

**2020 – 2024
COMMUNITY FORESTRY MANAGEMENT PLAN**

Byram Township

**Sussex County
New Jersey**



Mayor & Council

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Harvey Roseff
Raymond Bonker
Cris Franco
Jack Gallagher, Jr.

Township Manager

Joseph Sabatini

Department of Public Works

Mike Orgera, Superintendent



Environmental Commission

James Myers, Chairperson
Michelle Rehse, Vice Chair
Harvey Roseff, Township Council Liaison
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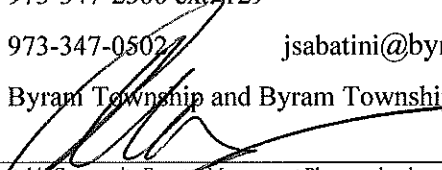
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1.

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 

I certify that this Community Forestry Management Plan was developed specifically and exclusively for our municipality.

Date of Management
 Plan Submission November 2019

Time Period Covered
 In Management Plan 2020-2024

Community Stewardship X CSIP# 1 Training
 Incentive Program (CSIP) X CSIP# 2 Community Forestry Ordinance Establishment
 Identified in Management X CSIP# 3 Public Education and Awareness
 Plan 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 2020 – December 2024.

The objectives in this third five-year plan address street trees, park trees, and trees on other public grounds. This plan will build on the successes accomplished during the second 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 comprise 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.
 - a. With the continued decline and loss of Ash the township will work to encourage replanting on private and public land to maintain tree cover while removing hazards trees as fiscally practical.
 - b. Apply for a CSIP funding to replant trees within the Township right of way.
 - c. Work toward planting more trees than trees that are removed, once the Ash Borer moves through Town.
2. Maximize the benefits of trees to the community.
 - a. Use tree planting and rain gardens to attenuate storm water runoff.
 - b. Educate residents and lake communities to the benefits of trees in reducing runoff, soil stabilization and nutrient absorption.
 - c. Continue to use trees to meet the goals of the Municipal Master Plan.
3. Maximize long-term stability and sustainability in the shade tree resource.

- a. Work to develop a healthy, species diverse and age-diverse community forest and street tree resource to provide long term stability and benefits including watershed protection and reduced stormwater runoff.
4. Minimize the risk of trees to public safety.
 - a. Update the hazard tree survey that was completed between 5-10 years ago.
 - b. Continue to prioritize and remove hazards as much as is fiscally possible.
 - c. Apply for a CSIP grant to complete a hazard tree survey and remove the top priority hazard trees.
5. Optimize the balance between tree health, maintenance costs and budgetary constraints.
 - a. Work with public utilities to remove/prune noted hazards wherever possible.
 - b. Systematically remove the highest hazards first using sound pruning principals and planting the right tree in the right place.
6. Improve and maintain public interest, appreciation, knowledge and support for public shade tree programs and encourage volunteer participation.
 - a. Celebrate Arbor Day annually with a Council Declaration.
 - b. Educate residents about the Emerald Ash Borer and Ash Yellows as well as Spotted Lanternfly.
 - c. Distribute tree related materials at Byram Day.
 - d. Enroll Byram Third Graders in the Third Grade Tree Team to receive free seedlings.
 - e. Develop a largest tree in Byram Contest to raise awareness of the tree resources within the Township.
 - f. Re-enroll in Tree City USA.
 - g. Adopt the Forest/Tree Ordinance once a model ordinance is adopted by the Highlands Council.
7. Encourage the planting and proper care of trees on public and private property.
 - a. The Township recently completed a No Net Loss Planting Grant with 350 trees planted on Township Property and within township right of ways. This project was completed in 2019.
 - b. The Environmental Commission should encourage private landowners to plant and maintain trees on their properties to maximize societal benefits of forest cover and replace the lost Ash.
 - c. Encourage residents to remove invasive plant species on their property and to raise awareness of invasive insects.
8. Meet all eligibility requirements of the NJ Shade Tree & Community Forestry Assistance Act.
 - a. Ensure that at least one current employee and one volunteer completes CORE Training.
 - b. Continue to achieve more than 8 continuing education units annually to maintain certification.

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 are heavily settled.

Byram covers more than 22.48 miles and its current population is estimated around 7,933, based upon the 2018 Census estimates a loss of about 417 residents over the last 8 years.

| Population | |
|--|--------------|
| Population estimates, July 1, 2018, (V2018) | 7,933 |
| Population estimates base, April 1, 2010, (V2018) | 8,411 |
| Population, percent change - April 1, 2010 (estimates base) to July 1, 2018, (V2018) | -5.7% |
| Population, Census, April 1, 2010 | 8,350 |
| Age and Sex | |
| Persons under 5 years, percent | 4.6% |
| Persons under 18 years, percent | 21.3% |
| Persons 65 years and over, percent | 13.3% |
| Female persons, percent | 48.1% |

| Race and Hispanic Origin | |
|--|-------|
| White alone, percent | 97.2% |
| Black or African American alone, percent(a) | 0.6% |
| American Indian and Alaska Native alone, percent(a) | 0.0% |
| Asian alone, percent(a) | 1.5% |
| Native Hawaiian and Other Pacific Islander alone, percent(a) | 0.0% |
| Two or More Races, percent | 0.4% |
| Hispanic or Latino, percent(b) | 3.3% |
| White alone, not Hispanic or Latino, percent | 94.2% |
| Population Characteristics | |
| Veterans, 2013-2017 | 398 |
| Foreign born persons, percent, 2013-2017 | 8.0 |

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 is dealing with a large-scale infestation of Emerald Ash Borer and in the next couple of years will have to remove a substantial number of trees within Township right-of -ways and Township Parks.

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 SECOND FIVE YEARS: A REVIEW OF BYRAM'S ACCOMPLISHMENTS

2014 Accomplishments

- Published an update of the Byram Trails Guide and trails map. The map is on view at the town hall and the full Trails Guide is on the Byram Township website. The Commission also purchased 14 new trail-head signs.
- Partnered with the Township Board of Health, Byram teacher Patti Poff and her students, and ReCommunity Recycling to promote recycling in town, including a recycling postcard, Earth Day celebrations, and Byram Day presentations.
- Shared a Byram Day booth with the Board of Health to promote recycling and composting, private well testing, radon testing, and an amphibian rescue project with the NJ Wildlife Conservancy. Entrants in the 'Where In Byram' quiz were eligible to win a \$25 Sunnyside Gardens gift certificate.
- Purchased milkweed plants for the C.O. Johnson Park rain gardens and milkweed seeds to hand out at Byram Day, to help provide habitat for Monarch butterflies, which are under severe threat, and provided public information on this problem. Also planted milkweed to improve the buffer along Lubbers Run at Neil Gylling Park.
- Oversaw the Conservation Easement grant project and identified and organized official site plans that map such easements.
- Reviewed Planning Board applications, including several Cranberry Lake additions, and recommended changes to respond to the ideals of the Township Master Plan and protect local natural resources. Reviewed environmental regulations affecting lakeshore development, including the C-1 regulations and a wetlands delineation project at Cranberry lake.
- Dedicated a tree on Arbor Day to local teacher Peg Swentzel, partnered with Troop 276 to distribute 200 free trees, and applied for Tree City USA status for Byram.
- Fielded representatives to the Musconetcong River Management Council and the Citizens Advisory Group for the Mansfield Trail superfund site. Welcomed a representative from the Lenape High School Go-Green Club as the EC's newest member.

2015 Accomplishments

- Trailhead posts identifying different trail routes were installed at the start of 18 various trails and parks throughout the Township. The posts indicate length, type (hiking, jogging, biking) any connecting trails, level of difficulty, and blaze color. Blazes with QR code were purchased to and will be affixed (by EC members, Spring 2016) to each post, which, when scanned, will upload the full Byram Township Trails Guide.
- EC member Jim Reinhold attended a March 28th Trail Maintenance course given by NY-NJ Trail Conference to better coordinate community trail work days.
- EC members participated in the Spring Amphibian Rescue on Waterloo Rd. in coordination with the NJ Wildlife Conservancy.

- EC member James Myers applied for and received 100 trees from the NJ Tree Recovery Campaign, which were then distributed to Byram residents in celebration of Earth Day and Arbor Day. The Willow Oak tree seedlings, together with planting suggestions and instructions, were given away on Saturday April 18th at the recycle center. Some of these seedlings were planted by the EC along Lubbers Run behind Neil Gylling field.
- NJ Department of Environmental Protection awarded a Certificate of Approval to Byram for the successful completion of a 5-year Community Forestry Management Plan, 2015-2019. The EC manages the annual work plans to meet requirements for this status.
- EC member Jim Reinhold became a Certified Chain Saw Operator. This certification will allow him to assist with minor tree/brush issues during trail maintenance days. The May 6th Chain Saw Safety Certification class was funded by the EC.
- The Sustainable Jersey (Conservation Easement) grant was completed. An educational brochure, *A Guide to Conservation Easements*, was created and mailed out to all Byram residents. This brochure summarized the accomplishments and future work needed on this project.
- EC members worked at clearing a trail at the Brookwood site in May, then again in the September.
- To celebrate National Trails Day, June 6th, EC members Katie and Jim worked at Tamarack Park and the Salt Shakers Running Club partnered with the EC to do a trail clean up and maintenance at the Sussex Branch Trail.
- DPW assembled and installed benches and a picnic table in Brookwood Park along Lubbers Run, which were purchased using the Recreational Trails Grant money
- EC purchased and planted 8 shrubs, 4 blueberry and 4 clethra, for Lubbers Run buffer at Neil Gylling Park.
- Byram Day: EC hosted and funded a salamander presentation, fly fishing demos, and a 'Where in Waterloo' contest. Handed out the new recycling schedule postcard, as well as informational brochures on recycling and composting, our Trails Guide, private well testing, radon testing, conservation easements, and an amphibian rescue project with the NJ Wildlife Conservancy. Entrants in the 'Where In Waterloo' quiz were eligible to win a \$70 Harvest Moon Festival gift certificate.
- Tree City USA status awarded for Byram.
- Participated in the No Net Loss Grant application, awarded to Byram, to replace trees in the Township that were destroyed by storms, and also to beautify the town and improve the tree canopy in parks, detention basins, and open spaces. Phase I involves a re-forestation of the new Jones Lane recreation fields, and Phase II targets township owned properties.
- EC member Jim Reinhold posted white diamond blazes at Johnson Lake and Brookwood Park to better mark trails.
- In August, the Township bid farewell to Margaret McGarrity and wished her all the best in her retirement. Margaret was a significant and fundamental member/secretary to the EC for over 27 years.

2016 Accomplishments

- At Byram Day, the EC hosted a booth and distributed a variety of brochures including Clean Water For Our Town and Habitat Protection (ANJEC), Protecting Nature in Your Community (American Museum of Natural History), information on testing drinking water, Planting a Bee Friendly Garden and information on various mosquito borne diseases (NJ Dept. of Health). Sapling trees, soil and planting containers were provided to residents which they took home to grow indoors in the winter and transplant to the yard in the spring.
- Partnered with representatives from Byram Twp. Schools:
- Sponsored a Conserve Wildlife presentation to discuss wildlife that live and migrate through NJ and the importance of recycling to preserve their habitats
- Participated in student presentations on water conservation and advised what Byram is doing to conserve water
- Issued a postcard (Keep Our Lakes and Streams Clean), Tree City USA signs and trail signs as well as included information on keeping water clean in tax bills
- Celebrated Arbor Day, Earth Day by sponsoring a presenter from Conserve Wildlife to speak at the Byram Lakes School on April 23rd.
- Monarch Pledge letter was signed by Mayor to help monarch butterflies flourish
- EC members worked at completing the Johnson Lake Trail to the end of the peninsula as well as improving the markers and clearing the Cranberry Overlook Trail, which culminates in a scenic overlook above Route 206.
- EC members participated in the Spring Amphibian Rescue on Waterloo Road along with NJ Wildlife Conservancy. EC pledged their support for this important initiative
- EC members reviewed Planning Board Applications and recommended changes with regards to the ideas of the Township Master Plan and to protect local natural resources
- EC members applied for and was approved for a grant of \$2500 to improve the township website to better document the trails within the township. During the next several months, the EC will be working to collect trail information and pictures and will make the improvements to the website. EC also supported various grants including Community Forest Management Plan, Green Infrastructure Program and No Net Loss Program
- Fielded representatives to the Musconetcong River Management Council, Planning Board and Council meetings.
- Letter was sent to all Byram Residents, signed by Township Mayor, describing the need for stormwater management techniques
- Posted QR Code signs at the trailhead posts for each Byram trail
- Freshened up the blazes for several of the Byram trails
- EC members reviewed ideas for future projects including: Interactive trail program which would allow users to download Trail information on smartphone, tablet or computer (QR signs) and Geocaching / treasure hunts on trails

2017 Accomplishments

- Completed ANJEC 2016 grant. EC members walked all Township trails, reported any issues, and took pictures. Applied for ANJEC 2017 open space grant.
- Celebrated Arbor Day by distributing 100 tree seedlings to residents at CO Johnson Park on April 29, 2017.
- Training attended: "Conservation Blueprint Project: Land Priorities for Farms, Habitat, Water and People".
- Supported the Amphibian Tunnel project by volunteering during Spring Amphibian Rescue event.
- Developed and issued the annual storm water management letter signed by Mayor James Oscovitch. This letter was sent to all residents and provided many tips on a variety of important topics including the need for stormwater management techniques, proper use of pesticides and herbicides, emerging issues such as Emerald Ash Borer threat, etc.
- Sponsored two community Trail Clean-ups on Briar Ridge Trails and Tamarack Park.
- Freshened the blazes on many Township Trails, reported vandalism and worked with DPW to advise them when trees fell and blocked trails.
- Researched options to make trail maps available electronically and working on an app using Tamarack Park Trail as the first trail. This app will include links to points of interest along the trail itself or nearby.
- Developed and posted informative documents on the website including Emerald Ash Borer, C-1 classification details as well as various events held in the county.
- Researched areas in town that might provide good habitats for monarch butterflies.
- Byram Day - a huge success this year with a heavily attended booth that received many compliments. Protecting our Pollinators was the theme this year, specifically for bees and monarch butterflies. Various displays were set up with poster boards and monarch caterpillars and chrysalids.
- Supported several Township grants including the Community Forestry Management Plan, No Net Loss, Green Infrastructure and Clean Communities Programs.

2018 Accomplishments

- A Green Communities Grant was received to complete a third five-year Community Forestry Plan.
- CEU's were obtained by 7 members and 6 sessions earning CEU's.
- Participated in Byram Day and distributed environmental related information.
- Arbor Day planted an evergreen tree at the Municipal Building.

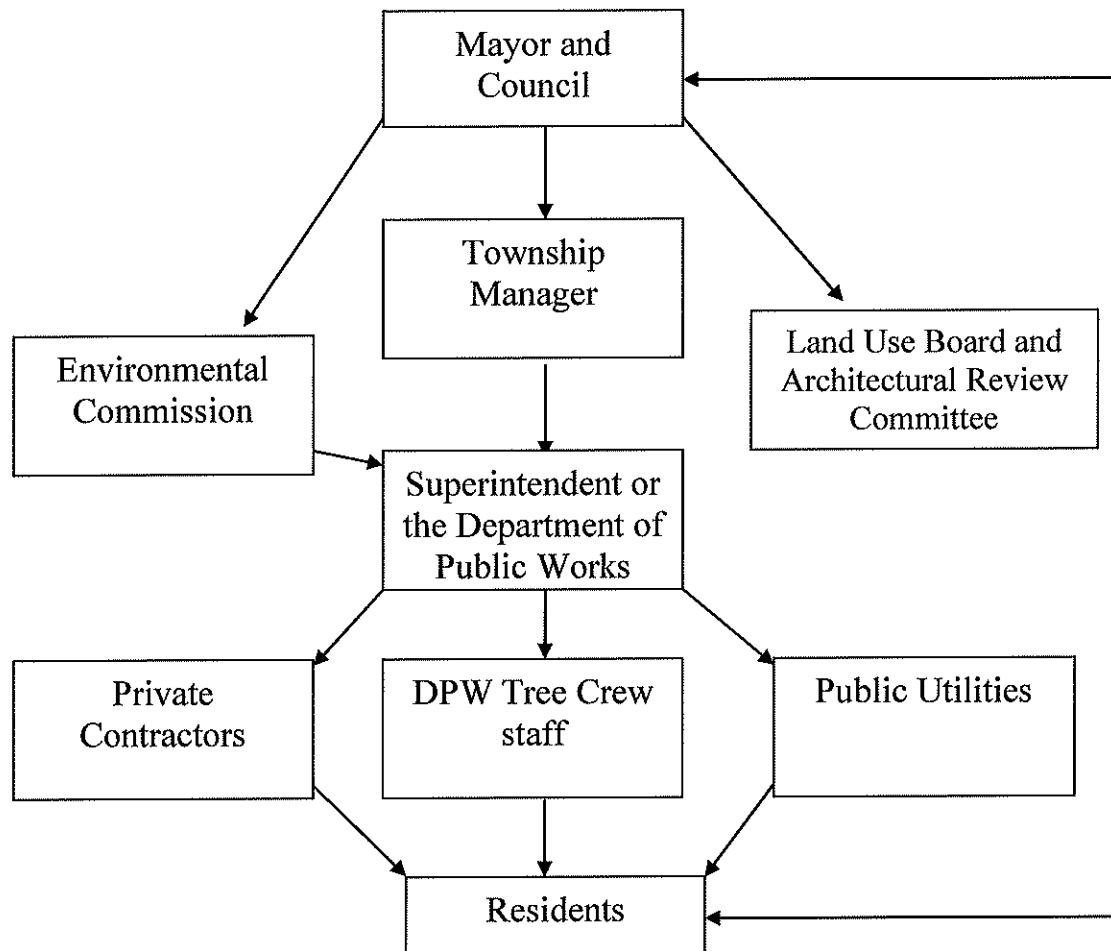
No tree ordinance has been adopted by Byram Township yet, as the Highlands Council will be developing a model ordinance for Highlands Communities that may be adopted by Byram through the

Highlands Conformance process. It is anticipated that this ordinance will be completed in the near future.

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.

CSIP #2 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 within this planning period.

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 Public 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.

2020-2024 Administration Objectives

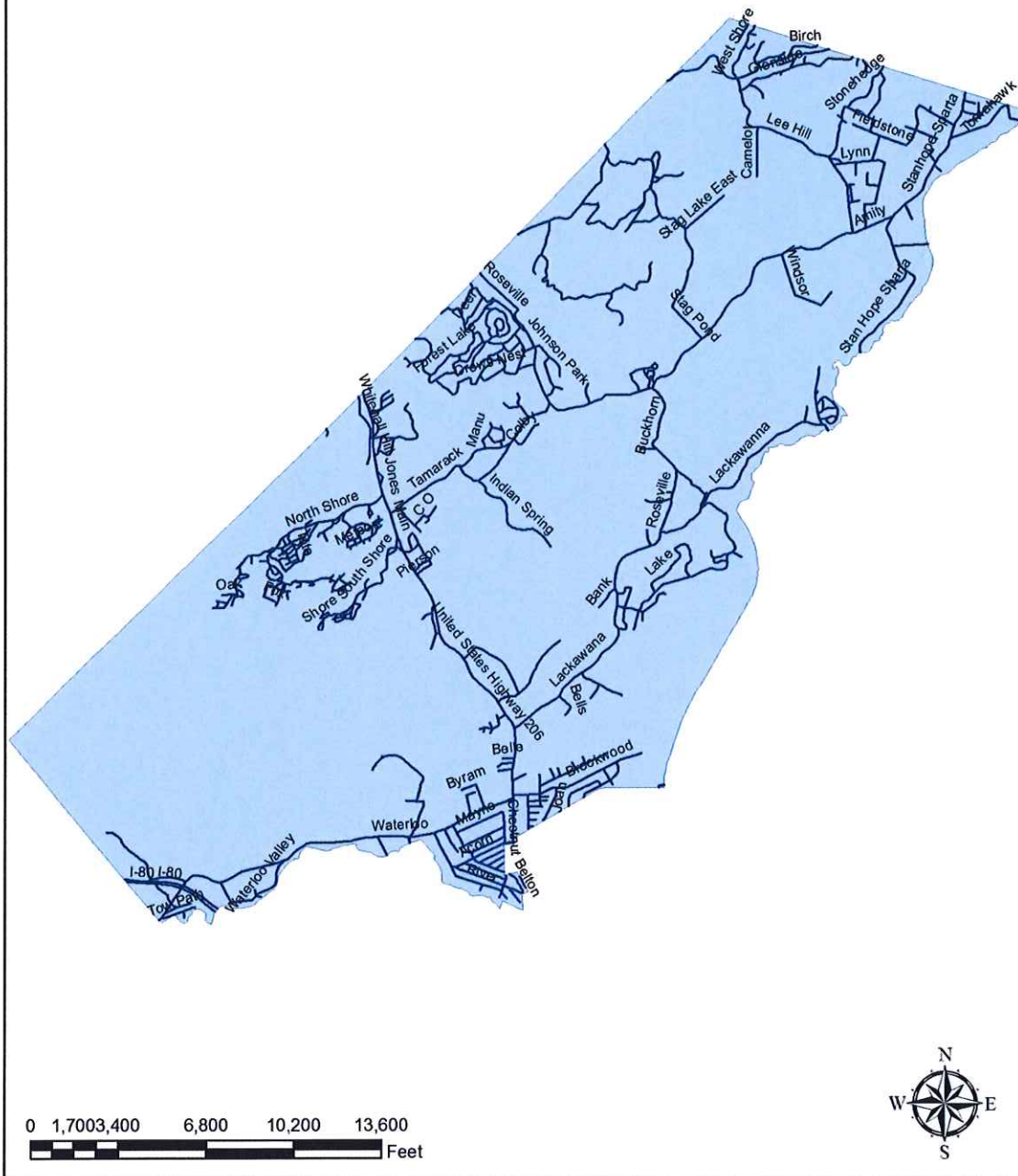
1. Ongoing Administrative Programs

a) 2020-2024

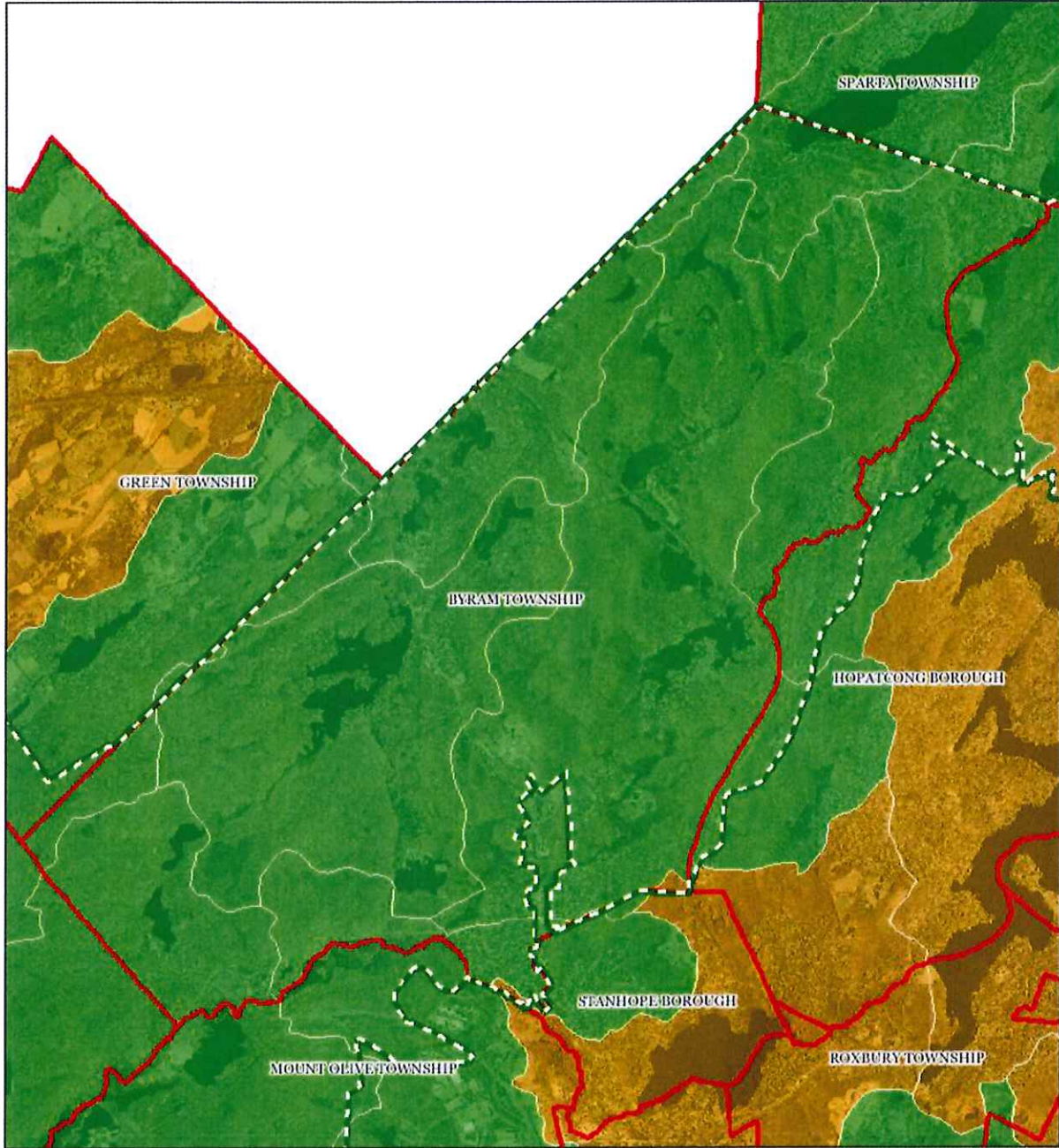
- Continue implementing the administrative programs, policies and procedures already in effect. This system has worked effectively and efficiently over time.
- Work with PSE&G on the maintenance of the power line right-of-way to assure that they remove the vegetation via mechanical means. An initial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

5. BYRAM TOWNSHIP MAP

Byram Township Roads



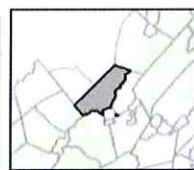
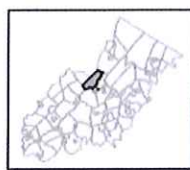
Forest Watershed Integrity



Forest Integrity by HUC14 Subwatershed

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

BYRAM TOWNSHIP

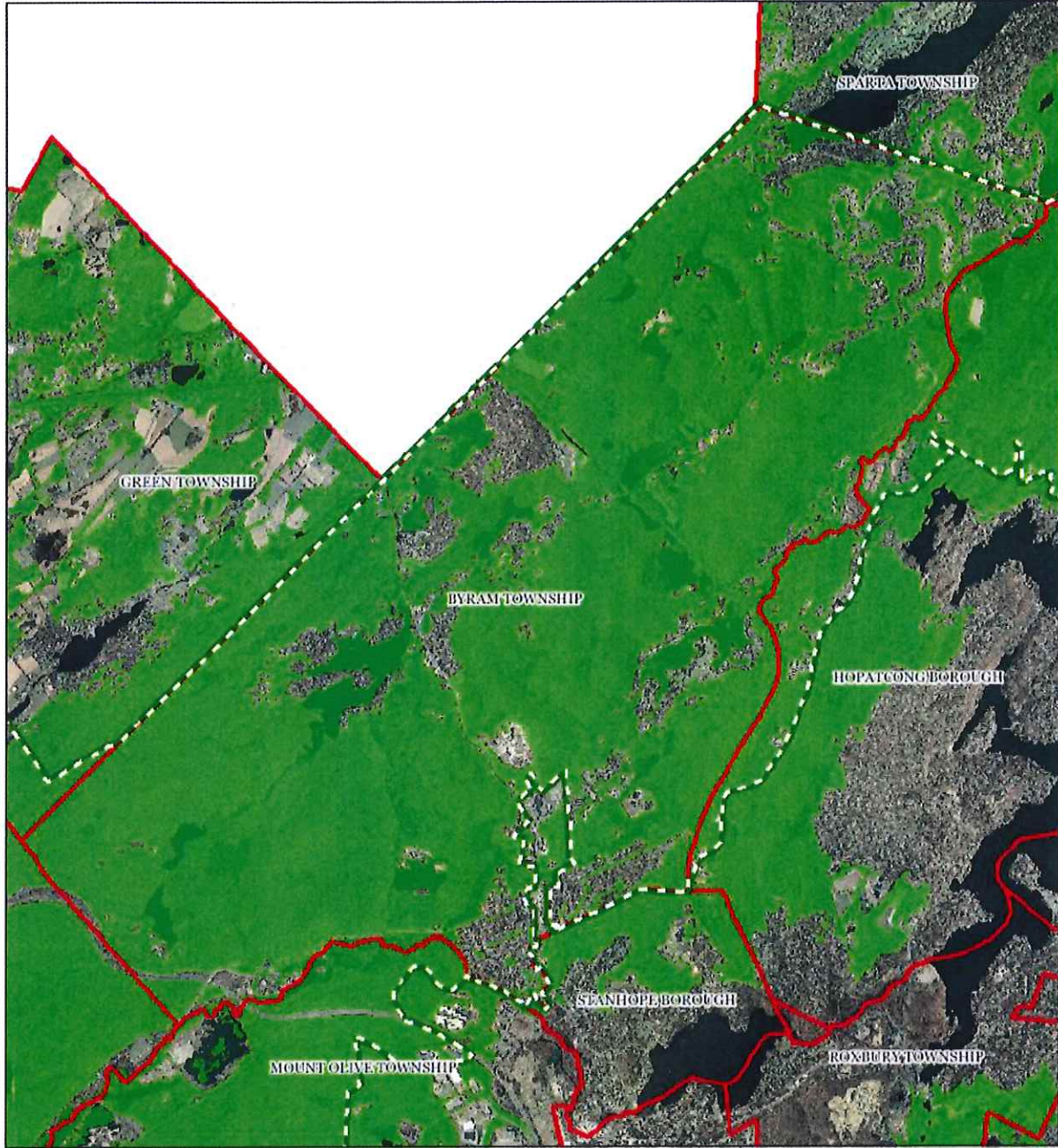





1 inch = 0.966 miles

Highlands Council
New Jersey

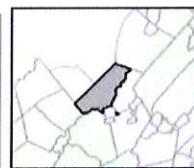
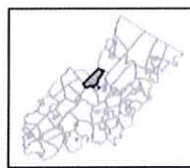


Critical Wildlife Habitat



-  Critical Wildlife Habitat
-  Preservation Area
-  Municipal Boundaries

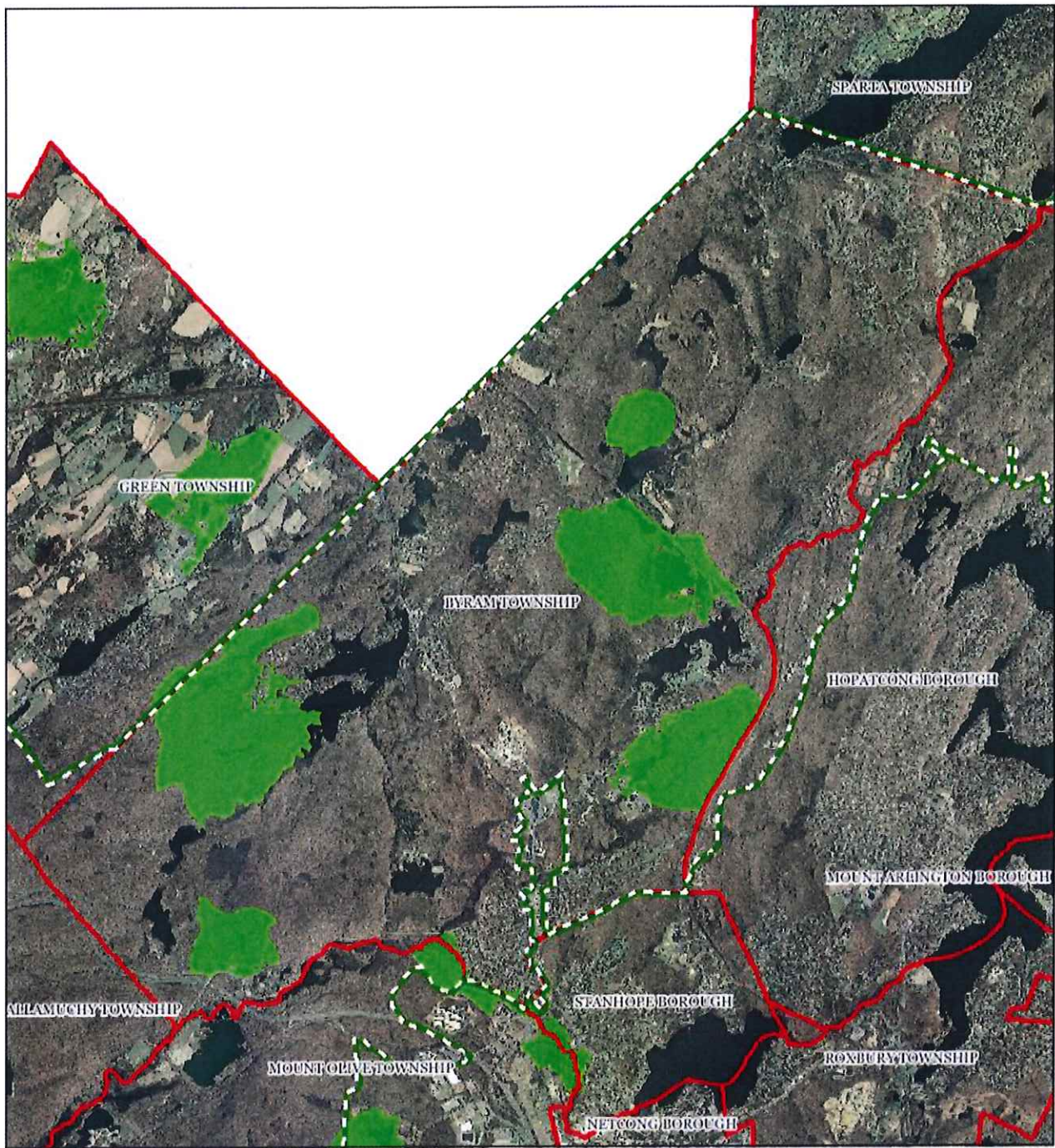
BYRAM TOWNSHIP



1 inch = 0.966 miles

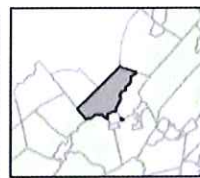
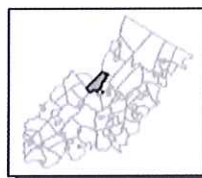
Highlands Council
New Jersey





BYRAM TOWNSHIP

- Significant Natural Areas
- Preservation Area
- Municipal Boundaries



1 inch = 0.966 miles

Highlands Council
New Jersey



6. TRAINING PLAN CSIP #1

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 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 the DPW Superintendent and Township Manager have 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 and Environmental Commission have obtained sufficient 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 or two volunteers and one more Township employee.
2. Advanced level tree hazard identification and assessment for Department of Public Works employees.

2020-2024 OBJECTIVES

1. Ongoing Training Programs

a) 2020-2024

- 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.

2020-2021

- Obtain CORE training for at least one additional Township employee and one or two volunteers from the Environmental Commission to ensure compliance through succession.

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 CSIP #3

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 celebration events have been conducted by the Township over the last 8 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
 - a) Byram has previously participated in the Tree City USA program and will work towards re-gaining recognition by the National Arbor Day Foundation. An application will be submitted again during this planning period once the Highlands Ordinance is adopted.
3. Media
 - a) Any tree related events/happenings in Byram 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 Deer, Emerald Ash Borer and Spotted Lanternfly.

2020-2024 OBJECTIVES

1. Ongoing Public Education, Awareness and Outreach Programs

a) 2020 – 2024

- 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 Township Manager and 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 White-tailed Deer, Emerald Ash Borer and Spotted Lanternfly in New Jersey.

8. STATEMENT OF 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)

\$23,124.00

OPERATIONS

Contracted services
Training
Materials and supplies
Consulting
Other miscellaneous expenses

| | |
|-----------------|-------------|
| Subtotal | \$ 5,000.00 |
|-----------------|-------------|

TOWNSHIP EQUIPMENT

Various chain saws
Various small tools
Brush chipper

| | |
|---|-------------|
| 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. The figure shown here is for the approximately \$700 annually spent from Township budgets.

| | |
|-----------------|-----------|
| Subtotal | \$ 350.00 |
|-----------------|-----------|

WASTE RECYCLING

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

| | |
|-----------------|--------------|
| Subtotal | \$ 10,139.00 |
|-----------------|--------------|

VOLUNTEER SERVICES

Environmental Commission, Open Space and Recreation Committee members, plus volunteers from the Environmental Commission's list of Trail Volunteers

| | |
|--|-------------|
| Subtotal (200 hours per year @ \$25.43) | \$ 5,086.00 |
|--|-------------|

TOTALS

| | |
|---------------------------|--------------|
| Township Resources | \$ 53,613.00 |
|---------------------------|--------------|

| | |
|---|-------------|
| Value of Volunteer Contributions | \$ 5,086.00 |
|---|-------------|

2020-2024 Budget Objectives

1. Ongoing Budget

b) 2020-2024

- 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.

9. STATEMENT OF PLAN IMPLEMENTATION

TREE INVENTORY CSIP #5

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 and should be updated due to the Emerald Ash Borer. The Township will investigate developing a street tree inventory in areas with major developments that have sidewalks and street trees, if a CSIP grant can be received. 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).
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.

2020-2024 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 2021 (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 2023

- 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.

HAZARD TREE IDENTIFICATION CSIP #6

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.

2020-2024 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 declining Ash and other hazardous trees, based on the hazard rankings in the Hazardous Tree Inventory which should be updated.

TREE PLANTING CSIP#11

The maintenance programs outlined in this Plan are designed to maximize the service life of individual trees. However, their decline and death are 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 with the CSIP grant has kept pace with tree removal. However, with the onset of Emerald Ash Borer within the Township many more trees will be lost than are planted due too the number of Ash within the Township.

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, utilizing the 10-20-30 method. No more than 10% of any species, no more than 20% of any genus and 30% of any family should be planted.
3. 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.
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.

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, as well as the Forester.
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 Forester.
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 and Forester.
 - Based on past performance of plantings.
 - Based on their suitability to the existing growing conditions at each site.
 - Planting the Right Tree Right Place.
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 or the Township. 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 year after planting.
- c) Proper mulching will be installed as depicted in the appendices (no volcano mulching).
- d) All trees must be protected from deer, both browsing and rubbing.

7. Funding

- a) Byram Township will have to depend upon outside funding via grants to sustain any sort of planting program.

2020-2024 OBJECTIVES

1. Ongoing Tree Planting Programs

a) 2020-2024

- Planting will be limited due to the lack of funding for a planting program.

2. Vacant Planting Site Identification

a) January - October 2021

- Prioritize all existing vacant planting sites identified by the tree inventory or via the Environmental Commission and institutional knowledge within the Township.

TREE MAINTENANCE AND REMOVAL CSIP #8

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;
 - Other heavy equipment used to remove brush and branches;
 - Various chainsaws, pruners and other small tools.
- c) The DPW Tree Crew completes:
- 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) DPW performs pruning where appropriate. This activity is limited at this time as the Township does not possess a bucket truck.
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.
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.
 - If the Spotted Lanternfly reaches Byram, the Township will need to cooperate with USDA in an attempt to control this species.
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.

2020-2024 OBJECTIVES

1. Ongoing Tree Maintenance Programs

a) 2020-2024

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

OTHER ACTIVITIES

ARBOR DAY ACTIVITIES CSIP #4

The Township of Byram will continue to host an annual Arbor Day event. Arbor Day is an excellent public relations tool. The event will include a formal proclamation by the Mayor and Council and when funding is available a ceremonial tree planting.

STORM DAMAGE ASSESSMENT CSIP #7

Tree-related emergencies are primarily 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. Proactive removal of declining Ash trees by the Township and Power Utilities will reduce the number of storm related emergencies.

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.

2020-2024 OBJECTIVES

1. On-going Programs

- a) 2020-2024
 - 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.

INSECT AND DISEASE MANAGEMENT CSIP #9

The Township of Byram is getting hit hard by invasive insects. The Hemlock Woolley Adelgid and Emerald Ash Borer and are found extensively throughout the Township. The Spotted Lanternfly is on the Township's radar. 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 an on-going and reactive process.

These insects will be monitored and education provided to private landowners to increase awareness of these species, treatment and prevention and potential impacts.

2020-2024 OBJECTIVES

Goal: Maintain community forest health to provide as many environmental services and positive community benefits as possible for the Township of Byram.

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 a major forest health issues be identified, CSIP funding may be applied for to reduce the financial impact on the Township.

- The Township and the Environmental Commission will continue to work with USDA to combat the Spotted Lantern Fly infestation. The Emerald Ash Borer and Ash Yellows have had a devastating impact on Ash trees and Hemlock Woolley Adelgid have drastically reduced the Hemlock population within the township.

The Township will attempt to provide education on emerging tree pests before they become entrenched within the Township.

WILDFIRE PROTECTION CSIP #10

Wildfire is not a significant threat in Township of Byram. 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 areas in the Township with steep slopes and thin soils, fire could nonetheless become a hazard during dry conditions. If the Township of Byram is interested it should pursue becoming a Firewise Community if funding is available from the New Jersey Forest Fire Service and the CSIP program. This would be a jointly managed program between the Fire Department and the Environmental Commission should a Firewise Grant be pursued.

Goal: Byram should review 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 for the control of invasive species and re-establishment of native Oak-Hickory forests on public and privately-owned forest tracts.

TREE RECYCLING CSIP #12

RECYCLING GOALS

The Township of Byram's Community Forestry and Shade Tree Program generates 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 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.

c) Bulk wood

- Brush and branches of up to 4" diameter can be dropped off by residents year-round (weather dependent). This material is loaded onto trucks and disposed of at the Sussex County Municipal Utilities Authority.

2020-2024 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.

SIDEWALK MAINTENANCE PROGRAM CSIP #13

There are virtually no sidewalks within the Township of Byram. 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.

2020 - 2024 Objectives

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 rain garden at C.O. Johnson Park, which are very visible to the many Township residents using the Township's largest sports park.
3. Review the possibility of creating a stormwater utility.

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 inventoried 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.

2020 - 2024 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.

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 third five-year plan being completed by Byram Township.

EXISTING PROGRAMS, POLICIES AND PROCEDURES

Preparation of this third 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.

2020-2024 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, 2024.

PLAN IMPLEMENTATION

Successful implementation of this plan will require a dedicated core of volunteers, community acceptance and buy in from municipal employees and elected officials. Based on the participation during these planning meetings and hazard tree field work, by volunteers and elected officials, the Township of Byram has shown and will continue to show dedication to its tree and forest resources.

This plan lays out the specific actions to be carried out each year for the next five years and the group responsible for carrying out these actions. This Implementation Timetable is a projected schedule. There may be unforeseen circumstances that may result in an alteration to this timetable. For this reason, some projects may be completed earlier or later than projected in this plan.

At each Environmental Commission meeting progress will be reported, it will be clearly laid out who is responsible each task, who will assist in completion of the task and clear deadline will be established for completion of the task. It is also understood that the Township of Byram has a limited pool of employees available to carry out this plan. Success breeds interest and each successful project should result in a press release.

SUMMARY OF 2020-2024 OBJECTIVES

IMPLMENTATION TIMELINE

| Date | Activity | Responsible Party | |
|-------------|--|--|--------|
| 2020 | | | |
| Spring 2020 | Arbor Day Tree Event | Environmental Commission Dept. of Public Works Volunteers | Annual |
| 2020 | Track hours and expenditures for Community Forestry Program | Dept. of Public Works Environmental Commission | Annual |
| 2020 | Submit two tree related articles to the Township website, local and regional newspapers | Environmental Commission | Annual |
| 2020 | Complete annual training requirements 8 Continuing Education Units | Environmental Commission Dept. of Public Works Consulting Forester | Annual |
| Fall 2020 | Plan and develop outreach efforts at Byram Day | Environmental Commission Consulting Forester Volunteers | Annual |
| 2020 | Conduct semi-annual trail cleanup event | Environmental Commission | Annual |
| 2020 | Register all 3 rd Graders in the Township for the free tree program from NJ Tree Foundation | Environmental Commission 3 rd Grade teachers | New |
| 2020 | Submit the Hazard Tree Survey Grant for CSIP funding | Environmental Commission Consulting Forester | New |
| 2021 | | | |
| Spring 2021 | Arbor Day Tree Event | Environmental Commission Dept. of Public Works Volunteers | Annual |
| 2021 | Track hours and expenditures for Community Forestry Program | Dept. of Public Works Environmental Commission | Annual |
| 2021 | Complete annual training requirements; 8 Continuing Education Units | Environmental Commission Dept. of Public Works Consulting Forester | Annual |
| 2021 | Submit 2 tree or forest related articles to local and regional newspapers and Township website. | Consulting Forester Environmental Commission | Annual |
| 2021 | Plan and develop outreach efforts at Byram Day | Environmental Commission Consulting Forester Volunteers | Annual |
| 2021 | Conduct semi-annual trail cleanup event | Environmental Commission | Annual |
| 2021 | If funding available apply for a Township Seedling Giveaway | Environmental Commission | Annual |

| | | | |
|-------------|---|---|--------|
| 2021 | Provide an education day for residents concerning invasive species, deer and planting on private property | Environmental Commission Consulting Forester | New |
| 2021 | Review or ensure that CORE Training requirements are met (two are required) | Dept. of Public Works Environmental Commission Mayor and Council | New |
| 2021 | Complete the field work for the hazard tree survey | Environmental Commission Consulting Forester | New |
| 2021 | Reach out to Public Utilities to jointly work on hazard tree mitigation. | Dept. of Public Works Environmental Commission Consulting Forester | New |
| 2022 | | | |
| Spring 2022 | Arbor Day Tree Planting | Environmental Commission Dept. of Public Works Volunteers | Annual |
| 2022 | Track hours and expenditures for Community Forestry Program | Dept. of Public Works Environmental Commission | Annual |
| 2022 | Continue and improve outreach efforts at Byram Day. | Environmental Commission Consulting Forester Volunteers | Annual |
| 2022 | Complete annual training requirements 8 Continuing Education Units | Environmental Commission Dept. of Public Works Consulting Forester | Annual |
| 2022 | Submit 2 tree or forest related articles to local and regional newspapers and Township website. | Consulting Forester Environmental Commission | Annual |
| 2022 | Explore the feasibility of Tree City USA re-certification | Environmental Commission | Annual |
| 2022 | Conduct semi-annual trail cleanup event | Environmental Commission | Annual |
| 2022 | Complete a review of the hazard tree list, update which trees have been removed/pruned | Consulting Forester Environmental Commission Department of Public Works | New |
| 2022 | Adopt the Model Highlands Shade Tree Ordinance (if its completed). | Environmental Commission Mayor and Council | New |
| 2022 | Implement a Largest Tree in Byram contest to raise awareness of the tree resource. | Environmental Commission Consulting Forester | New |
| 2023 | | | |
| Spring 2023 | Arbor Day Tree Planting | Environmental Commission Dept. of Public Works Volunteers | Annual |
| 2023 | Complete a review of the hazard tree list/windshield survey, update which trees have been removed/pruned | Consulting Forester Environmental Commission Department of Public Works | Annual |
| 2023 | Track hours and expenditures for | Dept. of Public Works | Annual |

| | | | |
|----------------|--|---|--------|
| | Community Forestry Program | Environmental Commission | |
| 2023 | Complete annual training requirements 8 Continuing Education Units | Environmental Commission Dept. of Public Works Consulting Forester | Annual |
| 2023 | Continue and improve outreach efforts at Byram Day. | Environmental Commission Consulting Forester Volunteers | Annual |
| 2023 | Submit 2 tree or forest related articles to local and regional newspapers and Township website. | Consulting Forester Environmental Commission | Annual |
| 2023 | Conduct semi-annual trail cleanup event | Environmental Commission | Annual |
| 2023 | Apply for CSIP funds to develop a Green Stormwater Project or Rain Garden Project on public land. | Environmental Commission Consulting Forester | New |
| 2024 | | | |
| Spring 2024 | Arbor Day Tree Planting | Environmental Commission Dept. of Public Works Volunteers | Annual |
| 2024 | Submit 2 tree or forest related articles to local and regional newspapers and Township website. | Consulting Forester Environmental Commission | Annual |
| 2024 | Apply for Tree City USA recertification | Environmental Commission | Annual |
| 2024 | Complete a review of the hazard tree list/windshield survey, update which trees have been removed/pruned | Consulting Forester Environmental Commission Department of Public Works | Annual |
| 2024 | Track hours and expenditures for Community Forestry Program | Dept. of Public Works Environmental Commission | Annual |
| 2024 | Complete annual training requirements 8 Continuing Education Units | Environmental Commission Dept. of Public Works Consulting Forester | Annual |
| 2024 | Continue and improve outreach efforts at Byram Day. | Environmental Commission Consulting Forester Volunteers | Annual |
| 2024 | Conduct semi-annual trail cleanup event | Environmental Commission | Annual |
| 2024 | Strategic planning, goal development and evaluate the successes and failures of the second CFMP. | Environmental Commission Consulting Forester | New |
| 2024 | Apply for Green Communities funding for the creation of the fourth five-year plan | Environmental Commission Consulting Forester | New |
| 2024 | Apply for a CSIP grant for a Tree Planting Project | Environmental Commission Consulting Forester | New |

10. COMMUNITY STEWARDSHIP INCENTIVE PROGRAM

CSIP #1 TRAINING: Page 25

CSIP #2 ORDINANCE ESTABLISHMENT: Page 19

CSIP #3 PUBLIC EDUCATION AND AWARENESS: Page 27

CSIP #4 ARBOR DAY: Page 36

CSIP #5 TREE INVENTORY: Page 30

CSIP #6 HAZARD TREE ASSESSMENT: Page 32

CSIP #7 STORM DAMAGE ASSESSMENT: Page 36

CSIP #8 TREE MAINTENANCE AND REMOVAL: Page 34

CSIP #9 INSECT AND DISEASE MANAGEMENT: Page 37

CSIP #10 WILDFIRE PROTECTION: Page 38

CSIP #11 TREE PLANTING: Page 32

CSIP #12 TREE RECYCLING: Page 38

CSIP #13 SIDEWALK MAINTENANCE PROGRAM: Page 39

CSIP #14 STORMWATER MANAGEMENT: Page 40

CSIP #15 OTHER: Page 40