

**2015 – 2019
COMMUNITY FORESTRY MANAGEMENT PLAN**

Byram Township

**Sussex County
New Jersey**



Mayor & Council

James Oscovitch, Mayor
Scott Olson
Marie Raffay
Nisha Kash
David Gray

Township Manager

Joseph Sabatini

Department of Public Works

Adolf Steyh, Superintendent



Environmental Commission

John Boyer, Chairperson
David Gray, Township Council Liaison
Michelle Rehse, Vice Chair
Donna Koenig
James Myers
James Reinhold
Catherine Varian
Kathleen Parrish
Lisa Shimamoto, Planning Board Representative
Margaret McGarrity, Secretary

Plan Prepared by

Farr Forestry Services
6 Ricker Road
Newfoundland, NJ 07435
farrforest@yahoo.com
973-208-8165

**Farr
Forestry
Services, LLC**

TABLE OF CONTENTS

MUNICIPAL INFORMATION	
MUNICIPAL INFORMATION FORM.....	4
INTRODUCTION	
SCOPE.....	5
MISSION STATEMENT.....	5
OVERALL PROGRAM GOALS.....	5
HAZARDS AND LIBABILITY.....	6
COMMUNITY OVERVIEW	
THE TOWNSHIP OF BYRAM.....	6
BYRAM SHADE TREE PROGRAM.....	7
RELATION TO THE MASTER PLAN.....	8
RELATION TO THE HIGHLANDS REGIONAL MASTER PLAN.....	9
THE FIRST FIVE YEARS A REVIEW OF ACCOMPLISHMENTS.....	11
PROGRAM ADMINISTRATION	
SHADE TREE PROGRAM ADMINISTRATION.....	13
SHADE TREE ORDINANCE.....	16
SHADE TREE POLICIES.....	17
MAPS	
TOWNSHIP STREET MAP.....	18
HIHGLANDS COUNCIL MAPS.....	19
TRAINING AND PROFESSIONAL DEVELOPMENT	
TRAINING AND PROFESSIONAL DEVELOPMENT.....	22
PUBLIC EDUCATION, AWARENESS AND OUTREACH	
PUBLIC EDUCATION, AWARENESS AND OUTREACH GOALS.....	24
ANNUAL BUDGET AND RESOURCES	
OVERVIEW.....	26
STATEMENT OF PLAN IMPLEMENTATION	
TREE INVENTORY AND ASSESSMENT	
INVENTORY AND ASSESSMENT GOALS AND OBJECTIVES.....	28
COMMUNITY FORESTRY ORDINANCE ESTABLISHMENT	
ORDINANCE REVIEW AND ADOPTION.....	26
HAZARD TREE ASSESSMENT AND MANAGEMENT	
HAZARD MANAGEMENT GOALS AND OBJECTIVES.....	30
TREE PLANTING	
TREE PLANTING GOALS AND OBJECTIVES.....	31

TREE MAINTENANCE AND CARE	
TREE MAINTENANCE AND CARE.....	33
ANNUAL WORK PLAN	
2015-2019 GOALS.....	35
COMMUNITY STEWARDSHIP INCENTIVE PROGRAM	
1. TRAINING.....	37
2. ORDINANCE ESTABLISHMENT.....	37
3. PUBLIC EDUCATION AND AWARENESS.....	37
4. ARBOR DAY	37
5. TREE INVENTORY.....	38
6. HAZARD TREE ASSESSMENT.....	38
7. STORM DAMAGE ASSESSMENT.....	38
8. TREE MAINTENANCE AND REMOVAL.....	39
9. INSECT AND DISEASE MANAGEMENT.....	39
10. WILDFIRE PROTECTION	40
11. TREE PLANTING.....	41
12. TREE RECYCLING.....	41
13. SIDEWALK MAINTENANCE.....	42
14. STORMWATER MANAGEMENT.....	42
15. OTHER GOALS.....	42
PLAN PREPARATION AND EVALUATION	
PLAN PREPARATION.....	43
SUMMARY OF 2015-2019 OBJECTIVE	
IMPLEMENTATION SCHEDULE.....	44

1.

MUNICIPAL/COUNTY INFORMATION FORM

Municipality Byram Township
County Sussex County
Address 10 Mansfield Drive
Byram, NJ 07874

Contact Name and Title Township Manager Joseph Sabatini
Phone Number 973-347-2500 ext. 129
Fax # and E-mail 973-347-0502 jsabatini@byramtwp.org
Organization Name Byram Township and Byram Township Environmental Commission

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

Date of Management Plan Submission April 2015

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 _____
State Forester Approval Date _____

2. INTRODUCTION

SCOPE

This document outlines the programs, policies and procedures by which shade tree resources within Byram Township will be managed during the period January 2015 – December 2019.

The objectives in this second five-year plan address street trees, park trees, and trees on other public grounds. This plan will build on the successes accomplished during the first five year planning period.

MISSION STATEMENT

The overall goal of Byram Shade Tree Program is to improve the quality of life throughout the Township by maximizing the environmental, social and economic benefits of trees to the community while minimizing expenditures and liabilities. The Township will maintain existing forest cover and increase forest cover in developed areas and preserve forested streetscapes on its rural roads.

OVERALL PROGRAM GOALS

The New Jersey Community Forestry Council has identified fifteen Community Stewardship Incentive Program (CSIP) practices that together compromise a complete and comprehensive community forestry program.

Within each of the plan elements that follow, existing Township programs, policies and procedures are described, intermediate and 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. Maximize the benefits of trees to the community.
3. Maximize long-term stability and sustainability in the shade tree and traditional forest resource.
4. Minimize the risk of trees to public safety.
5. Optimize the balance between tree health, maintenance costs and budgetary constraints.
6. Minimize conflicts between trees and infrastructure.
7. Improve and maintain public interest, appreciation, knowledge and support for public shade tree programs and encourage volunteer participation.
8. Encourage the planting and proper care of trees on private property.
9. Meet all eligibility requirements of the NJ Shade Tree & Community Forestry Assistance Act.
10. Fulfill the planting requirements of the No Net Loss Funding, planting 1,058 trees within the Township.

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 pro-active shade tree program striving to prevent, anticipate and correct such problems will maximize the benefits of trees to the community while minimizing the threat to public safety and exposure to liability. All elements of this Community Forestry Management Plan are designed to optimize the balance between tree benefits and risks.

Byram Township 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 this Plan is to direct available resources toward the greatest needs and to 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.

3. COMMUNITY OVERVIEW

Accounts of Byram Township's history vary. However, it is said that the ancestors of the Lenape Indians were the first inhabitants of this area, arriving in post-glacial times, perhaps as long as 11,500 years ago. Lenape is generally used to refer to Indian Groups who lived in what is now New Jersey and is most often translated as "the ordinary people".

The first Europeans to explore Sussex County were the Dutch in the 17th century. In 1753, when the county was officially formed, there were only about 600 inhabitants.

Byram Township was established on February 5, 1798, having been separated from the vast area that was then Newton. The name honored the Byram Family, surveyors who had settled in the area before the Revolution. In 1798, the head of the family was Jephthah Byram, who is buried in the Sparta Cemetery.

Between 1798 and 1957, Byram's borders changed six times, including the secession of Hopatcong in 1898 and Stanhope in 1904.

Currently, Byram is known as "The Township of Lakes", having more than two dozen lakes and ponds, most of the large ones heavily settled.

Byram covers more than 22.48 miles and its current population is estimated around 8,600, based upon the 2000 Census (revised).

Original **2000 CENSUS DATA**

	BYRAM	NJ	US
POPULATION			
	Number	Number	Number
Total population	8,254*		
Square miles (land)	21.07		
Population per square mile	391.78	1,134.42	79.56
GENDER			
	Number	Pct	Pct
Male	4,098	49.6	48.5
Female	4,156	50.4	51.5
AGE			
	Number	Pct	Pct
15 or younger	1,988	24.1	20.9
16-24	867	10.5	11.9
25-44	2,674	32.4	31.2
45-64	2,224	26.9	22.7
65+	501	6.1	13.2
	Number	Number	Number
Average age (years)	34.33	37.19	36.22
RACE AND ETHNICITY			
	Number	Pct	Pct
White	7,905	95.8	72.6
Black or African American	80	1.0	13.6
American Indian and Alaska native	5	0.1	0.2
Asian	116	1.4	5.7
Native Hawaiian and other Pacific islander	5	0.1	0.0
Some other race	53	0.6	5.4
Two or more races	90	1.1	2.5
Hispanic or Latino	243	2.9	13.3

Sources: U.S. Census Bureau, 2000 Census; ePodunk

* Later revised to about 8,600.

Byram is bordered on the east by Hopatcong and Stanhope, on the west by Andover Borough, Andover Township, Green Township and Allamuchy Township, on the north by Sparta and on the south by Mount Olive Township.

BYRAM'S SHADE TREE PROGRAM

Byram and its numerous lakes have reaped the benefits of substantial forest cover throughout the Township. This forest cover can be seen in the Highland's map found at the end of this section.

The Township has an excellent foundation on which to build a successful community forestry program, with funding and a dedicated group of volunteers and Township employees. The Township looks forward to continuing in this direction with the support of residents and elected officials.

The Township's current tree resource is a mixture of traditional forest and older neighborhoods and lake communities where forest cover is dominated by native species. Newer developments tend to have very low forest cover and may serve as future planting areas should funding become available. Some of the new developments have non-native trees planted as street trees.

The Township Environmental Commission has completed two plantings recently along Lubbers Run in Neil Gylling Park and at two detention basins in C.O. Johnson Park, in partnership with the Rutgers Extension Service. The Township is also working on choosing planting areas for trees to be received through the No Net Loss Program, to help remediate the loss of trees during the road expansion on the Cat Swamp Hill section of Route 206 through the Township.

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 2004 Master Plan. **Pages 84 and 85 of the Master Plan specifically recommend that Byram develop a Community Forestry Plan and explain the numerous benefits of a healthy, well managed community forest.** The forested environs surrounding Byram's developed areas establish the character of the Township. Given that much of the development in Byram is surrounding lake communities, Byram's forests are arguably the most critical landscape component for maintaining property values, water quality, and quality of life for all residents.

Pages 8 and 9 of the Master Plan mention forests numerous times. The section "Looking Forward: Imagine" discusses retaining large areas of contiguous woodlands and restricting development and the fragmentation of the landscape in the environs.

As cited on page 10 of the Master Plan, forests are the best land use for protecting steep slopes and wetlands, for preventing erosion and flooding, and for protecting potable water supplies.

A well managed healthy forest is critical to obtainment of the following goals and objectives of Byram's Master Plan:

Page 12:

"Retaining natural features and environmental resources that give the Township its rural character and provide open space and recreation, protect water quality and maintain wildlife habitat."

Other than farmland, nothing provides rural character like large contiguous forests and tree lined roadways. As discussed above, woodlands are critical to protecting water resources and providing wildlife habitat for native species.

“Maintain the traditional character of each lake community, including preserving the environmentally sensitive and undeveloped forests surrounding these communities, which together establish Byram’s distinct land use pattern.”

Community forests are the predominant feature that give developed areas character.

“Establish transportation infrastructure.....emphasizing bike and pedestrian paths, forested rural roadways.”

Forested roadways and trails define the character of Byram and provide the natural beauty that attracts residents and visitors to the Township.

General objectives from the Master Plan for which forests and community forests are critical include:

Page 13:

“Minimize the impacts of development on Byram’s extensive forestlands, waterways and wildlife.”

The importance of forests to this objective has been discussed above.

“Encourage the preservation of the Township’s historic and cultural resources including scenic views, forests, ridges, waterways and rural roadways.”

One does not have to drive a long distance in New Jersey to find examples of areas where scenic views, ridges, and waterways have been diminished or ruined by removal of forest cover.

“Enhance the visual character and beauty of Byram through the preservation of important visual corridors (including rural forested roadways), natural or native landscaping and perpetuation of consistent architectural schemes.”

The importance of forests to this objective has been discussed above.

Page 14:

“Guide land development and the locations of community facilities to meet the community’s needs while preserving the natural environment.”

The community forestry plan and a well written tree ordinance would be the most effective way to obtain this objective from the Master Plan.

“Maintain the current character of development in each lake community, surrounded by environmentally sensitive and largely undeveloped lands...and ensure the basic water quality of the lakes.”

Trees and forests would be the most distinguishing feature in many of these lake communities and provide the most benefit for water quality by reducing runoff, and by encouraging groundwater infiltration, nutrient assimilation, and thermal moderation of storm water.

“Promote land use practices and subsequent development regulations to allow for manageable and controlled growth while protecting the rural ambiance and environmental resources of the Township.”

Street trees and a well written tree ordinance would work to meet this goal.

“Maintain the essential rural character of the Township by guarding against degradation and destruction of woodlands, steep slopes, lakes and waterways.”

This is an essential part of good planning for Byram, whose neighborhoods are all either on lakes or on sloped terrain. A healthy community forest, as well as trees on private parcels, are key to protection of slopes, lakes, rivers, wetlands, and numerous other natural resources.

Page 15:

“Protect stream corridors, wetlands, woodlands, steep slopes, groundwater recharge areas, lakes ponds and other critical areas through the enforcement of local ordinances.”

This goal will be obtained by developing an effective tree ordinance.

“Retain rural roadways, with forested roadside shoulders, wherever possible.”

Tree lined streets can also provide a rural look to a street through a developed area.

Pages 84 and 85:

This section discusses the reasons for the development of a Community Forestry Plan by the Township as well as discussing the benefits provided by forests, both traditional forested areas and community forests.

RELATION TO HIGHLANDS REGIONAL MASTER PLAN

Byram is located in the Highlands region. Approximately 98% of the Township is in the Highlands Preservation Area and must comply with the Highlands Regional Master Plan. The other 2%, which is Byram’s Route 206 center area, has been ‘opted in’ to the HRMP and so also must meet elevated environmental standards.

The Highlands Environmental Resource Inventory for Byram Township, developed by the Highlands Council in concert with the Township, describes the importance of healthy forests to the future of Byram and the rest of the Highlands:

“The forests of the Highlands Region provide essential ecosystem functions, including surface water filtration, which is important to protecting essential drinking water supplies for the Highlands Region, and air filtration, which helps to reduce the effects of global warming through carbon sequestration.

Forests also serve as habitat for animal and plant species and are critically important to maintenance of biodiversity in the Highlands Region. In addition, properly managed, they provide an important renewable resource of wood products.

Historically, forests were the predominant land cover of the Highlands. Today, more than half of the Highlands Region consists of upland and wetland forest communities (approximately 464,200 or 54% of the total land area). Despite increasing forest loss due to land development patterns, the Highlands

Region still includes extensive areas of relatively intact forest tracts. More than half of the existing forests in the Highlands Region consist of contiguous forested tracts greater than 500 acres in size.

Protecting the integrity of the Highland's forests is dependent on maintaining large contiguous forested areas and healthy forest stands. Large contiguous forest tracts have a higher degree of interior, or core forest. Interior or core forests provide important ecological values. Core forest habitat is defined as a forest located more than 300 feet from altered land or a road. Approximately 44% of the total Highlands Region forest area is a core habitat. It is important to note, however, that even those large contiguous areas may consist of many smaller parcels under individual ownership. This presents a significant challenge in efforts to manage forest for sustainable ecological or water quality benefits.

Increased fragmentation of forest tracts is occurring due to land use alterations. This fragmentation results in quantifiable landscape level changes which include increased edge, reduced forest interior, increased number of patches, forest patch isolation, and reduced habitat area. Historical and current forest losses due to changes in land development patterns and poor management activities threaten the protection of the region's wildlife, water quality, air quality, and overall ecosystem health.

Sustainable forest becomes more difficult as woodlot sizes decrease particularly with increased suburbanization occurring around large properties. Deer over abundance and introduction of non-native pest species are of significant threat to the regions forest. An over abundance of white tailed deer, in particular, is detrimental to forest health and regeneration due to over-browsing".

THE FIRST FIVE YEARS: A REVIEW OF BYRAM'S ACCOMPLISHMENTS

2010 Accomplishments

- Obtained CORE Training for one municipal employee and one volunteer.
- Completed a Forest Stewardship Plan on three Township owned properties.
- Tree removal and trimming was implemented through the Morris County Cooperative as well as with municipal employees.
- Obtained a \$7,000 federal Business Stimulus Grant to inventory and remove hazardous trees.

2011 Accomplishments

- Municipal Department of Public Works employees obtained 25 CEUs' through a training session provided by the Township's consulting forester. Obtain Training included hazard tree identification and proper pruning techniques.
- The hazardous tree inventory was completed by the Township's consulting forester, and removal of hazardous trees was begun, based on available funding and the prioritized hazard rankings provided in the inventory.

- Two trees were planted to celebrate Arbor Day. Sixty people attended the ceremony.

2012 Accomplishments

- Six Township Department of Public Works employees obtained 9 CEUs through a training session provided by the Township's consulting forester. Training included tree protection measures in connection with various types of DPW work.
- Various educational pieces were posted at the town hall and on the Township website, including a flyer on the negatives of volcano mulching, an advisory on recognizing hazard trees, and a flyer concerning stormwater and landscaping with native plants.
- Extensive plantings were completed in Brookwood Park near the new entrance, and Arbor Day plantings occurred in C.O. Johnson Park.

2013 Accomplishments

- Byram received a \$20,000 CSIP grant to remove hazardous trees along local roadways and to clean up extensive 2012 storm damage in Township parks and along Township trails.
- Arbor Day was celebrated by planting of three trees at the municipal complex.
- Byram received a \$10,000 Sustainable Jersey grant to inventory all conservation easements in Byram.
- The Township's No Net Loss Grant funding was partially restored; the Township received \$55,646 to plant trees at the Jones Lane sports fields, within Byram's Tamarack Park.

2014 Accomplishments

- A Green Communities Grant was received to complete a second five-year Community Forestry Plan.
- CEU's were obtained through an all-day Community Forestry Seminar attended by on Township Department of Public Works employee and one volunteer from the Township Environmental Commission
- The Township received a second \$317,554 No Net Loss Grant in the amount of \$317,554 to plant 1,058 trees throughout the Township.
- The Township received 200 trees through the New Jersey Tree Recovery Campaign, and distributed through Scout Troop 276 to be planted at homes in Byram.

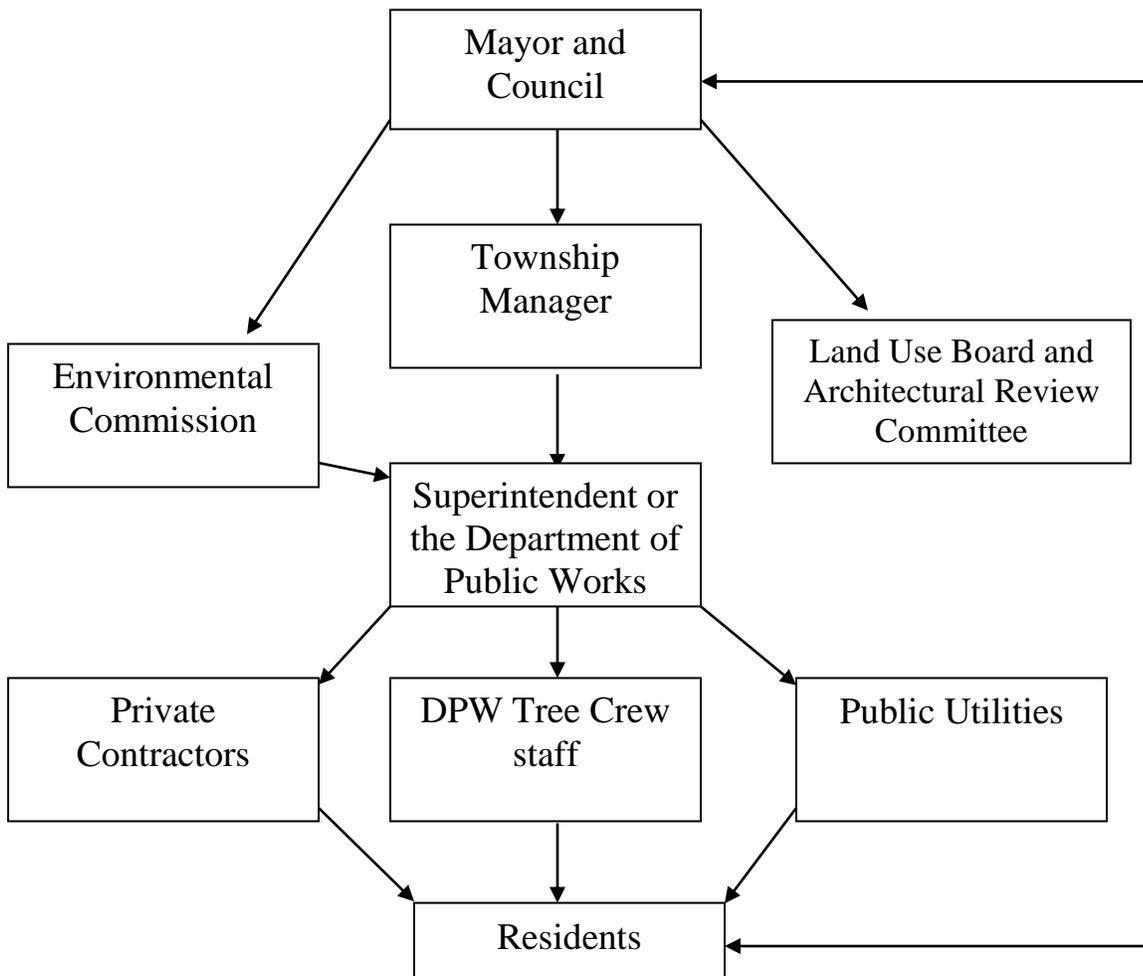
- The Township applied for Tree City Designation in February of 2014.

No tree ordinance has been adopted by Byram Township yet, as the Highlands Council will be developing a model ordinance for Highlands Communities that may be adopted by Byram through the Highlands Conformance process. It is anticipated that this ordinance will be completed in 2015 or 2016.

4. PROGRAM ADMINISTRATION

SHADE TREE PROGRAM STRUCTURE AND RESPONSIBILITIES

The Superintendent of the Department of Public Works is primarily responsible for the management of public trees in Byram Township. The DPW has a limited number of staff and funding for tree work at this time. The DPW Superintendent operates under the Township Manager and in cooperation with various other bodies, as follows.



1. Mayor and Council

- a) The Mayor is responsible for appointing members to the Environmental Commission and the Architectural Review Committee; the Township Council appoints the members of the Open Space Committee and the Recreation Committee
- b) The Mayor and Council have ultimate authority over the policies, procedures, and programs of the shade tree work and are responsible for approving the budget.

2. Township Manager

- a) Under the direction of the Mayor and Council, the Township Manager supervises the daily operations of the Township's various Departments and serves as its Chief Administrative Officer.
- b) In addition, the Township Manager is responsible for:
 - Administering personnel regulations.
 - Developing the municipal 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, Open Space Committee, Recreation Committee, and Architectural Review Committee

- a) The Environmental Commission has seven regular members and two alternates who are appointed by the Mayor, as well as a Council liaison.
- b) The Open Space Committee has seven members, all appointed by the Township Council.
- c) The Architectural Review Committee has five to eight members, Mayor (including two members of the Planning Board), appointed by the Mayor.
- d) The Recreation Committee has seven members and two alternates, all appointed by the Council.
- d) These boards are not empowered boards per state Statue 40: 641 – 14.
- e) The Environmental Commission:
 - Works with the Township Manager and Council and with the Superintendent of the Department of Public Works to help implement the Community Forestry Plan.
 - Reviews plans before the Land Use Board and makes recommendations for plantings, especially on properties along waterways and that have steep slopes
- f) The Architectural Review Committee is charged with the review of design criteria and landscaping recommendations in the Commercial Zones, especially the Village Center Zone. Along with the Environmental Commission, the ARC will help develop a list of planting sites for the No Net Loss grant funding.
- g) The Open Space Committee oversees the implementation of the Township's Forest Stewardship Plan and advises the Township Council on the preservation of permanent Township-owned open space.
- h) The Recreation Committee partners in the development of Township parks and trails, as well as in the planting of trees within Township parks.

4. Land Use Board

- a) The Land Use Board is 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 (Zoning Officer) 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 character.
 - Various other Departments and Boards notify the Department of Public Works and the Environmental Commission of plans and projects relating to shade trees and seek their input.
 - All Departments notify the Department of Public Works of tree-related hazards for emergency response.

6. Property Owners

- a) Private property owners are indirectly involved in the Shade Tree Programs to the extent that they:
 - Notify the Township of tree service requests (see procedures below).
 - 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.
 - Are required to establish and maintain lakeshore or river-bank buffers under Township ordinances, as part of Land Use Board approvals (typically for home additions or new construction).

7. Community Volunteers

- a) Community volunteers occasionally assist in completing certain projects and tasks relating to the shade trees, including planting and education programs, as well as work on Township parks and trails to promote safe and healthy forests there. Dedicated volunteers will be critical to meeting the goals of this plan due to the limited staff in the Township.

8. Superintendent of the Department of Public Works

- a) The Superintendent of the Department of Public Works manages the daily shade tree operations. The Environmental, Open Space, and Recreation Committees can provide assistance where necessary, particularly with planting projects and education programs and with park and trail work.
- b) Specifically, the Superintendent is responsible for:
 - Planting, maintaining and removing public trees.
 - Enforcing elements of the Township Code that regulate and control the planting and protection of public trees.
 - Serving notice to property owners for the removal of trees deemed necessary to reduce risks posed by dangers to public health or to public property.

- Inspecting trees on public property and determining maintenance requirements.
- Managing the Department of Public Works, which completes various maintenance tasks as well as tree removals.
- Coordinating and supervising outside contractors hired to complete tree maintenance, removal, and other tasks.

9. Department of Public Works Staff

- a) The Department of Public Works Staff is responsible for:
 - Completing tree maintenance and related tasks under the direction and supervision of the Superintendent of the Department of Public Works.
 - Providing emergency response service, when appropriate.
 - Following all current and accepted arboricultural standards and practices and abiding by all current safety standards relating to tree care operations.
 - Reporting any tree-related hazards or other problems immediately to the Superintendent of the Department of Public Works.

10. Tree Maintenance/Removal Contractors

- a) Private tree maintenance contractors are occasionally hired to assist with removal and maintenance work and provide emergency service.
- b) Contractors are, within the terms of their agreement, responsible for:
 - Completing all work to the specifications of and under the supervision of the Superintendent of the Department of Public Works in an efficient and safe manner.
 - 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, particularly PSE&G and JCP&L.
- b) While working on or around Township trees, public utilities report to the Superintendent of the Department of Public Works 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 or Township contractors in completing tree removal and maintenance work around their facilities, where necessary.
 - Maintaining the power line right-of-way through the township.

SHADE TREE ORDINANCE

Byram Township does not have a Shade Tree Ordinance at this time. The Township will work with the Forester to review sample ordinances and work with the Township Council to adopt an ordinance during

this planning period. Ideally, the Township could adopt the Highland’s model ordinance when it is developed. It is expected that this ordinance will be completed in late 2015 or 2016.

SHADE TREE POLICIES

Byram’s Shade Tree Program does not currently have formal, written policies beyond what is dictated by the applicable ordinances. However, the Program does operate in accordance with several unwritten policies, as indicated in the following sections.

TREE SERVICE REQUEST PROCEDURES

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

1. All service requests are received by or forwarded to the Superintendent of the Department of Public Works.
2. Pruning requests:
 - a) Pruning is conducted by the DPW on major local roads.
3. Tree removal requests:
 - a) The tree is inspected by the Superintendent of the Department of Pubic Works to determine the validity of the request.
 - b) If removal is justified and the tree is a Township tree, a DPW work order for removal is generated.
 - c) If removal is not justified, the requester is notified and, if necessary, a DPW work order for other corrective work is generated.
 - d) The appropriate work is completed by the DPW (or contractor) on a priority basis.
4. Emergency service requests are responded to immediately by the DPW or an outside contractor, as appropriate. All others are completed in order of priority and/or as time permits.

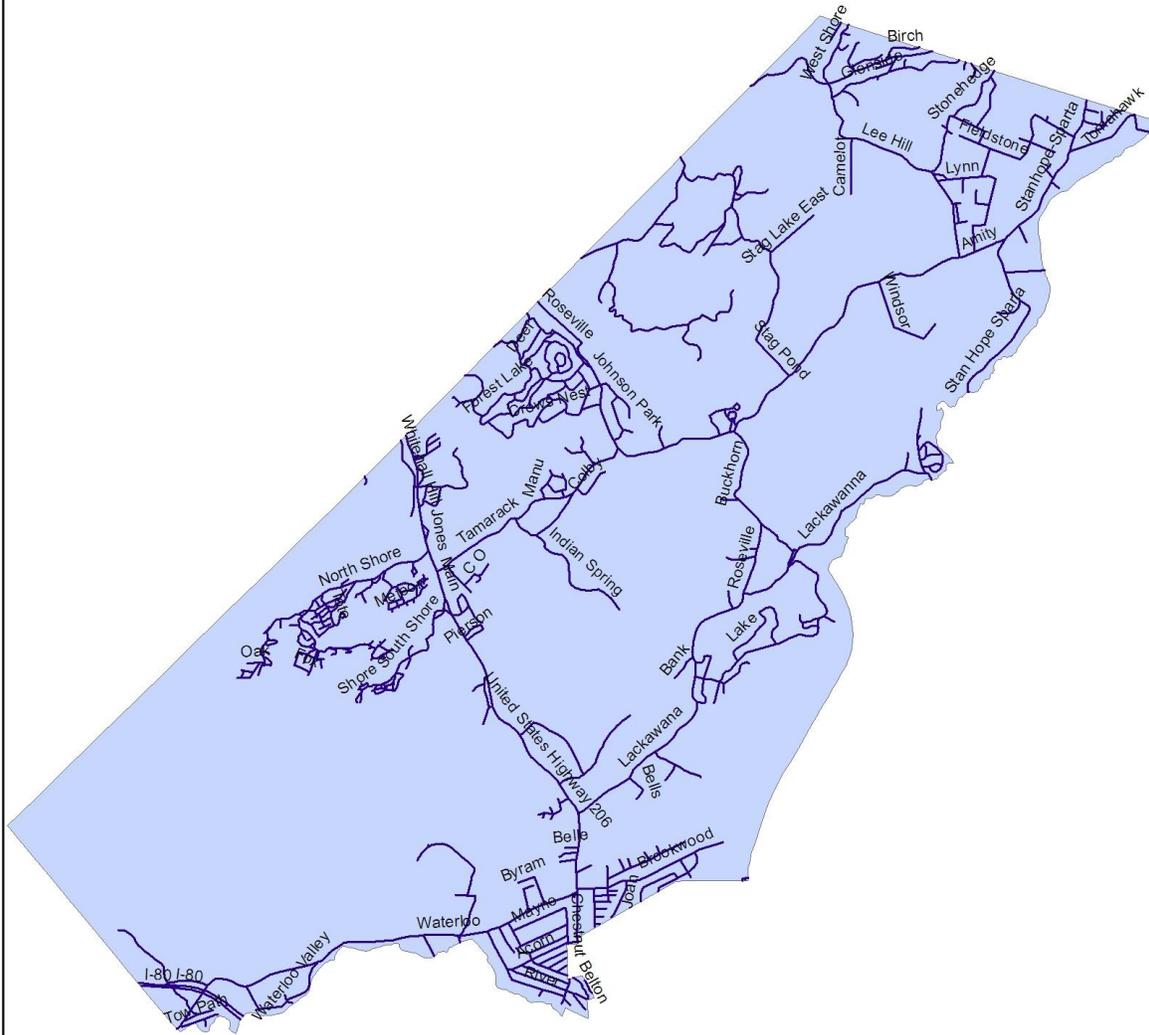
2015-2019 Administration Objectives

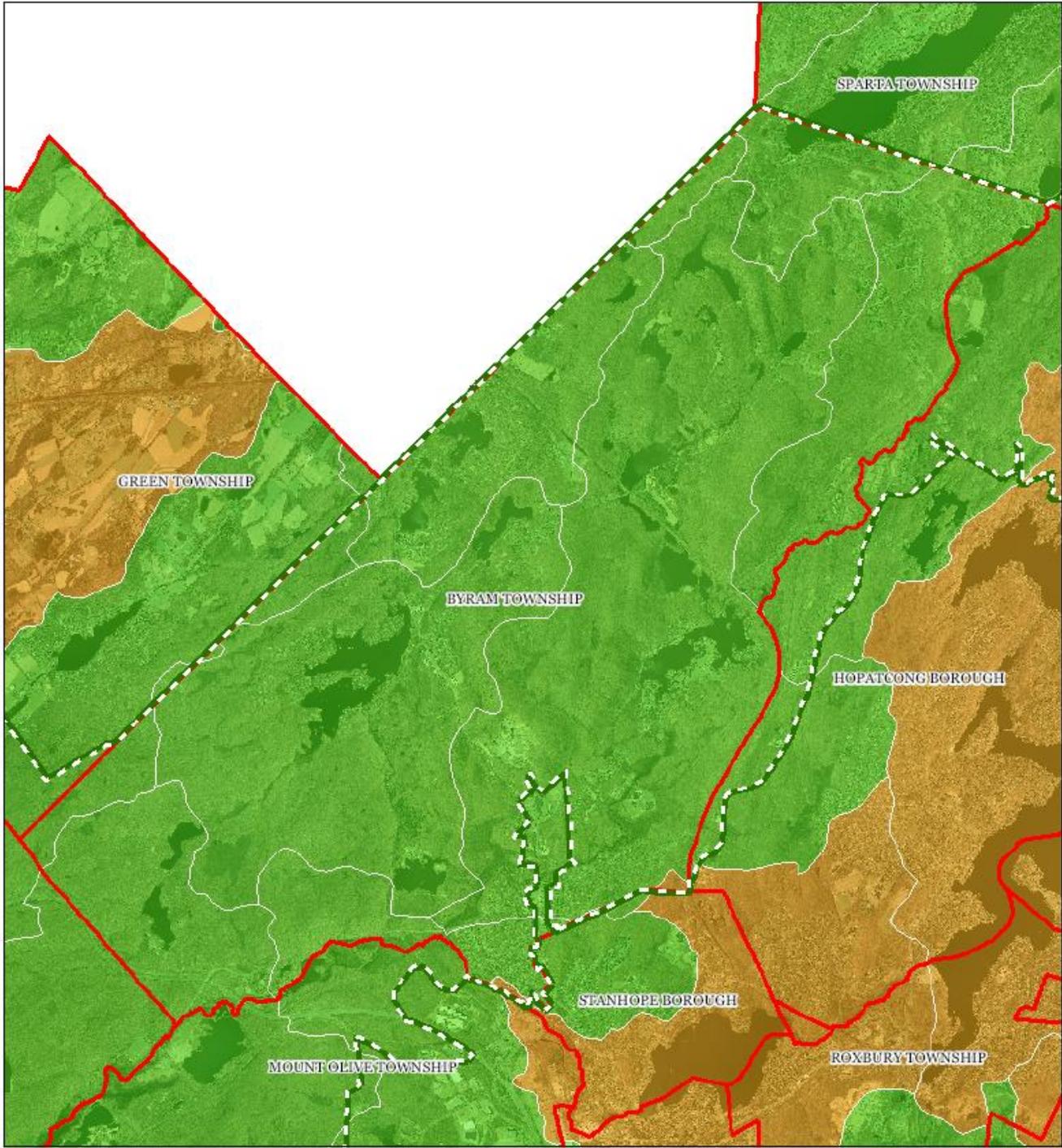
1. Ongoing Administrative Programs

- a) 2015-2019
 - Continue implementing the administrative programs, policies and procedures already in effect. This system has worked effectively and efficiently over time.
 - Work with PSE&G on the maintenance of the power line right-of-way to assure that they remove the vegetation via mechanical means. An initial meeting was held and a draft agreement was shared but no formal agreement has been signed.

5. BYRAM TOWNSHIP MAP

Byram Township Roads

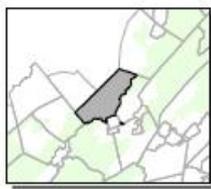
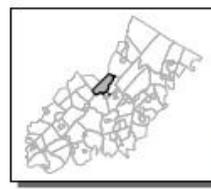




Forest Integrity by HUC14 Subwatershed

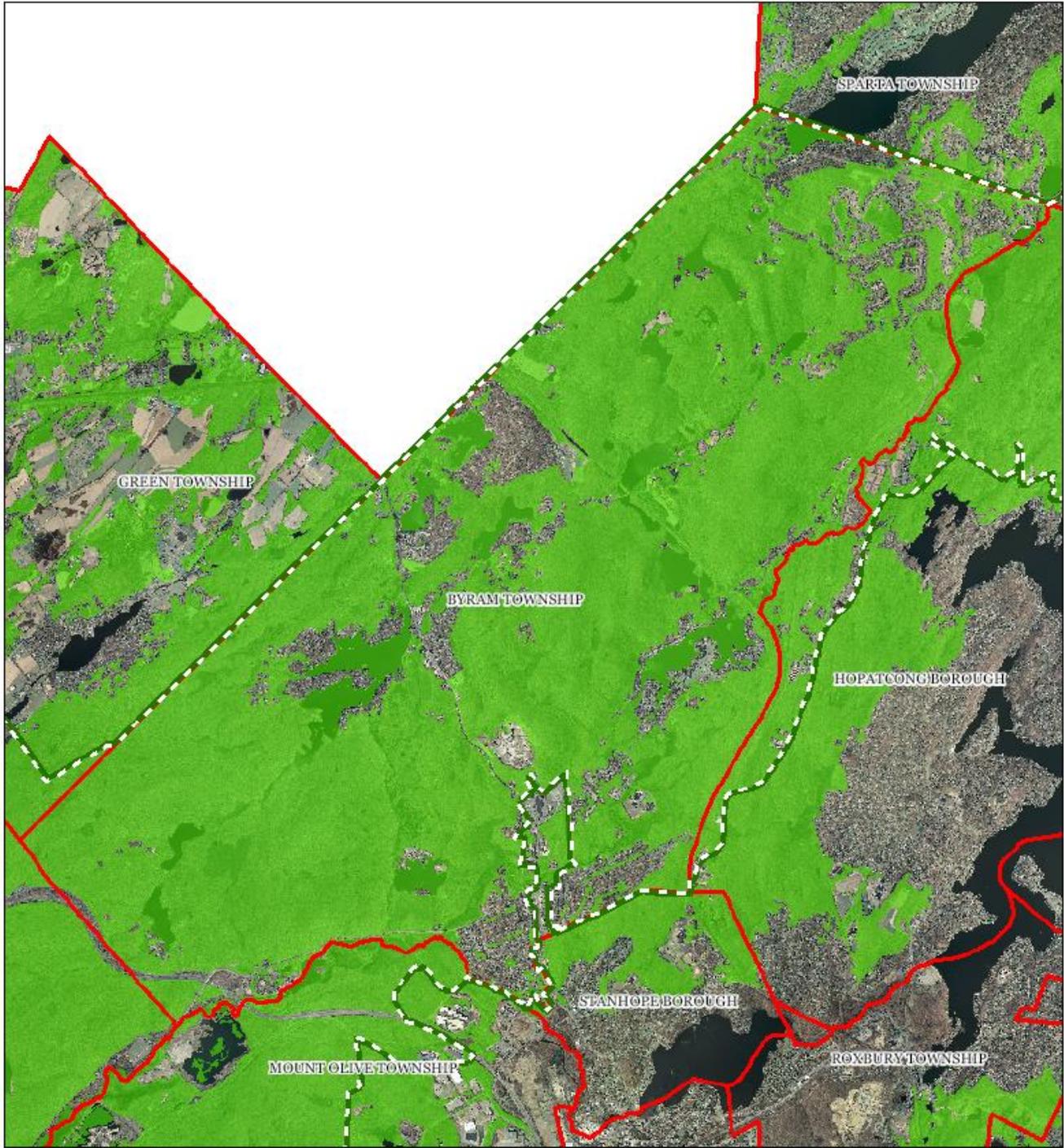
BYRAM TOWNSHIP

- Low*
- Moderate*
- High*
- Preservation Area
- Municipal Boundaries



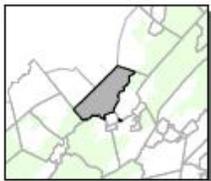
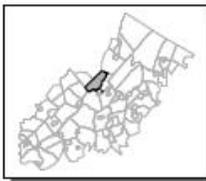
1 inch = 0.966 miles





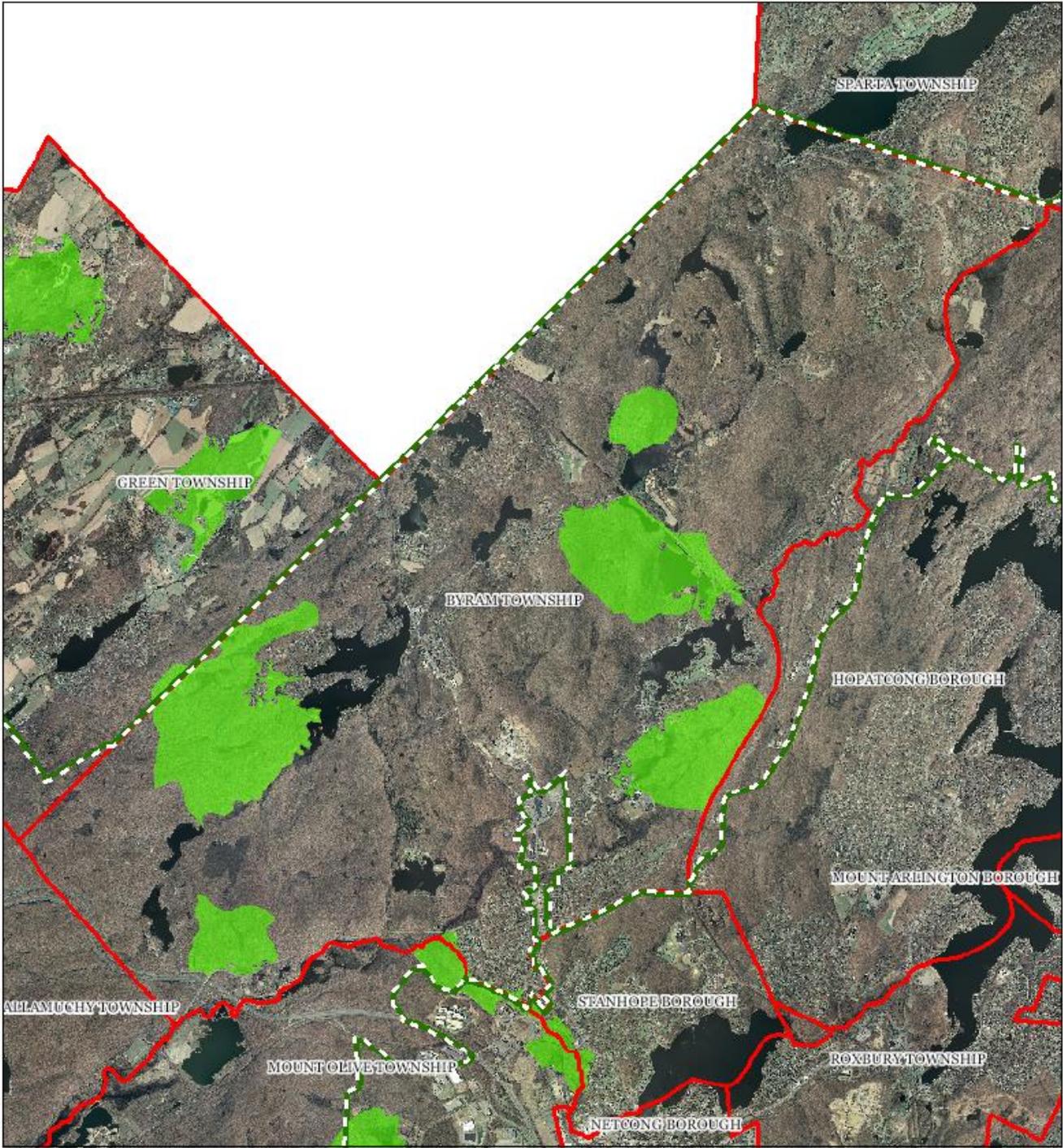
BYRAM TOWNSHIP

- Critical Wildlife Habitat
- Preservation Area
- Municipal Boundaries



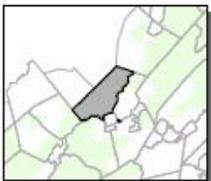
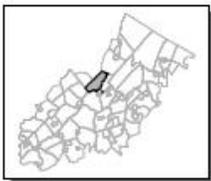
1 inch = 0.966 miles





BYRAM TOWNSHIP

- Significant Natural Areas
- Preservation Area
- Municipal Boundaries



1 inch = 0.966 miles



6. TRAINING AND PROFESSIONAL DEVELOPMENT

TRAINING AND PROFESSIONAL DEVELOPMENT GOALS

Byram Township recognizes that a continuous, comprehensive training program is necessary for individuals at all levels of the Shade Tree Program to ensure effective shade tree management over the long term. Specifically, ongoing training and professional development will:

1. Ensure that individuals within the 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.
3. Ensure that tree inspections and evaluations follow accepted standard procedures and that the results are objective, technically correct and consistent.
4. Ensure continuity in the overall level of knowledge and expertise within the Shade Tree Program as individuals leave the program and new ones join.
5. Satisfy the requirements of the New Jersey Shade Tree and Community Forestry Assistance Act Training Skills and Accreditation Program. This requires that 8 hours annually be accumulated by Township representatives, either staff or community volunteers.

EXISTING PROGRAMS, POLICIES AND PROCEDURES

1. **Training Provision:**
 - a) The Township has annually provided training and professional development opportunities relating to arboriculture and urban forestry for volunteers.
 - b) Employees of the Department of Public Works are provided with ongoing safety and related training.
 - c) The Department of Public Works provides “cross-training” by rotating its employees between various crews so that they can master a variety of skills. As a result, all of the Department of Public Works employees are interchangeable and can lend a capable hand to the tree crew when extra assistance is needed.
 - d) There is no line item in the Township budget to provide continuing education for the Department of Public Works in relation to tree management issues. However, the objectives listed below will require a minor increase in training budgets. The Township’s ability to meet these objectives may depend upon the availability of external sources of funding.

2. Licenses, Certifications and Recent Training:

- a) Members of the Environmental Commission and Township employees do not currently hold licenses or certifications directly related to arboriculture and urban forestry and are not required to.
- a) The current Superintendent of the Department of Public Works is knowledgeable in all aspects of shade tree management, tree evaluation, and tree maintenance techniques. He can seek assistance from the Township's consulting forester if necessary.

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

- a) At the time this plan was prepared, two Township employees and two volunteers from the Environmental Commission had satisfied the CORE training requirements of the New Jersey Shade Tree and Community Forestry Assistance Act Training Skills and Accreditation Program. If possible one more employee and one more volunteer should be CORE trained in this planning period. During the period of Byram's first Community Forestry Plan, employees of the Department of Public Works obtained a total of 34 CEUs in forestry skills.

CURRENT TRAINING NEEDS

The Township has identified the following areas in which training is currently needed or desired, based upon available funding:

- 1. Attempt to obtain New Jersey Shade Tree and Community Forestry Assistance Act CORE Training for one more volunteer and one more Township employee.
- 2. General urban forestry training (legal issues, community forestry planning, etc.) for members of the Environmental Commission.
- 3. Planning site analysis and species selection for Environmental Commission members and the Superintendent or the Department of Public Works.
- 4. Advanced level tree hazard identification and assessment for Department of Public Works employees.

2015-2019 OBJECTIVES

1. Ongoing Training Programs

a) 2015-2019

- Continue the annual training and professional development programs, policies and procedures based on need, in order to maintain accreditation.
- Strive to maximize the number of individuals, both employees and volunteers, who increase their level of expertise.

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

January – March, Annually

- Review training needs and upcoming training opportunities. Ensure that the Township will accumulate the necessary continuing education credits as required by the New Jersey Shade Tree and Community Forestry Assistance Act Training Skills and Accreditation Program by the end of each year.

January – December 2015-6

- Obtain CORE training for at least one Township employee.

Annual training requirements will continue to be met by Township Employees and volunteers, who will obtain sufficient continuing education units for compliance with the New Jersey Shade Tree and Community Forestry Assistance Act Training Skills and Accreditation Program.

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 Safety and Health 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 Superintendent of the Department of Public Works prior to commencing work.

7. PUBLIC EDUCATION, AWARENESS AND OUTREACH

PUBLIC EDUCATION, AWARENESS AND OUTREACH GOALS

An efficient and pro-active Shade Tree Program will enjoy strong Township and citizen support. However, ongoing public education, awareness and outreach programs are necessary to ensure continued success over the long term. Specifically, such programs will:

1. Maintain and increase interest and active support for Byram's 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 all citizens in the importance of environmental stewardship.

EXISTING PROGRAMS, POLICIES AND PROCEDURES

1. Arbor Day
 - a) Formal Arbor Day celebrations have been conducted by the Township over the last four years and will continue to be celebrated.
 - b) Programs will be sponsored and organized by the Environmental Commission.
Such programs shall include a formal proclamation and ceremonial tree plantings.
2. Tree City USA and Other Awards
 - a) Byram has not yet participated in the Tree City USA program but will work towards gaining recognition by the National Arbor Day Foundation. An application was submitted in February of 2014.
3. Media and the Byram Tree Replacement Program.
 - a) The Township's internet web site (<http://byramtwp.org/>) will be routinely used to post announcements relating to the Shade Tree Program, such as the *Byram Tree Replacement Program* and *No Net Forest Loss plantings*.
 - b) The *Byram Tree Replacement Program* will also be announced via the Township Calendar or Newsletter.
4. Property Owner Relations
 - a) The Township will use the Township website, form letters and handouts to facilitate communications with property owners, such as flyers on volcano mulching, native species, pruning, the maintenance and protection of newly planted trees, or news concerning Gypsy Moth spray programs.

2015-2019 OBJECTIVES

1. Ongoing Public Education, Awareness and Outreach Programs
 - a) 2015 – 2019
 - Disseminate information at the annual Byram Day about the successes of the program.
 - Continue implementing all existing programs, policies and procedures in a manner that improves and maintains the Shade Tree Program's visibility and maximizes the number of people and groups that are reached.
 - Continually review all existing public relations programs and materials and update them, as necessary. Education materials and programs will be handled through the Environmental Commission.
 - Submit two articles annually to the print media to promote the benefits of trees and the Shade Tree Program or about forest health risks such as Gypsy Moth and the emerging Emerald Ash Borer in New Jersey.

8. ANNUAL BUDGET AND RESOURCES

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

Completion of some objectives contained in this Plan will require resources that the Township may not be able to meet internally. The Township’s ability to satisfy these objectives may depend on obtaining additional funding through external sources and grant programs. The figures below are based upon estimated time spent on tree related issues, as no employee is assigned full time to tree work.

EMPLOYEE SALARIES AND WAGES

Township Manager
Superintendent of the Department of Public Works
DPW personnel
Clerical assistance

Subtotal (total pro-rated by percent of time dedicated to the Shade Tree Program)	\$18,000.00
--	-------------

OPERATIONS

Contracted services
Training
Materials and supplies
Consulting
Other miscellaneous expenses

Subtotal	\$ 10,000.00
-----------------	--------------

TOWNSHIP EQUIPMENT

Various chain saws
Various small tools

Subtotal (estimated annual value based on 5-10 year service life, maintenance, repairs, etc.)	\$15,000.00
--	-------------

TREE PLANTING

Other than grant funding, the Township has limited budgets for tree planting. The Township Environmental Commission uses some of its budget annually for Arbor Day plantings and a recent rehabilitation of the municipal building included limited landscaping. The Township currently has two

No Net Loss grants to plant trees in Township parks and on other public properties throughout Byram. The No Net Loss grants will together extend over most of the current planning period. The figure shown here is for the approximately \$700 annually spent from Township budgets, plus the two No Net Loss grants, which were obtained during the last two years.

Subtotal \$ 373,900

WASTE RECYCLING

Leaf and wood disposal (branches less than 4" diameter)
Township facilities and equipment for storing,
Processing and distributing recycled tree waste

Subtotal \$ 6,000.00

VOLUNTEER SERVICES

Environmental Commission, Open Space and Recreation Committee members, plus volunteers from the Environmental Commission's list of Trail Volunteers and from the Salt Shakers Running Club, a group that meets in a local restaurant and partners with the Environmental Commission on trail cleanups.

Subtotal (200 hours per year @ \$20.55) \$ 4,110.00

TOTALS

Township Resources \$ 417,010 (including value of 2 No Net Loss grants)

Value of Volunteer Contributions \$ 4,110.00

2010

Tree Removal \$ 2,775
Pruning \$ 500

2011

Tree Removal and Pruning \$ 5,000

2012

Tree Removal and Pruning \$ 6,000

2013

Tree Removal and Pruning \$36,000

2015-2019 Budget Objectives

1. Ongoing Budget

b) 2015-2019

- The budget for Shade Tree related projects should be maintained at current levels with slight yearly increases when feasible.
- Volunteer hours should be tracked closely, as their number of volunteers and their hours will increase over time with the implementation of this plan.
- Accounting of staff time dedicated to tree related issues should be closely monitored to provide a more accurate accounting of expenses related to trees through the year.
- More data is required concerning the operating costs of the Township leaf and branch recycling operations.

9. STATEMENT OF PLAN IMPLEMENTATION

TREE INVENTORY AND ASSESSMENT GOALS

The Township does not currently have a full inventory of its street trees, although it does have a Hazardous Tree Inventory and spreadsheet, developed in 2011 under a federal Business Stimulus Grant. The Township will investigate developing a street tree inventory in areas with major developments that have sidewalks and street trees, including the recent landscaping of the Route 206 improvements (NJDOT landscaping plans), so that it can be used as an effective shade tree management tool. The goals of the 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 progress toward the impact of management activities on the tree population and the overall goals of the Shade Tree Program.
3. Improve or establish pro-active maintenance programs (e.g. systematic tree pruning, implementing young tree developmental pruning to reduce utility conflicts and structural failures in the future, etc.).
4. Improve the efficiency of daily tree management activities by using the data to identify, prioritize and schedule planting, maintenance and hazard abatement needs.

EXISTING PROGRAMS, POLICIES AND PROCEDURES

1. Tree Inventory

a) The Township does not have a current inventory of all street trees. The Township would benefit by having such information for areas of major development (subdivisions with sidewalks and street trees and the Route 206 corridor, including sections of Lackawanna Drive, Waterloo Road, and Brookwood Road landscaped during the recent Route 206 improvements, which could be stored in a computerized database where all trees would have a designated number and where past maintenance and possible safety issues can be recorded.

2. Current Tree Assessment

a) Through a limited survey of street trees as part of this plan, the following has been determined about Byram's existing tree population:

- Trees within the older developments are dominated by large native tree species and good canopy cover. The most dominant non-native tree was Norway Maple.
- Newer developments tend to have much less canopy coverage as well as a higher percentage of non-native trees.

2015-2019 OBJECTIVES

1. Shade Tree Inventory. These objectives will only be met via access to grant funding from outside the Township budget, possibly through the New Jersey Forest Service. A full shade tree inventory has not been completed by the Byram Township. Given the extensive forest cover along municipal roads a full inventory of trees within the Township right of way would be very extensive and very expensive, whereas an inventory of street trees in residential subdivisions that have sidewalks and street trees and in the commercial areas along Route 206 would be a useful tool.

a) January – December 2017 (if CSIP funding is received)

- Identify needs and desires for implementing a tree inventory, as described above, to improve the efficiency and effectiveness of the Shade Tree Program and to preserve community character, as emphasized in the Township's Master Plan.

Appropriate uses may include:

- Periodically producing data summaries from which short-term and long-term management decisions can be made and their impact can be evaluated.
- Scheduling systematic maintenance and inspection programs (e.g. annual rotation pruning and hazard inspections).
- Producing work lists for tree planting and pruning bids.
- Maintaining records of maintenance treatments and inspections.

2. Street Tree Inventory Report

a) April – June 2018

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

generated photographically, to record the rural character of Byram’s roadways, for comparison with any future changes resulting from development or from forestry issues.

3. Park and Public Properties Tree Inventory

a) July – December 2018

- Begin developing plans to complete an inventory of trees in parks and on other public properties which are not covered under the Forest Stewardship Plans, particularly the areas of athletic fields parking areas and walkways.

HAZARD TREE IDENTIFICATION AND MANAGEMENT GOALS

While the benefits of shade trees to Byram 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 pro-active shade tree management. Public safety shall be the primary consideration in all decision-making and activities at all levels of the Shade Tree Program.

EXISTING PROGRAMS, POLICIES AND PROCEDURES

1. Tree Hazard Identification

a) Hazardous conditions are currently identified promptly by:

- Calls and letters from adjacent property owners.
- Observations by Department of Public Works and other Township employees during the course of their daily routines.

2. Tree Hazard Abatement

a) The Director of the Department of Public Works responds immediately to inspect potentially hazardous trees brought to his attention.

b) Resolution of potentially hazardous conditions is prioritized and scheduled for completion by the Department of Public Works staff or outside contractors, based on the degree of hazard.

3. Tree Hazard Record-Keeping

a) Records of work completed are currently maintained by the Superintendent of Public Works, who is responsible for ongoing updates to the Township’s Hazardous Tree Inventory and spreadsheet.

2015-2019 OBJECTIVES

1. Ongoing Tree Hazard Management Programs

a) Continue to review hazard trees within the Township, using the Hazardous Tree Inventory and spreadsheet.

- Continue to update and address hazard abatement needs as they are identified.

- Consider seeking CSIP grants to remove hazardous trees, based on the hazard rankings in the Hazardous Tree Inventory.

TREE PLANTING

The maintenance programs outlined in this Plan are designed to maximize the service life of individual trees. However, their decline and death is inevitable. This planting program is designed to continually replace the Township’s aging public trees to perpetuate the resource at a level that is sufficient to benefit the community. At this time, most trees in residential neighborhoods were planted 40 or more years ago. Tree planting has not kept pace with tree removals.

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 future tree and sidewalk conflicts.

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

1. Achieve and perpetuate the public tree population at maximum practical stocking (the total number of trees that the Township can effectively manage in accordance with all elements of this Plan, given available resources.)
2. Improve and maintain species diversity to help insulate the tree population from catastrophic losses to species-specific insects and diseases. The NJDOT landscaping plans for the Route 206 improvements completed in early 2015 did not emphasize diversity; the Township should monitor these street trees in the future to prevent diseases or losses and should consider supplementing the NJDOT plantings with trees of other species.
3. Improve and maintain age diversity so that the number off trees requiring removal and replacement due to advanced age is consistent from year to year.
4. Minimize conflicts between trees and sidewalks, buildings, utilities and other public and private fixtures.
5. Improve aesthetic appeal, seasonal variation and physical benefits to adjacent properties and the Township overall.

NO NET LOSS

The driving force behind completion of this plan is the eligibility of the Byram Township to access No Net Loss funding which was collected by the New Jersey Forest Service Community Forestry Program in relation to the road widening project completed along Route 206 through Byram in the Cat Swamp Hill Section.

The Township has been granted a substantial amount of funding for tree planting projects in an attempt to mitigate the loss of forest cover from the road expansion project. In 2013 \$55,646 was received to plant 185 trees (to be planted in the spring/fall of 2015). As of early 2015, the Township was working on the second NNL grant, an additional \$317,554 to plant an 1,058 trees.

The Township will have three years to plant trees, starting from the date the grant agreement is executed with the New Jersey Forest Service. If the planting is completed by a contractor, it will be inspected by the Forest Service within 10 business days of the planting. Planting plans must be submitted 60 days prior to the proposed planting.

The Environmental Commission proposed a list of potential planting sites in relation to the obtainment of No Net Loss funding. This will fulfill the planting goals for the Township during this 2015-2019 planning period, as over 1,100 trees should be planted during this period, far exceeding the number of trees that might be removed.

EXISTING PROGRAMS, POLICIES AND PROCEDURES

1. Planting Jurisdiction

- a) In the future, based upon available funding, the Township will plant and maintain trees on:
- Township rights-of-way.
 - Parks, schools and other Township properties.

2. Planting Site Identification

- a) Planting sites will be identified by the Environmental Commission in cooperation with Department of Public Works, the Architectural Review Committee, the Township Council and Manager, the Township Engineer, as well as contractors under the No Net Loss grants.

3. Tree Placement

- a) Tree placement and spacing will be determined:
- By the Superintendent of the Department of Public Works and/or the Environmental Commission and private contractors hired to fulfill the No Net Loss grants.

4. Species Selection

- a) Species are selected:
- By the Superintendent of the Department of Public Works with the advice and advisement of the Environmental Commission.
 - Based on past performance of plantings.
 - Based on their suitability to the existing growing conditions at each site.

5. Tree Installation

- a) All trees are supplied by private vendors selected via public contract laws and will be installed by private contractors, DPW staff, or volunteers.

6. Post-Planting Care

- a) New street trees should be watered and fertilized by the adjacent property owner, the Township, or contractors hired to fulfill the No Net Loss grants. A letter containing detailed instructions

for maintaining and protecting the trees will be provided to each property owner at planting time, for any trees that are to be maintained by local residents or businesses.

- b) Trunk wrap and stakes are removed one week after planting.
- c) Proper mulching will be installed as depicted in the appendices (no volcano mulching).

7. Funding

- a) The Byram Township is in a unique position due to the funding provided by the No Net Forest Loss Act, which can be utilized for planting efforts. It will likely take most of this planning period to complete all the plantings required under the two No Net Loss grants.

2015-2019 OBJECTIVES

1. Ongoing Tree Planting Programs

a) 2015-2019

- Planting will increase substantially with the funding provided by the No Net Forest Loss Act.

2. Vacant Planting Site Identification

a) January - October 2015

- Prioritize all existing vacant planting sites identified by the tree inventory or via the Environmental Commission and institutional knowledge within the Township.
- Begin incorporating the resulting lists into existing planting programs and schedules.

3. Through the No Net Loss planting process species diversity should be maximized as much as possible.

TREE MAINTENANCE AND CARE

The Township recognizes that pro-active, systematic tree maintenance improves tree condition and appearance, extends tree life, and reduces hazards better than a haphazard “crisis” approach. It is also more cost-effective.

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. Continued maintenance as the trees 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. In-House Crews.

- a) The Township does not have a dedicated tree crew within the Department of Public Works but the term is used below to indicate those DPW workers who may spend time on tree work.
- b) Equipment available for DPW use are:
 - crew members who rotate from other DPW crews;
 - (1) chip truck;
 - (1) chippers (old and small and used sparingly);
 - Other heavy equipment used to remove brush and branches;
 - Various chainsaws, pruners and other small tools.
- c) The DPW Tree Crew completes:
 - Nearly all tree removal work;
 - All tree pruning work;
 - Some stump removal (The Township does not own a stump grinder at this time);
 - All cleanup of debris generated by storms within the Township (which is hauled to the Sussex County Landfill).

2. Private Contractors.

- a) Private tree maintenance firms are occasionally hired to complete pruning, limited specialty treatments, and removal of large trees and hazardous trees.

3. Inter-Local and Mutual Assistance Agreements.

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

4. Systematic Maintenance Programs.

- a) Annual Tree Trimming Program:
 - In the past, the DPW routinely pruned and trimmed trees throughout the Township.
 - If funding is found during this planning period, a bucket truck and chipper could be purchased, employees retrained and the trimming and pruning program could be reinvigorated.

5. Work Identification, Prioritization, Scheduling and Record-Keeping.

- a) All other work is identified on an as-needed basis via service requests and observations by the Superintendent of the Department of Public Works, DPW, other Township employees and residents.

6. 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 of the Superintendent of the Department of Public Works and the Township Manager.

- b) In recent years, the Township has removed two to three trees per year.
7. Plant Health Care.
- a) Insect and disease controls and other specialty treatments are completed on a limited, as-needed basis on high value trees. In the past, treatments included:
 - Spraying of Gypsy Moth infestations in areas designated by the State in cooperation with the State’s eradication program. However, for several years, no Gypsy Moth infestations have been reported in Byram that require treatment.
8. Sidewalk Maintenance.
- a) Adjacent property owners are responsible for clearing snow from public sidewalks, but the Township is responsible for sidewalk maintenance and repair.
 - b) All species selection and planting placement is designed to minimize future conflicts between trees and sidewalks. Currently, there are very few sidewalks within the Township. New commercial and mixed-up zones call for sidewalks throughout.
9. Funding.
- a) The DPW operating budget covers the cost of the tree maintenance work completed by its crews and contractors. There is not a separate line item at this time for tree related projects.

2015-2019 OBJECTIVES

- 1. Ongoing Tree Maintenance Programs
 - a) 2015-2019
 - Continue implementing existing tree maintenance programs, policies and procedures on a regular basis.

ANNUAL WORK PLAN

2015 Goals

- Begin tree planting to fulfill the first No Net Loss Grant received by the Township.
- Complete the annual training requirements, obtaining at least 8 CEU’s.
- Submit the annual accomplishments report.
- Celebrate Arbor Day.
- Complete planting plans for the second No Net Loss Grant.

2016 Goals

- Complete tree planting from the first No Net Loss Grant.
- Reassess the hazard trees throughout the Township.
- Complete the annual training requirements, obtaining at least 8 CEU’s.
- Submit the annual accomplishments report.
- Celebrate Arbor Day.
- Re-certify for Tree City USA.

Apply for CSIP grant to complete a street tree inventory in developed areas of the Township and/or for removal of hazardous trees.
Begin the second No Net Loss Grant planting.

2017 Goals

Complete a forest inventory field work.
Re-evaluate Township easements on private land.
Complete the annual training requirements obtaining at least 8 CEU's.
Submit the annual accomplishments report.
Recertify for Tree City USA.
Celebrate Arbor Day.

2018 Goals

Complete the second No Net Loss Grant plantings
Submit the final forest inventory report.
Re-assess the hazard trees throughout the Township.
Complete an inventory of trees on public land in park settings and near athletic fields.
Complete the annual training requirements, obtaining at least 8 CEU's.
Submit the annual accomplishments report.
Re-certify for Tree City USA.
Celebrate Arbor Day.

2019 Goals

Re-evaluate Township easements on private land.
Complete the annual training requirements, obtaining at least 8 CEU's
Submit the annual accomplishments report.
Recertify for Tree City USA.
Celebrate Arbor Day.
Apply for a Green Communities Grant for the next planning period.
Complete the third five year plan.

10. COMMUNITY STEWARDSHIP INCENTIVE PROGRAM

CSIP #1 TRAINING

Training is discussed extensively above in Section 6. Funding could be utilized to pay for professional courses for Township employees or volunteers.

CSIP #2 ORDINANCE ESTABLISHMENT

SHADE TREE ORDINANCE

Byram Township does not currently have a Shade Tree/Forestry Ordinance. It is recommended that the Township wait to develop an ordinance. The Highlands Council will be preparing a model Forestry/Shade Tree Ordinance. Once this is approved, Byram Township should adopt it as part of the Highlands Conformance process.

2015 - 2019 OBJECTIVES

1. Community Forestry Ordinance Establishment

a) Byram Township will adopt the Model Forest Ordinance once it has been completed by the Highlands Council which should be prior to the end of this planning period.

CSIP #3 PUBLIC EDUCATION AND AWARENESS

Public Education and Awareness protocols are discussed above in Section 7 above. The Township could utilize CSIP funding for a more aggressive public education program, particularly for homeowners in Byram's large lake communities, where trees and forest cover are so critical to protection of water quality and of community character.

CSIP #4 ARBOR DAY

Discussed in Section 7. The Byram Township will continue to celebrate Arbor Day with ceremonial tree plantings and a Mayoral Declaration. The Township has not utilized this grant and will likely not utilize it in the future.

CSIP #5 TREE INVENTORY

Tree inventory is discussed in section 9. The Byram Township should apply for a CSIP grant to complete a street tree inventory in residential subdivisions with sidewalks and street trees and in commercial areas.

CSIP #6 HAZARD TREE ASSESSMENT

HAZARD MANAGEMENT GOALS

While the benefits of shade trees to Byram 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 pro-active 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.

CSIP #7 STORM DAMAGE ASSESSMENT

Tree-related emergencies are almost exclusively the result of structural failure during severe weather events. The Township or public utilities are 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.

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.

2. Existing Emergency and Disaster Plans

- a) The Township has an emergency response team and plans in place. Mutual aid agreements are in place to provide support for large scale emergency situations.
- b) The Township does not have a plan which specifically deals with large scale tree replacement after such events, beyond the initial response efforts.

3. Emergency Response

- a) The DPW, public utilities and/or contractors are responsible for immediately clearing trees and debris that obstruct roadways or that hamper the restoration of electrical service and communications.
- b) DPW staff is 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 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 expand sound and responsible planting, preventive maintenance, hazard identification and remediation programs as laid out in this plan.

CSIP #8 TREE MAINTENANCE AND REMOVAL

Discussed further above. Should the Township need to remove or prune a large number of trees, applying for a CSIP grant could help offset the cost, particularly should there be another catastrophic winter storm or Hurricane as there was in 2012.

CSIP #9 INSECT AND DISEASE MANAGEMENT

There are no specific goals in this plan regarding insect and disease management. While the Emerald Ash Borer has been discovered in New Jersey in Somerset County, the extent of its distribution is not known at this time. Other insect and disease issues that are looming include the Gypsy Moth which is currently in a low population cycle, and Bacterial Leaf Scorch which studies are showing is found not only on the streetscape but also in the forest settings. 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. This will be a reactive process.

2015-2019 OBJECTIVES

Goal: Maintain community forest health to provide as many environmental and community benefits as possible for Byram 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, in order to increase appreciation for the community forest cover and create municipal pride and ownership.
- Should major forest health issues be identified, CSIP funding may be applied for to reduce the financial impact on the Township. As Emerald Ash Borer moves closer, Byram should apply a CSIP grant to treat or remove Ash trees in advance of the infestation.

CSIP #10 WILDFIRE PROTECTION

Wildfire is not a significant threat in Byram Township. However, in areas with steep slopes and thin soils, fire could nonetheless become a hazard during dry conditions. The Township could pursue becoming a Firewise Community, if funding is available from the New Jersey Forest Fire Service and the CSIP program.

Goal: Byram Township should investigate 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

Tree planting goals during this planning period will be met by the No Net Loss funds and the planting of approximately 1100 trees throughout the Township.

CSIP #12 TREE RECYCLING

Byram's Shade Tree Program generates large volumes of vegetative wastes. The Township recognizes the potential cost savings and benefits associated with properly recycling these materials and using the resulting products for beneficial use.

A comprehensive tree waste recycling program would:

1. Minimize the cost of tree related wastes 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 a limited amount of vegetative wastes.

2. Material Processing, Use and Distribution

a) Leaves

- Byram contracts with Blue Diamond, the Township's garbage hauler, for two leaf pick-ups in the fall. Leaves are picked up curbside and must be in biodegradable bags.
- Approximately 1,000 cubic yards of materials are collected by the Township, with some available for use on Township property (mulch).

b) Wood Chips

- Very little of the wood debris is chipped at this time. If wood is chipped it is collected in a dump truck or dumpster and utilized shortly afterwards.
- These wood chips are used on Township property as mulch.

b) Bulk wood

- Brush and branches of up to 4" diameter can be dropped off by residents during two weeks in May and two weeks in September. This material is loaded onto trucks and disposed of at the Sussex County Landfill.

2015-2019 OBJECTIVES

1. Tree waste recycling programs will continue as they have in the past. Some thought will occur as to how to utilize locally more woody debris and materials.

2. Bulk wood utilization will be reviewed for possible use in traditional forest products. Wood can also be processed into usable timber through a cooperative agreement with a saw mill for use by the Township as part of a pilot study if funding is available.

CSIP #13 SIDEWALK MAINTENANCE PROGRAM

There are virtually no sidewalks within Byram Township. There will likely be no activity involving sidewalks and CSIP #13 during this planning period. While there are sidewalks along the new highway construction trees being planted will not impact the newly installed sidewalks for some time depending upon the species planted.

CSIP #14 STORMWATER MANAGEMENT

The Township has a Storm Water Management Plan backed by a Storm Water Management Ordinance, most recently approved by NJDEP on January 18, 2015. Stormwater management is also referenced in the Township Master Plan as an important planning and environmental issue and is stressed particularly in the Lakefront Development Plan (part of the Master Plan), which emphasizes the importance of preserving and improving natural vegetation and forests. It may be possible to develop a grant for CSIP funding.

2015 - 2019 Objective

1. Utilize trees and the community forest as a storm water management tool.
2. Work to create rain gardens as demonstration projects for homeowners and businesses. Publicize the two rain gardens at C.O. Johnson Park, which are very visible to the many Township residents using the Township's largest sports park.

CSIP#15 OTHER

Easement Monitoring

Byram Township holds conservation easements on private properties. These easements should be monitored to assure the easements are being honored. In 2014-2015, under a \$10,000 Sustainable Jersey grant, the Township inventories those easements, established a clear process for imposing, recording, and monitoring them, and devised an educational program for Township residents and businesses. . This CSIP could be used to create a baseline study of each easement and develop and fund an inspection program to assure there are no violations of the easements.

2015 - 2019 Objectives

1. Communicate with easement holders about the inspection process.
2. Inspection should be conducted by the Township or a Contractor of all town owned and conservation easement properties for resource inventories, baseline studies, boundary markings and problems (i.e. unauthorized uses, forest health issues). These inspections will be conducted annually or biennially.

Establishing and Maintaining Township Hiking Trails on Township Owned Land

The Township Environmental Commission has taken the lead in creating and maintaining hiking trails within Township parks, often in partnership with the NY-NJ Trail Conference and local hiking clubs and volunteers and with the assistance of the Township DPW. The Commission organizes work days that address the forested areas around these trails, including identifying hazardous trees, removing fallen trees and limbs, and maintaining the forested areas that characterize Township parks. It may be possible to apply for CSIP funding to help offset the cost of such work and training.

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. This plan is the second five year plan being completed by Byram Township.

EXISTING PROGRAMS, POLICIES AND PROCEDURES

Preparation of this second five-year plan was a cooperative effort of the Township Managers Office, Department of Public Works, the Environmental Commission, and the Township's Consulting Forester. The preparation of this plan is funded through the New Jersey Forest Service's Community Forestry Program Green Communities Grant.

2015-2019 OBJECTIVES

- 1) Annual Program Evaluation
 - a) Every December, the DPW, Environmental Commission, and Consulting Forester will evaluate the success of the past year's accomplishments relative to the goals and objectives laid out in this plan.
 - b) Programs will be adjusted as necessary based upon this evaluation.
 - c) The Township will 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 objective will be evaluated for completion to date as laid out in this plan.
- b) A new plan shall be written and submitted for approval to the New Jersey Community Forestry Council by October 1st, 2019.

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					
Public Education, Awareness and Outreach	2015	2016	2017	2018	2019
Annual Arbor Day Celebration					
Submit Annual Application for Tree City Recognition					
Submit two press releases to increase awareness of the Shade Tree Program and its benefits					
Tree Inventory and Assessment	2015	2016	2017	2018	2019
Investigate funding for completing a community forest inventory in developed areas of Byram, if grants are available from New Jersey Forest Service					
Complete an inventory, if funding received					
Produce a spreadsheet for future evaluation of management and planting activities					
Begin to inventory trees in public parks and properties, if funding is available					
Hazard Tree Management and Evaluation	2015	2016	2017	2018	2019
Continue existing pruning programs and removals as they are identified and prioritized					

	2015	2016	2017	2018	2019
Tree Planting					
The Township will continue its tree planting program and work to increase the number of trees planted annually					
Develop planting plans and carry through with implementation of two No Net Loss grants.					
Establish long term goals for species composition and improved diversity					
Reverse the tree deficit by increasing planting efforts					
Conduct tree planting activities using No Net Loss funding					
Tree Maintenance					
Continue current tree maintenance programs including pruning and trimming schedules					
Continue the current work order program for tree maintenance including inspections, service requests, and update the hazardous tree inventory spreadsheet					
Begin to use street tree database for similar tracking					
Waste Recycling					
Continue all tree waste recycling programs					
Evaluate the possibility of using street trees as traditional forest products					
Investigate purchase of new chipper and bucket truck					
Tree Care Disaster Planning					
Continue existing disaster programs as needed					
This really exists, in concert w. utilities and in accordance w. ongoing DPW tasks.					
Plan Preparation and Evaluation					
Evaluate prior year's accomplishments and adjust program as necessary					
Prepare and submit the Annual Accomplishment Report to NJFS					
Evaluate the accomplishments during the 2015-2019 planning period and begin to formulate new goals and objectives					
Apply for funding to complete the 2020-2014 plan					
Finalize new plan for the 2020-2024 planning period					
Submit the 2020-2024 plan for approval					
Complete an updated Forest Stewardship Plan on municipally-owned land, particularly forested open space					

