



State of New Jersey

MAIL CODE 501-04

DEPARTMENT OF ENVIRONMENTAL PROTECTION

STATE FORESTRY SERVICES

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CHRIS CHRISTIE

Governor

BOB MARTIN

Commissioner

KIM GUADAGNO

Lt. Governor

July 1, 2015

Tonya Cubby
Township of West Milford
1480 Union Valley Road
West Milford, NJ 07480

Dear Ms. Cubby:

Congratulations! On behalf of New Jersey State Forestry Services, I am pleased to inform you that Passaic County's Community Forestry Management Plan is approved for N/A - 2019.

The major goal of the state's Community Forestry Program is to educate all municipalities and counties in the state about the benefits of developing their own distinctive Community Forestry Management Plan. As these plans develop, the health of the tree cover will improve, the number of trees will increase and the awareness of our state's residents will rise.

A management plan is an essential guide to successfully achieving a healthy and safe community forest. One of the major points of the Shade Tree and Community Forestry Act is to enable New Jersey's communities to reduce or eliminate their exposure to litigation due to the drastic decline and poor condition of the community tree resource. The basis for this protection is a properly planned local community forestry program implemented through a state approved management plan – as well as a municipal or county participation in the Training skills and Accreditation Program.

If you are a participant in the Green Communities grant program, the next step would be to submit your expenditure report and financial documentation for reimbursement within 30 days.

Please find the enclosed certificate of approval and a signed certification by the State Forester within your management plan.

Sincerely,

Carrie A. Sargeant

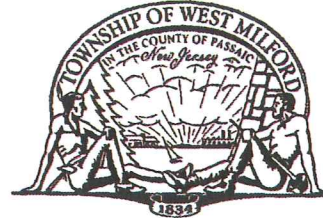
Urban & Community Forestry Coordinator

Encl. (2)

eCC: Mayor, Clerk

2015 – 2019
COMMUNITY FORESTRY MANAGEMENT PLAN

Township of West Milford
Passaic County
New Jersey



Mayor & Council

Bettina Bieri
Michele Dale
Ada Erik
Vivienne Erk
Michael Hensley
CarLa Horton
Lou Signorino

Township Administrator

Kenneth Gabbert

Township Clerk

Antoinette Battaglia

Environmental Commission

Steve Sangle, Chairman
Andrew Abdul
Tim Dalton
Gary Oppenheimer
Douglas Ott
Thomas Tamayne
Don Weise
Jennifer Easterbrook
Lucas Slott
Tonya Cubby, Secretary



Plan Prepared by
Farr Forestry Services
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973-208-8165

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1. **MUNICIPAL/COUNTY INFORMATION FORM**

Municipality Township of West Milford
County Passaic County
Address 1480 Union Valley Road
West Milford, NJ 07480

Contact Name and Title Tonya Cubby, Planning Board/Environmental Commission Secretary
Phone Number 973-728-2798
Fax # and E-mail 973-728-2843
Organization Name Township of West Milford Environmental Commission

Mayor's Signature Bertine Biele
I certify that this Community Forestry Management Plan was developed specifically and exclusively for our municipality.

Date of Management Plan Submission November 2014

Time Period Covered In Management Plan 2015-2019

- Community Stewardship Incentive Program (CSIP) Identified in Management Plan
 - X CSIP# 1 Training
 - X CSIP# 2 Community Forestry Ordinance Establishment
 - X CSIP# 3 Public Education and Awareness
 - X CSIP# 4 Arbor Day Activities
 - X CSIP# 5 Tree Inventory
 - X CSIP# 6 Hazard Tree Assessment
 - X CSIP# 7 Storm Damage Assessment
 - X CSIP# 8 Tree Maintenance and Removals
 - X CSIP# 9 Insect and Disease Management
 - X CSIP# 10 Wildfire Protection
 - X CSIP# 11 Tree Planting
 - X CSIP# 12 Tree Recycling
 - X CSIP# 13 Sidewalk Maintenance Program
 - X CSIP# 14 Storm Water Management
 - X CSIP# 15 Other

Official Use Only Certification

The above named municipality/county has made formal application to the New Jersey Forest Service. I am pleased to advise you that after our review, the NJ Forest Service has concluded that this plan meets the standards set forth by the State and the NJ Community Forestry Council and is approved for the period covered.

Signed Gm E J State Forester
Approval Date 6/24/15

SCOPE



Photo by Jennifer Easterbrook

The Township of West Milford applied for and received a Green Communities Grant to finance the development of this five-year plan. The Township of West Milford Community Forestry Plan is being developed by the West Milford Shade Tree planning subcommittee of the West Milford Environmental Commission. The plan once completed will allow the Township of West Milford to access No Net Loss funding which the Township is eligible for as a result of the Tennessee Gas Pipeline Project.

The community forest resource is an important resource that contributes to the quality of life for the residents of the Township of West Milford. This community forest resource works to improve air and water quality, reduce energy costs, increase property values, increase economic stability, improve citizen health and beautify the Township.

The following outlines the programs, policies and procedures by which shade tree resources within the Township of West Milford will be managed during the

period of January 2015 through December 2019. The objectives in this five-year plan address street trees, park trees, and trees on other public grounds.

Mission Statement:

The overall goal of the West Milford Shade Tree Program is to improve the quality of life throughout the Township of West Milford by maximizing the environmental, social and economic benefits of trees to the community while minimizing the associated costs and liabilities.

Overall Program Goals:

The New Jersey Community Forestry Council has identified fifteen Community Stewardship Incentive Program (CSIP) practices that together comprise a complete and comprehensive community forestry program that will help the Township complete the goals laid out in this plan.

Within each of the plan elements that follow, existing Township programs, policies and procedures are described, intermediate end element-specific goals are established, and five-year CSIP-based objectives are set.

Systematic fulfillment of the CSIP-specific goals and objectives will gradually move the Township's Shade Tree Program toward its overall program goals, which have been established as follows:

1. Develop and perpetuate a beneficial shade tree resource.
2. Reverse the tree deficit.
3. Maximize the benefits of trees to the community.
4. Maximize long-term stability and sustainability in the shade tree resource.
5. Optimize the balance between tree health, maintenance costs and budgetary constraints.
6. Minimize the risks of trees to public safety.
7. Minimize conflicts and integrate trees in the Township infrastructure.
8. Effectively use the community forest to address storm water issues.
9. Improve and maintain public interest, appreciation and support for public shade tree programs and encourage volunteer participation.
10. Encourage the planting and proper care of trees on private property.
11. Meet all eligibility requirements of the NJ Shade Tree & Community Forestry Assistance Act.

Hazards and Liability:

As is the case with all municipal assets, trees require maintenance and it is inevitable that potentially hazardous conditions will emerge. Nevertheless, a complete, comprehensive and proactive shade tree program will strive to prevent, anticipate and correct such problems that maximize the benefits of trees to the community while minimizing the threat to public safety and exposure to liability. All elements of the Community Forestry Management Plan are designed to optimize the balance between tree benefits and risks.

The Township of West Milford acknowledges that not all hazardous conditions can be or will be predicted. It must work within a limited budget and may not be able to meet every need immediately. The intent of the Plan is to direct available resources toward the greatest needs and systematically develop and maintain a healthy shade tree resource with a commensurate reduction in any threats to public safety.

Public safety will be a primary consideration in the development and implementation of all shade tree plans and programs. This plan provides a means of identifying and abating existing tree hazards on a prioritized basis. Further, it provides a means of reducing the potential for future hazards and liability through responsible planting and preventive maintenance.

Community Overview



The Township of West Milford History

The settlement of West Milford began with the Lenni-Lenape Indians. They were a peaceful tribe dependent on fishing, hunting, and farming as a means of support. The Minsi or Wolf tribe of the Delaware Indians dwelled in the area named Macopin (also Makapin, Maucopin, Maukapien and Mockapeen) or “place where wild potatoes grow.” As the Dutch, English, and German families purchased land from the Indians, the tribes were pushed toward Lake Stockholm and the Susquehanna River. Settlers from Milford, Connecticut named the area “New Milford” and it remained so until 1828.

As more settlers came, the need for better communication became evident. The first post office was established in 1812 at Stockholm, followed by both Newfoundland and West Milford in 1828. A conflict arose in 1828 when the Township and another town of the same name in present day Bergen County tried to establish their post offices on the same date. "New Milford" then became known as "West Milford" on April 5, 1828 of that year.

One of the earliest major interests that brought people into the area was the discovery of rich iron deposits. Iron mining began in West Milford when Peter Hasenclever, with the approval of the British government, formed the American Iron Company and began purchasing land on which to build furnaces and forges. Hasenclever, as resident general manager, brought ironworkers and their families from



Photo by Vaughn DePalmaFarr

Germany. Township residents were employed as woods choppers and charcoal burners to furnish fuel for the blasting and smelting of the ore. Two of the tracts of land, which were purchased by the American Iron Company, were to be the future sites of the Charlottesville and Long Pond Iron Works. During the American Revolution, Robert Erskine was forced to rely on New York business interests for capital to keep the ironworks in operation as English stockholders withdrew their support. His ironworks produced cannonballs, stoves, and

other equipment for the American Army, and he recruited the first continental militia in New Jersey from men in Ringwood, Long

Pond and Charlottesville. During the Civil War, the ironworks were an important source of iron for the Union and enjoyed a temporary upswing in business. The mines continued to make a profit until the 1890's. Some were abandoned and others continued to operate, but because of insufficient business they were shut down in the 1930's. In 1942, the United States government purchased the mines for an emergency source of iron.

Many semi-independent hamlets developed over the large Township, including Newfoundland, Smith's Mills, Uttertown, and Postville. Later, other hamlets were incorporated into West Milford; these included Clinton, Moe (now Upper Greenwood Lake), Oak Hill (now Oak Ridge), Cooper (near Awosting), and Orion (near Bearfort Mountain). The hamlets' names were generally derived from Indian names, local industries, or the original families that settled the area.

Development of the area was slow until the 1870s. With the arrival of two railroads, the New York, Susquehanna & Western Railroad and the Montclair & Greenwood Lake Railroad. West Milford began a transformation. The Macopin Railroad, completed in 1887, serviced the ice industry and brought tourists to Echo Lake. This introduced new prosperity to the lake region, as hotels and boarding houses like the Green Pond Hotel and the Idylease Inn were built. Excursion trains running from Jersey City to "Greenwood" brought summer vacationers and the growth of seasonal business. Visitors enjoyed swimming, boating, and fishing on Greenwood Lake. Three excursion steamboats traveled the lake daily, and in the winter iceboat races were popular. The railroad ran until the mid 1930's.

The lakes, rivers, and streams of West Milford continued to draw fishermen and vacationers. The waters became important for another reason as well. They were, and still are, an important source of drinking water for much of northern New Jersey. Through a complicated process involving water rights, property ownership, the displacement of hundreds of people and small communities, reservoirs were built. The City of Newark purchased a thirty-five thousand acre tract divided among six municipalities that included many of these reservoirs. Seventeen thousand of those acres are in West Milford and include the reservoirs of Oak Ridge, Clinton, Macopin, Canistear, Charlottesburg and Echo Lake, the only natural lake.



Photo by Jennifer Easterbrook

in the most accessible areas.

West Milford, once belonging to Pompton Township, was originally in Essex County from 1682 to 1709, and then included in Bergen County from 1709 to 1837. On February 25, 1834, an act of the New Jersey Legislature was adopted, making West Milford a separate Township. In 1837 Passaic County was formed to include the Township of West Milford. Geographical factors have dictated West Milford's unique pattern of development. For example, extremes in elevations from 450 feet above sea level at Smith Mills to 1465 feet near Terrace Pond on Bearfort Mountain tend to promote clustering of development

Originally, the Township operated via a Township Committee form of government. Comprised of three Committee members, that eventually increased to five, members were elected for staggered three year terms. One of the major drawbacks, according to the Charter Study Commissions in 1962 and in 1968, was that the Township Committee form of government did not have an authorized official or an executive authority to make vital decisions and to assist employees and residents with their concerns on a daily basis. The Commissions also noted a lack of accountability and fair representation throughout the growing municipality and recommended the establishment of Wards as part of the change in the form of government for the Township of West Milford. A new form of government was eventually approved by the voters following the Charter Study Commission Report in 1968.

The Township of West Milford began operating under the Optional Municipal Charter Law, Council-Manager Plan D, the form of government recommended by the Charter Study Commission and chosen by the voters in 1968. With this form of government, three fundamental powers were reserved exclusively for the people: Recall, Initiative and Referendum. The Council-Manager Plan provided for an elected five member governing body, two at large and three Ward representatives, chosen in non-partisan elections held in May of odd-numbered years. The members of the Council served four-year staggered terms. The Mayor presided at all meetings of the Township Council, acted as signatory for written obligations of the Township, and voted as any other Council member.

The Township of West Milford currently operates under the Faulkner Act: New Jersey Municipal Charter Law, Mayor-Council-Administrator Plan which began on January 1, 2004. This plan is often referred to as the "Faulknerized" version of the borough form of government, and it is the fourth optional form of municipal government. The voters of the Township adopted the Mayor-Council-Administrator Plan at a Special Election held on December 10, 2002. This plan provides that the municipality will have an elected Mayor and Council as the governing body, with an appointed municipal Administrator. The Township Council consists of the Mayor and six Council members,

elected at large, in the partisan general elections in November. Under this form of government, the municipality may create up to six municipal departments by ordinance. Each department is headed by a director who is appointed by the Mayor with the advice and consent of the Township Council.

West Milford Today

Today's West Milford is an 80 square mile, semi-rural township in northwest Passaic County. West Milford is situated 35 miles northwest of New York City. It is bounded by the Townships of Vernon and Hardyston to the west, Ringwood, Bloomingdale and Butler to the east, the Townships of Kinnelon, Rockaway and Jefferson to the south, and New York State to the north. The Township of West Milford's population has increased over the years, from 1,901 year round residents in 1930, to 8,093 in 1960, to 25,850 in 2010 in the Township.

West Milford contains many miles of municipal and county roadways most of which travel through forested watershed land.

According to the data, 25,850 residents live among a pleasant mixture of watershed land, attractive single-family homes, town houses, and town center comprised of a wide variety of small retail businesses. There are 10,419 housing units.

Population by Sex/Age

Male 13,122
Female 13,086

Under 18 6,986
18 & over 19,222
65 & over 2,212



Photo by Jennifer Easterbrook

Population by Race

White 25,658
Hispanic or Latino 962
African American 181
Asian 626
American Indian and Alaska Native 26
Other 95
Identified by two or more 53

West Milford's Shade Tree Program

West Milford streets are heavily treed/forested and there have been tree related road injuries in the recent past. Trees within the right of way in West Milford are overwhelmingly native trees species and Norway Maple.

Despite all of the positives, many of the trees are aging and inevitably will require replacement or maintenance. With age and deterioration, come increased needs for hazard identification and abatement.



Photo by Robert Jonas

As a result, segments of the public tree population are demanding a higher level of attention than before and removal and replacement needs are increasing. Many of the potential hazard trees found along roadways will likely be found in forest environs.

The Township of West Milford will look to reverse the tree deficit during recent time. A tree deficit means that the Township has been removing more trees than it is replanting. Many trees were lost over the last few years with Superstorm Sandy and the early fall snow in 2011.

Relation to the Township's Master Plan

Implementation of this Community Forestry Management Plan will directly or indirectly help satisfy several goals and objectives of the Township's Master Plan developed for conformance with the NJ Highlands Council. The Township Master Plan will be reexamined to incorporate all the requirements of the Highlands Act.

Page 22 Under Section A Forest Resource

3. States Where development is permitted in the Forest Resource Area, to avoid deforestation and require submission of and compliance with a Forest Mitigation Plan.

It should be noted that the specific requirements for these plans is currently being developed by the Highlands Council. This would provide an opportunity for the Township of West Milford to have more funding to plant trees and the ability to create "Tree Planting Zones" for trees received or to be reforested.

6. To ensure site-specific forest resource are identified through project review and that those to remain are protected both during the construction of an approved development project and by conservation easement post-construction.

This policy is also being developed by the Highlands Council at this time. Once completed the Township of West Milford will adopt the policy and recommendations as part of the conformance

process. Put simply this will work to protect trees on development and redevelopment projects and protect roots from compaction and other damage during construction.

9. To maintain forest cover in the natural and built environment of the Township Highlands Preservation Area to the maximum extent possible.

The township has moderate forest cover in developed areas particularly in the older developments. Many areas where there is a lack of trees can be addressed by the 2,000 No Net Loss trees from the Tennessee Gas Pipeline Project.

Page 23 Highlands Open Waters and Riparian Areas

- 1. To protect, restore and enhance Highlands Open Waters and Riparian Areas.*
- 2. To require protective buffers adjacent to open waters of sufficient width and composition to protect the integrity of the water resource from impairment due to proximate land uses.....*

Page 25 Critical Habitat

Given the extensive forest cover within West Milford and the State and Watershed Land throughout the township critical habitat will be dominated by large contiguous forest land which with continued planting or easements can help connect areas that have been fragmented by development. All sixteen species (Federally listed, State Endangered, Threatened or Species of Concern) listed in the ERI are forest dependent species.

Page 29 Lake Management

- 1. To prevent degradation of lake water quality, protect lake ecosystems and promote lake area aesthetic values in the Lake Community Sub-zone.*
- 2. To protect lake water quality and associated ecosystems from the impacts of present and future development for all lakes... ..*

Given the importance of water quality to West Milford's many lake communities and 90% of the Township draining into large drinking water reservoirs restoring riparian buffers to reduce nutrient loading can be undertaken as part of the community forestry program. Funding from the No Net Loss Act could also be utilized to plant stream and lake buffers and work to educate- land owners about having lawn going right up to lakes.

Page 37 Low Impact Development

Low impact development will be assisted by maintaining canopy cover and increasing tree cover after development. Improving tree canopy cover will reduce storm flows, assist in the uptake of nutrients prior to it reaching streams and lakes and water conservation by adding shade to the equation.

The Community Forestry Plan and CSIP funding can be essential to providing financing for the Township to monitor and maintain easements to prevent violation of and encroachment on Township held easements. Active planning and stewardship of municipally owned land is planned going forward.

Highlands Environmental Resource Inventory

The below maps depict the amount of forest cover within the Township and the importance of the community forestry plan to maintain this cover and increase forest cover in developed areas. All the HUC 14 watersheds within the Township have a high forest integrity score. There is a good chance no other township has such a distinction.

The Highlands Council assessed the ecological integrity of forests through the examination of landscape level characteristics at both the forest patch and subwatershed (HUC14) level, utilizing measures of forest fragmentation, to identify where regionally significant forests are located in the Highlands Region. These are the forests that are most suited to support ecological processes. The result of this assessment is the spatial delineation of the Forest Resource Area within the Highlands Region. The Forest Resource Area includes high ecological value forest areas including those forested areas that exhibit the least fragmentation and are vital for the maintenance of ecological processes.

The Highlands Council spatially delineated the Forest Resource Area by including those forested areas that express one or more of the following indicators – a contiguous forest patch of equal to or greater than 500 acres in size, an area consisting of >250 acres of core forest area greater than 300 feet from an altered edge, or areas that include >45% of mean total forest cover, and mean distance to nearest patch (HUC14 only).

In addition, the Highlands Council assessed forest cover integrity in the Highlands Region at the watershed level. Forests are important for the protection of water quality and quantity. To assess forest cover integrity at a subwatershed level, the Highlands Council assigned a value class to each of the 183 HUC14 subwatersheds in the Highlands Region as follows:

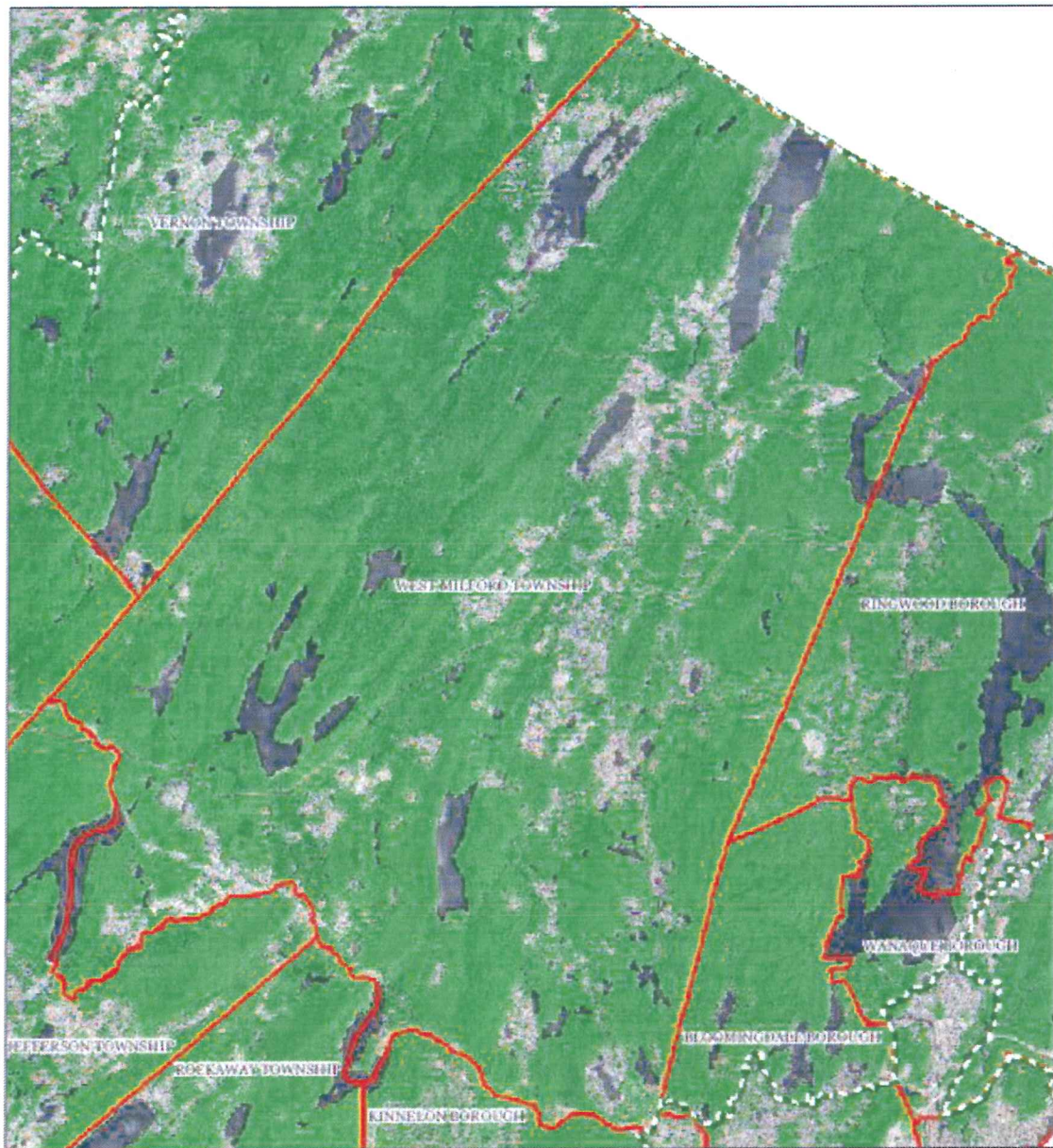
- **High Integrity Forest Area** – Predominantly forested, including a high proportion of forest cover consisting of high core area, large patch size, and a low distance to nearest patch.
- **Moderate Integrity Forest Area** – Predominantly forested, but do not exhibit a high proportion of forest cover, core area or patch size and an increase in distance to nearest patch.
- **Low Integrity Forest Area** – Predominantly non-forested or include low values for proportion of forest cover and patch size, or a high distance to nearest patch.

Each subwatershed within the Highlands Region was evaluated, using these indicators of forest watershed integrity to identify forested subwatersheds that provide important water quality benefits. The Forest Resource Area and the Forest Integrity Indicators are used in the Highlands RMP to achieve the protection of forest areas in the Highlands Region. West Milford Township contains 50,914.14 acres of Forest Resource Areas. West Milford Township contains 40,417.86 acres of Total Forest. The HUC14 subwatershed scores for forest integrity for West Milford Township are outlined in the table below, and are depicted in Figure 1.

Figure 1. Forest Integrity Scores of Subwatersheds in West Milford Township

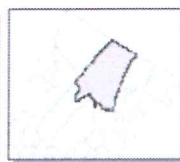
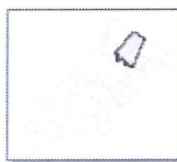
HUC 14 Subwatersheds	HUC 14 Subwatershed Name	Forest Integrity Score
02020007040050	Wawayanda Creek & tribs	HIGH
02020007040060	Long House Creek/Upper Greenwood Lake	HIGH
02030103050020	Pacock Brook	HIGH
02030103050030	Pequannock R (above OakRidge Res outlet)	HIGH
02030103050040	Clinton Reservoir/Mossmans Brook	HIGH
02030103050050	Pequannock R (Charlotteburg to OakRidge)	HIGH
02030103050060	Pequannock R(Macopin gage to Charl'big)	HIGH
02030103050080	Pequannock R (below Macopin gage)	HIGH
02030103070010	Belcher Creek (above Pinecliff Lake)	HIGH
02030103070020	Belcher Creek (Pinecliff Lake & below)	HIGH
02030103070030	Wanaque R/ Greenwood Lk(aboveMonks gage)	HIGH
02030103070040	West Brook/Burnt Meadow Brook	HIGH
02030103070050	Wanaque Reservoir (below Monks gage)	HIGH
02030103070070	Wanaque R/Posts Bk (below reservior)	HIGH

Total Forest Area in West Milford Township



- Forested Areas
- Preservation Area
- Municipal Boundaries

WEST MILFORD TOWNSHIP



1 inch = 1,565 miles

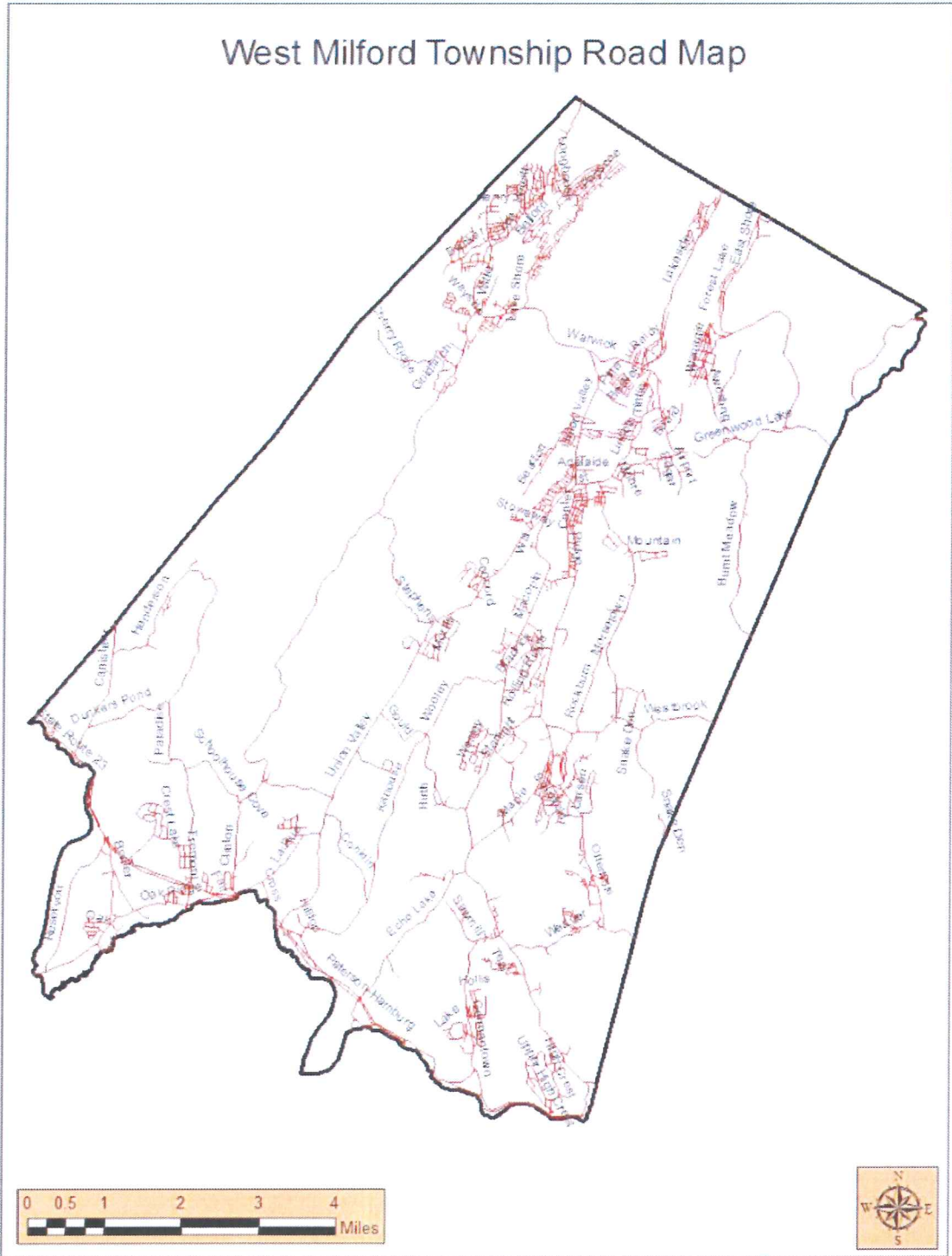


West Milford Township has extensive forest cover as depicted in the map above. West Milford watersheds deliver water to two large water purveyors that serve over 100 communities throughout northern New Jersey. Given the importance of these forested watersheds the area has been targeted for land preservation for nearly 100 years. Of the 40,417.86 acres of forest area 34,039.38 acres (84.2%) are preserved by various government and non-profit groups.

Preserved Land Category	Acres
Preserved Farmland	0
<i>Preserved Open Space</i>	
Federal	22.51
State	15,201.38
County	1,562.04
Municipal	724.06
Non-profit and Authorities	16,529.39
Conservation Easements (where known)	0
<i>Total Preserved Lands</i>	<i>34,039.38</i>

Much of the privately held forest land is actively managed through the Farmland Assessment Program. Some of the non-profit land have had Stewardship Plans developed but there has been little management activity completed. Through this plan it may be possible to fund and encourage the municipality to develop Forest Stewardship Plans on municipally owned lands.

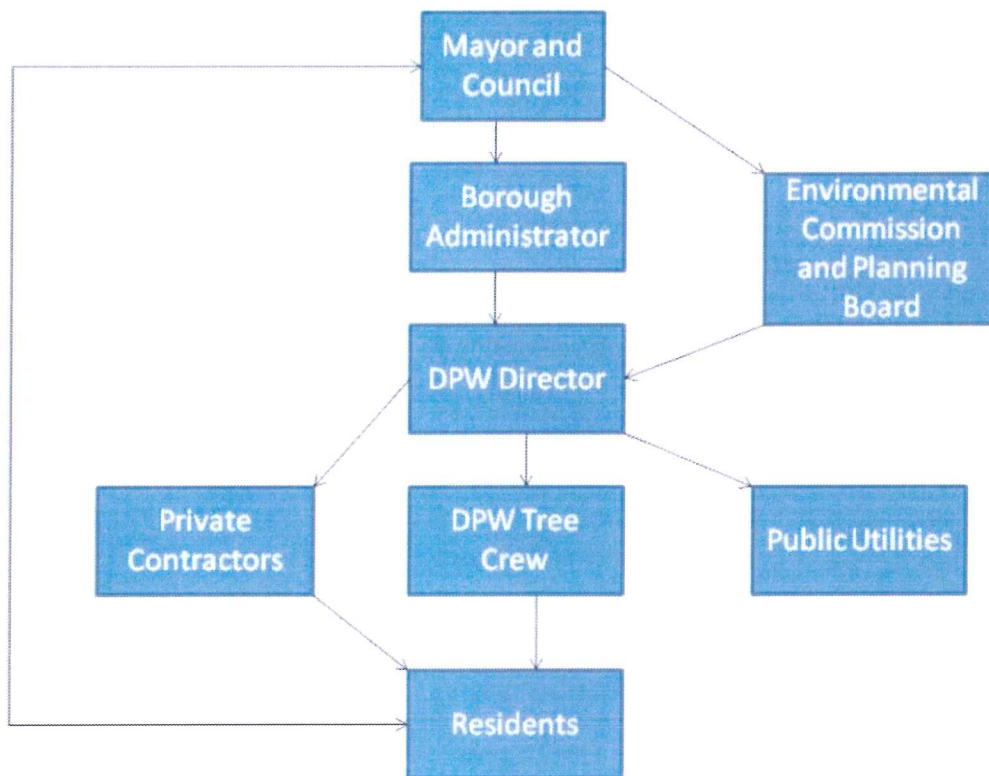
TOWNSHIP MAP



PROGRAM ADMINISTRATION

SHADE TREE PROGRAM STRUCTURE AND RESPONSIBILITIES

The Director of Public Works is primarily responsible for the management of public trees in the Township of West Milford. However, the Director of Public Works operates with advisement from the Reforestation Sub-committee of the Environmental Commission and in cooperation with various other bodies as follows.



1. Mayor and Council

- The Mayor and Council are responsible for appointing members of the Environmental Commission whose members make up the Reforestation Subcommittee.
- The Mayor and Council have ultimate authority over the policies, procedures and programs of the Shade Tree Program and are responsible for approving its budget.
- The Mayor and Council will approve any projects in association with the No Net Loss Program.

2. Township Administrator

- a) Under the direction of the Mayor and Council, the Township Administrator supervises the daily operations of the Township's various departments and serves as its Chief Administrative Officer.
- b) In addition, the Township Administrator is responsible for:
 - Developing the budget with the Chief Financial Officer
 - Functioning as the purchasing agent.
 - Handling citizen inquiries.
 - Performing various other administrative duties and completing special projects in connection with the Mayor and Council.

3. Environmental Commission

- a) The Environmental is a group of nine residential volunteers including two alternates, who are appointed by the Mayor.
- b) The Environmental Commission is responsible for:
 - Advising the Township Council and the Director of Public Works as to the future plans for the planting, pruning, removal, and care of trees and shrubs in Township rights-of-way and on public lands.
 - Assisting in the development and implementation of solutions for problems and issues relating to public trees.
 - Reviewing plans before the Planning and Zoning Boards and making recommendations for planting and species selections.
 - Working to develop and approve planting plans in relation to the No Net Loss funding.

4. Planning and Zoning Boards

- a) The Planning and Zoning Boards are responsible for implementing and enforcing various elements of the Township Code and Master Plan that relate to the planting and preservation of public and private trees, landscaping and buffers.

5. Other Township Departments and Boards

- a) Other Departments and Boards participate in the Shade Tree Program to the extent that they implement Township policies, procedures and ordinances that are directly or indirectly related to shade trees. For example:
 - The Code Enforcement Officer within the Building Department is responsible for ensuring that property owners respect the rights of others and that they maintain their property in accordance with minimum standards, Township ordinances and community standards.
 - Various other Departments and Boards will notify the Department of Public Works and the Environmental Commission of plans and projects as they relate to shade trees and seek their input.

- All Departments notify the Department of Public Works of tree-related hazards for emergency response (e.g. Police Department notifies Director of downed trees for emergency service, etc.)

6. Property Owners

- a) Private property owners are indirectly involved in the Shade Tree Programs to the extent that they:
 - Notify the Township of potential hazard trees and future planting locations.
 - Are asked to be stewards of new public tree plantings adjacent to their properties.
 - Are encouraged to plant and properly maintain trees and landscaping on private property, native trees where possible.

7. Community Volunteers

- a) Community Volunteers occasionally assist in completing certain projects and tasks relating to the Shade Tree Program, including planting and education and outreach programs.

8. Director of Public Works

- a) The Director of Public Works manages the daily operations of the Shade Tree Program with the advice and advisement of the Environmental Commission.
- b) Specifically, the Director is responsible for:
 - Assisting in the planting, maintaining and removing public trees.
 - Managing the Department of Public Works Tree Crew, which completes various maintenance tasks.
 - Providing emergency response services, when appropriate.
 - Following all current and accepted arboricultural standards and practices and abiding by all current safety standards relating to tree care operations.

10. Tree Maintenance Contractors

- a) Private tree maintenance contractors will be hired to complete public tree planting in relation to the No Net Loss Grant, and occasionally hired to assist with removal and maintenance work and provide emergency service.
- b) Contractors are, within the terms of their agreement, responsible for:
 - Following all current and accepted arboricultural standards and practices and abiding by all current and applicable safety standards relating to tree care operations.
 - Reporting any tree-related hazards or other problems immediately to the Township.

11. Public Utilities

- a) The role of public utilities in the Shade Tree Program is primarily to minimize conflicts between trees and their facilities and infrastructure.
- b) While working on or around Township trees, public utilities report to the Director of Public Works and the Environmental Commission and are responsible for:
 - Abiding by all applicable ordinances.
 - Keeping the Township informed as to their work plans and schedules.
 - Exercising reasonable diligence in the installation and maintenance of its facilities to avoid damage to public and private trees.
 - Not removing any tree without prior approval of the Township or its owner.
 - Following all current and accepted arboricultural standards and practices.
 - Assisting the Department of Public Works Tree Crew or Township contractors in completing tree removal and maintenance work around their facilities, where necessary.

The Environmental Commission should meet with utilities to discuss the maintenance of utility transmission lines to request that invasive species be treated during routine vegetative work.

TREE ORDINANCE

West Milford has a tree ordinance which deals mainly with uncontrolled tree removals. Town code 500-84 "Shade Trees".

1. The ordinance defines a Township Forester and the definition of a tree. The Township Forester is the duly appointed officer of the Township given the authority to enforce the provisions of this chapter.

A tree is any living deciduous plant having a trunk of a diameter greater than four inches, measured at a point 4 ½ feet above the ground, or any living coniferous tree having a trunk diameter greater than four inches, measured at a point 4 ½ feet above the ground or a height greater than six feet. Nothing in this ordinance contradicts the Act of the State of New Jersey, Chapter 251 of the Public Laws of New Jersey.

2. A permit is required to destroy, cut or remove a tree through the Township Forester.

Cutting is permitted with an Approved Forest Management Plan as long as no more than 30% of the trees are removed from the property.

Exempted from this ordinance are trees located on a property <1 1/2 acre where there is a residential dwelling; trees grown in a nursery, tree farm or orchard; trees growing on a sanitary landfill, trees growing within the municipal right of way or drainage easement, trees near utility lines, hazard trees and trees within 20 feet of a planned structure.

It should be noted that this ordinance will likely be updated when the Highlands Council develops its model ordinance as part of the Conformance Process.

SHADE TREE POLICIES

West Milford does not currently have formal shade tree program other than the removal of fallen trees on municipal roads. Written policies are limited to what dictated by the above mentioned ordinance.

TREE SERVICE REQUEST PROCEDURES

Requests for the pruning, removal or other treatment of public trees are primarily received from adjacent property owners and occasionally from Township Departments and others. All service requests are addressed in the following manner:

Residents sometimes make requests for trees to be removed but the requests are typically denied. The Township's responsibility is to remove such trees once they fall and block the road they are cut up and removed.

There is a list of dead trees kept that require removal and they are moved when there is an opportunity and sufficient equipment to remove them.



Some pruning may be performed if limbs are creating a hazard within the right of way. The Township is a member of the Passaic County Co-op. There are no contracted services on an annual basis although sometimes a hazard tree may be contracted out to private vendors.

2015-2019 Administration Objectives

1. Ongoing Administrative Programs

1. 2015-2019

- Continue implementing the administrative programs, policies and procedures already in effect. This system has worked effectively and efficiently over time. A formal hazard trees survey may help prioritize hazard trees.

ANNUAL BUDGET AND RESOURCES

OVERVIEW

The following is a summary of the resources available to West Milford's Shade Tree Program, on average, in each of the past three years.

Completion of some of objectives contained in the Plan will require resources that the Township may not be able to internally meet. The Township's ability to satisfy these objectives may fully depend on obtaining additional funding through external sources and grant programs.

EMPLOYEE SALARY AND WAGES

There is currently no employee "assigned" to do tree work. Trees are mainly only removed when they have fallen. Tree related hours are not currently tracked.

OPERATIONS

Very few trees are contracted for removal

TOWNSHIP EQUIPMENT

One Chipper
Eight Chain Saws

Subtotal \$12,000.00

TREE PLANTING

No tree planting currently but there will be with the implementation of the No Net Loss funding.

WASTE RECYCLING

There is currently litigation with the previous compost facility operator. Brushy material is taken to a local recycler.

Subtotal \$47,500.00

VOLUNTEER SERVICES

This number has not been tracked. During the planning process approximately 100 hours were expended by volunteers in completing this plan.

Subtotal (100 hours per year @ \$21.79)	\$2,179.00
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TOTALS

Township Resources	\$61,679.00
Value of Volunteer Contributions	\$2,179.00

2015-2019 Budget Objectives

1. Ongoing Budget

1. 2015-2019

- The budget for the Shade Tree Program should be maintained at current levels with slight yearly increases when feasible.
- Volunteer hours will need to be tracked closely as their number and hours will increase over time with the implementation of this plan.
- Any tree related projects should be tracked to determine the real costs.

CSIP #1 TRAINING AND PROFESSIONAL DEVELOPMENT

TRAINING AND PROFESSIONAL DEVELOPMENT GOALS

West Milford Township recognizes that a continuous, comprehensive training program is necessary for individuals at all levels of the Community Forestry and Shade Tree Program to ensure effective shade tree management over the long term. Specifically, ongoing training and professional development will be provided if funding is available to provide training:

1. Ensure that individuals within the Community Forestry and Shade Tree Program have sufficient knowledge to make effective management decisions.
2. Ensure that all tree planting and maintenance activities are planned and completed in accordance with the latest scientific knowledge and current industry standards.

5. Satisfy the requirements of the New Jersey Shade Tree and Community Forestry Assistance Act Training Skills and Accreditation Program.

EXISTING PROGRAMS, POLICES AND PROCEDURES

1. Training Provision:

- a) Employees of the Department of Public Works (DPW) are provided with ongoing safety and related training.
- b) The cost of existing training programs is covered by the operating budget of the DPW, and in the future through CSIP grants as appropriate. However, the objectives listed below will require a significant increase over current training budgets. The Township's ability to meet these objectives may fully depend upon the availability of external sources of funding.

2. Licenses, Certifications and Recent Training:

- a) Members of the Environmental Commission do not currently hold licenses or certifications directly related to arboriculture and urban forestry, and are not required to.
- b) The current Department of Public Works Director is CORE trained and is knowledgeable and capable in all aspects of shade tree management, tree evaluation, and tree maintenance techniques. He joined the DPW in April of 2014.

3. New Jersey Community Forestry's Training Skills and Accreditation Program:

- a) At the time this plan was prepared, one Township employee and one volunteer have satisfied the CORE Training requirements of the New Jersey Shade Tree and Community Forestry Assistance Act Training Skills and Accreditation Program.

CURRENT TRAINING NEEDS

The Township has identified the following areas in which training is currently needed or desired if CSIP funding is available for training:

- 1. General urban forestry training (legal issues, community forestry planning, etc.) for DPW employees or Environmental Commission members.
- 2. Planning site analysis and species selection for Environmental Commission members and the Department of Public Works.

2015- 2019 OBJECTIVES

1. Ongoing Training Programs

a) 2015-2019

- Strive to maximize the number of individuals with basic training--including both employees and volunteers—and increase their level of expertise through CORE training and annual CEU's to meet the requirements of the Community Forestry Accreditation.

2. N.J. Community Forestry's Training Skills and Accreditation Program

Annually

- Review training needs and upcoming training opportunities. Ensure that the Township will accumulate the necessary continuing education credits required by the N.J. Shade Tree and Community Forestry Assistance Act Training Skills and Accreditation Program by the end of each year. This may be provided by the Consulting Forester if desired.

January 2015- December 2015

- Obtain CORE Training for one more Environmental Commission volunteer and one more DPW/Township employee.

Tree Hazard Evaluation Training

January 2016- December 2016

- Train the Department of Public Works and/or another key employee or volunteers to further advance their ability to recognize and evaluate tree hazards using the latest information and techniques. This will be accomplished via attendance at a professional course or seminar in which at least one full day is dedicated to tree hazards and can be taught by the Consulting Forester.



CONTRACTORS AND PUBLIC UTILITIES

Contractors working for the Township and utility contractors working in or around Township trees must have sufficient training and knowledge to ensure that all treatments are completed to applicable American National Standards Institute (ANSI) and Occupational Health and Safety Administration (OSHA) standards and practices and performed in a safe manner. They must also possess all appropriate certifications.

Evidence of training and appropriate certifications must be provided to the Department of Public Works prior to commencing work was completed through the Passaic County Coop in December of 2013.

CSIP#2 COMMUNITY FORESTRY ORDINANCE ESTABLISHMENT

SHADE TREE ORDINANCE

West Milford Township does not currently have a Shade Tree/Forestry Ordinance. It is recommended that the Township wait to develop an ordinance. The Highlands Council has a contract for a model Forestry/Shade Tree Ordinance to be developed. Once the Highlands Council approves this ordinance West Milford Township should adopt it as part of the conformance process.

2015 - 2019 OBJECTIVES

1. Community Forestry Ordinance Establishment

West Milford Township will adopt the Highlands Model Forest Ordinance once it has been completed by the Highlands Council near the end of this planning period. Once adopted by the Highlands Council West Milford Township will review its applicability to its needs and adopt or modify as necessary. Adopting such an ordinance will likely be part of the conformance process.

CSIP #3 PUBLIC EDUCATION, AWARENESS AND OUTREACH

PUBLIC EDUCATION, AWARENESS AND OUTREACH GOALS

The Environmental Commission will work to build strong Township and citizen support. However, it recognizes that ongoing public education, awareness and outreach programs are necessary to ensure continued success over the long term. Specifically, such programs will:

1. Maintain and further increase the interest and active support for West Milford Township's Community Forestry and Shade Tree Program.
2. Encourage public assistance in implementing various programs, protecting public trees, and beautifying the Township.
3. Encourage the planting, protection and care of trees on private property for the benefit of the entire community.
4. Educate citizens in the importance of environmental stewardship and native species.
5. Educate people on the potential of preserved land and the benefits of active stewardship and management.

EXISTING PROGRAMS, POLICIES AND PROCEDURES

1. Township website

a) The township can release/post tree related articles on the Township website or the two local free newspapers that serve West Milford or the Suburban Trends.

2015- 2019 OBJECTIVES

1. Work to develop Public Education, Awareness and Outreach Programs to meet the requirements of the Community Forestry and Shade Tree Act and build public support.
2. Work towards recognition by Tree City USA and work to maintain the certification.
3. Utilize the Township's internet web site (<http://westmilford.org>) to post announcements relating to the Community Forestry and Shade Tree Program, such as educational articles, grants applied for and received and about progress being made in this program.
4. Submit at least two articles a year discussing the Community Forest, accomplishments of the program, educational articles, etc, to the Messenger, Argus and Suburban Trends.

CSIP #4 ARBOR DAY ACTIVITIES

EXISTING PROGRAMS, POLICIES AND PROCEDURES

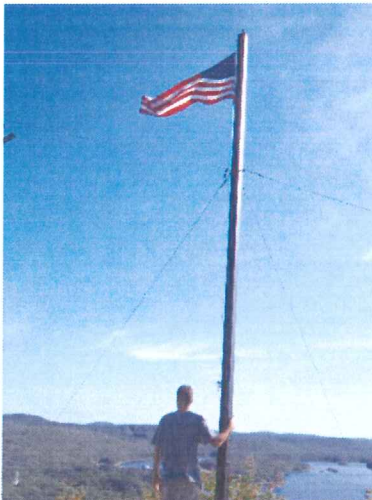


Photo by Jennifer Easterbrook

No formal Arbor Day celebrations are currently conducted by the Township.

ARBOR DAY GOALS

The Township will begin to formally celebrate Arbor Day with a government proclamation and ceremonial tree planting. Arbor Day is an excellent public relations tool for the Community Forestry Program for West Milford Township. Over time this will build public support for the program. Any articles related to the Arbor Day Program can be utilized as part of the two press releases annually.

2014-2018 OBJECTIVES

1. Arbor Day

- a) West Milford Township will formally celebrate Arbor Day with ceremonial plantings and a formal proclamation by the Township Council.
- b) Programs can be run in cooperation with the with the Township schools. Such programs shall include a formal proclamation and ceremonial tree plantings.
- c) West Milford Township Schools should be encouraged to sign up for the NJ Free Tree Program for 3rd Graders.

CSIP #5 TREE INVENTORY

EXISTING PROGRAMS, POLICIES AND PROCEDURES

At this time there is no inventory of street trees or trees within the Township right of way. Given the rural nature of the Township a full forest inventory would be outside the budget of the Township. The Environmental Commission should complete a CSIP grant to complete an inventory.

INVENTORY AND ASSESSMENT GOALS

The goals of a tree inventory are to:

1. Provide accurate baseline information on which sound shade tree management plans and decisions can be made.
2. Monitor and evaluate the impact of management activities on the tree population and progress towards the overall goals of the Community Forestry and Shade Tree Program.
3. Improve or establish proactive maintenance programs (e.g. systematic tree pruning, implementing young tree developmental pruning to reduce utility conflicts and structural failures in the future, etc.)

2015- 2019 OBJECTIVES

1. Shade Tree Inventory

a) January 2017 – December 2018

- Identify needs and desires for conducting a street tree inventory to improve the efficiency and effectiveness of the Community Forestry and Shade Tree Program. Completing this project will

be contingent on available funding. Given the lengths of roads that are forested this would be a substantial grant.

2. Street Tree Inventory Report

a) April – June 2019

- Produce report with a variety of charts that summarize the current state of the street tree population. This report will serve as a baseline to which future reports can be compared and the impact of management activities can be evaluated.

CSIP #6 HAZARD TREE ASSESSMENT

This is the most important part of the Community Forestry Program. It will allow the Township to systematically remove potential hazards in a fiscally responsible fashion and maximize efficiency.

EXISTING PROGRAMS, POLICIES AND PROCEDURES

1. Tree Hazard Identification

- a) The Township currently lacks a program for routinely and systematically inspecting public trees specifically for the purpose of identifying hazardous conditions. Typically trees are removed if they are dead or have already fallen. CSIP funding, if available, should be utilized here.

HAZARD MANAGEMENT GOALS

While the benefits of shade trees to West Milford Township residents are obvious, the Township recognizes that they also present risks and the potential for liability.

The sole purpose of the Tree Hazard Management element of this plan is to ensure public safety. The Township is committed to improving safety and reducing liability through comprehensive and proactive shade tree management. Public safety shall be the primary consideration in all shade tree planning, decision-making and activities at all levels of the Community Forestry and Shade Tree Program. There has been a fatal tree accident in town within the last few years on a county road. Advancing this program would help reduce the likelihood of such accidents in the future.

2014- 2018 OBJECTIVES

1. Future Tree Hazard Management Programs

a) January – December 2015

- Secure funding to complete a formal hazard tree survey.
- Continue to address hazard abatement needs as they are identified and as funding allows.

CSIP #7 STORM DAMAGE ASSESSMENT

STORM DAMAGE ASSESSMENT GOALS

Tree-related emergencies are almost exclusively the result of structural failure during severe weather events. The Township is prepared to respond promptly to such emergencies so that electrical service, communications and transportation can be restored with minimal disruption for residents. Other possible sources of widespread tree loss include insect and disease outbreaks and are less likely to cause mass losses due to the implementation of this plan.

The frequency and severity of tree-related emergencies and widespread tree loss are minimized through well-designed planting, maintenance and hazard tree management programs already being implemented by the Township.

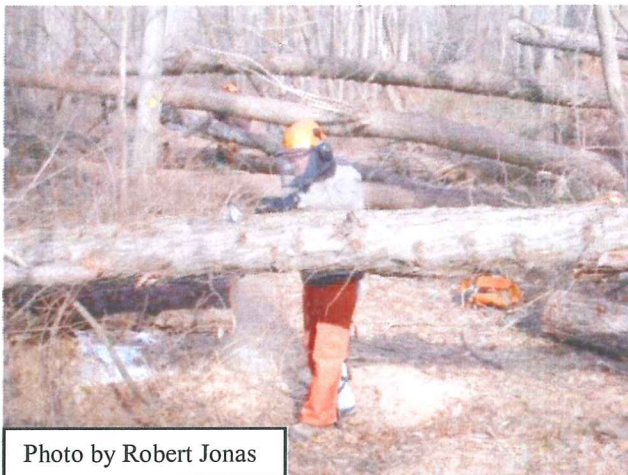


Photo by Robert Jonas

EXISTING PROGRAMS, POLICIES AND PROCEDURES

1. Tree Emergency and Disaster Threats

- a) Severe weather leading to mass loss and structural failures are the primary disaster threat to Township trees.
- b) Structural failures pose a serious threat to electric service, communications, travel and public health. Downed trees may hamper the Township's ability to provide critical services during an emergency or disaster.

c) Brush fires pose a threat to Township trees in all parts of the township, including trees on private property, township-owned property, and on preserved properties.

2. Existing Emergency and Disaster Plans

a) The Township has an emergency response team and operations plans are in place. Mutual aid agreements are in place to provide support for large scale emergency situations. West Milford is part of the Passaic County Co-op.

b) The Township does not have a plan which specifically deals with large scale tree replacements after such events beyond the initial response efforts.

3. Emergency Response

a) The DPW in cooperation with public utilities and contractors are responsible for immediately clearing trees and debris from open roadways and those that hamper the restoration of electrical service and communications.

b) DPW staff are on call 24 hours a day to respond to tree related emergencies.

c) Arrangements have been made with private contractors to provide support in emergency situations when this assistance is considered necessary.

2015- 2019 OBJECTIVES

1. On-going Programs

a) 2015-2019

- Continue to implement the programs above and review them on a regular basis.
- Reduce the risks of mass tree failure by continuing to implement and expanding sound and responsible planting, preventative maintenance, hazard identification and remediation programs as laid out in this plan.

CSIP #8 TREE MAINTENANCE AND REMOVALS

MAINTENANCE GOALS

The Township recognizes that proactive, systematic tree maintenance more cost effectively improves tree condition and appearance, extends their service life, and reduces hazards instead of having a haphazard “crisis” approach.

Maintenance needs are addressed before trees are planted by selecting species and disease-resistant cultivars that are suited to the area in which they will be planted to minimize stress, insect and disease infestations and unnatural pruning needs. Developmental pruning early in the tree’s life will minimize future pruning needs and the development of structural defects. Conditioned maintenance as they mature will help extend their service life, increase their benefits relative to costs, and reduce their hazard potential.

Specifically, the goals of the tree maintenance program are to:

1. Improve and maintain the health and physical condition of the tree population.
2. Maximize the service life of existing trees.
3. Maximize the cost-efficiency of tree maintenance activities.
4. Maintain public safety.
5. Optimize the benefits that trees provide to the community relative to the cost of maintaining them.

EXISTING PROGRAMS, POLICIES AND PROCEDURES

1. DPW Crews

a) The Township has a DPW and is available for tree projects. The entire DPW is made up of six men who are responsible for all of the duties of the Department of Public Works.

b) This DPW consists of and is equipped with:

- (1) chip truck
- (1) chipper
- Various chainsaws, pruners and other small tools

c) The DPW completes:

- Approximately eighty percent of all tree pruning work

2. Private Contractors

a) Private tree maintenance firms are routinely hired to complete pruning and limited specialty treatments.

b) Private contractors complete:

- 100% of all specialty work such as insect and disease treatments and fertilization.

3. Inter-Local and Mutual Assistance Agreements

a) The Township currently has informal agreements with neighboring municipalities for sharing of equipment and personnel for tree maintenance.

4. Private Landowners

a) Private landowners are responsible for tree maintenance on their property and within the Township right of way.

5. Tree Removal

a) It is the Township's policy to not remove public trees unless they are dead or hazardous or there is some other valid reason, subject to the approval by the Department of Public Works.

b) The Township has removed 100 trees per year on average over the last five years particularly due to severe weather events over the last few years.

6. Funding

a) The DPW operating budget covers the cost of tree work completed by its employees and contractors.

2015- 2019 OBJECTIVES

1. Ongoing Tree Maintenance Programs

a) 2015-2019

- Continue implementing existing tree maintenance programs, policies and procedures on a regular basis.

CSIP#9 INSECT AND DISEASE MANAGEMENT

There are no specific goals in this planning regarding insect and disease management. The Emerald Ash Borer has made its way into New Jersey within the last year and it has also been found in New York, Pennsylvania and Maryland. Other insect and disease issues that are looming are Gypsy Moth which is currently in a low population cycle, Bacterial Leaf Scorch which studies are showing that it is found not only on the streetscape but also in the forest and others. The Department of Public Works, Environmental Commission and Consulting Forester will continue to stay up to date on current conditions and potential forest health issues which may affect the community forest.

2015-2019 OBJECTIVES

Goal: Maintain community forest health to provide as many environmental services and positive community benefits as possible for West Milford Township.

Objectives:

- Conduct continuous periodic monitoring of forest health issues throughout the Township.

- Create awareness among the public of forest health issues and the importance of trees to the community will raise the status of the community forest cover and create municipal pride and ownership.
- Should large forest health issues be noted CSIP funding may be sought to reduce the financial impact on the Township.

CSIP #10 WILDFIRE PROTECTION

Wildfire is not a significant threat in the West Milford Township. The township is extensively forested. The oak forests of the past may have been maintained by clear cutting or forest fire but it is currently a reduced risk in this Township. With many areas in the Township having steep slopes and thin soils, fire could become a hazard during dry conditions. If West Milford Township is interested it should pursue becoming a Firewise Community if funding is available from the New Jersey Forest Fire Service and the CSIP program.

Goal: West Milford Township should pursue becoming a Firewise Community.

Objective:

- Determine if forest fire is enough of a threat to apply for Firewise funding and become a Firewise Community.
- Raise awareness of the potential for damage from wildfire within the township.
- Raise awareness of potential benefits of prescribed burning.

CSIP #11 TREE PLANTING

PLANTING GOALS

At the same time, the stability of the tree population will be improved by manipulating and optimizing its species composition and age distribution via careful species selection and consistent planting from year to year. Further, responsible species selection, placement and planting techniques will help reduce further tree and infrastructure conflicts. Native species will be recommended for planting.

1. Improve and maintain species diversity to help insulate the tree population from catastrophic losses to species-specific insects and diseases.
2. Improve and maintain age diversity so that the number of trees requiring removal and replacement due to advanced age is consistent from year to year.
3. Minimize conflicts between trees and buildings, utilities and other public and private fixtures.
4. Minimize future maintenance needs and costs.
5. Strategically plant the right species in the right place with storm water issues in mind.
6. No Net Loss funding will provide a tremendous boost in tree planting over the next two years throughout the Township.

EXISTING PROGRAMS, POLICIES AND PROCEDURES

The Township does not have a planting program and is operating in a tree deficit, removing more trees than it is planting. Once the No Net Loss Plantings are completed there will be very few vacant planting sites remaining within the Township.

2015- 2019 OBJECTIVES

1. Tree Planting Programs
 - a) 2015-2019
 - Develop underwire planting criteria.
 2. Vacant Planting Site Identification
 - a) July 2018 – October 2019
 - Prioritize all existing vacant planting sites identified by the tree inventory and the Environmental Commission to be utilized for future planting projects if CSIP funding is available. After planting 2,000 trees via the No Net Loss project there should be very few sites remaining in this heavily forested Township.
 - Contact landowners to determine if they want a replacement tree and create a procedure to be followed should a landowner want to contact the Township to inquire about a replacement tree.
3. Investigate creating a Tree Trust for future planting of trees in West Milford.

CSIP #12 TREE RECYCLING

RECYCLING GOALS

West Milford Township's Community Forestry and Shade Tree Program and local residents have the potential to generate large volumes of vegetative waste. The Township recognizes the cost savings and benefits associated with properly recycling these materials and using the resulting products for beneficial use.

A comprehensive tree waste recycling program will:

1. Minimize the cost of tree related waste to the Township.
2. Produce beneficial recycled products for use on Township and residential properties.

EXISTING PROGRAMS, POLICIES AND PROCEDURES

1. Recycling facilities

a) The Township recycling center is used to store, process and distribute wood chips and mulch on a limited basis. Currently brush is taken to a private recycler off site resulting in a cost of \$3,950 per month. There is litigation involving the contract that was utilizing the township mulch site after several large fires due to the improper handling of large volumes of mulch and wood chips.

2. Material Processing, Use and Distribution

a) Leaves

- All leaves are delivered by residents to the recycling yard for composting.
- The finished compost is made available for use by residents as well as on Township-owned property.

b) Wood Chips

- Some wood chips are stockpiled on Township property.
- These wood chips are utilized by residents as well as on Township-owned property as mulch.

c) Bulk Wood

- Bulk wood products are cut and left on site for use by residents for firewood.

2015- 2019 OBJECTIVES

1. Tree waste recycling programs will be a work in progress due to the current legal issues concerning the DPW Recycling Center site.
2. Bulk wood utilization will be reviewed for possible use in traditional forest products. The new Citi Log facility in Newark can process such material if it is economically feasible to do so. The Environmental Commission should investigate developing an agreement with saw mills that are in close proximity to utilize wood removed.
3. Develop a policy for residents to take advantage of wood from trees removed by the Township.

CSIP #13 SIDEWALK MAINTENANCE PROGRAM

There are virtually no sidewalks within West Milford Township. There will likely be no activity involving sidewalks and CSIP #13 during this planning period.

CSIP #14 STORMWATER MANAGEMENT

The Township has a Storm Water Management Plan backed by a Storm Water Management Ordinance. It is also referenced in the Township Master Plan. It may be possible to develop a grant for CSIP funding. There is a limited mention of trees and their positive impact controlling storm water. Water is a critical resource in the Township as 90% of the town drains into a major drinking water supply reservoir serving millions of New Jersey residents.

Creation of a Green Storm water Management System

The Township may be able to utilize CSIP funding to create a model storm water system which utilizes green technology to help infiltrate storm water, remove sediments and nutrients. This system could be constructed on a municipally owned property and could serve as an education tool for residents to implement on their own properties.

2015 - 2019 Objectives

1. Utilize trees and the community forest as a storm water management tool.
2. Create a model storm water system on a municipally owned parcel.

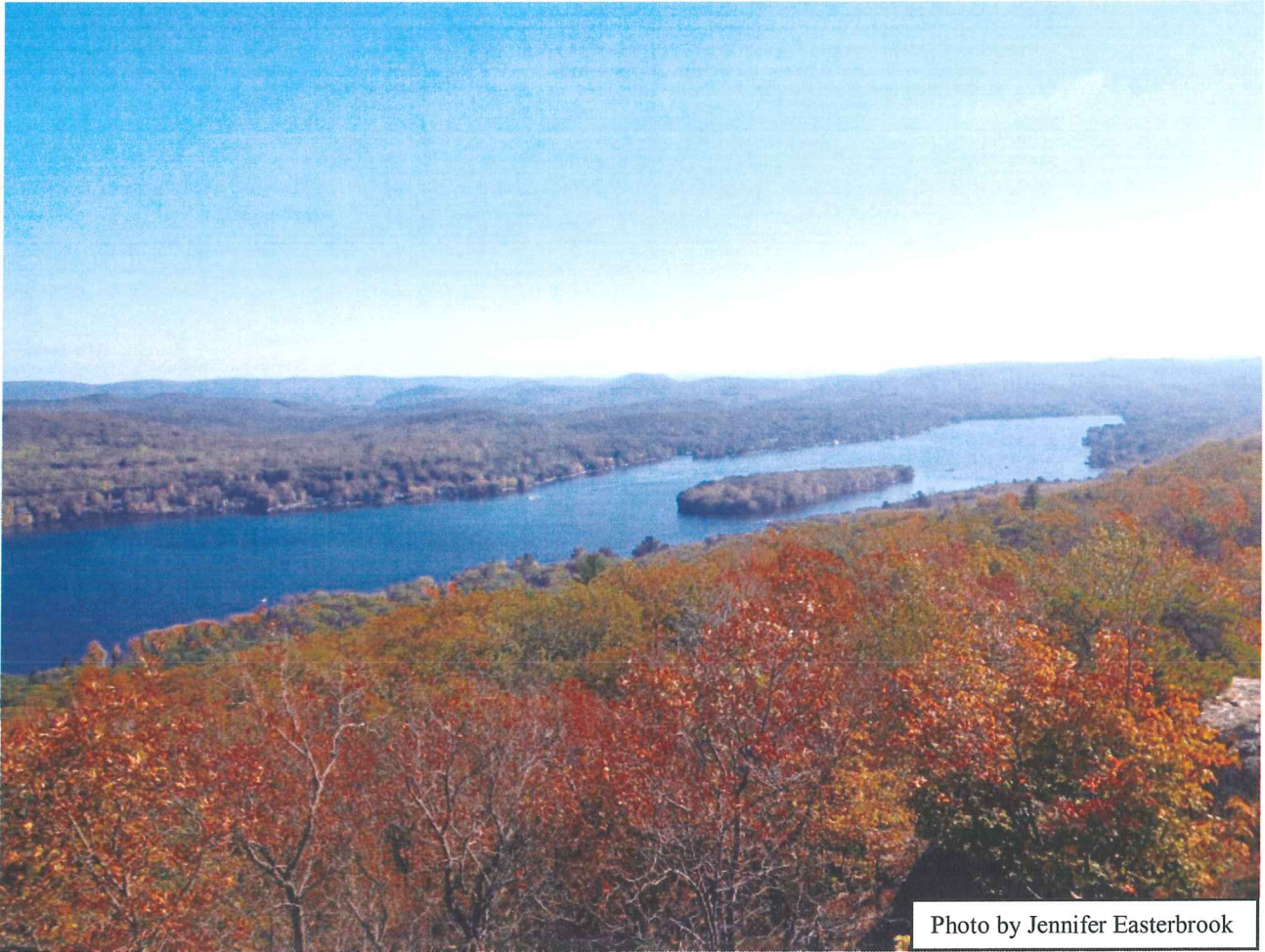


Photo by Jennifer Easterbrook

CSIP #15 OTHER

Forest Stewardship Planning on Preserved Land

West Milford Township will utilize CSIP funding to complete Forest Stewardship Plans on municipally owned and managed land where easements are held. These Forest Stewardship Plans will include identification and classification of the resources found on the parcel, baseline studies of preserved land and easements, management recommendations for controlling invasive species, forest and wildlife management recommendations, future trail development, signage of owned properties and encouraging recreational use of the properties. Under these plans property boundaries should be clearly marked and delineated.

Invasive Species Control

West Milford Township will look into the possibility of applying for CSIP funding to facilitate the removal of invasive species from public land and to provide education to residents about removing invasive species on their properties and avoiding planting them. The Environmental Commission may look into creating a recommended native planting list and source of native planting stock.

Restoration of Riparian Areas

Once a Stream Corridor Protection and Restoration Plan is completed. West Milford Township should apply for CSIP funding in order to carry out the goals of this plan and utilize the funding to develop restoration and planting plans. Trees are a critical component of riparian buffers and provide streambank stability, shade for keeping water cool, nutrients that drive the aquatic food chain, can reduce nitrogen and phosphorus loading. It should focus on one watershed to maximize the impact.

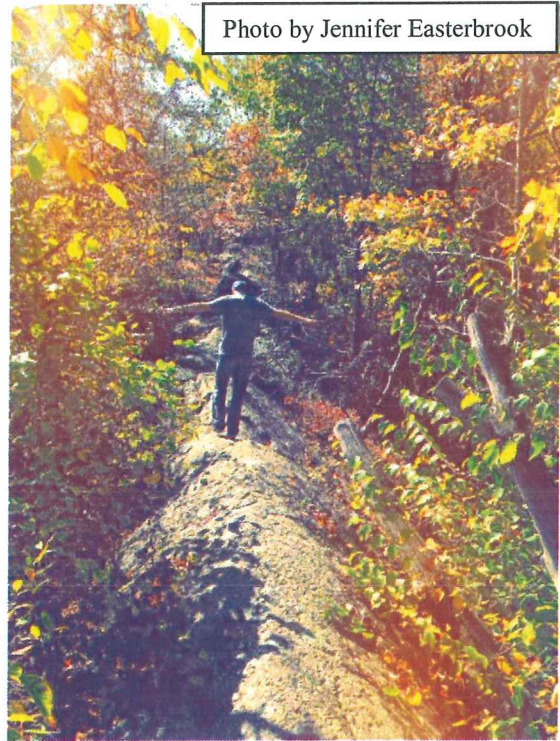


Photo by Jennifer Easterbrook

PLAN PREPARATION AND EVALUATION

PLAN PREPARATION AND EVALUATION GOALS

The Township recognizes the benefits of this Community Forestry Management Plan to the long term success of its Shade Tree Program. The Township is committed to developing and implementing consecutive five-year plans and remaining in compliance with the New Jersey Shade Tree and Community Forestry Assistance Act. The next plan should be completed by August of 2019 to prevent any lapse in plan coverage. This plan is the first plan being completed by the Township of West Milford.

EXISTING PROGRAMS, POLICIES AND PROCEDURES

Plan Preparation

Preparation of this first five-year plan was a cooperative effort of the Environmental Commission, the Reforestation Subcommittee and their Consulting Forester. This plan was funded by the Green Communities Grant Program through the New Jersey Forest Service's Community Forestry Program.

2015- 2019 OBJECTIVES

1. Annual Program Evaluation

- a) Every December the DPW, Environmental Commission, Shade Tree Committee and the Consulting Forester will evaluate the success of the past year's activities and accomplishments relative to the goals and objectives laid out in this plan.
- b) Programs will be adjusted as necessary based upon this evaluation.
- c) Prepare and submit the Annual Accomplishment Report to the New Jersey Forest Service in accordance with the requirements of the New Jersey Shade Tree and Community Forestry Assistance Act.

2. Five-year Evaluation

- a) The achievement of goals and objectives will be evaluated for completion to date as laid out in this plan.
- b) New objectives and adjustments to existing policies will be made and changed if necessary for the 2020-2024 management planning period by August 2019.
- c) A new plan shall be written and submitted for approval to the New Jersey Community Forestry Council by October 1st, 2019.

NO NET LOSS

A separate planting plan will be developed for the planting of the trees in regards to the No Net Loss funding West Milford is eligible for. Planting plans will have to be approved by the New Jersey Forest Service. The Township is eligible for \$600,000 for tree planting to mitigate the loss of forest cover via the construction of the Tennessee Gas Pipeline project.

1. Planting Jurisdiction

- a) The Township plants and maintains trees on:
 - Township rights-of-way
 - County rights-of-way
 - Parks, schools and other Township properties

2. Planting Site Identification

- a) Planting sites are currently identified by the Consulting Forester and Shade Tree Advisory Committee and the Environmental Commission to be planted utilizing No Net Loss funding.

3. Species Selection

a) Species are selected:

- Based on the recommendations contained in the NJ Shade Tree Federation's Trees for New Jersey Streets, as required by West Milford Code.
- Based on their suitability to the existing growing conditions at each site.
- Utilizing native species.

4. Tree Installation

a) All trees will be supplied and installed by private contractors selected via public bid.

5. Post-Planting Care

a) New street trees will be watered and fertilized by the adjacent property owner and/or the contractor. A form letter containing detailed instruction for maintain and protecting the trees is provided in each owner to each owner at planting time.



TREE CANOPY GOALS

Forest cover within the Township of West Milford as determined by utilizing the available data from the Highlands Council is 79.38%. Many residential areas have good forest cover which would increase overall canopy cover to over 80%. The Township will work to maintain and increase canopy coverage over time particularly on developed land with a focus on the downtown area.

The Township may wish to develop a No Net Loss policy for Township Owned Land. This would come into effect should an area of forest be cleared from land that is owned by or contains an easement to the Township. This policy would come into effect should a linear utility project be constructed through the area or if forest area is cleared to construct county or municipal infrastructure in order to maintain forest cover over time.

Such a policy could be extended to regulate tree cutting for new subdivisions with tree protection and replacement requirements being established. Such requirements could be scaled in that priority forests will lead to a higher rate of replanting and restoration while clearing of a forest in poor condition dominated by invasive woody species would require a smaller restoration ratio. The Highlands Council is currently working on a similar proposal to deal with linear development.

SUMMARY OF 2015 – 2019 OBJECTIVES TIMELINE

Objectives/Tasks					
Program Administration	2015	2016	2017	2018	2019
Continue existing administrative programs					
Training and Professional Development	2015	2016	2017	2018	2019
Review training needs and schedule training as required to maintain approved status					
Obtain CORE Training for 1 more volunteer					
Hazard Tree training for one other key employee (if funding is available)					
Community Shade Tree Establishment Ordinance	2015	2016	2017	2018	2019
Review and adopt the NJ Highlands Council Model Ordinance when developed					
Public Education, Awareness and Outreach	2015	2016	2017	2018	2019
Submit Annual Application for Tree City Recognition					
Submit two press releases to increase awareness of the Shade Tree Program and the benefits associated with the resource.					
Tree replacement program outreach					
Arbor Day Celebration	2015	2016	2017	2018	2019
Conduct an Annual Arbor Day Celebration					
Tree Inventory and Assessment	2015	2016	2017	2018	2019
Complete Inventory report and incorporate into daily management activities					
Identify needs and desires from the street tree inventory					
Apply for CSIP funding to complete an inventory of parks and other public property					
Hazard Tree Management and Evaluation	2015	2016	2017	2018	2019
Conducted a hazard tree survey, apply for CSIP funding to complete the survey and remove the highest priority trees					
Storm Damage Assessment	2015	2016	2017	2018	2019

Continue with current procedures					
Tree Maintenance and Removals	2015	2016	2017	2018	2019
Continue ongoing tree maintenance dependent upon budget					
Insect and Disease Management	2015	2016	2017	2018	2019
Informally monitor forest health issues throughout the Township					
Wildfire Protection	2015	2016	2017	2018	2019
Investigate becoming a Firewise Community					
Tree Planting	2015	2016	2017	2018	2019
Identify vacant planting sites					
Utilize No Net Loss funding to replant trees					
Investigate creating a Tree Trust for future tree planting projects					
Waste Recycling	2015	2016	2017	2018	2019
Settle legal issues with current contractor					
Develop a policy for residents to utilize wood from trees removed in the Township					
Sidewalk Maintenance	2015	2016	2017	2018	2019
No activity					
Storm water Management	2015	2016	2017	2018	2019
Create a Green Storm Water Management System					
Other	2015	2016	2017	2018	2019
Invasive Species Control					
Restoration of Riparian Areas					
Forest Stewardship Plans on Preserved Land					
No Net Loss	2015	2016	2017	2018	2019
Complete Planting Plan					
Plant 500 trees Spring 2015					
Plant 1000 trees Fall 2015					
Plant 500 trees Spring 2015					
Plan Preparation and Evaluation	2015	2016	2017	2018	2019
Apply for Green Communities funding to develop a second five year plan					

APPENDIX
SHADE TREE ORDINANCE

*Township of West Milford, NJ
Tuesday, May 6, 2014*

Chapter 500. ZONING

Article IX. General Provisions and Design Standards

§ 500-84. Shade trees.

A. Planting.

- (1) Trees shall be planted along the public right-of-way varying by tree type every 50 feet.
- (2) Trees shall be a minimum of 10 feet in height and a minimum of 50 to 75 feet apart.
- (3) Each tree shall have a minimum caliper of 3 1/2 inches measured two feet above the ground.

B. All trees shall be nursery-grown stock and shall have a root ball wrapped in burlap, with a replacement guarantee by the developer for two years.

CHAPTER 371 TREE REMOVAL

[HISTORY: Adopted by the Township Council of the Township of West Milford as Sec. 5-10 of the 1976 Revised General Ordinances. Amendments noted where applicable.]

GENERAL REFERENCES

Zoning — See Ch. 500.

§ 371-1 Findings: purpose.

The Township Council does herein decide and find that the uncontrolled destruction, removal and cutting of trees upon lots and tracts within the Township has resulted in creating increased municipal costs for drainage control and has further caused increased soil erosion and stream pollution, decreased the fertility of soil, increased dust which has further deteriorated property values and has further rendered land unfit and unsuitable for its most appropriate uses and has caused deterioration in the value of improved and unimproved real estate within the Township with a resulting adverse effect upon the health, safety and general well-being of the inhabitants. The aforesaid findings have caused the passage of this chapter to regulate and control the indiscriminate and excessive cutting of trees in the Township.

§ 371-2 Regulation of tree removal; compliance required.

It has been determined, therefore, that no person shall cut or remove any tree upon any lands within the Township, unless such action accomplishes a useful purpose and is done in accordance with the regulations and provisions of this chapter.

§ 371-3 Definitions.

All definitions herein contained shall be considered in conformance with those set forth in the Zoning Ordinance of the Township of West Milford, N.J., 1969, and as amended, and as in Chapter 500 of the Code of the Township of West Milford, with the following additions:

TOWNSHIP FORESTER

The duly appointed officer of the Township given the authority to enforce the provisions of this chapter.

TREE

Any living deciduous tree having a trunk of a diameter greater than four inches, measured at a point 4 1/2 feet above the ground, or any living coniferous tree having a trunk of a diameter greater than four inches, measured at a point 4 1/2 feet above the ground, or a height greater than six feet. Nothing in this chapter is intended to conflict with or supersede the provisions of the Soil Erosion and Sediment Control Act of the State of New Jersey, Chapter 251 of the Public Laws of New Jersey.

Editor's Note: See N.J.S.A. 4:24-39 et seq.

§ 371-4 Permit required.**A.**

Application. Any person desiring to destroy, cut or remove any such tree which is not excepted under terms of subsection 5-10.3 shall apply to the Township forester for a permit to remove such tree.

B.

Information.

(1)

The applicant shall identify by block and lot the land upon which the tree is located and shall disclose the name and address of the owner, tenant or duly authorized agent of such owner or tenant, and the applicant shall also identify the species and generally designate the location of the tree sought to be cut, removed or destroyed.

(2)

A tree removal permit, if required, shall be obtained prior to the approval of all minor and major subdivisions, site

plans, building applications and certificates of occupancy on a map which shall include the following:

(a)

Area of tract or parcel of land.

(b)

General location of wooded areas and trees to be removed.

(c)

Exact location of rare or historic trees as required by the Township forester.

(d)

General topographic conditions of site as derived from USGS map of the West Milford area.

§ 371-5 Fees.

[Amended 4-16-1986 by Ord. No. 1986-6; 6-6-1990 by Ord. No. 1990-19

Editor's Note: Amended at time of adoption of Code (see Ch. 1, General Provisions, Art. 1).

]

Upon application for a permit, the applicant shall pay to the Township the fees set forth in Chapter 135, Fees and Costs.

§ 371-6 Criteria for determination of permitted tree removal.

As a basis for determining permitted tree removal, the duly appointed officer shall give due consideration to the following:

A.

For purposes other than commercial lumbering. The lands covered by each application shall be inspected by the Township Forester who shall issue a permit upon a finding that the destruction or removal to be permitted would not impair the growth and development of the remaining trees on the applicant's property or adjacent properties, would not cause soil erosion, would not impair existing drainage patterns, would not lessen property values in the neighborhood and would not impair substantially the aesthetic values of the area. The Township Forester shall have the authority to affix reasonable conditions to the approval of a permit required by this chapter.

B.

For the purposes of commercial lumbering in accordance with the following restrictions:

(1)

The lumbering company or individual owner of the property in question shall file with the duly appointed officer a forest management plan approved by the New Jersey Department of Environmental Protection, Bureau of Forestry, or other professional forester. Such plan shall be subject to the approval of or disapproval of the Township Forester. Any deviation taken from this plan shall be considered a violation of this chapter.

(2)

In no case shall more than 30% of the total number of trees be removed from the entire tract.

§ 371-7 Issuance of permit.

If the applicant as defined in § 371-4 discloses that no more than five trees in excess of the size referred to aforesaid in this chapter are to be removed, cut or destroyed, or have been cut, removed or destroyed from the lot or tract of land identified in the application, then the Township Forester may waive any or all of the items listed in § 371-4 and may issue a permit for the removal of such trees.

§ 371-8 Exceptions.

Excepted from this chapter shall be:

A.

Any tree located on a tract or parcel of land 1 1/2 acres or less in size on which a residential dwelling is located.

B.

Any tree growing on property actually being used as a nursery, garden center, Christmas tree plantation or orchard.

C.

Any tree growing on land actually being used for a sanitary landfill operation or for surface mining, or on land approved for such use by the Township or applicable agencies.

D.

Any tree growing in a public right-of-way, private right-of-way, drainage or utility easement, as designated on the West Milford Township Tax Map.

E.

Any tree located on a tract or parcel of land in excess of 1 1/2 acres, to be cut for personal use as firewood by the owner of such property. Not more than five trees per acre shall be cut in any one year, and in no case shall more than 30% of the total number of trees located on such property be removed.

F.

Any tree dead or diseased as a result of natural causes, or other tree that is likely to endanger life or property.

G.

Any tree cut or removed in accordance with a management plan developed by the New Jersey Department of Environmental Protection, Bureau of Forestry, or other professional forester, and filed with and approved by the Township Forester duly appointed by the Township.

H.

Any tree located on or within 20 feet of a proposed residential structure, its well, septic system or other accessory structures.

I.

Any tree located within 10 feet of the planned paved areas of a residential driveway, provided that the alignment of the driveway is planned to save as many trees as possible.

J.

Any tree located near utility lines or substations, provided that the reason for the tree removal is related to public safety purposes.

§ 371-9 Unique and irreplaceable trees.

No person shall cut, remove or destroy upon any lands within the Township any tree considered to be unique and irreplaceable by reason of age, historical associations, or botanical rarity as determined by the Township Forester.

§ 371-10 Right of appeal.

[Amended 9-1-2004 by Ord. No. 2004-6]

The applicant shall have the right to appeal the decision of the Township Forester to the Township Administrator within 10 days of receipt of such decision. The appeal shall be by written notice to appeal. The Township Administrator shall proceed to hear such appeal upon notice to the applicant within 30 days after the filing of such notice of appeal. The Township Administrator may, in his discretion and upon complete review of the application, and after hearing the testimony of the Township Forester and the applicant, reverse, modify or affirm the aforesaid decision.

§ 371-11 Interpretation.

All trees protected by this chapter shall be protected against construction damage, soil deposits or other activities to the satisfaction of the Township Forester.

§ 371-12 Violations and penalties.

Any person violating any provisions of this chapter shall be, upon conviction, subject to the penalty as provided in Chapter 1, Article III, General Penalty, of the Township Code.

§ 135-38 Tree removal.

In accordance with Chapter 371, Tree Removal, upon application for a permit, the applicant shall pay to the Township the following fees:

A.

For any application consisting of five acres or less: \$25.

B.

For each additional acre: \$5.

C.

There is no maximum permit fee.

§ 256-3 Trees, shrubbery and other physical features.

A.

No person in an open space and recreation area shall damage, deface, cut, carve, transplant, remove any tree or plant or injure the bark, or pick the flowers, fruits, berries or seeds, of any tree or plant. Nor shall any person attach any rope, wire, or other contrivance to any tree or plant.

B.

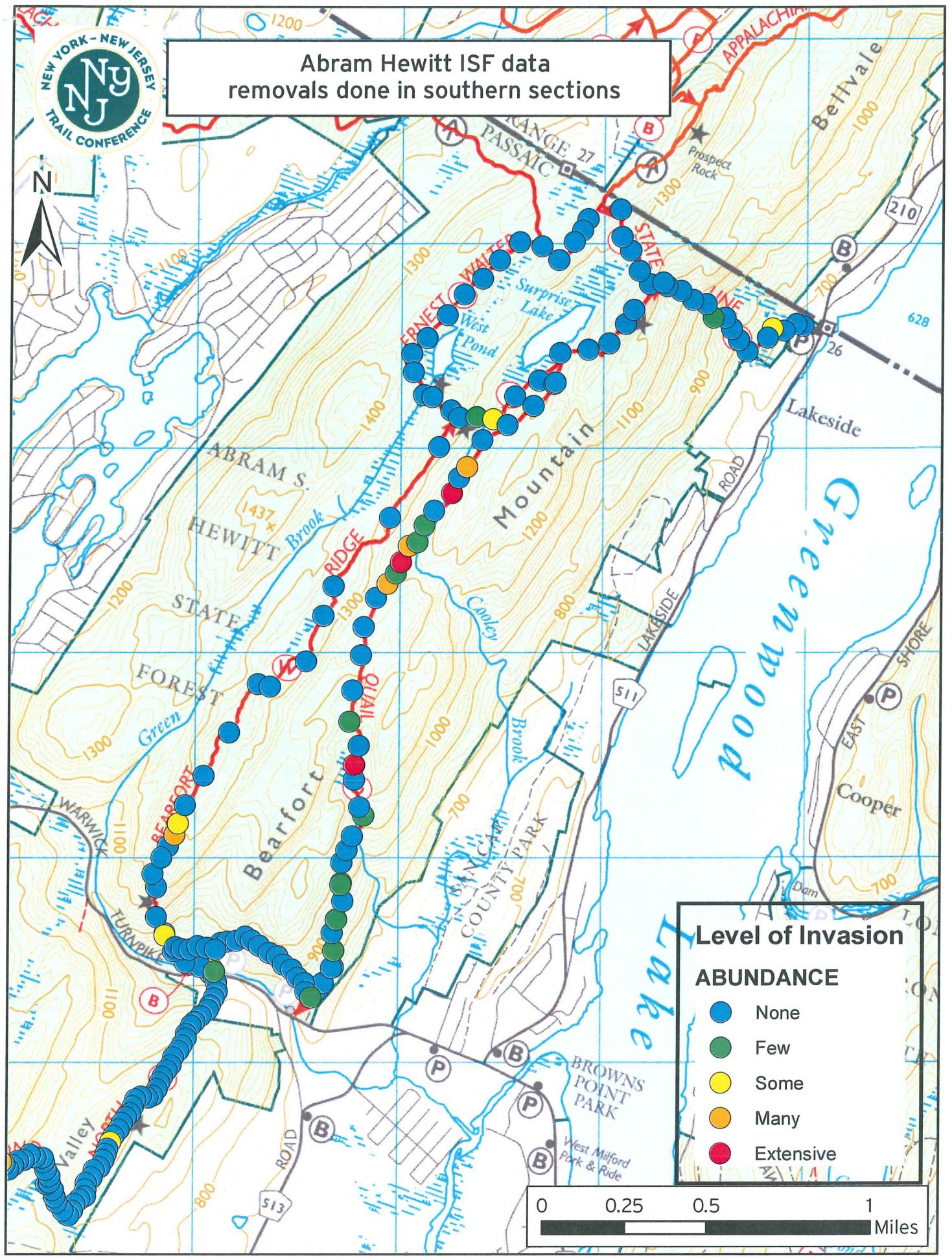
No person in an open space and recreation area shall dig in or otherwise disturb grass areas or in any other way injure or impair the natural beauty or usefulness of any area.

C.

No person shall excavate or remove any rock, soil, stone or sand from an open space and recreation area.



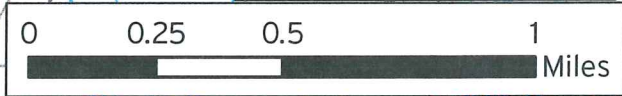
Abram Hewitt ISF data removals done in southern sections



Level of Invasion

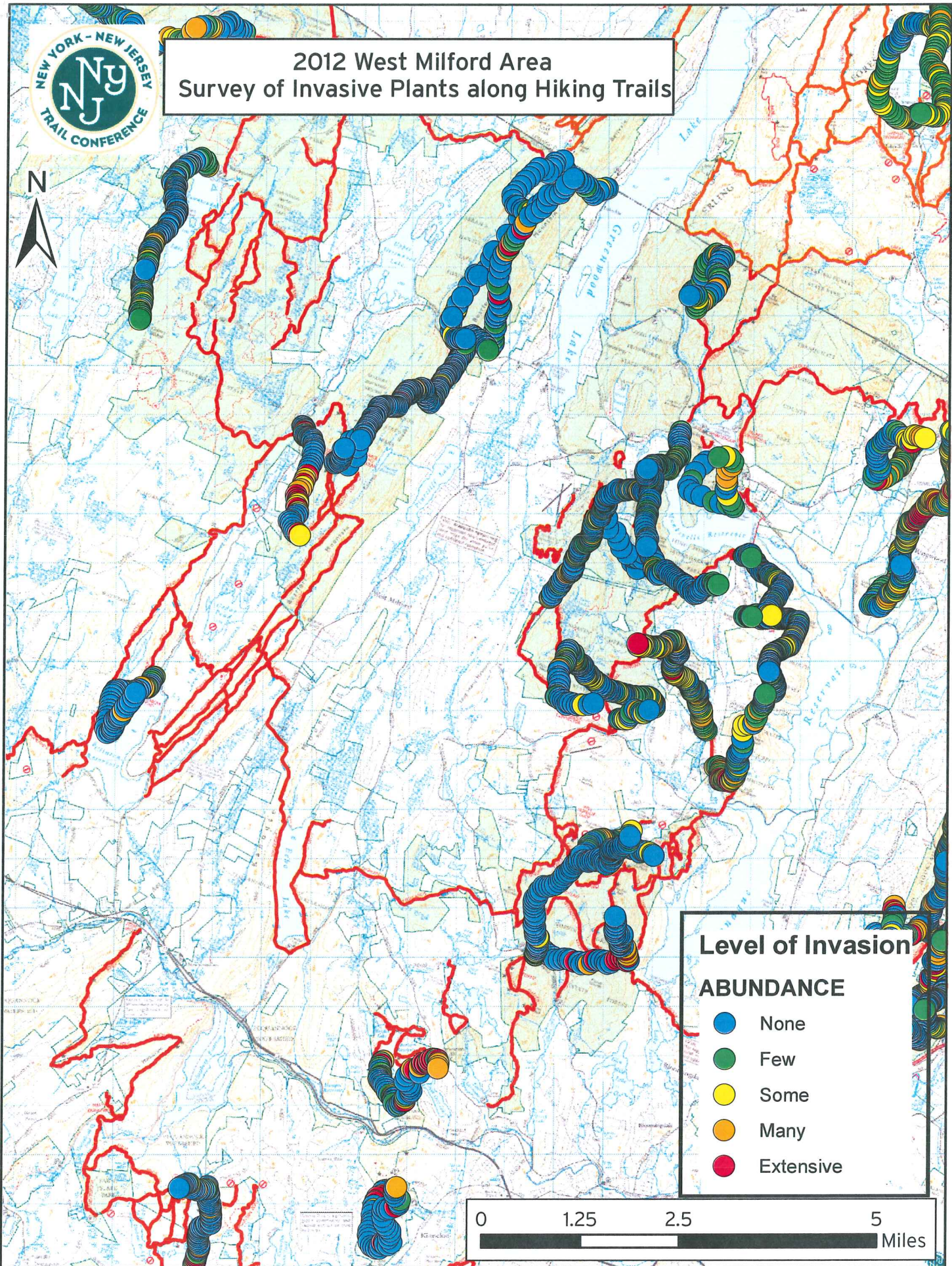
ABUNDANCE

- None
- Few
- Some
- Many
- Extensive





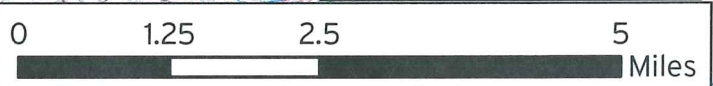
2012 West Milford Area Survey of Invasive Plants along Hiking Trails



Level of Invasion

ABUNDANCE

- None
- Few
- Some
- Many
- Extensive



Township of West Milford

Passaic County, New Jersey

~ Resolution 2014 - 322 ~

RESOLUTION OF THE TOWNSHIP OF WEST MILFORD, COUNTY OF PASSAIC, STATE OF NEW JERSEY ACCEPTING THE COMMUNITY FORESTRY MANAGEMENT PLAN PREPARED BY FORESTRY CONSULTANT RONALD FARR AND THE WEST MILFORD ENVIRONMENTAL COMMISSION THROUGH A GREEN COMMUNITIES 2013 GRANT FROM THE NJDEP DIVISION OF PARKS & FORESTRY

WHEREAS, the Township of West Milford had authorized, through Resolution 2013-113, the application for a NJDEP Green Communities 2013 Grant for the development of a Community Forestry Management Plan through the collaboration of the West Milford Environmental Commission and Certified Forester Ronald Farr; and

WHEREAS, the Township was awarded a grant in the amount of \$3000.00, with an in-kind match (for services) of \$3000.00, and entered into an agreement with the NJDEP Division of Parks and Forestry for Grant # PF13-153, authorized by the Mayor and Township Council through Resolution 2013-213; and

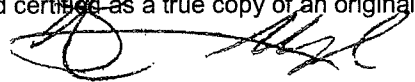
WHEREAS, the Community Forestry Management Plan 2014-2018 was developed with the assistance of grant consultant and Certified Forester Ronald Farr and approved by the Township of West Milford Environmental Commission and West Milford Planning Board prior to being presented to the Mayor and Township Council at a regular meeting held on September 17, 2014.

NOW, THEREFORE, BE IT RESOLVED that, having reviewed and approved the Township of West Milford Community Forestry Management Plan 2014-2018, the Mayor of the Township of West Milford is hereby authorized and directed to endorse said plan, with a copy to be submitted for approval to the NJDEP Division of Parks and Forestry.

BE IT FURTHER RESOLVED that the Chief Financial Officer is hereby authorized to effectuate the processing of the grant funds received under this Green Communities 2013 Grant #PF 13-153.

Adopted: October 1, 2014

Adopted this 1st day of October, 2014
and certified as a true copy of an original.



Antoinette Battaglia, Township Clerk

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
New Jersey State Forestry Services

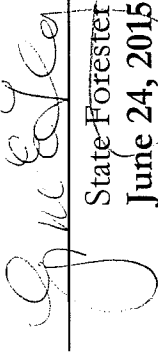
Hereby presents the

Certificate of Approval

awarded to

Township of West Milford

*For the successful completion of an approved
Community Forestry Management Plan in accordance with the
New Jersey Shade Tree and Community Forestry Assistance Act,
P.L. 1996, Chapter 135.*


State Forester
June 24, 2015