennsylvania Natural Diversity Inventory (PNDI)

The requirements of this Section help to protect sensitive areas of wildlife habitat, natural communities and geological features that:

1. have been formally identified a species of concern by Federal and State authorities.

2. contributes to the biodiversity and health of the Township's ecosystems.

3. are worthy of protection and consideration during the development review process.

Section 515: Carbonate Geology

The requirements of this Section help to protect sensitive areas underlain by carbonate geology that:

1. protect a uniquely sensitive and valuable potable groundwater resource area.

2. protect groundwater quantity and quality from pollution from hazardous materials or toxic substances, sewage, oil and grease, de-icing compounds and sediment.

3. promotes the recharge capability of the area achieved through best management practices; and,

4. decreases and minimizes the dangers of land subsidence and sinkholes characteristic of carbonate geologic formations.

Section 516: Tree Cutting

Recognizing that the presence of living trees in our surroundings is important and desirable from an ecological, environmental and aesthetic standpoint, this section imposes restrictions upon the noncommercial cutting-down of mature trees upon private property.

Section 518: Wellhead Protection Overlay Zone

The purpose of this Section is to safeguard the public health, safety and welfare, by providing regulation of land use and the manufacture, use, storage, transport, or disposal of hazardous substances which pose a threat to the quality and quantity of groundwater being extracted from the public water system. Both Well Numbers CC#2 and ZM2 have a minimum Wellhead Protection Zone radius of 400 feet. This ordinance should be updated to reflect all three well heads in the Township.

Section 519: Historic Site Demolition

The purpose of this Section is to provide the means that the Township can protect and preserve historic sites and structures and to initiate a process of public and technical review prior to the demolition of historic structures.

1. No historic structure shall be demolished until the applicant has obtained conditional use approval and a zoning permit for such demolition.

2. Prior to the application for conditional use approval to demolish an historic structure, the applicant shall be required to meet with the staff of the Pennsylvania Historical and Museum Commission (PHMC) to gain their ideas about potential preservation options for the building/structure. No conditional use approval or zoning permit for the demolition of an historic structure shall be issued unless the applicant meets with the staff of the PHMC. To inform the staff of the PHMC about the structure, the applicant shall be required to produce all of the available following materials:

A. Historic deeds, surveys and site plans of the subject property;

B. Current and historic photos of the property; and,

C. A description of the specific reasons why the historic structure cannot accommodate a permitted use and the demolition is warranted.

Subdivision and Land Development Ordinance (SALDO)

Section 507: Bicycle Paths & Recreational Trails

507.A. Bicycle Paths - Bicycle paths shall be provided, when designated on or as part of an official plan or map, or as otherwise required by the Township.

507.B. Recreation Trails - Recreation trails shall be provided, when designated on or as a part of an official plan or map, or as otherwise required by the Township.

Section 510: Sidewalks

Sidewalks shall be provided along all streets and access drives. Sidewalks along access drives leading to streets do not need to parallel an access drive when the Township determines that an alternate location is suitable.

Section 522: Parks and Recreation Lands

522.A. Requirements for Reservation of Park and/or Recreation Lands

1. Every proposed residential subdivision of land and/or residential land development regulated by this Ordinance and the MPC, shall provide land for dedication which is suitable for park and/or recreation land.

2. The amount of land required to be dedicated shall be three thousand (3,000) square feet per residential lot or dwelling unit (whichever number is greater) that is part of an approved application. If at the time of plan

application submission, the developer is domiciled in a dwelling unit on one of the lots in the proposed subdivision or development, said lot or dwelling unit shall not be included in this calculation.

4. A developer shall dedicate land for park and recreation purposes. In lieu thereof, the developer may propose the following or a combination of the following, subject to approval of the Board of Supervisors:

a. Dedication of land for park and/or recreation purposes,

b. Payment of a recreation fee,

c. Construction of park and/or recreational facilities, or

d. Private reservation of park and/or recreation land.

5. If the developer receives approval from the Board of Supervisors for the payment of a fee in lieu of dedication of all or some of the required park and/or recreation land, then the fee shall be calculated on the basis of the most current fee schedule. At the time of this report, the recreation fee is $5,000 for each approved building lot or dwelling unit.

6. If the developer elects to pay a fee in lieu of the dedication of park and/or recreation land, then such payment, if approved by the Board of Supervisors, shall be deemed a condition of application approval and shall be paid at the time of execution of the improvements agreement with the Township or if no improvements agreement is necessary, then prior to recording the approved plan.

7. All fees paid pursuant to this Section shall be maintained in a separate, interest bearing, account for the purpose of park and recreation. Such funds shall not be used for any purpose inconsistent with the applicable provisions of the MPC.

8. The requirements of Section 522 shall be in addition to, and not in lieu of:

a. Open space which is required to be provided in connection with certain uses, developments, subdivisions and/or other residential living arrangements pursuant to the Zoning Ordinance; and

b. Any private park and/or recreation land provided by the developer for the benefit of the residents thereof, unless approved by the Board of Supervisors pursuant to Section 522.A.4.d.

Official Map

Upper Saucon Township has an Official Map (Fig. 2-2)which is a combined map and ordinance that is an important tool for implementing the goals and community vision as described in a comprehensive plan. Official maps show locations of planned future open space, public lands, and trails and express the municipality's interest in acquiring land for public purposes in the future. This map allows the Township to focus resources and is an important negotiation tool to ensure that development is compatible and supportive of goals of the community.

With the Official Map, any property owner or developer with the intention build, subdivide, or perform any work on land located on the map must notify the Township. The Township then has up to a year to confirm acquisition interest. This planning tool gives municipalities a seat at the table as a means to have facilities included into the development that are of interest to the community. The following link is for the complete Upper Saucon Township Official Map: https://www.uppersaucon.org/wp-content/uploads/2016/02/ord140.pdf

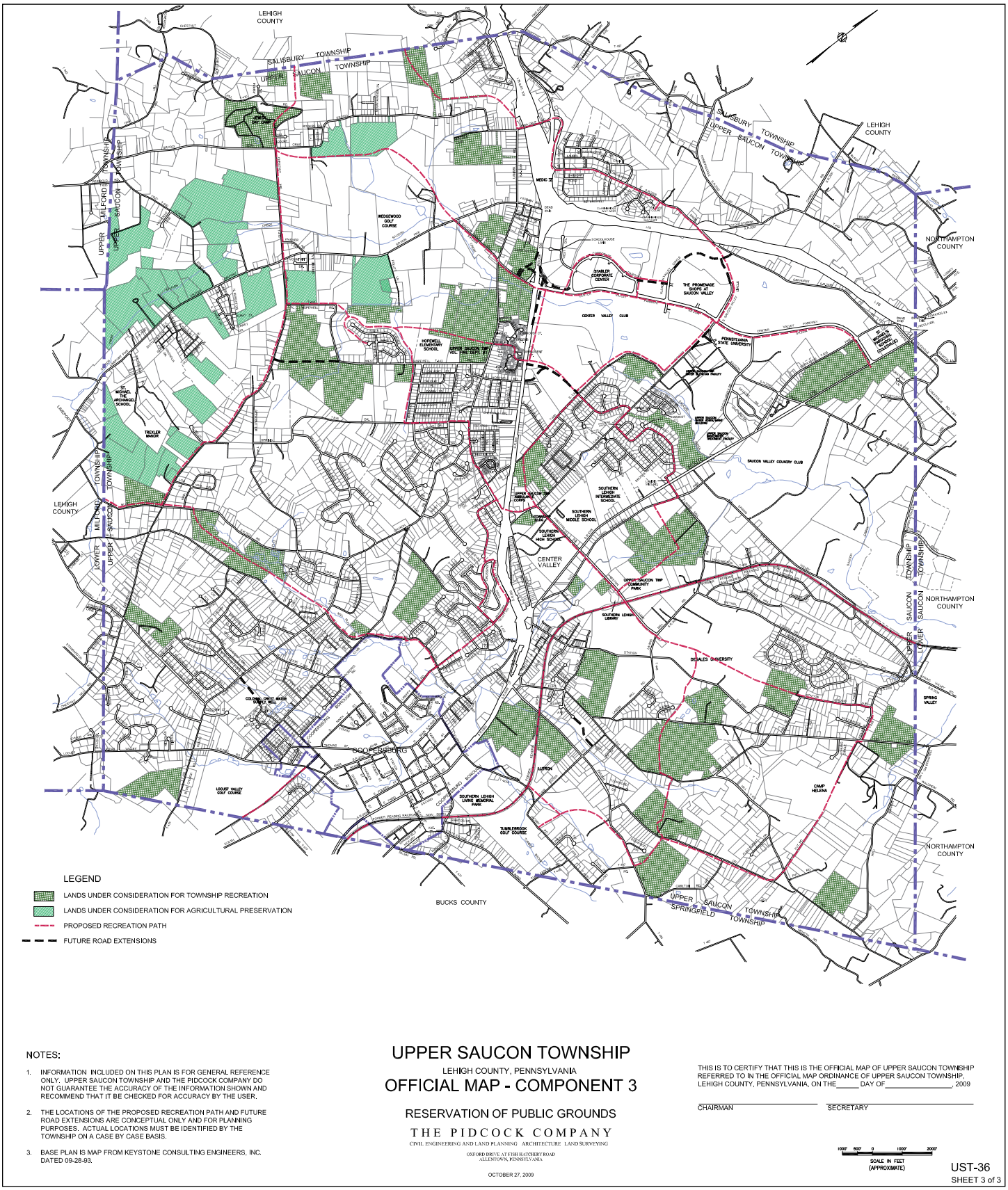
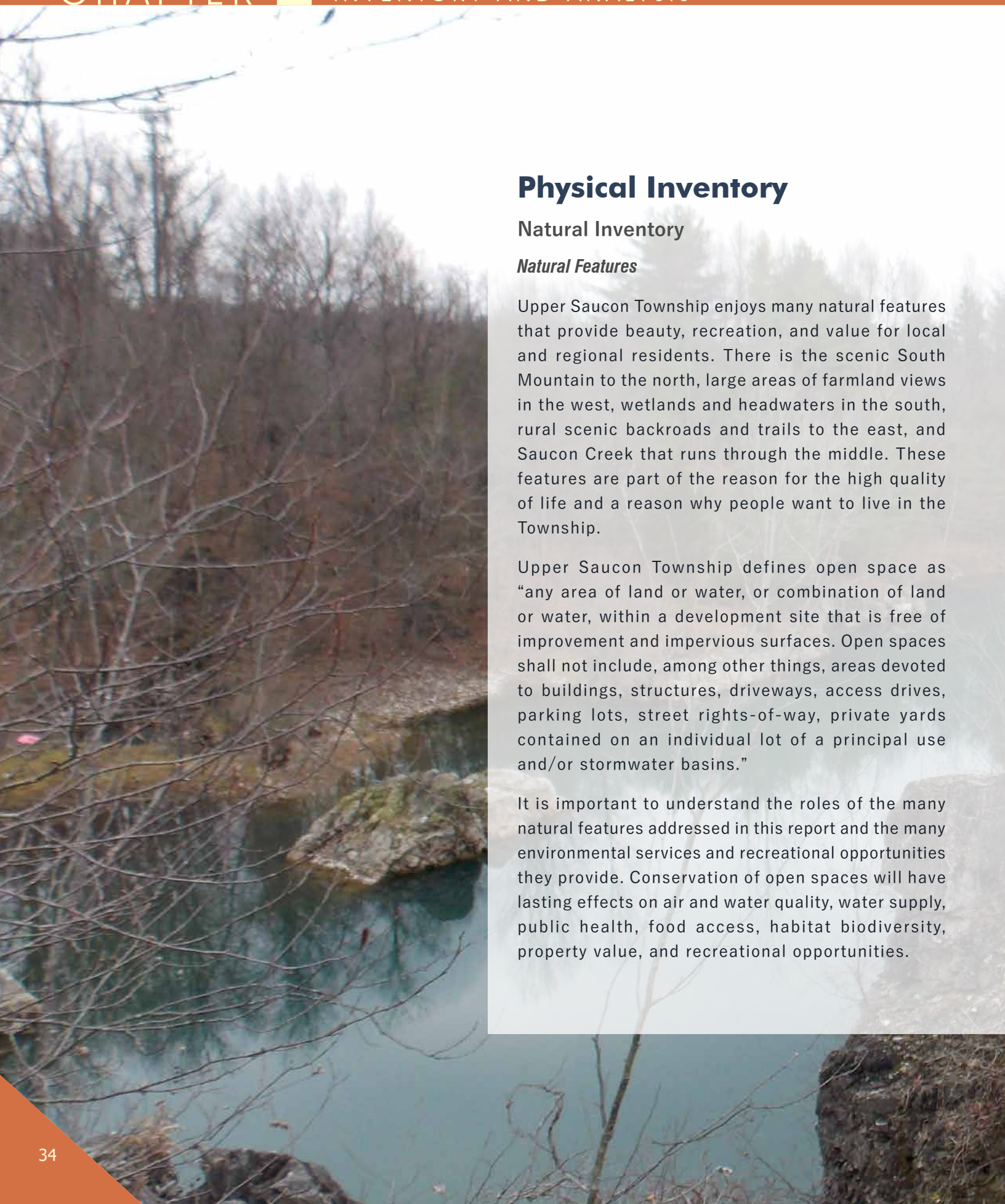


Figure 2-2: Upper Saucon Township Official Map



Physical Inventory

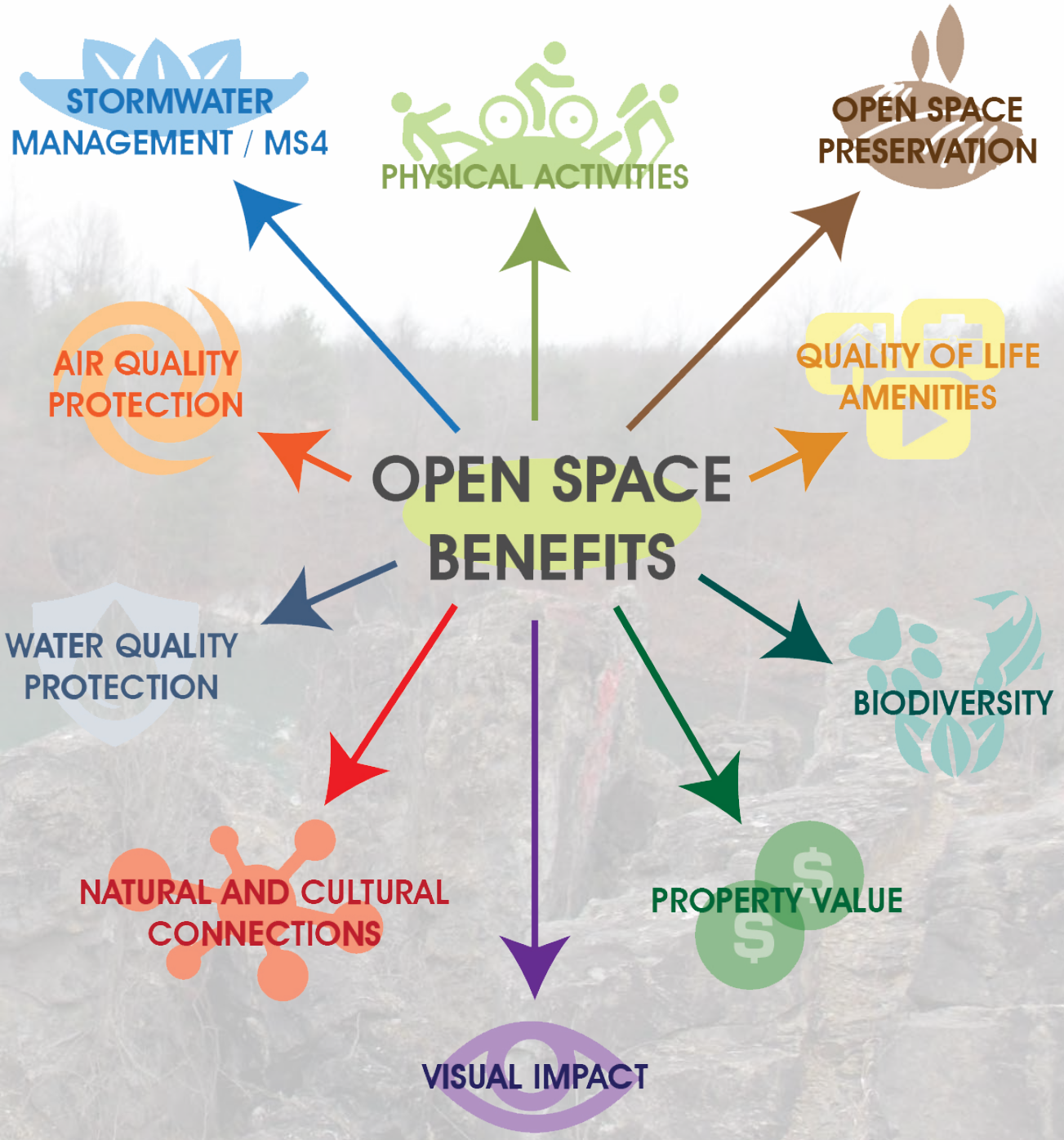
Natural Inventory

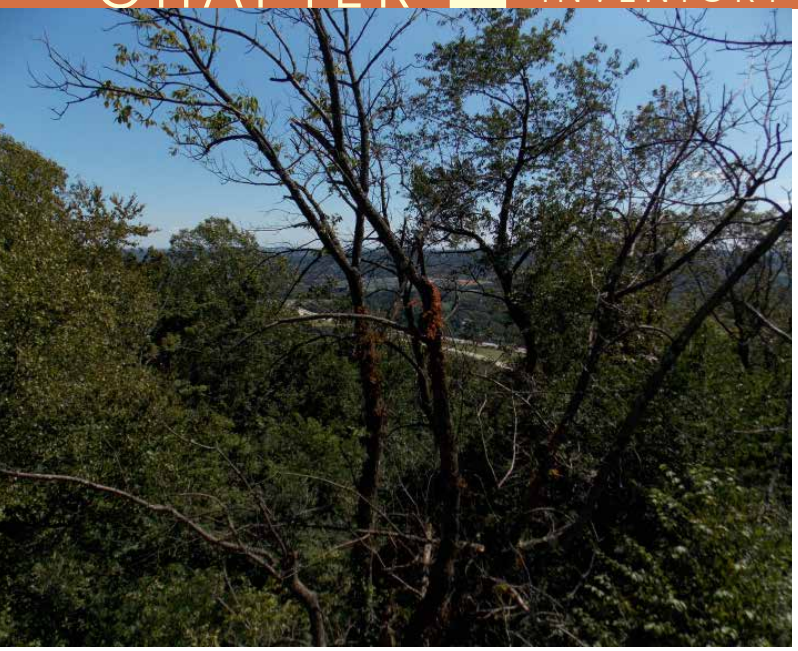
Natural Features

Upper Saucon Township enjoys many natural features that provide beauty, recreation, and value for local and regional residents. There is the scenic South Mountain to the north, large areas of farmland views in the west, wetlands and headwaters in the south, rural scenic backroads and trails to the east, and Saucon Creek that runs through the middle. These features are part of the reason for the high quality of life and a reason why people want to live in the Township.

Upper Saucon Township defines open space as "any area of land or water, or combination of land or water, within a development site that is free of improvement and impervious surfaces. Open spaces shall not include, among other things, areas devoted to buildings, structures, driveways, access drives, parking lots, street rights-of-way, private yards contained on an individual lot of a principal use and/or stormwater basins."

It is important to understand the roles of the many natural features addressed in this report and the many environmental services and recreational opportunities they provide. Conservation of open spaces will have lasting effects on air and water quality, water supply, public health, food access, habitat biodiversity, property value, and recreational opportunities.


OPEN SPACE BENEFITS
STORMWATER MANAGEMENT / MS4
PHYSICAL ACTIVITIES
OPEN SPACE PRESERVATION
AIR QUALITY PROTECTION
QUALITY OF LIFE AMENITIES
WATER QUALITY PROTECTION
BIODIVERSITY
NATURAL AND CULTURAL CONNECTIONS
PROPERTY VALUE
VISUAL IMPACT



Greenways

Greenways are defined as a corridor of open space, that may vary in scale from narrow strips of green that run through developed areas to wider corridors that may incorporate natural, cultural and/or scenic features. Greenways are an important component of the landscape, because the connectivity of open space creates additional value compared to isolated paths and small pockets of open space. Any preserved open space and waterways are a valuable resource, but the conservation and recreational value is broadened while the resiliency of the environment is strengthened when they are linked together.

To understand the importance of large connected open space, it is essential to understand the environmental functions of core habitats. In general, a greenway that is, for example, half a mile wide will contain habitat for more wildlife species than one that is only 200 feet wide. Greater diversity from large habitat areas leads to greater number of species with greater population, therefor creating a healthier and more resilient ecosystem. Fragmentation of open space creates more edge communities that, in return, increases areas for invasive species and other disturbances to enter and increases the need for maintenance.

Two greenways have been identified in Upper Saucon Township, The Pennsylvania Highlands and the Saucon Creek Greenway.

The Pennsylvania Highlands Greenway is a large conservation and scenic greenway that extends through Pennsylvania, New Jersey, New York, and Connecticut. It was recognized through the Highlands Conservation Act of 2004 and is considered as one of the major greenway corridors in Pennsylvania. This greenway is located in the southeast corner of the Township and runs along the west side and through the South Mountains in the north.

The Saucon Creek Greenway extends from Lower Milford Township through to the confluence of the Lehigh River. It is considered by Lehigh Valley as a multi-use and conservation greenway and is important to the region. It also connects to the Pennsylvania Highlands Greenway. The health and use of this waterway will be discussed further in the hydrology section of this report.

Woodland/Tree Canopy

Woodlands are important not only to many species of birds and wildlife, but also to mitigate many environmental stressors through reduction of stormwater runoff, erosion control, filtering ground water, purifying air, steep bank stabilization, and moderating climate conditions such as protection from direct sunlight and windbreaks.

Most of the woodlands that once existed in Upper Saucon were cleared for agricultural uses, large golf courses, and development. The largest area of intact woodlands exists north of the Township on the steep slopes of the South Mountain range and home of the Robert Rodale Reserve which is considered a maturing second growth forest. Another large area of woodlands exists on the east side of the Township in the area of and around the former Camp Helena. This area is identified by the Natural Resource Plan, part of the *Comprehensive Plan The Lehigh Valley...2030*, as a very high conservation priority. Other smaller tracts of woodlands can be found scattered throughout the Township.

Natural Resources

Upper Saucon Township Comprehensive Recreation and Open Space Plan

LEGEND

- Woodlands (2018)
- Ponds/Lakes
- Wetlands
- Hydric Soils
- Streams
- Saucon Creek Greenway
- Pennsylvania Highlands Greenway
- 15-24% Slope
- 25%+ Slope
- Areas of Importance from PA Natural Heritage Inventory
- Township Border
- County Border
- Municipal Border
- Roads

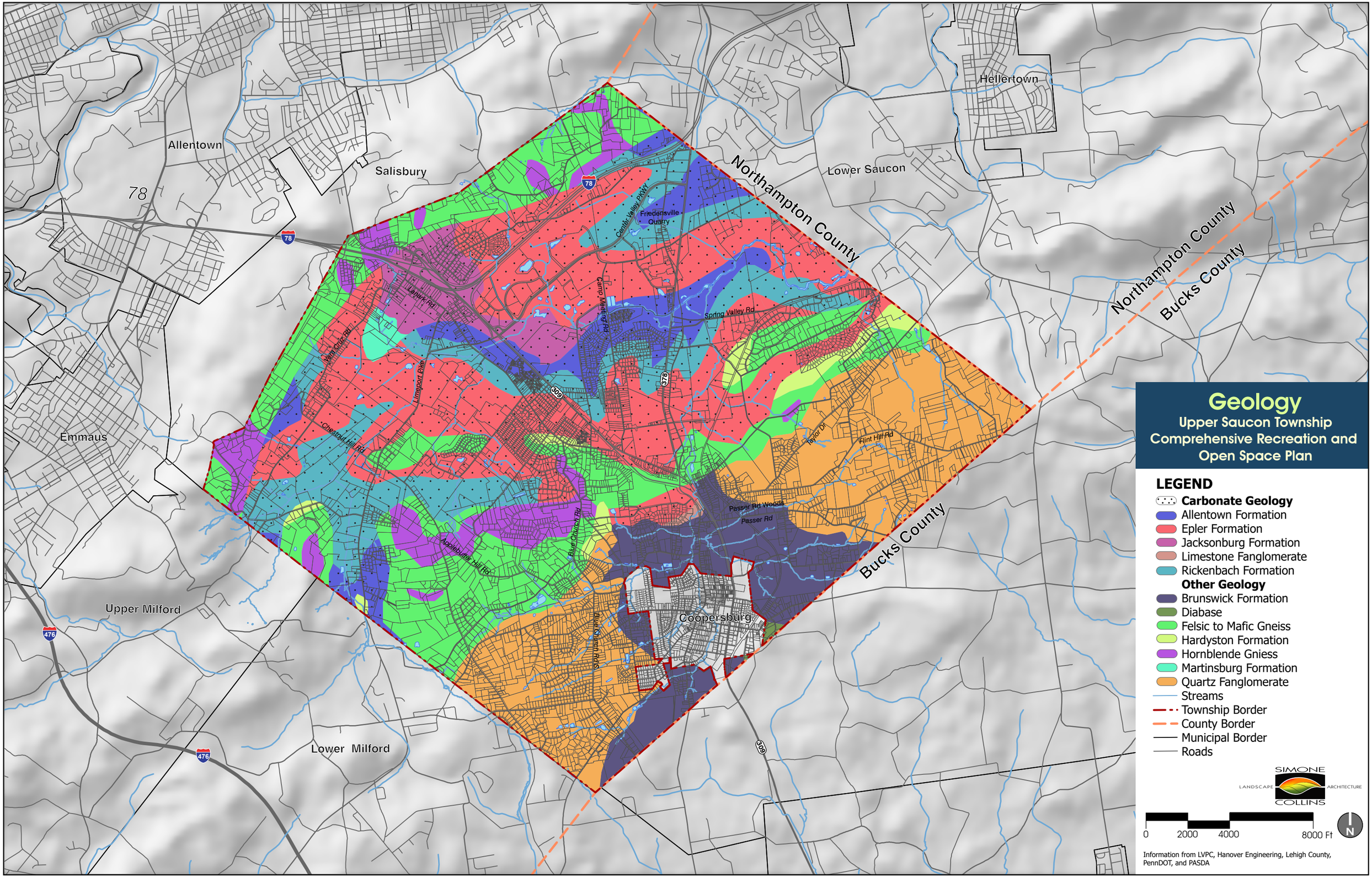
SIMONE COLLINS LANDSCAPE ARCHITECTURE

0 2000 4000 8000 Ft

N

Information from LVPC, Hanover Engineering, Lehigh County, PennDOT, and PASDA

Allentown
Salisbury
Hellertown
Lower Saucon
Emmaus
Upper Milford
Lower Milford
Coopersburg
Northampton County
Bucks County
Friedensville Quarry
Center Valley PKWY
Camp Meeting Rd
Spring Valley Rd
Lehigh Rd
Mest Marsh
Vera Cruz Rd
Limepoint Pike
Chestnut Hill Rd
Apple Butter Hill Rd
Blue Church Rd
Saucon Creek/ Limeport Wetlands
Blue Church Rd
Taylor Dr
Flint Hill Rd
Passer Rd Woods
Passer Rd
78
378
309
476


Geology
Upper Saucon Township
Comprehensive Recreation and
Open Space Plan
LEGEND
Carbonate Geology
Allentown Formation
Epler Formation
Jacksonburg Formation
Limestone Fanglomerate
Rickenbach Formation
Other Geology
Brunswick Formation
Diabase
Felsic to Mafic Gneiss
Hardyston Formation
Hornblende Gniess
Martinsburg Formation
Quartz Fanglomerate
Streams
Township Border
County Border
Municipal Border
Roads
SIMONE
LANDSCAPE
ARCHITECTURE
COLLINS
0
2000
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8000 Ft
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Information from LVPC, Hanover Engineering, Lehigh County, PennDOT, and PASDA
Allentown
Salisbury
Hellertown
Lower Saucon
Northampton County
Bucks County
Emmaus
Upper Milford
Lower Milford
Coopersburg
Friedensville Quarry
Center Valley PKWY
Camp Meeting Rd
Spring Valley Rd
Lanark Rd
Main Cruz Rd
Limeport Pike
Chestnut Hill Rd
Applebutter Hill Rd
Blue Church Rd
Spring Mills Rd
Passer Rd Woods
Passer Rd
Taylor Dr
Flint Hill Rd
78
378
309
476

Geology

The geology of Upper Saucon lies within the Great Valley physiographic region within the Ridge and Valley, New England, and Piedmont geographic provinces. The region can be described by long rolling hills, long mountains, and fertile valleys. Within the Township, the geology consists of large areas of limestone and dolostone (known as carbonate geology) that run through Saucon Valley. Subsurface water contributes to limestone dissolving, which can lead to faults, fractures, and underground caverns that can result in sinkholes. There are known sinkholes located in areas west of Route 309 and east of Limeport Pike in the areas of Lanark. The carbonate geology is also a main area for groundwater recharge. The limestone aquifer that lies within the Township is an important source for potable water within the region. Excessive runoff, erosion, chemical and biological pollution, and sewage systems that lie in the carbonate geology pose threats to polluting groundwater from fractures or faults in the limestone and dolomite bedrock. Additionally, sinkholes can cause property damage, injury and loss of life, disruptions to utilities and public services, and roadway damage.

Through the South Mountain, Felsic to mafic gneiss geology exist. Bauer Rock in the north of the Township lies within this area and is formed from Pochuck gneiss that rises nearly 40' above the ridge and is considered an outstanding geologic feature. Due to the rock type, it has resisted typical erosion due to fewer joints and cracks than the surrounding ridge. Another band of gneiss runs along the south side of the carbonate geology. The south end of the Township has red sedimentary rocks that includes sandstone, siltstone, shale, and some conglomerate.

Topography

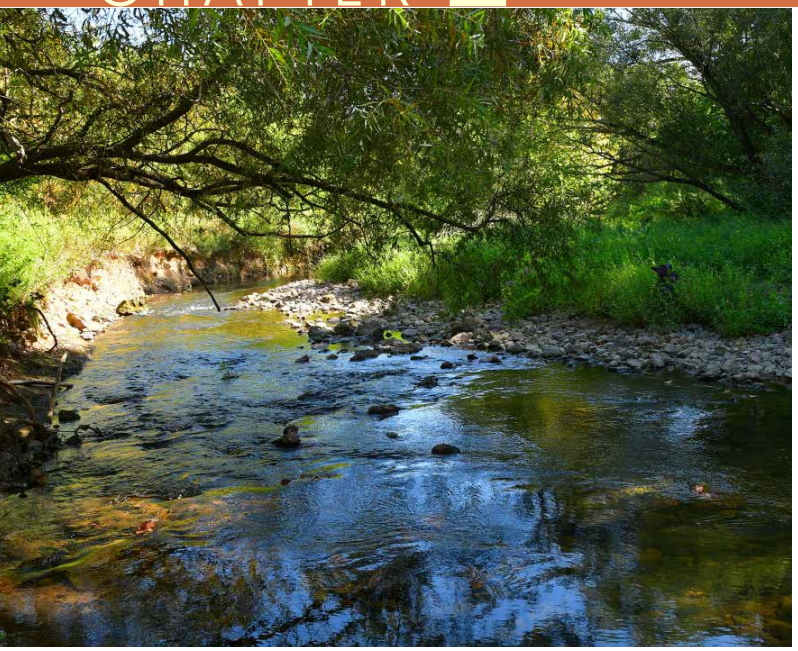
Upper Saucon Township considers areas that possess slopes exceeding 15% and 25% as steep slopes. Steep slopes contribute to erosion as all soils are prone to movement but are increased as slope increases. Disturbance of steep slopes can create heavy sediment loads on waterways, decreasing water quality and decreasing biodiversity of aquatic habitats. Heavy sediments can also reduce the ability of waterways to manage stormwater by reducing floodwater storage capacity within drainage ways.

Steep slopes are unsuitable for most active recreation facilities and difficult for farming and development. Due to these constrictions, most steep slopes tend to be undisturbed and wooded, which can be desirable for conservation and passive recreation and often are integrated within open space plans.

Most steep slopes lie within the Pennsylvania Highland Greenway south, west and north of the Township. Another area with concentrated steep slopes lies between Weyhill Drive and Spring Valley Road.

Hydraulics

The hydrologic cycle is a dynamic system that is in constant movement of rainfall, surface water, groundwater, and evaporation and evapo-transpiration. When one part of the system is impacted, other parts of the system will feel the effects. For example, when an area is paved, this will reduce infiltration and evaporation, while increasing runoff. Protecting important hydrologic features will help mitigate damages caused by extreme weather events while providing important ecological services and recreational opportunities.



Streams – Streams, rivers, and waterways play important historic, recreational, and environmental roles with people who live in the region. As part of protection of these valuable resources, the Pennsylvania Department of Environmental Protection (DEP) created water quality standards, Chapter 93, and further designated PA streams as Exceptional Value (EV), High Quality (HQ), Cold Water Fishes (CWF), Trout Stocking Fishes (TSF), and Warm Water Fishes (WWF). Additionally, as part of the Federal Clean Waters Act, the DEP is required to access the water quality of all streams within Pennsylvania for uses for Fish Consumption, Aquatic Life, Recreational Use or Water Supply and Navigation. Any stream that does not meet the water quality standards necessary to protect them from their designated use are classified as "impaired." More information can be found at https://www.depgis.state.pa.us/2018_integrated_report/index.html.

Saucon Creek watershed covers nearly 98% of Upper Saucon Township and is part of the larger Lehigh River watershed. Saucon Creek, and its two main tributaries, Laurel Run and Tumble Brook, flow through residential areas, agricultural lands and golf courses throughout the Township. These streams effect the quantity and quality of water resources in the region and provide important habitat and scenic views. All the waterways within the Township are designated as Cold-Water Fishes, meaning that the waters are suitable for the maintenance and propagation of fish species and flora and fauna that are native to cold water habitats. The western part of Saucon Creek from Route 378 into Lower Milford Township is considered as Class A Wild Trout Stream by the Pennsylvania Fish & Boat Commission, meaning that the waters support a population of naturally reproducing trout and are not stocked that can support long-term sport fishery.

DEP has classified most parts of Saucon Creek and Laurel Run as impaired. Saucon Creek's sources of impairment come from pathogens and agriculture. Laurel Run on the other hand is impaired due to urban runoff. When streams are considered as impaired, the DEP requires the municipality to have a Municipal Separate Storm Sewer System (MS4) or a Total Maximum Daily Load (TMDL) plan to address the sources of impairment. The Township completed a MS4 Pollutant Reduction Plan in July 2017. The report can be accessed here: https://www.uppersaucon.org/wp-content/uploads/2017/07/10940.02-Upper-Saucon-Draft-PRP-No-Maps7_20_17.pdf

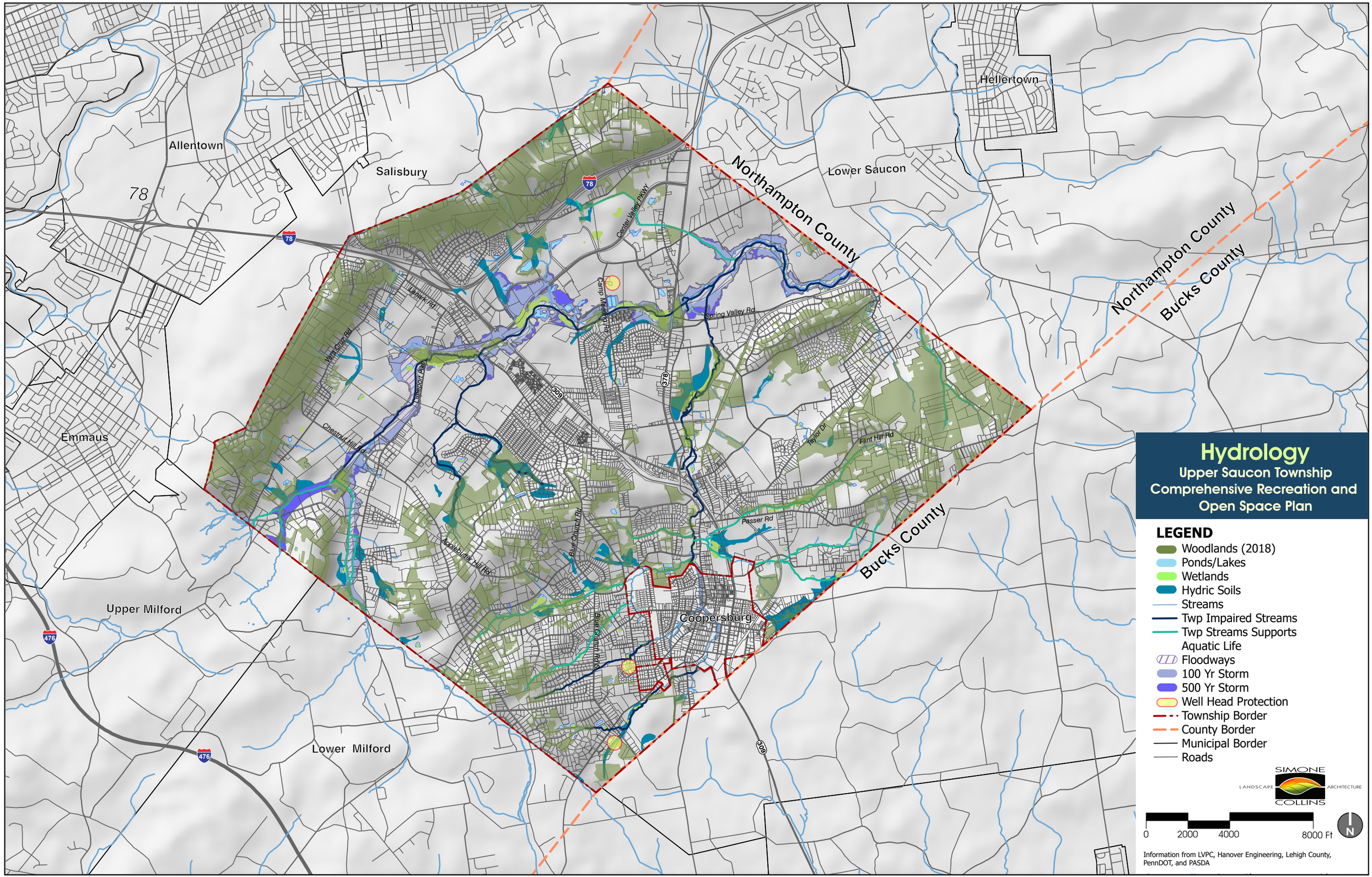
Lakes – Lakes are desired for their recreational uses and views. There are two lakes that exist in the Township. The 10-acre Lake Thomas lies between the corporate center and the Promenade Shops north of the Township. Currently there is no easy access to this lake.

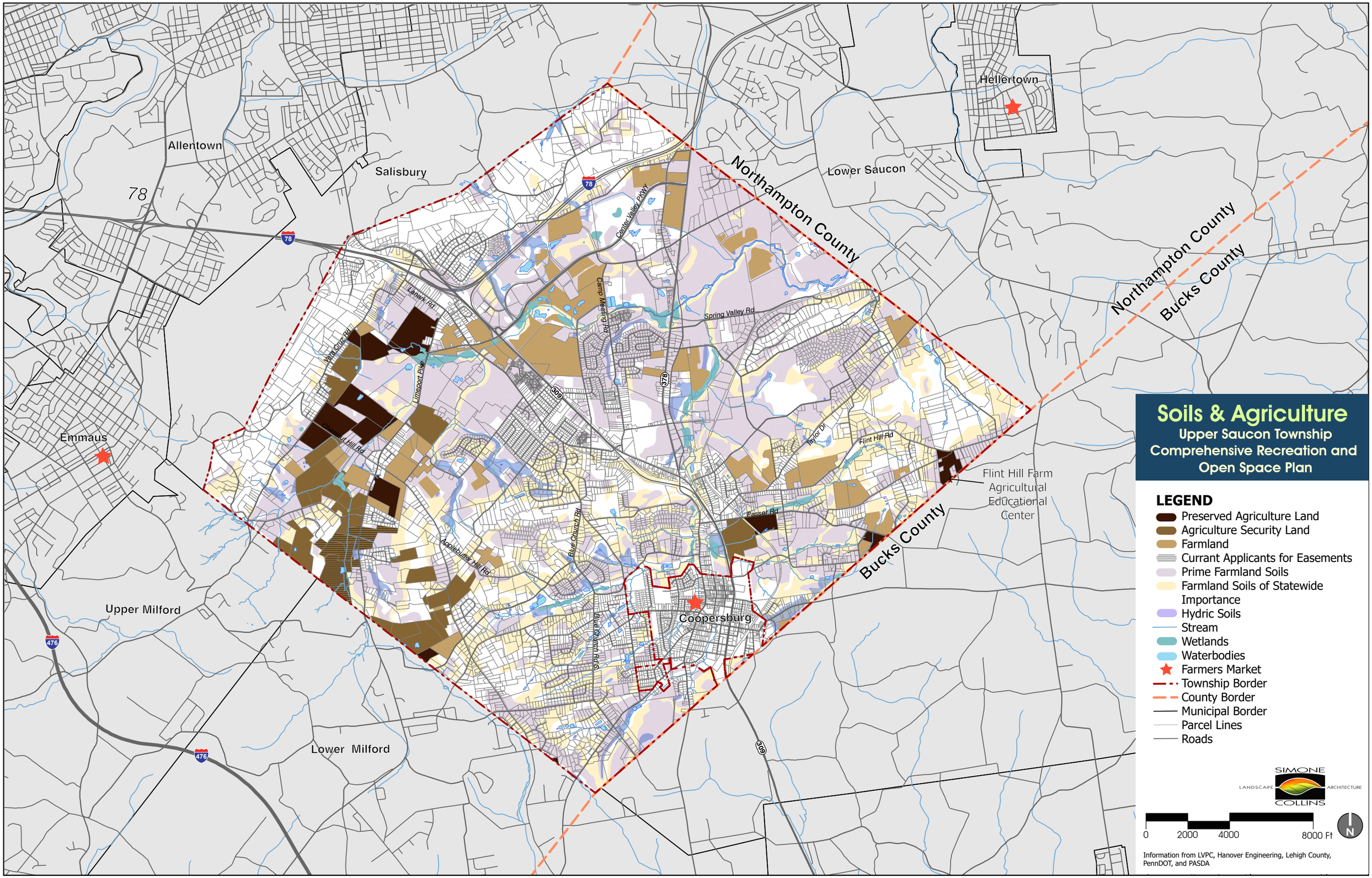
The most known lake is Moyers Lake within the Moyers Lake and Campground. This 10-acre catch and release fishing lake is popular with people who want to fish but don't have a license. Boats are also allowed on the lake and provide a unique recreational opportunity that is not found anywhere else in the Township. The lake lies within important headwaters and within the region known as Saucon Creek/ Limeport Wetlands.

Other large water bodies can be found along Saucon Creek and in the areas of past mining operations.

Hydrology

Upper Saucon Township Comprehensive Recreation and Open Space Plan




Soils & Agriculture
Upper Saucon Township
Comprehensive Recreation and
Open Space Plan
LEGEND
Preserved Agriculture Land
Agriculture Security Land
Farmland
Currant Applicants for Easements
Prime Farmland Soils
Farmland Soils of Statewide Importance
Hydric Soils
Stream
Wetlands
Waterbodies
Farmers Market
Township Border
County Border
Municipal Border
Parcel Lines
Roads
SIMONE
LANDSCAPE ARCHITECTURE
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Information from LVPC, Hanover Engineering, Lehigh County, PennDOT, and PASDA
Allentown
Salisbury
Hellertown
Lower Saucon
Northampton County
Bucks County
Emmaus
Upper Milford
Lower Milford
Coopersburg
Flint Hill Farm Agricultural Educational Center
Center Valley PKWY
Camp Meeting Rd
Spring Valley Rd
Lanark Rd
Vera Cruz Rd
Limeport Pike
Chestnut Hill Rd
Applebutter Hill Rd
Blue Church Rd
Blue Church Rds
Taylor Dr
Flint Hill Rd
Passer Rd
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378

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 assist with protecting people from property damage and prevention of 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 floods does not mean that a rain event will cause flooding that will only happen every 100 years, but rather 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. Since 1950, the Lehigh Valley has had 23 flood events that required federal and state disaster declarations, with the most recent being in 2004, 2005, and 2006. The last update to the FEMA Flood Insurance Rate Map (FIRM) was in 2009, but FEMA is currently in the process of updating the Lehigh County FIRM that would be completed in 2021. In looking at the recent drafts, flood zones in Upper Saucon will increase, especially around Laurel Run. This is likely due to new development that is leading to additional stormwater runoff.

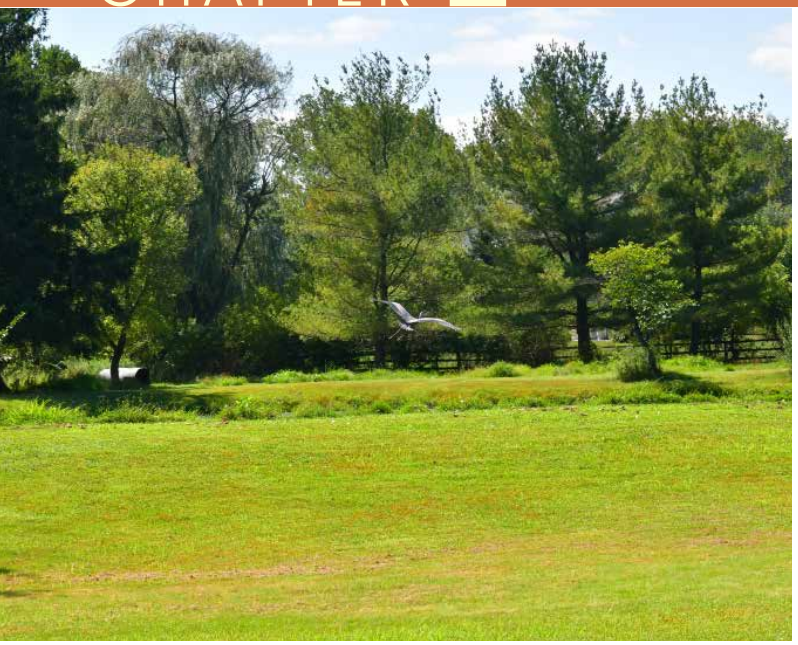
Wetlands – Wetlands are areas that are filled with water long enough to support the variety of

vegetation that has adapted to life in saturated soils. As noted in the *Lehigh Valley Return on Environment* (2014), wetlands provide higher natural system service benefits on a per acre basis than any other land cover. Wetlands are one of the most biologically diverse ecosystems in the world and provide for many important environmental services, even some of the wetlands that are considered as seasonal such as vernal pools provide needed habitat for many varieties of plants and animals. As a whole, Pennsylvania has lost more than half of its natural wetlands and even when wetlands are created due to development, they rarely match the full ecological services provided from natural wetlands.

Many of the wetlands in Upper Saucon Township are concentrated along the waterways that run through the region. In Lehigh and Northampton Counties Natural Areas Update (2005), the wetlands known as Mill Run or Saucon Creek/Limeport Wetlands that lie northwest of Coopersburg and Mesch Marsh by Limeport Pike, just east of Wedgewood Golf Course, were identified for statewide and local significance. Both areas may be home to rare species.

Soils

Three important soil types are identified in this plan. Hydric soils are identified in the Hydrology Map (pg. 41) and the Soils & Agriculture map (pg.42). Prime



farmland soils and soils of Statewide importance are shown on the Agriculture Map (pg. 42).

Hydric soils are soils that are formed under conditions of saturation, flooding or ponding long enough during the growing season to develop anaerobic (absence of oxygen) conditions within the upper part. These soils currently support or are capable of supporting wetland ecosystems. These soils are typically found along headwater areas, waterways, and along wetlands.

Prime farmland soils are defined by the U.S. Department of Agriculture as land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber and oilseed crops. Since the supply of high-quality farmland is limited, it is important that regions recognize where these soils lie and promote sustainable agriculture within these soils.

Soils of Statewide importance are farmland soils that do not meet the criteria for prime farmland soils. The criteria for defining and delineating these soils are determined by State agencies. Generally, these soils include soils that nearly meet the requirements of prime farmland and produce high yields of crops when managed according to acceptable farming methods.

There are an abundance of both prime farmland and soils of Statewide importance that lie through the Saucon Valley. All farming within the region takes advantage of these very important soils but these areas are also desirable for development as they are typically flat and easy to develop.

Wildlife

To maintain resilient wildlife diversity and population, conservation of all types of habitats in larger undisturbed areas is crucial if we are to reduce species decline from stresses due to development. As water quality decreases, woodlands are fragmented, and wetlands are degraded or lost, stresses on native wildlife is increased. Additionally, invasive species have been wreaking havoc on our habitats, such as Emerald Ash Borers, Woolly Adelgid, Oriental Bittersweet, Japanese Stiltgrass, and recently the Spotted Lantern Fly to name a few. A list of invasive plants is included in Upper Saucon Township Ordinance No. 141, page 29.

Natural Heritage Areas

Upper Saucon Township has many natural areas that have been identified as important areas for preservation due to having or potentially having threatened or endangered plants and/or animals, rare and high-quality natural habitats, or outstanding geological features. These areas have been identified in the *Natural Heritage Inventory of Lehigh and Northampton Counties, Pennsylvania*. The most recent update, 2013, describes two areas within the Township, the Friedensville Quarry and the Passer Road Woods, but other areas were identified in past versions of the report in 1999 and 2005. The Pennsylvania Natural Heritage Program does not release specific information of areas identified in the report so that the features that make the area important for preservation will not be harmed by curious people or collectors.

Manmade Inventory

Significant Historic and Cultural Resources

Historical assets contribute to cultural landscapes that reflect lifestyles, cultures, and industries that helped shape the character of a region. Cultural landscapes are depictive or indicative of the local historic built environment. Although there is a sense of importance in preserving these important structures and landscapes, many remain threatened due to lack of protection or lack of resources to address deferred maintenance. Locations of these spaces are identified on the Historical & Cultural Resources map (pg. 47).

A good example of this type of loss is the Centennial Bridge. This was a stone Arch Bridge built in 1876 and placed on the National Register of Historic Places (NRHP) in 1988, but due to deferred maintenance, the bridge was condemned and eventually demolished in 2013. This was the only structure that was on the NRHP within the Township and is marked by a plaque where this structure once was.

In 2008, the report *Historic Sites and Preservation Strategies – A Pilot Project for Upper Saucon Township* identified many historic sites and provided strategies for preservation of these sites. One of the sites identified is the Pump House located on the Ueberroth Zinc Mine site. This site was once the home of the President Pump, considered one of the largest Cornish pumps of its kind in the world. The Township has been an active partner with Lehigh University, owner of the site, in preserving this space. Close by is the Manor House Inn (formerly the Friedensville Hotel) that dates to

1845. An interesting fact of this structure is that there was a tunnel that ran from the basement to the mines. These two properties provide a glimpse of the zinc mining industry that was once an important source for jobs in the Township. These are but a few of the places identified in the report and each add to the character of Upper Saucon Township.

Additionally, there is an active effort between Lehigh, Bucks, and Montgomery Counties to complete the Liberty Bell Trail, celebrating a historic trolley that ran between Allentown and Philadelphia. Many municipalities have started or completed segments of this trail. Once finished, people from the region will be able to follow the path of what many consider to be the most popular and successful electric streetcar operation.

More cultural resources that have been identified in the Comprehensive Plan as National Register eligible or undetermined are as follows:

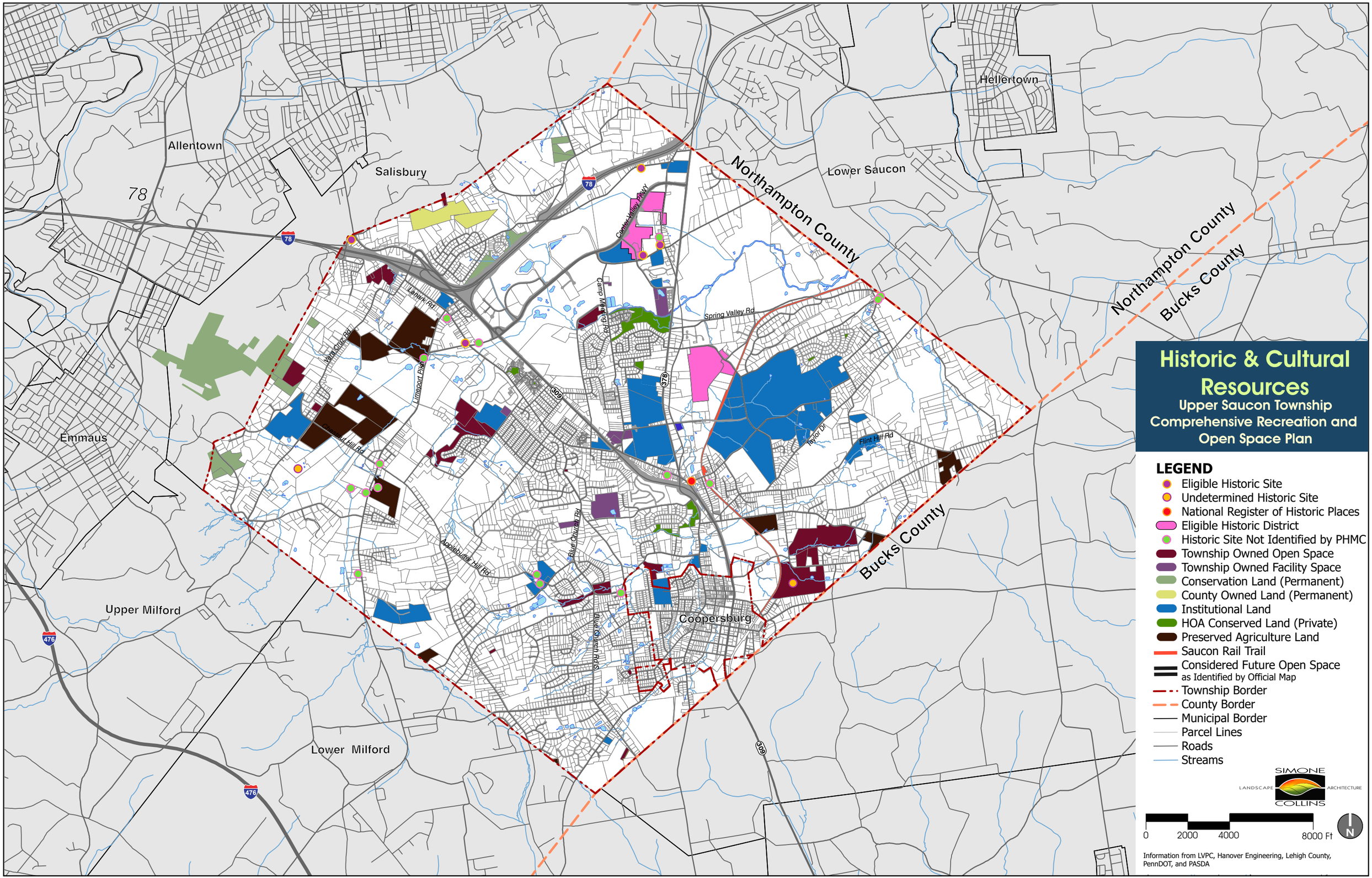
- St. Andrew's Lutheran Church - eligible
- Friedensville Union Church, Friedensville Lutheran Church – eligible (PHMC indicates re-evaluation may be necessary)
- Heller's Tavern – eligible (PHMC indicates re-evaluation may be necessary)
- Farmhouse, Barn and Outbuildings, Oakhurst Drive – eligible
- Hartman Residence (demolished, plaque placed on location) – eligible
- Heiney Lime Kilns – undetermined
- Ueberroth Zinc Mine Historic District – eligible (PHMC indicates re-evaluation may be necessary)
- Reuben Mohr Property, Mill Historic District – undetermined
- Tumblebrook Golf Course - undetermined

Agricultural Lands

Upper Saucon Township has an Agriculture Protection Zoning District that functions to protect areas with prime agriculture soil to maintain and support agricultural activities. Additionally, the Township is an active partner with the Lehigh County Agricultural Easement Program, which has led to approximately 381 acres of permanently preserved farmland with about another 659 acres of farmland located in Agricultural Security Areas (ASA). Preserved Agricultural Land is permanent preservation of farmland through easements that remain with the property in perpetuity for the use of agriculture only. ASA is not permanent and does not restrict a landowner's ability to use the property for non-agriculture use, but any landowner who wants to participate in the Preserved Agricultural Land program must first be part of the ASA. Another way to assist farmlands is the Clean and Green Act 319 and 515. This provides parcels that are used for farming or have large woodlands to claim tax reductions. This also is not permanent, but a parcel that would want to sell for development would have to owe back taxes.

It is important to understand that although agriculture provides many benefits of open space, it is an industry, and when protected, often compliments adjacent open spaces with pastoral views and recreation opportunities, while providing regional food security.

Flint Hill Farm Educational Center, located in the eastern side of the Township, is a 26-acre preserved multifaceted Agro-Educational facility that provides the region with unique learning opportunities and programs to provide visitors to the importance of farming and land stewardship. They also have a market that is open to the public to access fresh food. Residents also have access to locally produced food by ways of farmers markets in Coopersburg, Emmaus, and Hellertown. In neighboring Upper Milford Township, The Seed Farm provides an agricultural education and entrepreneurship program to assist in cultivating the next generation of farmers that can take over preserved farmland within the region.


Historic & Cultural Resources
Upper Saucon Township Comprehensive Recreation and Open Space Plan
LEGEND
Eligible Historic Site
Undetermined Historic Site
National Register of Historic Places
Eligible Historic District
Historic Site Not Identified by PHMC
Township Owned Open Space
Township Owned Facility Space
Conservation Land (Permanent)
County Owned Land (Permanent)
Institutional Land
HOA Conserved Land (Private)
Preserved Agriculture Land
Saucon Rail Trail
Considered Future Open Space
as Identified by Official Map
Township Border
County Border
Municipal Border
Parcel Lines
Roads
Streams
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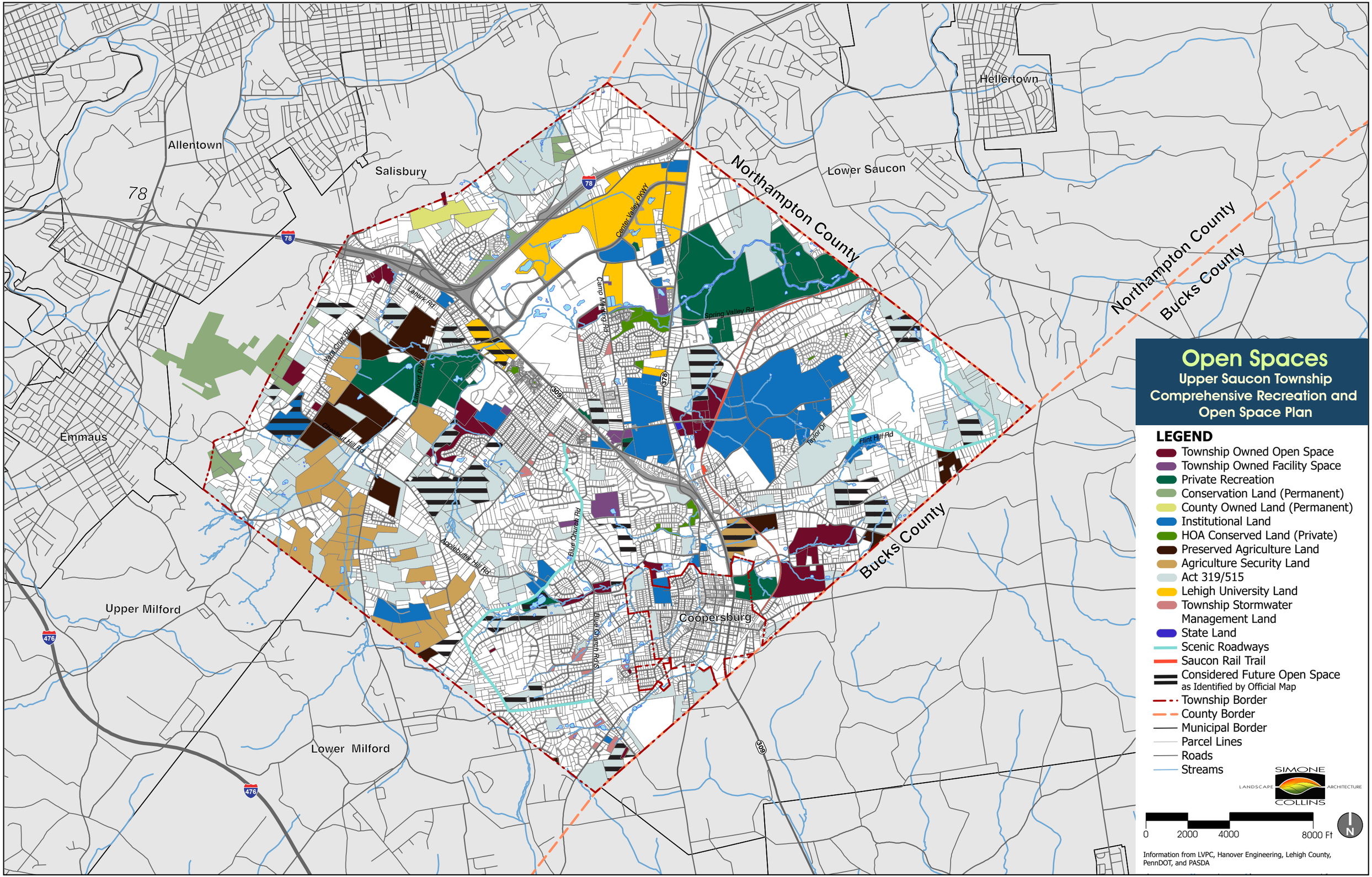
Salisbury
Hellertown
Lower Saucon
Northampton County
Bucks County
Emmaus
Upper Milford
Lower Milford
Coopersburg
Center Valley PKWY
Camp Meeting Rd
Spring Valley Rd
Lanark Rd
Mack Cruz Rd
Limeport Pike
Chestnut Hill Rd
Taylor Dr
Flint Hill Rd
Blue Church Rd
Applebutter Hill Rd
Blue Church Rd S
78
476
309
378


Open Spaces
Upper Saucon Township
Comprehensive Recreation and
Open Space Plan
LEGEND
Township Owned Open Space
Township Owned Facility Space
Private Recreation
Conservation Land (Permanent)
County Owned Land (Permanent)
Institutional Land
HOA Conserved Land (Private)
Preserved Agriculture Land
Agriculture Security Land
Act 319/515
Lehigh University Land
Township Stormwater
Management Land
State Land
Scenic Roadways
Saucon Rail Trail
Considered Future Open Space
as Identified by Official Map
Township Border
County Border
Municipal Border
Parcel Lines
Roads
Streams
SIMONE
LANDSCAPE ARCHITECTURE
COLLINS
0
2000
4000
8000 Ft
N
Information from LVPC, Hanover Engineering, Lehigh County,
PennDOT, and PASDA
Allentown
Salisbury
Hellertown
Lower Saucon
Northampton County
Bucks County
Emmaus
Upper Milford
Lower Milford
Coopersburg
78
476
309
378
Center Valley PKWY
Camp Meeting Rd
Spring Valley Rd
Lanark Rd
Vera Cruz Rd
Limeport Pike
Chestnut Hill Rd
Applebutter Hill Rd
Blue Church Rd
Blue Church Rds
Taylor Dr
Flint Hill Rd

Existing Preserved Land

There are currently approximately 630 acres of permanently preserved lands in Upper Saucon Township. These lands are preserved in different ways as described below. Altogether, preserved open space makes up 4% of lands within the Township. There is an additional 2,091 acres of temporary open space, meaning that the land is not protected from future development.

Township owned Open Space

Upper Saucon Township Community Park, Hopewell Park (opening in 2020) and the former Tumblebrook Golf Course make up approximately half of the open space currently owned by the Township. Other open spaces include undeveloped land or land acquired by the Township for future recreational use. Most notable are the Benckini Tract that is adjacent to the Upper Saucon Community Park and the Haring tract, adjacent to Tumblebrook. In 2017, these two parcels went through a master planning process to be designed as sustainable community parks. Since then, the Benckini Tract plans have been going through revisions in hopes of providing passive recreational opportunities and connections to the neighboring community park. An additional 7.7 acres of open space will be added as part of an agreement of a future development of a retirement community on the grounds of the soon to be closed Locust Valley Country Club.

Only one parcel in the Township is permanently preserved due to deed restrictions and makes up only .1% of the permanently preserved lands within the Township. This means that the additional 387.13 acres the Township currently owns can be sold to development unless State or Federal funds were used for obtaining or construction on the parcel, which usually comes with restrictions for future land use.

Lehigh County owned

Lehigh County owns both the South Mountain Big Rock Park that is home to Bauer Rock and the 21- acre Scholl Woodlands Preserve that is located at the base of Big Rock Park. 56 acres of the South Mountain Big Rock Park lies in Upper Saucon Township with the remaining 21-acres lying in neighboring Salisbury Township. The 77 acres of Lehigh County owned land makes up nearly .5% of permanent open space within the Township.

Conservation land

Conserved lands through conservation groups such as Wildlands Conservancy and Heritage Conservancy have protected 105.3 acres in the Township, accounting for .7% of preserved open space. South Mountain Preserve (Wildlands Conservancy) and Buehler Memorial Park (Wildlands Conservancy) make up about half of the conservation land.

Preserved Farmland

There are currently 10 farms that are permanently preserved through the Lehigh County Agricultural Preservation program. The lands add up to 381.22 acres and is 2.5% of the preserved open space in the Township. There currently is another 658.8 acres of farmland included as Agricultural Security Area, with some farms waiting on the list to become permanently preserved.

Existing Open Space Data

Open Space	Acres	% of Twp Land
Upper Saucon Twp Total Area	15552	
Township Owned	10	0.1%
Lehigh County Preserved Land	77	0.5%
Conservancy Land	105.3	0.7%
Agriculture Easements	381.22	2.5%
HOA Conserved Land	56.03	0.4%
Total Permanent Open Space	629.55	4.0%
Township Owned	387.13	2.5%
Saucon Rail Trail	27	0.2%
Private Recreation	1018	6.5%
Agriculture Security	658.8	4.2%
Total Temporary Open Space	2090.93	13.4%

Home-Owners Association (HOA)

Through the Conservation Design Development zoning ordinances, HOA preserved open space accounts for .4% of preserved open space. It is important to note that not all HOA lands that are undeveloped are considered as open space due to the requirements defined in the Township's regulations.

Saucon Rail Trail

This important trail provides connections to open spaces from Coopersburg to Hellertown. 27 acres of the pathway is leased from SEPTA (30 years) and lies within Upper Saucon Township making up .2% of the open space withing the Township.

Connections

Just as important as preservation of land is providing an option for non-vehicular connections to open spaces for passive and active recreational opportunities. These connections can range from sidewalks to much larger greenways described previously. The Park Service Area Map (pg. 52) shows residents that are located within a 10-minute walk or within 3 miles of the three community parks within the Township. Neighboring parks are also shown to examine if residents that are not within the 3-mile service area are being served by a park in a neighboring township. Many residents within the Township have expressed a need for more safe passageways to desired destinations.

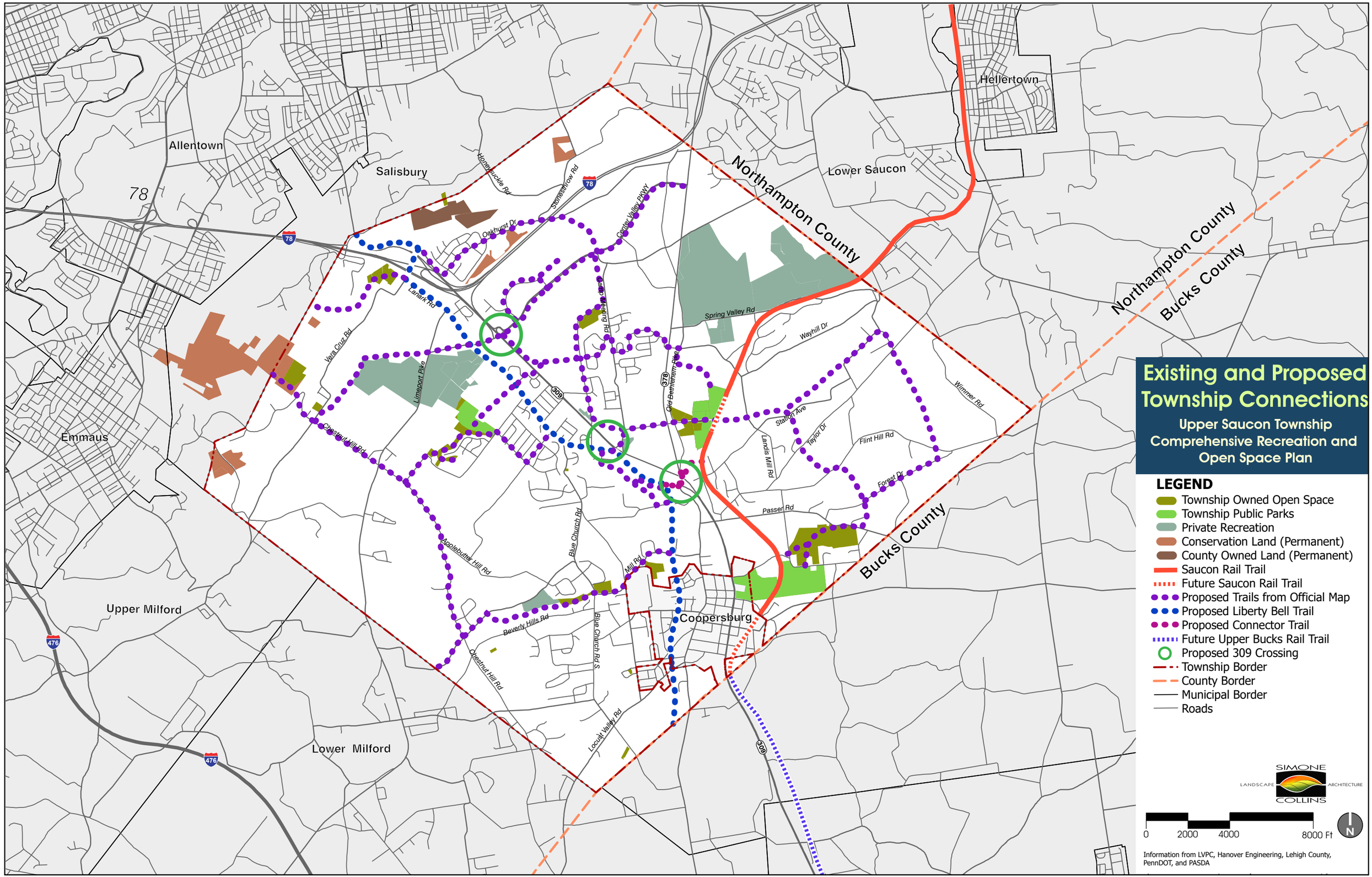
Trails

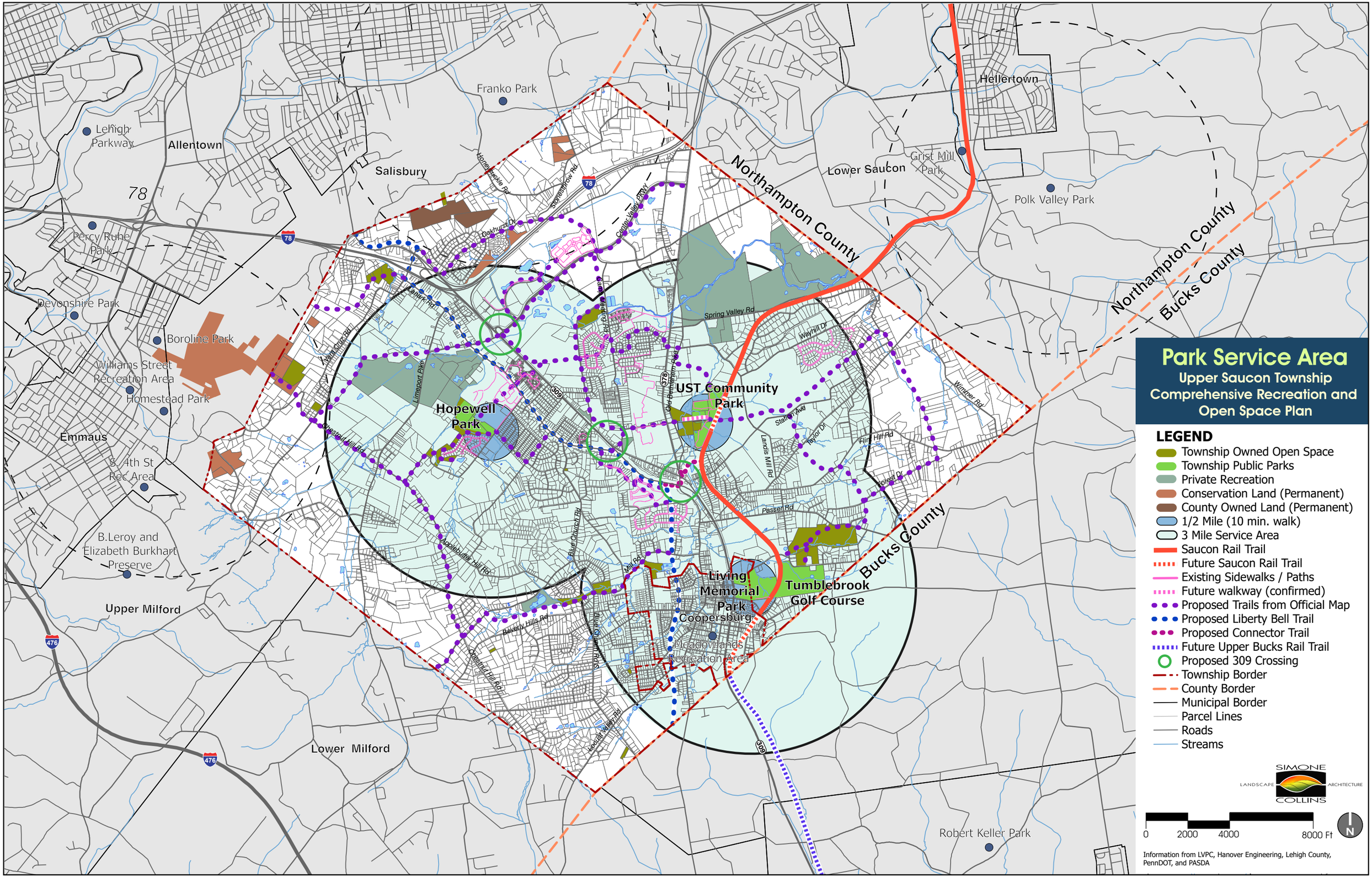
The Saucon Rail Trail is a multi-purpose connector trail that provides safe travel for pedestrians and bicyclists to and from parks along its 7.6 miles from Coopersburg through to Hellertown. Future phases will connect this trail to the Upper Bucks Rail Trail (in progress) as part of the Highlands Trail Project and to South Bethlehem Greenway.

Other trails are shown on the Upper Saucon Official map including the proposed Liberty Bell Trail with a connector trail to join with the Saucon Rail Trail. The Township has already expressed that a priority would to be to build the Liberty Bell Trail to the connector, construct the connector, then complete the Liberty Bell Trail. Other identified trails would consist of a mix of off road and on road paths using the Bicycle and Pedestrian Guidelines within the Comprehensive Plan that would help provide safe connections across the two sides of the Township that are currently split by Route 309.

Sidewalks

Currently, sidewalks within the Township are primarily within newer developments and are disconnected. Not having a connected pedestrian corridor does not provide enough additional options for leisure walks or needs, such as walking to work, school, or shopping. Making improvements in walkability within communities can allow residents to navigate through larger portions of the Township to connect to desired open spaces.


Existing and Proposed Township Connections
Upper Saucon Township Comprehensive Recreation and Open Space Plan
LEGEND
Township Owned Open Space
Township Public Parks
Private Recreation
Conservation Land (Permanent)
County Owned Land (Permanent)
Saucon Rail Trail
Future Saucon Rail Trail
Proposed Trails from Official Map
Proposed Liberty Bell Trail
Proposed Connector Trail
Future Upper Bucks Rail Trail
Proposed 309 Crossing
Township Border
County Border
Municipal Border
Roads
SIMONE COLLINS
LANDSCAPE ARCHITECTURE
0 2000 4000 8000 Ft
N
Information from LVPC, Hanover Engineering, Lehigh County, PennDOT, and PASDA
Allentown
Salisbury
Hellertown
Lower Saucon
Northampton County
Bucks County
Emmaus
Upper Milford
Lower Milford
Coopersburg
78
476
309
378
Honeysuckle Rd
Stonesthrow Rd
Oakhurst Dr
Center Valley PKWY
Lanark Rd
Vera Cruz Rd
Limeport Pike
Camp Meeting Rd
Old Bethlehem Pike
Spring Valley Rd
Wayhill Dr
Wimmer Rd
Station Ave
Taylor Dr
Landis Mill Rd
Flint Hill Rd
Forest Dr
Passer Rd
Chestnut Hill Rd
Applebutter Hill Rd
Blue Church Rd
Mill Rd
Beverly Hills Rd
Blue Church Rd S
Locust Valley Rd


Park Service Area
Upper Saucon Township
Comprehensive Recreation and
Open Space Plan
LEGEND
Township Owned Open Space
Township Public Parks
Private Recreation
Conservation Land (Permanent)
County Owned Land (Permanent)
1/2 Mile (10 min. walk)
3 Mile Service Area
Saucon Rail Trail
Future Saucon Rail Trail
Existing Sidewalks / Paths
Future walkway (confirmed)
Proposed Trails from Official Map
Proposed Liberty Bell Trail
Proposed Connector Trail
Future Upper Bucks Rail Trail
Proposed 309 Crossing
Township Border
County Border
Municipal Border
Parcel Lines
Roads
Streams
SIMONE
LANDSCAPE
ARCHITECTURE
COLLINS
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Information from LVPC, Hanover Engineering, Lehigh County, PennDOT, and PASDA
Northampton County
Bucks County
Hellertown
Lower Saucon
Grist Mill Park
Polk Valley Park
Franko Park
Lehigh Parkway
Allentown
Salisbury
Percy Ruhe Park
Devonshire Park
Boroline Park
Williams Street Recreation Area
Homestead Park
Emmaus
S. 4th St Rec Area
B.Leroy and Elizabeth Burkhart Preserve
Upper Milford
Lower Milford
Robert Keller Park
Hopewell Park
UST Community Park
Living Memorial Park
Coopersburg
Tumblebrook Golf Course
Meadowlands Recreation Area
78
476
309
378
Honeysuckle Rd
Stonesfrow Rd
Oakhurst Dr
Center Valley Pkwy
Camp Meeting Rd
Spring Valley Rd
Weyhill Dr
Wunner Rd
Limeport Pike
Lanark Rd
Main Church Rd
Chestnut Hill Rd
Old Bethlehem Pike
Station Ave
Taylor Dr
Flint Hill Rd
Lands Mill Rd
Forest Dr
Passer Rd
Blue Church Rd
Applebutter Hill Rd
Mill Rd
Beverly Hills Rd
Chestnut Hill Rd
Southern Blvd
Leonard Valley Rd

Parks and Recreation Inventory and Analysis

The importance of parks and recreation within any community cannot be understated. Parks are important areas where residents of all ages, ethnicity, economic status, and abilities will interact and create community building experiences that can be a tangible reflection of the quality of life within the community. Parks and recreation services are often noted as important factors of how livable a community is and create a sense of cohesion and public pride. This is added to all the many other open space benefits already described.

Publicly Owned Facilities

Upper Saucon Township Community Park

The Upper Saucon Township Community Park is an approximately 70-acre park owned by the Township that is spread out over two sites, connected by a pedestrian underpass of Preston Lane. It is also home to the Southern Lehigh Public Library. This is primarily an active recreation park with three full sized soccer fields, two short-sided soccer fields, three multi-purpose fields, one 90 ft base ball field, one 60 ft base ball field, two basketball courts (that also double as parking), and about 2 miles of trails. It also has two tot-lots, a large pavilion (with accommodations for up to 100 people), a restroom/concession stand facility on one side of the park, and restrooms located in the library that are accessible from the outside.

The park is connected to the Saucon Rail Trail, but there are no other sidewalks or trails that residents can use to reach the park without a car. Even with the Southern Lehigh Schools within a ½ or 10-minute walk to the entrance of the park, there are no safe paths for students to use to get to the park.

The park is well maintained. Water fountains, benches, picnic tables, trash/recycling receptacles are located throughout the park. An entrance sign is at both entrances.

The Hopewell Road Community Park

The new Hopewell Road Community Park will open in 2020 and is estimated to be completed in 2021. This Township owned, 61-acre park will have three multi-purpose fields, one lacrosse/multi-purpose field, two volleyball courts, two basketball courts, three pickleball courts, and trails. It will also have an amphitheater, tot lot, restrooms, and a pavilion. Two of the multi-use fields lie on school property and will be managed by the School District, but will be open to the public after normal school hours.

Currently there is only one walkway along the north side of W. Hopewell Rd that leads to the park. The Township has stated that trail connections will be part of the plan. This may be helpful to the residents in the adjacent development and to students of the Hopewell Elementary School. There are no sidewalks in the developments that are across the street from the new park.

Upper Saucon Township Municipal Golf Course at Tumblebrook

Tumblebrook is a 9-hole course spread over 71 acres. It is currently closed since the Township has determined that it is not viable as a functioning golf course. The Township has submitted grants for converting the golf course into an active recreation facility with sports fields.

South Mountain Big Rock Park

Home of Bauer Rock, this park provides passive recreation with hiking trails and opportunities for wildlife observation.

Saucon Rail Trail

The Saucon Rail Trail is a compact gravel path that is used heavily by walkers, joggers, and bicyclist in the region. About 4 miles of this trail lies within the Township. The trail is in good condition, but residents have expressed concerns when crossing Passer and Flint Hill Roads.

Privately Owned Facilities

In addition to the public owned facilities within the Township, there are multiple private recreation providers including Wedgewood Golf Course, Saucon Valley Country Club, Putt U Miniature Golf, Olympus America Softball Field, Ridge and Valley Gun Club, and Moyers Lake. HOAs also have some small parks and trails within their developments. Additional private recreation is listed below.

Southern Lehigh Living Memorial Park

The Living Memorial Park is a 54-acre (32 acres lie in Upper Saucon Township with the remainder in Coopersburg) privately owned park that is primarily active recreation. The land is owned by the Southern Lehigh School District and leased to the Living Memorial Association and as part of the lease, cannot be taken by School District as long as it is being used as a successful park. The park has 8 ball fields, a multi-purpose field, a volleyball court, a basketball court, a tennis/pickleball court, and a makeshift skateboard park. The park also houses a community building, various playgrounds, pavilions, snack bar, restrooms, and a wooded lot that is home to a boy scout cabin.

This park receives a lot of additional programming and community events as it is very accessible to the residents of Coopersburg. It is also connected to the Saucon Rail Trail.

The ball fields were in great condition. Other elements were not in great condition or were outdated. Some people had commented that the park was in desperate need of an upgrade.

SOLECO Community Pool

This outdoor pool is run by the Frank Banko Southern Lehigh Community Pool Association and recently saw some upgrades to the pool house. The pool is open by membership, by season or through same day passes. Some of the programs offered are swimming lessons, youth and adult programs, and lifeguard certification.

Swim-In Zone – Swim-In Zone is an indoor shallow pool that offers lessons and lap swimming for members. It is also available for rental events.

Institutionally Owned Facilities

The Township is home to the Southern Lehigh School District with 5 schools that serve approximately 3,150 students. Southern Lehigh High School, Southern Lehigh Middle School, and Southern Lehigh Intermediate School are all in close proximity of each other and have many well-maintained sports facilities that are open to the public, but only when not in use for school activities. The recently rebuilt Hopewell Elementary School has a new playground that replaced the well-known Kids Kingdom wooden playground. Liberty Bell Elementary School is in Coopersburg.

Two universities are located in the Township. DeSales University is a large campus next to the Upper Saucon Township Community Park and has well maintained athletic amenities for its students. It is also home to the annual Pennsylvania Shakespeare Festival. Penn State Lehigh Valley is a small branch campus with a multi-purpose field and dual-purpose tennis/basketball courts. It has been mentioned in meetings that the school was looking for more fields to accommodate school activities for its students.

The St Micheal the Archangel School has two schools in the Township. St. Michaels accommodates students from 5th to 8th grade and has a playground, basketball court, and ball field for its students. St. Joseph Church School houses students from pre-K to 4th grade and has a playground, basketball court, and ball field for students.

Camp JCC is a Jewish Community Center summer day camp located on 55 acres below South Mountain. The camp has an outdoor pool, tennis courts, basketball courts, ball fields, multi-purpose fields, make-shift skate park, gaga pit, and hiking trails. Currently, this property is for sale and these facilities may be lost with new ownership.

Maintenance

Township Maintenance and Responsibilities

Upper Saucon has staff dedicated to park maintenance services. The Township performs most park maintenance and the Department organizes the work schedules to accomplish maintenance within the Township. Three maintenance staff members are dedicated to park maintenance. Most maintenance is performed in-house. Maintenance efforts include full time, part time, and contracted workers to fulfill maintenance needs.

The maintenance department functions at a high level. Equipment care, vehicle maintenance, record keeping, and community response to needs all function well within the maintenance division. Workers perform many of the tasks required for success. Contracted services assist to provide high level maintenance for all township property. The maintenance staff performs several maintenance tasks that other communities outsource such as aerating, over seeding, tree care, etc. Some typical examples of contracted services include: large tree removal, concrete work, and other tasks that cannot be performed in-house due to resources, work-hours, equipment needs, or technical skill.

A thorough review of the local parks in Upper Saucon was conducted over weekday and weekends in September, November, and March 2019/20. The review evaluated current conditions, maintenance practices, possible future uses, recreational program opportunities, and a risk analysis of each location. All comments for maintenance and accessibility are derived from information provided by the Consumer Product Safety Commission (CPSC) Guidelines for playground safety and from the American with Disabilities Act handbooks. The CPSC guidelines are guideline and not laws; however, courts have held that failure to comply with the guidelines usually results in a judgement for the plaintiff. The ADA regulations are law and must be followed.

In every visit, parks and other Township property maintenance has been excellent. Maintenance issues such as trash, safety surfaces, downed branches, lawn care - all received passing evaluations. Staff takes pride in their efforts to provide safe, usable, and visually pleasing parks. Informative signage, sightlines, field playing conditions, hardcourt surfaces all meet the guidelines and requirements and received passing evaluations.

A review of the tasks performed and the work-hours necessary to complete the assignments reveals

additional seasonal employees would increase the work output. While the Township performs at a high level, many tasks are not performed or are underperformed due to the number of work-hours available. Adding seasonal employees would increase the maintenance output while not presenting a financial burden to the Township. Park maintenance operations perform the necessary work to provide safe and clean parks. However, the extra care necessary to provide the needs of the community, as reflected through surveys and interviews, requires additional work hours, especially when the new parks are open. Once operational, the new parks may demand the need to add at least one full-time maintenance worker dedicated to park maintenance.

Upper Saucon offers continued learning opportunities for staff members. Training seminars, workshops, and conferences afford staff the opportunity to learn, observe, and share knowledge with other professionals and industry leaders; and, in turn, those who attend the training sessions share information learned with other staff members and the public. Seminars provide new information concerning storm water management and other environmental issues. Additionally, workshops offer employees to be well informed on current issues facing the community. Opportunities also provided information related to human resource materials, anti-harassment efforts, and safe work environment concerns.

Upper Saucon encourages and provides the opportunity for staff to attend a variety of professional seminars, workshops, and knowledge-based programs in a continued effort to support the workforce and to provide them with tools necessary to be successful.

Equipment

A record of all Township equipment is listed in the appendix. The care and maintenance of all equipment is a high priority for the community. The high level of service to equipment extends the life of the equipment and helps keep budgetary concerns lower. Play equipment is installed in house. Staff are certified

playground installers and inspectors as recognized by the National Recreation and Park Association (NRPA). Further, the maintenance department also routinely inspects playgrounds for dangerous conditions and performs monthly audits of all structures. These audits are recorded and the information is retained should issue arise.

Risk Management

Written policies exist for equipment and Township policies are available and reviewed to assist staff. An in-house safety committee meets regularly to review issues and to discuss new trends for the safety of workers and the community. Proper park signage is installed to make all patrons aware of proper playground use and other park rules and regulations.

Adequacy of Maintenance

Current maintenance practices are performed at a high level. The concern will be moving forward as new park and open space facilities are brought on-line. All staff are currently utilized to their full ability that maximizes staff efficiency. As new parks are developed staff will have substantial time constraints to maintain current high levels of maintenance. Bringing new staff in early will provide an opportunity to training, park familiarity, design contributions, and team development.

Recreation Programming Analysis

The Township provides few recreational programs. Passive opportunities for spontaneous recreation pursuits abound within the Township. Limited opportunities for organized recreation programs exist, excluding youth sports groups,due to a lack of staff hours that can be dedicated to providing recreation programs. The residents are being underserved when it relates to recreation programs offered by the Township.

It is important to note that the consultants were not able to attain the necessary resources to evaluate the adequacy of the current inventory of the fields in relation to the demands of the various athletic groups that are active in the Township. It has been expressed in the survey and in public meetings that there is a need for more fields. As the fields in Hopewell Park come on line and if the plan to turn Tumblebrook Golf Course into an active recreation park with additional fields, the problem with the field shortages may be eliminated, but without any real record keeping at the Township level, knowing future field needs of the sports group will be hard to determine.

Opportunities are plentiful for Upper Saucon to provide some simple programs which will serve residents. The programs may take the form of employee instructors, third party providers, and partnerships with private organizations.

The current amount of public input needs to be enhanced to ensure the Township is meeting the needs of the community or is at least aware of the community needs. At present, the results from a recently completed survey and remarks provided from public meetings indicate that the residents of the Township do feel recreational programs are important and are desired in the Township. Regular input from the residents is needed and essential. The recent public survey will provide information for the immediate future; however, additional and ongoing information needs to be obtained from the public to address the changing needs of a changing community.

Administration Analysis

Administrative Analysis of Providers and Relationships

The Administrative offices serve as the central contact point for the residents, businesses, and community groups of Upper Saucon. The Administration accepts facility reservations, provides park work orders, handles the daily activities of the Township, and responds to requests from community members.

While reviewing the current formal partnerships related to recreational opportunities, we found few partnerships. Limited partnerships have shown success; however, few recreational programs are offered by the Township or community groups (aside from youth sport groups). The difficulty in forming possible future partnerships is there is no formal procedures in place. The creation of written procedures would outline who is responsible for what and how future programs would be advertised, held, and evaluated. Upper Saucon Township has a verbal system in place for partnerships, however, that system is not memorialized in any written form.

Some cooperative verbal partnerships exist to assist the Township; youth sport organizations, civic organizations, and some private businesses. Partnerships are essential to the success of the Upper Saucon Township, due to limited Township staffing. Written partnerships with the School District and other recreational providers will benefit the community and allow the Township to offer several new programs to meet community requests.

Marketing Efforts

The current level of public relations and marketing efforts the Township performs to promote services is adequate. The Township utilizes their website, Facebook, flyers, brochures, newspapers, posters and signage, and other means to promote the Township recreational facilities. These public relation efforts are placed throughout Township owned facilities, in some local businesses, posted on signs, promoted via social media, and are available at other community outlets.

While current practices are adequate, when future recreation programs are offered, there are improvement opportunities which will allow residents more opportunities to access materials and to be involved and well-informed.

Policies for Parks and Recreation Operation

Since the Township provides limited organized recreation programming, there are few written policies and procedures that govern the agency's general operations. The Township does provide information, policies and procedure for reservations of park amenities. These include pavilion rentals, ballfield reservations, and other park amenities within Upper Saucon. The procedures and policies that govern the use of those facilities are readily available for residents and outline the procedure for rental and use. The policies have not been updated for process and fees for several years and should be reviewed and reevaluated.

Other policies should be reviewed to determine if the fees being charged are appropriate for field use and pavilion reservations. Additionally, some of the policies do not provide for facility use priorities. For instance, perhaps fields are provided to resident youth sports first, then resident teen activities, then resident adults use, followed by non-resident groups (if permitted). These written policies will assist administrative offices in making decisions when multiple requests are made for a particular field and will provide a standard to follow in explaining why a group received a field or not.

Record Keeping

The current practice of record keeping for park maintenance, when issues are called in from residents, is adequate and is easily trackable. Work orders are prepared and forwarded to the Director of Roads and Properties for action. Once completed, the maintenance records and executed work order is retained by the Township. After the completion of the work task, the Township does reply to the person logging the comment to ensure the requested work was performed adequately.

Since not all work tasks are prepared via a work order, daily park maintenance is not recorded in an easily retrievable manner. Improvements can be made to the daily tracking of park maintenance activities. The current practice is informal. The Director of Roads and Properties keeps the daily activity sheets of work

performed on his own, with no technology assistance. The tracking of work performed may improve work scheduling, task assignments, and daily results.

Financing and Funding

All park maintenance activities, including payroll, are funded through the Townships General Fund Budget. There is currently no funding for recreational programs; however a fund is in available for capital improvements. Minimal General Fund revenues which are received are derived from facility rentals or facility use fees (such as pavilion and field rentals). Other revenue streams can be created with the addition of recreational programs for people of all ages and abilities. The current recreation fund within the Township is providing for new park improvements and continued funding is essential to the success for capital improvements.

Moreover, funds received from fees-in-lieu of land dedicated for park and recreation purposes have been diminishing in recent years as developers have been providing for open space in new subdivisions, so as recreational needs increase, future funding options for maintenance and improvements should be considered a priority.

CHAPTER 3

RECOMMENDATIONS

Community Benchmarking

Community benchmarking was completed as a means of evaluating park acreage and recreational facilities that Upper Saucon Township offers its residents, compared to other similarly-sized communities. Two means of assessment were completed, a Comparable Municipalities Summary and a comparison to the 2019 NRPA Park Metrics. Comparisons were made to both current and future population projections to allow the Township to accurately plan for future growth.

Comparable Municipalities Summary

Recreational facilities from nine municipalities with similar current populations and physical size to Upper Saucon were inventoried (page 65) and compared to the facilities available to residents at the three public parks, Upper Saucon Township Community Park, Hopewell Park (opening in 2020), and The Living Memorial Park. This information was used to determine the extent of deficit or surplus per facility type.

The comparable municipalities are:

- New Hanover Township, Montgomery County: Population: 12,453
- North Whitehall Township, Lehigh County: Population: 16,154
- Newberry Township, York County: Population: 15,509
- Cumru Township, Berks County: Population: 15,341
- Hilltown Township, Bucks County: Population: 15,242
- West Hempfield Township, Lancaster County: Population: 16,426
- North Fayette Township, Allegheny County: Population: 14,520
- Silver Spring Township, Cumberland County: Population: 16,302
- Stroud Township, Monroe County: Population: 18,892

Upper Saucon shows a deficiency in biking / hiking trails, pavilions and youth play areas. The Township shows a surplus in baseball / softball fields, basketball and volleyball courts, multipurpose fields, skate parks, soccer and lacrosse fields, when compared against these municipalities. This inventory does not assess the condition of the facilities provided.

The recreational facilities were also compared against municipalities whose current populations are similar to Upper Saucon's projected 2040 population to illustrate any deficits and surpluses that may affect the Township's future residents (page 65).

There comparable municipalities are:

- Buckingham Township, Bucks County: Population: 20,306
- Peters Township, Washington County: Population: 21,881
- Lower Township, Cape May County, NJ: Population: 22,051
- Upper Macungie Township, Lehigh County: Population: 23,054
- Montgomery Township, Somerset County, NJ: Population: 23,059
- Upper Providence Township, Montgomery County: Population: 23,129
- Roxbury Township, Morris County, NJ: Population: 23,458
- Derry Township, Dauphin County: Population: 24,950
- Moon Township, Allegheny County: Population: 25,490

In addition to increases in most of the recreational deficiencies that currently exist, Upper Saucon would also experience a deficiency in tennis courts, when compared against these municipalities. Moreover, facilities that currently show excess capacity when compared against other municipalities, such as ball fields and basketball and tennis courts, would see these surpluses diminish.

Community Benchmarking - Existing Facilities				
	Upper Saucon Twp	Average	Difference from Average	Difference from Maximum
2017 Population (ACS)	16,143	15,698	445	-2,749
2017 Pop Density per Sq. Mile	656	605	51	-126
# of Parks	3	6	-3	-9
Park Area (Acres)	166	125	41	-131
Facility				
Baseball / Softball	10	6	4	-4
Basketball	5	3	2	-2
Biking / Hiking Trails	2	3	-1	-5
Football	0	0	0	-2
Multipurpose Field	6	2	4	-4
Pavilion / Rental Space	3	4	-1	-4
Pool	1	0	1	0
Tennis	1	1	0	-3
Skate Park	1	0	1	0
Soccer	5	1	4	0
Volleyball	3	1	2	1
Youth Play Areas	2	3	-1	-7
Disc Golf	0	0	0	-1
Hockey	0	0	0	0
Lacrosse	1	0	1	-2

Community Benchmarking - 2040 Facilities				
	Upper Saucon Twp	Average	Difference from Average	Difference from Maximum
2040 Population (ACS)	21,793	22,917	-1,124	-3,697
2017 Pop Density per Sq. Mile	886	922	-36	-384
# of Parks	3	8	-5	-14
Park Area (Acres)	166	343	-177	-796
Facility				
Baseball / Softball	10	9	1	-8
Basketball	5	4	1	-3
Biking / Hiking Trails	2	4	-2	-9
Football	0	0	0	-1
Multipurpose Field	6	3	3	-8
Pavilion / Rental Space	3	4	-1	-7
Pool	1	0	1	0
Tennis	1	3	-2	-5
Skate Park	1	0	1	0
Soccer	5	4	1	-6
Volleyball	3	2	1	-2
Youth Play Areas	2	6	-4	-10
Disc Golf	0	0	0	-1
Hockey	0	0	0	-2
Lacrosse	1	1	0	-4

The Recreation Recommendations later in this chapter describe Level of Service (LOS) recommendations from the National Recreation and Park Association (NRPA) on the number of specific courts for a community. NRPA metrics for some general recreational facilities are noted below.

2019 NRPA Park Metrics

The National Recreation and Park Association compiles park and recreation agency information from across the country. NRPA understands that there is no single set of standards for parks and recreation to address the uniqueness of a community. The organization creates averages for total acres of parkland, total number of parks, facility type totals and average operating expenses to assist planners with addressing parks and recreation needs within a community. According to these metrics:

- There are typically 11.8 acres of parkland per 1000 residents.

1. Based on the current population, Upper Saucon would need to add an additional **24** acres to meet this metric.
2. Based on the projected 2040 population, Upper Saucon would need to add an additional **91** acres to meet this metric.

- There is typically one playground for every 3,706 residents.

1. Based on the current population, Upper Saucon would need to add **one** more playground to meet this metric.
2. Based on the projected 2040 population, Upper Saucon would need to add **three** more playgrounds to meet this metric.

- There is typically one recreation / community center for every 30,470 residents.

1. The population threshold generally used as a baseline to consider the development of a community center is **15,000 residents**. Upper Saucon meets this threshold.

The Open Space Recommendations identify a number of parcels in the Township that have the potential to provide park and recreational facilities that can work toward targeting NRPA metrics as well as meeting the recreational needs of current and future residents.

Community Center

The desire for an indoor community center was strongly voiced throughout the planning process by Township residents. As noted above, the population threshold generally used by parks and recreation agencies as a baseline to consider a community center is 15,000 residents. Moreover, additional NRPA metrics show that over 50% of agencies inventoried had these facilities. This shows Upper Saucon is in line to support an indoor community center facility.

Indoor community centers are an expensive operation for municipalities, and it is important that Upper Saucon understands and plans for the financial and operational implications. A separate feasibility study is recommended that would look at the need, operational cost, and administration demands. Some important components to consider are:

- Construction Costs
- Debt Structure (grant / bond / loan)
- Maintenance and operating costs
- Membership costs
- Building size
- Facilities offered

The following are some examples of community centers, including facilities offered, and Figure 3-1 shows associated costs of these centers.

Greater Plymouth Community Center, Plymouth Meeting, Montgomery County, PA

Municipal population (2018 ACS) – 17,421

Opened in 2000 and incorporated areas of an old school and new construction. Cost of construction was $14 million (escalated construction costs are $21 million in 2019 dollars) and annual operation/ maintenance costs are $367,450.

- Two swimming pools (lap and leisure)
- Gymnasium
- Fitness center
- Changing areas and showers
- Several breakout rooms
- Activity room (used for aerobics, zumba, etc.)
- Day care area
- Specialized fitness area (kids exercise classes, spinning, etc.)
- Offers memberships
- Offers numerous year-round programming

https://www.plymouthtownship.org/greater-plymouth-community-center/

Montgomery Township Community and Recreation Center, Montgomeryville, Montgomery County, PA

Municipal population (2018 ACS) – 25,984

Opened in 2015. Cost of construction was $11 million (escalated construction costs are $12 million in 2019 dollars) and annual operation/maintenance costs are $861,000.

- Gymnasium with elevated walking track
- Fitness center
- Two breakout rooms
- Teen/Senior area
- Toddler area
- Offers memberships
- Offers year-round programming

http://www.montcrc.com/info/default.aspx

Community Center	Municipality	Size of Community (2010 Census)	Year Opened	Building Size (Square Feet)	No. of Parking Spaces	Construction Costs	Debt Structure	O&M Costs
Montgomery Community and Recreation Center	Montgomery Township, Montgomery County	24,790	2015	32,000	662	$ 11,000,000	Township Funds; DCED Loan 400,000; repayment covered by revenue	$ 849,000
Haverford Township Community Recreation and Environmental Center	Haverford Township, Delaware County	48,491	2012	35,000	319	$ 9,000,000	6.5 Million from sale of former state hospital; Grants.	$ 400,000
Greater Plymouth Community Center	Plymouth Township, Montgomery County	16,525	2000	76,000	203	$ 14,000,000	Township budget	$ 367,451
Upper St. Clair Community and Recreation Center	Upper St. Clair Township, Allegheny County	19,385	2009	90,000	662	$ 16,000,000	bond	$ 3,500,000

Figure 3-1: Community Centers and some of the associated costs.

Upper St. Clair Township, Allegheny County, PA

Municipal population (2018 ACS) – 19,592

Newer facility located in the western half of the state. Cost of construction in 2009 was $16 million (escalated construction costs are $19 million in 2019 dollars) and annual operation/maintenance costs are $3.5 million.

- Group exercise studios
- Children's playroom
- 3,600 sf community room
- Locker room facilities
- 2 gymnasiums
- Indoor aquatics center
- Fitness center
- Outdoor aquatics center
- Offers memberships
- Offers year-round programming

http://www.twpusc.org/crc/crc-home.

Haverford Township's Community Recreation & Environmental Center, Delaware County, PA

Municipal population (2018 ACS) – 49,162

Opened in 2012. Cost of construction was $9 million (escalated construction costs are $10 million in 2019 dollars) and annual operation/maintenance costs are $400,000.

- Activity room
- Arts and crafts room
- Kitchen
- Multipurpose room
- Offices
- Walking track
- Environmental classroom
- Environmental lab
- Fitness studio
- Gymnasium
- Health and wellness center
- Offers rentals

https://www.haverfordtownship.org/Parks_and_Recreation/CREC_Information/

Below is the Montgomery Township Community and Recreation Center. Picture from the web.

Open Space Recommendations

Connections – Trails and Sidewalks

The consultants reviewed existing and proposed sidewalks and trails from the Official Map and from plans provided by the Township. The consultants then developed a plan that would provide a starting point for a much-needed Comprehensive Connectivity Master Plan for the Township. Data from Wikimapping, public meetings, and STRAVA heat maps were analyzed to develop the plan shown on the Proposed Connections Map (pg. 71). STRAVA fitness tracker heat maps use GPS tracking to show areas where people are walking, jogging, or cycling. This provided information of routes that are being used now. Additionally, scenic roads were also considered.

The proposed trails are organized by on-road and off-road trails with two subcategories for each.

On-road trails are divided by "May Use Full Lane"or "Bike Facility" trails. May Use Full Lane (formally known as Share The Road) routes are the easiest to implement as signs and pavement markings are used along the route to provide awareness of bicyclists sharing the roadway with vehicular traffic. These are usually used on low stress roads. Bike Facilities routes can provide additional infrastructure by designating bike lanes within a roadway. Bike lanes are exclusively for bicycle use and are typically placed along roadways that see heavier vehicular traffic.

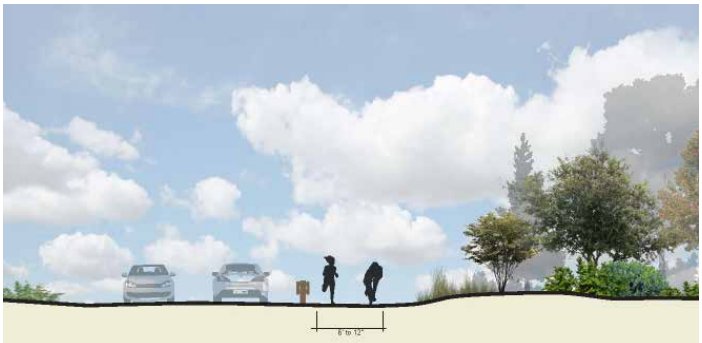
Off-road trails are divided by side paths and multi-use paths. Side paths are shared use trails located immediately adjacent and parallel to a roadway and typically have a barrier separating vehicular traffic from the trail. Multi-use trails are completely off road, typically two-way shared use trail. The Saucon Rail Trail is a great example of multi-use trail.

Proposed sidewalk connections were also part of the plan. The consultant team examined areas of dense development. The plan shows where the Township

Types of Trails

May Use Full Lane

Bike Facility



Side Path

Multi-use Trails

should implement sidewalks to provide residents with safe passage to destinations in the Township. The proposed sidewalks do not identify whether or not sidewalks would be located on one side or both sides of a street. This determination will be made in a more detailed study.

The proposed trails and sidewalks did not examine the existence of adequate Rights-of- Ways, width of existing roadways, or any other additional factors needed to implement the plan, but the consultants strongly suggest that the Township consider completing a Comprehensive Connectivity Master Plan to address the feasibility and costs of creating better non-vehicular connections in the Township.

A safe pedestrian/bicycle crossing at Route 309 is the highest priority connectivity improvement. The consultants recommend that crossing at the intersection of W. Saucon Valley Road and Center Valley Parkway will provide the easiest and safest crossing point. This connection would require the least amount of new infrastructure to provide safe pedestrian movement across Route 309 and would serve as an important link to many of the proposed trails listed in the plan. This crossing would prioritize trails proposed along Lanark Road, W. Saucon Valley Road, Center Valley Parkway, Camp Meeting Road, and Preston Lane. These trails would provide a link from concentrated developments to Hopewell Park, The Corporate Center, The Promenade, Upper Saucon Township Community Park, Saucon Rail Trail, and schools.

The next Route 309 crossing to be considered is at the intersection of Lanark Road and Camp Meeting Road. This may require more infrastructure, but would provide a more direct link between concentrated developments in the Township to desired destinations. The Comprehensive Plan provided a conceptual overhead ADA compliant crossing (pictured below). This would prioritize trails along Lanark Road, Camp Meeting Road, and Preston Lane to provide connections from concentrated development to Hopewell Park, Upper Saucon Township Community Park, Saucon Rail Trail, The Promenade, and schools.

A third option for crossing Route 309 would require the most infrastructure by providing a trail connection from the future Liberty Bell Trail to the Saucon Rail Trail. This would require crossing Route 309 twice and crossing Laurel Run before connecting to Station Ave at the site of the old Centennial Bridge. To provide connections to the concentrated developed areas, the trails along Lanark Road and Preston Lane would be a priority to connect residents to Hopewell Park, Upper Saucon Township Community Park, and schools.

Below is the Route 309 Overhead Crossing Concept for pedestrians and bicycles provided in the 2020 UST Comprehensive Plan. Concept prepared by Brad Heilman, JMT.

Proposed Connections

Upper Saucon Township Comprehensive Recreation and Open Space Plan

LEGEND

- Township Owned Open Space
- Township Public Parks
- Private Recreation
- Conservation Land (Permanent)
- County Owned Land (Permanent)
- Saucon Rail Trail
- Future Saucon Rail Trail
- Existing Sidewalks / Paths
- Future Upper Bucks Rail Trail
- Proposed Liberty Bell Trail
- Proposed On Road Trail
  - Bike Facility
  - May Use Full Lane
- Proposed Off Road
  - Side Path
  - Multi-use
- Proposed Sidewalk Connections
- Township Border
- County Border
- Municipal Border
- Parcel Lines
- Roads
- Streams

SIMONE COLLINS LANDSCAPE ARCHITECTURE

0 2000 4000 8000 Ft

N

Information from LVPC, Hanover Engineering, Lehigh County, PennDOT, and PASDA

Allentown
Salisbury
Hellertown
Lower Saucon
Emmaus
Upper Milford
Lower Milford
Coopersburg
Northampton County
Bucks County
Hopewell Park
UST Community Park
Living Memorial Park
Tumblebrook Golf Course
78
476
309
378
Honeysuckle Rd
Stonesfrow Rd
Oakhurst Dr
Center Valley PKWY
Camp Meeting Rd
Spring Valley Rd
Weyhill Dr
Warner Rd
Lehigh Rd
Mary Cruz Rd
Limeport Pike
Chestnut Hill Rd
Old Bethlehem Pike
Station Ave
Taylor Dr
Flint Hill Rd
Lands Mill Rd
Forest Dr
Passer Rd
Spring Dr
Blue Church Rd
Appleblutter Hill Rd
Mill Rd
Beverly Hills Rd
Locust Valley Rd
Blue Church Rd

Proposed Open Space

Upper Saucon Township Comprehensive Recreation and Open Space Plan

This number coincides with the assigned evaluation number. All evaluations can be found in the appendix of this report.

LEGEND

- Township Owned Open Space
- Township Owned Facility Space
- Private Recreation
- Conservation Land (Permanent)
- County Owned Land (Permanent)
- Institutional Land
- HOA Conserved Land (Private)
- Preserved Agriculture Land
- Agriculture Security Land
- Lehigh University Land
- Township Stormwater Management Land
- State Land
- Considered Future Open Space as Identified by Official Map
- Proposed Future Open Space
- Saucon Rail Trail
- Township Border
- County Border
- Municipal Border
- Parcel Lines
- Roads
- Streams

SIMONE COLLINS LANDSCAPE ARCHITECTURE

0 2000 4000 8000 Ft

N

Information from LVPC, Hanover Engineering, Lehigh County, PennDOT, and PASDA

Allentown
Salisbury
Hellertown
Lower Saucon
Northampton County
Bucks County
Emmaus
Upper Milford
Lower Milford
Coopersburg
Center Valley PKWY
Camp Meeting Rd
Spring Valley Rd
Lanark Rd
Vera Cruz Rd
Limeport Pike
Chestnut Hill Rd
Applebutter Hill Rd
Blue Church Rd
Guth Mill Rd
Taylor Dr
Flint Hill Rd
78
476
309
378

Open Space

A primary purpose of the Recreation and Open Space Plan is the consideration to add to the Township inventory of parks and open space lands. Fifty seven parcels were evaluated using eighteen criteria that included parcel size, water resources, land resources and community resources. Thirty three of the parcels that were evaluated are already designated as "Future Open Space" on the Official Map. (Please see Official Map information in Chapter 2, fig 2-2, pg. 33).

Each parcel that has been evaluated has been given points in each of the eighteen categories that result in a total score. Please refer to the Appendix to see the score for each parcel that was evaluated. Also, please refer to the Open Space Parcel Inventory Map. There are also footnotes on some of the evaluation sheets such as parcel access, if the parcel lends itself to active or passive recreation or if it is included in any preservation program.

Total points per parcel range from 9 to 29. A higher score indicates that the parcel has relatively more desirable characteristics than a lower scoring parcel. However, the higher scoring parcels do not necessarily mean that they are the "best" for municipal acquisition.

Municipal acquisition of lands for public open space is a complex process, one with many moving parts. There are a variety of dynamic factors that, in addition to the parcel evaluation criteria, may make one parcel more or less desirable than another. These include:

- A landowner willing to sell the parcel for open space
- Nearby development pressures
- Adjacency to existing open space
- Current economic conditions and land values

The total number of parcels that were evaluated (57) does not mean that this report recommends preservation of all the parcels evaluated. Conversely, it is assumed that most of these parcels will not and cannot be acquired, simply because of magnitude of cost. Having more parcels to potentially choose from hopefully assures the Township of a good inventory of open space when the Township is fully developed.

The report does recommend that all evaluated parcels be placed on the Official Map as future open space. The Official Map process does not mandate any action by the Township. However, if a parcel designated as future open space is planned for development by the submission of a land development or subdivision application, it gives the Township an opportunity to discuss preserving at least part of the parcel as open space, in addition to whatever provisions may exist in the zoning ordinance for open space preservation or providing residents with public trails.

Currently, park land owned by the Township is not permanently preserved as open space. Park sites such as Community Park, Living Memorial Park and the new Hopewell Park, represent a significant investment of Township resident tax dollars. Just as with roads that are built with Township funds, there is an implied commitment to maintain these roads. We suggest that the same commitment should be made to the very fine parks that have been developed in Upper Saucon. Preservation of Township owned land not only serves current residents but is also a commitment to the future of the Township in maintaining the quality of life amenities that make Upper Saucon a great place to live, work and play. Additionally, any Township parks that may have received DCNR or other state or federal funds (such as Land and Water Conservation Funds – LWCF) for construction and development may be restricted from other uses due to the requirements of these funds. (Historic funding of township parks was not available).

Accordingly, it is the recommendation of this plan that Township-owned open space, as well as future open space should be deed restricted as open space only so that the land is permanently protected for current and future generations.

Parcel Preservation Priority Matrix

Fig. 3-2 shows the Parcel Preservation Priority Matrix that was used to evaluate parcels that are on the Official Map (33) and the parcels recommended for addition (24). Each parcel is assigned a number to reference it to the Open Space Parcel Map (pg. 72). It is also identified by the parcel ID number and address. All evaluation forms are in the Appendix. To enhance legibility of the map, groupings of parcels are assigned only one number.

The following is a description of the categories within the Parcel Preservation Priority Matrix:

Parcel Size - A larger parcel receives a higher score as it can assist in preserving larger core ecosystems, and can lead to more area for recreation or preservation.

Water Resources - This category reviews what water resources exist on site and coincides with the Hydrology Map (pg. 41). Water quality is important to the community and ecosystem. Protection of headwaters is crucial to preserving water quality. Headwaters receive points if they are on site or adjacent to the site. Higher quality streams receive more points than lower quality streams as determined by the PA Department of Environmental Protection (DEP). Existing 100-year flood plains as determined by FEMA delineated floodplain zones from 2009 and the score is given by percentage of coverage on site. As FEMA completes their updated version, some parcels may see a score change.

Land Resources – Land resources examines information from the Natural Resources Map (pg. 37), the Geology Map (pg. 38), and the Agricultural Map (pg. 42). Scores are given by percentage of coverage of a site. Slopes of over 25% are given more weight compared to slopes between 15- 25% due to higher stress from erosion. Prime agricultural soils are given more priority over soils of Statewide importance due to national recognition. The importance of both carbonate geology and woodland coverage has been described in Chapter 2.

Community Resources – This category examines historic and cultural resources, such as existing and proposed trail alignments, residential development, park service areas, etc. This information can be

2020 Preservation Priorities

Parcel ID - Parcel Address -

Resource	Conservation Value					
	4	3	2	1	0	Points
Parcel Size		25 AC +	10-25 AC	5-10 AC	> 5 AC	
Water Resources						
Headwaters		On Site	Adjacent Parcel		No Resource	
Stream On Site (Water Quality)		supporting	impaired		No Resource	
100 Yr. Flood Plain		75% +	50-75%	25-50%	> 25%	
Land Resources						
Steep Slopes over 15% slope			50-100%	0-50%	No Resource	
Steep Slopes over 25% slope		50-100%	0-50%		No Resource	
Prime Agricultural Soils		50-100%	0-50%		No Resource	
State Wide Importance Agricultural Soils			50-100%	0-50%	No Resource	
Carbonate Geology		75%+	50-75%	25-50%	>25%	
Woodlands Coverage		75% +	50-75%	25-50%	> 25%	
Community Resources						
Adjacent to Permanent Preserved Land		Openspace	Permanent AG		No Resource	
Adjacent to Single Family Residential Dev.	Four Sides	Three Sides	Two Sides	One Side	No Resource	
*Add one point per side for Multifamily Dev.**	*+1*	*+1*	*+1*	*+1*	No Resource	
Adjacent to Trails (existing or planned)		Existing	planned		No Resource	
Historic Sites				Yes	No Resource	
Public Park 3-mile Service Area				Outside	No Resource	
Within Greenway Limits (Creek or Highlands)				yes	No Resource	
Within Public Water / Sewer Service Exist		proposed	Yes		No Resource	
					Total Points	

* Multifamily development is defined as: two family twin or duplex dwellings, single family attached dwellings, or multifamily apartments.

Figure 3-2: Preservation matrix used to evaluate parcels

reviewed on the Natural Resource Map (pg.37), Proposed Connections Map (pg.71), Park Service Area Map (pg.52), and the Open Space Map (pg.48). Sites that are adjacent to existing permanent preserved space are scored higher and show the importance of connecting to existing open space lands. Developed areas are scored higher as this will assist in providing open space in more densely populated areas. An additional score is placed on the parcel if the development is adjacent to a multi-family residential areas. Adjacency to trails is given a higher score to address connections in the Township. Historic sites mya be an important factor for preservation. Public park service areas recognize that a parcel that may be important in underserved communities. Greenway limits pertain to the greenways identified in Chapter 2 and their incorporation of natural, cultural, and/or scenic features. Sewer and water services recognizes Act 537 existing and proposed facilities. Having parcels located within these zones will reduce the need for additional services to be applied on a parcel if it were to be developed.

Parcels to be Added to the Official Map for Acquisition Consideration

This section examines only the parcels not currently on the Official Map and are noted on the Proposed Open Space Map (pg.72). The parcels are described by the coinciding number placed on the map. As stated before, multiple parcels are shown with one number for clarity.

4 **Parcels 4** – These parcels should be added to increase the size of the area around Moyer Lake. Moyer Lake is a diamond in the rough. It already offers unique programming for catch and release fishing for children who normally may not have access to these types of activities. If the Township were to acquire all of the properties within this area, this would provide a large core habitat area that is within the Saucon Creek/Limeport Wetlands and would connect to Township Open Space, creating a large, ecologically important greenway. The properties lend themselves for passive recreation, access to the lake, and educational opportunities in an area that is outside of the public park 3-mile service area.

7 **Parcels 7** – There are two parcels within this area to be considered. They both have steep slopes and are wooded. Since the parcels are completely surrounded by development, this area would serve the surrounding areas for ecological services and perhaps passive recreation.

8 **Parcel 8** – This parcel contains important hydrological functions such as hydric soils and headwaters that feed a tributary to Saucon Creek. It sits across from existing Township owned stormwater BMPs. If this land was acquired, it could provide a trail connection from the neighboring developments to the Hopewell Park. It also could be managed to help address water quality as it passes through the adjacent horse farm (parcel 10) and into Hopewell Park.

14 **Parcels 14** – These two parcels lie within the Saucon Creek floodway and are within the 100-year flood zone. They also lie within the Saucon Creek Greenway. Acquiring these properties should be considered with the other 2 parcels (parcels 12) shown along Saucon Creek to provide a trail for residents to access to Saucon Creek, as well as providing protection of riparian ecosystems.

20 **Parcels 20** – There are five parcels to be considered for acquisition by the Township. They are connected to the Lehigh County Scholl's Woods and Big Rocks area. These lands would increase the ecologically important forest core along the South Mountain area and provide passive recreation access to this unique geological area. Some of these parcels contain headwaters that may come from seeps within the gneiss rock formations of South Mountain.

21 **Parcel 21** – This parcel is Thomas Lake and provides no opportunity for development. What it could provide is walking access to passive recreation opportunities for people within the corporate center or visitors to the Promenade.

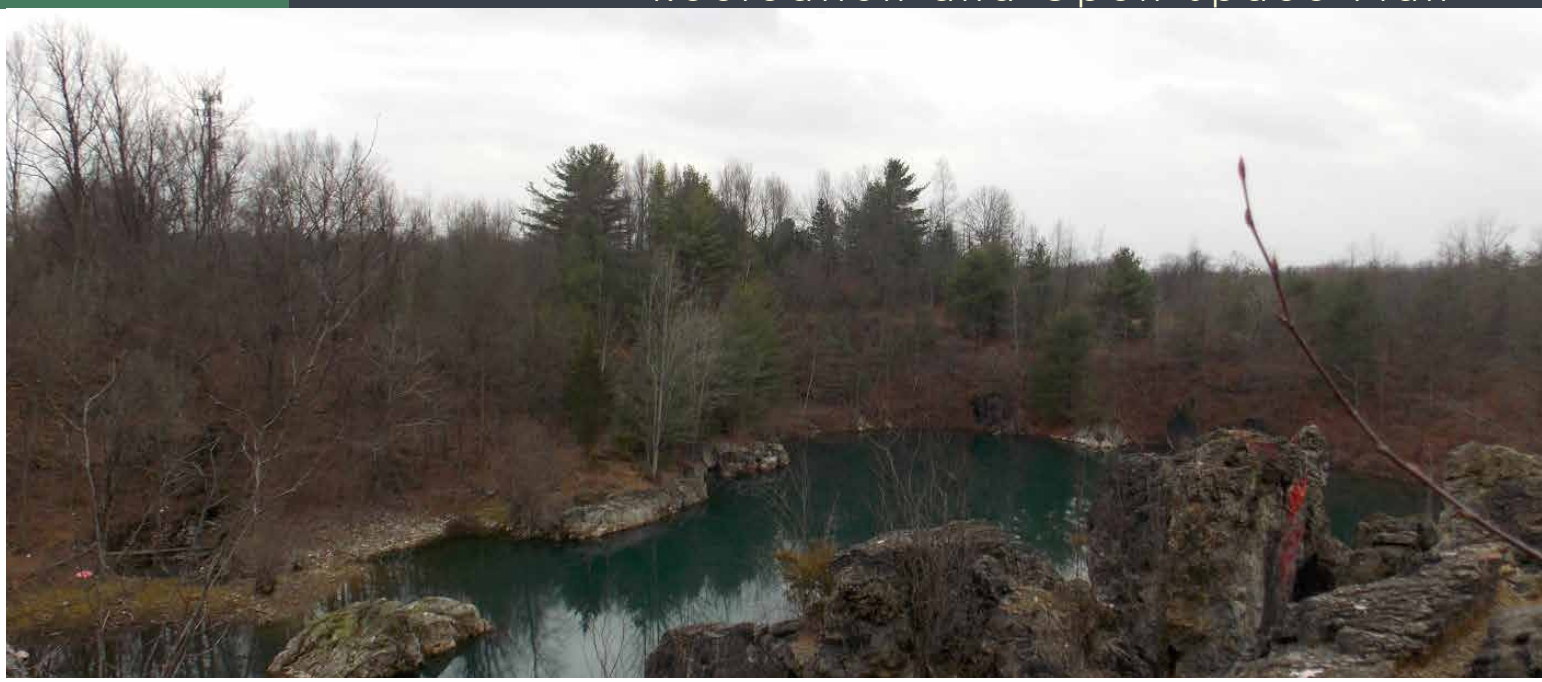
22 **Parcel 22** – This is the site of the former Center Valley Club Golf Course. This area is underlined with limestone carbonate geology and has many constraints for development. This large parcel lies in the Saucon Creek floodway and 100 and 500-year flood zones. Currently, some existing trail infrastructure could be used to provide immediate use of the space for passive recreation. It would also build on parcels 12 and 14 and Township owned open space to create a larger area of preserved riparian ecosystem through the Saucon Creek Greenway. When connected to Township owned open space and the trail system on the HOA preserved open space; it would provide a trail system from Route 378 to Limeport Pike.

23 **Parcel 23** – This parcel is home of the historically important President Pump House within the Ueberroth Zinc Mine site. The Township has been in conversation with Lehigh University to preserve this land as an educational and passive recreation space. This engine house is the only surviving example of a Cornish-style, house-built pumping engine structure in the United States. Preservation of this site would also protect the cultural heritage for the Township. Additionally, this area has been identified by the Natural Heritage Inventory for being home to a threatened species.

24 **Parcel 24** – There are three parcels within this area and all are privately owned by the same party. These parcels are adjacent to the Saucon Valley Golf Club and preserving this land along Saucon Creek can increase the size of preserved riparian ecosystems. This area is already being farmed and has Prime agricultural soils.

31 **Parcels 31** – There are five parcels in this area and one is already identified on the Official Map. There are headwaters on site and some steep slopes over 15%. These parcels could provide passive recreation opportunities for residents in this area.

32 **Parcel 32** – This large parcel is the former home of Camp Helena and is the only large core of woodlands that exist in this part of the Township. Preserving this site as a wooded area should be a priority for the Township. Additionally, this is the highest scoring property on the parcel preservation matrix with a score of 29. It has both headwaters and aquatic life supporting streams on site. There are both steep slopes of 25% and important agricultural soils. This site offers passive recreation opportunities and environmental educational opportunities.



Parcels Acquisition Priorities

After reviewing all the parcels that are existing and proposed for the Official Map, a list of 6 important land areas was made to assist the Township with prioritizing land acquisition. As stated before, municipal acquisition of lands for public open space is a complex process, but this list will help focus efforts of the Township for land acquisition.

Priority 1: Parcels 4 & 5 – These 9 parcels would create a larger greenway and preserve important core habitat of 106 acres (including the adjacent Township owned open space) within the Saucon Creek/ Limeport Wetlands. Additionally, this connection of lands would provide the Township with unique passive recreation opportunities such as trails, education, primitive camping, and access to the lake for fishing and non-motorized boating in a part of the Township that lacks recreational facilities and opportunities.

Priority 2: Parcels 22, 12 &14 – These 5 parcels total 224.5 acres within the Saucon Creek Greenway. Preserving lands along the Saucon Creek can assist with protecting floodways, riparian ecosystems, and water quality while creating passive recreation opportunities such as a trail that could stretch from Limeport Pike to Route 378.

Priority 3: Parcels 20 – The combination of these 5 properties would preserve an additional 68.2 acres in the South Mountain area. When combined with the adjacent Lehigh County Lands, it would add up to 144 acres of continuous core forest habitat and protection from development pressure. The parcels can provide for a more attractive access and hiking to Big Rocks Park and other passive recreation opportunities.

Priority 4: Parcel 32 – The home of the former Camp Helena is the only large core of woodlands that exists in this part of the Township and would provide for 180.5 acres of preserved open space in this corner of the Township. As stated before, this parcel scored the highest of all parcels evaluated for preservation due to the many natural resources on the site.

Priority 5: Parcel 23 – The site of the President Pump House and mining past is an important historical and cultural parcel that is important to the region. This 61.5 acre site is currently owned by Lehigh University. The Lehigh University has been using the historical parcel as a teaching opportunity with their architectural program to define the space for a historical park. Keeping this property high on the list is important if anything would happen with Lehigh University's interest in keeping the property.

Priority 6: Parcels 8 & 10 – These two parcels would provide 35.3 acres of preserved open land that borders development and could provide a trail connection to neighboring Hopewell Park. The parcels would also serve as important stormwater management for the surrounding developed lands.

These 6 parcels do not address active recreation needs. Without complete understanding of demands for active field use in the Township, it would be difficult to appropriately prioritize the purchase of additional land to meet these needs. Currently, the majority of open space owned by the Township is used for active recreation. The need for active recreational space should be evaluated as new fields come on line at Hopewell Park and the possible conversion of Tumblebrook Golf Club into sports fields. The Township needs to work with the athletic groups to gain more understanding for field needs. New active sports game scheduling software will also assist the Township in understanding sports field use and needs. If after evaluating field use and it is determined that more fields are needed for active recreation, the Township should considered the former JCC (parcel 17) since there is already significant infrastructure in place to accommodate immediate active recreational use.

Agricultural Lands

Upper Saucon Township recognizes the importance of the farmlands that exist and are active partners in preservation of farmland within the community. This is apparent as the Township is continuing to assist area farmers with farm preservation through the strong partnership with the Lehigh County Agricultural Land Preservation Program and are accepting applications for farms that want to be included in the Agriculture Security Area (ASA). It is also important to note that the majority of ASA and preserved farmland exist in clusters providing economic and environmental benefits such as keeping

Information on the cost of developing a 100-acre farm vs preservation from ***Opportunity Knocks: Open Space is a Community Investment*** by Heritage Conservancy

Note: costs based on Central Bucks School District, 2002

Development of the "100-Acre Farm" - Costs to the Community

Calculate the Public School Costs for the Development

100	Farm Area Acres
x 0.66	Dwelling Units per Acre (Average lot = 1.5 acres per home)
66	New Homes
x $7,526	Public School Costs Per Home
$496,716	Public School Costs for the 66 New Homes Per Year

Calculate the Public School Revenues from the Development

66	New Homes
x $3,377	Average School Tax Revenues Per Home (RE and EIT)
$222,882	Public School Revenues for the 66 Homes Per Year

Calculate the Annual Net Shortfall from the Development

$222,882 (revenues) - $496,716 (costs) = -$273,834 (shortfall) Per Year

Preservation of the "100-Acre Farm" - Savings for the Community
Purchase the Conservation Easements

Calculate the Cost to Purchase the Conservation Easements

100	Acres Purchased
x $16,982	Average Cost Per Acre - Easements Purchase
$1,698,200	Purchase Price of the Easements

Calculate the Break Even Period

$1,698,200/$273,834 (shortfall) = 6.2 Year Break Even Point

significant tracts of contiguous high-value prime agricultural soils intact and providing protection to the land's distinct natural advantage. Additionally, having clustered agricultural activity can provide opportunities for economic development to support farmers within these areas.

The Township should continue to find opportunities to include farmers in the ASA areas and preservation programs and should provide workshops with local farmers to share outreach programs such as those described through the Farm Service Agency of the Unites States Department of Agriculture (USDA). Additionally, the Township should reach out to local businesses and residents to find ways in which they can support and partner with local farmers such as Farm to Table restaurants, agri-tourism or Community Supported Agriculture (CSA) opportunities to assist in the viability for farming to continue to exist within the Upper Saucon. The Township should take comment from the farm community on Zoning Ordinance Section 435 – Farm-based Education and Entertainment Use - as a reasonable ordinance for conducting agricultural-related activities. The Township should provide opportunities for "agrihood" development within its residential zoning ordinance. Agrihoods are a new trend in development in housing development centered around community farming, allowing farm to table living in a cooperative environment.

Historic

Protection of historical assets is essential to the cultural landscape and Upper Saucon Township should build upon the work that was done in the 2008 *Historic Sites and Preservation Strategies – A Pilot Project for Upper Saucon Township* and strengthen its partnership with the Coopersburg Historical Society and LVPC to identify all the historical sites and document their importance to the Township.

Additionally, the Township should devise a plan to reach out and assist property owners of historically valuable resources to have their properties evaluated or to be documented in the National Register. The Township can also require a Cultural Resource Management Plan for subdivision/land development plan as described in the Comprehensive Plan that identifies and defines how a historical asset will be preserved and incorporated into any design and layout for the purpose of preservation, protection, and reuse.

Recreation and Program Recommendations

Recommendations and comments below were formulated through discussions at public meetings, discussions with staff, survey results, and other communications. All comments were evaluated and researched to determine what may be possible for Upper Saucon when considering budget constraints, staffing levels, and resident expectations.

Administration

Consider the addition of a Part-Time Parks and Recreation Director. Currently, there are very few programs offered to residents and no programs are offered through the Township. The evidence reflects there is resident desire for activities for people of all ages and abilities. Due to limited administration staff hours available, the addition of a part or full time Director of Parks and Recreation is required in order to meet the requests from the community. This position will be responsible for offering year-round and seasonal recreational programs and will be responsible for communication with the Public Works Director for maintenance issues and task performance. The position will also be responsible for sustainability, best management practices, and risk management issues. Additional duties may also include program brochure development, policy recommendations, social media communications, and be responsible for direct communication with the residents.

The part time position allows the government to evaluate the effectiveness of the position and to weigh the benefits of the position for the community incrementally. A part time position may only attract a certain professional population and offers local governments to structure the department and position responsibilities as the position grows. It is recommended that Upper Saucon, after two years, reevaluate the position to consider moving to full time. Typically, part time positions attract candidates who

are recent college graduates, retired professionals, or professionals from other fields who are seeking a return to work in a limited capacity.

If the position is offered full time from the beginning, it is believed the Township would attract a candidate with more professional experience, which in turn, would provide more knowledge to the position with a minimal salary increase as compared to a part time position (as noted in the five year plan). Some of the benefits to offering the full time position from the beginning include: less training necessary, instant experiences which translate directly to the position responsibilities, quicker program facilitation, maintenance knowledge which can be implemented immediately, partnering experiences, professional networking, and advanced communication ability with Township residents.

Programming

A variety of program opportunities are available to the Township. Year round or seasonal organized recreation programs could include in-house instructors or third-party contractors. Programs may include summer camps, short term (6-8 week) educational offerings, health and wellness opportunities, after-school offerings, sport camps, trips, summer concerts, movies in the park, agriculture education, among other possibilities.

There are opportunities for the Township to develop and provide programs and informational brochures that reinforce best management practices for environmental concerns, land stewardship, and sustainability to address the concerns raised by the community. Additionally, one-day special events, if offered, help promote a sense of community. These may include pop-up events such as, festivals, community flea markets, brew pub events, holiday events, to name a few. Passive opportunities may include community gardening, star gazing, walking clubs, orienteering, and bird watching.

New multi-purpose fields can accommodate soccer,

cricket and other field sports that are popular with new residents from various diverse cultures and backgrounds. In addition, the Township should coordinate with social and religious organizations with diverse populations on how best to serve the recreational needs of these communities when considering future active recreation expansion.

Administrative Operations

Successful departments have firm policies and procedure in place to assist the department. Such documentation provides support to the department, or director, necessary for decision making. Necessary policies include, registration and refund policies, fees scheduling, rental procedures and policies, hiring practices, and others. These policies and procedures provide detailed documentation for the director, the administration, participants, and community groups.

In order to accomplish recreation offerings, consider the purchase of a recreation software package which will provide direct communication with residents, enhanced record keeping, history tracking, program promotion, pavilion rentals, field use scheduling, and program invoicing, while providing the Director an easy means to perform all these duties. In turn, this will permit additional time for the Director to focus on other recommendations found in this report including but not limited to, instructor solicitation, brochure development, work order requests, administrative assistance for maintenance, and program development. A small recreation software package cost is approximately $3,500 annually, with a one-time startup cost of $1,500. There are several software packages available that would easily accomplish this recommendation.

It is important to communicate with other organizations to provide indoor facility space for future program offerings. Partners may include, school districts, firehouse, churches, businesses, among others. Develop a user agreement to permit indoor program use and program sustainability. There are no costs associated with this recommendation. By providing indoor recreational opportunities, the Township will realize additional revenue streams, as may the partnering agency.

Develop a mechanism to recruit and retain program instructors and third-party recreation providers. Instructors and third-party providers will play a large role in the success of the Department to offer year-round or seasonal programs. New Child Protective Services laws exist, adherence to these laws is mandatory. Develop a procedure to identify which instructors or third-party providers need clearances, and most importantly, develop a system to ensure all clearances are provided as outlined in the law.

Enlist the Park and Recreation Commission to review all current policies used for field reservations, pavilion rentals, and other current policies. The review should address facility rental procedures, fees structures, rules and policy, maintenance issues or concerns, and who is eligible to use the facility. The Commission should also develop a fee structure philosophy regarding program costs. For example, a resident rate verses a non-resident rate for programs and facility rentals. A typical fee philosophy may be non-residents are charged 30% more than residents. However, the philosophy must provide an opportunity for programs offered to run. If non-residents are charged additional fees they may not register for a particular program, and the program may be canceled. Several models of various fees structures exist through the PA Recreation and Park Society or the National Recreation and Park Association. A well-defined set of policies provides the Director with the tools necessary to provide information to the community with the support of the Park and Recreation Commission and the Board of Supervisors.

The Township should memorialize partnerships with the School District, colleges, and community groups to assist in promoting Township activities and community awareness. The School District noted they have several Memorandums of Understanding (MOU) with other groups and is willing to share those

partnership agreements with the Township.

Upper Saucon Township should become an active partner with Living Memorial Park. 60% of the park lies within the Township and the park provides many active recreation opportunities for residents. From meetings and observation, it was expressed that some of the amenities in the park need repair and upgrades. A successful partnership with Southern Lehigh School District, Coopersburg, and Living Memorial Association will assure that the park will continue to serve the needs of area residents.

Active Recreation

Population growth demonstrates the need for additional organized playing fields. Community meetings and survey results have noted a need for additional field space. As most sports are offered year-round as compared to seasonally, field needs are in high demand. In years past, multipurpose fields were used for one sport in the fall and other sports in the spring. That is no longer the case across the country. For example, soccer was a fall sport in most areas, soccer was not played year-round. So, fields could be used for baseball in the spring and the outfields were converted to fall soccer fields. Today, the need for additional fields to accommodate the year-round activity is amplified. Additionally, youth sports are offered to a much younger age than in the past. The need for additional smaller fields is also a high demand. With the increased demand comes additional year-round wear on the fields with little to no time to rest fields allowing for best turf management. There are several means to assist turf maintenance efforts.

Having an excess of fields to permit a season of resting. This is a typically useful means for field success. Few communities have the resources to have a field of open space off-line due to acquisition costs or participants gaining access to rested fields, among other reasons.

Increase field turf management by adding field

irrigation to fields that are in high demand and are not currently irrigated and apply a higher degree of over seeding, fertilization, and herbicide / pesticide control measures. This has proven successful in many communities but does require a financial and staff-hour commitment.

Sport synthetic field allow for maximum use. These fields can be used during or immediately after rains which results in very little down time. Fields are typically lined for a maximum of three sports allowing for easy changes from one sport to another. Such fields can be used longer each day (into the late evenings with lights), allow for longer seasons since play can occur virtually year-round, and require less maintenance. That is not to say there is no maintenance associated with these fields. Synthetic fields require a large capital investment ($1,000,000 and up pending the field amenities). The life span of a synthetic field depends on its use; however, communities can expect 10-12 years of use before new surfaces are required. The cost for the new surface is lower than the original investment since only the surface needs to be replaced.

Synthetic field do come with some risk. The newer technology for synthetic fields has made them much safer in recent years (knee injuries, etc.). There are also some reports that indicate people may be at risk of health issues associated with long term use of these fields. If Upper Saucon moves in this direction, it is recommended to perform a thorough study of the research to make the best decision for Upper Saucon.

Hardcourts and soft courts allow for sport activities, competition, and enhanced skill opportunities. Hardcourts may include basketball, tennis, pickleball, volleyball, bocce, Gaga, and more. The National Recreation and Park Association provides resources for the Level of Service (LOS) recommendations for the number of courts needed in a community. **These are suggestions, and each community must decide what is necessary for their community.** Some communities have a greater need than the LOS for specific courts and fields based on their community needs, while other communicates may have less need. The need for additional hard and soft courts in Upper Saucon as compared to the LOS is evident. As the population increases the Township owned court deficiencies may include tennis courts and basketball courts. While not currently noted in NRPA LOS, pickleball is a new sport that is gaining national support. It should be noted that three pickleball courts are now included in the updated plans for Hopewell Park when it opens in 2020. School facilities provide court space when not in use by the school which helps lesson the need for court space. There are also private agencies that provide recreational amenities for their members.

As the project team did not have the information needed to evaluate the adequacy of the current inventory of fields in relation to the demands of the various athletic groups that are active in the Township, Township officials should review field demands and what still may be needed, especially when new fields become available as Hopewell Park comes on-line. Moreover, the Township's Parks and Recreation Commission and the youth group organizations can partner together to explore field opportunities and usage so that the Township has a clear understanding of what is being used and how often until the Township is able to purchase software to track usage. The Township can also work towards partnerships with DeSales University and Penn State Lehigh Valley for possible field use of school facilities by residents.

Passive Recreation

Passive recreation refers to activities that do not require formal facilities such as sports fields or game courts and are attractive to all age groups. Passive recreation places minimal stress on a site's natural resources that in return, allow the site to provide ecological benefits. Additionally, passive recreation amenities are typically less expensive to maintain

than active recreation sites. Activities usually include walking, hiking, wildlife viewing, picnicking, camping, fishing, bicycling, and can provide educational opportunities. Currently, the majority of Township owned open space is used for active recreation. Passive recreation is not identified in NRPA LOS. Many residents have noted their desire for more passive recreation opportunities and parcels have been identified that would best suite this type of activity.

The Township has planned for two sustainable parks, Benckini and Haring, but has yet to implement the plans. It is recommended that providing passive recreation on these sites should be completed and the Township should look for more opportunities to provide passive recreation for its residents as lands are acquired.

Maintenance Recommendations

Maintenance personnel should be augmented to include one or two dedicated seasonal parks maintenance worker to assist the Public Works Department. A dedicated worker (mid-March – October) will provide additional man-hours required to perform the many tasks associated with park work. A seasonal Maintenance worker, working 40 hours per week for 25 week equals 1,000 hours. This cost could exceed $15,000; however, the cost is offset by increased work performed, better maintenance practices, an enhance experience for park patrons, and increased safety of the park facility. All of which enhance risk management measures.

Best Management Practices should be incorporated to a greater level. While much of the maintenance work is more than adequate, there are areas for improvement. Continue to offer maintenance staff the opportunity to attend best management practices seminars and environmental workshops. These seminars and workshops are minimal in cost and provide a wealth of knowledge on the investment.

Provide clerical assistance to the Public Works Department. Currently, the Public Works Director prepares all written correspondence, returns phone calls, communicates via email, and other clerical duties. The assistance of a clerical person (even part time) allows the Public Works Director to utilize his time more efficiently in the performance of his duties.

Funding Recommendations

Some recommendations in the report will not generate revenues and each will need to be evaluated to determine if the existing general budget can accommodate the recommendations. Other recommendations will require capital investments to provide for recommended improvements. Some recommendations will generate a small revenue stream which may help to offset the costs of implementing the recommended improvement.

Personnel recommendations, seasonal maintenance workers and a part time director of Parks and Recreation, are typically funded through the Townships general fund payroll budget. Upper Saucon has not had a tax increase in over 30 years. The current tax revenue will not afford the Township the opportunity to make the personnel recommendations without the benefit of a small tax increase or other forms of revenue. With the addition of a new park coming on-line in 2020/21, additional funds will be required for proper maintenance of the facility.

Various funding sources are available to fund capital improvement recommendations and are outlined within the report Chapter 4. Recent capital funding for park improvements has been successful and continued support of the capital improvement fund is necessary to maintain the high level of service currently provided. Opportunities to utilize capital improvement funds as leverage for matching grants

can provide for 50% to 80% of the capital cost of the improvements to be made using grant funding. However, applicable grants are competitive, and the grant must be well prepared in order to achieve funding approval. The Department of Conservation and Natural Resources (DCNR) is one funding source which provides recreation funding for open space, park improvements, and other recreational opportunities. While each capital improvement recommendation will benefit the Township in general, singular improvements are not generally favorably received by DCNR for recreational improvements. DCNR would rather see a wholistic approach to recreation when determining which projects to fund. In this case, it may be best to review all recreational opportunities at a location in order to leverage the best possible opportunity for funding. As an example, DCNR is not likely to fund sport field irrigation. The Township may take a position that the irrigation will be part of an overall improvement for Community park which may include, handicap accessibility, stormwater management issues, a play area, among other improvements. While the improvements will still present a cost to the Township, the Township would be in a position to leverage their capital funds for additional improvements by receiving matching grant funding.

One recommendation that would return a revenue stream to the Township is the position of a part time Parks and Recreation Director. In typical municipalities, the position recoups a portion of the salary and all program costs through program registration fees. It must be noted however, that while it may be possible to recoup all the costs of offering a recreation department, it is not practical. A good return for the position and program fees would be to generate 50% of the cost of the department through revenues derived from registrations, special events, and sponsorship opportunities. It should be expected that all programs fees and other costs associated with offering the program will be fully recouped, the Township should expect a 50% return on the salary costs associated with the hiring of a part time Parks

and Recreation Director While there are a few self-sustaining departments; they are the exception, not the rule. The Township must evaluate the needs and wants of the community as compared to the budgetary constraints. The Township may wish to review the DCNR model found in Financing Municipal Recreation and Parks (http://www.docs.dcnr.pa.gov/cs/groups/public/documents/document/dcnr_002283.pdf), as a guide for determining program fees and sponsorships.

Like many municipalities in Pennsylvania, the Township can dedicate a certain millage for parks and recreation which would provide a dedicated revenue stream, with half of those funds being used for operational budgets and the other half for capital improvements.

Operations budget. A dedicated revenue stream for parks and recreation can provide a sustainable source of income. Coupled with that stream would be the revenues generated from recreation programs, pavilion rentals, field rentals, etc. Adding those funding sources provides a total revenue available to be used for staffing, parks maintenance, and recreational programs.

Capital improvements also would be provided an annual revenue stream which rolls over from year to year and provides for annual capital improvements, but also larger capital improvements with funds that are unused from year to year. This would not negate any purchases for additional park land and other capital projects through the use of bonds. There are several benefits to this form or revenue. Funds are available annually for recommendation needs and approval by the Board. Funds are in the bank, which is most useful when applying for grants, and, annual revenues allow for capital future planning.

Generally, operational budgets are requested annually from a director to the Manager, then to the Board of Supervisors. Typically, operational budgets do not change much from year to year (modest increases) and are supported through the general Township tax fees. They are usually supplemented with revenues generated from programs and other sources which are entered into the Township's general fund.

Capital improvements in this structure are requested annually and provide for no annual sustainable fund. These are at the sole discretion of the Supervisors who determine if the improvement is worth funding in any particular year.

As stated in Chapter 2 of this Report, under the Township Subdivision and Land Development Ordinance, every proposed residential subdivision and/or residential land development regulated by

Recreation Fees in Nearby Municipalities

Municipality	Median Household Income (MHI)	Percentage MHI is within Upper Saucon Township MHI	Recreation Fee
Upper Milford, Lehigh County	$84,483	18%	$3,150 / dwelling unit
South Whitehall, Lehigh County	$79,169	23%	$2,500 / dwelling unit
Solebury Township, Bucks County	$123,438	17%	$4,000 / dwelling unit
Newtown Township, Bucks County	$118,250	13%	$8,070 / dwelling unit
Recreation Fee Average			***$4,430***

Note: Upper Saucon MHI is $102,880 Source: ACS 5 Year Estimate, 2013-2018, U.S. Cencus Bureau; Municipal Saldo

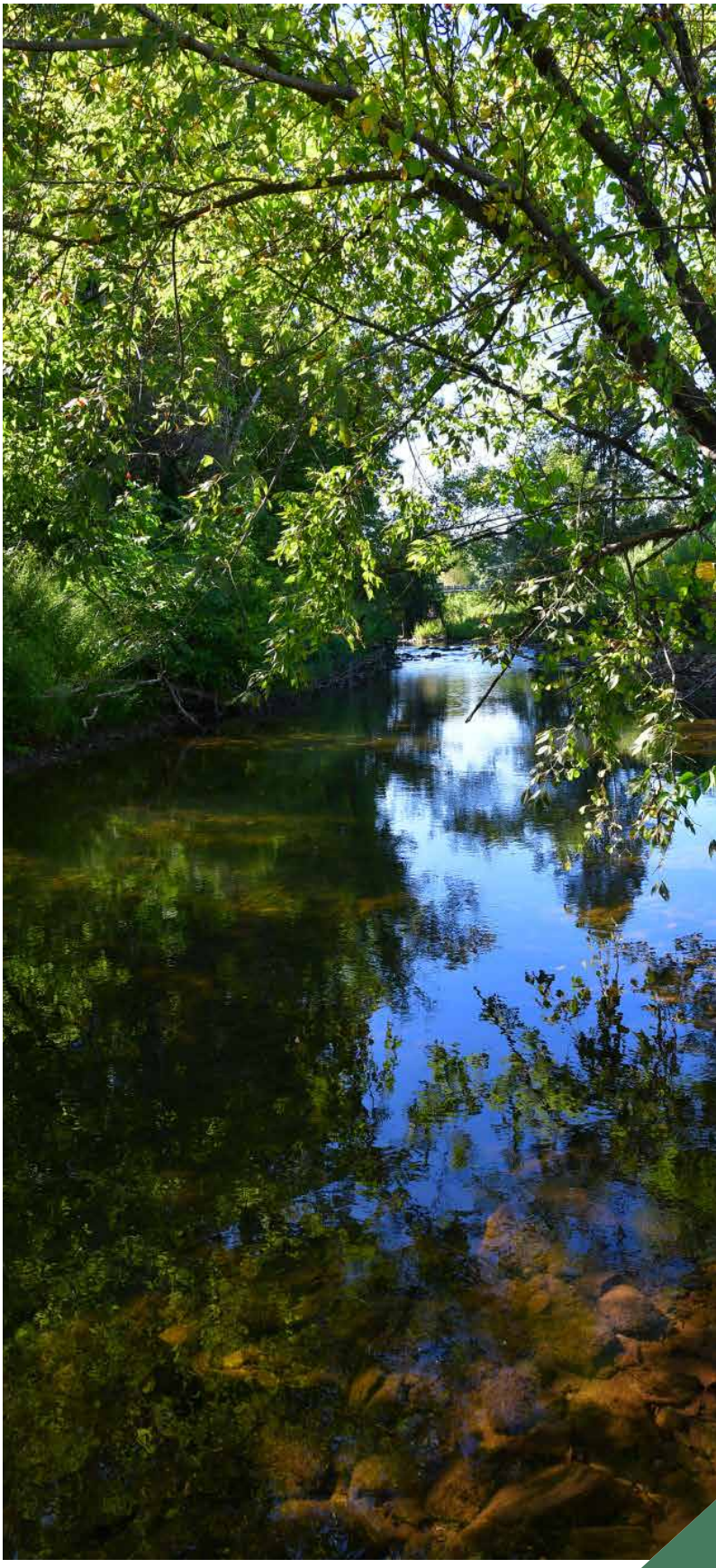
Figure 3-3: Recreational Fees in Nearby Municipalities

SALDO shall dedicate land suitable for park and/or recreation land. However, if a developer receives approval from the Board of Supervisors, they may pay a fee-in-lieu of the dedication of all or some of the required park and/or recreation land. Currently, the recreation fee is $5,000 for each approved building lot or dwelling unit.

An analysis of recreation fees in surrounding municipalities and municipalities in adjacent counties was conducted to determine the appropriateness of the current Township fee-in-lieu of land dedication based on the median household incomes of these municipalities compared to Upper Saucon Township. Figure 3-3 shows the recreation fees for municipalities whose median household incomes are within 25% of Upper Saucon's median household income of $102,880. The average of these recreation fees is $4,430.

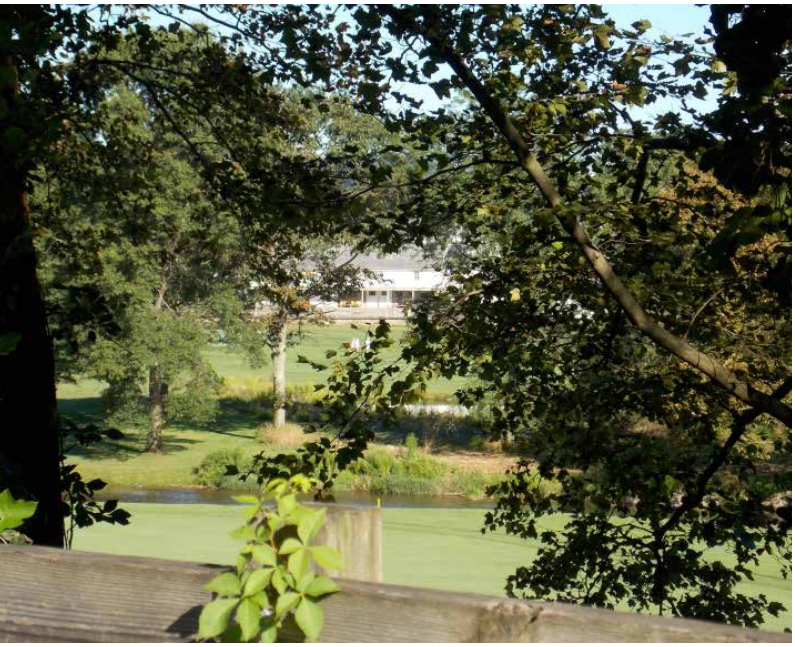
Additionally, some of these municipalities have their recreation fees take effect after a minimum number of dwelling units are proposed.

Based on this analysis, it is recommended that the recreation fee for Upper Saucon be maintained at $5,000 for each dwelling unit, for 4 or more proposed units. This fee amount is above the average for these 4 communities and, based on median household income, appears to be a number that is appropriate and one that can be justified based on these metrics.



CHAPTER 4

IMPLEMENTATION



Recommendation Implementation Schedule

Implementation of all plan recommendations will require a decade or more. Plan recommendations are categorized by time-line priorities of immediate (1-3 years), mid-term (1-5 years), and long term (6+ years) with relative estimated costs, potential partners and funding sources. Costs to implement recommendations are divided into three categories, < $100K, < $500K, and > $500K. This plan will need to be revisited and updated periodically, at least every decade, to address new recreational trends and other changes within the Township. The following chart identifies plan recommendations with a recommended timeline.

Recommended Implementation Schedule			
Timeframe	Partnerships	Funding Sources	Costs
Open Space Acquisition / Preservation			
Immediate (1-3)			
Deed restrict Township owned land for open space	Planning Commission, Board of Supervisors	General funds	< $100K per year
Prepare a comprensive survey of historic resources .	Coopersburg Historical Society, LVPC, PHMC, consulting firm	General funds, PHMC, National Trust for Historic Preservation	< $100K
Add proposed parcels for land acquisition and proposed trails on the Official Map	Planning Commission, Board of Supervisors	General funds	< $100K Low Cost
Prepare an EIT referendum for open space funds	Planning Commission, Board of Supervisors	General funds	< $100K Low Cost
Add Agrihood development into the current development zoning ordinances	Planning Commission, Board of Supervisors	General funds	< $100K Low Cost

Timeframe	Partnerships	Funding Sources	Costs
Mid-term (1-5)			
Land acquisition for open space preservation	Property owners, Board of Supervisors, Planning Commission, Environmental Advisory Committee	DCNR, DCED, Penn Vest, Wildlands Conservancy, general funds	> $500K
Farmland permanent preservation	Property owners, Lehigh County Ag Board, Board of Supervisors	General funds, Lehigh County and State funds	< $500K per year
Coordinate with community and partners to educate and promote farming	Local businesses, local farmers, Lehigh County Ag Board	General funds, programming fees, USDA	< $100K per year Low Cost
Long-term (6+)			
Continue farmland permanent preservation	Property owners, Lehigh County Ag Board, Board of Supervisors	General funds, Lehigh County and State funds	< $500K per year
Continue land acquisition for open space preservation	Property owners, Board of Supervisors, Planning Commission, Environmental Advisory Committee	DCNR, DCED, Penn Vest, Wildlands Conservancy, general funds	> $500K
Continue to coordinate with community and partners to educate and promote farming	Local businesses, local farmers, Lehigh County Ag Board	General funds, programming fees, USDA	< $100K per year
Trails / Connectivity			
Immediate (1-3)			
Prepare a Comprensive Connectivity Master Plan	Planning Commission,Park and Recreation Commission, Board of Supervisors, consulting firm	DCNR, DCED, Penn Vest	< $100K
Design and build preferred safe crossing of Route 309 and suggested related trails	Planning Commission, Board of Supervisors, PennDOT,consulting firm	DCNR, Penn DOT, DCED	> $500K
Provide necessary signage for "May Use Full Lanes" on road trails	PennDOT, local bicycle organizations	DCNR, Penn DOT	< $100K

Timeframe	Partnerships	Funding Sources	Costs
Mid-term (1-5)			
Design and build parts of Liberty Bell Trail	Planning Commission, Board of Supervisors, consulting firm	DCNR, DCED, Penn DOT	> $500K
Design and build trails and sidewalk connections	Planning Commission, consulting firm	DCNR, DCED, Penn Vest	> $500K
Long-term (6+)			
Complete design and build of Liberty Bell Trail	Planning Commission, consulting firm	DCNR, DCED, Penn Vest	> $500K
Continue to design and build trails and sidewalk connections	Planning Commission, consulting firm	DCNR, DCED, Penn Vest	> $500K
Design and build additional preferred safe crossings of Route 309	Planning Commission PennDOT,consulting firm	DCNR, Penn DOT, DCED	> $500K
Programmatic Recommendations			
Immediate (1-3)			
Design and build Community Center	YMCA, Planning Commission	DCED, Penn Vest, RCAP	> $500K
Complete revisions to Master Plans to Benckini and Haring Tracts and start	Parks and Recreation Commission	DCNR, DCED	< $500K
Mid-term (1-5)			
Design and implement recreation programs	Parks and Recreation Commission, in-house instructors, 3rd party contractors	General funds, programming fees	< $100K
Long-term (6+)			
Continue to design and implement recreation programs to address needs of population	Parks and Recreation Commission, in-house instructors, 3rd party contractors	General funds, programming fees	< $100K
Administration & Operations			
Immediate (1-3)			
Add part time Parks and Recreation Director with promotion of full time by year three	Parks and Recreation Commission, Board of Supervisors	General funds, revenue from programs	< $100K

Timeframe	Partnerships	Funding Sources	Costs
Immediate (1-3)			
Purchase recreational software and hardware		General funds	< $100K Low Cost
Develop a fee structure philosophy for program costs	Parks and Recreation Commission	General Funds	< $100K Low Cost
Develop Memorandums of Understanding (MOU) with partners	Parks and Recreation Commission, Board of Supervisors, School District	General funds	< $100K Low Cost

Project Partners

Partnerships at the local, county/regional and state levels will need to be established and maintained in order to help the Township meet the goals of the Upper Saucon Township Comprehensive Park, Recreation and Open Space Plan. Partners can assist in many ways included being advocates of the completion of plan projects, by implementing some recommendations themselves and by assisting to obtain grants and other funds to pay for improvements.

Local partners include:

- Southern Lehigh School District
- Private Recreation Providers (i.e. golf courses)
- Youth/Adult Sports Leagues
- Social and Religious Organizations
- Other Recreation Groups

County / Regional partners include:

- Lehigh Valley Planning Commission (LVPC)
- Lehigh County Parks & Recreation Department
- Lehigh County Agricultural Land Preservation Board

State partners include:

- Pennsylvania Department of Transportation (PennDOT)
- Department of Community and Economic Development (DCED)
- Department of Conservation and Natural Resources (DCNR)
- Pennsylvania Infrastructure Reinvestment Authority (PennVEST)
- Pennsylvania Historical & Museum Commission (PHMC)

Other potential partners include:

- Wildlands Conservancy
- The Conservation Fund
- Delaware and Lehigh National Heritage Corridor

The School District, private recreation providers, sports leagues and social and religious groups can all provide valuable insight to the Township as to the recreational needs of their students and members. These groups cater to individuals of all ages who participate in a range of active and passive activities and partnering with the Township would ensure that recreational facilities and programs are in place that would meet the needs of these organizations, and the Township as a whole.

LVPC is the regional Metropolitan Planning Organization (MPO) for Lehigh and Northampton Counties and they can plan on a regional basis recommending "big picture" planning priorities for the region including open space preservation, agricultural lands preservation and park facility needs.

The Lehigh County Parks & Recreation Department

is responsible for the development, operation and maintenance of all County-owned parks, recreation facilities and historic sites.

Lehigh County Agricultural Land Preservation Board has been an active partner with the Township, assisting with providing resources for farmers interested in becoming part of the Lehigh County Agricultural Easement Program.

The Pennsylvania Department of Transportation (PennDOT) can provide planning and funding through the TIP (Transportation Improvement Plan) and MTF (Multimodal Transportation Fund) for specific transportation improvement project involving pedestrian and bicycle facilities or resolving areas of vehicular conflicts with these modes. The agency administers several funding sources for improvement projects that include pedestrian and bicycle mobility and safety. DCNR and DCED can also provide planning, design, and construction funding through grants. PHMC can assist with funding in addressing the needs of historical preservation in the Township, although funding through PHMC is typically very limited.

Wildlands Conservancy is a Lehigh Valley-based non-profit, land conservation organization that supports the protection and preservation of important environmental areas in the region and has partnered with the Township in open space preservation and assisting residents with open space conservation easement strategies. The D&L National Heritage Corridor has assisted the region with assistance in recreation and conservation. They are a big proponent for connections of multi-use trails and preserving the heritage of the region. The Conservation Fund is a national non-profit that works with communities to preserve land and water resources through different means. They most recently worked with Northampton and Monroe County to add an additional 4,350 acres to the Cherry Valley Wildlife Refuge.

Funding Sources

Multiple funding sources are available through grants, incentives and other programs for the implementation of the recommendations proposed in this report. Examples of funding sources are listed below.

It is important to note that implementing the plan cannot be done solely on funding opportunities that arise from grants and other programs that are not consistently available and are extremely competitive. To rely on such funds would severely limit the ability to achieve the stated recommendations of the plan. The Township should consider adopting a Capital Planning Budget and/or yearly operations/programming budget that would assist in providing funding to implement this plan.

PennDOT

Transportation Alternatives Set-Aside Program (TA Set-Aside)

The Transportation Alternatives Set-Aside Program (TA Set-Aside) is a Federal highway and transit funds set-aside under the Surface Transportation Program (STP) for community-based “non-traditional” projects designed to strengthen the cultural, aesthetic, and environmental aspects of the nation’s intermodal transportation system. The program seeks to provide funding for projects such as construction, planning, and design of on-road and off-road trail facilities for pedestrians, bicyclists, and other non-motorized forms of transportation. Non-motorized forms of transportation include sidewalks, bicycle infrastructure, pedestrian and bicycle signals, traffic calming techniques, lighting and other safety-related infrastructure, and transportation projects to achieve compliance with the Americans with Disabilities Act of 1990. Recently, these grants have been available every two years. For more information on the PA

Transportation Alternatives Set- Aside Program, visit: https://www.penndot.gov/ProjectAndPrograms/Planning/Pages/Transportation%20Alternatives%20Set-Aside%20-%20Surface%20Trans.%20Block%20Grant%20Program.aspx

Safe Routes to Schools (SRTS)

Administered through TA Set-Aside, SRTS is a national and international movement to create safe, convenient and healthy opportunities for children to walk and bicycle to school. The program encourages children to walk and bicycle to school, helping to reverse an alarming decrease in students' physical activity and an associated increase in childhood obesity. By getting more children to walk and bicycle to school, communities are also reducing fuel consumption, alleviating traffic congestion, and improving air quality. SRTS programs are built on collaborative partnerships among many stakeholders, including educators, parents, students, elected officials, engineers, city planners, business and community leaders, health officials, and bicycle and pedestrian advocates.

Eligible activities include new or reconstructed sidewalks or walkways, pedestrian and bicycle signs or signals, transportation projects that achieve ADA compliance, such as curb ramps, bike parking facilities or bus bike racks, shared use paths, side paths, trails that serve a transportation purpose, crossing improvements, and traffic realignments, road diets, or intersection changes. For more information on the PA SRTS program, please visit https://www.penndot.gov/TravelInPA/Safety/SchoolResourcesAndPrograms/SafeRoutesToSchool/Pages/default.aspx

Multimodal Transportation Fund (MTF)

PennDOT's Multimodal Transportation Fund provides grants to ensure that a safe and reliable system of transportation is available to the residents of this Commonwealth. The program is intended to provide financial assistance to municipalities, councils of governments, businesses, economic development organizations, public transportation agencies, rail freight, passenger rail, and ports in order to improve transportation assets that enhance communities, pedestrian safety, and transit revitalization. PennDOT will administer activities directly initiated or undertaken by it related to grants for eligible multimodal programs in accordance with these guidelines. More information can be found at http://www.penndot.gov/ProjectAndPrograms/MultimodalProgram/Pages/default.aspx.

pennsylvania
DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES

Department of Conservation and Natural Resources (DCNR)

Community Conservation Partnership Program (C2P2)

C2P2 provides funding to municipalities and authorized nonprofit organizations for recreation, park, trail and conservation projects. These include planning for feasibility studies, trail studies, conservation plans, master site development plans, and comprehensive recreation park and open space and greenway plans; land acquisition for active or passive parks, trails and conservation purposes; and new development and rehabilitation of parks, trails, Riparian Forest Buffers, and recreation facilities. Most of these projects require a 50% match, which can include a combination of cash and/or non-cash values. Grant applications for the C2P2 program are accepted annually—usually in April. Funding from DCNR for "sidewalk" connections will need to be categorized as multi-use trails. More information on this program can be found at the DCNR website: https://www.dcnr.pa.gov/Communities/Grants/Pages/default.aspx

PA Department of Community and Economic Development (DCED)

Greenways, Trails and Recreation Program (GTRP)

Administered through the PA Department of Community and Economic Development (DCED), the Greenways, Trails and Recreation Program (GTRP) provides funding for planning, acquisition, development, rehabilitation and repair of greenways, recreational trails, open space, parks and beautification projects. The program awards up to $250,000 per project to eligible applicants and requires a local match of 15% of the total project cost. Funding from DCED for "sidewalk" connections will need to be categorized as multi-use trails. Additional information on the Greenways, Trails, and Recreation Program can be found at http://dced.pa.gov/programs/greenways-trails-and-recreation-program-gtrp/.

Multimodal Transportation Fund (MTF)

The Multimodal Transportation Fund provides grants to encourage economic development and ensure that a safe and reliable system of transportation is available to the residents of the Commonwealth. Funds may be used for the development, rehabilitation and enhancement of transportation assets to existing communities, streetscape, lighting, bike lanes, sidewalk enhancement, pedestrian safety, connectivity of transportation assets and transit-oriented development. Grants are available for projects with a total cost of $100,000 or more and grants shall not exceed $3,000,000 for any project. For more information please visit https://dced.pa.gov/programs/multimodal-transportation-fund.

Pennsylvania Infrastructure Investment Authority (PennVEST)

PennVEST offers both grants and low interest loans for projects that help to manage stormwater and improve water quality. Projects funded by PennVEST contribute to environmental health and resident health, as well as provide jobs for Pennsylvania workers. More information can be found at https://www.pennvest.pa.gov/Information/Funding-Programs/Pages/default.aspx

Pennsylvania Historical and Museum Commission (PHMC)

Keystone Historic Preservation Planning Grant

As established under the Keystone Recreation, Park and Conservation Fund, funding under the Keystone Historic Preservation Planning Grant program is available to nonprofit organizations and local governments for the planning and development for publicly accessible historic resources listed in or eligible for listing in the National Register of Historic Places. The purpose of the grant is to support projects that identify, preserve, promote and protect historic and archaeological resources of Pennsylvania for both the benefit of the public and the revitalization of communities. Minimum awards are $5,000, maximum awards are $25,000 and funding requires a 50/50 cash match. More information can be found at https://www.phmc.pa.gov/Preservation/Grants-Funding/Pages/Planning-Projects.aspx

United States Department of Agriculture (USDA)

Local Food Promotion Program (LFPP)

The LFPP grant assist projects that develop, coordinate, and expand that help increase accessibility and availability to locally and regionally produced agriculture products. More information can be found at https://www.ams.usda.gov/services/grants/lfpp

The Conservation Fund

The Conservation Fund provides financing for conservation in many ways, including funds for acquisition of valuable lands and waters, bridge financing through loans, and grants and loans to entrepreneurs who are developing sustainable and successful solutions to conservation problems. Assistance frequently goes to those in underserved and economically distressed communities. More information can be found at https://www.conservationfund.org/our-work/conservation-finance.

Lehigh Valley & Lehigh County

Greenways Mini Grants

These grants, coordinated by Delaware & Lehigh National Heritage Corridor (D&L), are offered to assist funding for projects that promote and conserve natural resources in the region and advance the goals set forth by Lehigh Valley Greenways. The priorities include implementing ecological restoration projects, hosting educational events and workshops, improve trail network throughout the region, and climate change adaptation strategies. More information can be found at https://lvgreenways.org/mini-grants/

Quality of Life Grant

This grant is provided by Lehigh County to cultural, civic, or recreational non-profit organizations that may be affiliated with a unit of local government, to assist with programs, projects, events, capital projects, or operational support. More information can be found at https://www.lehighcounty.org/Departments/Community-Economic-Development/Grant-Programs/Quality-of-Life-Grant-Application

Tourism Development Grant

This grant is provided by Lehigh County to municipalities for projects that encourage new or one-time events, first year events, or improve facilities that are regional in nature, that may draw large numbers of people. More information can be found at https://www.lehighcounty.org/Departments/Community-Economic-Development/Grant-Programs/Tourism-Grant-Application

Public-Private Partnerships

A public-private partnership (P3) is an agreement between public entities, like municipalities, and private sector partners, like businesses, where the municipality works with businesses to aid in the construction, operation, financing and managing of a facility. The municipality still retains ownership of the facility, however, the business has a say as to how tasks are managed at the facility. An example of this partnership is Tumblebrook Golf Course.

Private Foundations

There may be regional corporations and foundations that support public works such as park development. Competition for these funds is usually brisk, but opportunities should be researched. Funding is often to non-profit organizations.

Maintenance Cost and Estimates Over 5 Years

As the Township continues to expand their park, recreation, and open space program, the cost of maintenance will increase. A five-year projection of fiscal implications on the Township budget shows maintenance costs becoming steady after Year 3 as recreational software and minor and major equipment are initially purchased, and part-time programming staff shifts to a higher-paying full-time position. Other maintenance costs include salary for a seasonal maintenance worker, annual recreational software fees and the purchase of additional equipment.

Prior to the implementation of any park, recreation, and open space recommendations, the Township should ensure that adequate maintenance and resources are available for existing and proposed Township facilities.

YEAR 1

add a seasonal mainenance worker 1,040 hours at a rate of $15.00 an hour	$15,600
add part time Parks and Recreation Director 1,450 hours at a rate of $21.00 an hour	$30,450
irrigation of lacrosse field #10 at Commmunity Park	$50,000
purchase (1) zero turn mower	$12,000
Purchase of recreational software and hardware	$3,500
Grand Total Year 1	**$111,550**

YEAR 2

continue the seasonal mainenance worker 1,040 hours at a rate of $15.00 an hour	$15,600
add a second seasonal worker as the new park comes on line 1,040 hours $15.00	$15,600
continue part time Parks and Recreation Director 1,450 hours rate of $21.60	$31,320
purchase (1) zero turn mower	$12,000
annual recreation software fees	$1,000
Grand Total Year 2	**$75,520**

YEAR 3

continue the seasonal mainenance workers 2,080 hours at a rate of $15.00 an hour	$31,200
promote Parks and Recreation to full time w Administrative duties for Public Works	* $48,000
Irrigate the 90 foot baseball field at Community Park **	$50,000
annual recreation software fees (increase due to ehanced programs)	$1,500
Grand Total Year 3	**$130,700**

* Salary does not include benefits ** Consider irrigating other fields

YEAR 4

continue the seasonal mainenance workers 2,080 hours at a rate of $15.00 an hour	$31,200
promote Parks and Recreation to full time w Administrative duties for Public Works	* $49,440
annual recreation software fees (increase due to additional programs)	$2,000
Grand Total Year 4	**$82,640**

* Salary does not include benefits

YEAR 5

continue the seasonal mainenance workers 2,080 hours at a rate of $15.00 an hour	$31,200
continue Parks and Recreation to full time w Administrative duties for Public Works	* $51,170
annual recreation software fees	$2,000
Grand Total Year 5	**$82,640**

*Salary does not include benefits

CHAPTER 5

APPENDIX

UPPER SAUCON TOWNSHIP
ORGANIZED
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LEHIGH COUNTY, PENNSYLVANIA