

Trails Master Plan

Township of West Milford
Passaic County, New Jersey



ADOPTED BY THE
WEST MILFORD ENVIRONMENTAL COMMISSION
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Introduction

West Milford Township, located in the northwest corner of Passaic County (See Figure 1), retains an enduring rural character that is the epitome of the Highlands Region with vast forested areas, reservoirs and unique geology. The Township's steeply sloping topography, stream corridors and historic buildings and settlements are an eloquent expression of the Township's heritage.

West Milford is endowed with a unique array of natural and cultural resources that define the community character. Nearly three-quarters of West Milford is restricted against future development either through deed restrictions or public lands. The combination of these factors endows West Milford with a rural character that is cherished by residents and visitors alike.

West Milford contains hundreds of miles of trails including a portion of the Appalachian Trail and Highlands Trail. The majority of trails in West Milford are maintained by the volunteer-based New York/New Jersey Trail Conference, maintaining 120 miles of official blazed and maintained trails. In addition, approximately 20 miles of official, blazed mountain biking trails are maintained by Jersey Off Road Bicycle Association (JORBA). The balance of trails are local neighborhood trails, fire roads and other unblazed trails (Figure 2). The trail network provides connectivity and access to a wide range of open space and recreational areas within the Township and provide key linkages to other trail systems, as in the case with the Appalachian and Highlands Trails.

Maintaining and fostering the trails network is a key component to the Township's overall goals of provide open space and recreation facilities to Township resident's, promote active and healthy lifestyles, provide alternative modes of access from population centers to key activity areas and provide an overall high quality of life for Township residents.

The goal of the West Milford Trails Plan is to identify the current inventory of trails and associated facilities, identify the needs of the trail network and overall connectivity throughout the Township, promote the trail network, provide additional information for users and identify an action plan to acquire, enhance, manage the trail networks. The Trails Plan has identified these steps through a series of meetings hosted by the Environmental Committee in West Milford Township. Through their work and input, the Township has identified a comprehensive inventory of the existing trails as well as providing an analysis of proposed connections. This guidance will help to ensure the continued effort of long-term trail planning in West Milford.

Goals

The purpose of the Trails Plan is to provide guidance for current and future trails and facilities and the preservation and management of these areas. West Milford has consistently included the need to increase open space and recreation facilities throughout the Township, including maintaining and expanding existing trails, finding new opportunities for multi-modal trails and creating greenways to provide additional means of linkages throughout the Township to recreation, open space and activity centers. The following is a reflection of those planning initiatives.

1987 West Milford Master Plan

The 1987 master plan identified the following objectives:

- To preserve the semi-rural character of the Township
- Preserve the pristine nature of the forest, waterways, and sensitive areas
- encourage growth that will minimize impacts on air and water quality
- encourage a pattern of land use that will provide reasonable residential, commercial and industrial land use consistent with the character of the Township
- *Promote active recreational opportunities on both public and private lands and in the area of public lakes*
- encourage energy conservation of scarce fossil fuels
- Improve circulation patterns throughout the Township for through-traffic and local traffic demands to residential and commercial land uses
- provide municipal and social services to meet the demands of the existing and future population and to achieve efficiency in the administration of these services

2003 West Milford Master Plan Reexamination

The 2003 Reexamination report included the following goals and objectives for the Master Plan. Included in these were goals related to open space and recreation (emphasis added).

Goal I

Preserve and protect the semi-rural and environmentally sensitive character of the Township

Objectives

1. *Preserve scenic, cultural, historic, and environmentally sensitive land.*
2. Encourage aesthetic, energy efficient and environmentally sensitive site design.
3. Promote farmland preservation through appropriate zoning.

4. Prevent sprawl type development.

Goal II

Preserve contiguous open space

Objectives

1. Limit growth in and protect lands with major physical constraints and critical habitats.
2. Provide suitable land uses on sensitive lands through zoning.
3. Protect existing lakes and waterways from deterioration.
4. Encourage open space by the use of appropriate land use techniques.
5. *Identify and implement a greenway network linking privately and publicly preserved lands.*

Goal III

Protect water resources

Objectives

1. Consider alternative and technological advancements in wastewater treatment.
2. Provide for methods of reducing storm water runoff and its impact through best storm water management practices.
3. Appropriately zone vacant land adjacent to open bodies of water for minimal development impact.
4. Protect areas of high groundwater recharge value.
5. Protect stream corridors.

Goal IV

Land/Use and Growth Management

Objectives

1. Focus growth around existing business districts, encouraging infill and mixed land use.
2. Provide a range of housing opportunities that will encourage "least cost" housing and housing geared toward municipal needs.
3. Encourage commercial and industrial growth on suitable land in appropriate areas recognizing the existing roadway system
4. *Promote recreational opportunities.*
5. Provide for zoning standards that are consistent with existing neighborhoods.

Goal V

Regulate circulation patterns throughout the Township for through traffic and local traffic demands to residential and commercial land uses.

Objectives

1. Improve roadways in response to traffic needs.

2. Encourage the continuation of the private road improvement program so that these residential communities can be serviced properly.
3. Encourage and plan for the use of mass transportation uses through additional park and ride facilities and bus services.
4. *Encourage the development of multi-modal pathways.*

Goal VI

Preserve character of existing lake communities

Objectives

1. Permit limited "infill" growth in existing lake communities consistent with the character of those communities.
2. Establish septic maintenance program.
3. Protect lake vistas.
4. Establish fertilizer, pesticide, and herbicide standards.
5. Minimize shoreline deforestation.

Goal VII

Encourage economic vitality of community business districts

Objectives

1. *Promote a functional physical environment consisting of streetscapes, pedestrian improvements, shared parking and building design criteria.*

2003 Open Space Plan

The 2003 Open Space plan included a chapter dedicated to trails which identified the goal "to develop a framework for an interconnected system of open space and recreational areas." (P. 9). The plan stated that in order to fully provide a comprehensive trail network throughout the Township, the Township would need to investigate and resolve any legal issues that might preclude the use of trails by the general public.

West Milford Trails Plan Goals

The goals and objectives for the West Milford Trail Master Plan are:

1. Identify, promote and preserve a network of shared use trails in West Milford Township, which will interconnect municipal, county and state recreation areas and provide pedestrian access to historical landmarks and natural resources within and around the Township
2. Coordinate the Township's trail system plan with the overall plans of Passaic County Heritage Plan and the plans of the State of New Jersey.
3. Develop a pedestrian friendly transportation network throughout West Milford Township that connects to neighboring municipalities.
4. Apply for funding and grants whenever possible to assist in project initiatives and to defray costs.

5. Work with landowners regarding the trail systems and encourage cooperation with the Township in the creation of the trail system.

Inventory

The Township contains a large network of trails as identified in the table below and presented on Figure 2. These facilities offer a wide range of recreational opportunities from easy nature walks and hiking to difficult hikes (Attachment A for full list).

Appalachian Trail

A rugged, beautiful stretch of the internationally famous, 2,167-mile-long Appalachian Trail, which runs from Georgia to Maine, passes through the township of West Milford. The trail enters the northwestern corner of West Milford near Long House Road and runs through Abraham Hewitt State Forest before following Bearfort Mountain into Orange County New York, high above Greenwood Lake. Rocky outcrops, upland creeks, and swamps, characterize the popular West Milford section and scenic views from glacier carved ridges. A variety of family-friendly, Appalachian Trail loop hikes to Surprise Lake and secluded West Pond can be made using West Milford's Jeremy Glick, State Line, Ernest Walter, and Bearfort Ridge trails.

Jeremy Glick Trail

The Jeremy Glick Trail, formerly known as the Quail Trail, is an easily accessed, two and one-half mile historic walking trail located entirely within West Milford's Abraham Hewitt State Forest. Beginning adjacent to Warwick Turnpike near a native trout production stream and ending at Surprise Lake on Bearfort Mountain, it is a stretch that West Milford's own Jeremy Glick knew very well. On September 11, 2001, Jeremy Glick became a national hero when he was among the passengers aboard United Airlines Flight 93 who stormed the cockpit in an attempt to wrest the plane from terrorists who had pointed it toward Washington, D.C. The jetliner crashed in a field in rural Pennsylvania, killing all aboard. According to his wife Lyzbeth, the Quail Trail, with its view of the World Trade Center, was one of his favorite trails. In 2002, the Quail Trail was renamed the Jeremy Glick Trail, in honor of his heroism.

The Hasenclever Trail

The New York-New Jersey Trail Conference, with the assistance of the Friends of Long Pond Ironworks and Ringwood State Park, is currently establishing the Hasenclever Iron Trail. For over 200 years, the trail, approximately 3.5 miles in length, has connected Ringwood Manor (the historic Ironmaster's home) with Long Pond Ironworks (the manufacturing center). The late Martin Deeks was instrumental in the re-discovery and development of this trail that connects the municipalities of Ringwood and West Milford. Due to his participation, the Trail Conference is considering establishing a series of trails spanning the border of New York and New

Jersey, dedicated to interpreting and directing travelers to many of the local historic iron sites.

Highlands Trail

The Highlands National Millennium Legacy Trail, or simply Highlands Trail, is a nationally recognized, bi-state foot trail, built to highlight the natural beauty of the New Jersey and New York Highlands region, and draw the public's attention to this endangered resource. Now mostly completed, the trail 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. 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 trail, which begins along the Delaware River near Phillipsburg, NJ, enters West Milford's southwestern corner near Route 23. It traverses approximately 25 miles some of the wildest, most scenic, environmentally sensitive and historic highlights within the township, including: Dunker Pond, Clinton Reservoir, Bearfort Mountain and Fire Tower, Echo Lake, Norvin Green State Forest, Horse Pond Mountain, Monksville Reservoir, Long Pond Ironworks and the New Jersey portion of Sterling Forest and the Newark-Pequannock Watershed.

The Highlands Trail exits West Milford and New Jersey at Big Beech Mountain in Sterling Forest, continuing its journey to Storm King Mountain along the Hudson River, at its northern terminus.

Action Plan

The following provide additional information and criteria for the maintenance, creation and expansion of trail networks and accessibility in the Township. Figure 3 is a representation of the action plan which seeks to extend existing trails, develop new connections and paths and provide more meaningful access to Township resources for multimodal users.

Greenways, Linkages and Trails

The Trails Plan is not only an inventory of physical trails used for recreational purposes, but also a means to develop interconnected, multimodal systems that allow alternative modes of travel throughout the Township, connecting neighborhoods to recreational opportunities, civic areas, schools and commercial centers. The idea is to provide a fully functioning system that will encourage and support the use of non-vehicular traffic available to all residents and visitors.

Trails that connect existing or proposed open space, expand existing or proposed greenways/linkages or provide additional opportunities to expand trail systems are valuable additions to the overall open space and recreation system in the Township. A linear or contiguous system of open space that provides access for the greater population and preserves uninterrupted habitat, is a stated goal and important to

protect. This criterion can be used to evaluate potential acquisition sites for both passive and active recreation facilities.

West Milford Bikeway

The Township has developed the proposed West Milford Bikeway intended to provide a safe bikeway from Town Hall on Union Valley Road to the West Milford School complex (Figure 2). The bikeway is partially completed in the area between Town Hall and Cross Road and again near the school consisting of road signage, widening, striping and other improvements to make the road safe for bicycle travel. Parts of the full bikeway are still under development, but once complete will provide for safe alternative travel between these two important civic centers.

Bikeway/Multipurpose Trail System

The Township prepared a Center Designation Report in 1998 focused on the area surrounding the municipal building, library, and Lake Melody. The Center Designation was never formally approved or adopted but the idea of providing pedestrian, bikeway and multi-use trails to service the 8,500 residents living in the area remains an important goal. Linking neighborhoods to civic and commercial areas provides an opportunity for residents to conduct some business and services in a non-vehicular manner. Additional opportunities can also link these neighborhoods to open space areas and trails. These items should be further reviewed and incorporated into Trails planning.

Passaic County Heritage Tourism Element of the Passaic County Master Plan 2013

The Passaic County Heritage Tourism Element is an extension of the County's previous work on the Circulation and Transportation Master Plan. The Plan identified a series of recommendations that included further needs to establish a system of roadways that are Scenic and Historic that would address a series of objectives, including:

- Preservation of the County's historic sites, scenic vistas and open space,
- A unified interpretive story of Passaic County's history and its role in historical movements and events of regional and national significance,
- Improved access to visitor destinations by tourists as well as residents of all ages and abilities,
- Economic vitality from increased tourism, and
- Transportation improvements that support the Scenic and Historic Byway objectives,
- Encourage the use of non-motorized travel,
- Address safety throughout the Byways network.

West Milford is an integral part of the County's Plan for Scenic Corridors and Byway program and contains an extensive byway loop that connects Long Pond Iron Works,

through the center of West Milford and south past Apshawa Preserve (Figure 4). The Plan also identifies a connection from the Appalachian Trail connection to San Cap Park (Figure 5). The connectors and the byway loop will connect the Township to other Passaic County municipalities, historic and recreational resources and other civic destinations. The County initiatives are mirrored by the Township in the desire to create connectivity through diverse mobility options and create corridors that will enhance the Township's trail networks.

Power Lines

Power line rights-of-way and easements are another area of potential trail connections. Since many areas encumbered by power line easements are maintained to specific requirements, through mowing, clearing and routine upkeep, these areas are often wide, cleared and easily identifiable. The Township should explore power line easements to determine if they are appropriate and meaningful to the overall trail Plan and, if so, determine legal impediments for their use. Many utility companies have provided trail access along easement areas to the benefit of the community.

Develop new linkages

As trail areas become available, new or expanded linear opportunities may become evident. In this event, areas that may add connectivity to a new system should be investigated.

Cultural/historical lands

Preserving historically or culturally significant sites has been identified in the Township's planning documents. Providing increased access to publically located cultural and historic lands and sites should be a consideration for existing and future trail networks. These significant features can help to preserve the character and historically rich identity of the Township and should be part of any overall planning initiatives.

Scenic Viewsheds

Maintaining the rural character and vistas in the Township can also be a consideration when considering maintaining or enhancing existing trails or developing new paths. Scenic viewsheds offer a sense of place and feel to a community, not only for residents but also for those traveling through an area, and are worthy of protecting.

Other Recommendations

Trail Management

The proper management of Township owned trails is necessary to ensure the long term health and viability of these facilities. Management of Township-owned facilities and areas should be assessed for optimum benefit to users and habitat maintenance. Additionally, there is a need to set forth policy for the continuing maintenance of trails. For example, a trail should provide appropriate markers and be maintained to the level associated with the trail, for example those intended to be accessible for all residents should be cleared and maintained often while those

intended to be more difficult and meant for recreation use may have a lower level of required maintenance. The New York-New Jersey Trail Conference has prepared a Trail Maintenance Manual which includes trail management duties in detail, including blazing, patrolling, reporting, clearing, protecting the trails, educating hikers, environmental monitoring and insurance issues. The manual can be found on their website at:

http://nynjtc.org/files/Trail%20Maintenance%20Manual7threvised_0.pdf

These steps will help to ensure proper long-term care of the Township's areas.

New York-New Jersey Trail Conference

Since 1920, the volunteer-based New York-New Jersey Trail Conference partners with parks to plan, create, protect, and promote over 2,000 miles of public trails in the bi-state region. The Trail Conference organizes volunteer service projects, that keep trails open, safe, and enjoyable for the public, and publishes maps and books that guide public use of these trails. The Trail Conference maintains 120 miles of trails in West Milford and has created dozens of trailhead and dozens of hiker crossing signs in the township.

New Jersey Trails Association (NJTA)

NJTA is a cooperative project of environmental organizations, primarily in South Jersey, dedicated to making free information conveniently available to the public about places to walk. NJTA assembles information on trails open to the public, and posts the information on their website (www.njtrails.org). NJTA works with state, county, local, and non-profit land preservation groups and parks agencies to plan more trails.

Community Education

Educating residents on trails can be a valuable tool for expanding the overall network in the Township. Providing educational materials and informative seminars at a Township or neighborhood level may reduce conflicts and encourage residents to participate in the process.

Implementation Approaches and Resources

TOOLS FOR CREATING BICYCLE AND PEDESTRIAN PATHS

While the Trails Plan includes much discussion on recreational trails, a key component is also to create a Township wide connected network of non-vehicular access. This includes creating pedestrian and bicycle friendly alternatives to allow residents and visitors alike to access trails, activity centers, civic areas and commercial centers in a safe way. The following is intended to examine some tools to help achieve this goal.

Signs

Signs are an example of a low cost improvement that can be beneficial to cyclists, pedestrians, and motorists. “Share the Road” signs are especially useful on shared lanes with speeds of 40mph or greater; shared lanes with limited sight distances; and where shared lanes, demarcated shoulders, or bike lanes end and motor vehicle travel must begin to share the travel lane. Signage is critical to reducing motor vehicle and bicycle conflicts. There should not be ambiguity as to the bicycle right-of-way.

Traffic Calming

Traffic calming is an approach to manage the roadway environment by reducing the dominance and speed of vehicles in targeted areas. The variety of methods used to accomplish this include physical alterations to the horizontal and vertical alignment of the road as well as changes in user priority.

In residential areas, traffic calming can alert motorists that they are entering a shared roadway. When properly planned, traffic calming diverts traffic to roadways designed to handle higher volumes. This in turn enhances the quality of life of residents, as traffic finds the roads best designed to handle it. The appropriate technique for an area is dependent upon the physical characteristics of the road, the goal of the design, and available resources.

According to the NJDOT’s Bicycle Compatible Roadway and Bikeways Planning and Design Guidelines some important design considerations in regard to cyclists include:

- Where possible, provide bicyclists with opportunities, such as ramps, to by-pass physical obstacles; the recommended minimum width for a bicycle pass is 27 inches.
- Where a reduction in roadway width is employed as a speed control measure, careful consideration should be given to how motorists and bicyclists can safely share the remaining space.
- Surface materials, particularly on ramps, should have a good skid resistance, while textured surfaces should not be so rough that they endanger the stability of bicyclists or cause severe grazing if the bicyclist should fall.
- A smooth transition on entry and exit ramps should be provided. Inclines should be clearly indicated and have a gradient of not more than 1:6 (16 percent).
- If the traffic calming feature is to be installed on a road with a gradient, it must be noted that bicyclists are likely to approach it at quite different speeds uphill and downhill. This should be taken into consideration in designing the feature.

Pedestrian Facilities

Most roadways should have some type of pedestrian facility. Dedicated sidewalks are preferable, but may not be appropriate or possible in all cases. While sidewalks are generally warranted wherever pedestrians are likely to move along the roadway, two areas that deserve particular scrutiny are where school children walk to school and the areas around transit facilities.

According to the Pedestrian Compatible Planning and Design Guidelines¹, the following are advisable:

- Consider modifications to road standards and subdivision regulations in the direction of current performance standards that are more tuned to functional classification.
- Advocate the separation of pedestrian sidewalks from the roadway by a grass strip at least three feet wide.
- Require construction of sidewalks or walkways along all arterial and collector roads located within 2 miles of a school.
- Require developers to extend sidewalks up to 400 feet beyond the boundary of the site to provide for sidewalk continuity.

Crosswalks

Crosswalks should be installed only where needed. Motorists lose respect for crosswalks if they encounter them at a large number of areas where they rarely encounter pedestrians. In general, crosswalks should primarily be considered in these areas:

- All signalized intersections with pedestrian signal heads.
- All locations where a school crossing guard is normally stationed to assist children in crossing the street.
- All locations within ¼ mile of transit stations or schools.
- Situations where a dedicated pedestrian trail crosses a highway at a mid-block location and pedestrian traffic would not otherwise be anticipated.
- All other locations where there is a need to clarify the preferred crossing location when the proper location for a crossing would otherwise be confusing.
- Locations in urban and non-urban areas where development on both sides of a highway result in concentrated pedestrian volumes crossing the highway and there is no highway intersection. For example, where a large parking lot is on the opposite side of the road from a campus or where shopping or eating areas are across the road from workplace areas.

Curb Ramps

A public sidewalk curb ramp with a level landing should be provided wherever a public sidewalk or public pedestrian easement crosses a curb or other change in level. Examples of such areas are:

¹ NJ Department of Transportation. Pedestrian Compatible Planning and Design Guidelines.

- Intersections
- Painted crosswalks at mid-block locations
- Driveways
- Channelized islands or divisional islands
- Median islands at mid-block locations

State Funding Sources

Available state funding sources focus more on pedestrian and bicycle safety and access. The Township can utilize these sources to connect developed neighborhoods and schools to the overall larger network, as is the case with the Township's Bikeway Plan.

Safe Routes to School (NJDOT)

This funding allows a community to develop and implement a bicycle and walking plan for routes that encourage walking and biking to schools safely. Safe Routes to School (SRTS) is a federal, state and local effort to enable and encourage children, including those with disabilities, to walk and bicycle to school.

The goal of New Jersey's Safe Routes to School Program is to assist New Jersey communities in developing and implementing projects and programs that encourage walking and bicycling to school while enhancing the safety of these trips. A major goal of the program is to increase bicycle, pedestrian and traffic safety. Successful Safe Routes to School programs in the United States usually includes engineering, enforcement, education, or encouragement.

NJ Highway Traffic Safety Grant

This grant is typically used for education and enforcement programs, but has also been used for engineering efforts, such as signing and striping. Bike and pedestrian advocates, as well as police departments and Safe Routes to School coordinators can also apply for funding through this program. The issues addressed in this program must be justified using crash data, accident data, etc.

The Pedestrian Safety Corridor Program

This program is an initiative to identify and remediate highway corridors in the state with the greatest pedestrian safety problems. Corridors are chosen based on crash history and other identified pedestrian safety issues. The program involves assembling a Pedestrian Safety Impact Team consisting of 30-40 stakeholders, including government and elected officials, traffic engineers, planners, business owners, local residents, and representatives from civic groups. The team receives classroom training on pedestrian-related planning, design, education, and enforcement issues and then completes fieldwork, studying the corridor and recommending improvements.

The Division of Highway Traffic Safety

The Division offers grants for pedestrian safety education and enforcement, as well as small scale engineering treatments, such as striping and signage. So far this year, the Division has issued approximately 30 State and Community Highway Safety Program grants to police departments to enhance pedestrian safety efforts.

National Recreational Trails Program

NJDEP provides financial assistance for developing and maintaining trails and trail facilities for non-motorized, motorized and multi-use purposes. The maximum grant award is \$25,000, and projects are funded on an 80% federal share and 20% matching share basis.

Other Potential Funding Sources

Non-profit organizations and transportation groups are other funding sources that can contribute to the creation, enhancement or assistance to pedestrian and bicycle paths. While these funds may be limited they can add to existing funding or provide a necessary jumping off point for further issues. Organizations such as TransOptions, an organization which provides a variety of transportation and commuting options occasionally provides small grant opportunities to the enhancement of pedestrian and bicycle opportunities.

Other options for funding may include partnering with neighboring municipalities as a way to develop intra-municipal and larger regional connections. This type of partnership not only benefits the Township but also the region by promoting regional awareness and healthy lifestyles to a larger population base.

Summary of Action Plan

The Action Plan provides a toolbox for the Township to assist in the identification, selection, and implementation of trails and trail areas. Partnering with the State, County and private organizations and reaching out to private landowners helps to bolster efforts to develop a Township wide trails network. Consequently, the Action Plan can be viewed as a guidebook to create a long lasting agenda for a trails network in the Township.

CONCLUSION

The goals and objectives outlined in this Plan seek to provide a safe and comprehensive system of pedestrian and bicycle routes throughout the Township that will link open space, recreational areas, residential neighborhoods and business centers. These efforts will be most effective when integrated with other initiatives designed to promote safe vehicular travel by better managing traffic speed and volumes to promote safer pedestrian and bicycle movements. In establishing policies and strategies to accommodate pedestrian and bicycle travel throughout the Township and provide better connectivity among neighborhood services and destinations, partnering efforts will be of paramount importance. Strategic alliances with Passaic

County, New York/New Jersey Trail Conference, and other non-profit organizations will be important to implementation of this plan.

The Plan identifies a series of recommendations that range from minor improvements requiring maintenance, signage or stripping of roads and parking areas, while others identify a need for new trails and new areas of connectivity. Phasing the projects to begin with visible but easy to install signs and modest traffic calming devices will not only enhance existing pathways but will also increase community awareness and support for improvements efforts.

The Township should be aware of all sources of funding to achieve the goals of the Trails Plan, including non-traditional sources of funding, such as non-profit and transportation organizations. Partnering efforts with neighboring municipalities may also garner additional funding, including more expansive connectivity, while also creating an additional benefit of creating larger regional pedestrian and bicycle connections.

The implementation of a well planned and thoughtful trail network benefits the entire community and region, providing opportunities for more meaningful interaction with the Township than vehicular transportation can provide. Alternative forms of transportation promote a healthy lifestyle and community interaction, reduce pollution and automobile dependence, and enhance the overall character of West Milford Township.

APPENDIX A: INVENTORY OF TRAILS

Number	Name	Status	Existing Trail Description
1	Appalachian Trail	Existing	Enters 1/4 mile west of Longhouse Creek in Wawayanda Park, Leaves from the northernmost end of the Abram Hewitt State Forest, just north of the NY/NJ State Line Trail.
2	Arcadia Trail	Existing	The trail is a "lollipop loop", with the entrance off Road, about 1/2 mile west of Macopin, with limited parking for one or maybe two cars.
3	Awosting	Existing	Between Awosting Road and Passaic County 704.
4	Banker	Existing	This trail runs from the end of Banker Road to connect to the Cherry Ridge and Cedar Swamp trails in Waywayanda State Park. There is very limited parking around the corner at the side of Ancora Road.
5	Bearfort Waters/Clinton	Existing	This trail starts in the north at the Old Coal Trail (Yellow Trail) in Wawayanda park and runs south for about 15 miles, crossing into the Newark Watershed lands. The trail joins the Highlands trail north of Buckabear Pond and continues south past Buckabear and down the west shore of the Clinton Reservoir, ending at parking lot P9 on Paradise Road.
6	Bearfort Ridge	Existing	Starts in Abram Hewitt St Forest. Starts at Ernest Walter trail. Rhododendron forest and exfoliated rocks. Ends at Warwick Turnpike near bridge over Green Brook
7	Blue Trail	Existing	Runs from Bearfort Ridge Trail across a nice bridge and Warwick Turnpike to meet the Terrace Pond North trail. Will be subsumed into the Terrace Pond North trail in the future
8	Buckabear Pond	Existing	Climbs ridge from P3 parking lot to cross the Clinton West trail to end at Buckabear pond beaver dam.
9	Burnt Meadow	Existing	Starts at the Hewitt-Butler trail in Hewitt NGSF North, ends at Highlands/Horse Pond Mountain trail. Nice view of Horse Pond Mountain
10	Camp Wyanokie	Existing	Old Mine trail, Northern terminus West Brook Road. Southern terminus on Snake Den Road West. Follows scenic West Brook for a while, also ends at Boy Scout Lake.
11	Cedar Swamp	Existing	In Wawayanda State Park. Includes boardwalk through heavy rhododendrons and wetlands. Northern terminus Double Pond Trail. Southern terminus is Banker trail.
12	Clinton West	Existing	Starts at Clinton Road, ends at beaver dam/Buckabear Pond trail. Nice peninsula with WPA rock work and views of Clinton Reservoir. Runs with Highlands trail for a short distance.
13	Dumptruck	Existing	Mountain Bike trail in Jungle Habitat. See JORBA maps.
14	Echo Lake East	Existing	Nothern terminus Gould Road, Southern Echo Lake Rd. Partial coalignment with Highlands trail. Follows shore of Echo Lake.
15	Ernest Walter	Existing	Northern terminus Applachian Trail also State Line Trail. Two mountain top lakes, West Pond and Surprise Lake; scenic views of Manhattan, beautiful rock formations. Southern loop intersects the Quail trail and the Bearfort Ridge trail.

*West Milford Township Trails Plan
August 2014*

16	Fire Tower Ridge	Existing	Northern terminus Fire Tower West trail. Southern terminus Clinton Road. Includes ridge top with views and Bearfort Fire Tower. Partial views of Hanks Pond, former site of Cross Castle. Intersects Blue/white Hanks Trail, Fire Tower West trail.
17	Fire Tower West	Existing	Northern terminus Stevens Rd. Southern Terminus Clinton Rd. parking lot P2. Junction with two blue connector trails, Fire Tower West and co-aligned with Highlands trail for a while. Fire Tower, views.
18	Green Trail	Existing	Two northern termini with White trail. All in Apshawa Preserve, connects with Red and Yellow trails, views to Farney Highlands, scenic Ravine, big green tanks.
19	Hanks East	Existing	Northern terminus Stevens Rd. Southern terminus with Blue Trail at Parking lot P1 on Van Orden Rd.
20	Hanks West	Existing	Northern terminus at Stevens Rd. Southern terminus at Clinton Road. Connects to Fire Tower Ridge trail by a woods road, Open to Horses (may be seasonal) Features Hanks Pond, wetlands.
21	Hasenclever Iron	Existing	Southern terminus at Sterling Ridge Trail north of Long Pond Iron Works. Bridge is out north of Long Pond Ironworks (2013). Trail goes north and east to township line, northern terminus is Ringwood Manor in Ringwood. Interpretive Signage, views of Wanaque Reservoir and River.
22	Hewitt-Butler	Existing	Two trails: Northern terminus Greenwood Lake Turnpike near Long Pond, southern terminus of Northern section is WestBrook Rd. Southern Section begins at Northern Otterhole Trail near Glenwild Avenue, southern terminus in Camp Vacamas. Intersects Horse Pond Mtn, Burnt Meadow, Overlook Rock, Manaticut Point Trails, Westbrook Connector trail. Limited parking in Camp Vacamas Parking Lot. Northern section intersections and features: partial alignment with Highlands trail, features Monksville Reservoir, view from Long Hill, views from Westbrook Mtn, Manaticut Point. Southern section has views and features: Wyanokie High Point, Carris Hill Point, Posts Brook, Otter Hole, Torne Mountain, Stone Living Room, Osio Rock, Southern intersects (N to S) Macopin Rd. Highlands trail, WCI, Carris Hill, Posts Brook, WCR, Otterhole, Torne (twice) May be able to reconnect these trails in the future.
23	Highlands	Existing	Everywhere.
24	Horse Pond Mountain	Existing	Northern Terminus in Long Pond Ironworks at Junction with Hewitt-Butler and Highlands trails South of Greenwood Lake Turnpike exits same place as Highlands trail.
25	Jennings-Hollow	Existing	Lollipop Loop - terminus at Highlands/Sterling Ridge trail near Iron Furnaces at Long Pond.
26	Jungle Junction	Existing	Jungle Habitat entry road
27	Lake Sonoma	Existing	Junction of Burnt Meadow Road on Ringwood/West Milford Border. Southern terminus at Overlook Rock Trail
28	Lake-to-Lake	Existing	This trail is mostly in the Sterling Forest between Jennings Hollow and Sterling Ridge trail (no direct connection) crosses briefly into NJ at State Line Mile marker 24.

*West Milford Township Trails Plan
August 2014*

29	Manaticut Point	Existing	Loop trail; terminus at Crescent Drive, 1/10 mile west of junction with Burnt Meadow Road by Big Rock.
30	Monks	Existing	Begins and ends at the North boat launch on Monksville Reservoir. Big loop, mostly in Ringwood.
31	Monks Connector	Existing	All in Ringwood
32	Old Coal	Existing	Eastern term at Clinton Road near P7 lot. Terminates at Cherry Ridge Road. Juncts Bearfort Waters/Clinton, Lookout trails.
33	Otter Hole	Existing	Northern terminus at Weis Ecology parking lot. Southern terminus at Junction with Hewitt-Butler and Highlands trail near Post Brook
34	Overlook Rock	Existing	Northern terminus Hewitt-Butler trail just west of power lines, Southern also Hewitt-Butler trail at eastern end of West Brook Mountain.
35	Quail	Existing	Also Jeremy Glick Trail. Southern terminus at Warwick turnpike (Kiosk). Northern terminus at Ernest Walter Trail
36	Red trail	Existing	Northern terminus at junction of White trail just west of Butler Reservoir Southern terminus at junction with white trail at southern end of Butler Reservoir. All in the Apshawa Preserve.
37	Shiloh	Existing	Western terminus Burnt Meadow, connects to Horse Pond Mountain trail (1/4 mi)
38	So Long and Thanks	Existing	Inside Jungle Habitat northern end at Gas Line right of way
39	Spring North	Existing	Pequannock Watershed; Northern terminus at Terrace Pond trail; Southern terminus at Stevens Road
40	State Line	Existing	Eastern terminus at Lakeshore Road parking lot across from marina. Ends at AT after junct with Ernest Walter trail.
41	Sterling Ridge	Existing	Southern terminus Greenwood Lake Turnpike in Long Pond Ironworks; Northern terminus in Sterling Forest State park NYS
42	Stonetown Circular	Existing	Eastern terminus on Stonetown Road, near junction of Stonetown and West Brook roads. Western terminus also Stonetown road near Mary Roth drive with parking. Signage for Stonetown Recreational Area.
43	Terrace Pond Circular	Existing	Links other trails; Terrace pond north, Terrace pond south, Spring north and Terrace pond red (green on map)
44	Terrace pond North	Existing	Starts at parking lot P7 on Clinton Road, terminates at Ernest Walter trail north of Warwick turnpike
45	Terrace Pond Red	Existing	Starts at Stevens Road, Terminates at Terrace pond circular at Terrace Pond.
46	Terrace Pond South	Existing	Starts at P7 on Clinton Road (kiosk) Terminates at Terrace pond circular at Terrace Pond.
47	Torne	Existing	Northern terminus at Otterhole Road and Hewitt-Butler trail, Southern terminus at Hewitt Butler trail.
48	Two Brooks	Existing	Starts at Clinton Road, P4, travels east to Fire Tower West trail.
49	Warthog	Existing	Bike trail inside Jungle Habitat. See JORBA maps

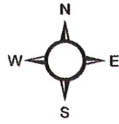
*West Milford Township Trails Plan
August 2014*

50	West Brook Connector	Existing	Starts at West Brook Road, ends at Northern section of Hewitt-Butler trail.
51	White	Existing	In Apshawa Preserve connects Yellow and Red trail
52	Whritenour	Existing	Crosses at Greenwood Lake Turnpike near Monksville Reservoir/Long Pond Ironworks, loop on south side of road.
53	Will Monroe Loop	Existing	In Norvin Green Forest. Runs from Wyanokie Circular trail over top of Assiniwikam Mountain.
54	Wyanokie Circular	Existing	Starts at junction of Otterhole trail at extension of Snake Den Road east. Terminates at Snake Den road west at Camp Wyanokie Boy Scout Lake.
55	Wyanokie Crest	Existing	Southern terminus parking lot on Glenwild Avenue; terminates at Wyanokie Circular trail at the foot of Assiniwikam Mountain.
56	Yellow	Existing	In Apshawa Preserve connects White and Red trails.
57	Yellow Dot	Existing	
Number	Name	Status	Trail Description
A	Apple Valley	Proposed	
B	Braemar	Proposed	
C	Emerald Forest	Proposed	Runs from Stowaway Road to Bald Eagle Village through property known as the Stanford Tract.
D	Pinecliff Lake	Proposed	Northern terminus Southern End of Bearfort Road.
E	Random Woods	Proposed	
F	Rockburn Waters	Proposed	
G	Weaver Road	Proposed	Located off Weaver Road and under consideration for Recreation and Open Space Planning efforts. Property would provide connector between Weaver Road, NJDEP properties and Highlands National Millennium Trail.

Figure 1

Regional Location

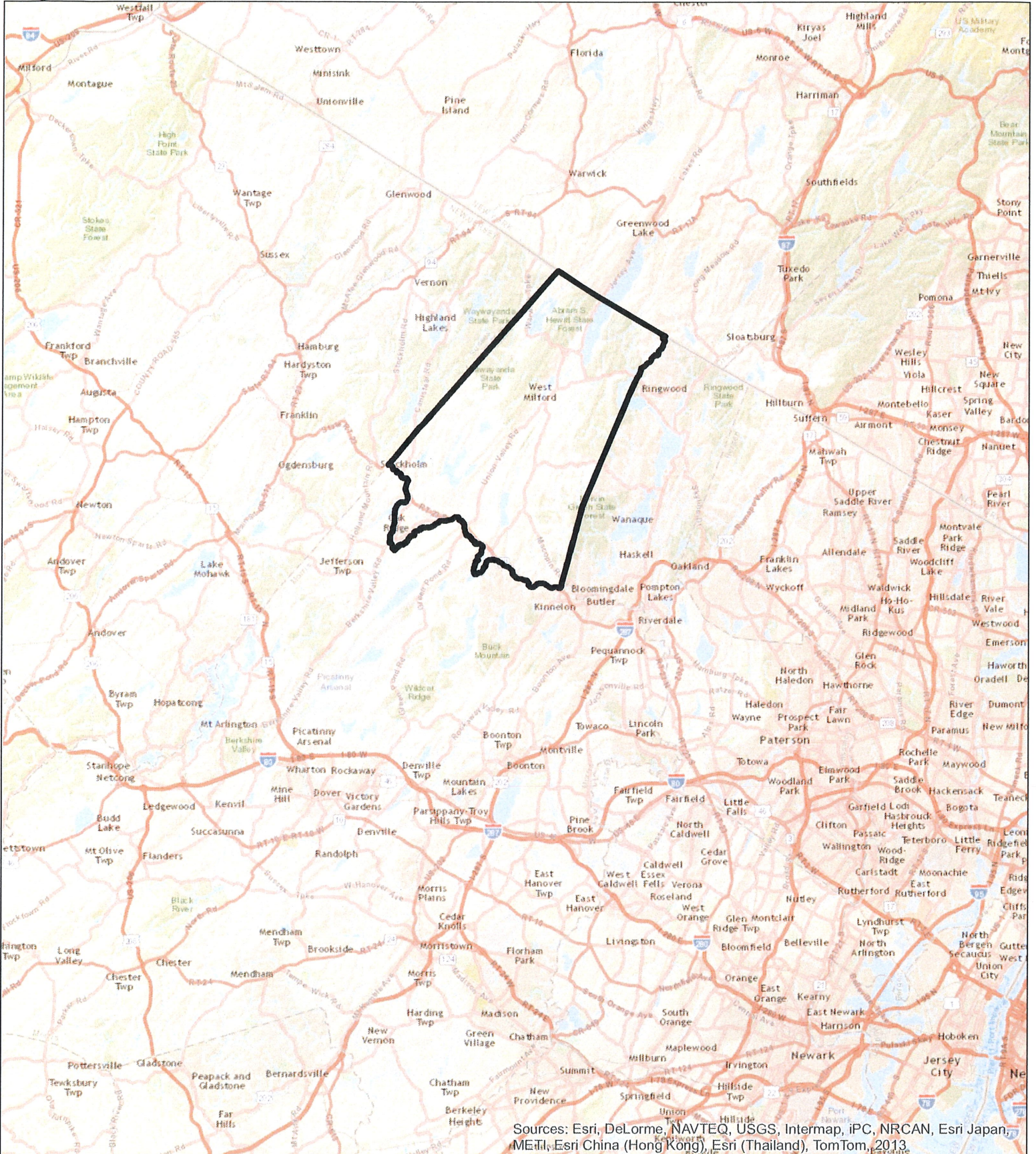
West Milford Township,
Passaic County, New Jersey
August 2014



0 1 2 4 6 Miles

Legend

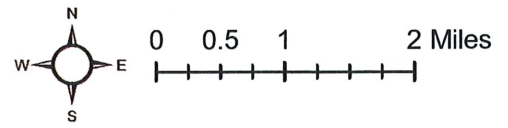
West Milford Township



Sources: Esri, DeLorme, NAVTEQ, USGS, Intermap, iPC, NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, 2013

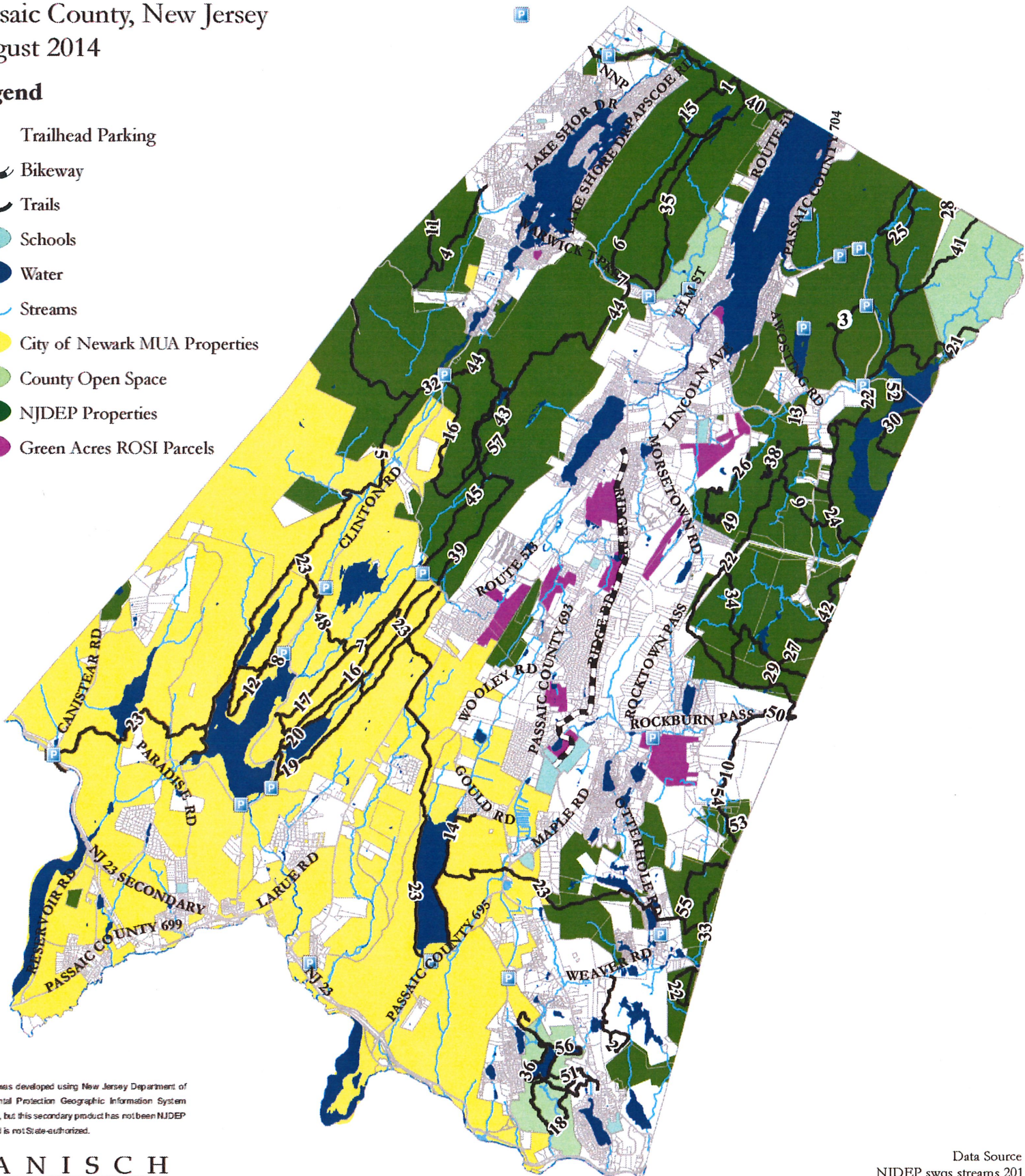
Figure 2: Trails, Public Properties and City of Newark MUA Properties

West Milford Township,
Passaic County, New Jersey
August 2014



Legend

- Trailhead Parking
- Bikeway
- Trails
- Schools
- Water
- Streams
- City of Newark MUA Properties
- County Open Space
- NJDEP Properties
- Green Acres ROSI Parcels



This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been NJDEP verified and is not State-authorized.

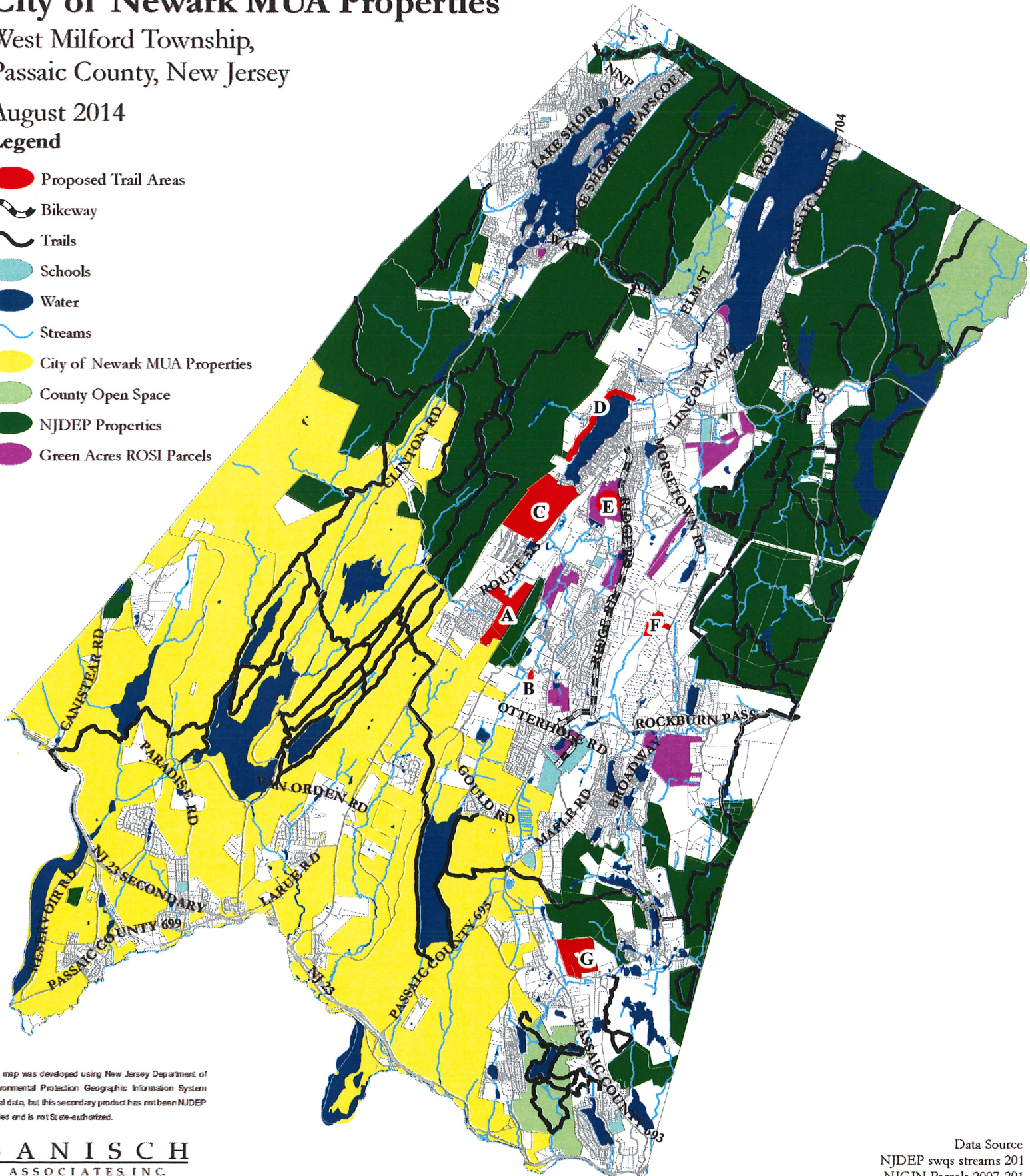
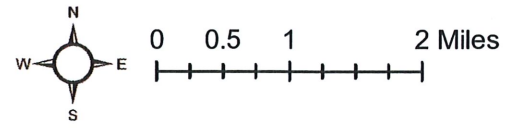
Figure 3: Proposed Trails, Existing Trails, Public Properties and City of Newark MUA Properties

West Milford Township,
Passaic County, New Jersey

August 2014

Legend

- Proposed Trail Areas
- Bikeway
- Trails
- Schools
- Water
- Streams
- City of Newark MUA Properties
- County Open Space
- NJDEP Properties
- Green Acres ROSI Parcels



This map was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been NJDEP verified and is not State-authorized.

**Figure 4 Passaic County Byway Network Character Areas
Northern Passaic County**

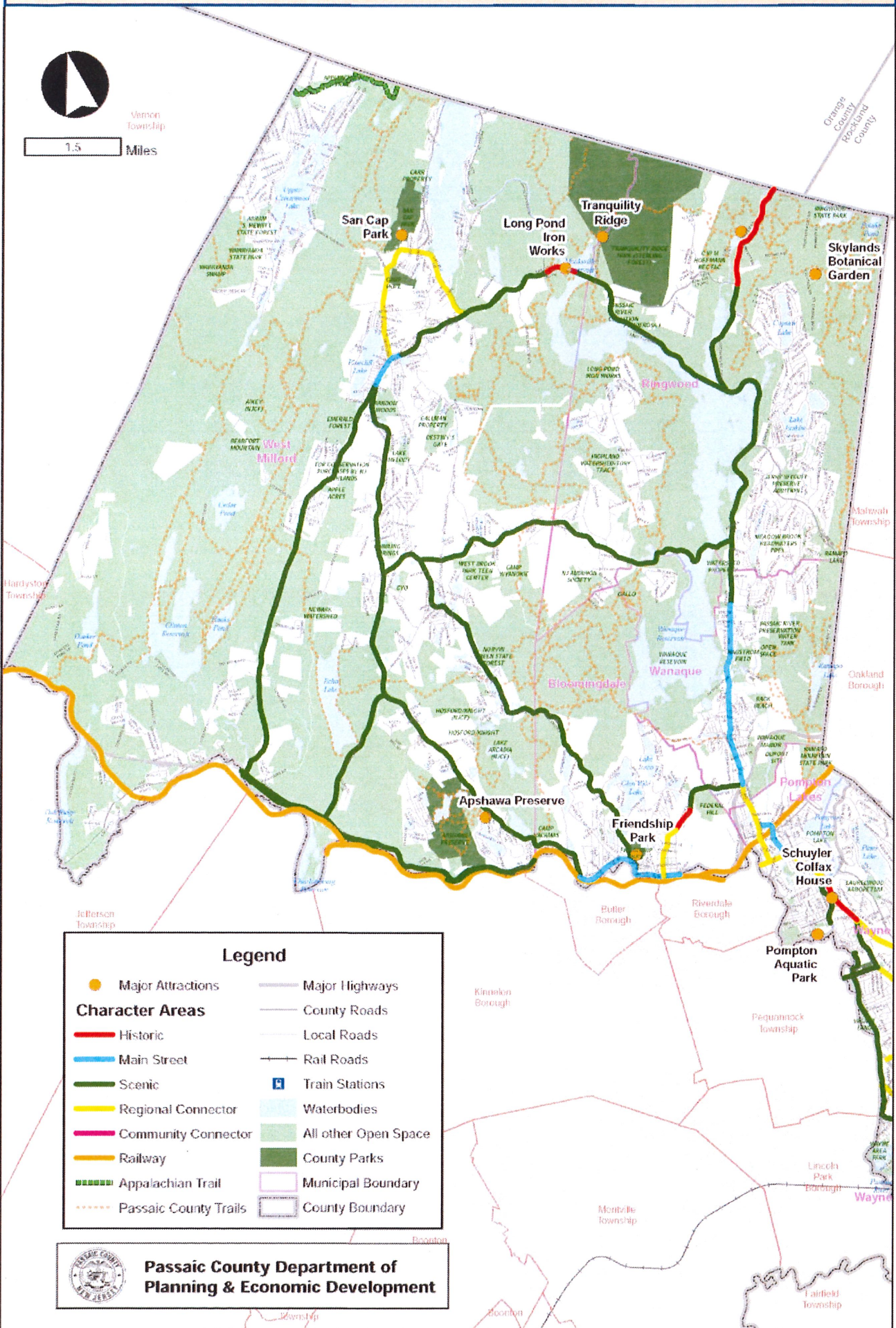
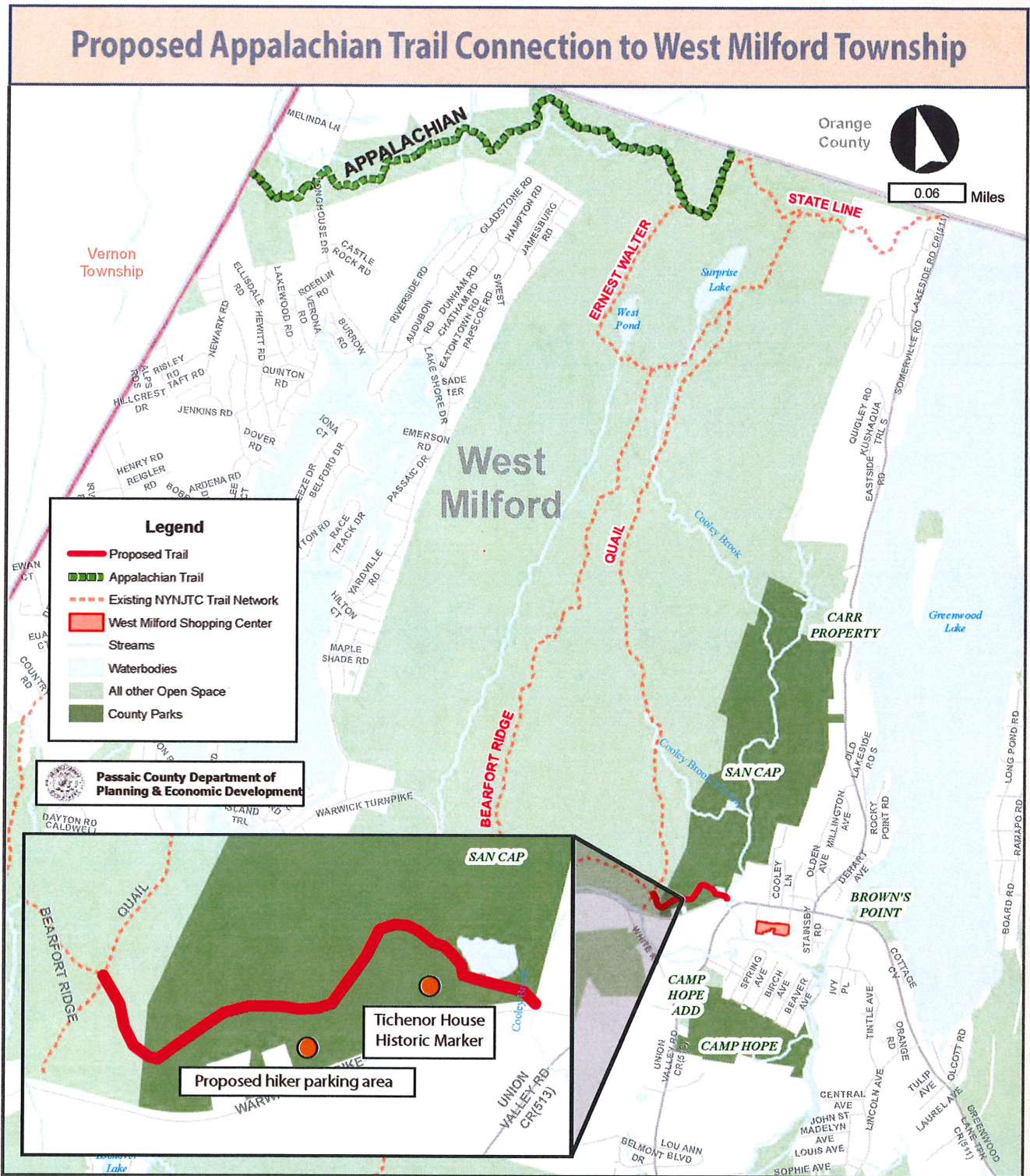


Figure 5

HERITAGE TOURISM PLAN



Township of West Milford
Passaic County, New Jersey

~ Resolution 2014 – 303 ~

RESOLUTION OF THE TOWNSHIP OF WEST MILFORD, COUNTY OF PASSAIC AND STATE OF NEW JERSEY APPROVING THE TRAILS MASTER PLAN DATED AUGUST 4, 2014 AS PRESENTED BY THE WEST MILFORD ENVIRONMENTAL COMMISSION

WHEREAS, the Township of West Milford Environmental Commission received a 2010 Smart Growth Planning Grant from ANJEC in the amount of \$10,000 (\$5,000 in grant funds and \$5,000 in municipal matching funds and/or in-kind services) to develop a Trails Master Plan; and

WHEREAS, the Governing Body supports the trails concept and the opportunities trails offer to the community; and

WHEREAS, by Resolution No. 2010-257, the Governing Body approved the allocation of funds from the Township's Open Space Account to be used for the matching portion of the grant; and

WHEREAS, the West Milford Environmental Commission, assisted by their consultant, Banisch Associates, Inc., the NY/NJ Trail Conference and several other local organizations, completed the Trails Master Plan, a document that identifies the current inventory of trails and associated facilities, identifies the needs of the trail network and the overall connectivity throughout the Township, promotes the trail network, and identifies an action plan to acquire, enhance, and manage the trail networks; and

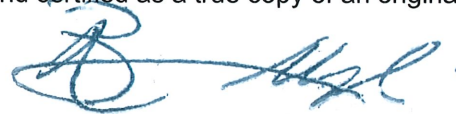
WHEREAS, the West Milford Planning Board reviewed and approved the Trails Master Plan at a regular meeting held on July 24, 2014; and

WHEREAS, the West Milford Environmental Commission held a public hearing on August 4, 2014, and following a presentation on the document, the Commission approved the Trails Master Plan and requested that it be forwarded to the Governing Body for review and approval as a tool for use in future planning, recreation and open space considerations.

NOW, THEREFORE BE IT RESOLVED, that the Township of West Milford hereby approves the West Milford Trails Master Plan, dated August 4, 2014, prepared by the West Milford Environmental Commission and presented at the September 3, 2014 Governing Body Workshop meeting.

Adopted: September 17, 2014

Adopted this 17th day of September 2014
and certified as a true copy of an original



Antoinette Battaglia, Township Clerk