

LOWER SAUCON TOWNSHIP



OPEN SPACE ACTION PLAN
APRIL 4, 2007

Acknowledgements

Lower Saucon Township Council

Glenn Kern	President
Tom Maxfield	Vice President
Priscilla deLeon	Member
Ron Horiszny	Member
Sandra Yerger	Member

Environmental Advisory Council

Sandra Yerger, Chairman
Tom Maxfield, Vice Chairman
Laura Ray, Secretary
Dennis Aranyos
Ted Beardsley
Hazem Hijazi
Allan Johnson
Glenn Clouser
Tom McCormick
Bob Davis
Glenn Kaye

Table of Contents

<u>Chapter</u>	<u>Page</u>
Introduction.....	4
What is Open Space?	5
Community Involvement and Awareness.....	7
Purpose.....	10
Township Characteristics.....	13
Existing Open Space Inventory	18
Goals	24
Methods and Procedures for Open Space Preservation	26
Open Space Preservation Checklist	28
Sample Open Space Preservation Checklist	30
Conclusion	36
Appendices.....	37

Introduction

As Lower Saucon Township faces great pressure from development, it is important that the Township provide means for preservation of open space in order to protect its natural areas and historically or culturally important sites. However, preservation and open space are terms that are often misunderstood by the general public, developers and local governments. With this in mind, it is the goal of this plan to demonstrate what open space is and why open space conservation should be an important goal of the Township. Means of fostering community involvement and public awareness are included. Other existing Township, County and



Agricultural lands are just one form of open space which merits preservation as the Township is faced with increased development pressures.

Regional documents which advocate open space preservation are explored. A study of the Township's characteristics and an inventory of the Township's existing open spaces are included, in order to better guide future preservation. The plan includes a list of ten goals which the Township should use as general guidelines when considering open space preservation. Methods and procedures are discussed which may be used to formulate a system for making recommendations on which parcels should be preserved, including a further elaboration of the goals, in the form of a checklist, which the Township may use to help recognize the qualities and shortcomings of parcels proposed for preservation. Together, all of this information will help the Township make more informed decisions regarding open space preservation.

What is Open Space?

Open Space is a term that includes all parcels or areas of land or water set aside, dedicated, designated, or reserved for public or private use or enjoyment or for the use and enjoyment of the land by the landowners, occupants and their guests, or for the general benefit of the community as preserved lands. Open Space is the general “umbrella” category which includes parks, recreational facilities, greenways, trails, natural, agricultural and historic areas in the community.



Areas of scenic value which demonstrate characteristics typical of the Township may be worthy of preservation, regardless of the existence of natural resources

When using this broad definition of open space, it becomes apparent that Lower Saucon Township contains a variety of types of open spaces. Each of these areas may provide different uses and potentials and can interact with each other in different ways. The Township parks and other recreational facilities, which contain passive and active recreation areas, provide places to play or relax. Forests, stream corridors and other natural areas offer opportunities for hunting, fishing, hiking, biking, camping, boating or simply viewing and enjoying nature. Municipal properties such as schools or preserved historic sites often provide green spaces that can

accommodate passive or active recreation and group gatherings. Agricultural areas may be symbolic of an area’s culture, and the preservation of working farms can provide food, retain jobs and create educational opportunities. While all of these properties may not be typical open space in terms of appearance or ownership, it is important to consider how they may interact and affect one another.

Like many communities in Pennsylvania, Lower Saucon Township is facing a boom in residential and commercial development. New development brings an increased need for functional open space, as the population level rises and vacant or agricultural land is developed. Many communities have not realized the importance of open space until it was too late. Fortunately, there is an opportunity for Lower Saucon to foster intelligent growth and incorporate open space into the overall development of the Township. Furthermore, the Township has an opportunity to provide open space to areas which were developed with no planned open space before they are completely built out.

The Township currently has a diverse mix of natural undeveloped, rural, suburban and semi-urban areas. The undeveloped areas are often of great beauty and importance, containing thick forests, steep slopes, streams, wetlands, seeps, springs and scenic views and vistas. They are also home to the plants and animals native to the region. The rural areas are made up of centuries old farmland. The semi-urban areas are historically tied to the industrial areas along the Lehigh River and include both high density residential and

industrial properties. Semi-urban areas have also developed along the major traffic corridors of Routes 378 and 412. The majority of the new development in the Township has been in a typical, medium to low density, suburban style. Unfortunately, the best land for agriculture is often the most profitable land for development. This sprawling development threatens to devour the existing agricultural areas and further isolate the existing semi-urban areas.

Open spaces can be used to protect natural areas in order to preserve the habitats of native species. These areas can also be used as trails and greenways which can link natural areas, communities and other open spaces. The existing semi-urban communities may be improved by providing green space where little is currently available by reclaiming and rehabilitating the brown field properties which currently sit vacant.



Nature trails through preserved open spaces can create linkages with little financial cost or disturbance to the natural resources.

The potential sprawl of new suburban development can be broken up by preserving large open spaces, or by requiring higher percentages of open space as part of cluster or planned residential developments. If numerous developments are required to dedicate adjacent open space areas, the Township may have the opportunity to provide large community parks without acquiring a large property on the open market. It is also important to utilize open space to preserve the cultural heritage and agricultural aesthetic and history of some parts of the Township. The majority of new developments are proposed on existing rural properties. Preservation and conservation of agricultural open space is one way to stop an important aspect of the Township's history and culture from disappearing altogether.

Community Involvement and Awareness

Community involvement and awareness of the importance of open space are keys to any successful open space program. A community that understands the importance of open space and embraces an open space preservation program can greatly enhance the effectiveness of an open space program. Initially, the burden of education falls on the local government. They must educate the general public, landowners, developers and elected officials.

The general public must be made aware of the importance of preserving open space. This can be done simply by spreading information via literature, the Township website or cable access. Interactive programming may also be used. Events such as hikes through existing open space, lectures or workshops about preserved historically or culturally important properties, agricultural fairs or markets featuring products from preserved farms and other such events begin to draw people into the open spaces. Once the public realizes that they may use open spaces and their products, they may begin to appreciate the need for open space more deeply. The Township must also clearly label open spaces for public use and highly publicize open space acquisitions in order to demonstrate open space funding at work and to demonstrate that the preserved open spaces are for the benefit of the public.



The Township must make open space preservation efforts visible to the public through signage and other methods, in order for the public to see open space funding at work.

If the Township properly educates the general public, they can become proponents of open space preservation through participation with Township Commissions, such as the Environmental Advisory Council, The Saucon Valley Conservancy and The Lower Saucon Township Historical Committee; or, less formal organizations such as ‘Friends of’ groups. These citizens can also help maintain preserved open spaces as volunteers during open space maintenance programs or general cleanups. Support can also come from citizens by purchasing products from local farms or nurseries which are on preserved agricultural land and through donations of funds or land to open space preservation agencies.

It is also strongly recommended that the Township form a permanent Open Space Committee, or appoint an existing committee made up of citizens, to work with the Township Council. This committee would be charged with guiding the formation of the open space network. The committee would also recommend parcels for preservation through outright purchase or purchase of easements using open space funds. It should

also be the duty of the commission to recommend revisions and/or updates to the open space plan and any other applicable Township ordinances.

It is strongly recommended that the Open Space Committee, or other governing bodies, review all submitted subdivision and land development plans. The committee should offer guidance to the developer on how and where open space can be most effectively preserved on a property proposed to be developed. The committee should also consider the effects of neighboring parcels on any proposed open space, the effects of proposed open space on neighboring parcels, the possibility of future development of neighboring parcels and their effects, the viability and importance of preserving natural features on the site and the role of a proposed open space within the overall open space network.

Owners of large properties which may be desirable for preservation as open space must also be educated about the benefits of preserving their properties. Many landowners do not currently understand the function of conservation easements or other multi-party agreements. They understand only two options: to stay on their land or sell it to a developer. The Township may be ineffective in acquiring open space if landowners do not understand that they have the option of preserving their property while being compensated for an easement. Additionally, many property owners may feel threatened by open space planning, believing that the Township intends to ‘take’ their land. The Township must offer opportunities for open dialogue with landowners, such as public meetings or presentations, in order to clarify the intentions and methods of open space preservation.



The Township must work with developers in order to encourage environmentally friendly designs which can benefit the Township, the developer, and the future residents of the proposed development.

Developers must also be educated about smart development. Often, developers and preservationists are seen as competitors for land. However, through the use of smarter development, such as cluster designs, developers and preservationists can work together. Cluster development focuses on limiting individual lot size in order to provide large areas of open space. Many developers believe that they can't make a profit on developments featuring small lots.

However, cluster developments in the region are showing that many buyers will pay a premium for a lot abutting a large open space. Also, cluster developments often are cheaper to build as less infrastructure may be required. The Township must provide information to developers in order to encourage them to propose smarter designs and reduce the number of large lot subdivisions being built.

Finally, the Township must further educate itself and keep informed of the latest developments in open space preservation. The Township's elected officials and appointed commission members must be educated in as many aspects of open space as possible, including the benefits to the general public, methods of preservation and benefits to developers. The Township must also be diligent in staying up-to-date with new developments in open space preservation methods.

Purpose

The purpose of this Open Space Plan is to combine aspects of the many existing Township documents which recommend open space preservation in a manner which can help guide the Township in making decisions. These documents all offer suggestions regarding open space preservation, but none of these documents are aimed specifically at preservation of open space as their main goal. By including aspects of each in one Open Space Plan, the Township has a clearer picture of how to best preserve open space based on the information found in these documents.

Each of the following documents offer different types of information aimed at achieving different types of goals. However, all of them indicate that open space planning should be a priority within the Township. The Township Zoning and Subdivision and Land Development Ordinances help shape new developments on a site by site basis. The Township Comprehensive Plan sets long term goals for development in the Township, while the Lehigh Valley Comprehensive Plan helps establish the Township's role in the region. The Natural Areas Inventory Summary, prepared by The Lehigh Valley Planning Commission, describes the most important natural areas in the region. The Park and Recreation Plan addresses the recreation and open space needs of the Township and its residents. The Natural Resource Inventory of Lower Saucon Township includes an in-depth study of natural resources in the Township and recommends specific areas to be preserved. The Saucon Region Recreation and Open Space plan recommends methods for preserving open space and promoting recreational land uses in Upper and Lower Saucon Townships. The Lower Saucon Township Mini Open Space Plan offers surveys and statistics which suggest that open space preservation should be a priority now and in the future. Each of these documents is used as a guide in determining how to best preserve open space in the Township.

The Township Zoning Ordinance includes requirements for natural resource protection. When new subdivisions are proposed, it is important to keep an inventory of preserved natural areas in order to better create connections between them through preservation of open space. Where cluster developments are proposed, open space is required to be dedicated to the Township. It is important to study the proposed open space and how it may interact with adjacent parcels when the Township is considering the plans for approval. If many contiguous parcels propose cluster subdivisions, the open spaces may be planned in a manner as to create one very large open space. The Township Subdivision and Land Development Ordinance also contains open space and recreation land requirements. These should also be incorporated into open space planning.

The Lehigh Valley Comprehensive Plan and the Northampton County 21st Century Open Space Initiative advocate farmland and open space preservation throughout the region. They identify numerous areas in Lower Saucon Township which should be focal points for preservation. One of these areas is the Saucon Creek corridor, a portion of which the Township has already preserved within Heller Homestead Park.

The Lower Saucon Township Comprehensive Plan outlines many goals and objectives of the Township. These include improvements in various areas, including groundwater protection, open space and agriculture preservation, land use planning and recreation

planning. The plan includes four overall land use goals, which summarize the plan's advocacy of open space, natural resource and agricultural preservation. These goals are:

- 1) To assure maintenance of existing residential, non-residential and public facility land uses within the Township and assure that natural resources and open space within the Township are protected for the benefit of the environment and future generations.
- 2) To assure reasonable opportunities for agricultural land use, so that this land use is not incrementally lost over a period of time.
- 3) To recognize that open space, recreation areas, agricultural areas, and areas of natural resource protection are land uses and areas with such land uses should not therefore be deemed to be "undeveloped" or "unused."
- 4) To assure, to the extent it is reasonably possible, protection of surface and groundwater quality throughout the Township with the recognition that groundwater and surface water resources in specific portions of the Township are utilized for public drinking water by the citizens of the Borough of Hellertown, Springfield Township and Upper Saucon Township.

These four goals clearly illustrate that the Township has had a need for preservation of open space and agricultural areas even prior to the preparation of an open space plan.

The Natural Areas Inventory Summary for Lehigh and Northampton Counties highlights important natural features in the region. Only two areas in Lower Saucon Township have been specified. These are Redington Cave, along Bull Run, and the Steel City Slopes, along the Lehigh River. It should also be noted that the Department of Conservation of Natural Resources has established the portion of the Lehigh River which flows through Lower Saucon Township as part of a National Heritage Corridor, due to its role in the development of the region. The areas surrounding Redington Cave, the Steel City Slopes and the Lehigh River contain many large agricultural parcels which are facing strong development pressure. These areas will be considered when identifying prime open space preservation areas.



The Steel City Slopes, identified in the Natural Areas Inventory Summary, suffer from erosion damage due to the location of Riverside Drive.

The Natural Resources Inventory (NRI) of Lower Saucon Township includes an in-depth study of natural resources in the Township, including springs, seeps and streams, woodlands, steep slopes, vernal ponds and other wetlands, and plant and animal species. The Inventory identified ten areas in the Township which should be considered for preservation. These areas are: the Black River Corridor, the Cooks Creek Tributary Headwaters, the Crestline Road Ravine, the East Branch of the Saucon Creek Headwaters, Granite Hill, Kohlberg Hill, the Lehigh River Corridor, the Saucon Creek Corridor, Silver Creek Wetlands and Swoveberg Hill. The NRI will serve as a foundation for the Open Space Plan as it provides information on the most sensitive natural resources in the Township, which are often those in the greatest need of protection and preservation.

The Lower Saucon Township Park and Recreation Plan states that it was adopted in order to address the existing and future recreation and open space needs of the Township and its residents. This statement clearly shows that the Township already believes that there is an important connection between open space and parks and recreation areas, and that they can co-exist as parts of an open space network.



The Heller Homestead Park provides recreation opportunities while preserving natural and historic features.

The Lower Saucon Township Mini Open Space Plan provides statistics and surveys which indicate that the public believes open space preservation should be a high priority now and in the future. It also shows housing and population growth projections which suggest that the population will steadily increase over the next ten to twelve years. This growth means that more land will be developed for housing and commercial uses, leaving less land to be preserved as open space. However, as the population grows, so does the need for preserved open space. These statistics show that the Township must plan for open space preservation now, before it is too late.

These documents all share different kinds of information, have different purposes and different goals. However, all of them show that it is important for Lower Saucon Township to plan for the preservation of open space, agricultural areas and natural resources now and in the future. Planning for open space will help the Township meet the goals of each of these documents.

Township Characteristics

When planning for open space preservation, it is important to understand the current composition of the Township, in order to make informed decisions when deciding whether to preserve a particular property. While it is impossible to include a detailed description of the entire Township in this plan, it is important to recognize the general composition, including relationships between differing uses, the development of the major traffic corridors, the existence of natural resources and agricultural areas, and growth and development patterns in different areas. When considering an individual parcel for preservation, more detailed study of the immediate surrounding area may be necessary, but the characteristics of the Township overall must also be considered.

Lower Saucon Township exists in the southernmost portion of Northampton County. It borders the Boroughs of Hellertown, Freemansburg and Fountain Hill, along with the City of Bethlehem. It also borders Williams, Bethlehem, Salisbury, Upper Saucon and Springfield Townships. Routes 78, 378 and 412 serve as the major traffic corridors. The Township is divided into two distinctly different areas. The west side of the Township has already been heavily developed, while the east side still contains vast areas of agriculture and many natural features. Each side still has great opportunities for preservation of open spaces.



The construction of Route I-78 has created a major traffic corridor through the Township. The road has also divided many properties in two and created numerous dead end streets.

The west side of the Township has already succumbed to much development in the form of typical modern subdivisions, with a variety of lot sizes and layouts. The extreme western portion of the Township features small lots, often less than one acre, in modified grid layouts. Further east towards the center of the Township, larger lots and more organic layouts begin to appear. However, there are very few tracts greater than 30 acres remaining. While the majority of the development is in single family dwellings, a few multi-family developments exist as well.

All of the Village Commercial, General Business and Office & Laboratory Zoning Districts exist in the western portion of the Township. These districts, and their associated shopping centers and offices, are concentrated in the areas along Route 378, between Seidersville Road and the southwestern boundary of the Township. The combination of new single family homes and shopping centers shows the characteristics of typical suburban sprawl.

The Black River Corridor and Saucon Creek Corridor are the only natural areas identified in the NRI which exist in the western portion of the Township. As many properties in these corridors have already been developed, preservation or improvement of these corridors may prove to be difficult.

The Black River Corridor traverses many small, single family lots and multi-family development properties between Route 378 and Surrey Road. None of these properties should be considered prime targets for open space acquisition. However, it may be beneficial to obtain easements in order to provide riparian buffers. From Surrey Road west to Friedensville Road, Black River traverses numerous very large parcels which should be considered for open space preservation. Many of these parcels do not provide a riparian buffer and do little to protect the integrity of Black River. If preservation of any of these properties were proposed it would be strongly recommended that stipulations be included which substantially protect the Black River and create a riparian buffer.



The Black River runs through numerous small properties, making preservation or protection of its riparian buffer area very difficult. Where protection measures are not established, erosion of the stream's banks may occur.

The NRI also recommends preservation of the section of the Saucon Creek Corridor which begins at the Township's southwestern boundary, within the Saucon Valley Country Club, and runs north into Heller Homestead Park. In this area the Saucon Creek either passes through or borders approximately thirty different parcels of various sizes. Many of the single family lots are too small, while the Saucon Valley Country Club may be too large and too valuable, to be considered for open space preservation. Establishment of easements for riparian corridors should be considered on these properties. However, the Creek does



The Saucon Creek riparian corridor contains many areas of woodlands, steep slopes and wetlands. Areas with multiple natural resources should be strongly considered for preservation.

pass through some parcels which are large enough to be considered for outright purchase or conservation easement acquisition. Many of these parcels also contain other features which should be preserved, such as steep slopes, woodlands and agricultural land.

Unlike the west side, the east side of the Township is still largely free of modern development. The landscape is dominated by agriculture and natural areas, many of which are identified in the Natural Resources Inventory. Many large lots exist which should be considered for acquisition for open space. There are few commercial uses in this portion of the Township, except for roadside farm markets and the occasional corner store. The Silver Creek Country Club and Woodland Hills Country Club are also located here. The eastern portion of the Township is also home to many private clubs such as the Beethoven Waldheim Club, The Whitetail Bowmen Archery Club, Bushkill Valley Motorcycle Club, Steel City Gun Club and the Easton Fish and Game Association. Many of these clubs exist on large parcels which are greatly undeveloped and contain many natural resources, but could be developed at any time.



Large agricultural parcels, like those found in the eastern portion of the Township, are often the easiest and most cost effective parcels to develop, resulting in strong development pressure.

Much of the residential development in the area is in the form of single family homes on large wooded lots or farmsteads. Many of these larger lots are under great development pressure. The larger agricultural lots could be developed into major subdivisions containing many new homes. Some of the smaller lots could be developed into minor subdivisions, providing fewer new lots, but creating a repeating pattern of cul-de-sacs and private streets.

Steel City, with its small lots and urban grid pattern, is an exception. This area has strong ties to the steel industry in neighboring Bethlehem and was developed to provide housing for the steelworkers. This high density development isn't found anywhere else in the Township. While there is little opportunity for open space preservation in Steel City itself, there are areas along the Lehigh River which should be considered. The NRI encourages preservation of the Lehigh River corridor. This includes the rocky outcrops of the Steel City Slopes along with the Redington Proving Ground and Redington Cave. The area within the corridor contains woodlands, steep slopes and floodplains. These areas provide habitat for riverine species of amphibians, mammals and birds. This area also holds cultural significance as it is a link to the steel industry, which is an important factor in the establishment of population centers in this area. Also, some of these properties contain ruins of structures, such as furnaces which were built to serve the iron and steel industries. There are also numerous large agricultural sites within this area, some of which face immediate development pressure.



The area surrounding the Steel City Slopes and the Lehigh River Corridor is an important reminder of the history of the Township, particularly to its relationship with the steel industry, as evidenced by remnants of historic structures such as the Coleraine Iron Company Redington Furnace.

The Northampton Hills of the Highlands are prominent features in the southern and central portion of the eastern half of the Township. With their steep slopes covered in mature woodlands, Swoveberg Hill, Kohlberg Hill and Granite Hill all provide scenic beauty. They also contain wetlands, seeps, springs, vernal ponds and streams. These vast areas of natural features provide habitat for the region's wildlife. They also serve as groundwater recharge areas and are important to the Township's natural hydrologic cycle and the drinking water supply. Hellertown Borough has seen the importance of these areas and has acquired much property on Swoveberg and Kohlberg Hills in order to protect their drinking water supply. The Hellertown Borough properties should not be considered as open space for public use, but should be highly regarded pieces of an open space network as other properties can be linked to them, protecting larger areas for groundwater recharge, wildlife habitat and scenic beauty.



The Crestline Road Ravine is an important natural area as steep slopes, woodlands and an important riparian corridor all exist within the Ravine.

The Crestline Road Ravine also plays a major role in groundwater recharge and wildlife habitat. The ravine runs between Crestline Road and the southwestern foot of Granite Hill. A tributary to the East Branch of the Saucon Creek runs through the ravine. The steeply sloped sides of the ravine are heavily wooded with mature forest. A few single family dwellings exist along the ravine. This area should be considered for open space preservation in order to preserve the existing woodlands which protect the steep slopes, and stream from erosion and other negative effects of development.

East of the Crestline Road Ravine exists the East Branch of the Saucon Creek headwaters. This area is already being developed, mostly on a lot by lot basis, rather than large subdivisions. Most of the homes are tucked into wooded areas on relatively large, sloped, wooded lots. Another tributary of the East Branch of the Saucon Creek runs through this area. Many of these properties contain wetlands, seeps, springs and vernal pools, which play an important role in the hydrology of the Creek, and in supplying drinking water to the surrounding area.

Southwest of the Saucon Creek Headwaters, lays the Cooks Creek Tributary Headwaters. This area, located adjacent to the Bucks County boundary, contains agricultural and residential uses. The residential uses are single family homes on mid-sized lots. They appear to have been constructed individually, rather than as part of a larger development. The agricultural uses are also on small to medium sized parcels. The area contains woodlands, steep slopes, wetlands and vernal pools which are important features in the hydrology of Cook's Creek.

Further southwest, also adjacent to the Bucks County boundary, exists the Silver Creek Wetlands. The wetlands are home to numerous wetland plant and animal species. This area is important as it connects to similar sites downstream in Bucks County. The area in Lower Saucon Township is primarily used for agriculture. This includes Bechtold's Orchard, a mainstay in the Township. Bechtold's Orchard and similar properties in the area should be considered for preservation as they provide the opportunity to preserve an important cultural feature, agriculture, and natural features all on one property. Furthermore, this area sits at the foot of Kohlberg Hill, another important natural area. The combination of the rolling hills and agriculture against the backdrop of Kohlberg Hill creates a beautiful scene typical of this portion of the Township. Any agricultural land preserved as open space in this area must implement better management practices in order to protect the natural features on site and those downstream.

While the two halves of the Township are clearly different in their natural features and development patterns, each offers significant opportunities to preserve open space and agricultural lands. The various natural, historical, cultural and agricultural features found throughout the Township have the potential to become a very strong open space system featuring a variety of uses and preservation techniques.

Existing Open Space Inventory

While conservation and preservation of new open spaces is a major component of any open space plan, it is also important to consider the importance and functionality of existing open spaces. Providing additional maintenance, programming or improved access may greatly improve the functionality of an existing space. Additionally, preservation of neighboring parcels can form links between open spaces and create opportunities for trail systems, greenways, wildlife corridors and extended protection of natural resources. Existing open spaces within the Township include land which has been dedicated to the Township, private land which is under a deed restriction or conservation easement, Township Parks or other Township owned land, public entities such as schools, and other protected private properties such as the Hellertown groundwater recharge areas (See Map A-10).

Many subdivisions and land developments, in various stages of plan approval, propose dedicating open space to the Township. As more developments are approved in the Township, more and more open space will be dedicated to the Township. The Township's cluster development ordinance, combined with the popularity and profitability of cluster developments, will provide the Township with more and more dedicated open space. Open space dedicated by developers has the potential to become the Township's single largest source of open space. These open spaces must be carefully coordinated in order to maximize the effectiveness and usefulness of each individual open space and to integrate each into the overall open space network.

Private properties with conservation easements do currently exist within the Township. The Yerger, Seifert-Ray, and Dreyer properties are all under conservation easement agreements. As these are private properties, they should not be considered for use when planning trail systems, parks or other public uses within open spaces. However, they may be considered as portions of greenways, wildlife corridors, groundwater recharge areas or other natural systems.

The Township contains six parks of varying size, use and character. The opportunities provided by these parks must be considered while planning for open space. While open space and park and recreation areas have fundamental differences, opportunities may arise for the two different kinds of spaces to function in concert. Often, open space can function as a buffer between differing uses, such as highly intensive active recreation parks and single family homes. In other instances, open space can serve as a natural extension of a passive or culturally or historically themed park. Open spaces and parks which are not contiguous, but in close vicinity to each other can provide a framework for trail systems. For these reasons, it is important to understand how each park functions, and how each may affect open space planning.

Town Hall Park



Located at the Municipal Complex on Old Philadelphia Pike, Town Hall Park is a good mix of passive and active recreation. The park contains an enclosed children's playground with a gazebo, additional scattered play equipment, basketball courts, multi-purpose fields which can be used for soccer, lacrosse or baseball, a pavilion and a walking trail. A pond and areas of woodlands and hedgerows exist on the site, which help to separate the differing uses. The site contains approximately 27 acres. Single family homes on varying lot sizes surround the park.

Steel City Park



This park, located at Riverside and Matthews Drives in Steel City, contains approximately 1.65 acres of land. It provides a softball field, basketball court, asphalt multi-purpose play area, pavilion and play equipment. A parking area is planned to be constructed in the future. The site is within walking distance for most residents of Steel City and is the only park in the northern portion of the Township. The park contains no natural features except for a few trees which provide shade for the play equipment. The park is surrounded by single family homes on small lots.

Polk Valley Park



This 59 acre park is the largest in the Township. Located on Polk Valley Road, it is easily accessible from Saucon Valley High School and the surrounding residential neighborhoods. It's primarily an active recreation park, containing baseball, softball, soccer and multi-purpose fields. However, its size and numerous paths and driveways provide ample opportunities for passive recreation as well. It is surrounded by single family homes and agricultural uses.

Southeastern Park



This 11 acre park, located off Wassergass Road, provides active and passive recreation opportunities. The site contains a softball field, pavilion, permanent restrooms, play equipment and picnic areas. Multi-use open fields and wooded areas also exist. A wildflower meadow featuring walking paths and a bird blind is currently being created.

Heller Homestead Park



The 14 acre park is dedicated to passive recreation and historic preservation. It contains the historic Heller Homestead buildings and the remains of the historic barn. An herb garden has been added to the homestead area. Nature trails lead from the homestead into a natural area which features woodlands and steep slopes. The natural area is adjacent to Saucon Creek. The neighboring property, which contains the Society Hill and Four Seasons developments, also contains steep slopes adjacent to Saucon Creek. These slopes are a valuable natural resource which should be considered for preservation as an extension of the park.

Kingston Park



This 1.93 acre park is planned for passive recreation. It is intended to function in concert with the neighboring property in order to provide pedestrian and vehicular access to the Lutz- Franklin Schoolhouse. This park also has the potential to contain a relocated historic structure, a pavilion, gardens and a walking trail. A turfgrass lawn and hedgerows currently exist on the site.

Lutz-Franklin Schoolhouse



The newly restored Lutz-Franklin Schoolhouse sits on a 0.69 acre parcel at the intersection of Limpar Lane and Countryside Lane. The building which exists on the site is believed to have been in use from 1880 until 1958. However, the site has been home to a schoolhouse since as early as 1768. Further development is planned to provide opportunities for passive recreation and education, while preserving the historical context of the site.

While the Township parks are of variable size and character, they may each present unique opportunities for connection to preserved open spaces. They may not be typical of preserved open space, but each of the parks should be considered as an important piece of the open space network.

The opportunities provided by creating connections to public entities such as schools, recreation facilities and government owned land should also be considered when preserving open spaces. School District property, which is private property, may have the potential to act as a piece of an open space network. Agreements may be made to permit a trail through district property in order to link open spaces or parks. Additionally, open space preservation adjacent to schools and other high traffic uses, can help mitigate traffic problems by limiting the quantity of dwellings in the immediate area. Open spaces can also help buffer high impact portions of a campus, such as athletic fields, from surrounding uses. The preservation of open space adjacent to schools may also act as an extension of the campus and provide opportunities for environmental or agricultural education.

Saucon Valley High School is the only significant School District owned property in the Township. While it is not public property, the 104 acre campus provides opportunities for active recreation as the grounds contain numerous athletic fields which may be available for public use when not in use by the School District. Additionally, a walking path is proposed to link Saucon Valley High School to nearby Polk Valley Park. This land could act as a link in the overall open space network.



The view of the Saucon Valley Schools from Polk Valley Park shows the potential for linkages between open spaces and School District properties.

Hellertown Borough Authority owns large swaths of land comprised of numerous parcels in the south central portion of the Township. These parcels are private property and should not be considered when planning trails, parks or other public uses. They do however provide wildlife habitat, scenic views, greenway links and wildlife corridors and habitat as they are preserved as woodlands and act as groundwater recharge areas. Much of the area's drinking water supply depends on these preserved areas.

This inventory shows that the Township already contains numerous parcels which may act as open space. While these parcels may not be owned or controlled by the Township, and should not be considered as typical preserved open space, these parcels may offer different opportunities for the Township. These existing parcels may help to establish a framework for the development of an overall open space network.

Goals

The preservation of any single piece of open space may appear to be beneficial. However, the means by which to preserve open spaces will be limited. Therefore, decisions on which pieces of open space to preserve should not be taken lightly. It is important to understand that while preservation of a parcel as open space may be justified purely on the merits of preservation, parcels which perform certain functions in addition to being open space will be the most valuable for preservation. With that in mind, it is important to establish goals for each parcel and the open space network as a whole, which the Township should strive to achieve through preservation. These goals include:

1. Preserving, protecting or conserving open space, natural areas, historically important areas, agricultural lands and other culturally important areas;
2. Providing passive and active recreation areas where they are needed;
3. Restoring or rehabilitating brownfields and other underused properties to their highest potential in the best interest of the community;
4. Protecting and rehabilitating properties which directly affect groundwater or other resources which may have a direct effect on the health, safety and welfare of the community;
5. Protecting lands which are in previously identified environmentally sensitive areas such as the Floodplain or Carbonate Geology Overlay Districts;
6. Creating links to and from neighboring communities such as Hellertown Borough, the City of Bethlehem, Upper Saucon Township and others;
7. Creating links to and from natural areas and cultural or recreational sites;
8. Creating links which connect portions of the Township across Route 78;
9. Supporting land use and planning goals for the Township and the region as described in the Lehigh Valley Comprehensive Plan;
10. Protecting the overall character and aesthetic qualities of the Township.



Agriculture has been a way of life in Lower Saucon Township for hundreds of years. Agricultural lands should be preserved due to their historic and cultural significance.



The Carbonate Geology Overlay District merits protection through preservation in order to avoid dangerous conflicts between sinkholes and development.

These goals have been established in order to help guide the Township toward preservation of high quality open space, or open space which can serve a greater purpose, rather than simply preserving the greatest quantity of open space possible. The goals are not necessarily intended to be applied to each parcel considered for preservation, but rather a set of standards or necessary background information of which the Open Space Committee should be aware when carrying out their duties. The goals are further developed and made quantifiable as a checklist in the following section.

Methods and Procedures for Open Space Preservation

The Township will acquire the majority of its open space through dedication from development, donation of funds, land or easements or from purchase of land or easements using funds specified for open space preservation in concert with county, state and federal grants. It will be the duty of the Open Space Committee, or other responsible body, to oversee the development of the open space network in accordance with the Open Space Plan. This body will be responsible for researching individual parcels and making recommendations to the Township Council on which properties should be pursued for preservation. The Committee should consider economic, environmental, cultural and social factors when considering recommendations for preservation.

This Committee should be expected to meet on a regular basis and be knowledgeable of the Township's preservation needs and wants, along with its history and culture, and development trends. Members of this Committee should be expected to keep apprised of submissions for subdivisions and land developments, in order to understand their impacts on the Township in general, and specifically on the open space network. They should also be expected to regularly attend conferences or seminars and utilize other methods to continually be updated on open space preservation methods and issues throughout the region. Using this knowledge, this Committee should be expected to actively investigate open space preservation opportunities, while forming relationships with similar bodies which may exist in neighboring municipalities and other private or public organizations which may be actively involved in open space preservation. The committee may also be expected to work with the Township Historical Committee, Parks and Recreation Board, Public Works Department and any other body which may provide information regarding the character of a site, its position within the open space network, care and maintenance concerns or any other pertinent subject.

While management of any open space budget would be the responsibility of the Township Council and Township Staff, the Open Space Committee would be expected to be knowledgeable of the budget. Open space funds must be carefully managed in order to best serve the Township. These funds should be primarily used for open space preservation through purchase of land or easements. However, the funds should also be used to fund activities, information sessions or seminars which may further the cause of open space preservation in the Township. It is the responsibility of the Open Space Committee to consider the importance of each and to make recommendations to the Township Council regarding allocation of funds for open space preservation itself and related activities.

When considering a parcel for preservation, the Committee is not expected to rely solely on their personal knowledge of that parcel. The contents of this plan, including the attached maps, and any other published information, should be used to implement the following checklist. The checklist should be used as a reference to help guide the Township in making decisions regarding preservation of specific properties. The checklist should be used as a tool to decide whether a parcel may be suitable for preservation. As the needs and wants of the Township may change over time, it may be counterproductive to attempt to apply the checklist to all parcels in the Township as part of this Plan, which is compiled at a static moment in time. For example, the preservation

of agricultural land may be the most important goal for the Township in 2007. However, in five years, the goals of the Township may shift in accordance with development patterns or other outside factors. Additionally, outside factors which may affect a parcel over time may also affect the results of the checklist. Therefore, the checklist may be applied to any parcel at any time, rather than be applied to all parcels at this moment.

This approach should leave the Township with flexibility in deciding which parcels may be preserved, by not ranking all parcels at this moment. The questions included in the checklist are meant to lead to further conversation regarding the preservation of a parcel. It is conceivable that in any given year, the Township may examine the open space preservation funds and consider numerous parcels for preservation. At this time, the checklist may be used in order to help the Township quantify the benefits of preserving each parcel. The results of applying the checklist can then be utilized in making a decision on which, if any, parcel is to be preserved.

Open Space Preservation Checklist

The size of the parcel should be listed and a check mark should be placed in the space next to each criteria which describes the parcel in question. The quantity of check marks combined with the size of the parcel should be used as a guide to making informed decisions regarding the preservation of a parcel.

1. _____ State the size of the parcel in acres.
2. _____ The parcel is currently available for preservation through outright purchase on the open market, sale or donation of a conservation easement, or dedication of land to the Township.
3. _____ The parcel is easily accessible to much of the Township or can provide open space to areas which lack accessible open space.
4. _____ The parcel provides opportunities to create links between Lower Saucon Township and other municipalities or between the many different residential areas within the Township.
5. _____ The parcel is a former industrial or commercial site which has been abandoned or underused, has negative effects on the surrounding environment, and which presents opportunities for remediation or adaptive reuse by the Township.
6. _____ The parcel is currently or has formerly been used for agricultural or nursery production, or displays characteristic of agricultural sites such as farmhouses, barns, fallow fields or hedgerows.
7. _____ The parcel exists within the Carbonate Geology Overlay Zone, as defined by the Township Zoning Map.
8. _____ The parcel contains Prime Agricultural Soils or Soils of Statewide Importance in accordance with the Northampton County Soil Survey.
9. _____ The parcel contains floodplains or hydric soils.
10. _____ The parcel contains steep slopes of 8% or greater slope.
11. _____ The parcel exists within the Watershed Protection Overlay Zone, as defined by the Township Zoning Map.
12. _____ The parcel contains lakes, ponds or associated buffers.
13. _____ The parcel contains wetlands, wetland buffers or vernal pools.
14. _____ The parcel contains Waters of the Commonwealth, Waters of the U.S., other watercourses or riparian buffers.

15. _____ The parcel contains woodlands.
16. _____ The parcel contains environmentally sensitive woodlands.
17. _____ The parcel provides opportunities to create links between preserved open spaces, parks, recreation areas, culturally or historically important sites, natural areas or important habitat elements.
18. _____ The parcel exists within an area recommended for preservation by the Township NRI or an Open Space Preservation Focus Area, as shown on Maps A-13 through A-18.
19. _____ The parcel contains springs or seeps.
20. _____ The parcel contains rock outcrops.
21. _____ The parcel contains an exceptional value or high quality stream, or a tributary or headwater thereof.
22. _____ The parcel contains habitat suitable for endangered, threatened or rare species which are indigenous to the area.
23. _____ The parcel contains endangered, threatened or rare plant species.
24. _____ The parcel contains a building, feature or place listed on the Register of Historic Places or which is significant to the general character, history or cultural heritage of the Township or region, regardless of age.
25. _____ The parcel contributes strongly to the aesthetic quality and/or general character or provides scenic views of the Township or region.
26. _____ The parcel strongly detracts from the aesthetic quality and/or general character of the Township or region and presents potential for remediation in order to vastly improve the scenic value.
27. _____ The parcel contains or has the potential to contain natural or man made features which play an integral role in stormwater management for the surrounding area.

Sample Open Space Preservation Checklist

In order to demonstrate how to apply the contents of the checklist, it is applied to the Yerger property, a residential property which contains many natural features and has already been conserved through a conservation easement. This property is shown as No. 10 on Map A-10, Existing Open Space Inventory. Notes intended to clarify how each checklist category is applied are provided in italics.

1. 27 ac. State the size of the parcel in acres. (*The property contains five separate parcels with a combined area of approximately 27 acres.*)
2. √ The parcel is currently available for preservation through outright purchase on the open market, sale or donation of a conservation easement, or dedication of land to the Township. (*This category must be judged based on the discretion of the Committee, considering any contact with the property owners.*)
3. √ The parcel is easily accessible to much of the Township or can provide open space to areas which lack accessible open space. (*This property exists on Easton Road, one of the Township's primary roads, as shown in Map A-1, Lower Saucon Township Map.*)
4. _____ The parcel provides opportunities to create links between Lower Saucon Township and other municipalities or between the many different residential areas within the Township. (*The property does not border any neighboring municipality, nor does it provide the opportunity to connect different areas of the Township, as can be seen on Map A-1, Lower Saucon Township Map.*)
5. _____ The parcel is a former industrial or commercial site which has been abandoned or underused, has negative effects on the surrounding environment, and which presents opportunities for remediation or adaptive reuse by the Township. (*This parcel is not an industrial or commercial site, as shown by Map A-2, Existing Land Uses and Zoning Districts. Previous uses may be obtained through examinations of property records, information provided by the land owner or general knowledge of the property.*)
6. _____ The parcel is currently or has formerly been used for agricultural or nursery production, or displays characteristic of agricultural sites such as farmhouses, barns, fallow fields or hedgerows. (*This criteria may be confirmed through the use of Map A-2, Existing Land Uses and Zoning Districts, Map A-3, Agricultural Properties, or through the knowledge of the Committee regarding current or past conditions and uses of this property.*)

7. The parcel exists within the Carbonate Geology Overlay Zone, as defined by the Township Zoning Map. *(Portions of the parcels exist within the Carbonate Geology Overlay Zone, as shown on Map A-5, Carbonate Geology, and the Township Zoning Map.)*
8. The parcel contains Prime Agricultural Soils or Soils of Statewide Importance in accordance with the Northampton County Soil Survey. *(The parcels do not contain any agricultural soils, as shown on Map A-6, Soils.)*
9. The parcel contains floodplains or hydric soils. *(The parcels contain the hydric soil, BeB, Baile extremely stony silt loam, as shown on Map A-6, Soils.)*
10. The parcel contains steep slopes of 8% or greater slope. *(The parcels contain slopes as steep as 25% as shown by Map A-7, Slopes.)*
11. The parcel exists within the Watershed Protection Overlay Zone, as defined by the Township Zoning Map. *(The parcels do not exist within the Watershed Protection Overlay Zone, as shown in Map A-8, and the Township Zoning Map.)*
12. The parcel contains lakes, ponds or associated buffers. *(No lakes, ponds or buffers are present on this site, as shown on Maps A-8 and A-9. Additionally, other published information or information provided by the property owner may be utilized to confirm the existence of these features.)*
13. The parcel contains wetlands, wetland buffers or vernal pools. *(The parcels contain wetlands and vernal pools, as shown on Map A-9, Hydric Features.)*
14. The parcel contains Waters of the Commonwealth, Waters of the U.S., other watercourses or riparian buffers. *(The parcels contain a stream, as shown on Map A-9, Hydric Features.)*
15. The parcel contains woodlands. *(The parcels contain woodlands as shown on Map A-10, Woodland Areas.)*
16. The parcel contains environmentally sensitive woodlands. *(Environmentally sensitive woodlands exist where hydric soils and steep slopes exist in the same areas as woodlands, as shown on Map A-11, Composite Natural Features.)*

17. _____ The parcel provides opportunities to create links between preserved open spaces, parks, recreation areas, culturally or historically important sites, natural areas or important habitat elements. *(The property does not border any preserved parcels as shown on Map A-12, Existing Open Space Inventory.)*
18. √ The parcel exists within an area recommended for preservation by the Township NRI or an Open Space Preservation Focus Area, as shown on Maps A-13 through A-18. *(This parcel exists within the area known as Granite Hill, as shown in Map A-16. Map no.'s A-13 through A-18 show the Open Space Preservation Focus Areas.)*
19. _____ The parcel contains springs or seeps. *(No seeps or springs are shown on the attached maps. However, additional published information or information provided by the property owner may be utilized to confirm the existence of certain features.)*
20. _____ The parcel contains rock outcrops. *(The attached maps do not provide information regarding rock outcrops. However, their existence may be verified visually or through information provided by a property owner. Additionally, the presence of very steep slopes or woodlands may indicate the possible presence of rock outcrops.)*
21. _____ The parcel contains an exceptional value or high quality stream, or a tributary or headwater thereof. *(The Lehigh Valley Comprehensive Plan shows Silver Creek and its tributary as the only exceptional value or high quality stream in the Township. However, it is unclear whether all streams in the Township have been mapped and/or categorized. Any future changes to stream classification in the Township should be considered by the Committee.)*
22. _____ The parcel contains habitat suitable for endangered, threatened or rare species which are indigenous to the area. *(The attached maps do not provide information regarding habitat. However, it is recommended that when it is suspected that valuable habitat may exist, a Pennsylvania Natural Diversity Inventory (PNDI) search be conducted.)*
23. _____ The parcel contains endangered, threatened or rare plant species. *(The attached maps do not provide information regarding endangered, threatened or rare plant species. Additional information regarding these species may be obtained through DCNR, PNDI, visual confirmation or information provided by the property owner.)*

24. _____ The parcel contains a building, feature or place listed on the Register of Historic Places or which is significant to the general character, history or cultural heritage of the Township or region, regardless of age. *(The maps attached do not provide information regarding historically or culturally important places. Information on historic properties may be found at the National Register of Historic Places website. Additionally, historically, culturally or otherwise important sites may be considered at the discretion of the Committee.)*
25. √ The parcel contributes strongly to the aesthetic quality and/or general character or provides scenic views of the Township or region. *(This property contains steep slopes and woodlands which are typical of this portion of the Township. Additionally, it fronts on one of the main circulation routes, offering views to many travelers passing through the Township.)*
26. _____ The parcel strongly detracts from the aesthetic quality and/or general character of the Township or region and presents potential for remediation in order to vastly improve the scenic value. *(Scenic value shall be left to the discretion of the committee. When considering preservation of a property which detracts from the aesthetic quality of the Township, the committee must also consider the costs of restoring this property, including planning, implementation and materials.)*
27. _____ The parcel contains or has the potential to contain natural or man made features which play an integral role in stormwater management for the surrounding area. *(Information regarding stormwater management is not provided in this plan. This criteria should be applied to properties which currently contain stormwater management facilities or those properties which currently flood or otherwise contribute negatively to the area's stormwater management systems.)*

The results of the checklist show that the Yerger property has received eleven check marks and has an area of 27 acres. As the checklist includes twenty-seven different criteria, eleven checks may not appear to be a strong score. However, it should be noted that it is not possible to receive check marks in all twenty seven fields. Several of the criteria deal with conditions that probably will not co-exist with certain other criteria. For instance, it is highly unlikely that the same parcel could receive a check mark as a property which both strongly contributes to and strongly detracts from the character of the Township. Therefore, it is important to remember that the checklist is not to be applied in order to simply calculate a raw score.

The checklist is intended to encourage further research into any specific property and to give general insights into the character of a property. For instance, in viewing the attached maps while applying the checklist, we see that the Yerger property contains many natural resources, including hydric soils, vernal pools, a watercourse, steep slopes, woodlands and environmentally sensitive woodlands. This site appears to be a strong candidate for preservation, as it contains many delicate natural resources. However, this seeming overabundance of natural resources



Where many natural resources exist together, the Township Zoning Ordinance may serve to adequately protect the property.

may mitigate a need for preservation, as the requirements of the Township Zoning Ordinance may adequately protect this property. In this case, the Committee must analyze the property and determine whether the development restrictions which would be placed on the property would be sufficient to stop developers from trying to develop this site. The Committee must consider whether other properties in the Township, which may be more easily developed or may be facing immediate development pressure, should be considered for preservation first. The Committee must also be aware of the status of open space preservation funding when making recommendations for preservation.



Historic structures may appear to increase a property's preservation value. However, the Township must consider safety and cost issues associated with maintaining these structures.

The checklist should also be used to encourage discussions regarding future uses for potentially preserved open spaces. For instance, a site which exists adjacent to neighboring municipalities and adjacent to other preserved open spaces may seem ideal for preservation in order to create links in a greenway. However, application of the checklist may indicate that the site contained an industrial use at one time. The Committee would then need to address issues regarding the health of the site and its suitability as a link in a greenway. Also, can the Township afford to fund measures to clean up the site?

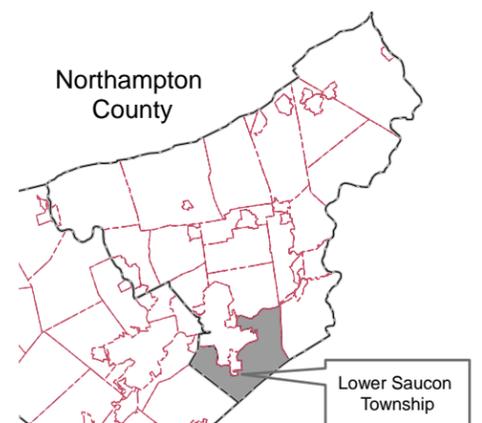
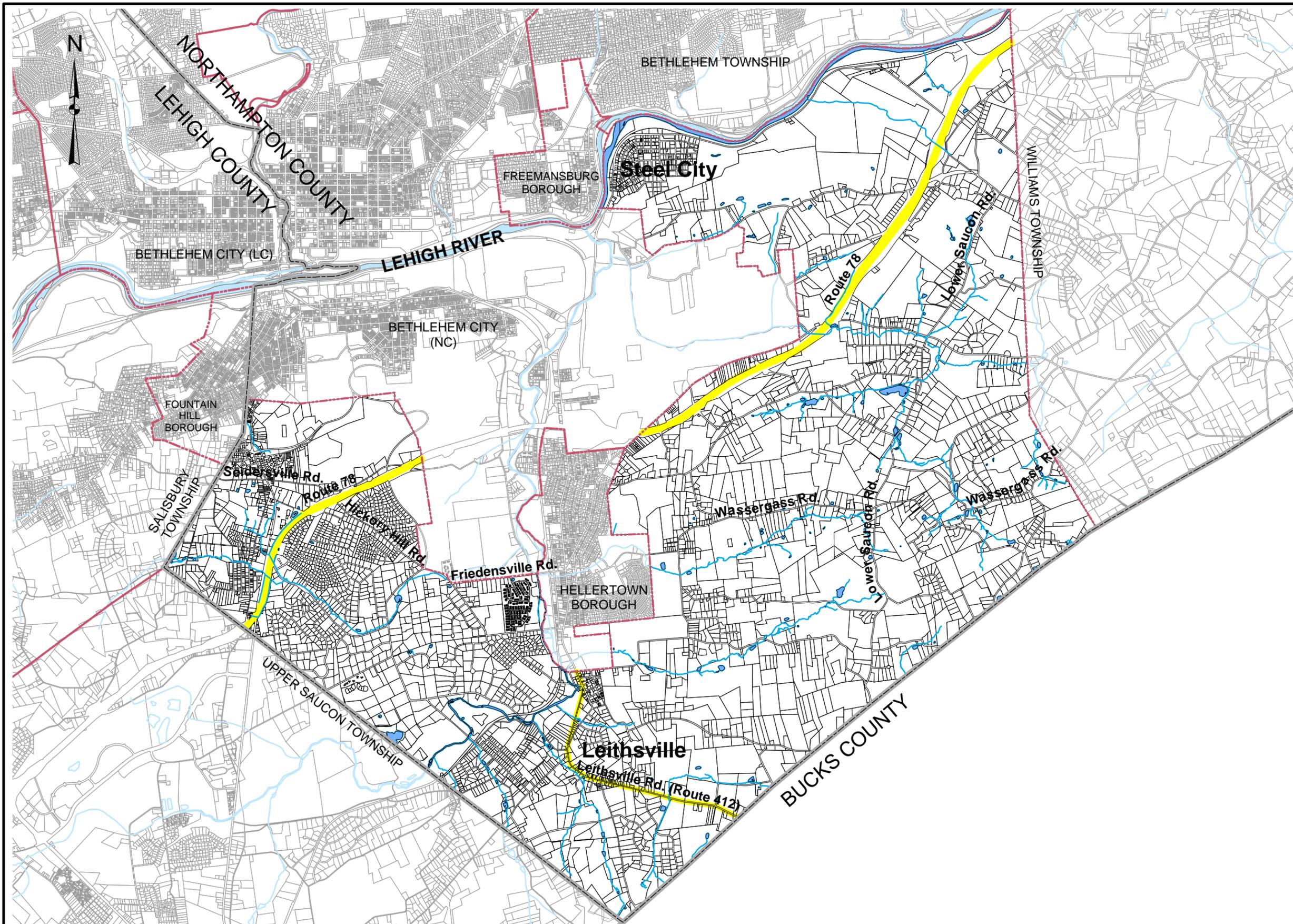
And would the Township be willing to assume any additional liability that may be associated with this property? In some cases, the Township may be willing to assume these additional responsibilities in order to reclaim a blighted site. In other cases, the Township may not be. However, in any case, the Committee must consider these issues when making their recommendations, rather than simply picking parcels off of a map.

Conclusion

As the population of Lower Saucon Township grows, preservation of open space will become a more important priority. However, open space preservation can only be successful if it is understood and embraced by the community as a whole. The Township already contains numerous open spaces, and the vast areas of agricultural lands and natural resources provide ample opportunity for further open space preservation. Preservation is already recommended in numerous Township documents, yet these have not been embraced. Goals, methods and procedures have now been suggested in order to help the Township make informed decisions regarding future open space preservation.

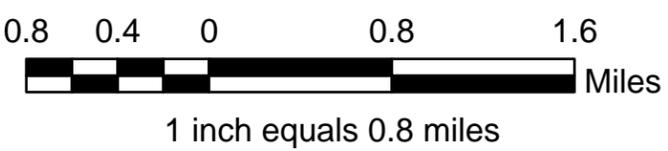
Appendices

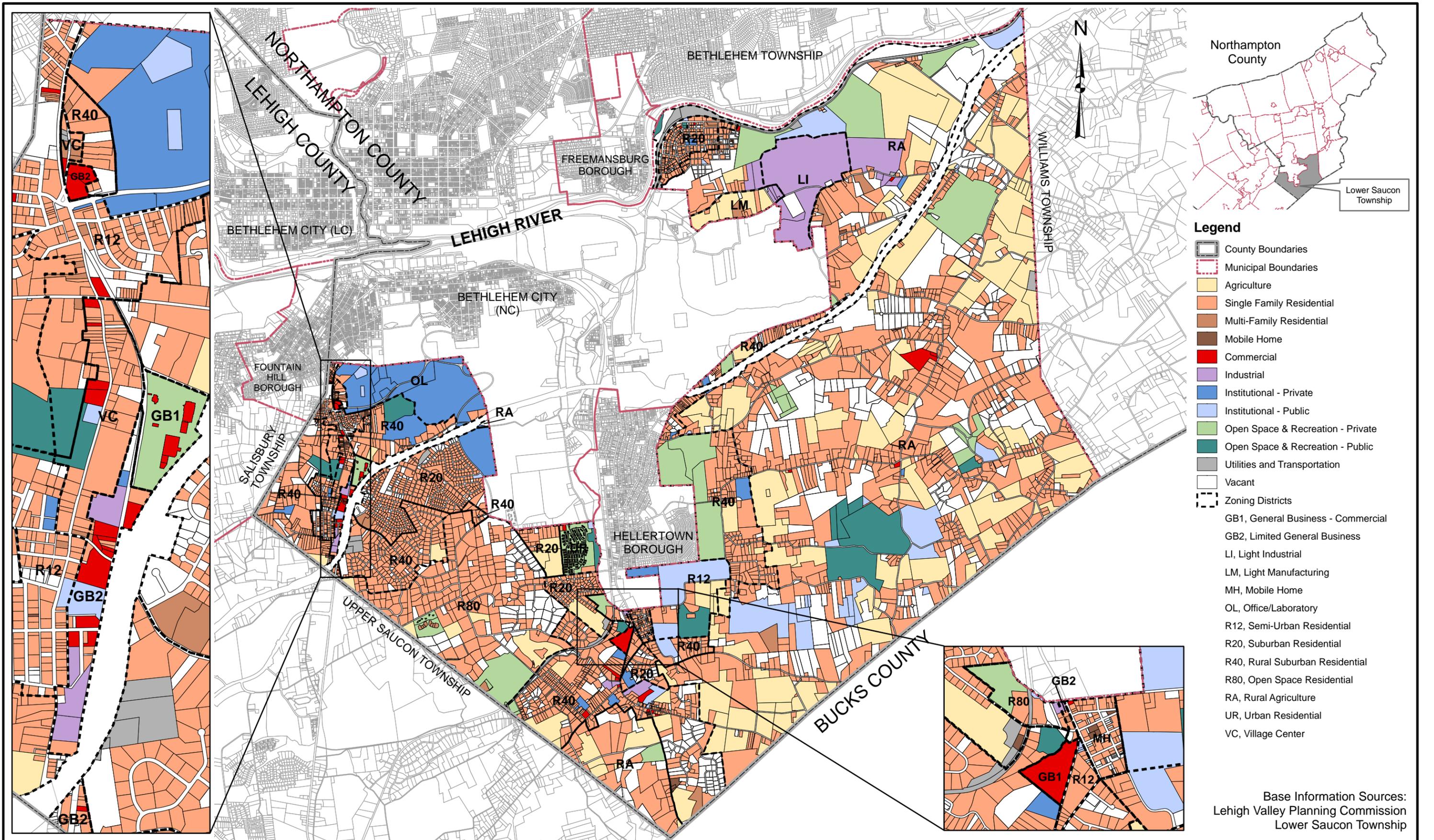
- A-1. Lower Saucon Township Map
- A-2. Existing Land Uses and Zoning Districts
- A-3. Agricultural Properties
- A-4. Geology
- A-5. Carbonate Geology
- A-6. Soils
- A-7. Slopes
- A-8. Watershed Protection Areas
- A-9. Hydric Features
- A-10. Woodland Areas
- A-11. Composite Natural Features
- A-12. Existing Open Space Inventory
- A-13. Open Space Preservation Focus Areas Overview
- A-14. Black River and Saucon Creek Corridors
- A-15. Lehigh River Corridor
- A-16. Crestline Road Ravine, Granite Hill & East Branch Saucon Creek Headwaters
- A-17. Swoveberg Hill & Cooks Creek Tributary Headwaters
- A-18. Kohlberg Hill & Silver Creek Wetlands

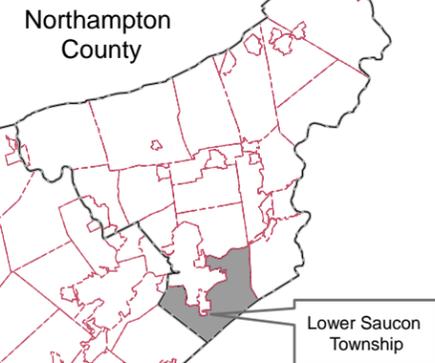
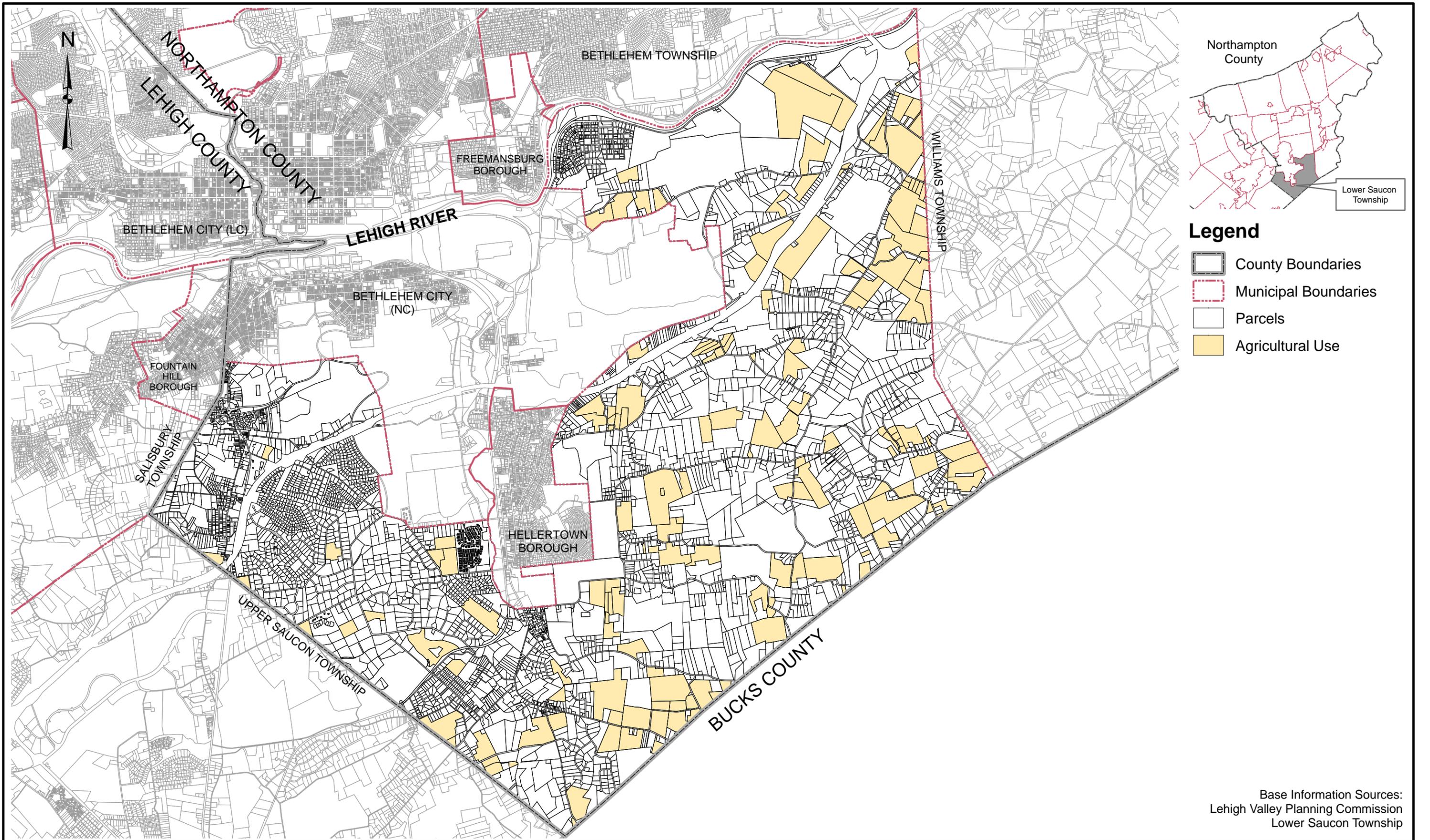


- Legend**
- County Boundaries
 - Municipal Boundaries
 - Parcels
 - Water Features
 - Rivers and Streams

Base Information Sources:
 Lehigh Valley Planning Commission
 Lower Saucon Township

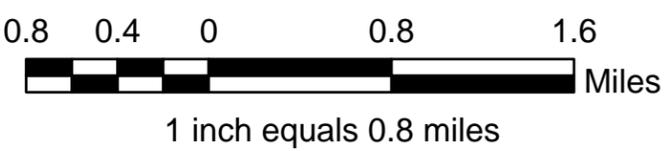


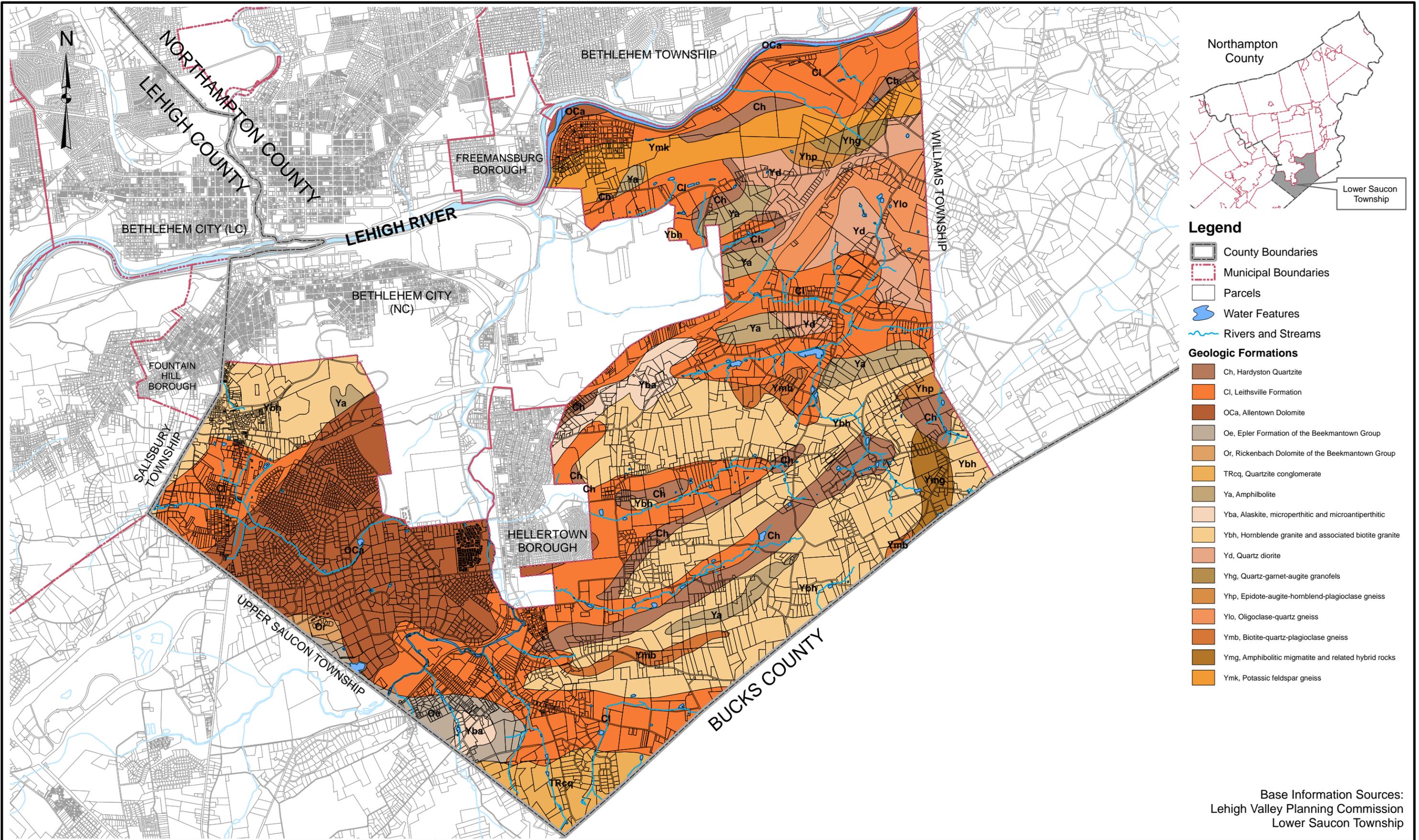


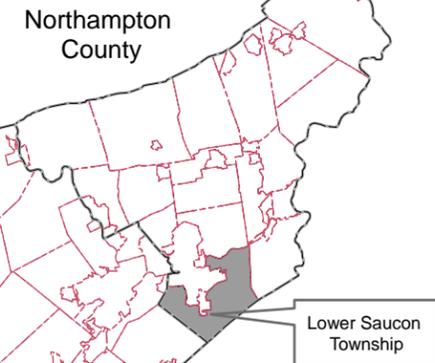
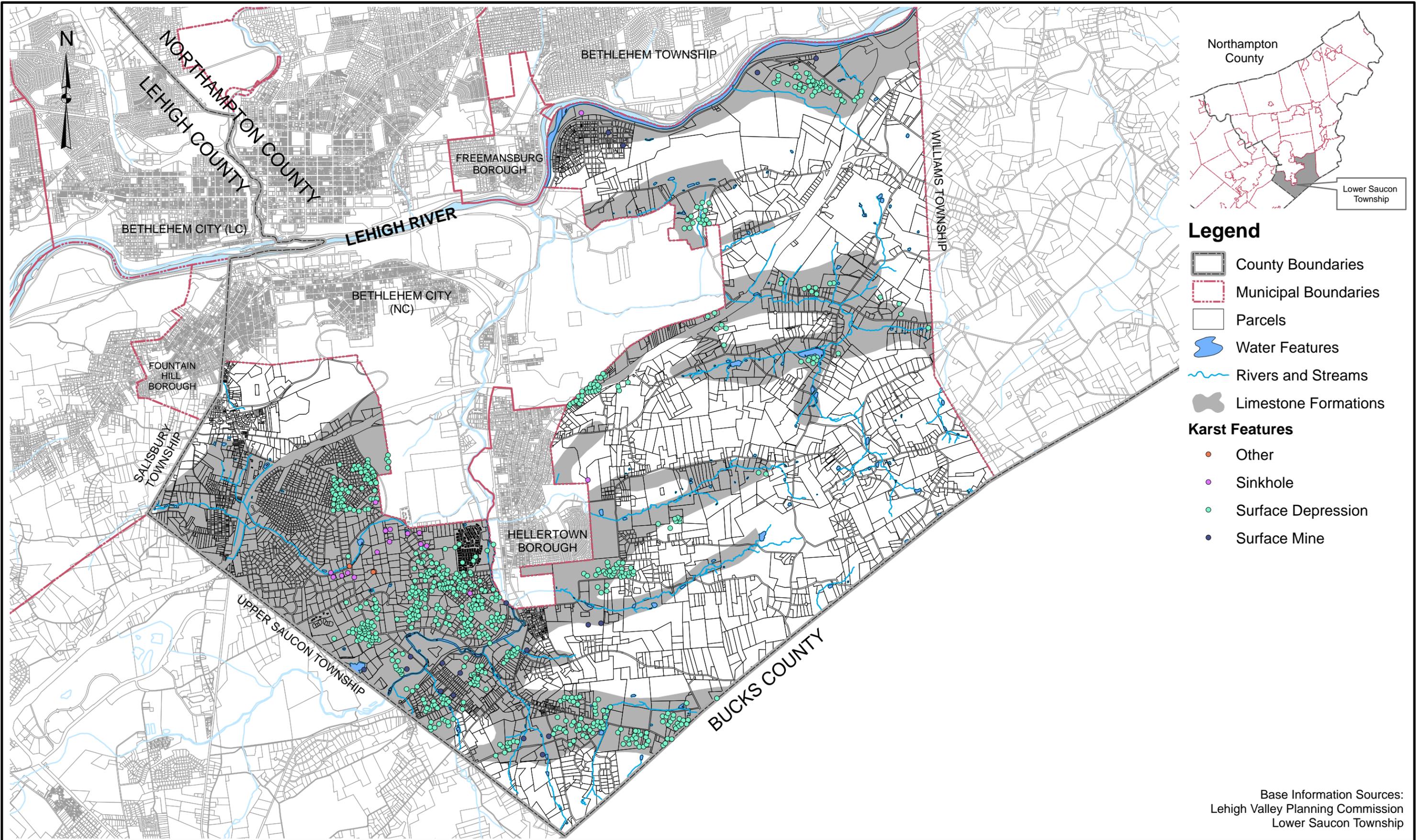


- Legend**
- County Boundaries
 - Municipal Boundaries
 - Parcels
 - Agricultural Use

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 Lower Saucon Township

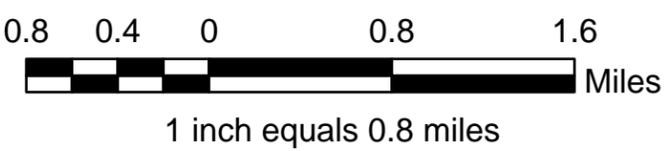


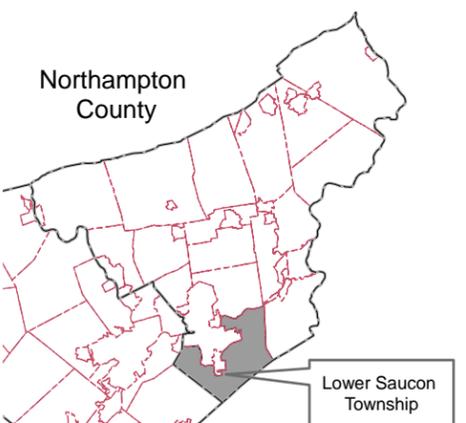
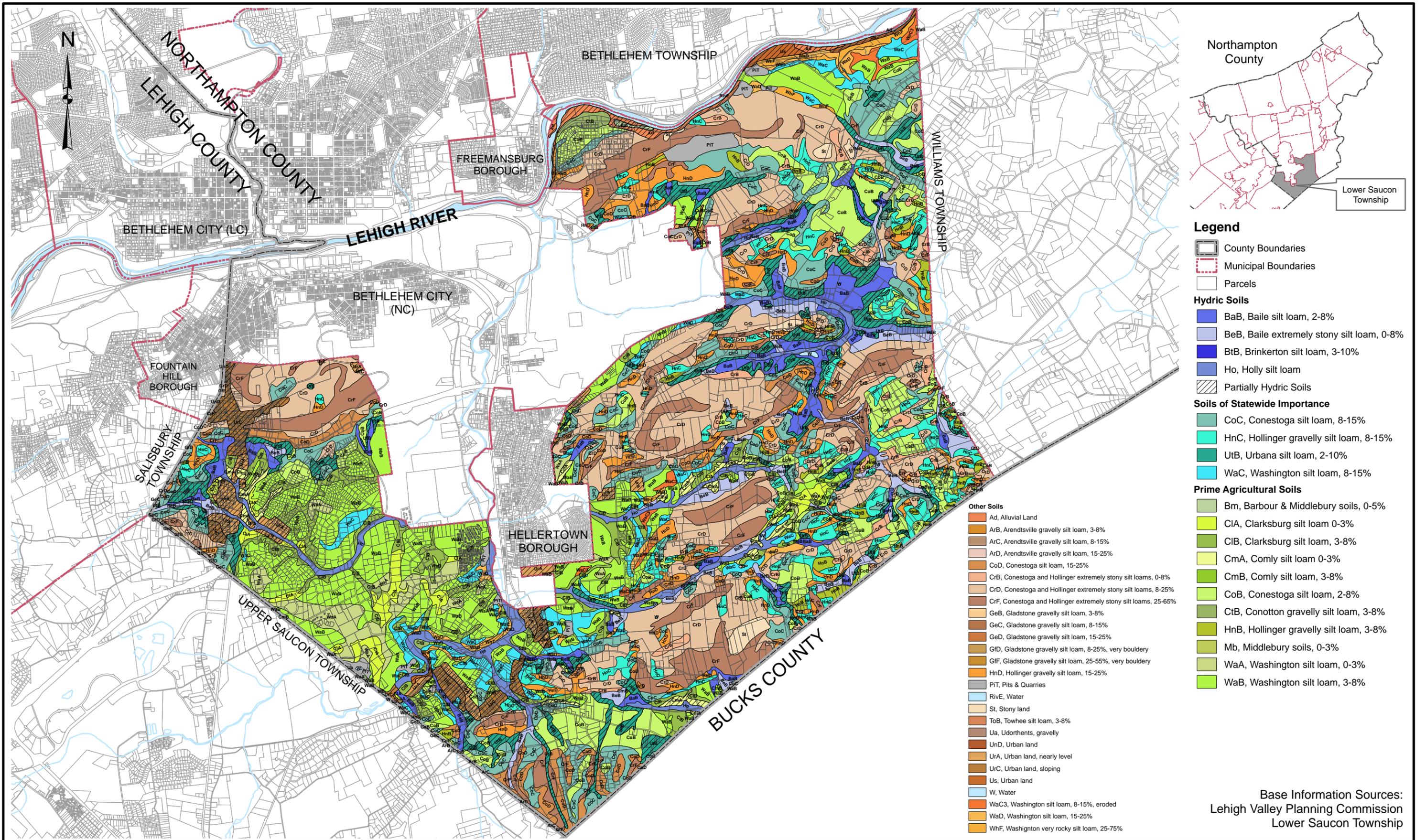




- Legend**
- County Boundaries
 - Municipal Boundaries
 - Parcels
 - Water Features
 - Rivers and Streams
 - Limestone Formations
- Karst Features**
- Other
 - Sinkhole
 - Surface Depression
 - Surface Mine

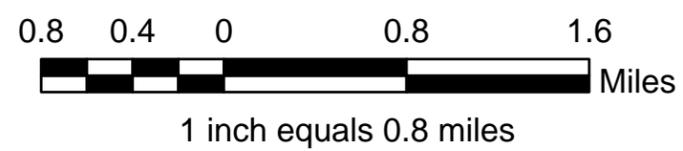
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 Lower Saucon Township

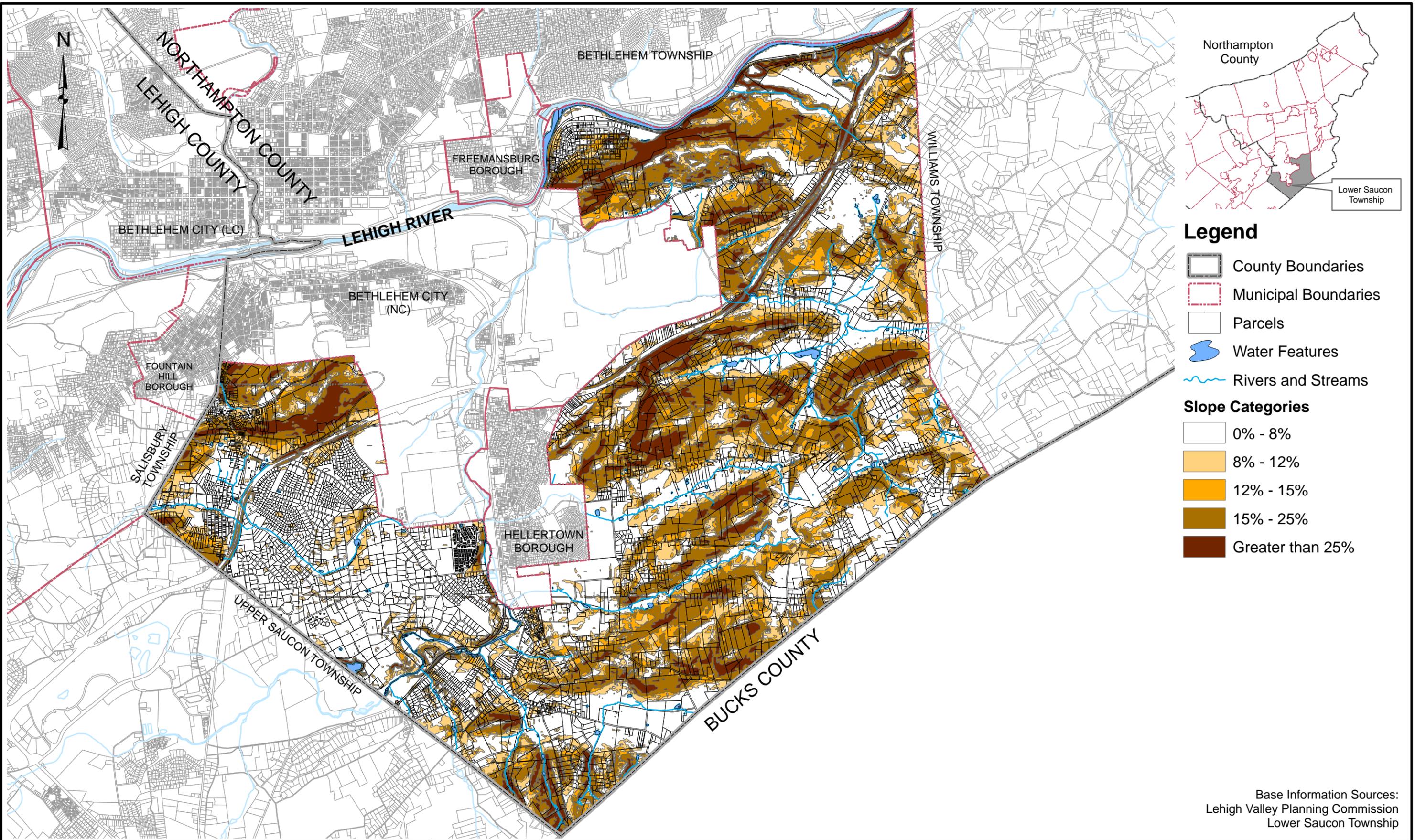




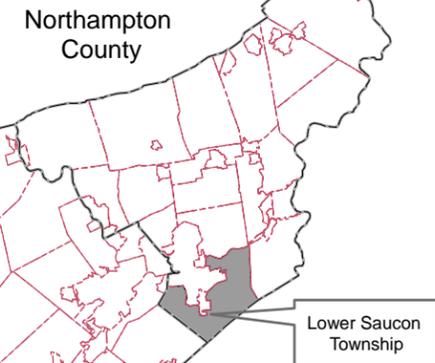
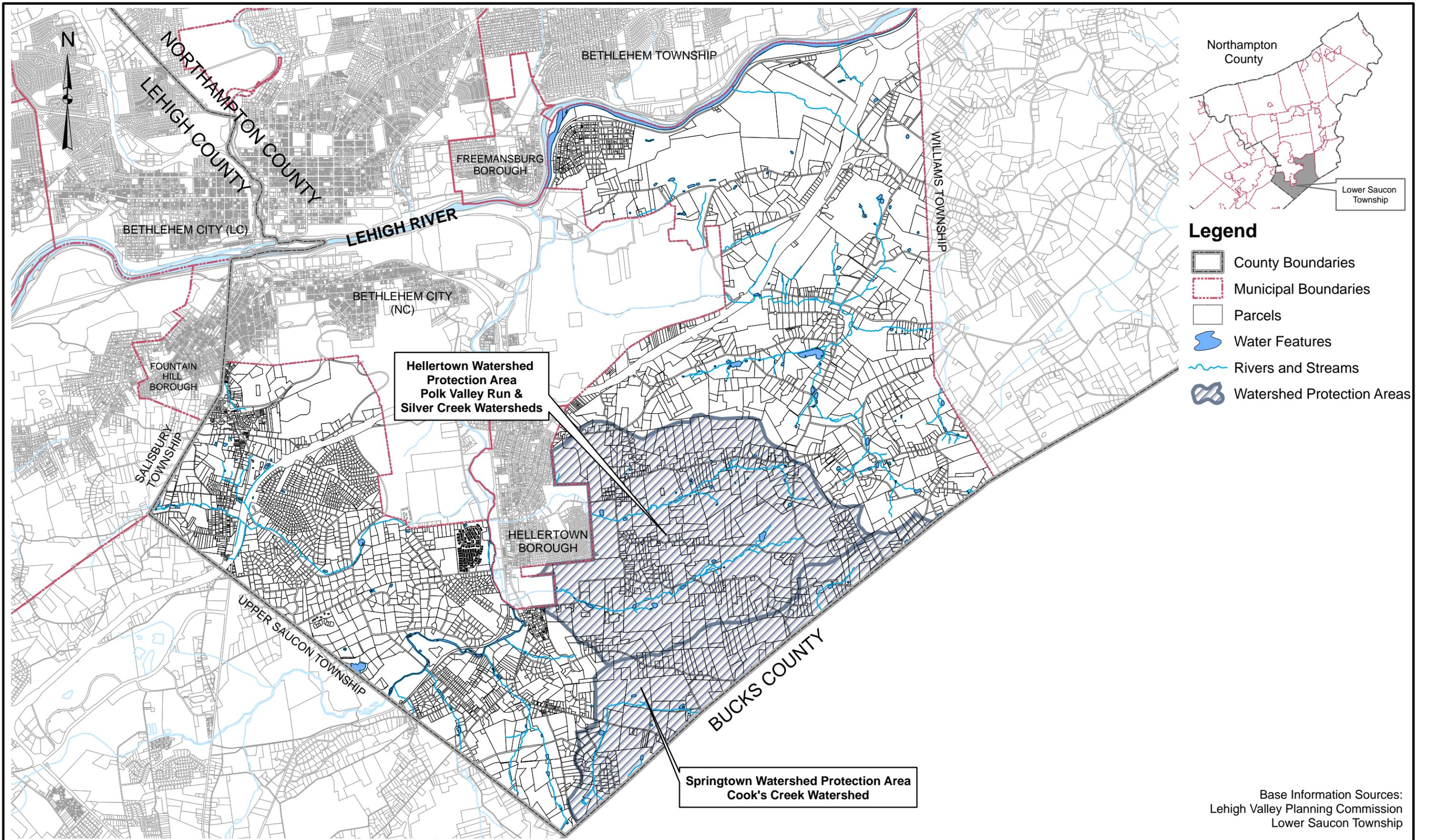
- Legend**
- County Boundaries
 - Municipal Boundaries
 - Parcels
- Hydric Soils**
- BaB, Baile silt loam, 2-8%
 - BeB, Baile extremely stony silt loam, 0-8%
 - BtB, Brinkerton silt loam, 3-10%
 - Ho, Holly silt loam
 - Partially Hydric Soils
- Soils of Statewide Importance**
- CoC, Conestoga silt loam, 8-15%
 - HnC, Hollinger gravelly silt loam, 8-15%
 - UtB, Urbana silt loam, 2-10%
 - WaC, Washington silt loam, 8-15%
- Prime Agricultural Soils**
- Bm, Barbour & Middlebury soils, 0-5%
 - ClA, Clarksburg silt loam 0-3%
 - ClB, Clarksburg silt loam, 3-8%
 - CmA, Comly silt loam 0-3%
 - CmB, Comly silt loam, 3-8%
 - CoB, Conestoga silt loam, 2-8%
 - CtB, Conotton gravelly silt loam, 3-8%
 - HnB, Hollinger gravelly silt loam, 3-8%
 - Mb, Middlebury soils, 0-3%
 - WaA, Washington silt loam, 0-3%
 - WaB, Washington silt loam, 3-8%
- Other Soils**
- Ad, Alluvial Land
 - ArB, Arendtsville gravelly silt loam, 3-8%
 - Arc, Arendtsville gravelly silt loam, 8-15%
 - Ard, Arendtsville gravelly silt loam, 15-25%
 - CoD, Conestoga silt loam, 15-25%
 - CrB, Conestoga and Hollinger extremely stony silt loams, 0-8%
 - CrD, Conestoga and Hollinger extremely stony silt loams, 8-25%
 - CrF, Conestoga and Hollinger extremely stony silt loams, 25-65%
 - GeB, Gladstone gravelly silt loam, 3-8%
 - GeC, Gladstone gravelly silt loam, 8-15%
 - GeD, Gladstone gravelly silt loam, 15-25%
 - GiD, Gladstone gravelly silt loam, 8-25%, very bouldery
 - GiF, Gladstone gravelly silt loam, 25-55%, very bouldery
 - HnD, Hollinger gravelly silt loam, 15-25%
 - PIT, Pits & Quarries
 - RvE, Water
 - St, Stony land
 - ToB, Towhee silt loam, 3-8%
 - Ua, Udorthents, gravelly
 - UnD, Urban land
 - UrA, Urban land, nearly level
 - UrC, Urban land, sloping
 - Us, Urban land
 - W, Water
 - WaC3, Washington silt loam, 8-15%, eroded
 - WaD, Washington silt loam, 15-25%
 - WhF, Washignton very rocky silt loam, 25-75%

Base Information Sources:
Lehigh Valley Planning Commission
Lower Saucon Township





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 Lower Saucon Township

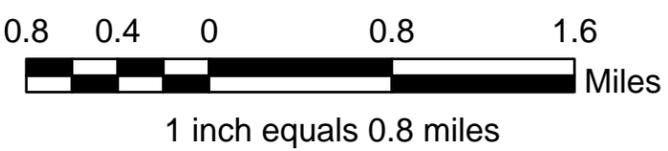


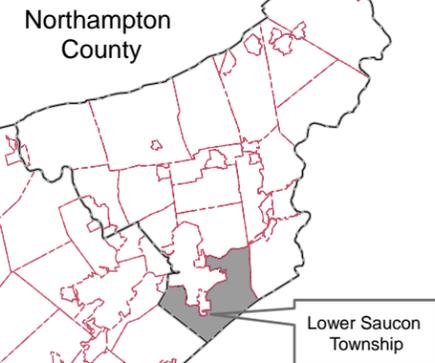
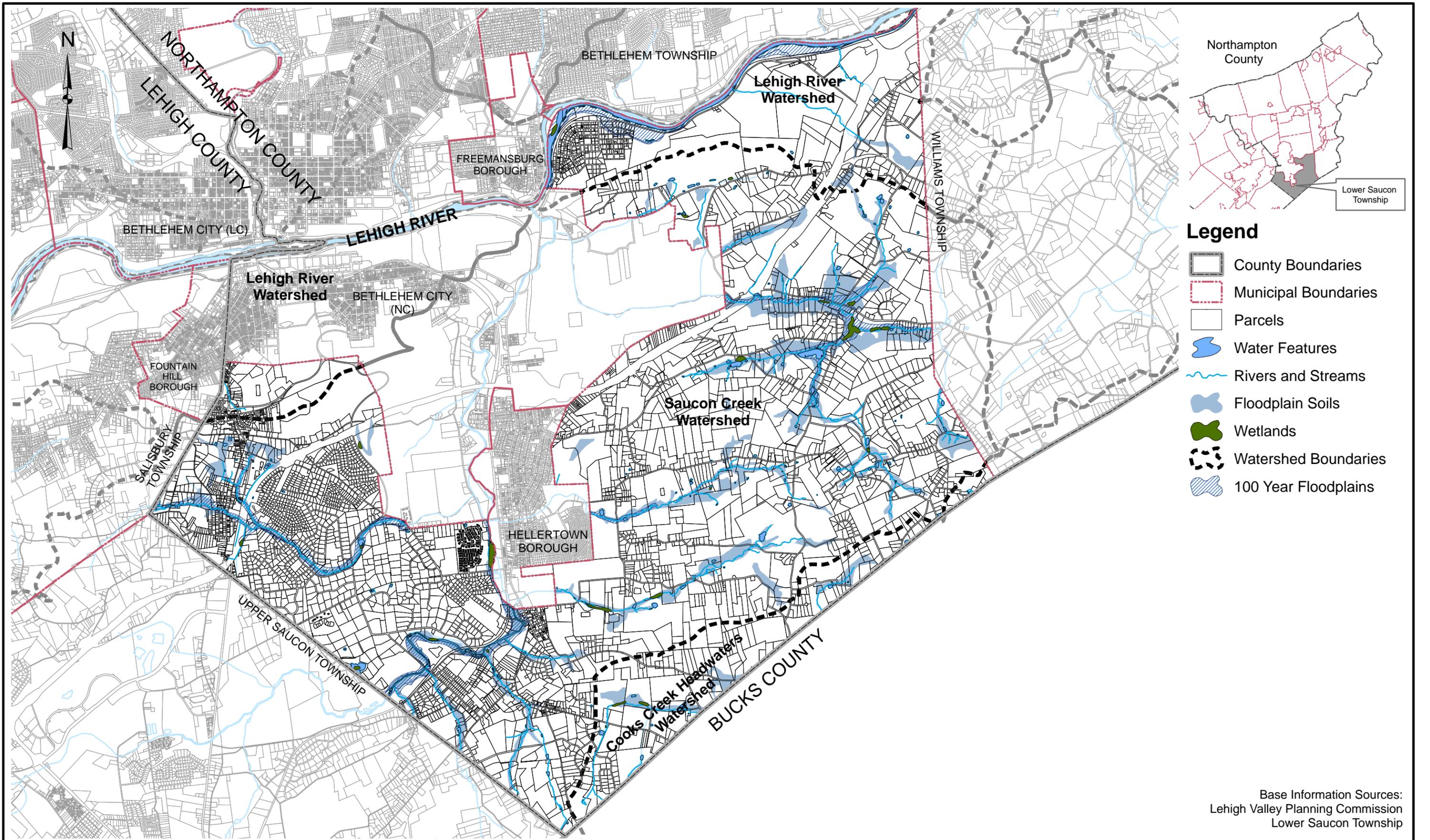
- Legend**
- County Boundaries
 - Municipal Boundaries
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 - Water Features
 - Rivers and Streams
 - Watershed Protection Areas

**Hellertown Watershed Protection Area
Polk Valley Run &
Silver Creek Watersheds**

**Springtown Watershed Protection Area
Cook's Creek Watershed**

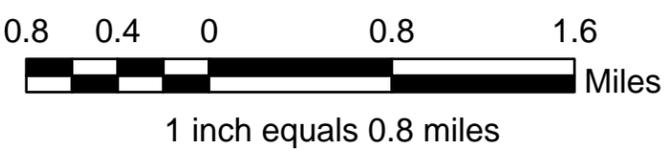
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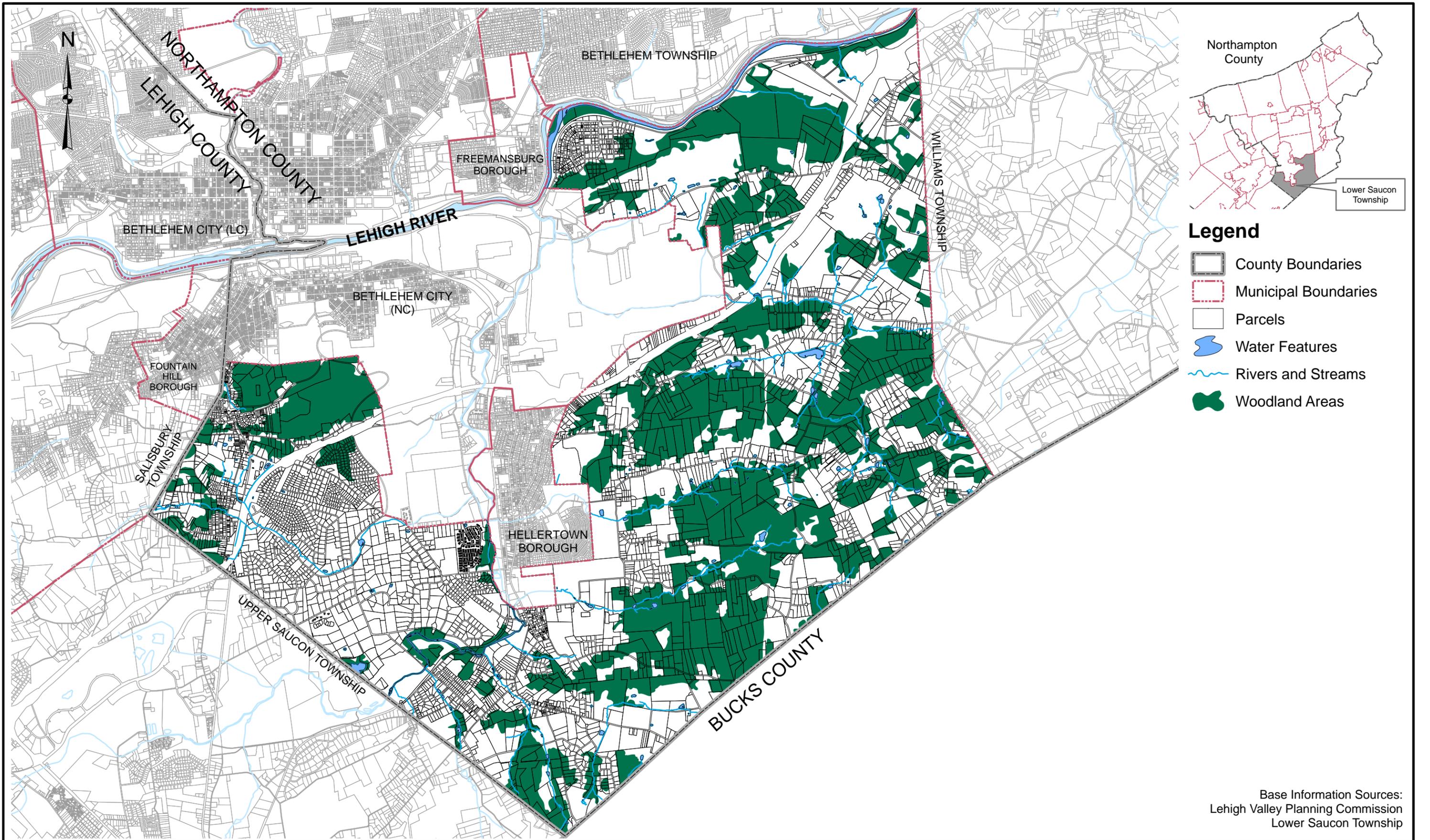


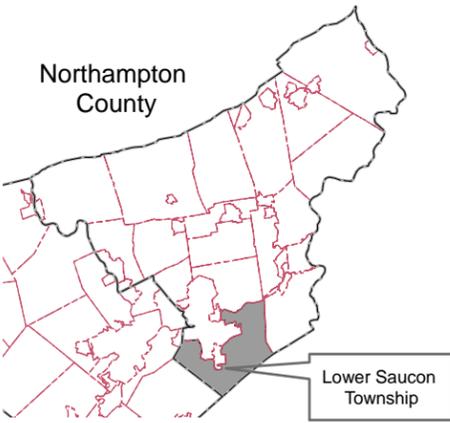
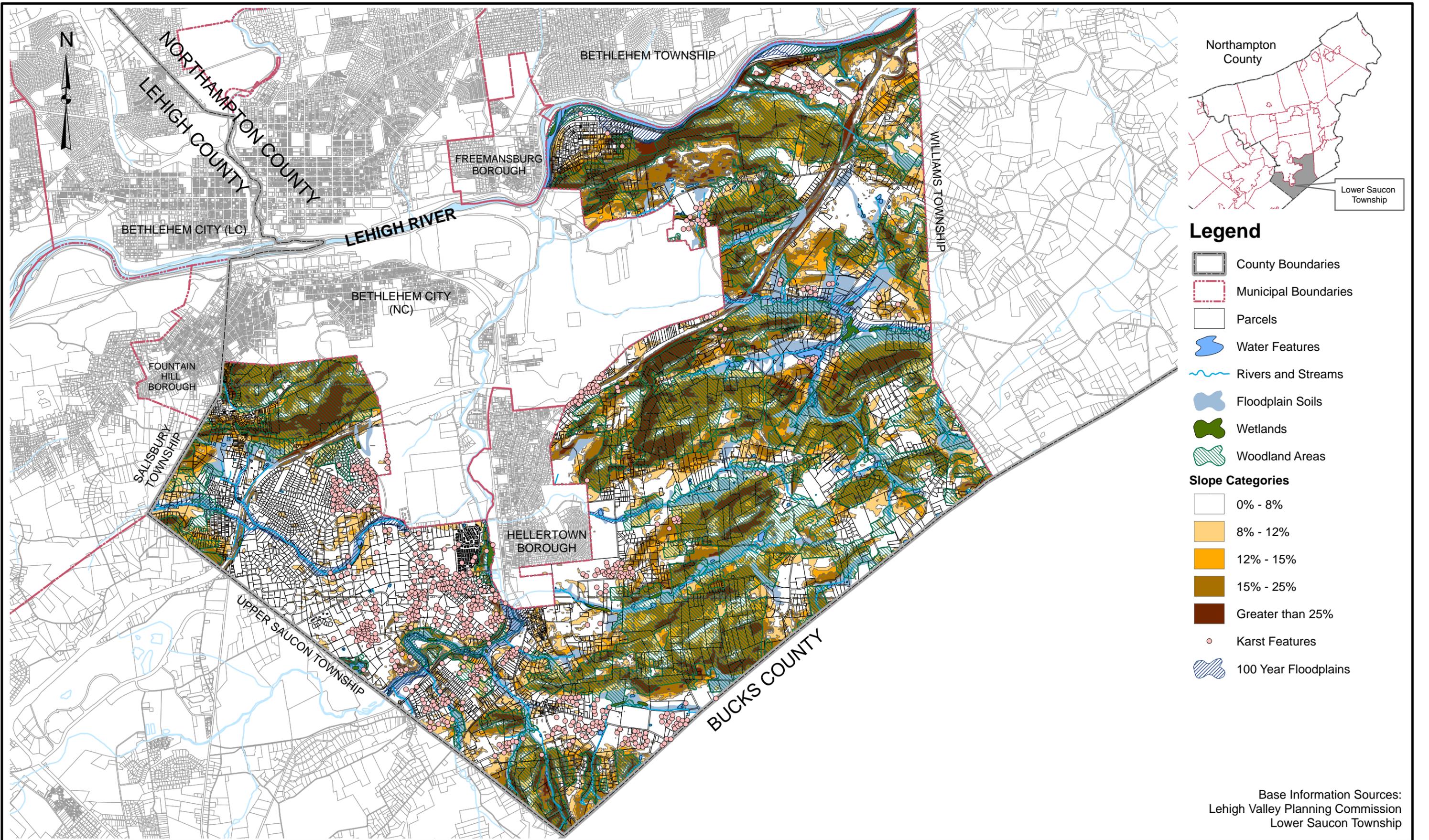


- Legend**
- County Boundaries
 - Municipal Boundaries
 - Parcels
 - Water Features
 - Rivers and Streams
 - Floodplain Soils
 - Wetlands
 - Watershed Boundaries
 - 100 Year Floodplains

Base Information Sources:
 Lehigh Valley Planning Commission
 Lower Saucon Township

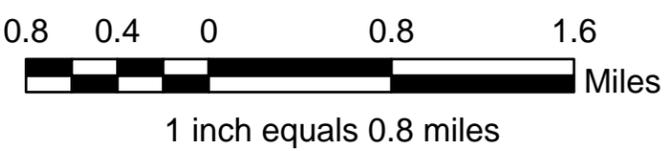


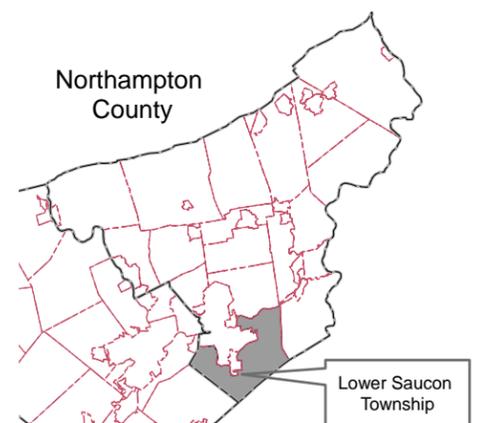
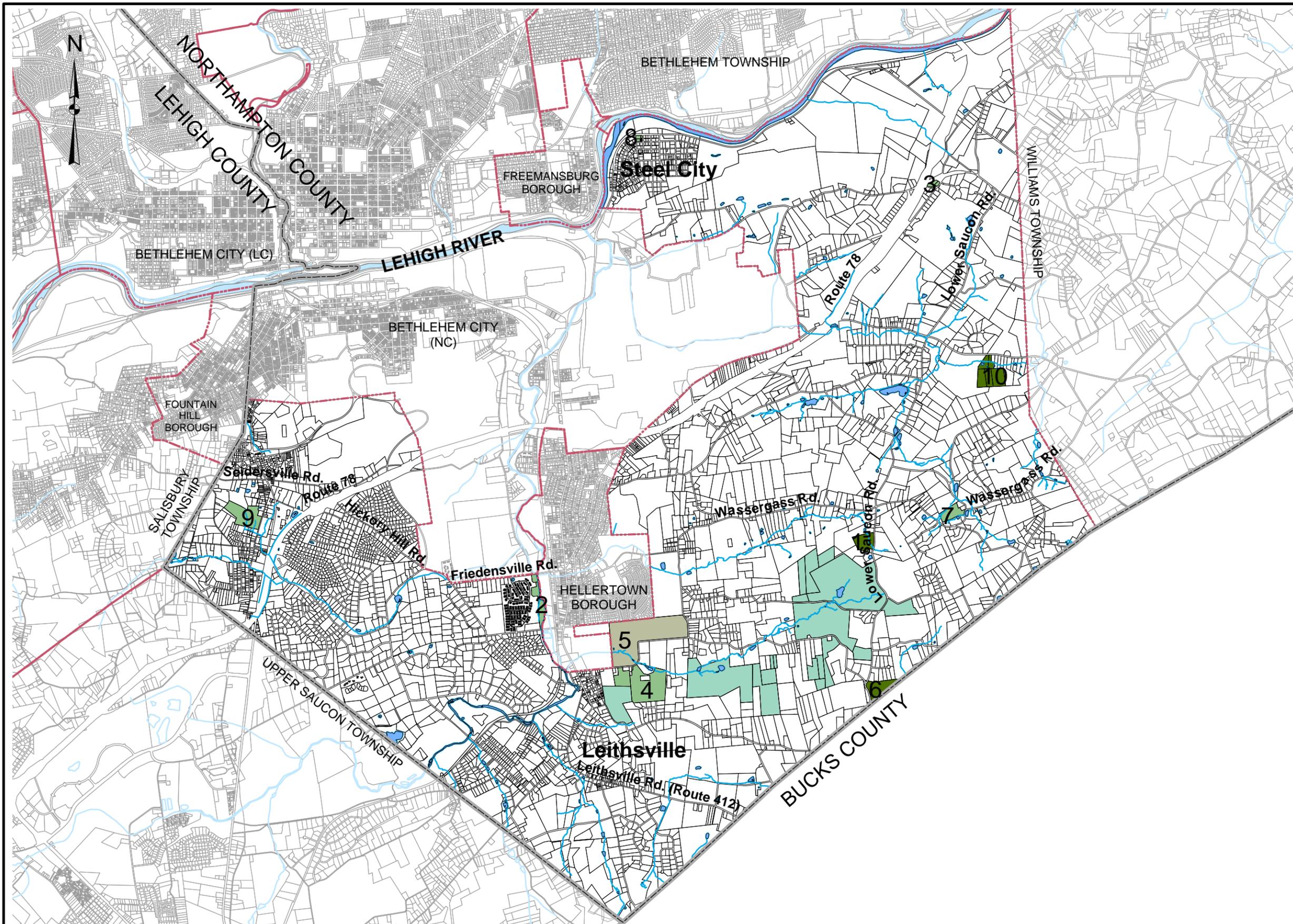




- Legend**
- County Boundaries
 - Municipal Boundaries
 - Parcels
 - Water Features
 - Rivers and Streams
 - Floodplain Soils
 - Wetlands
 - Woodland Areas
- Slope Categories**
- 0% - 8%
 - 8% - 12%
 - 12% - 15%
 - 15% - 25%
 - Greater than 25%
 - Karst Features
 - 100 Year Floodplains

Base Information Sources:
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 Lower Saucon Township



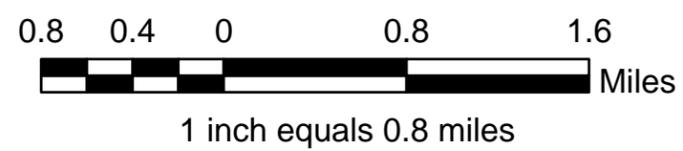


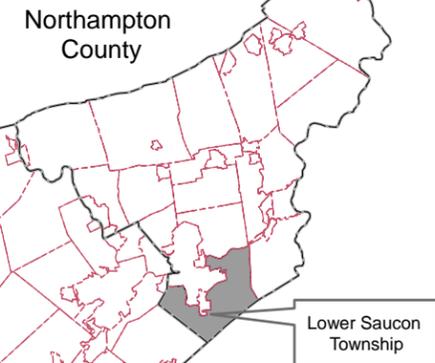
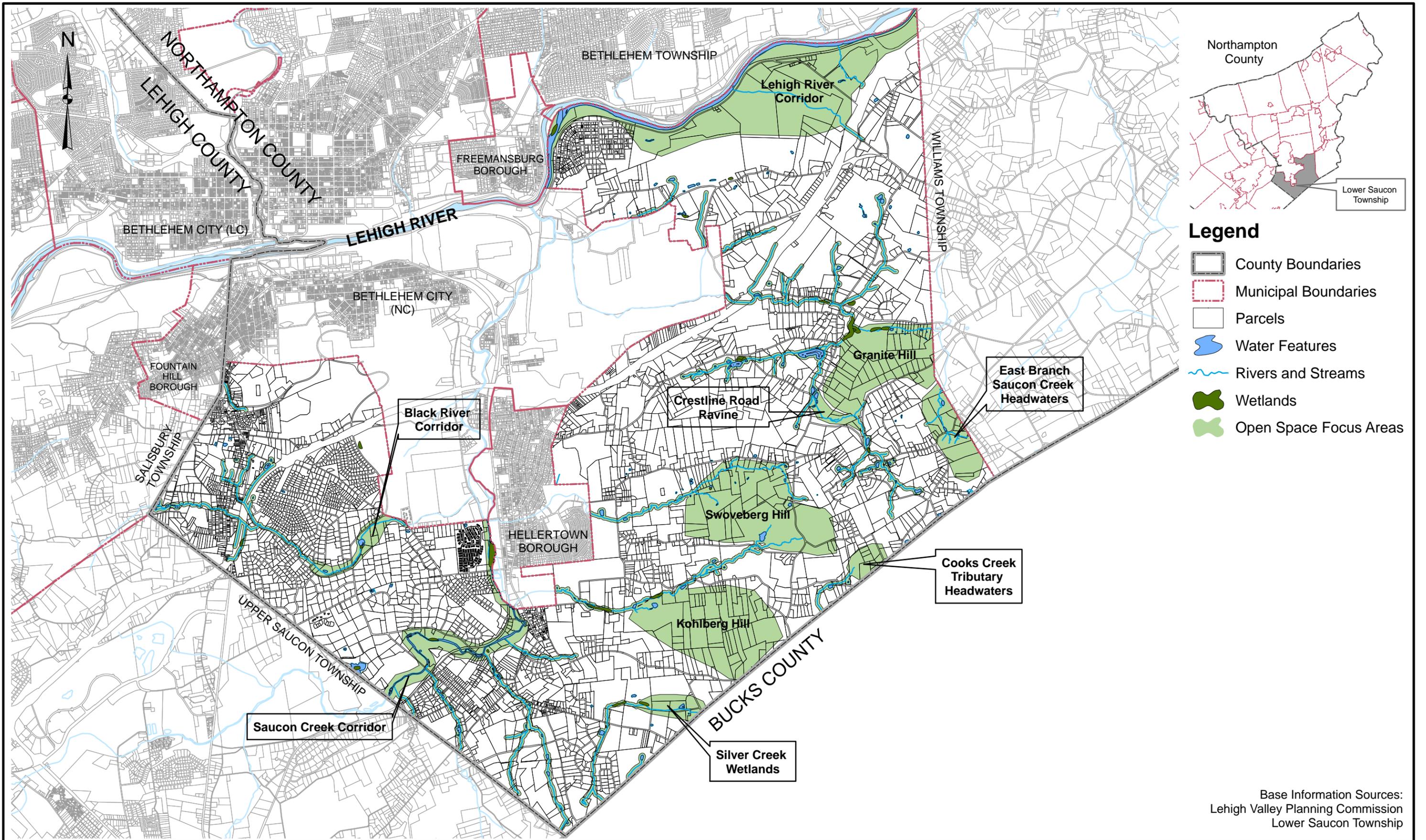
Legend

- County Boundaries
- Municipal Boundaries
- Parcels
- Water Features
- Rivers and Streams
- Open Space Categories**
- Conservation Easements
- Hellertown Borough Owned Parcels
- Township Parks
- Schools

- Open Space Areas**
1. Dreyer (Mease) Conservation Easement
 2. Heller Homestead Park
 3. Kingston Park
 4. Polk Valley Park
 5. Saucon Valley High School
 6. Seifert-Ray Conservation Easement
 7. Southeastern Park
 8. Steel City Park
 9. Town Hall Park
 10. Yerger Conservation Easement

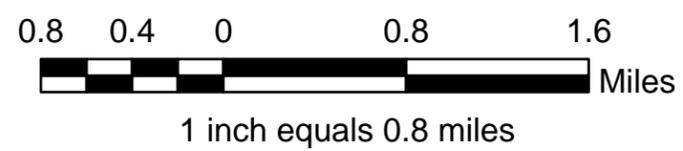
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 Lower Saucon Township

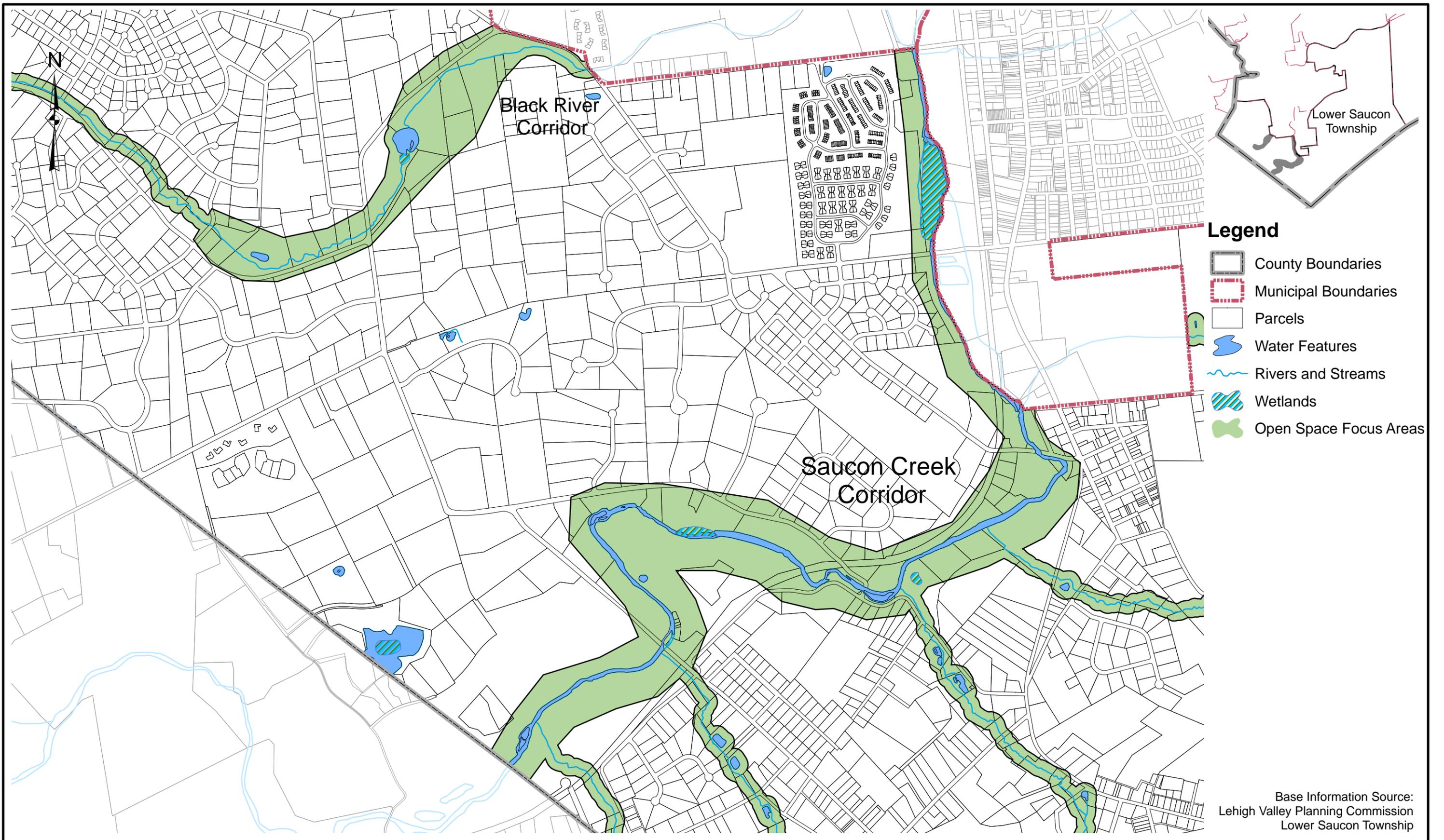




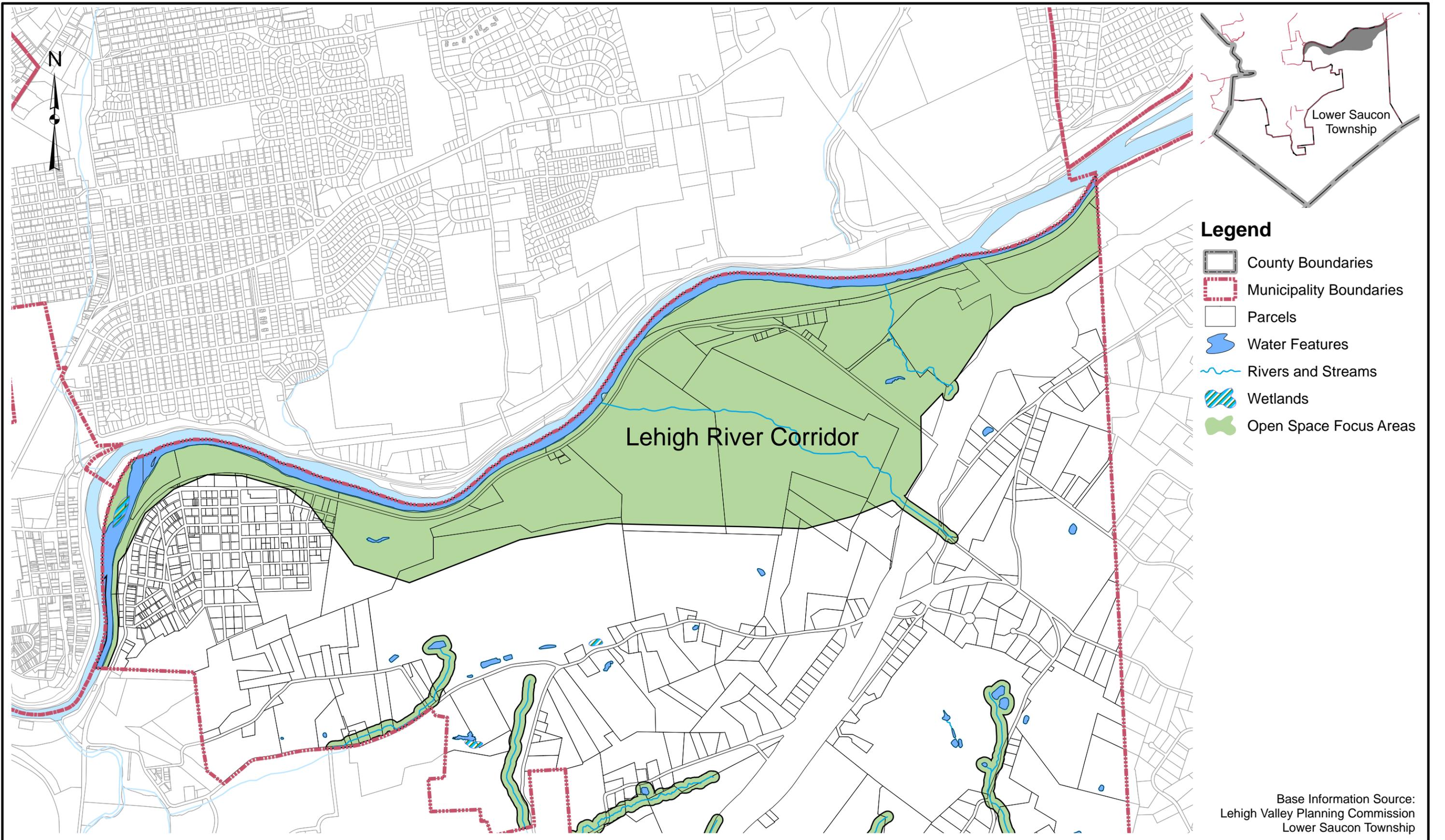
- Legend**
- County Boundaries
 - Municipal Boundaries
 - Parcels
 - Water Features
 - Rivers and Streams
 - Wetlands
 - Open Space Focus Areas

Base Information Sources:
 Lehigh Valley Planning Commission
 Lower Saucon Township





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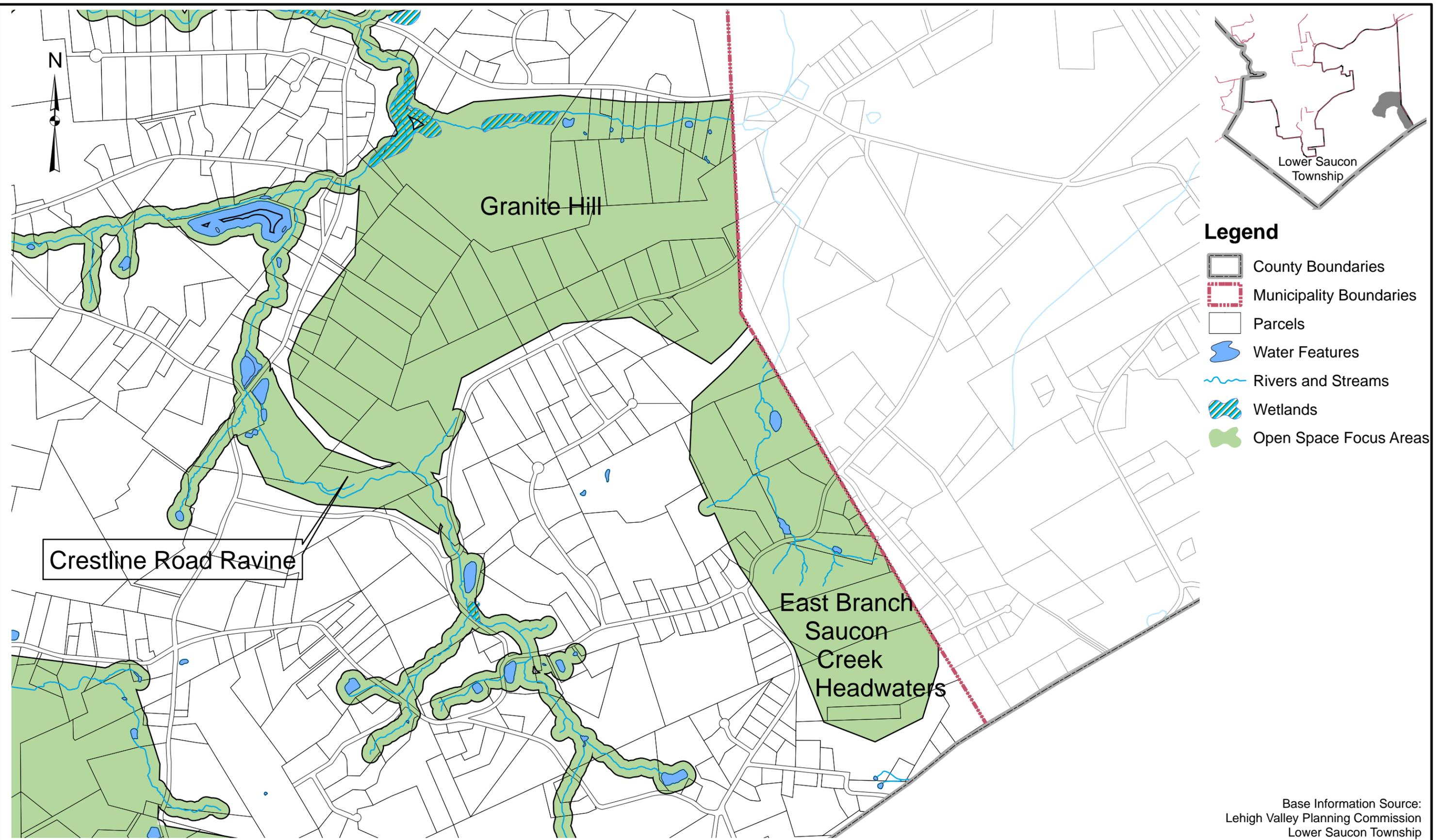
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Lower Saucon Township

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Lehigh River Corridor
Page A-15



Crestline Road Ravine

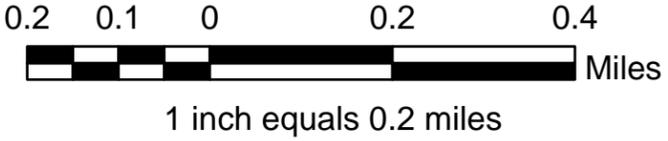
Granite Hill

East Branch
Saucon
Creek
Headwaters

- Legend**
- County Boundaries
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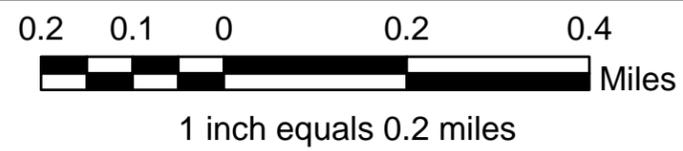
**Crestline Road Ravine, Granite Hill, &
East Branch Saucon Creek Headwaters**
Page A-16



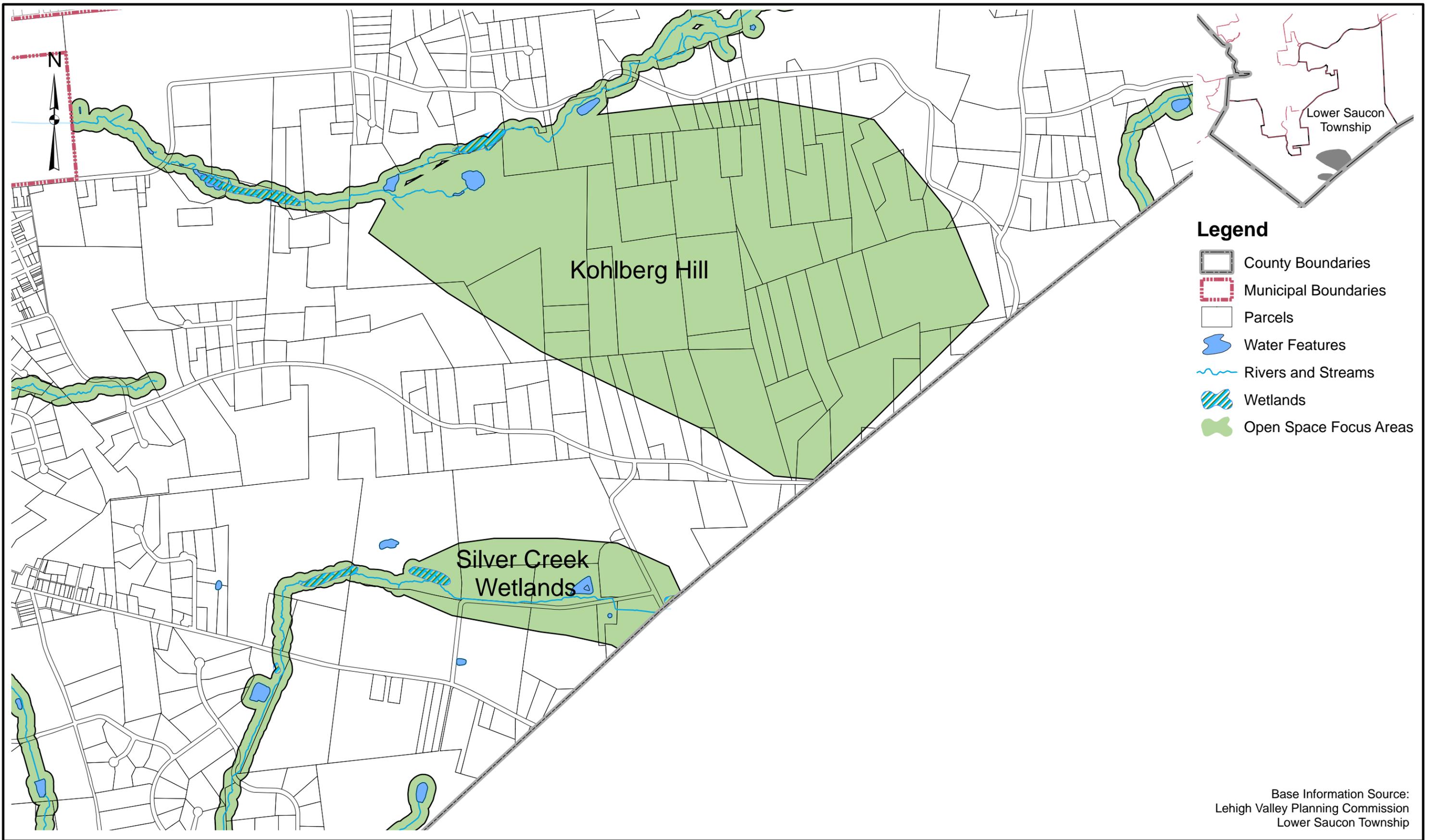
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**Swoveberg Hill &
Cooks Creek Tributary Headwaters**
Page A-17



- Legend**
- County Boundaries
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 - Open Space Focus Areas

Base Information Source:
Lehigh Valley Planning Commission
Lower Saucon Township