

DISPLAY
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OPEN SPACE AND RECREATION PLAN

For
Byram Township

“Township of Lakes”



Compiled by
Morris Land Conservancy
And the
Byram Township Open Space Committee

OCTOBER 2000

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Photographs

Cover Photograph: Lubbers Run, Byram Township – August 2000

Executive Summary

A total of 25% (3,264 acres) of the land in Byram Township is permanently preserved open space, with most of this land within Allamuchy Mountain State Park. Only 1,659 acres (13 %) of the land in Byram Township is assessed as vacant land, with no structural improvements upon the land. More than a third of the land in the Township is agriculturally assessed (5,036 acres or 38% of the available land acreage in Byram). Most of this agricultural land is in woodlands; Byram has few prime agricultural soils available for traditional crop agriculture.

Combining the available vacant lands, existing agriculturally assessed lands, and municipally owned property that is not listed on Byram's Recreation and Open Space Inventory, 60 % (7,928 acres) of the land within the Township has open space potential. The Plan inventories the natural, historic and recreational assets of the community and suggests steps to preserve and enhance these areas.

Byram is a "Township of Lakes," bounded by Allamuchy Mountain, the Musconetcong River, and Sparta Mountain. Byram's soils are shallow, with a limited amount of prime agricultural soils. Its steep terrain is characterized by the forests and the lakes that dot its landscape. Traditionally, development in Byram has centered around its lake communities. Allamuchy Mountain State Park covers a large portion of the Township and contributes virtually all of the preserved open space in the municipality. Byram has six Township parks and a recreation program that is struggling to meet the needs of its residents. Byram services approximately 2,000 youngsters in a variety of recreational activities on a very limited amount of field space.

The Plan suggests that Byram Township's open space program follow these courses of action:

- Acquire land for additional active recreation field space
- Preserve the Lubbers Run greenway
- Enhance and connect the existing trail system
- Enlarge and connect protected State and municipal lands in the Township
- Use open space to protect the Township's drinking water supply
- Protect the Township's agricultural lands, forests, and steep slopes
- Adhere to the principles of the State Development and Redevelopment Plan for Planning Areas 4 and 5, to limit sprawl in the community

Byram Township is facing development pressure from neighboring municipalities, the planned widening of Route 206 and the potential reactivation of the Lackawanna Cut-off for light passenger rail service. These planned transportation improvements will serve to open the Township to increased pressure to develop, especially in the interior portion of the Township. Open space can be used to plan for future development of the Township. Protection of environmentally sensitive lands and conservation of critical greenways will provide connection to larger green spaces and enhance protection of natural areas.

The Plan concludes with an Action Plan that describes the next steps to implement and supplement the Plan and to increase the open space preservation opportunities throughout Byram. The Action Plan suggests a public participation process to seek public acceptance and input on the objectives of the Open Space and Recreation Plan. Action steps are suggested for a five-year time frame as well as ongoing activities.

Byram's "Township of Lakes"

Bordering Morris and Warren Counties, Byram is "a gateway" to Sussex County. The Township is defined by steep, rocky slopes, with Allamuchy Mountain to the west and the Sparta Mountains in the northeast. People migrated to Byram Township as a summer community, building small homes around the larger lakes in the Township. Over the years, these seasonal homes have become yearlong residences, with new developments expanding upon these original communities.

As a gateway community, Byram is subject to significant development pressure stemming from the need to respond to the growth in population and industry in neighboring Morris County. Expanded transportation access to what were once the outlying regions of the state has led more people to settle in the western, more rural corridors. This population shift presents a challenge to Byram Township to welcome new residents yet continue to protect the quality of life and preserve the Township's unique and beautiful environs.

An Open Space and Recreation Plan will help the governing body and residents design the future of the countryside and take active steps to accomplish this design.

Natural Resources

"...Byram is taking a proactive approach in the identification, recognition, and preservation of this stream and its view sheds..."

Lubbers Run Greenway Project, page 2.

Byram Township is characterized by the lakes and ponds that dot its landscape and the vast woodlands that surround them. The Musconetcong River along the Township's southern border drains about 90% of the Township (*Byram Township Natural Resources Inventory, page 5*). Lake Mohawk, in the northern part of the Township adjoining Sparta Township, is the headwaters of the Wallkill River. The Pequest River drains a small north-central area including Forest and Panther Lakes in the Township (*Byram Township Natural Resources Inventory, page 5*). All told, there are 25 lakes in this "Township of Lakes" (*see Topography Map showing Byram's lakes and river systems*).

Lubbers Run is the largest tributary of the Musconetcong River. Lubbers Run and the Musconetcong River are both classified as trout maintenance waters by the State (*Byram Township Natural Resource Inventory, page 110*). Lubbers Run is nearly pristine with areas of overwhelming natural beauty (*Lubbers Run Greenway Project, A Stream Corridor Study, page 1*). The Township has proposed developing a greenway along Lubbers Run and is working with NJ Green Acres to protect this waterway. Lubbers Run lies within the Musconetcong watershed, a watershed that encompasses 157.6 square miles, with waters ultimately flowing into the Delaware River. The Musconetcong River is currently under review for designation as a federal Wild and Scenic River (*Lubbers Run Greenway Project, A Stream Corridor Study, page 4*). . Dragon Brook (the outlet stream for Cranberry Lake) is classified as non-trout waters by the state (*Byram Township Natural Resource Inventory, page 110*).

The New Jersey Natural Lands Trust manages three properties along Lubbers Run in Byram Township. These properties are near the Elementary School and include both sides of Lubbers Run, a beaver dam and an emergent marsh system. Detailed descriptions of each of these properties prepared by New Jersey Natural Lands Trust are included in the *Appendix*. This Lubbers Run Preserve includes habitat for the barred owl, a rare fern, orchid and buttercup plants, and includes freshwater mussels. NJ Natural Lands Trust would like to see the water quality maintained in Lubbers Run and increased protection of the associated wetlands in this region.

The land around most of the larger lakes in the Township are heavily developed. They are man-made lakes and have been enlarged through damming. All these large, developed lakes are suffering from varying degrees of eutrophication (*page 114*). Nonpoint source pollution, failing septic systems, and storm water runoff degrade the health of these lake ecosystems. The Township is sensitive to these problems and has begun working on drainage improvements, weed harvesting, community education and a land use plan that is sensitive to protecting the water quality of the lakes. The homes surrounding these lakes were at one time occupied primarily during the summer months, but many have become year-round residences with new developments encroaching upon the shoreline and beyond into their watersheds. The lakes are becoming nutrient enriched, resulting in an increase in nuisance weed growth, a subsequent drop in oxygen levels, and increased levels of soil siltation. Failing or overwhelmed septic systems, runoff, and increased use of the lake watersheds have contributed to this eutrophication problem. The smaller lakes in Byram Township are not typically surrounded by development and are within large family land holdings or are located within Allamuchy Mountain State Park. Because of their location, the smaller lakes are generally healthier ecosystems.

There are three types of wetlands in Byram: lacustrine (wetlands associated with lakes), riverine (wetlands associated with rivers and streams), and palustrine (marshes, swamps and bogs) (*Byram Township Natural Resource Inventory, page 42*). Most of the wetlands in the Township are associated with the lakes and waterways in the Township. Due to the steep and rocky slopes of the Township, most of the wetlands in the Township are associated with the floodplains of the streams and lakes.

Byram's topography is characterized by the northeast-southwest trend of the valleys and ridges, which parallel the dominant trend of the bedrock in the New Jersey Highlands (*Byram Township Natural Resource Inventory, page 53*). Byram Township's highest elevations are located in the southwest central and northeast portion of the Township (*Topography Map*). Elevations in the Township range from 660 feet above mean sea level along Lubbers Run in Waterloo Village to over 1,200 feet between Sparta-Stanhope Road and Amity Road in the northeast, and to the west of Cranberry Lake (*Township of Byram Comprehensive Master Plan, page IV-1*). Approximately 2/3 of Byram are made up of slopes of 15% or more, approximately half of those being steeper than 25% (*Byram Township Natural Resource Inventory, page 54*).

Byram's bedrock is relatively resistant (or impervious) and produces poor-to-moderate yields of underground drinking water. The majority of the Township is underlain by rocks that exhibit limitations as aquifers; but areas underlain by Paleozoic rocks and thick glacial sediments may be more prolific (*Byram Township Natural Resource Inventory, page 53*). Byram lies just north of the terminal moraine of the

Wisconsinan glacier. The glacier began its retreat about 20,000 years ago and the moraine crosses the state from Belvidere to Denville, through Budd Lake, Stanhope, and Netcong (page 54). Glacial till predominates in Byram's surficial deposits. Byram's best aquifers are the Leithsville bedrock and the stratified drifts deposits (page 54). Unlike the rest of Byram's bedrock, the Leithsville Formation contains limestone and may provide aquifers where the limestone has been dissolved to form caverns. However, these Leithsville Formations are probably too small in the Township to provide substantial water supplies (page 56). The Leithsville Formation is found in only three small areas in the Township: west of Lake Lackawanna, west of Lake Waterloo, and between Roseville and Koeffler's Ponds (page 100).

Those aquifers that do exist in Byram Township occur principally in the Musconetcong Valley (page 94). Byram's best possible aquifers may lie in the glacial stratified drift formations found intermittently along Route 206; along the Musconetcong River and Lubbers Run; and beginning southeast of Lake Lackawanna and extending up past Roseville Pond toward Stag Lake (page 100). Open space preservation can serve to protect these sites from development and encroachment. Byram's water supplies are limited and need to be protected. Both limestone and stratified drift formations are very susceptible to contamination from surface pollutants (see *Environmental Constraints Map*).

There are 23 soil types in the Township. The most common soils are the Rockaway soil, occurring on most of Byram's ridges and steeper slopes. In Byram, most Rockaway soils are on steep slopes (15-35%) (page 54). Byram has few soils useful for agricultural crops.

Large areas of Byram are considered generally unsuitable for septic, and many other areas are severely restricted. These unsuitable-restricted areas generally occur on the Township's ridges and steep slopes. Areas rated as possibly suitable generally follow the valleys and main roads (page 60).

Byram Township falls within the Highlands physiographic region in the State. Its woodlands are primarily a mixed Oak Forest (*Byram Township Natural Resource Inventory*, page 39).

Wildlife diversity is a direct measure of the health of wildlife habitat. The failure of any species to thrive or survive is often a direct reflection of stresses on their environment, primarily due to development (*Byram Township Natural Resource Inventory*, page 46). The New Jersey Natural Heritage Program inventories sightings of rare species and natural communities. In the *Appendix* are lists of endangered and threatened fauna based on probable occurrences within Byram and nearby areas (*Byram Township Natural Resource Inventory*, pages 47-51). Also included are site maps from the Natural Heritage Database. According to the Natural Heritage Database, Byram is home to five species of endangered amphibians, 29 species of birds, one endangered fish species, and five reptiles.

There are four Natural Heritage Sites within Byram Township according to the *Byram Township Natural Resource Inventory*: Allamuchy Mountain, Bridge to Nowhere, Wolf Lake, and Wrights Pond Bluffs. The 1999 *Atlas of Natural Heritage Priority Sites* describes three of these sites:

- Bridge to Nowhere is in Mount Olive Township, Stanhope Borough and Byram Township along the Musconetcong River. It has one state listed endangered plant

species plus three plant species of special concern. This site has alluvial woods, wet woods, rich wooded uplands and an abandoned canal along the stream.

- Wolf Lake, located in Byram Township, is a small lake with aquatic vegetation. It has one state listed endangered plant.
- Wrights Pond Bluffs is also completely within Byram Township and has steep slopes and open, rocky bluffs on a hillside above a large pond. Wrights Pond is also known as the Roseville Pond. Two state listed endangered plant species and one special concern plant species are found here.

Through the Natural Heritage Database, the Office of Natural Lands Management identifies critically important natural areas to conserve New Jersey's biological diversity. The Natural Heritage Priority Sites represent some of the best remaining habitat for rare species and exemplary natural communities in the state. These areas are considered to be top priorities for the preservation of biological diversity in New Jersey (*An Atlas of Natural Heritage Priority Sites*).

Open space can protect water quality, wildlife habitat and forested land. Byram Township is rich in natural resources and its special natural areas include its forests, lakes, the Musconetcong River, and Lubbers Run. The Township has developed a greenway plan for Lubbers Run from Lake Lackawanna to the Musconetcong River. The Natural Heritage Priority Sites of Allamuchy Mountain, Wolf Lake, Wrights (or Roseville) Pond Bluff, and the Bridge to Nowhere along the Musconetcong River are also areas to be preserved and protected.

Built Resources

Byram Township is located approximately fifty miles west of New York City and is crossed by two major highways: Route 206 from north to south, and Route 80 along Byram's southwestern corner. Allamuchy Township in Warren County borders Byram on the west; Green and Andover Townships in Sussex County run along the northwestern border. Sparta Township in Sussex County shares Lake Mohawk with Byram on the north; Hopatcong and Stanhope Boroughs in Sussex County form the eastern edge of the Township. Mount Olive Township in Morris County forms Byram's southern boundary.

The 1990 Census counted 8,109 residents in Byram Township; the 1998 estimate was 8,884, an increase of 9.6% (*U.S. Census Bureau, Sussex County Planning Department*). In 1990 there were 2,973 housing units. Fifty percent of the housing in Byram Township was constructed between 1960 and 1979. As of 1999, there have been 251 building permits issued in Byram Township since 1990 (*Alice Brees, Sussex County Planning Department, October 2000*). About 60% of the Township's population is located within two miles of Route 206 (*Byram Township Natural Resource Inventory, page 7*). Byram Township has been one of the fastest growing municipalities in Sussex County, with most of its residents commuting eastward towards Morris County and New York City for employment. Most of Byram's residents live in communities surrounding Cranberry, Forest, Johnson, Mohawk, Lackawanna and Panther Lakes. The East and West Brookwood neighborhoods and the Tamarack developments are also primarily residential. New development in the Township is located near Sparta Township around Lake Mohawk.

Byram covers 22.5 square miles (*Byram Township Natural Resources Inventory, page 5*). The total acreage in the Township is 13,184 acres (*Township of Byram,*

Comprehensive Master Plan, page V-2). There is a small noncontiguous segment of the Township located at the edge of Lake Musconetcong where Stanhope, Hopatcong, and Roxbury meet. Of this site, the NJ DEP owns a small tract next to the Lake and NJ DOT owns the remainder of the parcel between this and the railroad.

The southern tip of the Township is a densely developed area around the Route 206 commercial corridor bordering Mount Olive Township in Morris County and Stanhope Borough. Private residences border the southern side of Lubbers Run in this area with commercial development along the Route 206 corridor. There is a large quarry also located along Route 206 North near the new Shop Rite supermarket. Shop Rite recently opened a large commercial establishment on Route 206 North at the corner of Lackawanna Drive. This development is serviced by a new sewer line, currently the only sewer line in the Township. This sewer service area extends along Route 206 at Acorn Street to Lackawanna Drive to Mansfield Drive to the elementary school at the end of Mansfield Drive. The presence of this sewer line presents the opportunity for new development in this region of the Township.

The Route 206 corridor in Byram Township is proposed for widening starting from Acorn Street for 1.31 miles, past High Glen Drive in Byram (Route 206 M.P. 98.38 to M.P. 99.69 Byram Township, Final Scope Development, Summary Report). The recommended improvements provide an additional through lane northbound and southbound in this area and additional turning lanes at the signalized intersections at Route 206 and Waterloo/Brookwood Road and Lackawanna Drive (*page 24*). This roadway widening is designed to alleviate the traffic congestion in this area and would impact four watercourses (including Lubbers Run), and associated wetlands. Due to the documented presence of several rare, threatened or endangered species (specifically barred owl and wood turtle), wetland transition areas are required (*page 35*). In terms of land development, the road improvements will create easier access to and through the region, further increasing development pressure in the Township.

The interior portion of the Township is primarily large woodlots that are farmland assessed. Most of these properties are under family ownership, and some land holdings straddle two towns, primarily along the Andover-Byram Township borders. Several ponds are located in these large properties: Wolf Lake, Roseville Pond, Lake Bottom, Kofferls Pond, and Stag Pond. These agricultural lands are a mixture of traditional crop/hay farms and woodlands managed farms. The majority of the farms in Byram have woodland management plans due to the lack of adequate prime agricultural soils.

The Township road corridors follow the carriage routes of the original farmers in the area. There are two rail lines in the Township, currently both inactive. Recently, there have been discussions by the New Jersey Department of Transportation to reactivate the Lackawanna Cut-off that runs in the center of the Township into Andover Township. The Lackawanna Cut-off is a 29-mile abandoned rail right of way built in the early 20th century. It traverses northwestern New Jersey from Port Morris (near Lake Hopatcong) to the Delaware Water Gap (Morris Matters, page 4). In Pennsylvania the connecting corridor is an existing railroad with both freight service and limited recreational passenger service. The Morris County Department of Planning and Development envisions this rail line as providing the connection between suburban-rural centers in outlying counties to the growing employment centers of northern New Jersey, specifically Morris County. This proposal is designed to develop an alternative

transportation link between the Pocono region and northwestern towns in New Jersey to points east. If a rail station is built in Andover Township next to Byram, it would significantly increase the pressure in the Township to develop areas that are currently undeveloped.

A Public Service Electric and Gas Company line bisects the Township north to south near Sparta Township into Hopatcong Borough. Some Townships have adapted these linear right-of-way corridors as trail connections. Depending on the future plans for this corridor, that could also be a possibility for Byram Township.

The Environmental Commission identified three potential risks to groundwater in the Township. They are the MKY facility on Tamarack Road, a small dump on the southeastern shore of Wolf Lake, and an old landfill in the Cat Swamp Hill area of Route 206 (*Byram Township Natural Resource Inventory, page 108*).

The southwestern portion of the Township is part of New Jersey Department of Environmental Protection's Allamuchy Mountain State Park, covering **3,079 acres** or **23%** of the Township. This Park is part of Stephens and Allamuchy Mountain State Parks, 9,200 acres of parklands located between Hackettstown and Cranberry Lake in Morris, Warren and Sussex Counties. Thus, one-third of this State Park is located in Byram Township. Allamuchy Mountain inherited its name from the Lenape Indians - the chief for their settlement was Chief Allamuchahokkingen, whose name means "place within the hills." Allamuchahokkingen was later shortened to Mamuchahoken and then in 1737 to Allamucha (*Stephens and Allamuchv Mountain State Parks, New Jersey Division of Parks and Forestry pamphlet*). In the early 1970's, the State of New Jersey purchased this property with Green Acres bond funds.

Historical and Cultural Resources

The following is derived largely from: *Natural Resources Inventory*, pages 13-37; Byram Township Environmental Commission; *A History of Byram*; Cindy Lee; *Images of America, Waterloo & Byram Township*; Pages 10-14, 106-109; *Beautiful Sussex County*; and *Byram Township, Township of Lakes*. Ms. June Dobson of the Byram Township Historical Society was also helpful in providing information about historical structures.

In 1753 Sussex County became the 13th County in New Jersey. Byram Township was officially created on February 5th, 1798 when it was separated from Newton Township. At this time, Byram Township included all of Stanhope, as well as parts of both Sparta and Hopatcong. Between 1798 and 1957, the Township's borders were changed six times, creating the Township that exists today. The name Byram was chosen to honor the Byram family, Jephthah and John, who were thought to have been the first permanent settlers to the area (as opposed to the more transitory miners) shortly after the end of the Revolution. The family homestead was located on Lackawanna Drive near Lubbers Run (*Site #44 on Historical Map*).

The first inhabitants of the region that is now known as Sussex, Warren and Morris Counties were the Indian tribe, the Lenape. The clan named the Minsi (Wolf Tribe) or Mountaineers were the most warlike of the Lenape; it was their place to protect their lands from invasion by the Iroquois tribes of New York. In the early 1700's there

were few Indians remaining in the area; those left after the French and Indian War (1754-63) moved west under the terms of the Treaty of Easton (1758).

Indian graveyards are thought to exist in the vicinity of both Waterloo and Lake Lackawanna. There are also accounts of Indian sites approximately "...one mile south of Johnson Lake on Old Indian Spring Rd (*Site #42 on Historical Map*) and a larger one just southwest of Frenche's Pond near the current Boy Scout Camp..." (*Natural Resources Inventory, page 14*). There is some question as to whether there were Indian villages on those sites.

The first white explorers to the area were Dutch miners, and the earliest settlements in Byram were centered near iron deposits. At Stanhope, Brooklyn (now Hopatcong), Old Andover (now Waterloo), Roseville, Columbia, and Lockwood, furnaces or forges were established before the Revolutionary War. In some places, it is still possible to see evidence of the mines. As a rule, these settlements were transitory in nature, depending on the amount of ore in the deposit and its market value. The only lasting settlements were at Stanhope and Waterloo. Other significant sites dating from the settlement at Lockwood include the Lockwood Cemetery, which still exists today. Efforts are being made to have the site put on the State Registry of Historic Places. The Lockwood Tavern was built around 1807 and is now Barone's Restaurant. It was built on the state's first chartered turnpike, the Morris Turnpike, which ran from Elizabeth through Morristown and Newton to the Delaware River.

Waterloo was originally owned by William Penn and was purchased from him in 1760 by Allen & Turner. In 1763 they set up a forge at Waterloo (named the Andover Forge) in connection with the iron furnace they owned at Andover Borough. Pig iron was produced at the Andover Furnace and then taken to the Andover forge for conversion to bar iron. The iron was transported by pack mules, over the mountains to the Delaware River, where it was then shipped to market. Some believe that Allen & Turner's iron works were confiscated during the Revolutionary War and that the government used the iron manufactured there for the manufacture of steel for firearms. This is disputed and there is some doubt as to whether the Andover Forge at Waterloo was even in operation at that time. After the Revolutionary War, the iron works were abandoned as the supply of wood for fuel had been exhausted. The land lay unused until John & Sam Smith leased it in 1790 and utilized it for farming. John Smith purchased the land in 1805. In 1820 he established a bloom forge on Lubbers Run, about a mile from present day Waterloo. A store and village were also established and called 'Old Andover'.

When the Morris Canal reached the site of present-day Waterloo, the Smiths abandoned the site at Old Andover and moved to what is now known as Waterloo. Here they built a gristmill, store and tavern. The tavern was a popular stopping place for boatmen of the canal. The site was named 'Waterloo' sometime around 1839; the name was derived from the ancestral home of the Smith family who owned the site at the time.

The development of the Morris Canal saw the most prosperous period in Waterloo's history. The Canal was developed as a way to transport Pennsylvania's coal to forges and furnaces in northern New Jersey, as well as to transport iron and carry freight for local businesses. Construction of the Canal began in 1825 and it began operation in 1831. Lake Hopatcong, Lake Musconetcong and Cranberry Lake were dammed to increase water volume for the canal. Many of the major engineering features

of the canal exist at Waterloo. These include a lock, one of the inclined planes used to raise or lower canal boats, a level section, a dammed area in the river and a mule bridge.

Competition from railroads closed the canal in 1924 and began a diversion of traffic away from Waterloo. The village fell into decline. The Smiths' plan for a residential development of the area faltered after the 1929 stockmarket crash and the Waterloo site was sold.

After World War II, the Waterloo Foundation for the Arts, Inc, was founded by Percival Leach and Louis Gualandi. The aim was to restore and protect the historic buildings at Waterloo, many on their original foundations. The site opened to the public in 1964. There are structures from the Colonial to Victorian era, including homes, a church originally built in 1859, a working gristmill and sawmill. Waterloo Village is listed on the State Registry.

Two railroads existed within the Township. The first was the Sussex Mine Railroad, which began in 1848 and commenced operation in 1851. Ore was carried from the Andover mine to the Morris Canal at Waterloo. Originally the line was mule powered, but it was replaced by the steam powered Sussex Railroad in 1853. The line was reconstructed from 1853 – 1855 to create a junction with the Morris and Essex Railroad at Waterloo Station, and extended on to Newton and the Pochuch Mine in McAfee Valley. As a result of the railroad, Waterloo became an important center, and the junction between the two railroads was located there until 1901.

Stations at Waterloo and Cranberry Lake also meant that residents were able to travel to school, work and shop in Newton and even to jobs in metropolitan areas further east. Other goods shipped out included zinc ores, timber, milk and other farm produce. Food, coal, and mail were shipped in. The line stopped operation in 1966 and the tracks were torn up in 1977.

The second rail line was the Lackawanna 'Cut Off', which was built by the Delaware, Lackawanna & Western Railroad from 1908 – 1911. It was an engineering wonder, as it included the largest concrete bridge in the world at the time near the Delaware River, and the largest railroad fill ever built, situated just north and west of Byram. Within Byram itself, there are 3 road tunnels and one roadway overpass, as well as the 1/5 mile Roseville Tunnel (*Site #40 on the Historical Map*) which was bored through solid rock. The tracks were dismantled in 1983-84 by Conrail but the Cut-off's right of way is still very visible running north-south along the eastern side of Lake Lackawanna. There are plans for the State of New Jersey to re-establish a passenger service along this route between Pennsylvania and New Jersey.

In the early 1800's the production of charcoal was also a thriving industry for Byram. The wooded mountains of the Township provided ample material with which to make charcoal, which in turn powered the iron forges. Most of the wooded area was cut for this industrial purpose, but it was also cut for domestic use. Wood was used to power furnaces until 1900, so much of the area was devoid of trees during that time. Charcoal furnaces operated in Byram, including the Columbia forge (1800) on Lubbers Run (2 miles north of Lake Lackawanna), the Lockwood furnace (1857) where Rt. 206 crosses Lubbers Run, Old Andover (1804), Roseville forge (1828) in the center of Byram and Stanhope forge (1804) (*A History of Byram, page 29*). Byram is also dotted with old mines - Roseville Mine, Gaffney Mine, Bedell Mine, McCain Mine, Cascade/Smith Mine, and Frenche's Mine. A uranium mine known as the Charlotte Mine (*Site #32 on*

the Historical Map) was active between 1958-68. The mine is located south of Cranberry Lake in Allamuchy State Park.

When iron mining and charcoal production began to decline, the region began to develop as an agricultural area, producing grains, fruits and vegetables. The population of the region declined from 1400 in 1880 to 370 in 1940. However the development of Byram as a lake resort area saw the population increase (*A History of Byram, p.38*). Byram then became known as the 'Township of Lakes'.

In 1909, the Lackawanna Rail Road created an amusement resort at Cranberry Lake. Excursion trains ran from Hoboken on Sundays and public holidays. Activities at the Lake included boat trips and row boats, a miniature railway, a dance pavilion, carnival games, and a bowling alley. As many as 1,000 people would visit the Lake at a time, but by 1911 the resort was closed. The next development phase of Cranberry Lake began in the early 1920's, when the Cranberry Lake Development Company was created to promote the idea of a summer colony. The level of the lake was raised, roads were built and lots were sold for vacation homes. Recreational facilities such as tennis courts, bathing beaches and community docks were built. As time went on, the community became more permanent, providing year-round residences.

Lake Lackawanna, Lake Mohawk and Forest Lakes were all created in the early to mid twentieth century as small residential areas, often as summer vacation areas. They are now thriving, year round residential and recreational areas.

Sites the Byram Township Historical Society would like to see preserved include (*June Dobson, Byram Township Historical Society*):

- Kately House on Stanhope Road; a white stucco house built in 1820, this is the oldest house in Byram still in use.
- Colby Mansion on Tamarack Road.
- The Amity School on Amity Road built in 1940 which is now a private residence. This was the first school in Byram.
- Kimm Home on Stage Pond built in the 1840's.
- Roger Johnson Farm circa 1850 on Amity Road.
- Panther Lake home built in the mid 1840's.
- The home at 1 Amity Road which Mr. Colby built. It is said that Winston Churchill stayed there.
- A Colby built residence on Roseville Road.

Other areas of interest include:

- Lee Hill Farm where the Lee Home built in the 1850's still stands. An old barn exists on the site.
- The Ira Prickett property, which is now owned by Hudson Guild.
- Dr. Miles home on Lackawanna Drive, built in the 1870's/80's. An old barn still stands on the property and the railroad ran through part of the farm.
- The Spranger residence on Rt. 206 near Cranberry Lake (circa 1830/1850's) is the second oldest house.

The Open Space Program in Byram Township

“Haphazard or spotty preservation of natural areas is insufficient.

Sizable, continuous parcels should be permanently preserved so that natural systems can continue to do their irreplaceable work...”

Byram Township Natural Resource Inventory, page 163.

The goals and objectives of the Open Space and Recreation Plan are drawn from the ordinance and referendum establishing the Open Space Trust Fund and Committee, the Township Master Plan, and meetings with the Byram Township Open Space Committee.

The Master Plan is currently being revised. The Master Plan was completed in December 1988 and adopted by the Township in 1989, but the zoning recommendations in the document were never enacted due to public displeasure with the document. It was felt by the residents living in the Township that the 1988 Master Plan was too developer friendly, and there was concern that it would generate multiple family housing, overpopulated schools and an increase in traffic. Therefore, there has been no change in zoning since 1964/1965 when zoning was first adopted.

An important goal of the Open Space and Recreation Plan is to become an element of the Township’s Master Plan. The goals, objectives and policies for Byram Township are outlined in the 1988 Township of Byram Comprehensive Master Plan, and those goals that relate to open space are as follows:

Land Use:

- “Within the latitude afforded by the availability of vacant land and limitations imposed by environmental constraints, guide land development and the location of community facilities in order to meet the needs of the Township residents while promoting the preservation of the natural environment” (*page II-1*).

The corresponding objective for this goal is:

- “Promote land use practices and subsequent development regulations to allow for manageable and controlled growth while serving to protect the rural ambiance of the Township while safeguarding environmental resources” (*page II-2*).

Township Character and Identity – objectives:

- “Preserve the character and special sense of place of the Township’s historic areas” (*page II-2*).
- “Preserve the character and special sense of place of the Township’s ‘lakeside’ communities” (*page II-2*).

Environmental Resources:

- “Maintain the essential rural character and amenity of the Township by guarding against degradation and destruction of woodlands, steep slopes, lakes and waterways, areas of natural beauty, sensitive environmental areas, productive agricultural areas and important historic places” (*page II-3*).

The corresponding objectives for this goal are:

- “Limit the development and expansion of roads and utilities into environmentally sensitive areas” (*page II-3*).

- “Protect stream corridors, wetlands, woodlands, steep slopes, groundwater recharge lakes, and other environmentally sensitive lands and waters through the development of local ordinances” (*page II-3*).
- “Preserve and maintain major areas of open space” (*Township of Byram Comprehensive Master Plan, page II-3*).

The *Natural Resources Inventory of Byram Township* outlines a series of planning practices for preserving the Township’s natural resources, with special emphasis on its lakes and streams and its drinking water supplies (*Chapter 7, pages 163-173*). The Environmental Commission goals were to prevent disturbance of sensitive natural features including steep slopes, forests, streams, aquifer recharge areas, wetlands, areas where water tables are high or where bedrock is close to the surface, and also scenic views. In this section of the document, the report recommends “creating a town-wide open space plan that emphasizes sizable, continuous greenways and that clearly establishes the legal inviolability of areas set aside as open space” (*page 168*).

At a meeting of the Open Space Committee (May 2000) the members outlined the following goals and objectives for the open space program:

- Increase the amount of both passive and active parkland in the Township.
- Protect the large wooded areas and farms in the Township.
- Preserve and enhance the semi-rural character and resources of the community.
- Protect the watersheds of the waterways flowing through the Township, specifically Lubbers Run and the Musconetcong River.

The Open Space Committee also looks to remain consistent with the goals of the New Jersey State Development and Redevelopment Plan for the Township. Byram Township falls within three planning areas in the New Jersey State Development and Redevelopment Plan. The land owned by the New Jersey Division of Parks and Forestry (Allamuchy Mountain State Park) is designated as a “Park and Recreation Area.” A large section of the Township outside of the State Park, extending into Hopatcong Borough, is designated as “Planning Area 4 – Rural Planning Area,” and the remainder of the Township is within “Planning Area 5 – Environmentally Sensitive Planning Area” (*New Jersey State Development and Redevelopment Plan*).

The State Plan designates Sussex County as a low growth area, with emphasis on protection of the existing natural resources and agricultural lands. Byram Township has petitioned the State to develop a village center at the corner of Route 206 and Lackawanna Drive. The Township envisions this as an opportunity to develop a regional center for the Township incorporating a village shopping area and village green for residents to meet and socialize.

Open space preservation needs to be planned, as any municipal infrastructure must be planned. Conservation of critical tracts of lands helps to maintain the character of the community and preserve the quality of life for the current and future residents of the Township.

History of the Open Space Trust

Byram Township is one of the first municipalities in Sussex County to establish a dedicated tax for the acquisition of open space. In November 1999, the referendum establishing the Open Space Trust was passed by a three-to-one margin (*Appendix*).

On January 10th, 2000, the Township Council adopted Ordinance No. 11-1999 that established a municipal "Open Space, Recreation, Farmland Preservation, and Historic Preservation Trust Fund" (*Ordinance No. 11-1999 in Appendix*). This Ordinance establishes a program for the acquisition, development, maintenance and preservation of municipal open space, recreation, farmland preservation, and historic preservation in the Township. The Ordinance created a five member Open Space Committee consisting of the following representatives: Township Manager, one member of the Planning Board, one member of the Environmental Commission, one member of the Recreation Commission, and one citizen of the Township holding no other elected or appointed position. With the exception of the Township Manager, all members of the Open Space Committee serve for a term of one year. (*A list of the 2000 Committee members appears in the Appendix*).

The duties of the Open Space Committee are to complete an Open Space and Recreation Plan to become eligible for the New Jersey Green Acres Planning Incentive Program. They are to advise the Township on properties to acquire for preservation and to submit a prioritized list of those properties to the Township Council for their review.

Ordinance No. 11-1999 establishes funding through the dedication of an amount of \$0.02 per \$100 of assessed valuation of each annual tax levy commencing with the year 2000. The Township Manager anticipates the Trust will generate approximately \$100,000 per annum. Property acquired with these funds may not be leased or sold, until and unless the sale or lease has been authorized by the Township Council. Moneys from this Trust Fund can be utilized to acquire or develop vacant land, as well as land which has improvements upon it at the time of acquisition, or to acquire development rights, where the principal purpose of the acquisition is to preserve open space, recreation, farmland preservation and/or historic preservation. If no property is acquired for a period of five consecutive years, the Township Council will review the activities of the Open Space Committee and offer recommendations concerning the Trust.

Other Participants in Open Space Preservation in Byram Township

There are several organizations undertaking regional open space preservation activities in the Township. These regional initiatives include the following:

- **New Jersey Natural Lands Trust.** The NJ Natural Lands Trust owns land (91 acres) in the Township within the Lubbers Run greenway. The NJ Natural Lands Trust was created in 1968 by the Legislature as an independent agency with the mission to preserve land in its natural state for enjoyment by the public and to protect natural diversity through the acquisition of open space. The Trust preserves land primarily by donations of open space through acquisition of title in fee simple or of conservation easements, and manages its properties to conserve endangered species habitat, rare natural features, and significant ecosystems (*The New Jersey Natural Lands Trust, 1998 Annual Report*).
- **New Jersey Division of Parks and Forestry.** Allamuchy Mountain State Park encompasses a quarter of the Township. The Division of Parks and Forestry could potentially expand its holdings in this area to add to the existing park system.

- **Morris County Park Commission.** In the *Byram Township Natural Resource Inventory*, the Morris County Park Commission is reported as developing a trail from Schooley's Mountain Park in Washington Township to Stephens State Park in Hackettstown (page 169). The trail would connect Allamuchy State Park and the West Brookwood section of Byram to the Morris County Patriot's Path system. Patriot's Path is a multi-use trail designed to link parklands throughout Morris County and into neighboring Counties' trail systems.
- **Sussex County Chamber of Commerce.** The Chamber of Commerce is in the midst of developing an ecotourism plan for Sussex County. This meets the goal of Byram Township to promote ecotourism in the Township.
- **Sussex County Planning Department.** The Planning Department has recently formed a strategic growth planning committee for Sussex County. Byram Township is a gateway community to the County and should be actively involved in the development of such a growth plan to ensure goals are consistent with Byram's plans.
- **Highlands Coalition.** This group consists of 80 government, private sector and nonprofit land conservation organizations that work to preserve the New York-New Jersey Highlands region. The Highlands is significant as a source of drinking water and as a diverse habitat for plant and animal species. Population growth in the Highlands province is double that experienced in the rest of New Jersey. The Highlands Coalition is working to make the region a "State Area of Critical Concern" and to highlight the region as a special federal resource. These efforts may channel more funding resources into the Highlands to help communities accomplish their open space goals.
- **New York-New Jersey Trail Conference.** The New York-New Jersey Trail Conference was organized by hiking clubs 80 years ago to help coordinate hiking trails in the metropolitan areas. The Highlands Trail, a hiking trail connecting the Hudson and Delaware Rivers, under development by the New York-New Jersey Trail Conference, travels through Byram Township.
- **Boy Scouts of America.** The Boy Scouts of America operates one camping facility in the Township –within Allamuchy Mountain State Park. The Division of Parks and Forestry has a right-of-first-refusal for this property should the Boy Scouts decide to divest themselves of this property. The NJ DEP purchased an easement to retain this right for the State and the easement is on file with the NJ DEP.
- **Musconetcong Watershed Association.** The Watershed Association is a nonprofit watershed organization that focuses public awareness and support for the Musconetcong River corridor.
- **Canal Society of New Jersey.** This organization has been actively involved in the development of a Morris Canal trail and greenway from Jersey City to Phillipsburg. This trail would incorporate the Lubbers Run greenway planned by the Township.
- **Hudson Guild Farm.** This 500-acre property is a camp, conference and retreat located in both Hopatcong and Byram Township. The public is invited on this land for passive recreation purposes and this property has been used by pre-school groups, scouting organizations, public school children, senior citizens, families, local civic groups and local residents. The primary activities at the site are nature walks, nature study, aquatic study, picnicking, bird watching, hiking and field geology. The

emphasis of the Hudson Guild Farm is environmental awareness and natural resource stewardship.

- **New Jersey Conservation Foundation.** The Foundation's mission is to promote conservation of land and natural resources throughout New Jersey. They have proposed a greenway in Byram Township linking Allamuchy Mountain State Park and Sparta Mountain.
- **The Nature Conservancy.** The Nature Conservancy's mission is to preserve plants, animals and natural communities that represent the diversity of life on Earth by protecting the lands and waters they need to survive. They have been awarded funds from the Duke Foundation to preserve endangered species habitat in New Jersey.
- **Rails to Trails Conservancy.** This national conservation organization focuses its efforts on converting old railroad beds into trails. The railroad line in the center of the Township, the "Lackawanna Cut-off," has been proposed by the Environmental Commission as a proposed trail and Rails to Trails has been supportive of this initiative.
- **Morris Land Conservancy.** Formed in 1981, Morris Land Conservancy is a nonprofit, membership organization working in land conservation throughout the greater Morris County area. The Conservancy helped Byram Township compile the Open Space and Recreation Plan. The Conservancy is also working with neighboring towns in both Morris and Sussex Counties to implement their open space program.

Inventory of Outdoor Resources and Facilities in Byram Township

This section of the Open Space and Recreation Plan inventories the open space lands within Byram Township. Some of the lands are permanently protected as open space, owned by public and private entities, and these will be noted.

Public Open Space

The acreage numbers in **bold** within this section of the report come from the property lists in the *Appendix*. The accompanying *Open Space Map* details the location of these properties and has been developed using the computerized mapping program ArcView 3.2 based on the Township's base map, updated by the Township engineer in 1994 and incorporating updated tax map information. The property list data was supplied by the Byram Township Tax Assessor's office and represents the year 2000 tax data (*see property tax lists included in the Appendix*).

State Land

New Jersey Department of Environmental Protection

Allamuchy Mountain State Park and Waterloo Village

The NJ DEP owns **3, 079 acres** of parkland in the Township as part of the larger Stephens – Allamuchy Mountain State Parks (*publicly owned property, Class 15C in the Appendix*). This Park is used for hiking, boating, fishing, hunting and picnicking. Of this land, **46 acres** are set aside for Waterloo Village. This complex is open to the public and is a working historic village.

New Jersey Natural Lands Trust

The NJ Natural Lands Trust owns three properties in the Township on either side of Lubbers Run totaling **91 acres**.

New Jersey Department of Transportation

The NJ DOT owns **105 acres** of land in the Township dedicated to transportation purposes. This land is primarily the Route 206 and 80 highway corridors and the Lackawanna Cut-off railroad line. This rail line connects to the Erie Lackawanna rail line, and both are currently inactive. There have been discussions of reactivating this rail line for passenger service through the Township into Andover. One parcel is of special interest to the Township. It is a 65 acre linear tract of railroad property from the bridge at Lackawanna Drive south into Hopatcong. This large corridor property, if not redeveloped for an active railroad, would be an excellent rails-to-trails opportunity for the Township. The Environmental Commission has proposed that this property be part of the Lackawanna Cut-off trail running along the old railroad bed through the center of the Township into Andover.

Municipal Land

Byram Township

Byram Township owns a total of **132 acres** in the Township (*publicly owned property, Class 15C in the Appendix*). This land is primarily small lots scattered throughout the Township. As detailed in the Township's Recreation and Open Space Inventory (ROSI), the Township has six parks (*Recreation and Open Space Inventory in the Appendix*). Four of these parks have been developed for recreation use, and two are undeveloped parklands. The total acreage of parks on the Township's Recreation and Open Space Inventory (ROSI) is **94 acres**. The Township's ROSI is submitted to New Jersey Green Acres and is currently the highest level of protection a property can have for open space preservation. Therefore, of the total acres of Township owned property, **71%** is preserved as parkland. These parks include C.O. Johnson Municipal Park, Niel Gylling Field, Tomahawk Lake Park, East Brookwood Mini Park, Byram Township Municipal Park, and Riverside Park. The last two parks are undeveloped lands held for recreation and conservation purposes (*Recreation and Open Space Inventory in the Appendix*). There is a playground located on Riverside Park, but the majority of the property is used for passive recreation purposes.

Sparta Township

Sparta Township owns several small properties in the Township (*publicly owned property, Class 15C in the Appendix*), (**1 acre**) near the Sparta/Byram border. The Sparta Township Water Utility also owns a small lot (**2 acres**) in the Township. The lots owned by Sparta are used primarily for water utility infrastructure.

Quasi-Public Land

Public School Properties

The Byram Township Board of Education owns three properties in the Township totaling **108 acres**. The schools are located on Lackawanna Drive and Mansfield Drive. The playing fields for the schools are located on Mansfield Drive and there has been discussion of adding a new school on this site. The larger property on Mansfield Drive has wetlands onsite.

Summary of Public Open Space

The following table summarizes the publicly held properties in the Township:

NJ DEP Property	3,079 acres
NJ DOT Property	105 acres
NJ Natural Lands Trust	91 acres
Byram Township	132 acres
Sparta Township	3 acres
Byram Board of Education	108 acres

TOTAL 3,518 acres

The total amount of publicly held land in the Township is **3,518 acres**.

Of the publicly held land in the Township, the following properties are protected from sale or future development:

State Parkland	3,079 acres
NJ Natural Lands Trust	91 acres
Municipal Parkland	94 acres
TOTAL	3,264 acres

The total amount of protected land in the Township is **3,264 acres**. Thus, **93%** of the publicly held land is protected from future development. Of the total 13,184 acres in the Township, **25% of the Township consists of permanently preserved open space**. State Parkland makes up **94%** of the preserved open space in the Township.

Private Open Space

Nearly one-quarter of Byram Township is held as public open space. The remaining land in Byram Township is mostly held as private farms or woodland operations. There are a number of privately held recreation lands and facilities that offer additional opportunities for residents to enjoy the outdoors.

Campgrounds and Camping Facilities

There are four camping facilities in the Township:

- Panther Lake Campground on Route 206 surrounding Panther Lake 22 acres
- Columbia Valley Campground on Lackawanna Drive 35 acres
- Jefferson Lake Day Camp off of Waterloo Road 14 acres
- Boy Scouts of America Camp in Allamuchy Mountain State Park 910 acres

Each of these camping facilities are privately owned and operated. Panther Lake Campground offers lake passes to Township residents but access is restricted as to when Township residents can visit the lake. Columbia Valley Campground is also a private camping facility. Jefferson Lake Day Camp is a private summer day camp for children and is surrounded by Allamuchy Mountain State Park. It is privately owned, operates only in the summer months and is not open to non-participating campers. The total acreage for private campground facilities in the Township is **71 acres**.

The Boy Scouts of America is a tax-exempt organization that operates an active camping facility within Allamuchy Mountain State Park. The land is owned by the Boys Scouts, but NJ Green Acres purchased a Conservation and Preservation Easement in 1984. This easement allows no public access to the Boys Scout Camp, but requires the Boys Scouts to sell this property only to NJ Green Acres if they decide to divest themselves of this land. Part of this easements require the Boy Scouts to submit a five-year plan to NJ Department of Environmental Protection for this property, and any structural improvements to the site must be approved by NJ DEP first (*Kevin Dowling, Boy Scouts of America*).

Commercial Recreation

There are three commercial recreation sites in the Township:

- Wild West City on Lackawanna Drive near Route 206 18 acres (of the total 150 acres owned by this corporation, 18 acres is set aside for commercial use, the remainder is assessed as farmland)
- Lake Lackawanna Golf Course 22 acres
- Tomahawk Lake Resort 17 acres

Wild West City is an amusement park site located on Lackawanna Drive. Along with the amusement park offered during the summer months, Wild West City offers a paint ball course and cross-country skiing in the winter. This commercial property is located within the boundary identified for the Lubbers Run greenway. New Jersey Green Acres has discussed preservation of this property with the owners of Wild West City. Wetlands cover the rear portion of this property from Lubbers Run. Development is prohibited in wetlands, but Byram Township's current zoning allows a developer to add the density of development that could have been built in the wetlands into the uplands portion of the property. In terms of development, the wetlands area is of equal value as the uplands portion, which increases the overall cost of the property for acquisition.

As part of its town center planning, the Township has also proposed this site to the State Planning Commission as part of its village center. The Township would like to develop the upland portion of this property as part of the village center for residents and promote ecotourism along Lubbers Run and preserve the associated wetlands.

Lake Lackawanna Golf Course is a privately owned nine-hole golf course near Lake Lackawanna that is open to the public. Tomahawk Lake Resort is a privately owned beach and water park open to the public. This past summer, August 2000, the dam at Tomahawk Lake was breached and this recreational facility has been closed until repairs can be made.

The total acreage of the private commercial recreational lands in the Township is **57 acres**.

Beaches

Several of the privately owned lakes offer beach facilities and recreation to the homeowners surrounding that lake. Access is generally limited to the respective lake association members. There are no municipal public beaches in Byram Township. These private lakes include: Cranberry Lake, Lake Lackawanna, Forest Lake, and Lake Mohawk.

Most of Cranberry Lake is owned by the NJ DEP as part of Allamuchy Mountain State Park. The public can access the Lake at the dam where there is a launch ramp and dock. The shoreline owned by the NJDEP at the Lake is rugged and heavily wooded and can be accessed only by hiking in. The beach club at Cranberry Lake operates beach facilities at the Lake. In order to use the beach, residents have to join the community club. The Township does run a summer diving program at Cranberry Lake for its residents.

Fishing is permitted at all of the lakes. Motorized boats can be used at Cranberry Lake, Lake Lackawanna and Lake Mohawk, but they are not permitted on Forest Lake.

Tax-Exempt Organizations

Two nonprofit organizations own a significant amount of land in Byram:

- Hudson Guild Farm 86 acres
- Waterloo Foundation for the Arts 6 acres

Hudson Guild Farm owns a large retreat and conference center in Hopatcong and Byram. The majority of the land held, along with the main building is located in Hopatcong Borough. This property is open to the public primarily for passive recreation: hiking, birdwatching, nature study. Hudson Guild Farm has received tax-exempt status through the New Jersey Green Acres program (*Appendix*) and has been part of this conservation program since 1976. This certification prevents any type of development on the property while it is owned by Hudson Guild for three years. At the end of the three-year period, Hudson Guild Farms can choose to reapply to the state for tax exemption. Land in this program can be sold off and as long as the new owner pays the back taxes for the past three years. The newly acquired land can then be developed. There are currently no plans to sell this property or portions of this property for development, but the current application expires on July 1, 2001. The total acreage in Byram Township held by Hudson Guild Farm is **86 acres** on Stanhope-Sparta Road. This property was recently purchased but their application to the New Jersey Green Acres tax-abatement program remains standing.

Located on the banks of the Musconetcong River, Waterloo Village is an historic village and park. It is a replica of a four hundred-year-old Lenape (Delaware) Indian Village and a bustling port of the once-prosperous Morris Canal (*Stephens and Allamuchy Mountain State Parks, New Jersey Division of Parks and Forestry pamphlet*). The Village is leased to the Waterloo Foundation for the Arts, Inc. and incorporates numerous historic sites. The Waterloo Foundation for the Arts owns several small properties within Waterloo Village that are historic sites. In addition to the Foundation there two privately owned historic sites that are tax-exempt and also located within this historic district. The total acreage of these historic sites is **6 acres**. In addition to its historic functions, Waterloo Village is also the sites of numerous concerts and public arts events.

Non-Improved Lots in Byram Township

Scattered throughout the Township are non-improved lots with no structural improvements on them, and not currently assessed as farmland. There is a total of **1,659 acres** of tax-assessed non-improved properties in the Township. Only **13%** of the entire Township is left as unconstrained land, available for acquisition (*see non-improved, Class 1 properties in the Appendix*).

Several of these non-improved lots are the lakes themselves, the largest being Lake Lackawanna (117 acres) owned by property owners associations. A total of 213 acres of vacant land are privately owned lakes: Lake Mohawk, Lake Lackawanna, part of Cranberry Lake, and parts of Panther Lake. The *Priority Land Acquisition Recommendations* section of this Plan will detail specific land recommendations for these non-constrained properties.

Agricultural Land

The majority of farmland in the Township is farmed under the woodland management program. The soils in the Township for the most part are not conducive to traditional farming practices and do not yield high value traditional agricultural crops. The farmland owners in the Township have adapted their agricultural programs for timbering, woodland management, and some hay farming. There are **5,036 acres** of agricultural lands in Byram Township (*see agricultural, Class 3 properties in the Appendix*). This represents **38%** of the total land acreage in the Township. None of these farm properties are currently enrolled in the County or State's farmland preservation program. The Federal Forest Legacy program managed through the NJ Green Acres presents an opportunity for the Township to preserve this woodland legacy. The Open Space Committee supports the efforts of the landowners to preserve their family farms from development.

Open Space Inventory

Woodlands and lakes form a rural and secluded quality to Byram Township. In order to protect this quality, the Open Space and Recreation Plan recommends that Byram Township incorporate a diverse inventory of lands to begin to prioritize properties for acquisition. This inventory includes:

Non-improved properties	1,659 acres
Agricultural land	5,036 acres
Boy Scout Camp	910 acres
Hudson Guild Farm	86 acres
Waterloo Foundation	6 acres
NJ DOT railroad property	65 acres
Private Campgrounds	71 acres
Private Recreation sites	57 acres
Municipal property not on ROSI	38 acres

Total on Open Space Inventory 7,928 acres

Of the total acreage in the Township (13,184 acres), 7,928 acres or **60% of the Township is available for preservation and conservation.**

Outdoor Needs in Byram Township

One-quarter of Byram Township is permanently preserved open space, or land that will be in its natural state in perpetuity. Of this preserved land, 94% is owned by the State and is part of Allamuchy Mountain State Park. The Township would like to protect its sensitive waterways and lakes and also answer the active recreational needs of the Township residents. The demand for recreation space is strong and will not likely diminish in the near future. The Township is facing challenges in growth from the development around Lake Mohawk near Sparta, the anticipated widening of Route 206 through the Township, and the plans of NJ DOT to reactivate the railroad along the Lackawanna Cut-off into Andover Township. Stewardship and protection of existing open space and farmland in the Township are critical to maintaining the quality of life that residents have come to rely on in the municipality.

Demand Outpaces Recreation Space

*"Byram Township is one the best areas you can live in because someone is always willing to step up to the plate."
John Pappalardo, Chairperson Recreation Committee, June 2000*

The Township owns **94 acres** of recreation space or about **0.7%** of the Township's total land area. Four of the six parks (71 acres) on the Recreation and Open Space Inventory (*ROSI in the Appendix*) have been developed or partially developed for recreation purposes. These are: C.O. Johnson Municipal Park, Niel Gylling Field, Tomahawk Lake Park, and East Brookwood Mini Park. In addition to these recreation areas, the Township maintains the fields at the two municipal schools and shares the fields with the school for Township recreational programs.

Participation

The following chart indicates the number of recreation participants served by Township facilities in 2000. Several of the programs are open to residents from Netcong and Stanhope (indicated on the chart as "out of town").

<u>Recreation Activity</u>	<u>Number of Participants</u>
Swimming and diving lessons	140 children(15-20 out of town)
Spring Soccer	350 children(100 out of town)
Fall Soccer	400 children
Fall Baseball	75 children
Spring Baseball	290 children
Softball	300 girls
Mens Softball	168 men
Mens Basketball	45 men
Fall Football	230 children
Wrestling	80 children
Ladies Golf League	20 women

The Township baseball program incorporates T-ball, Little League, Babe Ruth and girls softball. Baseball and girls softball are run in both the fall and spring, with

clinics for both sports run during the summer. The Township also offers a summer baseball clinic for both boys and girls. Also available in the Township is basketball, tennis and jogging.

The demand for recreation remains strong in the Township. A total of 1,800 to 2,000 children participate in activities sponsored by the Township's recreation program. Over 1,400 children participate in the soccer and baseball programs. This represents 75% of the total recreational use. Over 750 children participate in the Township's soccer program, and the town currently has only one soccer field and one practice field. Sports have become year-long activities and are no longer seasonal. This places additional stress on the playing fields which does not allow the field to "rest" and recover. Maintenance costs thus increase while field deterioration is accelerated.

Field space in the Township is at a premium and the school fields are actively used for the Township programs. The Township has grown, and there is a referendum on the November ballot to build a new school to replace the grammar school on Lackawanna Drive. The new school will likely be constructed on the playing fields, so these fields will need to be replaced.

There is the possibility of expanding the recreational field space at C.O. Johnson Municipal Park, and the Township has recently added more fields within this park. The additional space is limited. The Mohawk View development is a new development near Sparta Township that recently completed a new multi-use practice field for the Township. The Recreation Committee would like to see this type of field dedication done when new housing developments are planned in the Township.

In addition to the anticipated need to replace fields lost with the construction of the new school building, the Recreation Committee wants to add another soccer field in the Township. The Township soccer program has the largest number of children participating and the least number of fields. In addition to this, the baseball program in the Township anticipates it will need two additional Little League fields and one Babe Ruth regulation size field. The Recreation Committee is actively pursuing the development of an in-line hockey rink at C.O. Johnson Municipal Park.

The swimming programs offered by the Township summer recreational program are at Panther Lake. The Committee would like to offer the swimming programs at a Township owned swimming facility since the lakes in the Township are privately owned. The Committee would also like to have a municipal golf course if a site becomes available for that type of development.

The biggest challenge facing the Recreation program in the Township is that it is currently being run solely by volunteers. All of the programs are run as independent organizations with volunteer administrators and coaches. Between coaches and program administrators, there are about 400 adult volunteers involved in these recreational programs. The Township residents feel a strong sense of community and volunteer their time where needed. The Recreation Committee does not run the programs itself; they administer and manage the field space necessary for these activities to run successfully. The Township is interested in hiring a recreation director. Currently, Byram's programs are open to out of town residents and there are a number of residents who take advantage of this opportunity.

The second major challenge facing the recreational program is the amount of maintenance necessary to keep the fields in playing shape. The fields are currently being

used year-round with limited time for reseeding and annual maintenance. The Recreation Committee would like to add more park space to the Township both for active recreational use (as stated above) and passive recreational use. The Committee would like a park system that is able to service the needs of all the residents in the Township.

Facilities

The following chart lists the current recreational facilities in the Township:

<u>Type of Recreation Facility</u>	<u>Number</u>
Little League fields	8
Senior Little League fields	2
Football Field (with lights)	1
Soccer fields	1
Practice Field	1
Youth Field	1
Tennis Courts	4
Basketball (1/2 court)	1
Basketball (full)	1
Playgrounds	3
Jogging Course	1

Of these recreational facilities, the soccer field, practice field, three Little League fields and the Senior Little League field are on school properties. As stated above, the fields are maintained by the Township so the residents can use them for the Township programs. There is also a basketball court at the school.

The Recreation Committee anticipates that lacrosse, field hockey, in-line hockey and volleyball will be the sports to plan for in the Township in the next few years. There has been some interest expressed in forming Township programs in these areas, and the Recreation Committee is trying to answer part of these needs with the plans to build an in-line hockey rink at C.O. Johnson Municipal Park.

Byram Township would like to be able to answer the recreational needs of all of its Township residents. Whether playing soccer or providing diving lessons, Byram Township would like to offer these opportunities to the Township residents. The variety of recreation space in the Township should reflect the variety of the residents in the community. A community with a successful recreation program will include a balance of facilities and lands for both passive and active recreation space.

State Facilities

By far, the State Park is the largest provider of passive recreation opportunities in the Township. The State owns over 3,000 acres in the western portion of the Township offering a variety of hiking, hunting and fishing opportunities.

Activities available at Allamuchy Mountain State Park include picnicking; 25 miles of unmarked trails in the northern section of Allamuchy that are available for hiking, biking, horseback riding, cross-country skiing, snowshoeing and dog sledding; fishing; hunting in parts of Allamuchy, and boating. During the spring, the NJ Division of Fish and Wildlife stocks the Musconetcong River with brown, rainbow and brook trout. Cranberry Lake is also stocked by the State. Jefferson Lake and Cranberry Lake

offer warm water species such as largemouth bass, sunfish, catfish, perch and pickerel. During the winter months, both perch and pickerel are caught through the ice (*Stephens and Allamuchy Mountain State Parks, New Jersey Division of Parks and Forestry pamphlet*).

The New Jersey Department of Transportation is designing a wetlands mitigation project on Lubbers Run adjacent to the Township Intermediate School. This project will enlarge existing wetlands along Lubbers Run as mitigation for wetlands being taken as part of the highway improvement project at Route 183. This wetland mitigation project is creating a total of 4 to 5 acres of new wetlands and will be designed as an open classroom for the school. The NJ DOT anticipates it will take 2 to 3 years to complete construction of the wetlands mitigation site (*Andrew Mavesky, NJ DOT, July 2000*). The NJ DEP Division of Parks and Forestry is working with the NJ DOT and the teachers at the Elementary School to develop a curriculum for the school to use this open classroom. The NJ DOT is designing woodchip trails, wooden tables and benches, bird blinds, and interpretive signs (*Ken Conrail, NJ DOT, July 2000*).

An Expanded Trail System is a Community Amenity

Byram Township benefits from a rich trail system within Allamuchy Mountain State Park. A network of trails criss-crosses Allamuchy Mountain State Park. The Highlands Trail is being developed in the eastern section of Byram through Allamuchy Mountain State Park by the NY-NJ Trail Conference. The hiking-only Highlands Trail is proposed to run the length of the NY-NJ Highlands region from the Hudson to the Delaware Rivers. The Sussex-Branch Trail traverses the State Park from south to north into Byram Township. This trail then heads into Andover, Newton and Branchville, crossing the Paulinskill Trail. The rail line that underlines this Trail was the first railroad in Sussex County. This was originally mule-powered, carrying iron ore from the Andover Mines to Waterloo Village. The Sussex Branch Trail within Allamuchy Mountain State Park is managed by Hopatcong State Park; the Trail that is outside of the Park is managed by Kittatinny State Park. The Sussex Branch Trail is a 100 foot wide multi-use trail that allows biking, hiking, horseback riding, dog sledding, snowshoeing and cross-country skiing. No motorized vehicles are allowed on the trail (*Rocky Gott, Kittatinny State Park, July 2000*). The Sussex Branch Trail is heavily used and has grown in popularity.

The Environmental Commission would like to incorporate an expanded municipal trail system that would connect the existing municipal parks and trails and significant natural areas.

The NY-NJ Trail Conference is planning the Highlands Trail to traverse Byram Township. It would go from the Hudson Guild Farm (where it would eventually extend east to the Hudson River), west to Lake Lackawanna, along Lubbers Run through the NJ Natural Trust lands, across Route 206 into the State Park to head west to the Delaware River. The Highlands Trail is being developed in the eastern section by the NY-NJ Trail Conference. The hiking-only Highlands Trail is proposed to run the length of the NY-NJ Highlands region. The NJ Canal Society is also very supportive of this project due to its proximity with their proposed Morris Canal Greenway and Trail. This trail may also link up with the Morris County's Patriot's Path trail system. Connections between trails, and

filling in the gaps between trail systems, is an opportunity to create an interconnected natural system between existing protected areas.

The third trail proposal is the Lackawanna Cut-off, as part of a rail revival plan to convert the railbed to a multi-use path system. The proposed trail would extend from Hopatcong northwest into Andover eventually leading to the Delaware River near the Delaware River Water Gap and the Appalachian Trail.

The Township has recently received a \$300,000 grant to put in a bike path at the end of Mansfield Drive. This path would go to the Lenape Valley Regional High School. This facility will create a bike path linking the grade school to the high school. The Committee would like to see this bike path tie into the East Brookwoods community.

The Lubbers Run Greenway and Trail (*Lubbers Run Greenway Project, A Stream Corridor Study*) aim to protect the sensitive Lubbers Run watershed. The greenway creates a path system extending from the Old Andover Forge near International Drive eastward across Route 206, through Wild West City, through Township owned property and NJ Natural Lands Trust property to Lake Lackawanna. This trail would parallel parts of the proposed Highlands Trail. The Township and the State Department of Environmental Protection are supportive of this project and of the preservation of the lands necessary to make this work.

The Morris Canal Greenway (*Appendix*) is a recreational trail and greenway corridor that is planned to extend along the Morris Canal through Hackettstown, Saxton Falls, Waterloo, Stanhope, Port Morris, Shippenport and Ledgewood. This project is a cooperative effort between the NJ Division of Parks and Forestry, the Canal Society of New Jersey, Friends of the Morris Canal, and Waterloo Village. The Greenway would serve to not only protect the canal remains and the associated natural environment, but also provide interpretive signs along the route. In Byram Township, this Greenway would parallel the Musconetcong River and protect parts of the Lubbers Run greenway corridor.

Historic Resources Remain Unprotected

There is a wealth of historical resources remaining in the Township. In the *Appendix* is a list of historic sites (and site map) in Byram Township. This list was compiled by the Environmental Commission as part of the 1994 *Natural Resources Inventory*. The majority of these properties are privately held; and if land development proceeds, these resources could be at risk. The challenge is not only preserving the sites themselves, but retaining the historic environment surrounding them.

Drinking Water Supplies are Limited

Eleven water companies supply most of Byram's residences with potable water. The smallest company serves 16 homes and the largest serves 400 homes in Byram (and Sparta) (*Byram Township Natural Resource Inventory, page 102*). The other homes, all the businesses, schools, and the municipal complex have individual wells. One of the primary problems facing the Township is the location of new wells to service new development in the Township. Byram's water service is limited by the extreme environmental constraints within the Township. The geological resources conducive to

groundwater supplies are limited. Areas of high recharge should be protected to maintain water quality and quantity in the Township.

Lake Ecosystems are at Risk

The communities surrounding the larger lakes in the Township have become predominately year-long residences rather than seasonal cottages. Failing septic systems, stormwater runoff and nonpoint source pollution have led to eutrophication of the lake ecosystems with associated weed growth and filling of the lakes. This eutrophication process reduces the available oxygen in the water, increases the water temperature of the lake, and reduces the quality of the habitat for fish in the lake. The lakes are monitored for water quality. Decreasing and restricting new impervious surface surrounding the lakes will serve to minimize the amount of stormwater runoff entering the ecosystem and protect the lakes from further degradation.

Preserved Land is Isolated

Apart from Allamuchy Mountain State Park, preserved land in Byram is scattered and not connected by greenways. Protection of swaths of land connecting already preserved land will enhance wildlife habitat, lead to increased residential access to park systems and limit the fragmentation of ecosystems. Protecting green corridors in the Township from future development protects the integrity of the system as a whole. Greenways that connect these sanctuaries of nature have human benefits as well. These natural pathways link people to their parks and the “green sidewalks” invite people to explore the natural world and bring natural resources close to home. The more experience and understanding of the natural world people gain, the more likely they will be to continue to support the protection of natural recreation areas. People will develop an “outdoor ethic” of respect and appreciation for natural areas and will begin to adopt stewardship functions that will sustain these areas into the future. Access to “wild” areas is important to increase public support. This support will be necessary to maintain the integrity of these areas into the future.

Growth Threatens Agricultural Landscape

As the Township’s infrastructure is expanded, either through the proposed widening of Route 206, the completion the passenger rail line on the Lackawanna Cut-off, or by new housing and commercial development, the existing agricultural land will be impacted. Byram Township’s agricultural land holdings are in large family estates primarily and have been that way for several generations in some instances. These woodlots are not intensively farmed. They represent areas that are not a priority for the traditional farmland preservation programs due to the lack of prime agricultural soils in the Township. These properties have tributaries that feed into Lubbers Run and the Musconetcong River. They may have historic structures. Because of their size, they define the rural landscape of Byram.

Creation of Lubbers Run Greenway needs to be Accelerated

The Lubbers Run greenway from Lake Lackawanna to the State Park has been identified by the Township as a critical natural area that should be preserved (*Lubbers Run Greenway Project, A Stream Corridor Study*). Many lands along Lubbers Run that may be included in the greenway are also in highly developable areas, such as the proposed town center along the Route 206 corridor. The State Department of Environmental Protection and Byram Township have been working towards the preservation of this greenway, and these efforts should be accelerated before the greenway becomes disrupted.

Regional Activities Influence Preservation and Future Land Development

The borders around Byram Township are in general either composed of residential areas or land that is preserved as open space and included within Allamuchy State Park and Waterloo Village (*Regional Land Use Map*).

In Sparta Township, residential developments (particularly surrounding Lake Mohawk) are located along the shared border with Byram Township. The Hudson Guild property in Byram spills over into Hopatcong Borough. Land that is located in Stanhope along the Byram border is zoned light industrial and commercial, with no current preserved open space areas. Mt. Olive shares its border with Byram Township along the Musconetcong River. Along much of this border, land is already preserved as a part of Waterloo Village and the proposed Musconetcong River Greenway.

Allamuchy State Park extends along Allamuchy Township's shared border with Byram. In Green Township, Allamuchy State Park composes a portion of the shared border, with large farming tracts lying along the remaining section of the shared border with Byram.

A System of Open Space in Byram Township

Open space is an infrastructure that needs to be designed and planned, just as utilities, roadways and pipelines. When planned as a system, this infrastructure provides many benefits to a community.

Community Benefits of Open Space Preservation

Natural lands and recreation space provide the following functions that promote a healthy community:

- Protect the quantity and quality of drinking water
- Preserve habitat for living resources, including plants, animals and humans
- Offer a variety of outdoor recreation experiences
- Balance growth and development to sustain economic vitality in the community
- Provide opportunities for residents to keep fit and improve physical health
- Aid in promoting a sense of community
- Connect current residents to the community's heritage by preserving historic landmarks and sites.
- Prevent erosion and conserve soil, a nonrenewable resource
- Contribute to landscape diversity and a scenic environment
- Control flooding
- Maintain a community's character
- Limit demand for traditional municipal services

A system of open space will achieve these benefits for Byram Township. The following recommendations will outline how the Township can build on existing protected lands to create a viable open space system.

Greenways Preserve Healthy Habitats and Create a More Livable Environment

The existing open space system includes Allamuchy Mountain State Park, the Township park system and land owned by NJ Natural Lands Trust, and the vast agricultural lands privately held in the Township. A greenway system that connects the Township parks to the State Park and extends into the interior of the Township would be an ideal goal for the Open Space program in Byram Township. A greenway linking natural areas prevents islands of habitat isolation and forest fragmentation. A secondary benefit of a greenway system is that it will guide people to explore and experience natural environments. This leads to and promotes the development of an outdoor ethic and support for continued preservation efforts.

To reach this goal, the Township should build on and connect the already protected areas in the Township. Any vacant lands adjacent to already protected areas should be acquired or easements purchased. This is especially critical in the areas next to the State Park. There are large, non-improved lots next to the State Park that will enhance this resource. To create a greenway connecting the Park to Township resources may require acquisition of easements through privately held land used primarily for

farming purposes. A greenway linking natural areas to the larger State Park system will invite the public to explore and discover natural treasures.

A greenway will also link neighborhoods in the Township. Currently, the communities in the Township are isolated from one another. A nonpaved linkage among neighborhoods builds a sense of community in the Township.

New Jersey Conservation Foundation has proposed a greenway corridor connecting Allamuchy Mountain State Park to Sparta Mountain. Connections between large, natural land holdings prevent forest fragmentation, loss of wildlife habitat, and loss of migratory pathways. Now is the time to protect these significant areas before development and economic pressures interrupt potential greenways.

Trails are Greenways with Public Access

Byram Township's Environmental Commission has actively pursued the development of a trail system in the Township. An extensive trail system linking natural areas and historic resources is another way to preserve greenway corridors in the Town. There are a number of groups excited about creating a trail system in Byram Township, and each of these organizations brings with it funding, people and ideas for implementing the project. Increased connections with the State Park and the rest of Byram would serve to bring more people outdoors and allow increased access and enjoyment of their natural resources.

Open Space Preserves a Community's Heritage

An open space system will complement and enhance historic sites. Open space preserves the landscape upon which the town is built. If the landscape is obscured by new buildings or altered with substantial earth moving, a connection is broken. Preservation of a building without the landscape represents only part of the history and understanding of a place.

State funds are available for historic preservation from the State's Green Trust. Some of these funds can be used to purchase lands to preserve a historic vista, the integrity of a historic district or cultural resource. Combining open space preservation goals with historic preservation priorities may create funding opportunities. The primary reason to unite goals is to preserve special places that will get people to understand and appreciate the heritage upon which their community formed. It connects current residents with the Township's past, promoting a sense of shared community.

Open Space Preserves Community Values

Byram is a "Township of Lakes," and protection of the health and beauty of these resources is important to each lake's ecosystem and to the residents living in the communities surrounding these lakes. In partnership with the private lake associations, Byram Township can work to protect the shorelines surrounding these lakes, educating the public about watershed protection, and integrating the community into the open space preservation program and bringing it "home" to them.

Greenways that connect the lake communities will likely follow the waterways that supply and replenish the lakes. Greenways will not only promote a sense of place, but will also literally demonstrate how a lake's resources are connected. Actions upstream and downstream affect the lake's health.

Open Space Safeguards Future Drinking Water Supplies

Due to the limited groundwater supply and natural restrictions on aquifers in the Township due to the underlying geology of the region, protection of the water supply for current and future needs is imperative. Open space preservation limits development, which in turn lessens the draw on available water supplies. Protection of limited groundwater and the aquifers from which it is drawn is necessary to preserve the quality and quantity of water for the Township's residents.

Agricultural Lands Preserve Scenic Character of Byram

Agricultural land lies in the heart of Byram Township. These lands preserve steep slopes and keep the shallow soil from running off into the lakes. The lakes in Byram are sensitive ecosystems, responding to the effects of increased siltation, nonpoint source pollution and degradation of water quality. A complete land use analysis of Byram Township and the role these lands have in preserving the existing natural resources in the Township is beyond the scope of this Plan. These forested farmlands are the most vulnerable to the growth that seems inevitable. The Township needs to take steps to encourage land owners to preserve their property now, on a voluntary basis.

Promotion of Agritourism will promote Farmland Preservation

Sussex County Agriculture Development Board is urging farmland owners to be a part of their agritourism program promoting agricultural enterprises in the County. These farms offer seasonal farm produce, opportunities to the public to "pick your own" fruits and vegetables and cutting their own Christmas trees. Sussex County falls within the Planning Areas 4 and 5 in the State Plan and the State Planning Office is working with Sussex County to promote agritourism initiatives (*Enjoy the Four Seasons of Agriculture in Sussex County*).

Encouraging farmland owners to become involved in the agritourism initiative will add to the economic viability of the local farming community. This program will perhaps motivate farmland owners to enroll their farms in the County and State Farmland preservation programs to prevent future non-farm development of their property. These preservation initiatives may not be applicable to all the farms in the Township, but is a valuable program for protecting farms. Farmland owners should be informed of this program and be supported in their conservation efforts.

Forest Stewardship will lead to Increased Protection of Natural Resources

Several farms in Byram Township are managed as stewardship forests and incorporate woodland management plans. For the State Farmland tax program, in order for a farm to qualify as a woodland management farm, the landowner must have a woodland management plan describing the forest resource and how the owner will manage their woodlands resources over a minimum of a ten-year period. To be eligible for the State Farmland tax program as a woodland farm, the farm must generate \$500 per year for the first 5 acres and \$.50 per acre for each acre above that first 5 acres.

The U.S. Forest Service also has a federally sponsored program called the Forest Stewardship Program. This offers landowner recognition for non-commercially owned properties where the landowner has a woodland management plan that also recognizes and manages the wetlands, wildlife, aesthetic value, soil and water in addition to the woodlands on the property. This program, when fully funded, also offers landowners cost-share initiatives to allow the landowners to fully follow the guidelines in their woodland management plan. In New Jersey, the State Farmland tax program and the U.S. Forest Service program have merged to allow one planning document for the landowner where the stewardship plan meets the state tax code and eliminates conflicts between the two (*Jack Shuart, NJ Bureau of Forestry*).

Byram Township does have landowners that are enrolled in the Forest Stewardship Program. Increasing enrollment of farmland owners in this merged state-federal program will ensure increased protection of the natural resources for an extended period – the minimum is a 10 year management plan. This does not ensure preservation of the land in perpetuity, but it does allow recognition of the importance of the land value and stewardship of the property for a longer period of time.

Ecotourism Initiatives will Promote Continuity of Natural Resources

The Sussex County Chamber of Commerce is actively promoting and developing an ecotourism program (*Tammy Horsefield, Sussex County Chamber of Commerce*). Ecotourism will take advantage of the beautiful natural resources that the County has to offer and present opportunities for people to enjoy the outdoors. Byram Township has the natural and historic resources to benefit from this initiative. Canoeing, boating, hiking, biking and a variety of outdoor recreational pursuits can take place in Byram Township. Ecotourism initiatives bring tourist dollars into the Township and offer an economic benefit for protecting scenic vistas and natural and historic landscapes. Combining the efforts of the County with the goals of the State land management agencies will increase the opportunities for recreation and tourism in Byram Township.

Action Program and Recommendations

The Action Program suggests a variety of steps that the Township should pursue to implement the Open Space and Recreation Plan. The activities listed for the first year after the adoption of the Plan are those that are most urgent and will further the Township's open space program immediately. The three-year recommendations are urgent but will take a little more time to complete. The projects under the five-year heading are important but should take place. The Open Space and Recreation Plan is not a static document. The Action Program should be updated every year and progress should be reported to the governing body.

First Year

Adopt the Open Space and Recreation Plan as an amendment to the Master Plan for Byram Township.

Submit the Open Space and Recreation Plan to the Green Acres program to become eligible for Planning Incentive grant for land acquisition.

Review and prioritize the properties highlighted in the Open Space and Recreation Plan with the Open Space Advisory Committee. Visit the properties and decide funding sources to pursue for the priority lands.

Begin discussions with the State to become a partner in the acquisition and permanent protection of lands adjacent to Allamuchy State Park.

Find and preserve a property appropriate for the development of active recreation fields.

Continue discussions with the State and private landowners to preserve the Lubbers Run greenway.

Continue the Open Space Advisory Committee, which will meet regularly and track the implementation of the Open Space and Recreation Plan.

Work with the Township Assessor and Attorney to confirm which developments have restricted land on them set aside for open space and preservation.

If a property becomes available for acquisition, Open Space Committee should act quickly to assess the property for potential acquisition for preservation.

Within Three Years

Develop materials and programs that describe the farmland preservation program and/or conservation easements to owners of large agricultural lands.

Inform landowners about various ways to protect and preserve land, including donation, estate planning and conservation easements.

Review developers' agreements and inform owners that official deed restrictions need to be placed on properties donated as open space in accordance with the Planning Board approvals (such as the Mohawk View field).

Begin discussions with farmland preservation officials at the County and State levels about the need to preserve woodland farms as well.

Seek input from the Byram Township Historical Society to determine how open space will enhance the long-term preservation of each site and work with the Society to prioritize potential land acquisition projects.

Prepare at least one application for the Sussex County Open Space and Farmland Preservation, if it is established.

Review the Township ordinances and implement ordinances that protect riparian buffers along stream corridors, limit or regulate tree removal, establish or maintain conservation easements, protect ridgeline and steep slopes and others that protect environmental resources to ensure they are as strong as possible. This activity should be accomplished in concert with the Environmental Commission.

Work with neighboring municipalities to coordinate and enhance the above ordinances and share land preservation initiatives.

Examine opportunities to increase the Open Space tax, perhaps with a "sunset" provision for the next 10 years.

Examine ecotourism initiatives – working with the County's Chamber of Commerce to begin implementing a tourism program.

Develop a regular process that contacts large landowners to request that the Township have a chance to purchase property before the land is placed on the open market.

Institute zoning that protects Byram's natural assets and directs development to appropriate areas of the Township.

Permanently protect the lands owned by Hudson Guild through easement or county/state/municipal acquisition.

Review the Open Space and Recreation Plan yearly to update the properties and information, and submit the update to Green Acres.

Within Five Years

Examine the tax-exempt properties owned by the Township and consider placing them on the Recreation and Open Space Inventory to ensure their permanent protection as open space. A list of these properties is included in the *Appendix*.

Pursue opportunities to reclaim properties around water bodies and along streams to protect the health of these resources and for public recreation.

Develop a comprehensive trail plan that includes bike paths and pedestrian trails that will provide alternative transportation routes between population centers and public parks.

Develop a stewardship program and informational materials that inform residents about the value of open space and their role in protecting existing open space.

Preservation Tools and Funding Sources

This section is a listing of the tools and funding sources available to preserve open space. It is not meant to be a complete listing. It is a list of the most commonly used and successful techniques.

Preservation Tools

Direct Acquisition

Usually, the most expensive way to preserve property is direct acquisition through fee simple. The title to the property changes hands from one owner to another. A disadvantage to this approach is the need to have the full purchase price available at the closing. Government agencies may not be able to raise the funds in time before an owner decides to sell the property to another buyer.

The Township may want to develop educational materials that target large property owners to describe various financial approaches to preserving land. For example, some owners may want to work out an arrangement where they sell blocks of their land over time to the Township or some other preservation partner. Other landowners may sell their land to the Township at a bargain sale to receive deductions for a charitable contribution on federal income tax. Donations of property may also be considered charitable contributions. Leasing arrangements with the owner allows the municipality to purchase the property and lease it back to the owner. This arrangement works when the property is not needed for immediate public use. Owners who want to remain on their property can sell a life estate. All of these techniques accomplish the Township's goal of retaining large properties without the prohibitive expenses of direct acquisition.

The Township can establish a relationship with a nonprofit land trust, such as Morris Land Conservancy or New Jersey Conservation Foundation, to help reach out to inform property owners of preservation options.

Less Direct Acquisition: Easements

Another effective tool for preserving land is an easement. An easement grants an entity the right to use another's property for a specific purpose. There are many kinds of easements designed for many purposes. Easements most appropriate for land in Byram include:

- trail easements--the right to traverse a specific path through a property
- scenic easements--the right to maintain a view and ensure that view is maintained
- conservation easement--the right to prohibit development on a property

The advantages of easements include the lower costs to the buyer to acquire a particular use on a piece of property. Conservation easements generally cost from 70% to 80% of the fair market value of the land. Trail easements may be used appropriately to create greenways along and around water bodies.

Another advantage of easements is that the land remains in private ownership. The Township will still collect property taxes from the owner. However, the amount and type of easement right that is sold will lessen the owner's tax liability. Land without development rights will be taxed at 70-80% less than its value.

Written into the deed, an easement will be associated with a tract of land despite an ownership change. Public access is not necessarily a condition for an easement.

Easements can provide a conservation solution for the municipality and the private landowner. They represent a flexible tool that can be written to satisfy public uses as well as private landowners' needs.

Bonding

The municipality can issue bonds to borrow money to pay for acquisitions. The funds from the Open Space Trust can be used for the 5% down payment to issue the bonds as well as the debt service over time. General obligation bonds require voter approval and can impair the credit of the municipality. The consistent, dedicated revenue from an Open Space Trust make revenue bonds an attractive alternative, but these bonds typically have a higher interest rate than the general obligation bonds.

Installment Purchases

For large purchases of land, the municipality may work out an arrangement with a landowner that allows an incremental purchase over time. The property owner receives the purchase price over time as well as interest on the unpaid, negotiated balance. Funds from the Open Space Trust can be committed for this payment. This arrangement may result in tax benefits for the seller, and the Township is not obligated to pay the full price of the land in one payment.

Lease-Back Agreement

If the land is not needed for immediate use, the Township can purchase a piece of property and lease it back to the owner or another entity for use. Partial reimbursement of the purchase price can be repaid through rental fees, and maintenance costs are reduced. A variation of this technique is the use of life estate rights. The Township would purchase a piece of property and allow the seller to continue to live on the property for a specified amount of time or until death. This technique is most useful when the Township identifies an important tract and wants to ensure its availability in the future. The landowner may realize estate tax advantages through these methods.

Donation/Bargain Sale

Selling land to a nonprofit organization or to a municipality will provide tax advantages to the owner. Landowners who own property that has escalated in value may reduce their capital gains liabilities through donating the property or selling it at a bargain sale or less than the appraised value. Estate taxes may also be reduced with proper planning. Conservation easements are effective tools for estate planning. The Township may want to discuss land priorities with a nonprofit land trust. The land trust can contact owners to discuss the general tax advantages in donations and bargain sales. This is a cost-effective method of obtaining open space.

Long-term Lease

The Township may be able to negotiate a long-term lease with a landowner who is unwilling to transfer complete ownership. This method may be a useful option for trail easements or athletic fields. The Township will have to weigh the cost advantages

of long-term rental payments compared to outright acquisition costs. However, this method may be an agreeable option for Township use of corporate-owned or School Board-owned properties.

Eminent Domain

The Township has the right to condemn and acquire privately owned property for a public purpose. This technique should be considered only when negotiation options have been exhausted. The cost of the property is likely to be considerably higher than a negotiated price because of increased legal fees and the court determination of the land value.

Zoning

Open space benefits may be achieved through the use of municipal tools, such as cluster zoning. This technique allows the same density on a track of land but reduces individual lot sizes. It can be an attractive incentive to developers since they will spend less on construction and infrastructure costs. The remaining land becomes dedicated open space at no cost to the municipality. The dedicated open space resulting from cluster zoning should be monitored to ensure the open space values are maintained. If these lands are not under conservation easement restrictions, the Township should consider that action. Any open space dedicated as part of a developer's agreement should be placed under a conservation easement. The Township may also want to require the establishment of an endowment or trust supplied with funds to be used to maintain the easement.

Protective zoning is a tool used to limit development in environmentally sensitive areas, such as aquifer recharge zones, wetlands, steep slopes, stream corridors, natural and historic sites.

Funding Sources

To accomplish all of its open space goals, Byram Township will have to seek funding support from a variety of sources.

Nonprofit Land Conservation Organizations

The Musconetcong Watershed Association, Morris Land Conservancy, New Jersey Conservation Foundation and other nonprofit land conservation organizations are eligible for nonprofit grants from the State Green Acres program. Nonprofit grants total up to \$500,000 for each nonprofit approved applicant and require a dollar for dollar match. The river associations are good partners for acquiring lands along waterways in Byram Township. These organizations also have experienced staff knowledgeable about benefits to a landowner interested in preserving property as well as strategies for open space preservation.

Historic Preservation

A total of \$6 million a year is available statewide from the State Green Acres program for historic preservation projects. Matching historic preservation and open space goals promotes access to this funding.

The Crossroads of the Revolution project is another State initiative to identify, preserve and document Revolutionary War sites. If Byram Township has sites of Revolutionary War significance, this effort may result in resources available to the Township.

State Land-Managing Agencies

The State is a likely partner to help the Township protect large resources. The NJ Division of Parks and Forestry has access to Green Acres funds. The Green Trust, source of Green Acres funds, includes funding for historic preservation, farmland preservation, and public parkland acquisition. Almost a third of the public parkland allocation goes to state land-managing agencies, with the rest to municipalities and nonprofit organizations. The Township needs to share its open space priorities with the State land managers and make a case for State acquisition of large sites. The Superintendent of Hopatcong State Park is open to new purchases adjacent to the existing State Park in Byram Township and would like to purchase additional property along the Sussex Branch Trail to provide an increased buffer to this recreational trail. The Superintendent would also like to see increased access to Cranberry Lake for the State Park. Currently, access is limited to a parking lot at the northern part of the Lake, where the Sussex Branch Trail is located.

State Green Acres

The State is under a mandate to protect one million acres of open space within the next 10 years. The State is looking for large projects to help them reach their goal. Since the Township has an Open Space Trust and an Open Space and Recreation Plan, Byram can apply for the Planning Incentive grant program. This program provides State funding assistance for the acquisition of Township park and recreation areas listed in the Open Space and Recreation Plan. The State will provide the grant and the Town has to match that grant 50-50 dollar for dollar.

The Green Acres Forest Legacy Program may also be an additional source of funding for Byram Township, where a large percentage of the Township land is held as large, forested wood lots. Traditional farmland preservation money may not be a significant funding source in Byram due to the lack of prime agricultural soils in the Township.

Sussex County Open Space and Farmland Preservation Trust

In November 2000, voters in Sussex County will decide on a bond referendum to establish a Farmland and Open Space Preservation Trust Fund to protect agricultural and open space lands in the County. The Referendum is written to divide this Fund between the two types of acquisitions: 90% for farmland and 10% for open space preservation (*Appendix*). If this referendum is successful, the Township should apply for funds from the County for open space preservation. If this resolution is passed, the Township should also encourage local farmland owners to apply for the preservation program. This resolution has a 10-year sunset provision, so the Township should act now.

Federal Land & Water Conservation Fund

Federal funding from the Land & Water Conservation Fund is being resurrected and should be available in the near future. The Conservation and Reinvestment Act

(CARA) is a comprehensive, bipartisan proposal that is estimated to provide \$61.7 million to New Jersey for a variety of purposes. These include open space acquisition, urban park and recreation recovery, coastal conservation, wildlife conservation, historic preservation, payment in lieu of taxes, and conservation easement/species recovery efforts. For potential grants to municipalities, the State is expected to receive \$11.8 million. Large, environmentally significant areas will be likely candidates for funding.

Morris Land Conservancy

Morris Land Conservancy is a nonprofit, membership organization working to preserve open space in the greater Morris County region. The Conservancy is helping eight municipalities in Morris County implement their open space programs and acquire land. In Sussex County, the Conservancy produced the Open Space and Recreation Plan for Byram Township and for Hampton Township. The Conservancy does not have a source of funding for land acquisition but has staff skilled in the art of land negotiations and crafting successful conservation strategies.

Transportation Enhancement Act (TEA-21)

The U.S. Department of Transportation has decided that funding for trail development and enhancement is an eligible expenditure from the Federal Transportation Trust. The amount of funding for these purposes is substantial, and funds for land acquisition are available. A special category of funding is dedicated to the enhancement of National Recreation Trails. An eligible project must show that the trail is part of the community's overall transportation system. Funds can be used for facilities such as signage, bike racks, surfacing, as well as acquisition of land through easement or fee simple. TEA-21 funding can jumpstart a community's bikeway and walking system. This system could then enhance the greenway that will thread through the town.

Trust for Public Land

The Trust for Public Land has been given \$9 million by the Doris Duke Foundation to preserve land in the Highlands region. The Township should talk with the Trust for Public Land regarding land conservation initiatives. This program could present more innovative conservation strategies for the Township and could be one form of funding to purchase easements to preserve the woodland managed farms. This is a program that could protect those lands that do not fall into the "typical" preservation programs currently available.

References

An Atlas of Natural Heritage Priority Sites. Published by NJ Department of Environmental Protection, Division of Parks and Forestry, Natural Lands Management, June 1999.

Beautiful Sussex County. Unknown Author. Available at the Sussex County Library

Byram Township Natural Resources Inventory. Byram Township Environmental Commission, June 1994.

Byram Township Township of Lakes. 175th Anniversary. Unknown Author Available at the Sussex County Library

Communities of Place. The New Jersey State Development and Redevelopment Plan: Interim Plan. New Jersey State Planning Commission. March 31, 1999.

Enjoy Four Seasons of Agriculture in Sussex County. Sussex County Agriculture Development Board, brochure.

A History of Byram. Unknown Author. Available at the Sussex County Library

A History of Byram Township. Carl O. Johnson and Elspeth Hart. 1964 The New Jersey Herald, Newton NJ

History of Sussex and Warren Counties, New Jersey. James Snell. 1971 Howard E. Case, Middletown, NY., pages 460-73

Images of America, Waterloo & Byram Township. Cindy Lee. 1997 Arcadia Publishing, New Hampshire

Lubbers Run Greenway Project – A Stream Corridor Study, Byram Township, New Jersey. March Associates Landscape Architects, P.C., June 1997.

Morris Matters. A Quarterly Publication of the Morris County Department of Planning and Development, Spring 2000.

Northwestern New Jersey, A History of Somerset, Morris, Hunterdon, Warren and Sussex Counties. A. Van Doren, Honeyman. 1927, Lewis Historical Publishing Company, Inc., pages 470-72

Route 206 M.P. 98.38 to M.P. 99.69 Byram Township, Sussex County. Final Scope Development – Summary Report. The RBA Group for the New Jersey Department of Transportation, December 1999.

Stephens and Allamuchy Mountain State Parks. New Jersey Division of Parks and Forestry State Park Service pamphlet.

Township of Byram, New Jersey. Comprehensive Master Plan. Louis Berger & Associates, Inc. and the Township of Byram Planning Board, December 1988.

The following people provided valuable information in interviews conducted for the Open Space and Recreation Plan:

- Bob Barth, Canal Society of New Jersey, August 2000.
- Alice Brees, Sussex County Department of Planning, Development and Human Services – Division of Planning, July 2000.
- John P. Brunner, Musconetcong Watershed Association, July 2000.
- Ken Conrail, New Jersey Department of Transportation, Environmental Liaison, July 2000.
- Susan Currie, New Jersey Conservation Foundation, August 2000.
- Rocky Gott, Kittatinny State Park, July 2000.
- Tammy Horsefield, Sussex County Chamber of Commerce, July 2000.
- Al Kent, Morris County Park Commission, July 2000.
- Bob Moss, NY-NJ Trail Conference, July 2000.
- Andrew Mavesky, New Jersey Department of Transportation – Right of Way Division, July 2000
- Rich Osborne, New Jersey Department of Environmental Protection – Green Acres Program, July 2000
- Martin Rapp, New Jersey Natural Lands Trust, July 2000.
- Frank Riley, Morris County Department of Planning and Development – Transportation Division, July 2000.
- Jack Shuart, New Jersey Bureau of Forestry, August 2000.
- Donna Traylor, County of Sussex – Department of Planning, Development and Human Services, Division of Planning, May 2000.
- Bart H. Wallin, Hopatcong State Park – Superintendent, July 2000.

Priority Land Acquisition Recommendations

Allamuchy Mountain State Park

<u>Block/Lot</u>	<u>Acres</u>	<u>Map</u>	<u>Location</u>	<u>Owner</u>	<u>Class</u>
94/323	1.033	3.01	Hickory Tr	Cap-ton Inc.	Vacant
94/332	3	3.01	Spring Tr	Jane Connamacher	Vacant
94/377	0.46	3.01	Brook Tr	George III & Nancy Harris	Vacant
95/1	4.3	3.01	Hickory Tr	Nicholas Clemens	Vacant
101/380	0.333	3.01	Brook Tr	George Muha Jnr.	Vacant
101/383	0.179	3.01	Brook Tr	A&C Tufano	Vacant
101/384	0.143	3.01	Brook Tr	A&C	Vacant
103/396	0.239	3.01	Waterloo Rd	J Catanzarite & P Casalino	Vacant
103/397	0.362	3.01	Waterloo Rd	Nectarios Kehagias, Despina	Vacant
118/1	13.83	3	North Shore Rd	Judith Keith	Vacant
101/385	0.142	3.01	Brook Tr	Byram Township	15C Exempt
101/386	0.373	3.01	Brook Tr	Byram Township	15C Exempt

Open Space Significance: This group of blocks run north/south and divide the residential region north of Cranberry Lake. They are framed by Allamuchy Mountain State Park to the north and south. These blocks would provide an excellent throughway to Allamuchy Park for those living in the residential areas around Cranberry Lake, as well as provide a new greenway link to Allamuchy State Park. There are streams running through blocks 95/1 and 118/1 and protection of these areas would provide a stream buffer and assist in the protection of these waterways and the health of Cranberry Lake.

Potential Acquisition Strategy: Green Acres funding

<u>Block/Lot</u>	<u>Acres</u>	<u>Map</u>	<u>Location</u>	<u>Owner</u>	<u>Class</u>
104/17	7.4	3.02	North Shore Rd.	John & Ruth Sedlock	Vacant
186/1	2.6	3.04	North Shore Rd	Dong Sik & Suk Koo Jung	Vacant
333/1	13	3.04	Cranberry Lake	C/o E & Dennis Rose	Vacant
380/3	22.5	3	North Shore Rd	C/o E & Dennis Rose	Vacant

Open Space Significance: These blocks are adjacent to Allamuchy State Park in the northern region, along North Shore Rd. These parcels would provide added acreage to Allamuchy State Park thereby increasing the amount of open space available. Blocks 104/17, 333/1 and 380/3 would provide a good buffer between the residential areas surrounding Cranberry Lake and the Park.

Potential Acquisition Strategy: Green Acres funding

<u>Block/Lot</u>	<u>Acres</u>	<u>Map</u>	<u>Location</u>	<u>Owner</u>	<u>Class</u>
212/1.01	15.37	3.06	Rt. 206	Subco Inc.	Vacant
212/1.02	23.19	3.06	Rt. 206	Canada Inc	Vacant
366/10	25.43	4	Rt. 206	Canada Inc	Vacant
366/11	54.13	4	Rt. 206	Canada Inc	Vacant
366/11.02	2.5	4	Rt. 206	Crown Atlantic Co	Vacant
366/12	18.86	3	1 Sutton Ln	Burbach	Residential
366/13	3.7	3	2 Sutton Ln	Decker	Residential

Open Space Significance: These blocks are located off between Rt. 206 and to the east of the Erie Lackawanna Rail Road. They are bordered by Rt. 206 on one side and Allamuchy State Park to the west and south. They could be purchased to further increase the park's acreage and help to provide a buffer from Rt. 206

Potential Acquisition Strategy: Green Acres funding

Allamuchy State Park cont.

<u>Block/Lot</u>	<u>Acres</u>	<u>Map</u>	<u>Location</u>	<u>Owner</u>	<u>Class</u>
70/7.02	0.6	4.05	Rt. 206	Theodore Beck	Vacant
70/10	17.64	4.05	Rt. 206	Harold Bilney	Vacant

Open Space Significance: These blocks are adjacent to the south eastern portion of Allamuchy State Park on one side and are bordered by Rt. 206 on the other. They could be added to increase the acreage of the park.

Potential Acquisition Strategy: Green Acres funding

<u>Block/Lot</u>	<u>Acres</u>	<u>Map</u>	<u>Location</u>	<u>Owner</u>	<u>Class</u>
366/3.01	6.68	4	38 Jefferson Lake Rd	Jefferson Lks Camp	Vacant
366/3.02	0.37	4			
366/3.03	0.52	4			
370/7.01&8	7.76	4	Jefferson Lake Rd	Jefferson Lks Camp	Commercial
370/7.02	5.92	4	Jefferson Lake Rd	Jefferson Lks Camp	Commercial
370/6	1	2	40 Jefferson Lake Rd	Nissenbaum	Residential

Open Space Significance: These block and lots are located around Jefferson Lake which is owned by the DEP. They are bounded by DEP owned land which is a part of Allamuchy Mountain State Park, so these blocks could be added to increase the size of the park and also serve as a buffer to protect the lake.

Potential Acquisition Strategy: The privately owned vacant land could be purchased or a conservation easement could be attained. The land owned by the camping facility could be purchased or a first right of purchase obtained. A conservation easement is another alternative.

Lubbers Run Greenway: Allamuchy – Lake Lackawanna

<u>Block/Lot</u>	<u>Acres</u>	<u>Map</u>	<u>Location</u>	<u>Owner</u>	<u>Class</u>
31/29	0.709	4.04	Millstream Ln	Raimo of Stanhope Inc.	Vacant
31/30	1.035	4.04	Millstream Ln	Raimo of Stanhope Inc.	Vacant
31/31	1.035	4.04	Millstream Ln	Raimo of Stanhope Inc.	Vacant
31/32	0.632	4.04	Millstream Ln	Raimo of Stanhope Inc.	Vacant
32/8	2.53	4.04	North St	Raimo of Stanhope Inc.	Vacant
32/10	0.918	4.04	North St	Robert & Theresa Mogni	Vacant
32/11	0.849	4.04	North St	Raimo of Stanhope Inc.	Vacant
32/16	1.079	4.04	Millstream Ln.	Charles & Debbie Thomson	Vacant
35/33	0.518	4.04	7 Netcong Ave	Robert Mogni Jnr.	Vacant
35/34.01	0.482	4.04	5 Netcong Ave	FFD Services	Vacant
36/53	11.5	4.04	Netcong Ave	Raimo of Stanhope, Inc.	Vacant
40/13	0.282	4.06	25 Stoney Brook Rd	J & J De Felice	Vacant
40/14	5	4.06	Rt. 206	Cheyenne Corp, Wild West	Farm
40/15	6.7	4.06	Rt. 206	Vetter	Residential
58.01/1	0.26	4.07	Lubbers Run	East Brookwood Ass.	Vacant
364/6	4.4	4	Lubbers Run	Roalnd Price Jnr.	Vacant
365/17	73.82	4	50 Lackawanna Dr	Cheyenne Corp	Farm
365/17.01	1	4	Lackawanna Dr	Michael & Kathleen Stabile	Farm

Open Space Significance: These blocks are situated along Lubbers Run from the south eastern end of Allamuchy at South Street and Lake Lackawanna at Heminover Lake Dr. They all adjoin to the Run, and protection of these blocks will provide a buffer of protection as well as a greenway along the Run. It will also provide a greenway link between Allamuchy Mountain State Park and Lake Lackawanna.

Potential Acquisition Strategy: Green Acres funding for purchase or conservation easements.

<u>Block/Lot</u>	<u>Acres</u>	<u>Map</u>	<u>Location</u>	<u>Owner</u>	<u>Class</u>
364/4.01	13.41	4	12 Mansfield Dr.	Board of Education	15A Exempt
365/16	89.81	4	Mansfield Dr.	Board of Education	15A Exempt

Open Space Significance: These blocks are adjacent to Lubbers Run, east of Rt. 206. They would provide an excellent buffer for the stream and be a part of a greenway. Block 364/4.01 is adjacent to land that is held by NJ Natural Lands Trust.

Potential Acquisition Strategy: Conservation easements could be obtained on portions or entirety of these blocks to help protect the stream by providing a buffer and to contribute to the greenway. Obtain right of first refusal on Board of Education properties if they were ever deemed surplus.

<u>Block/Lot</u>	<u>Acres</u>	<u>Map</u>	<u>Location</u>	<u>Owner</u>	<u>Class</u>
365/16.01	13	4	Mansfield Dr.	Township of Byram	15C Exempt

Open Space Significance: Lubbers Run flows through one end of this property. Township park property is located across Mansfield Rd with NJ Natural Lands Trust land close by. These properties provide a greenway along Lubbers Run.

Potential Acquisition Strategy: As this block is already Township owned, it could be placed on the Township's ROSI to provide protection for the Run in perpetuity.

Lubbers Run Dallis Pond - Sparta

<u>Block/Lot</u>	<u>Acres</u>	<u>Map</u>	<u>Location</u>	<u>Owner</u>	<u>Class</u>
341/1	0.01	8.01	Tomahawk Tr	Ann Rafferty	Vacant
341/2	0.02	8.01	Tomahawk Tr.	Township of Sparta	15C Exempt
341/3	0.122	8.01	Tomahawk Tr.	Mark Wallace	Vacant
341/4	0.028	8.01	Tomahawk Tr.	Fun Valley Inc.	Vacant
343/1	7.65	8.01	153 Tomahawk Dr.	Chester Wallace	Commercial
343/2	17.39	8	Tomahawk Dr.	Fun Valley Inc.	Commercial
343/3	18.82	8	519 Stanhope Rd	Mark Wallace et al	Farm
343/7	5.2	8.02	563 Stanhope Rd	Winton Johnson – farm	Farm
343/8	1.85	8.02	565 Stanhope Rd	Walz, Goldstein	Residential
343/9	80.09	8	567 Stanhope Rd	E G Anderson Inc.	Farm
343/12.01	17.1	8	Stanhope Rd	Hudson Guild Farm	15F Exempt
343/12.02	6.3	8	Stanhope Rd	Hudson Guild Farm	15F Exempt
343/12.03	1.4	8	Stanhope Rd	PSE & G	Vacant
344/14.02	27.4	8	Stanhope Rd	Hudson Guild Farm	15F Exempt
344/34	34.6	6	Lackawanna Dr.	Columbia Valley Camp.	Industrial
345/2	24.11	6	260 Lackawanna Dr.	Bonker	Vacant
345/2.01	0.95	6	270 Lackawanna Dr.	Elaine Krajewski	Residential
345/2.02	1.04	6	268 Lackawanna Dr.	Paul & Dawn Sadowski	Residential
345/3	1.69	6	282 Lackawanna Dr.	Brian & Mary Fitzgerald	Residential
345/3.01	4.14	6	Lackawanna Dr.	PSE & G	Industrial
345/3.02		6		Unknown	
345/3.03	1.3	6	276 Lackawanna Dr.	Kowalski	Residential
345/3.04	1.1	6	274 Lackawanna Dr.	Frank & Barbara Korp	Residential
345/3.05	1.483	6	280 Lackawanna Dr.	Josepls	Residential
345/3.06	1.7	6	278 Lackawanna Dr.	Dennis & Lila Kohl	Residential
345/4	3.65	6	292 Lackawanna Dr.	Kevin & Scot Catalina	Residential
345/4.01	6.1	6	288 Lackawanna Dr.	Dericks LLC	Farm
345/5	0.2	6	272 Lackawanna Dr.	Peterson	Residential

Open Space Significance: These blocks are situated along Lubbers Run between Dallis Pond and the border of Byram Township with Sparta Township. They all adjoin the Run, and protection of these blocks will provide a buffer of protection as well as a greenway along the Run. In addition to the Allamuchy to Lake Lackawanna greenway, this addition would provide a greenway throughout the town from Allamuchy through to Sparta Township thus enabling new access points to parks as well as providing protection to Lubbers Run along its length.

Potential Acquisition Strategy: Green Acres funding for purchase or conservation easements for vacant land. Farmland owners could be engaged to place these lands near the Lubbers Run under special designation for protection. TEA-21 should also be investigated for a source of potential acquisition funds.

Camp Westby Boy Scouts Camp

<u>Block/Lot</u>	<u>Acres</u>	<u>Map</u>	<u>Location</u>	<u>Owner</u>	<u>Class</u>
290.01/851	2.251	5.01	215 Forest Lake Dr.	Boy Scouts	15F Exempt
334/15	2.3	5.01	180 Forest Lake Dr	Boy Scouts	15F Exempt
360/1	55.27	3	183 Forest Lake Dr.	Boy Scouts	15F Exempt
360/1.01	15	5.01	Forest Lakes	Boy Scouts	15F Exempt

Open Space Significance: This block is located in the central northern portion of the Township between Panther Lake and Forest Lake, and includes Cub Lake. It is a rocky, wooded, hilly site that is undeveloped but which could be used for hiking.

Potential Acquisition Strategy: Green Acres funding

<u>Block/Lot</u>	<u>Acres</u>	<u>Map</u>	<u>Location</u>	<u>Owner</u>	<u>Class</u>
360/39	75.42	3	Johnson Lake	Three G Realty	Vacant

Open Space Significance: This block is adjacent to the Boy Scout properties listed above and could be added to those pieces if they were acquired to make a larger open space area.

Potential Acquisition Strategy: Green Acres funding

<u>Block/Lot</u>	<u>Acres</u>	<u>Map</u>	<u>Location</u>	<u>Owner</u>	<u>Class</u>
360/42	80	5.08	Roseville Rd	Cardoa Co C/o Replogle	Farm

Open Space Significance: This property is adjacent to 360/39 mentioned above, and is also bordered on one side by Johnson Lake. If the properties mentioned above were preserved as open space, the preservation of this property as farmland would help to provide a buffer to the other properties as well as contribute to maintaining the health of Johnson Lake.

Potential Acquisition Strategy: Green Acres funding, Sussex County

<u>Block/Lot</u>	<u>Acres</u>	<u>Map</u>	<u>Location</u>	<u>Owner</u>	<u>Class</u>
360/31	95.1	3	Panther Lake	Panther Lake Camping.	Farm

Open Space Significance: This property is located south of Panther Lake and is adjacent to the Boy Scout properties. As it is adjacent to Panther Lake, it would provide a buffer against development on this side of the lake which in turn protects the quality of the lake. As it is adjacent to the Boy Scout property, it could be linked to that site if it were protected

Potential Acquisition Strategy: Green Acres funding

Wolf Lake

<u>Block/Lot</u>	<u>Acres</u>	<u>Map</u>	<u>Location</u>	<u>Owner</u>	<u>Class</u>
352/1	10.5	5	Old Wolf Lake Rd	Cardia C/o Replogle	Farm
353/1	24	5	Roseville Rd	Cardia C/o Replogle	Farm
354/1	14.6	6	Old Wolf Lake Rd	Cardia C/o Replogle	Farm
355/1	4.5	6	Wolf Lake Rd	Cardia C/o Replogle	Farm
356/1	19	6	Buckhorn St	Cardia C/o Replogle	Farm
357/2	100.16	6	Indian Spring Rd	Cardia Co Inc.	Farm
358/2	207.79	6	Roseville Rd	Cardia C/o Replogle	Farm
358/3					

Open Space Significance: These properties surround Wolf Lake and are within a Natural Heritage Priority Site identified by the NJDEP. This area contains aquatic plant species within the primary boundary which includes the lake. The secondary boundary includes an upland buffer for the lake. One state listed endangered plant species is found in the area and the parcels are within a stratified drift formation and high recharge area.

Potential Acquisition Strategy: Forest Legacy Program through U.S. Forest Service or the NJ Green Acres, Farmland Preservation, The Nature Conservancy.

Wrights Pond Bluffs

<u>Block/Lot</u>	<u>Acres</u>	<u>Map</u>	<u>Location</u>	<u>Owner</u>	<u>Class</u>
348/9	499.7	5	Roseville Rd	Westby Corp.	Farm

Open Space Significance: This block is located in a National Heritage Priority Site known as Wrights Pond Bluffs. There are steep slopes and open rocky bluffs on the hillside above the pond. It includes a habitat for 3 rare plant species and the buffer contains 2 state listed endangered plant species and one special concern plant species

Potential Acquisition Strategy: Green Acres funding, The Nature Conservancy

Panther Lake

<u>Block/Lot</u>	<u>Acres</u>	<u>Map</u>	<u>Location</u>	<u>Owner</u>	<u>Class</u>
360/31	95.1	3	Panther Lake	Panther Lake	Farm
380/4	12.6	3	Rt. 206	John Wilcock	Farm
380/5	54	3	Rt. 206	John Wilcock	Farm
380/6.02	3.85	3.09	3 White Hall Rd	Maslow	Farm
380/6.03	1.5	3.09	5 White Hall Rd	Wrobleski	Farm
380/6.04	3.5	3.09	5 White Hall Rd	Wrobleski	Farm
380/6.05	1.201	3.09	5 White Hall Rd	Wrobleski	Farm

Open Space Significance: These parcels are situated on the western and southern side of the lake. There are areas of high ground water recharge, stratified drift and steep slopes between 15 & 25% on these blocks.

Potential Acquisition Strategy: Green Acres funding

Roseville to Koeffers Pond

<u>Block/Lot</u>	<u>Acres</u>	<u>Map</u>	<u>Location</u>	<u>Owner</u>	<u>Class</u>
336/31.01	6	7	331 Amity Rd	Jean Proulx	Farm
336/37	66.6	5	321 Amity Rd	Reiner	Farm
336/40	39.9	5	Stag Pond Rd	Lake Bottom Corp	Farm
336/41	4	5	Stag Pond Rd	Von Lengerke	Farm
348/3.01	16.32	5	Stag Pond Rd	Von Lengerke,	Vacant
348/3.02	37.9	5	Roseville Rd	Esposito	Farm
348/3.03		5	Stag Pond Rd	Von Lengerke	Farm

Open Space Significance: These blocks are situated between Roseville Pond and Koeffers Pond. The land in this region contains wetland areas and stratified drift formations. There are also some high groundwater recharge areas.

Potential Acquisition Strategy: Green Acres funding

Farms

<u>Block/Lot</u>	<u>Acres</u>	<u>Map</u>	<u>Location</u>	<u>Owner</u>	<u>Class</u>
226/11	121.63	4	Rt. 206	Byram Land LLC	Farm
363/1	27.4	4	Old Indian Springs Rd	Byram Land, LLC	Farm

Open Space Significance: There are portions of high groundwater recharge areas within these parcels as well as slopes between 15 & 25%. A 100 year flood boundary also passes through these blocks.

Potential Acquisition Strategy: Green Acres funding, Sussex County

<u>Block/Lot</u>	<u>Acres</u>	<u>Map</u>	<u>Location</u>	<u>Owner</u>	<u>Class</u>
364/8	244.5	6	14 Reis Ave	Lake Lackawanna Inc	Farm

Open Space Significance: There are wetland areas, steep slopes and high groundwater recharge areas contained within this block and lot.

Potential Acquisition Strategy: Green Acres funding, Sussex County

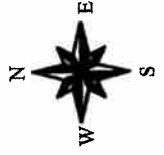
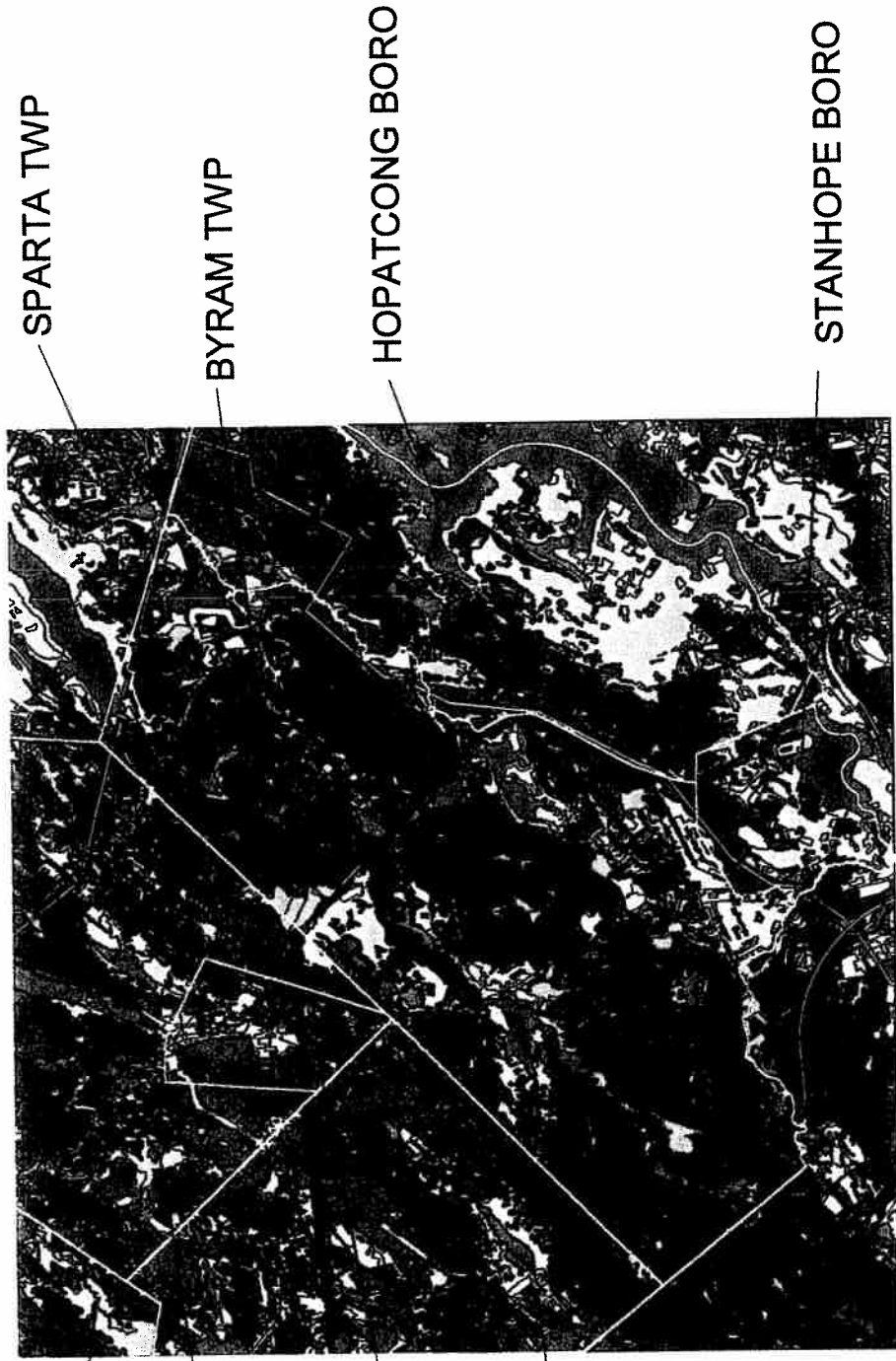
<u>Block/Lot</u>	<u>Acres</u>	<u>Map</u>	<u>Location</u>	<u>Owner</u>	<u>Class</u>
336/1	651	7	Stag Lake	Stag Lake Corp	Farm
348/9	499.7	5	Roseville Rd	Westby Corp.	Farm
348/10	373	5	Stag Pond Rd	Stag Lake Corp	Farm

Open Space Significance: These blocks are located in a high recharge groundwater area. There are also portions of stratified drift and wetlands, primarily on block 348/9.

Potential Acquisition Strategy: Green Acres funding, Farmland Preservation program; U.S. Forest Service Forest Legacy Program, Sussex County

Maps

Regional Land Use Map



WMA 1 - land use	WMA 1 - land use
WMA 2 - agriculture	WMA 2 - agriculture
WMA 3 - barren land	WMA 3 - barren land
WMA 4 - forest	WMA 4 - forest
WMA 5 - urban	WMA 5 - urban
WMA 6 - wetlands	WMA 6 - wetlands
WMA 7 - land use	WMA 7 - land use
WMA 8 - barren land	WMA 8 - barren land
WMA 9 - forest	WMA 9 - forest
WMA 10 - water	WMA 10 - water
WMA 11 - wetlands	WMA 11 - wetlands
WMA 12 - land use	WMA 12 - land use
WMA 13 - urban	WMA 13 - urban
WMA 14 - agriculture	WMA 14 - agriculture
WMA 15 - barren land	WMA 15 - barren land
WMA 16 - forest	WMA 16 - forest
WMA 17 - water	WMA 17 - water
WMA 18 - wetlands	WMA 18 - wetlands
WMA 19 - region	WMA 19 - region

Source: NJDEP