

CHAPTER VI

RESOURCE ASSESSMENT AND OPEN SPACE PLAN

To summarize the proposed open space plan, it is evident, that the County of Warren is not meeting the demand in preserving open space as revealed in the two methods for determining the acreage needed for open space.

When planning for open space in a rural county like ours, it is sometimes difficult to envision the need of open space planning, since there is the perception that there is so much open space already existing in Warren County. This is another reason why the Balanced Land Use method has an advantage over the population per acres method, in that it allows for a predetermined acreage when Warren County becomes fully developed in the future. Furthermore, this method recognizes land as an exhaustible resource, and therefore, Warren County needs to take steps now to insure that there is adequate open space preserved for future generations.

Land areas targeted in this 2007 Plan are classified into two tiers.

Tier I:

The allocation and priority for funding is based on the availability of land and willing sellers. When allocating funding, the funding should be directed to the properties shown as Tier I. Tier I status means that the Department of Land Preservation and the BRC should be more proactive in contacting landowners within the Tier I areas, in securing additional funding sources, and partnering with other agencies. Additional funding sources would include but not be limited to state and federal grants, non-profit participation, and private grants etc. Partnering with other agencies would involve other county agencies such as the CADB, municipalities, state agencies, and non-profits groups such as Morris Land Conservancy, PRO, Ridge and Valley Conservancy etc.

Tier II:

These are the areas where staff would take a more reactive approach toward acquisition. If a property owner, or partnering agency contacts the Land Preservation Department or the BRC and the property fits into the Open Space Plan in some way, the acquisition may be pursued. The main difference is that the county would not initiate contact with property owners. Partnering and coordination would still be encouraged.

This approach for open space planning will result in:

- Better focus in guiding county staff resources toward accepted county acquisition goals and projects
- Flexibility to acquire land that becomes available in accordance with the Tier I and Tier II areas described in this plan

- Allow for more interagency coordination in achieving the goals of this plan and local and state plans as well.

To meet the short and long term acquisition goals, the 2007 Warren County Open Space Plan envisions the County investing in four broad types of open space areas; Greenways, Special Use Areas, Conservation/Natural Resource Areas, and Open Space Lands. The Proposed Open Space System Plan, as Map 5 shows the Tier 1 properties targeted for acquisition. A more detailed description of each type and how they pertain to Warren County follow.

Greenways: Greenways are elongated and are usually continuous strips of land or water under public control through ownership, easement, or other agreement. Greenways may serve conservation needs (i.e. water quality protection) and recreation needs (i.e. access to fishable streams) and, wherever possible, should be planned to connect other park sites and centers of activity and to expose users to interesting views, and historic and unique natural features. Greenways often occupy natural corridors such as streams, ridgelines, and woodlands or man-made corridors such as the Morris Canal, railroad, and utility rights-of-ways.

The greenway should be of sufficient width to protect the host resource (i.e. stream valley, ridgeline, scenic vista). For the Morris Canal, at a minimum, a one hundred foot buffer along both sides of the Canal Corridor measured from the outside toe of the prism band, basin, lock or inclined plane is recommended. It should be of sufficient size and width to accommodate any intended public access and/or trail use type (i.e. pedestrian, bicycle, horse). Wider areas along the corridor may be necessary or desirable to accommodate ancillary facilities such as parking areas, picnic areas, and interpretive facilities or to encompass nearby areas of scenic, environmental, or historic interest.

Where appropriate to the intended purpose, greenways should have connections to and have frequent access points from other public land areas, centers of activity, and public roads. Greenways have the potential for serving a circulation function and should be considered when prioritizing properties for acquisition.

County lands that fall within this category include portions of the Morris Canal and the Warren Trail-Greenway spur of the Highlands Trail.

Tier I Greenways in Warren County are the following:

- Morris Canal

The Morris Canal has been a high priority of the county for years. The Morris Canal was listed on the National and State Registers of Historic Places in 1974. Created in 1981 by the Board of Chosen Freeholders as a special committee to the Warren County Planning Board, the Morris Canal Committee has been instrumental in recommending properties for purchase, educating the public, and preserving and protecting Canal properties as well as increasing the awareness of its great historical significance. The Morris Canal Greenway is described in the Warren County Directory as a major county preservation effort. The Morris

Canal preservation offers recreation, conservation, historic preservation and educational opportunities for residents and students of NJ.

The Morris Canal Committee has developed a model conservation ordinance for use by municipalities to preserve and protect the Morris Canal. Of the nine municipalities that the Canal traverses, Independence, Franklin, Greenwich and Washington Township, have enacted a Morris Canal protection ordinance. In addition, the Board of Chosen Freeholders through Warren County Planning Board's development regulations have requirements in its development review process for the delineation and voluntary preservation of the Morris Canal. The model ordinance and the section of the County Development Regulations pertaining to the Morris Canal preservation is provided in Appendix G. Efforts to secure easements from the current landowners need to be made unless adjacent properties can be acquired that have the Canal actually located on them.

The greatest single Morris Canal achievement was that it overcame more elevation changes than any other canal in the world. Through grants from the State of New Jersey, Green Acres Program, as well as with county and other funding sources, the County has purchased 5.9 miles of the 33 miles in Warren County amounting to 384 ± acres. All 5.9 miles have been acquired from willing sellers as they became available.

It is important to stress the long range goal of the effort. Linking parcels together over time will eventually lead to the completion of longer contiguous segments. The Canal from Route 22 in Lopatcong Township to Stewartsville in Greenwich, a 1.8 mile in fee simple and .8 mile in conservation easement with right to public access stretch began in 1994 with the acquisition of Inclined Plane #9 and was completed in 2002 through acquisition and public access easements. Long term policy commitment, dedication, and stable funding resources are needed to complete the effort.

Significant features of the Morris Canal are highlighted during the spring and fall tours conducted by the Morris Canal Committee. They are Saxton Falls, Florence Kuipers Memorial Park in Hackettstown, Port Murray Boat Basin, Bread Lock Park (Lock #7), and Inclined Plane #9.

This Plan recognizes that all segments of the Canal cannot be acquired particularly through the developed portions of Washington Borough and Phillipsburg. Likewise stretches of the canal from Rockport Road just east of Port Murray to Hackettstown, are unlikely to be acquired because remnants of the canal are already destroyed or are in very close proximity to residential structures. Alternative connections through Mansfield Township may be necessary to link Port Murray to Hackettstown. It is important to understand too, that people are unlikely to walk the entire length of the canal. However the goal is to link a many parcels together and connect them to the major population centers so that the people in these centers can have an additional recreational opportunity nearby where a person may choose to walk a couple miles down the canal and back. The walk would combine a recreational physical benefit with the benefit of exploring a state and national register historic site in a natural setting. For planning purposes access points should be considered at any road crossing and where other public open space properties intersect.

Detailed site planning would have to be done to determine where parking facilities could be located.

It is possible that all 33 miles could become a tourist destination in conjunction with the Warren Trail where a group or family could walk from Phillipsburg to Washington, stay overnight at a bed and breakfast in town, then continue north to Hackettstown the next day. In Hackettstown, stay overnight then continue on to Saxton Falls the next day and camp out in Allamuchy State Park or Stephens State Forest. The next day the journey could continue on to the Warren Trail and continue to the Pequest Fish Hatchery or Jenny Jump State Park. The Village of Oxford or Hope could be a stop along the way where some of the historic sites could be visited. The trek could end in Phillipsburg after visiting Merrill Creek Reservoir and the Pump House along the Delaware.

The target areas for acquisition of the Morris Canal Greenway can be classified as high or low priority. Criteria for designating high or low priority include as follows:

- Availability of Land
- Compatibility with Surrounding Land Uses
- Intactness of the Canal

Coordination with other governmental agencies including municipal and state agencies and farmland preservation programs is critical to the successful completion of the Canal Greenway.

The following is a discussion of the sections of the Canal from west to east and includes a discussion of the historical features, opportunities for acquisition, and actions taken so far to acquire the lands, and if it should be considered as high or low priority.

Morris Canal Arches to the S. Main St./Lock St Intersection in Phillipsburg.

The Canal arches are the gateway to the Delaware River. Canal boats would cross the river and access the Lehigh Canal to the coal mines in Pennsylvania. An ISTE grant was awarded to the Phillipsburg Riverview Organization to reconstruct the arches. The lands adjacent to the arches are owned by the Town of Phillipsburg, and by a developer who has proposed a housing project known as Delaware Heights that will redevelop a significant portion of former industrial land above the Delaware River water front. Special effort will be needed to secure properties and easements to ensure a safe walkway along the remnants of the canal. On many segments a road walk will be necessary. To promote awareness of the Morris Canal and the historic industrial and transportation significance of this area, a tour map and guide could be developed with the Town of Phillipsburg, the Friends of the NJ Transportation Museum, and the Black River and Western Railroad that has a stop near the Arches and runs excursion trains.

Total Length - 12,120' or 2.3 miles

Length in County Ownership - 0

Length in other Public Ownership- 2,940'
Length in Easements – 0

Total Acreage Acquired in Fee and Easement

Number of Properties Remaining for acquisition - 29
Number of Miles or feet remaining for acquisition – 9,180' or 1.74 miles

Priority: Low

Lock Street/S. Main Street in Phillipsburg to Rt 22.

This stretch is approximately 1.27 miles long. Portions have been acquired by the County in fee simple or easement. Notable features in this segment include the Incline Plane #10 which has not been acquired yet although the property owner is willing to sell and the Pursell Mill site on South Main St. Recently the dam was removed from the mill site to allow the Lopatcong Creek to become a free flowing water body once again. The owner of the mill is interested in preserving the canal area for public access.

Total Length - 6,700' or 1.27 miles

Length in County Ownership- 1,720'
Length in other Public Ownership- 1,210' through the Huntingdon Ballfields and
Homa Park

Length in Easements - 0

Total Acreage Acquired in Fee and Easement

Number of Properties Remaining for acquisition - 15
Number of Miles or feet remaining for acquisition - 3,770'

Priority: High

Rt 22. to North Main Street in Stewartsville

Notable features in this target area include Incline Plane #9 and plane tender's house, and the Hamlen Waste Weir. An ISTEA grant was awarded to the County to reconstruct the segment of the Canal from Rt 22 to CR 519 including the waste weir. Plans are being prepared for the reconstruction. Reconstruction of the canal is affected by the C-1 classification of the Lopatcong Creek. Permits are still needed from the NJDEP to undertake the work. However, work is scheduled to reconstruct the Canal from Strykers Road to U.S. Route 22 in conjunction with the Strykers Road bridge project.

The segment of the Morris Canal from the Hamlen property to North Main Street was acquired by a conservation easement with right to public access when the Stewarts Hunt

subdivision was approved in 1994. The right to public access cannot be exercised until such time the County creates a formal program for public use. Efforts to directly acquire a trail on the adjacent former Rinehart property, which went through the farmland preservation program, were unsuccessful.

On the N. Main St end of this stretch, the county owns a 68 acre tract that can be developed into a small parking area in the future. It can serve as a public access point for points west and east.

A historic preservation plan for the reconstruction of Inclined Plan #9 and house has been prepared. Some of the short term recommendations of the plan have been completed already while the intermediate and long term tasks still need to be undertaken. A well will be drilled and septic system installed to replace the cistern and cesspool.

Total Length – 12,370' or 2.34 miles

Length in County Ownership – 8,260' or 1.56 miles

Length in other Public Ownership –

Length in Easements – 4,110' or .79 miles

Total Acreage Acquired in Fee and Easement –TBD

Number of Properties Remaining for acquisition – 0

Number of Miles or feet remaining for acquisition – 0

Priority: High

North Main Street, Stewartsville to Rt. 57, Franklin Twp.

The Greenwich Township Rescue Squad building occupies the canal right of way. However, efforts can be made to obtain a public easement across the property. Selective acquisition of property to obtain a greenway or easements for a trail will have to be undertaken to Richline Road. From Richline Road north to the Nabozny County owned property direct acquisition of the properties for the greenway and reserves for open lands should be undertaken. Significant features along this stretch include Inclined Plane #8 and Lock #7 (County owned Bread Lock Park)

Total Length – 11,040' or 2.09 miles

Length in County Ownership – 3,960' or .75 mile

Length in other Public Ownership – 270' (Emergency Squad)

Length in Easements - 0

Total Acreage Acquired in Fee and Easement – 99 acres plus Emergency Squad

Number of Properties Remaining for acquisition - 8

Number of Miles or feet remaining for acquisition – 7,080' or 1.34 miles

Priority: High

Rt 57 to Millbrook Road, Franklin Twp.

This stretch is 2.64 miles long. It represents a great opportunity for acquisition without significant intrusions from adjacent development. Much of the canal is intact or easily restored. Only one property has been acquired by the county. Since the 1999 Plan two failed attempts were made to acquire property easements along the Morris Canal through the development review process and the farmland preservation process. Efforts to secure easements from the current landowners need to be made unless adjacent properties can be acquired that have the Canal actually located on them.

Total Length - 13,960' or 2.64 miles

Length in County Ownership – 1,080' or .2 mile

Length in other Public Ownership- 0

Length in Easements -0

Total Acreage Acquired in Fee and Easement – 2.4 acres

Number of Properties Remaining for acquisition - 16

Number of Miles or feet remaining for acquisition –12,610' or 2.39 miles

Priority: High

Millbrook Road, Franklin Twp. to Brass Castle Road, Washington Twp.

As the Rt 57 to Millbrook Road segment, this target area represents a good opportunity for acquisition as well. Located on Millbrook Road the Fancy property was acquired in 2001 and may be able to provide for parking facilities. It has over 2,000 feet of the canal. Along the way northward, a tract containing over 2,000 feet of the canal was acquired through the farmland preservation program. A license agreement or easement for public access would have to be secured from the owner. Toward the northern end of the target area is Washington Township's Meadow Breeze Park containing 1,400 feet of the Canal. Meadow Breeze park is well used park containing soccer and baseball fields, tennis and basketball courts, and a pavilion.

Total Length – 17,340' or 3.28 miles

Length in County Ownership – 2,010' or .38 mile

Length in other Public Ownership – 1,400' (Wash. Twp. Meadow Breeze) .27 mile

Length in Easements - 2,080' in farmland preservation easement, no conservation or public access to canal

Total Acreage Acquired in Fee and Easement – 74 acres plus Meadow Breeze Park

Number of Properties Remaining for acquisition - 15

Number of Miles or feet remaining for acquisition —13,930' or 2.64 miles

Priority: High (Need to secure a conservation easement and public access easement or license agreement from property owner to gain access to farm preserved property)

Brass Castle Road to Rt 31, Washington

Most of this section travels through the Borough of Washington. Much of the Morris Canal has been destroyed. A road walking tour from Meadow Breeze Park to Port Colden should be prepared. A brochure and map could be developed that would guide visitors to the noted landmarks along the route and promote the Washington Borough downtown. Some of the notable features on this walk are Plane Hill Road, and the North Lincoln Ave. Community. This could be accomplished through the combined efforts of the Morris Canal Committee, Board of Recreation Commissioners, the Washington Township and Borough Historic Societies, WC Regional Chamber of Commerce, Washington BID.

To provide an alternate to the road walk it may be possible to secure access easements and property along the Pohatcong Creek from Brass Castle Road to Plane Hill Road.

Total Length - 11,080' or 2.1 miles, Road walk will be lengthier

Length in Easements - 2,030' in possible JCPL license agreement

Priority: Low

Rt 31 to Port Colden, Westervelt Road

This section could take two possible routes. The route to be taken in the short term would be a road walk along Rt 57 to Port Colden. The Flower Avenue development destroyed most of the remains of the Morris Canal making a walk through the development undesirable.

The alternate route would depend on in part, the acquisition of public access or license agreement from the farm preserved property owner and the acquisition of six properties in the Flower Avenue development to facilitate a trail as close to the Morris Canal as possible.

Total Length – 6,830'

Length in Other Easements- 1,810' Farmland Preservation Easement (need to obtain a public access or license agreement from the property owner).

Properties to be Acquired - 8

Priority: Medium

Port Colden, Westervelt Road to Port Murray Road, Washington and Mansfield Twps.

Starting at the Port Colden School which was built in the Port Colden Boat basin, notable properties include Incline Plane # 6, a double tracked plane. It is likely that the site contains extensive archeological features of plane components and of earlier plane systems that were used. Further east are county owned properties containing over 2,270 feet of the canal. Before entering Port Murray is a large property containing approximately 160 acres. It contains remnants of the canal including Inclined Plane #5. Most of the Inclined Plane was destroyed when the property was used later as a clay pit.

Total Length - 16,290' or 3.08 miles

Length in County Ownership – 2,270' or .43 mile

Length in other Public Ownership – 600' (Port Colden School, right to access would have to be obtained)

Length in Easements -0

Total Acreage Acquired in Fee and Easement – 83

Number of Properties Remaining for acquisition -12

Number of Miles or feet remaining for acquisition – 13,420' or 2.54 miles

Priority: High

Port Murray Rd to Thomas Road, Mansfield Twp

This segment contains the Port Murray Boat Basin. Combined, the County and the State of NJ own 2,290 feet of the canal.

Total Length - 11,940' or 2.26 miles

Length in County Ownership – 1,460' or .28 mile

Length in other Public Ownership – 1,460' or .28 mile

Length in Easements – 1,480' or .28 mile (Access Easement)
813' in Conservation Easements

Total Acreage Acquired in Fee and Easement – 8.7 acres plus Rockport property

Number of Properties Remaining for acquisition – 22

Number of Miles or feet remaining for acquisition – 7,540' or 1.43 miles

Priority: High

Thomas Road to western end of Hackettstown Independence lands

Total Length - 15,010' or 2.84 miles

Length in County Ownership – 0

Length in other Public Ownership – 4,080' state or .77 mile

Length in Easements -0

Total Acreage Acquired in Fee and Easement – Rockport Game Farm Lands

Number of Properties Remaining for acquisition – 16

Number of Miles or feet remaining for acquisition – 10,930' or 2.07 miles

Priority: High

Hackettstown –Independence Properties (western end) to Rt 46 Hackettstown

Total Length - 7,240' or 1.37 mile

Length in County Ownership – 6,820' or 1.3 mile

Length in other Public Ownership - 0

Length in Easements 0

Total Acreage Acquired in Fee and Easement: 28 acres

Number of Properties Remaining for acquisition - 2

Number of Miles or feet remaining for acquisition – 420'

Priority: High

Rt 46 Hackettstown to CR 517 (Towpath Apartments)

Total Length - 5,700' or 1.08 mile

Length in County Ownership - 0

Length in other Public Ownership - 0

Length in Easements -0

Total Acreage Acquired in Fee and Easement - 0

Number of Properties Remaining for acquisition - 8

Number of Miles or feet remaining for acquisition – 5,700' or 1.08 miles

Priority: High

CR 517 Towpath Apartments to Bilby Road

Total Length – 4,490' or .85 mile

Length in County Ownership – 1,310' or .25 mile

Length in other Public Ownership -0

Length in Easements – 1,804' or .34 mile

Total Acreage Acquired in Fee and Easement – 11 acres

Number of Properties Remaining for acquisition 1

Number of Miles or feet remaining for acquisition – 3,180'

Priority: High

Bilby Road to Saxton Falls

Total Length – 8,830' or 1.67 miles

Length in County Ownership – 2,360'

Length in other Public Ownership – 3,460'

Length in Easements – 647' or .34 mile

Total Acreage Acquired in Fee and Easement -

Number of Properties Remaining for acquisition 2

Number of Miles or feet remaining for acquisition – 1,863'

Priority: High

- **Highlands Trail/Warren Trail and Greenway -Tier I**

This greenway and trail highlights the natural beauty of the New Jersey and New York Highlands Trail region, and draws the public 's attention to this endangered resource. It is a cooperative effort of the New York-New Jersey Trail Conference, conservation organizations, state and local governments, and local businesses. When completed, it will extend over 150 miles from Storm King Mountain on the Hudson River in New York south to Phillipsburg, New Jersey, on the Delaware River. Thirty two miles of the trail would be located in Warren County. The route will connect major scenic attractions in both states. Ultimately, a network of trails, including alternate routes and multi-use paths, is envisioned.

The Warren County section of the Highlands Trail will enter the county through Allamuchy Mountain State Forest and proceed in a southwesterly direction through central Warren County using the Lehigh Hudson railroad right of way, portions of the Pequest Fish Hatchery, state, county and municipal owned properties on Oxford Mountain, Scotts Mountain, and Marble Mountain, and the Merrill Creek Reservoir property. Warren County

has acquired over 797 acres of land area that was planned to be used for the greenway. Coordination with other governmental agencies to include municipal governments and the farmland preservation programs are important to ensure that the trail is completed with no gaps and minimal need to walk along public roadways. A detailed description of the Warren Trail is provided in Appendix H.

The following is a discussion of the sections of the Warren Trail-Greenway from South to North and includes a discussion of the features, opportunities for acquisition, and actions taken so far to acquire the lands, and if it should be considered as high or low priority.

Water Company Pump House to Merrill Creek Environmental Resource Preserve

This section provides a connection from the Delaware River at the Water Company pump house, owned by the County, and which serves as the southerly trail head and parking. The pump house property is a special use area that can be a destination of its own and serve as a stop on a historical tour of the county. Currently the pump house property is leased to the Friends of the NJ Transportation Museum who have been restoring the pump and the steam engine. In exchange the Friends have been storing transportation equipment and vehicles on the property in anticipation of the museum being constructed in Warren County. As a special use property a plan for the restoration and use of the pump house and storage building should be completed.

Walking across River Road, the trail can be accessed and hiked to the top of Marble Hill. On top is an ice cave. Still on County Property the trail could be established crossing state lands on top of the hill. There is a gap in publicly owned properties on CR 646 to a portion of property owned by Harkers Hollow. Opportunities exist to acquire rights to public access or outright acquisition of properties from private owners and the Warren County Farmers Fair Association.

Total Length - 23,650' or 4.48 miles

Length in County Ownership – 9,500' or 1.8 miles

Length in other Public Ownership – 6,500'

Length in Easements – 60' Shandor easement

Total Length in Road Walk - 4,600'

Number of Properties Remaining for acquisition - 3

Number of Miles or feet remaining for acquisition – 4,050'

Priority: High

Merrill Creek Environmental Resource Preserve

Currently owned by a consortium of power companies, the 2,800 acre reserve is open

for public use seven days per week during daylight hours. It contains a multitude of existing trails around the reservoir and can serve as a link in the greater Warren Trail connection. Permission to connect with the Merrill Creek trail system would have to be obtained. Approximately 2,000 feet of the Warren Trail would pass through this property.

Merrill Creek Environmental Resource Preserve to Washington Twp. Former Water Company Property at CR 623

To make an off road connection from Montana Road to the Washington Township property coordination with the farmland preservation program to jointly acquire farmland and/or secure public access easements would have to take place. This section of the Trail-Greenway represents a walk across a farmland plateau. Coordination with Washington Township on connecting a trail will have to take place. A connection from the Washington Water Company property to Meadowbreeze Park could be established as well. This would connect the Warren Trail-Greenway to the Morris Canal Greenway.

Total Length - 26,600'

Length in County Ownership – 6,850'

Length in other Public Ownership – 6,850'

Length in Easements

Total Length in Road Walk - 7,750'

Total Acreage Acquired in Fee and Easement

Number of Properties Remaining for acquisition - 3

Number of Miles or feet remaining for acquisition – 5,150'

Priority: High

Washington Twp. Former Water Company Property to Pequest Fish Hatchery

Ascending from the Washington Twp property this section overlooks the Pohatcong and the Musconetcong Valleys. There are two properties that need to be acquired to complete the Trail-Greenway in Washington Township. In Oxford a short road walk must be taken on Mine Hill Road and Rt 31 to connect the trail between properties. The county owned W. Oxford Mountain properties have a history of iron ore mining and have established trails for use.

Total Length - 26,950'

Length in County Ownership – 11,200'

Length in other Public Ownership – 250'

Length in Easements

Total Acreage Acquired in Fee and Easement

Number of Properties Remaining for acquisition - 2
Number of Miles or feet remaining for acquisition – 1,550'

Priority: High

Pequest Fish Hatchery Lands

Owned by the NJDEP the land area contains over 4,600 acres and connects Rt 31 in Mansfield Township to the Lehigh-Hudson Railroad in Liberty Township. Coordination with the NJDEP will have to take place to establish the trail through these lands.

Pequest Fish Hatchery lands to Allamuchy public lands

The trail would follow the abandoned Lehigh Hudson Railroad Corridor through much of the flat Pequest River valley and go around the eastern edge of the Great Meadows mucklands. In some segments through Liberty and Independence Township the trail may have to deviate from the railroad corridor.

Total Length - 44,900' or 8.5 miles

Length in County Ownership - 0
Length in other Public Ownership – 25,600'
Length in Easements

Total Acreage Acquired in Fee and Easement

Number of Properties Remaining for acquisition - 6
Number of Miles or feet remaining for acquisition

Priority: High

Ridge and Valley Trail

Although portions have been completed near White Lake in Hardwick Township, the Ridge and Valley Trail will offer a unique opportunity for the weekend hikers. This trail will connect the Paulinskill Trail with the Appalachian Trail, traversing the White Lake Natural Resource Area, various Ridge and Valley Conservancy properties and finally connecting near the Appalachian Trail at the Ralph Mason YMCA camp.

Interconnecting Trail Systems

To form a web of interlinking trails with other trail systems, natural resource areas, special use areas and open space areas, the special connecting trail systems can be acquired. This can give the trail user the opportunity to experience multiple trail systems or visit special areas on other trail systems in one hiking outing without the necessity of traveling by

car to the other sites. Specific examples include

Morris Canal – Warren Trail Connections

There are several possibilities exist in Franklin, Lopatcong and Washington Townships to include connecting the Morris Canal with the Warren Trail.

Morris Canal – Musconetcong River Connections

There are possibilities to connect the two systems in Mansfield and Washington Townships.

Jenny Jump – Paulinskill Trail Connection

There may be a possibility to acquire properties to connect properties associated with Jenny Jump in Allamuchy and Frelinghuysen Township with the Paulinskill Trail in Hardwick and the Liberty Water Gap trail. Utilizing land areas owned by the State, non-profit agencies and the Presbyterian Camp, an additional 3 miles of trail lands would need to be acquired to make the connection with the Paulinskill trail and the White Lake property and then to the Ridge and Valley Trail.

Tier II Other Greenways

Railroad Corridors

Abandoned or inactive railroad corridors offer citizens an excellent way of enjoying open space without having to purchase large blocks of land. Several railroads in Warren County are inactive and cross some of the county's most scenic regions. Since railroad corridors are flat, they are ideal for many uses, such as bicycling, walking, jogging, horseback riding, cross-country skiing, and wheelchair recreation. Preserving these corridors also creates agricultural and wildlife habitat buffers.

Rail-to-Trail programs link parks and create greenways through developed areas. It should be pointed out, however, that all railroad corridors cannot or should not be acquired for various reasons, such as economic, safety, and functional reasons. As corridors, or portions of corridors, become available, additional analysis should be completed.

Delaware River Greenway Trail

The Delaware River Greenway Trail will connect the Delaware and Raritan Canal on the New Jersey side with the Delaware Canal on the Pennsylvania side, both reaching their apexes at the Delaware Water Gap.

Musconetong River Greenway Trail

The preservation lands areas along this wild and scenic river is important for environmental, recreational purposes. It is consistent with the State acquisition plans and those of the Musconetcong Watershed Association.

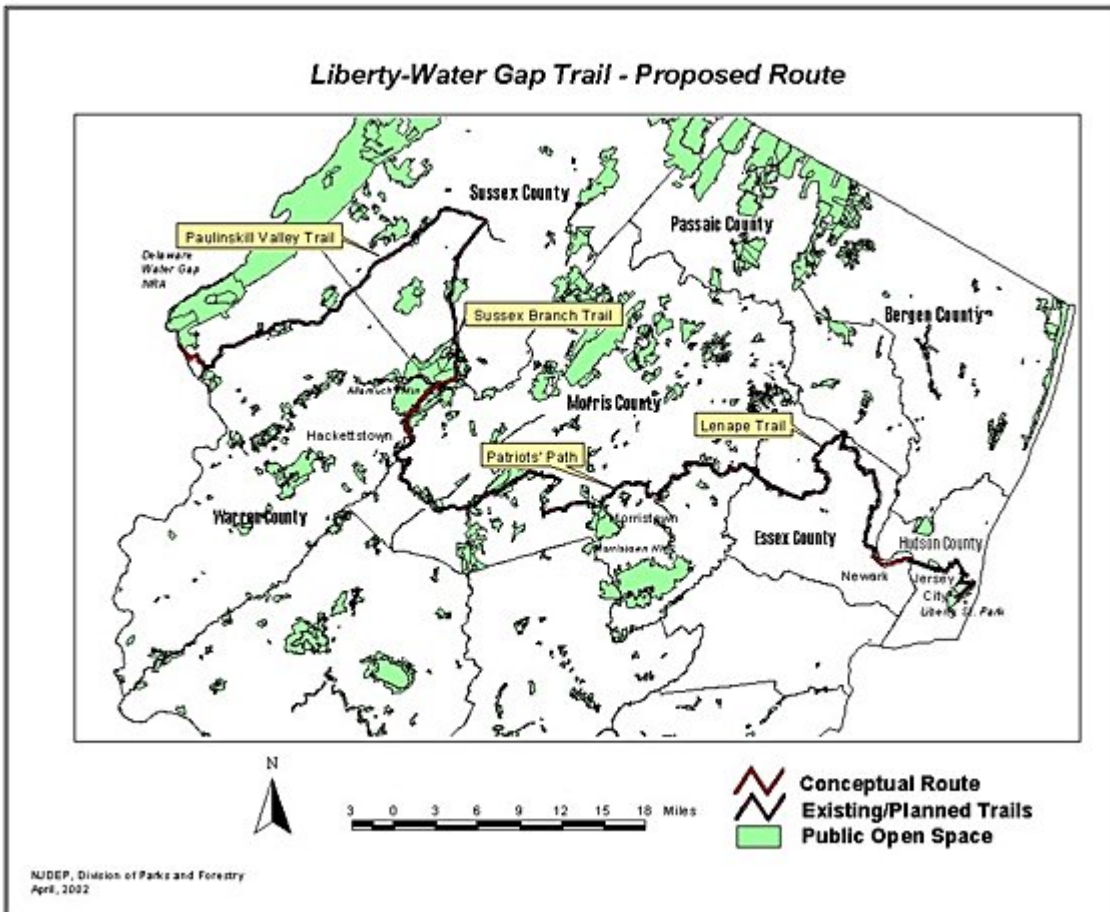
Liberty Water Gap Trail

As described on the Liberty Water Gap website at www.libertgap.org, when completed the Trail will connect the Hudson River to the Delaware Water Gap. The trail is for non-motorized multi-use recreational activity. It connects five counties in New Jersey. Uses along the trail vary depending on compatibility with the environment and policies of park agencies managing existing trails. The trail promotes appreciation of our cultural history and natural landscapes.

For the most part, the trail is the interconnection of four existing trails: the Lenape Trail in Essex County, Patriots' Path in Morris County, the Sussex Branch Trail in Sussex County and the Paulinskill Valley Trail in Sussex & Warren Counties.

Some connections to the Water Gap still need to be made in Warren County. The prime movers on establishing the trail through Warren County are Green Acres and the NY-NJ Trail Conference.

The following map depicts the Liberty - Water Gap trail in its entirety.



Special Use Areas: Special Use Areas serve a special purpose or meet a specific need. Often they are devoted to single purpose recreational, horticultural, historic or cultural activities. Special Use Areas may include sites of historic, cultural, scenic or archaeological significance. A Special Use Area may be located within or adjacent to another County land area.

Special use area may be classified into Tier I and Tier II areas as well. Tier I special use areas include significant features of the Morris Canal that have been acquired and need special attention for management, maintenance, and future development. The Inclined Plane #9 west in Greenwich Township, and Bread Lock Park (Lock #7 west) have maintenance and future development plans to restore these treasured properties into what existed when the Canal was functioning nearly 100 years ago. Both properties are part of the Morris Canal Greenway yet are considered Special Use areas because they can be stand alone destinations. Currently the properties are managed via an agreement with the Highlands Project.

Other special use areas in the County are Florence Kuipers Park in Hackettstown, the Port Murray Boat Basin property and the Consumers Water Company Pump House property. The Pump House property is currently leased to the NJ Friends of the Railroad and Transportation Museum. The Friends have been storing transportation equipment on site and have made strides in restoring the historic pump house and pump turbine. This site is located on the southern portion of the Warren Trail greenway and can become stand alone destinations or part of the greenway.

Tier II areas would include acquisition that is undertaken to preserve or take advantage of a specific existing or potential resource of County significance rather than as a response to a calculated recreation need. Their location and size should be determined in accordance with their intended function.

Conservation Areas/Natural Resource Areas:

The primary function of Conservation Areas is the preservation and enhancement of valuable natural resources and they are generally actively managed for that purpose. Conservation areas often include water and water related natural resources, mature woodland, noteworthy plant or wildlife habitats, geological features, and/or scenic landscapes. Public access for the appreciation and enjoyment of these resources should be accommodated providing it does not pose a threat to the resources themselves. Any development should be non-intensive and should be limited to the support and enhancement of nature-oriented outdoor recreation including such activities as nature interpretation, hiking, fishing, trail uses, and limited picnicking.

Conservation/Natural Resource areas may be classified into Tier I and Tier II areas as well. Tier I areas would include those area that function as a link in a Tier I greenway or special use area as defined in this plan. Existing Conservation/Natural Resource Areas include White Lake Natural Resource Area, Oxford Mountain Natural Resource Area, and the Marble Hill Natural Resource Area. The White Lake NRA is home to a large number of rare plant communities, diverse bird and amphibian communities, limestone forests which are considered rare as there are less than 100 occurrences of them worldwide. White Lake itself is unique because it is fed from springs and fissures in the bedrock. In addition it is a part of the Ridge and Valley Greenway/trail that is being led by the Ridge and Valley Conservancy to link the Paulinskill Trail with the Appalachian Trail. The West Oxford Mountain NRA and the Marble Hill NRA are segments of the Warren Trail. Future acquisition of Tier I Conservation/Natural Resource Areas should be part of a segment of a greenway.

The role of Tier II Conservation/Natural Resource Areas would be to permanently protect features of the landscape that have County significance. Conservation Areas should be acquired where there are natural features worthy of public protection. The size and location of the Conservation Areas will depend on the natural characteristics of the site. A Conservation Area may be located within or adjacent to other County land areas.

An important objective is the identification of unique environmental features of the natural environment that are not suitable for development or which pose problems or limitations to development and to incorporate them into areas of dedicated open space. Due to their particular physical characteristics, these environmentally sensitive areas may be greatly impaired by development activities. This requires a very close relationship between land use planning and open space planning with the goal being to guide development to areas that will have the least impact on environmentally sensitive areas. Frequently, areas that are not suitable for development are appropriate conservation and passive recreation uses.

Criteria for Selecting Conservation/Natural Resource Areas

For the purposes of conservation area planning, these areas may include all terrain in excess of fifteen percent slope, freshwater wetlands, stream corridors, aquifer recharge areas, wellhead protection zones, areas of endangered and threatened species, scenic vistas, lakes, and areas of special interest, including historic and scenic sites. These areas provide value to the region's economic, historic and recreation base, as well as provide identity to host communities

Steep Slopes

Slope is defined as the amount of vertical change in altitude over a horizontal distance, usually expressed in percent. Steep slopes are areas with a fifteen percent grade or greater. They are generally covered with vegetative growth. The leaf cover and root system hold the soil to the slope and provide cover and food supply for many forms of native wildlife. These areas have severe limitations to development, including building and road construction and septic effluent disposal. Development on steep slopes disturbs vegetation, which increases storm water runoff causing soil erosion, stream and river pollution, siltation, and lowers groundwater filtration, that then increases the danger of flooding. Often, at the apex of steep slopes are scenic view sheds. Map 6 Steep Slopes shows the areas of the county with over 15 percent slope, and major ridgelines and watersheds.

Freshwater Wetlands, Lakes, and Streams

A freshwater wetland is described in the 1993 New Jersey Freshwater Wetlands Protection Act (N.J.A.C. 7:7A et seq.) as “an area inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions, commonly known as hydrophytic vegetation”. The freshwater wetland systems are shown in Map 7 Freshwater Wetlands, Lakes, and Streams. Depending on the specific wetlands involved, the Act calls for buffers of 25 to 150 feet from the edge of the wetland. The buffer areas or greenways can meet a variety of community needs, including environmental and scenic protection, endangered and threatened species, open space and historic preservation while including some forms of passive recreation.

Stream Corridors

A stream corridor contains the stream channel and associated wetlands, floodplains, and forests. The establishment of buffers along stream corridors provides for the removal of sediment and pollutants in overland flow. Buffers help reduce stream bank erosion, prevent activities from occurring that may contribute to non point source pollution and, if forested, shade surface waters so that they are not excessively warmed. A large percentage of New Jersey's endangered species rely on stream corridors and wetlands for survival. The associated wetlands and floodplains help recharge groundwater aquifers, help prevent flood damage by providing flood storage capacity, and help maintain surface water level during low rainfall periods.

Stream buffer areas should include a minimum of 100 feet beyond the 100 year floodplain. If slopes greater than 15 percent correspond to the outer boundary of the stream corridor, the area of slopes should be included in the stream corridor buffer area. However, stormwater regulations now

require 300' buffers if classified as Category 1. Stream corridors are shown on Map 6 Freshwater Wetlands, Lakes, and Streams.

Aquifer Recharge Areas and Wellhead Protection Zones

Aquifers are defined as geological formations containing sufficient saturated permeable material to yield significant quantities of water to wells and springs. Aquifers and the recharge areas are significant because of their water supply potential. The amount of development permitted upon recharge areas should be guided by soil conditions and threat of pollutants reaching the aquifer. Municipal planning for aquifer recharge areas should, therefore, encourage open space and clean development to occur at relatively low densities.

Wellhead protection zones involve delineating protection areas around public community water supply wells. These areas represent the land around a well from which infiltrating rainwater and runoff water may come in contact with any water born contaminants thus polluting the well. Designated protected zones of open space is an effective means of reducing the risk of groundwater contamination. Known aquifers, recharge areas, and wellhead protection areas are shown in Map 8 Aquifers and Community Wellhead Buffer Zones.

Endangered and Threatened Species

Endangered and threatened species are plants and animals which have been designated by the New Jersey Non-Game and Endangered Species Act (N.J.S.A. 23:2A-1 et seq.) or the Federal Endangered Species Act (16 U.S.C.A. 1531043) to be in a jeopardized state of existence. To assist in the identification of areas suitable for rare and endangered species habitat the NJ State Landscape Maps may be consulted. The Landscape maps identify state threatened and endangered species.

Undisturbed Forest Tracts

Additionally, large undisturbed forested tracts often support biodiversity and should be considered for preservation as well. Forested areas are shown on Map 9 Forested Land. The presence and variety of wildlife and plants are excellent indicators of the overall health of the environment, while the disappearance of endangered species can act as an indicator of habitat loss and the instability of the environment. Identifying and locating these species is necessary to ensure protection for their environments. This necessitates environmentally sound development standards and land use decisions to secure a high quality environment. These decisions will, by nature, promote open space.

Scenic Vistas

Passive recreation can take many forms. The roads of Warren County can give the pleasure driver many scenic views. Steps should be taken by the county and municipalities to protect the view, as well as the points along all roads, which afford optimal views of these areas. The placement of cell towers should not intrude negatively on scenic vistas. Towers can often be camouflaged or made part of existing structures. Roadside development of these areas should be discouraged in order not to obstruct views. Ordinances can be enacted to control adjacent land use

and insure property setbacks, buffers, signs, and billboard and cell tower control. Where practical, small pull-off parking areas can be built where a panoramic view can be driven to and enjoyed safely. Watching migrating birds, the changing color of leaves in the fall, or the sunset can be enjoyable passive events.

Currently, the Rt. 57 corridor is being nominated as a scenic corridor. The acquisition of lands along the highway and within its viewshed should be pursued through the Morris Canal Greenways Conservation areas, and open lands as described next. A scenic resource analysis could be conducted to identify worthy scenic vistas and viewsheds.

Open Lands:

Open Lands are lands that are acquired to advance regional objectives for watershed protection, farmland preservation, and to enhance regional quality of life by preserving certain lands of county significance in an essentially unimproved condition. Open Lands may serve to protect areas of scenic beauty or natural habitat. Open Lands may serve to enhance public health and safety by preventing development of areas prone to flooding or erosion or which contribute to water quality protection. Preservation of Open Lands may be in fee or by easement.

Open lands may be classified as Tier I and Tier II. Tier I lands would include those that function as a link in a Tier I greenway project or are adjacent to a Tier I Conservation/Natural Resource Area. County lands that fall within this category include the Nabozny Tract in Franklin Township. It is part of the Morris Canal Greenway yet is agricultural in use and was acquired with the NJDOT to preserve the existing uses and growth management along the NJ 57 corridor which is also being considered as a scenic corridor.

Land classified as Tier II Open Lands are not intended for formal public use but may be made available for agriculture or forestry operations. Open lands may be acquired in coordination with farmland preservation program, or other programs designed to keep the land in an unbuilt condition with minimal to no public rights of access. Open Lands generally receive only minimal maintenance and patrolling. Open Lands should be acquired where there are large or contiguous undeveloped properties worthy of permanent preservation by the County but which either are not suitable for, or not currently needed for other public open space purposes. The size and location of Open Lands will depend on the characteristics of the site and patterns of development and ownership.

To assist the County in prioritizing land areas for Tier II Conservation/Natural Resource Areas and Open Space Site Selection the following additional criteria may be used:

Located in Regions Lacking Large Reserves of Open Space

Open space should be acquired in regions of the county lacking large reserves of open space or in areas of environmental sensitivity with the goal of preserving unique natural features. Using the open space regions contained in this plan, consideration should be given to projects located in the southern region where very little open space has been acquired by any governmental entity.

Facilitate Linkage with Other Open Spaces

Lands adjacent to or in close proximity to existing parkland and public open spaces that facilitate the linkage of open space parcels should be considered for acquisition.

- **Open Space Reserves Should Be at Least 75 Acres in Size**

These size criteria will afford the county residents large reserves of open space that they may not find in their municipality without the inconvenience of traveling longer distances to state or federal open space. Open space sites should be conveniently located throughout the county, thus providing the user the opportunity to enjoy the area in less than a full day.

The exceptions are stream corridors, ridgelines, the Morris Canal, inter- and intra-county trails, areas of unique features (both manmade and natural) and abandoned railroad rights-of-way. They may not be over 75 acres in size, but they do provide ideal opportunities for passive recreation while providing environmental protection and linkage to larger parcels of open space.

- **Associated with Streams, Lakes, and Ridge Tops**

Open space selection should consider the unique natural features, which will make the area a more desirable place to visit. Stream corridors are ideal for hiking/walking trails and fishing. Lakes are also ideal for passive recreation, as well as for boating, fishing, and swimming. Areas surrounding lakes also provide an ideal area for trails. A trail system and picnic areas can be developed along ridge tops, in association with scenic vistas.

- **Near Population Centers**

The selection of open space should take into consideration the users and how far they will travel to the open space facility. The potential number of users from an area should influence the type and location of open space facilities. Easy access by foot, bicycle, car, and public transportation is essential so people can enjoy the park as often as possible. Consideration should be given to sighting open space areas around centers as designated in the New Jersey State Development and Redevelopment Plan and in the County General Development Plan. The open space areas will serve as natural buffers, as well as provide the line of transition from a center to the environs surrounding the center.

- **Correlated with Historic and Cultural Resources**

Historic and cultural resources significant or unique to the development of Warren County should be preserved. The Warren County Historic Resources Survey of 1990-1991 and the National/State Registers of Historic Places should be consulted to determine a site's historic significance. A listing of properties and districts on the National and State Registers of Historic Places in Warren County is in Appendix I.

- **Located where Future Growth Anticipated**

With municipal assistance, the County should identify the areas where development is likely to occur and plan sufficient open space reserves accordingly. These areas should be consistent with the County Strategic Growth Plan and municipal master plans.

- **Complement Farmland Preservation**

The county should identify undeveloped, non-agricultural areas adjacent to properties in the farmland preservation program. These areas should be examined for their potential to be acquired as open space, which will complement the adjacent farmland or provide buffers to separate a farming operation from incompatible development, such as residential, commercial, and industrial.

- **Soils and Agriculture**

The US Department of Agriculture, Natural Resources Conservation Service, Soil Survey of Warren County provides basic soils data to be used as a guide for planning and land use and management for the benefit of the county and its residents. Areas designated as having severe limits, based on development due to poorly suited soils can be considered for open space reserves. They are shown on Map 10 Non-Agricultural Soils.

Sixty percent of Warren County is deep, non-stony soil, well suited for farming and community development etc. These areas also provide scenic vistas and watershed protection. Agricultural landowners should be encouraged to participate in the Farmland Preservation Program, to help ensure the viability of agriculture as a land use and economic activity while preserving them as open or undeveloped land areas. The remaining 40 percent is soil so stony, steep, shallow or wet that it is not suited for development.

The distribution of the soil is not uniform throughout the county. More than half of the deep, non-stony soil, which is well suited for farming and development, is in the southern part of the county. The northern section of the county has less than half of the stony, steep and shallow soil. Map 10 also shows the location of non-agricultural soils.

- **Associated with Aquifers**

Aquifers, which supply potable water, should be protected from contamination. By selectively acquiring these areas as open space, the aquifer can be protected from pollutants associated with development.

- **Unique Geologic Features**

While bedrock geology dominates much of the landscape of Warren County, there are significant overlying glacial deposits in the valleys. This surficial geology has a significant impact on groundwater availability. Karst limestone aquifers are particularly vulnerable for pollutants. The limestone aquifers provide high water quality and quantity.

SITES IDENTIFIED BY MUNICIPALITIES AND NON-PROFITS

To help guide the Municipal and Charitable Conservancy Trust Fund Committee and other county agencies in providing financial assistance to municipalities and non-profit groups it is recommended that the current Warren County Open Space Plan be consulted to determine how the proposed acquisition fits in with the County's vision for open space. It is recommended that the MCCTF transmit the applications it receives to the County Planning Department to determine consistency with the Open Space Plan.

To promote the coordination of Open Space acquisition efforts throughout the county, the Planning Department sent a request to all known municipal and non-profit agencies for an inventory of land holdings and identification of properties they have targeted for future acquisition. In addition each municipal Open Space and Recreation Plan was reviewed. A summary of the response and/or open space plan follows. A composite map depicting the areas are shown on Map 11.

Municipalities

Allamuchy Township

Allamuchy Township provided an inventory of open space land holdings in the township. It has over 4,600 acres in State open space, 165 acres in non-profit space and 261 acres of municipal owned open space. There is a over 300 acres of municipal space not earmarked for open space but for municipal purposes, i.e. fire, road department, well head protection etc. It has an additional 2000 acres preserved as farmland

Alpha Borough

Alpha Borough's Open Space and Recreation Plan dated February 2007 was reviewed. Its Action Plan contains some key points. They are to analyze vacant railroad properties to determine suitability for open space and trail development, apply for funding from the MCCTF, meet with adjacent municipalities to discuss common open space objectives and programs, and establish partnerships with other entities for funding the projects.

Belvidere

The last Master Plan Re-Examination from 2002 was reviewed. The town planning board identified two points concerning open space. They are to establish pedestrian access with walkways, bikeways and landscaping along the Delaware River and Pequest River waterfronts.

Blairstown

No discussion on open space.

Franklin

The Franklin Township Open Space Plan of 2006 was reviewed. It identifies four Greenway projects. They are the Scott's Mountain Greenway and connect with the Warren Trail, the Morris Canal Greenway, the Pohatcong Ridge Greenway, and the Musconetcong River Greenway. Partnerships with other agencies are recommended as well as seeking funding from the county MCCTF.

Frelinghuysen

The Township's Open Space Advisory Commission responded with an inventory of open space and a target list of properties the commission deems as suitable for acquisition. They are:

Location	Road	Acreage
B 103, L 3	Route 94	35.56 acres
B 1701, L 8	State Park Road	4.95 acres
B 601, L 1	Wasigan/Silver Lake Road	68.02 acres
B 201, L 16 (Vacant)	Route 94	22.40 acres
B 201, L 6	Lincoln Laurel Road	71.50 acres
B 201, L 8.08 (contiguous with B 201, L 6)	Route 94	89.80 acres
B 902, L 18 (farm assessed)	Mill Road	15.40 acres
B 902, L 12	Mill Road	54.36 acres
B 501, L 26 (across from Silver Lake Road)	Route 94	66.65 acres
B 1301, L 21	Greendell Road	125.76 acres
B 104, L 10 (Kid's Camp)	Lincoln Laurel Road	124.37 acres
B 1703, L 11	State Park Road	38.31 acres
B 1703, L 15	State Park Road	0.47 acres

Greenwich

The Township Land Use Plan and Conservation Plan was reviewed. It identifies objectives to protect stream corridors, wildlife habitats and scenic vistas.

Hackettstown

A 1988 plan revision was reviewed and it recommended that additional open space and recreation land be acquired when the remaining vacant lands along the Musconetcong are developed so that a balance between developed land and open space lands can be maintained.

Hardwick

The Hardwick Township Open Space Plan of 2000 was reviewed. It identifies seven project areas for preservation. They are; White Lake; Hardwick Meadows, Shuster Pond; Squires Corner; Kittatiny Mountain Macro site; Blair Creek Greenway; and the Limestone Forest-Carrazone Tract. In addition, the township endorses the Ridge Valley Trail also know as the Camp Ridge Trail to connect the Paulinskill Trail with the DWGNRA area.

Harmony

Harmony Township Environmental Commission provided an inventory of properties in Harmony Township preserved as farmland, as well as county, municipal, state and non-profit open space properties. A copy of the Township's Open Space and Recreation Plan dated April 2006 was provided and reviewed. The Plan identifies the need to create partnerships for water protection particularly with FEMA to purchase and preserve flood damaged properties along the Delaware River. To protect ground water quality and surface water quality, land within aquifer recharge areas, within 300 feet of C-1 and trout production waterways including the Buckhorn Creek, Lopatcong Creek, Merrill Creek and Mill Brook, surrounding the Merrill Creek Reservoir, and properties along the Delaware River, are recommended for preservation. In addition, lands along Scott's Mountain particularly the forested lands along the ridgeline and slopes to advance the completion of the Warren Trail. Farmland Preservation is a high priority as well.

Hope

Hope Township does has a farmland preservation element only.

Knowlton

Independence

No open space plan.

Liberty

The Liberty Township Open Space Advisory Committee responded and identified three focus areas. They are the Mountain Lake beaches and access points, the Warren Trail southern route as Block 300, Lot 1, and the northern route thru Jenny Jump State Park as Block 5, Lots 21.01, 22, 26.01, and a Green Golf Course as Block 9, Lot 22, containing a total of 131 acres.

Lopatcong

The Township planner provided an inventory township owned open space. In addition the township's 2004 Reexamination of the Open Space and Recreation Plan identified three tracts for active recreation use. They are Block 85, Lots 4 and 36 and Block 85.01, Lots 3, 4 and 38. In addition, Marble Hill, Scott's Mountain and Lopatcong Creek are identified as areas of environmental concern that should be preserved as open space. The plan recommends that the township and county consider a land swap where a tract owned by the county Block 2, Lot 28, is traded with Block 2, Lot 51 owned by the township. The swap would provide the county with contiguous parcels on the Warren Trail and would provide the township with contiguous properties. The plan also depicts a future trail system throughout the township that would link the various residential sections of the township with one another. The plan also includes the Warren Trail.

Mansfield

The 2001 township reexamination Report was reviewed. It states that the goals and objectives of the 1999 Master Plan had not changed to any significant degree. The 1998 draft Open Space Recreation Plan recognizes the Morris Canal as a county effort. In addition, the Plan identifies several open space greenways to establish trail systems to link state, county, on municipal open space areas. Also the plan identifies other sites for additional municipal parks.

Oxford

Oxford responded with an inventory map of open space and recreational facilities. The map identifies Block 26, Lots 85 and 86 for active recreation and passive recreation respectively consisting of 122 acres. Both are on Mt. Pisgah Avenue. Another property on Belvidere Avenue, Block 25, Lot 10, is identified for farmland preservation. Oxford Township's Master Plan recommends that the Ox Tech site be acquired and restored to create a historic site with park like amenities.

Phillipsburg

The town's Master Plan update for community facilities, recreation and open space plan was reviewed. It supports providing accessible recreation opportunities, preserving natural areas and enhancing access, use and enjoyment of the Morris Canal, Delaware River and Lopatcong Creek.

Pohatcong

The draft Pohatcong Open Space and Recreation Plan discuss a number of preservation efforts. They are; the Parkside Parks Preservation Area, Morris Canal Greenway, Phillipsburg Bluffs, Delaware River Recreation Corridor, Alpha-Pohatcong Grasslands, Pinchers Point, Southern Gateway, Musconetcong River Valley Historic Preservation Area, Pohatcong Creek Greenway, Northern Gateway,

Washington Borough

The Borough responded to the November 8, 2007 memo stating that the following properties are targeted for acquisition: Block 97, Lots 1, 2, 3 and 4, and Block 97.01, Lot 2. In addition, the Borough's Open Space Plan was reviewed and it identifies a number of other properties including the Morris Canal Corridor, the railroad right of way, various properties in the Flower Avenue section, Shabbecong Creek Greenway and the Mill Pond.

Washington Township

The Township provided a CD ROM containing the township's Open Space and Recreation Plan of 2006 and GIS coverage. The Plan discusses a number of projects to be considered as primary preservation areas. These projects are the restoration of the Old Port Colden School House, the acquisition of the Peter Van Doren Grist Mill site at Block 28, Lot 21, the acquisition of the Morris Canal through fee simple and/or easements. The Plan specifies 5 properties containing the Morris Canal that may be suitable for easement purchase.

The Plan proposes to establish a linear park on the abandoned Delaware, Lackawanna and Western RR from the Musconetcong River northward through Washington Borough to the border with Mansfield Township. Lots identified are:

<u>Block</u>	<u>Lot</u>	<u>Acres</u>
30	18	6.06
30	17	6.05
30	18	1.10
47	10	0.89
47	10	2.59

	<u>Lot</u>	<u>Acres</u>	<u>Length</u>	<u>Address</u>	<u>Status</u>
15	8.02	12.63	664	126 Little Philadelphia Rd	Private
16	4	94.580	1035	96 Little Philadelphia Rd	Private
16	8	8.781	1370	65 Little Philadelphia Rd	Private
17	3	2.76	300	74 Kavharts Lane	Private
40	87	98.04	1500	1 Julia Dr	Private
			83	6	3.56
			47	11	1.68
			47	9	83.56
			46	6	0.87
			47	8	6.77
			83	6	2.59

The Plan proposes conservation areas including the preservation of stream corridors (300 foot buffer) and greenways for the protection of water quality, wildlife protection, flood protection and passive recreation. A route for the Warren Trail is proposed identify two additional properties for acquisition and identifies additional properties throughout the township to be used for various types of passive and active recreation. A listing of those properties is shown below.

Block	Lot	Acres
<u>67</u>	<u>63.01</u>	<u>25.790</u>
<u>67</u>	<u>62</u>	<u>16.630</u>
<u>68</u>	<u>12.01</u>	<u>10.620</u>
<u>27</u>	<u>13.06</u>	<u>0.500</u>
<u>27</u>	<u>13</u>	<u>13.180</u>
<u>68</u>	<u>45</u>	<u>131.500</u>
<u>67</u>	<u>63.05</u>	<u>8.870</u>
<u>22</u>	<u>3.17</u>	<u>20.000</u>
<u>82</u>	<u>16</u>	<u>111.000</u>
<u>74</u>	<u>3.01</u>	<u>34.830</u>

Passive Recreation Properties

Block	Lot	Acres	Ownership	Purpose
<u>68</u>	<u>10</u>	<u>24.600</u>	<u>Washington Township</u>	<u>Meadowbreeze Field Expansion</u>
<u>68</u>	<u>11</u>	<u>1.277</u>	<u>Washington Township</u>	<u>Meadowbreeze Field Expansion</u>
<u>68</u>	<u>12</u>	<u>61.330</u>	<u>Washington Township</u>	<u>Meadowbreeze Field Expansion</u>
<u>30</u>	<u>37</u>	<u>13.890</u>	<u>WH Board of Education</u>	<u>Regional Sports Complex</u>
<u>84</u>	<u>1</u>	<u>41.230</u>	<u>Private</u>	<u>Future Active Recreation Park</u>

Active Recreation Properties

White Township

The White Township Master Plan dated June 14, 2004, was reviewed. The Plan identifies abandoned railroad rights of way for purchase. The ROW's can provide interconnections with stream corridors and serve as important links in pedestrian/bicycle/equestrian trail system. The Lehigh-Hudson Warren Line, Penn Central, and Belvidere-Delaware railroads should be preserved. In addition, cluster developments are encouraged as a means to protect vulnerable natural resources and to provide useable blocks of open space. All subdivisions should be required to either provide for or contribute financially to recreation space.

Non-Profit Groups

Ridge and Valley Conservancy

A project of the Ridge and Valley Conservancy is the Limestone Forest project. The

limestone forest is unique to the Appalachian Valley and Ridge Region of Sussex and Warren County. It consists of dense forests growing on limestone bedrock covered by thin glacial till, contains rare and endangered plant and animals, sinkholes, caves, springs, streams etc. Protecting these forests will preserve groundwater recharge. The RVC has protected over 2,600 acres already. Map 12 shows the limestone forest project area.

The Nature Conservancy

The Nature Conservancy responded with an inventory of lands it owns in Northern Warren County including the Johnsonburg Swamp Preserve in Frelinghuysen, Tranquility Farms in Allamuchy and Glover Pond in Frelinghuysen and Allamuchy, Greendell Ridge and Blair Creek in Hardwick. Future TNC priority is in Northern Warren County and the focus area is identified as Kittatinny Ridge. In general it is the land area north and west of NJ 94 at CR 521.

NJ Audubon Society (Responded to Memo)

The Audubon Society responded by stating that owns three distinct land holdings in Warren County. They are Catswamp Sanctuary in Independence and Allamuchy Township, Old Farm Sanctuary in Independence and Hariton Sanctuary in Harmony Township. The Audubon Society is seeking to acquire the Gordon Wattles Stewardship Center in Mansfield Township shown as Block 1506, parts of Lots 2, 2.01, 3.

STATE OPEN SPACE ACQUISITION PLANS

The following is taken from the Green Acres website and describes the areas identified for acquisition in Warren County.

Garden State Greenways

The Garden State Greenways is the result of the New Jersey Green Infrastructure Assessment conducted by the New Jersey Conservation Foundation in cooperation with the NJDEP Green Acres Program. It is vision of interconnected statewide system of open space. The NJGIA identified large tracts of undeveloped land that could act as hubs of interconnected open space. Linear connectors were then identified to represent potential linkages to the hubs. Map 13 contains the NJ Greenway's for Warren County.

Pequest River Greenway

The Pequest Trout Hatchery relies heavily on the high quality of its underground water supply for successful fish production. The fish raised at the hatchery are used to stock many of New Jersey's streams and ponds. Green Acres proposes to acquire land to expand the Pequest Wildlife Management Area and to preserve land along the river in Sussex and Warren Counties. The primary objective of these acquisitions is preserving the aquifer recharge areas designated as critical to the protection of the hatchery's underground water supply. The project will further protect the habitat of

a variety of wildlife species including the endangered bog turtle. These additions will offer excellent outdoor recreational potential, particularly for fishing, hunting, and hiking.

Delaware River Greenway

Many consider the Delaware River Valley to be one of the most scenic areas of the Mid-Atlantic states. A trip down the 115 miles of river along New Jersey's western border would reveal dramatic palisades at the Delaware Water Gap, the steep rise of the Kittatinny Mountains, forested islands, rolling valleys, towns, historic villages, and farms. The Delaware River also serves as a section of a major flyway for migratory birds. The amount of access varies throughout the length of the river, but remarkably, the vast majority of the New Jersey land along its length is only sparsely developed and retains its scenic quality. Efforts are underway to secure greater public access, broaden the width of public holdings within its corridor, and protect the scenic and historic resources of the Delaware River and its tributaries.

Highlands Greenway

Sweeping across the north central portion of New Jersey, nearly one million acres of forests in the Highlands surround and protect the source waters for one-third of New Jersey's citizens. Serving as a spectacular green belt around some of the nation's most densely populated cities and suburbs, the majority of the Highlands' mountains, ridges, forests, and fields are privately held and therefore are vulnerable to development. Preservation of the greenbelt is critical to ensuring the integrity of New Jersey's water supplies and maintaining the state's biodiversity.

Historic Resources

All across the state lie reminders of New Jersey's exciting and important past: battlefields and barracks; Native American and early immigrant artifacts; factories and farms; mines, mills, and munitions forges; canals and patriots' footpaths; industrial barons' mansions and humble poets' homes; laboratories of invention and genius and relics of early industries; lighthouses that guided schooners to safe harbor and safe houses that harbored slaves on the path to freedom. Many resources of New Jersey's past have been recognized, listed on the National Register of Historic Places and/or New Jersey Register of Historic Places and protected through public ownership or regulatory oversight. Many other historic sites still await discovery and proper recognition of their place in history; and all historic sites are in need of proper care and interpretation. By protecting and linking sites of historic significance and by preserving swaths of adjoining buffer lands, the history and even the historic landscapes of New Jersey can be preserved. With the foresight to preserve the past, the public will forever enjoy the scenic, cultural, recreational, and educational benefits of valuing New Jersey's history.

Jenny Jump State Forest

Jenny Jump State Forest provides opportunities for a variety of backwoods oriented recreation in rural but growing Warren County. The ridge-top forest, which spans six municipalities, is a popular area for camping, hiking, hunting, and cross-country skiing. Green Acres proposes to acquire additional land to create a linkage between publicly owned portions of the forest.

Musconetcong River/Pohatcong Creek Greenway

In keeping with the "string of pearls" concept associated with greenways, Green Acres, the DEP's divisions of Parks and Forestry and Fish and Wildlife, and the counties of Hunterdon, Morris, Sussex, and Warren have identified a number of sites along the Musconetcong River and Pohatcong Creek for acquisition. This project is a cooperative effort between Green Acres, the Department of Agriculture's Farmland Preservation Program, and the Musconetcong Watershed Association. Although this is one of the state's most important trout waters, fishing access is currently limited. Preserving the water quality in the Musconetcong is a major goal of the project.

Natural Areas

New Jersey's natural areas often protect threatened or endangered animals and plants species. Green Acres is committed to protecting these environmentally sensitive regions of New Jersey. Green Acres plans to expand dozens of Natural Areas throughout the state, ranging geographically from Woodbine Bogs in Cape May County, to Strawberry Hill in Mercer County, to Ramapo Lake Natural Area in Bergen and Passaic counties.

Paulins Kill Greenway

Green Acres has targeted the Paulins Kill as an excellent resource for open space and recreational opportunities. The State is committed to providing access to the river as well as preserving farmland in the Paulins Kill corridor to form an integrated open space system. To that end, Green Acres is working with the county agricultural development boards where there are opportunities to protect properties that meet common open space and farmland preservation goals, such as the Paulins Kill Greenway. The Ridge and Valley Conservancy, a local nonprofit land trust, is also participating as a partner with the state and county governments to share in land acquisition costs. Much of the Paulins Kill Valley Trail corridor follows the Paulins Kill and provides for excellent hiking and fishing along with a variety of other outdoor recreational opportunities. Green Acres will acquire additional land to expand the greenway and provide better access to the Paulins Kill Valley Trail.

Watershed Lands

New Jersey has long recognized the importance of protecting headwater areas and the sensitive resources of rivers, streams, lakes, reservoirs, wetlands, and associated buffers and coastal waters. These lands protect ecological resources and water quality, provide water-based recreation opportunities, and serve as linear open space linkages. Aquifer recharge areas and lands held by water utilities for protection of water supplies must be preserved, as well as sensitive areas beyond those holdings. The cost of not doing so is far greater than the cost of preservation. Therefore, Green Acres will continue to acquire land that will serve to protect critical water supplies, support wildlife habitat, and provide recreational opportunities throughout New Jersey.