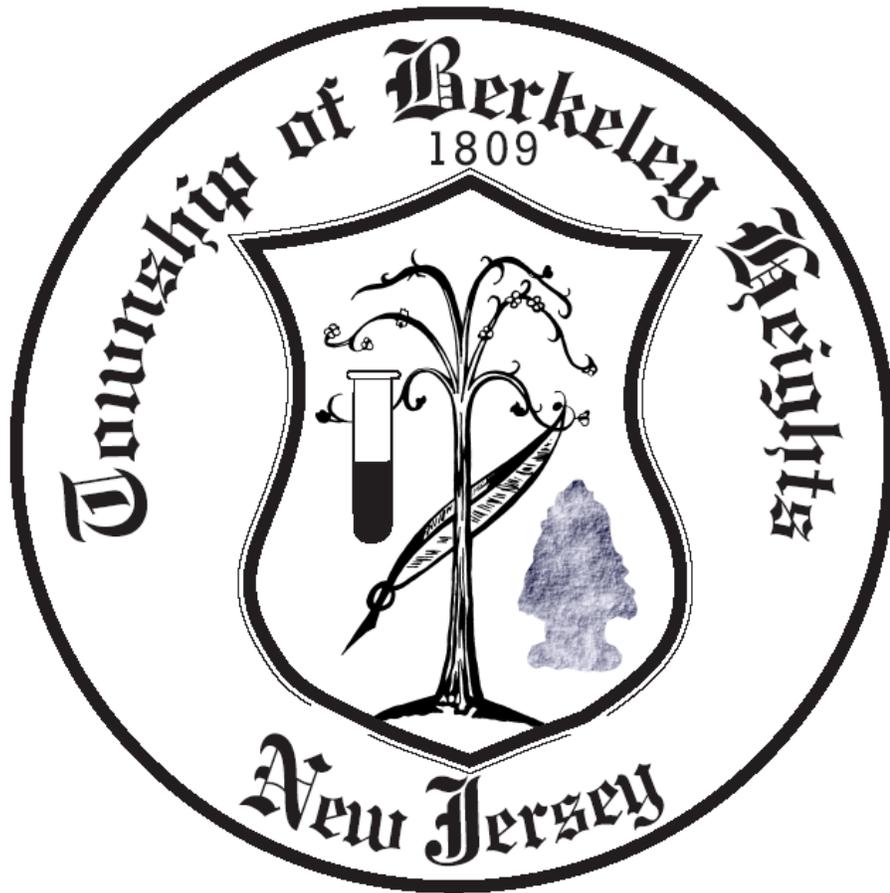


Township of Berkeley Heights  
Second 5 Year  
Community Forestry Management Plan  
2009-2014



Prepared by  
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In Cooperation with the  
Berkeley Heights Environmental Commission

# Berkeley Heights 2nd 5Years Community Forestry Management Plan 2009-2014

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**Municipal /County Information Form**  
(To be faxed over, no electronic copy exists)

## II. Introduction

### A. Scope

This plan has been designed to demonstrate the manner in which the Township of Berkeley Heights currently manages the community tree resources under its jurisdiction including trees along streets, in parks, right-of-ways and around township buildings and other holdings. This plan will also outline how Berkeley Heights intends to further improve this system over the next five years.

### B. Mission Statement

Berkeley Heights desires to maintain and promote a healthy, safe and sustainable shade tree resource that will physically and aesthetically benefit the community and its residents in the most cost effective manner possible.

### C. Goals and Objectives

The following is a list of goals of the Berkeley Heights Community Forestry Management Plan. Achievement of these goals will depend on the availability of funding from the township or grants.

1. Continue to introduce a diversity of trees and shrubbery that will provide for the long term coverage of public lands, parks and recreation areas.
  - a.) Expand a yearly planting program along local streets (municipal) and on recreation lands following the guidelines of an established list of trees developed with consideration of the size of the plant at maturity, the local climate and environment (clay soil, rocky or wetland conditions).
  - b.) Continue to participate in a cooperative planting program with Union County in conjunction with the municipal efforts.
2. Continue to follow an established ongoing maintenance program for the trees along township right-of-ways and coordinate with county, state and utility company maintenance divisions to ensure that their procedures are compatible with ours.
3. Inventory tree resources on all local, county and state roads, lands and parks.
  - a.) Identify maintenance deficiencies and propose corrective action.
  - b.) Establish a priority list for the implementation of corrective action.
4. Review and revise tree ordinances as necessary to define responsibility for maintenance, removal, replacement and to enhance tree resources.
  - a.) Develop policies for the ongoing maintenance of community shade tree resources. Establish where the greatest liabilities lie and address these areas.
  - b.) Propose policies based on the need to promote the safety and welfare of the community.
  - c.) Review and revise as necessary the current approved tree list used for planting in township easements.

5. Educate the public about trees and their importance to the entire community.
  - a.) Continue to update a list of community tree resources and locate important points of interest, i.e. significant trees by virtue of size, history or beauty.
  - b.) Establish an educational document updated yearly that reinforces the goals and objectives of the shade tree efforts in the community and encourage public participation in all events.
  - c.) Continue to develop educational programming to be used in the Berkeley Heights school system.
6. Develop Berkeley Height's shade tree resource and take a more proactive role in establishing the aforementioned goals.
7. Continue to identify hazardous trees, and develop and implement a plan to remediate hazardous tree conditions.
8. Ensure that the goals of the Community Forestry Management Plan are compatible with the Master Plan and Open Space and Recreation Plan. Provide input into future revisions of the Master Plan.
9. Expand the educational opportunities and training available for Environmental Commission members and Public Works employees.
  - a.) Send 1 or 2 members for CORE training annually.
  - b.) Hold in house training for proper pruning, pesticide application, tree identification and hazard tree identification, invasive and exotic species training, etc.
10. Enhance trees and other plantings along the Passaic River Pathway in cooperation with Union County.

#### D. Liability Statement

Berkeley Heights recognizes the benefits provided to the community by its tree resource. As trees are living entities, it is inevitable that as they mature they eventually require care, maintenance, removal and replacement. Berkeley Heights must, however, work within a reasonable budget and may not be able to meet every demand. Therefore it is the intent of this plan to focus available resources to reduce tree hazards.

Since it is impossible to predict or prevent all hazardous conditions that may arise, Berkeley Heights is developing this plan to become more proactive in its tree maintenance. Proactive tree management should reduce the occurrence of unexpected events.

Following this plan will demonstrate Berkeley Height's commitment to proper tree management within the Township's right-of-ways and public holdings.

### III. Community Overview

#### 5 Years of Progress

Achievements during the previous Five Year Plan

**Objective 1.** Introduce a diversity of trees and shrubbery that will provide for long term coverage of public lands, parks and recreation areas.

- a) Expand a yearly planting program along local streets (municipal) and on local recreation lands following the guidelines of an established list of trees developed with consideration of the size of the plant at maturity, the local climate and environment (clay soil, rocky or wetland conditions).
- b) Develop a cooperative planting program along Union County and State right-of-ways in conjunction with municipal efforts.

Street tree planting programs were run each year assisted by grant funding from Union County. Approximately 150 trees were planted in the 5 year period mainly on streets but a few trees were planted on municipal properties. Species were diversified compared to the existing street tree populace and new introductions included cherries, oaks, dogwoods, maples, maackias, and lindens. Planting was done by DPW employees and outside contractors. Flyers were distributed to home owners advising on proper care for the newly planted trees.

Extensive cooperative planting was done along with the Union County Park Commission in the newly established flood plain park along the Passaic River. Several hundred trees and shrubs were planted. River birch, cedar, white oak, flowering crabapple and dogwood were planted in the wet areas. Union County employees, Berkeley Heights Environmental Commission members, Berkeley Heights DPW, Sheriff's Labor Assignment crews, the Summit Junior League, employees of Martindale-Hubbard, Rutgers Cooperative Extension Master Gardeners, local students, boy scouts, girl scouts, and the New Jersey Tree Foundation all helped at different times. Volunteers also removed invasive species such as multi-flora rose, phragmites, and Japanese knotweed.

Over 1000 seedlings - pin oak, silky dogwood, white pines, and white spruce, were distributed to fourth grade students and other interested youngsters for planting.

A list of recommended evergreens was established by the Planning Board and a list of hardwoods has recently been suggested for their consideration. (See attachment).

**Objective 2.** "Establish an ongoing maintenance program for the trees along township right-of-ways and coordinate with county, state and utility company maintenance divisions to ensure that their procedures are compatible with ours."

A windshield survey was done at the start of the plan and the identified priority hazard situations were handled.

The town has relied on windshield surveys by the Tree Inspector, the township engineer, DPW foremen and resident reports to continue with the identification of hazardous trees. Hazard

situations are dealt with according to these observations and re-mediated as soon as possible depending on the condition rating of the hazard identified.

A meeting was held in 2003 among Environmental Commission members, the Tree Inspector, and the local utility, JCP&L, to discuss pruning strategies.

JCP&L and/or their contractor meet with the Tree Inspector before beginning routine pruning cycles.

**Objective 3.** Inventory tree resources on all local, county, and state roads, and in public lands and parks.

The town was divided into 5 sections but the town was unable to contract with arborists to do the planned tree inventories for the funds budgeted. Berkeley Heights was also unsuccessful thus far to get CSIP funding for such work but are still pursuing this as a primary goal in this current plan.

**Objective 4.** Revise tree ordinances as necessary to define responsibility for maintenance, removal, replacement and to enhance tree resources.

Tree ordinances from other towns were studied and, after 4 years of effort, a revised tree ordinance was passed in 2004 with the main objective of maintaining and extending the town's tree canopy. The ordinance requires tree replacements by developers based on the sizes of trees removed or payment in lieu of replacement to a township tree fund.

After experience with the ordinance, it was amended in early 2008 to encourage replacement on site by larger deciduous trees and/or evergreens and to increase the payments to a tree fund when replacements are not done on site. The tree fund is to be used for plantings elsewhere or other environmental purposes. Fines for violation of the ordinance were also increased. Copies of both ordinances are attached.

The Tree Officer, town engineer, and Environmental Commission representatives visit development sites before construction starts and discuss tree removal plans.

A steep slope Ordinance was also passed in 2005, which should help maintain such slopes in a wooded condition.

**Objective 5.** Educate the public about trees and their importance to the entire community. Berkeley Heights qualified as a "Tree City USA" at the beginning of the 5 year period and has maintained that qualification. Tree City signage has been placed at the entrances to town.

Several articles on trees or tree related subjects have been published each year in the township newsletter, the local newspaper (Independent Press), and even the Star Ledger. These are on subjects like the benefits of trees, the effect of deer on trees, the role of trees in the water cycle, and local tree-planting activities. A TV program was also presented on the local TV station, TV-36, covering the water cycle and the role of trees in reducing the impact of storm water run off.

The Mayor continues to proclaim Arbor Day each year, and an Arbor Day program is held. Tree

seedlings were distributed to all fourth graders in town each year, along with planting instructions. Seedlings were also distributed at the town library to interested youth. Also, in connection with Arbor Day, assemblies were held in local schools. Tree trails were established behind two of the local schools and students were led on tree walks each year.

An initial list of specimen trees in town has been established and is part of the 2005 update of the Natural Resources Inventory".

A deer fence was erected in the Passaic River Park as an educational tool to show the harmful effect of deer on the forest under story.

**Objective 6.** Develop Berkeley Heights' shade tree resource and take a more proactive role in establishing the aforementioned goals.

In addition to the achievements listed above, the town has established a new 17acre park area, with the cooperation of Union County on Sanford Drive.

With the sponsorship of the Environmental Commission, the Berkeley Heights Natural Resources Inventory was updated in 2005, with sections on the tree resource, forested areas, water recharge areas, etc. It also includes a table of "Terrific trees" in town.

**Objective 7.** Identify hazardous trees, develop and implement a plan to remediate hazardous tree conditions.

As was discussed under objective 2, Berkeley Heights has continued to maintain an annual windshield survey, and based on the findings of the survey, necessary recommendations to remediate the risk would follow. For example, as of June 1 2008, the town had a list of 18-22 potentially problematic street trees, which were to be evaluated and prioritized for action.

**Objective 8.** Ensure that the goals of the Community Forestry Management Plan are compatible with the Master Plan and Open Space and Recreation Plan. Provide input into future revisions of the master plan.

The Natural Resources Inventory discussed above has been incorporated into the master plan. The Environmental Commission uses it for advice on the suitability of Development Projects in town.

A new Master plan was issued in 2006. Many inputs from the Environmental Commission were incorporated, including:

- a) Recommendation to discourage "flag lots" which are often highly wooded areas.
- b) Recommendation to preserve and secure greenbelt land along the entire Passaic River corridor.
- c) Recommendation to "Protect and preserve environmentally sensitive areas, including flood plains, recharge areas, wetlands, steep slopes, rock outcrops, and concentrations of hardwood forested areas."

- d) Recommendation to "Locate, plant and maintain more street trees at consistent intervals, where feasible, along all roadways in the Downtown Business Districts".

**Objective 9.** Expand the educational opportunities and training for Environmental Commission members and Public Works employees.

Members of the Environmental Commission and DPW participated in training each year. CEU's obtained were 12.5 in 2003, 28 in 2004, 7 in 2005, 20 in 2006, and 16 in 2007. At present, one Environmental Commission member and 2 DPW employees are CORE trained.

**Objective 10.** Enhance trees and other plantings along the Passaic River Pathway in cooperation with Union County.

See discussion under Objective 1.

#### Problems Encountered During Original 5-year Plan

We were unable to hire an arborist with the budgeted funds to begin the systematic inventory of street trees and the concomitant listing of possible hazards. CSIP grants were applied for but not received. Instead DPW personnel received tree training and performed windshield surveys to locate and identify tree hazards. Town residents also participated in the program by reporting tree hazards.

Similarly, no systematic pruning program was started due to lack of funds.

The long range effect of the deer population on the wooded under story has become a concern. The Environmental Commission reviewed possible deer control methods and discussed them with the Township Committee liaison. However, no program has been started. The tree ordinance was revised to give developers credit for planting under story plants.

Several members of the Environmental Commission have left, including the one Master Gardener who also had the most tree training. We now have only one core trained Environmental Commission member and will look to obtain more training in the future.

#### Benefits to the Community of the CFMP

During the past five years the school age population has acquired an appreciation of the importance of trees. Adults too have learned more about trees primarily through the TV program and articles written by Environmental Commission (EC) members in the quarterly township newsletter. The EC meetings are open to the public. Most of the citizens who have attended have come to voice concerns about tree removal. The EC has been effective in communicating this concern to elected officials. For example, the 2004 tree ordinance just barely passed but the even more restrictive 2008 ordinance passed unanimously. As another example, when a proposal was made to remove 10 mature trees to allow for parking along the length of a two acre downtown park,

township residents voiced overwhelming opposition. The parking plan was abandoned and the trees remain.

Again due to public concern, the Town Council and Planning Board have supported increased tree planting on the main downtown street, Springfield Avenue.

#### A description of the municipal tree resource now and how it has changed over the last 5 years

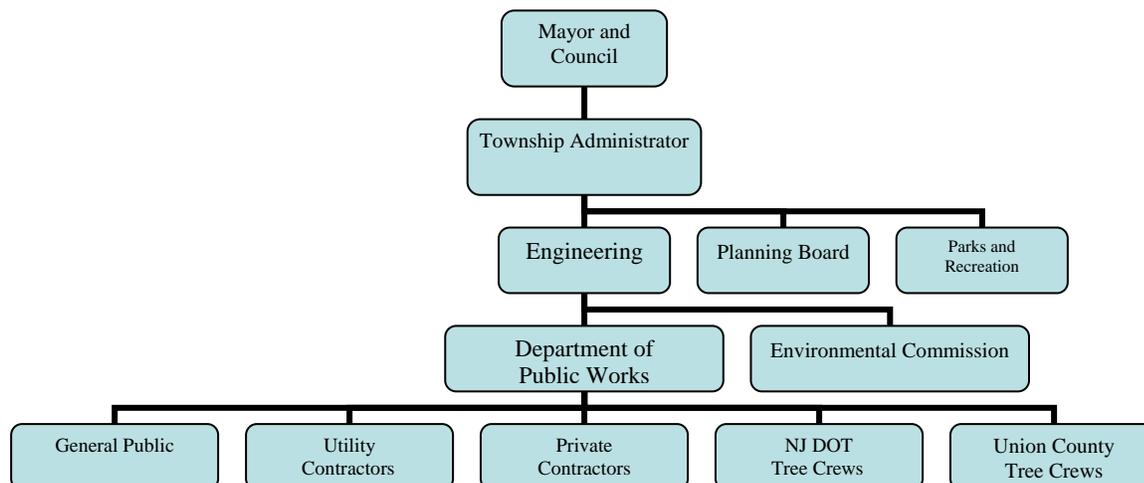
There has been no major change in the municipal tree resource during the last 5 years. Several developments have led to extensive tree removal, including older specimens - in the Connell properties north of Valley Road, at the Summit Medical Group Site on Mountain Avenue, and at a few other old, deep properties off of Mountain and Plainfield Avenues. Many citizens expressed concerns in these instances but replacement trees far exceed those removed although the replacements are obviously much younger.

#### Discussion of the link between CFMP and Master Plan

The new Master Plan incorporated several tree related elements. It recommends tree planting downtown, discourages development of flag lots (which usually involve wooded areas behind houses), supports maintaining the Passaic River frontage as a passive park, and incorporates a new Natural Resources Inventory (NRI) which identifies the wooded assets and recharge areas (generally wooded). There is not a lot of undeveloped land in town but the NRI needs to be used more as a tool in evaluating future developments many of which involve acquiring older homes on large plots of land, then subdividing the lots.

#### **IV. Community Forestry Program Administration**

The Berkeley Heights Environmental Commission advises the Mayor and Council, Planning Board, and Zoning Board on shade tree concerns on public property and along public right-of-ways. The following chart depicts the relationship of those involved in the shade tree management process.



A. The Mayor and Council

- 1) The Mayor and Council are responsible for appointing the members of the Berkeley Heights Environmental Commission.
- 2) The Mayor and Council review the policies and plans of the Berkeley Heights Environmental Commission.
- 3) The Mayor and Council approve annual budgets for the Berkeley Heights Environmental Commission and the Department of Public Works.

B. Township Administrator

- 1) Reviews plans and policies submitted by the Berkeley Heights Environmental Commission and makes recommendations to the Mayor and Council
- 2) Recommends the annual budget of the Environmental Commission to the Mayor and Council.

C. Berkeley Heights Environmental Commission

The Berkeley Heights Environmental Commission is a seven member volunteer board appointed by the Mayor and Council. They are the advisory agency for all community trees on municipal streets, right-of-ways, parks, or other properties. Their duties may include:

- 1) Provide advice regarding the planting, removal and general maintenance of Township trees.
- 2) Develop and recommend the policies and goals that will preserve and develop Berkeley Heights' tree resource.
- 3) Perform public outreach to foster better understanding and care for Berkeley Heights' trees on both public and private properties.
- 4) Propose tree related items for inclusion in the annual township budget.
- 5) Review site development plans and provide advice to the Planning

Board and Board of Adjustment regarding trees, and other environmental issues.

D. Department of Public Works and Township Tree Inspector

- 1) Reviews requests for tree planting, removal or maintenance and makes the necessary inspections in conjunction with the Environmental Commission.
- 2) Inspects work performed by private contractors for the township.
- 3) Develops annual plans and budget requests for tree maintenance.
- 4) Maintains through public employees and private contractors all trees on public property concerning tree hazards and other problems.
- 5) Responsible for tree removal, pruning and brush clean-up along municipal roadways and on township properties.
- 6) Grants permits for tree removal.
- 7) Reports to Engineering Department.

E. Township Engineer

- 1.) Oversees the Environmental Commission budget, which is a line item account placed through the Engineering Department.
- 2.) Inspects all the work performed by utility contractors on Berkeley Heights properties.
- 3.) Oversees the Department of Public Works and the Township Tree Inspector.

F. Planning Board

- 1.) The Planning Board reviews and approves all landscape and tree planting plans submitted to the township.

G. Department of Parks and Recreation

- 1.) Responsible for upkeep of newly planted and young trees in Township Parks, i.e. mulching, watering, fertilizing, trimming

H. Private Tree Contractors

Generally, most tree care and maintenance activities are done by outside vendors except emergency situations as they arise, which may be handled by the Department of Public Works, Union County or utility tree crews. Private contractors are responsible for the following:

- 1) Provide proof of appropriate insurance, certifications and licenses as necessary to the appropriate department heads.
- 2) Report prior to and following all work performed to the appropriate department supervisor.
- 3) Complete all work in a safe and timely manner according to all applicable safety standards set by OSHA or ANSI, as they pertain to tree care operations.
- 4) Follow all current arboricultural practices and recommendations.
- 5) Report all hazards or problems directly to appropriate department

head immediately.

I. Utility Contractors

- 1) Must notify the Berkeley Heights Director of Public Works prior to the start of any non-emergency work in the township.
- 2) Must follow all current arboricultural practices and recommendations.
- 3) May assist Public Works Department Tree Crews in clearing trees to a safe distance from their facilities when necessary.

J. General Public

- 1) Continue to report all requests for planting, removal or maintenance to the Department of Public Works, the Berkeley Heights Environmental Commission or the Engineering Department.
- 2) Assist in follow-up care to the newly planted trees on adjacent properties or in County or Township rights-of-way.

K. Union County Tree Crews

- 1) At the request of the Berkeley Heights Environmental Commission, the Department of Public Works or the Township Tree Inspector will maintain or remove trees on county rights of way.

L. NJ DOT Tree Crews

- 1) Responsible for maintaining trees on state roadways.

## Tree Service Request Process

Planting, removal, or pruning requests for trees on municipal property can be made by

any department or individual residing in Berkeley Heights so long as the property in question is one owned and maintained by Berkeley Heights. All requests must follow this procedure.

- A. All requests must be mailed or called in to the Berkeley Heights Engineering Department, Township Clerks Office or the Department of Public Works
- B. All information pertinent to the request should be sent to the Department of Public Works or Township Tree Inspector prior to action, except in the case of emergencies - which will be handled in an expeditious manner by the appropriate agency or private contractor depending on the severity and complexity of the situation.
- C. All non-emergency work will be inspected by the Township Tree Inspector prioritized and referred to the appropriate department, Union County, State D.O.T., or private contractors.
- D. Work requests will be completed in the order in which they are received (excluding emergency or priority work) and will be completed in a reasonable time period.
- E. Those making the request will be notified of any action to be taken, even if no action is deemed necessary at that time.

MAP  
(No computerized copy)

## VI. Training Plan

Since arboriculture is constantly changing with fast-paced technological and scientific innovations, Berkeley Heights recognizes the need for a broad based and ongoing training program for individuals at all levels of the Community Forestry Management Program.

From Public Works employees to Commission members and administrators, all need continued technical and managerial information to benefit Berkeley Height's tree resource.

#### A. Current Training

1. The Berkeley Heights Environmental Commission utilizes a portion of its budget for ongoing training of its members.
2. The Berkeley Heights Environmental Commission encourages and provides for its members to participate in continuing education classes and CORE training as included in the New Jersey Shade Tree & Community Forestry Assistance Act. At the time of this writing, two township employees and one volunteer are CORE trained.
3. Two members of the Department of Public Works have attended and received training at the annual Shade Tree Federation meeting over the last 3 years. Department of Public Works employees and Environmental Commission members obtained 83 CEU's from 2003-2007.
4. Members of the Environmental Commission and Department of Public Works employees continue to attend short courses relating to Arboriculture at Rutgers University.
5. In house training dealing with chainsaw safety, chipper safety, tree pruning and electrical hazard awareness has been provided to the Public Works tree crews.
6. Environmental Commission members attended courses and webinars on invasive species identification and site plan reviews.
7. The above mentioned courses and others are available to all individuals involved in managing tree resources.

#### B Goals and Objectives

1. To have all individuals involved in the management of tree resources CORE trained. To accomplish this, one or two Environmental Commission members and/or one township employee will be sent each year to be CORE trained.
2. To increase the quality of care given to Berkeley Height's trees by providing tree maintenance crews and Environmental Commission members with the most current technical arboricultural information.
3. To ensure the safety of tree maintenance crews and residents by providing current and advanced training in hazard tree identification, equipment safety, and electrical hazard awareness.

### VII. Public Education, Awareness and Outreach

Since its beginnings on July 6, 1970, the Berkeley Heights Environmental Commission has supported public education with regard to tree care. While this provides a valuable service to the community at large, it also encourages public support for the Environmental Commission. Upon acceptance of this management plan, the Berkeley Heights Environmental Commission hopes to pursue a more aggressive outreach program. In the past, the Commission has provided community

forestry education through some of the following public outreach methods and hopes to expand this program to include each of these objectives.

- A. Providing tree advice to residents at no charge.
- B. Providing trees and seedlings to schools for Arbor Day plantings.
- C. Notifying local newspapers of tree-related events when appropriate.
- D. Publishing Environmental Commission meeting dates in compliance with the "Sunshine Law."
- E. Inviting Scouts and other youth groups to Arbor Day activities and getting schools more involved with the Shade Tree Program.
- F. Assisting youth groups, such as the Scouts in tree related projects.
- G. Working with Garden Clubs to help maintain and beautify public spaces and parks.
- H. Advising the Planning and Zoning Boards regarding tree removal and tree planting in development applications.
- I. Installing an approved Community Forestry Management Plan on the township website and placing a copy in the library.
- J. Publishing 2 tree related articles annually in the local paper.
- K. Achieving and maintaining Tree City USA status on an annual basis.
- L. Involving community volunteers in planting trees and shrubbery along the Passaic River Pathway.
- M. Using community bulletin boards to post tree, disease insect information.
- N. Hosting a tree care program on the local cable channel.
- O. Expand the list of Historic and significant trees and better publicize it to the general public.

### VIII. Statement of Tree Budget

The year 2007 budget for the Berkeley Heights Environmental Commission is listed below, along with funds allocated for the Tree Management Program by the Department of Public Works Shade Tree Crew.

Annual Budget allocated for the following:

|   |                    |
|---|--------------------|
| - Tree plantings, Arbor Day seedlings and supplies        | \$ 2,070.00        |
| - Conferences, membership dues, publications and training | \$ 4,140.00        |
| - Advertising, postage and other miscellaneous materials  | \$ 110.00          |
| - Secretary's payroll                                     | \$ 2,000.00        |
| <b>Total of Annual Budget</b>                             | <b>\$ 8,320.00</b> |

In Kind Hours

2 meetings per month x 2 hours x 6 people = 288 hours per year

288 hours x \$18.77 per hour = \$5,405.76

Special projects (Arbor Day, Earth Day, site evaluations, special meetings, training)

220 hours per year x \$18.77 = \$4,129.40

**Total In-Kind Budget \$ 9,535.16**

|   |              |
|---|--------------|
| Emergency Tree Removal Budget           | \$ 10,350.00 |
| Wood waste recycling (chipping program) | \$ 23,805.00 |
| Tree Consultants                        | \$ 2,588.00  |

**Total General Tree Care Budget**

**\$ 36,743.00**

Natural Resources Projects

2007

200 people hours x \$18.77 \$ 3,754.00  
-on town beautification

Tree and shrub replacement from trust fund \$ 673.00  
Total Natural Resources Projects \$4,427.00

**Total Tree Care Budget: \$59,025.16**

## IX. Shade Tree Management Plan Implementation

### A. Tree Assessment and Inventory

The Township of Berkeley Heights has a large and diverse tree resource. Currently there is no formal street tree plan and only a partial tree inventory. Potential plans for GIS mapping in Berkeley Heights may lead to the eventual inventory of traditional street trees to be included in

those maps. It is unclear at this time if GIS mapping will become a reality in the near future or if woodland and native vegetation areas will be included in those plans at such time. A preliminary tree inventory, whether traditional or computerized, should begin with the most basic information within the next five years.

#### 1. Goals

The current goals of the tree inventory are to:

- a.) Determine the overall health of Berkeley Heights' tree resource.
- b.) Catalogue all planted trees along roadways in the township.
- c.) Catalogue all trees in township parks and on township owned properties.
- d.) Identify open planting spaces in the community.
- e.) Identify possible tree or sidewalk conflicts.
- f.) Develop maintenance cycles for systematic rotation pruning.
- g.) Include inventory on new GIS map when this becomes available.

### 2009-2014 Objectives

1. Seek volunteers to compile a complete tree inventory of all public trees along Township rights-of-way.
2. Hire a consultant to train volunteers in tree identification, and hazard tree identification.
3. Perform annual survey to assess tree health and future needs.
4. Train volunteers and Township employees to install information gathered into computer database.
5. Catalogue all pertinent information gathered in survey.
6. As a result of the information gathered in the inventory, set up systematic pruning cycles for newly planted and established trees.
7. Implement action plan to prevent and remediate tree / sidewalk conflicts.

#### B. Tree Hazard Identification and Management

Berkeley Heights is dedicated to providing a healthy and productive tree resource for its residents in the safest and most cost effective manner possible. Public safety is of the highest concern throughout every aspect of the tree management program from planting to removal. During the undertaking of this Community Forestry Plan, a preliminary Hazard Tree Assessment has already been completed through a cursory windshield survey covering 19 miles of roadway.

Information gathered in that survey has been forwarded to the appropriate departments for hazard abatement work.

1. Goals

- a.) To ensure public safety in relation to trees on all Berkeley Heights properties and thoroughfares.
- b.) To establish an ongoing comprehensive plan for Hazard Tree Assessment on all Township properties and thoroughfares.

2009-2014 Objectives

- 1. Hazard tree evaluation training should be provided for Environmental Commission members and Public Works employees.
- 2. Establish an annual Hazard Tree Assessment by windshield study.
- 3. Encourage all members involved in the Tree Management Program to report all potential tree hazards to appropriate department heads.
- 4. Have all recognized tree hazards discovered in the assessment remediated by pruning, removal or appropriate arboricultural actions.

C. Tree Planting

The tree planting program as it exists now is designed to replace dead trees, fill open spaces located by the Environmental Commission, meet the requests of residents, and add species diversity to Township parks, streets and other facilities. Builders are also responsible to plant 2 1/2 - 3 inch caliper trees on 30 foot centers for all new developments. Arbor Day and memorial plantings have also been an integral part of Berkeley Heights' tree planting program. Berkeley

Heights recognizes the need for diversity and stability in its aging tree population and intends to develop a formal plan to integrate young trees into areas with aging and declining tree populations. Implementation of this program will not only beautify the town, but also by diversifying the species and age of the trees in Berkeley Heights, it will benefit the community.

#### 1. Goals

- a.) Improve species diversity throughout the township.
- b.) Increase the number of ornamental tree species to increase the aesthetic appeal to the residents.
- c.) Increase the number of smaller ornamental tree species in close proximity to overhead utilities, reducing future tree and utility conflicts.
- d.) Develop plans for renovation and beautification of township parks.
- e.) Seek better ways to maintain and help establish newly planted materials i.e., water, mulch.
- f.) Develop signs and plantings for entrances welcoming residents and visitors into town.

#### 2009-2014 Objectives

1. With the cooperation of Union County tree crews and utility companies, start removing declining and poorly or over-pruned trees and replace them with smaller species around overhead utilities.
2. Find suitable tree species not currently existing on township properties, and incorporate them into new plantings.
3. Seek grants or donations to fund new plantings and beautification of township parks, including Adopt-a-Tree and memorial garden programs.
4. Solicit help of the Public Works Department and the public in the aftercare of new tree plantings.
5. Apply for Tree City USA status.
6. Continue to apply for Tree City USA status and strive for growth awards.

#### D. Tree Maintenance and Care

Berkeley Heights recognizes that trees need general wellness care and not just emergency care. A proactive plan of routine scheduled maintenance will ensure a healthy, aesthetically pleasing and cost effective urban forest with a reduced hazard potential.

This management plan aims to provide a framework that will benefit and raise the level of care for all township owned trees and trees along township thoroughfares. Structural pruning schedules will be established to train young trees to reduce future potential liabilities and maintenance costs.

Continued maintenance on established and mature trees should reduce the risk of hazardous situations and increase tree life spans, generating benefits to the community.

1. Goals:

- a.) To install healthy, viable trees into the existing landscape and help them to reestablish themselves as quickly as possible to insure their longevity.
- b.) Train and develop young trees with good structure.
- c.) Maintain the health and extend the useful life span of existing trees.
- d.) Promote public safety with regard to trees on township properties and right-of-ways.
- e.) Maintain the maximum benefit of trees in the most cost effective manner.
- f.) Review and revise all tree related ordinances as necessary.
- g.) Educate the public with regards to trees and their benefits and care.

2009-2014 Objectives

1. Seek cooperation from Union County tree crews to begin a routine pruning cycle in Berkeley Heights.
2. Submit an annual accomplishment report to the NJ Forest Service.
3. Work with utility companies to develop a removal and replacement program to eliminate future hazards and tree line conflicts. Emphasize the need for sound pruning practices.
4. Seek additional funds and grants for hiring of private contractors for general tree care needs beyond the scope of county and utility cooperation.
5. Develop a rigorous training program for structural pruning of 25% of young trees on an annual basis, by dividing the Township into 5 zones and completing one zone annually until finished.
6. Develop a quarterly news letter or newspaper column to inform the public of the Environmental Commission's progress and also general tree care tips.
7. Continue to seek help from Union County and utility tree crews on an annual basis and seek grant funding for additional work.
8. Establish an annual assembly seminar in the elementary school district.

Shade Tree Management Plan Implementation

## **Timeline for the years 2009 - 2014**

### Year 1, 2009

- Divide the township into five management zones and initiate a 5 year cycle of hazard pruning and maintenance. Begin this year by completing a simple windshield survey hazard tree assessment to identify existing hazards in all five zones. This hazard assessment will be carried out by the public works department, Environmental Commission and a hired consultant.
- Continue already established tree planting projects. The Environmental Commission traditionally hires outside contractors to plant approximately 10 trees per year usually in the spring, plus incidental planting and special projects such as Arbor Day. Planting is also done by bonded requirements from developments.
- Apply for Tree Planting Grant or tree planting money from CSIP.
- Develop a clear definition of what qualifies as a municipal tree, i.e. those trees for which the town is responsible.
- Establish a comprehensive street tree inventory. Initiate a plan of action and determine what information should be included in the inventory.
- Get the approved Community Forestry Management Plan on the Township web site and on reserve at the library.
  - Achieve Tree City USA status.
  - Continue to hold Township Arbor Day celebration
  - Have at least 2 articles published on tree related issues in the local paper
  - Write one article for the townships quarterly newsletter.
  - Continue to adhere to the sunshine law by publishing monthly meeting notices.
  - Continue working with volunteers to clean up and beautify the Passaic River Pathway.
- Send 1 or 2 people from the Environmental Commission and/or Public Works representatives to the New Jersey Shade Tree Federation Meeting for CORE training and CEU's. Continue a program of in-house training for the Public Works Department with the use of outside consultants and safety trainers. This year should focus on proper pruning, chain saw and equipment safety.
- Reach out to the local utility company to begin a proactive removal and replacement plan.
- Establish a citizens team to make recommendations for township action on "tree canopy and open space" as a part of the Berkeley Heights sustainability initiative.
- Continue twice monthly meetings with site plan reviews.
- Submit an Annual Accomplishment Report to NJ Forest Service.

### Year 2, 2010

- Using the assessment done in 2009, begin in the zone that was found to have the most hazardous situations and hire a contractor to prune or remove the hazardous trees in this first zone. (apply for CSIP Grant to fund this project).
- Continue with regular tree planting. Consider applying for tree planting grant or some tree planting money from CSIP depending on the severity of the hazard problem identified above.
- Begin comprehensive street tree inventory. The goal for this year is to complete the first zone.

- Meet with the Planning Board and Mayor and Council to review relevant ordinances for compliance with the Municipal Master Plan and to discuss what's working and what isn't. Ordinance review should include an update of the Approved Species Planting List and a review of the existing permitting process and a fine structure for failure to comply with the ordinance.
- Continue working with local utilities to begin removal of hazardous or troublesome and high maintenance trees under overhead conductors.
- Continue yearly Public Relations activities, such as Tree City USA recertification, Arbor Day celebrations, 2 newspaper articles, quarterly newsletter and Sunshine Law notifications.
- Continue attendance at the New Jersey Shade Tree Federation Meeting (Environmental Commission and Department of Public Works). Continue in-house training of Public Works employees. The goal for this year is to hold tree identification and hazard tree identification courses.
- Look into the feasibility of hiring or sharing with another community a part time forester or consultant.
- Continue working with the volunteers on Passaic River Pathway project.
- Submit Annual Accomplishment Report to the New Jersey Forestry Service.
- Continue twice monthly meetings with site plan reviews.

### Year 3, 2011

- Hazard tree removals / pruning should move on to the next priority zone as established in the windshield assessment.
  - Tree Planting goals remain the same as last year.
  - Continue the comprehensive street tree inventory. The goal for this year is to complete zone two.
  - Continue every year Public Relations activities: Tree City USA recertification, Arbor Day celebration, 2 articles in the local newspaper, continue participation in community service with volunteers at Passaic River Pathway, quarterly news letter and Sunshine Law notifications.
  - This year, work with the local cable channel to provide a tree care program for the local residents.
- 
- Continue training program with attendance at the NJ Shade Tree Federation Meeting (keep up with CORE and CEU requirements).
  - Continue in-house training with public works, address any training needs that may present themselves as we work through the plan or as other things happen. Perhaps training on how to recognize and deal with Bacterial Leaf Scorch and Asian Long Horned Beetle will be necessary.
  - Seek funds to develop a significant tree list, and perhaps develop a map and walking trail for citizens to locate the trees.
  - Continue working with utility companies to remove hazardous or high maintenance trees under the overhead conductors and begin replacing them with smaller ornamental varieties.

- Apply for a grant to hire a part time forester or consultant to help oversee the Community Forestry Management Plans goals and move the program forward. This is the CSIP goal for this year.
- Submit Annual Accomplishment Report to NJ Forest Service.
- Continue twice monthly Environmental Commission meetings with site plan reviews.

#### Year 4, 2012

- Hazard tree removals/pruning should move into the third priority zone.
- Tree planting goals should remain the same as in previous years, with possible adjustments considering the number of removals necessary as part of the hazard removal program and availability of grant money.
- Comprehensive street tree inventory should move to the third zone.
- Continue the trend of the “annual meeting” with the Planning Board, to keep them informed of our progress and to address any concerns. Push for the incorporation of the Community Forestry Management Plan into the Master Plan.
- Continue Public Relations activities: Tree City USA recertification, Arbor Day celebrations, 2 articles in local newspaper, quarterly newsletter and Sunshine Law notifications.
  - Initiate a training program for residents, a one day seminar for residents on pertinent tree issues.
- Continue working with volunteers along the Passaic River Pathway.
- Training program will continue as usual, with the addition of inviting members of the Planning Board to join us (Environmental Commission and Department of Public Works) at the Shade Tree Federation Meeting.
- Continue working with the utilities on the proactive removal and replacement project under the overhead utilities.
- Review the part time forester position and duties required, and apply for a CSIP grant again to fund this position.
- Submit annual accomplishment report to New Jersey Forest Service.
- Continue working on gathering information for a significant tree list.
- Continue twice monthly Environmental Commission meetings with site plan reviews.

#### Year 5, 2013

- Hazard tree pruning and removals should move into the last two zones and be completed for the first rotation of the entire township this year.
- Tree planting goals should remain the same.
- The tree inventory (comprehensive street tree inventory) should complete zone four this year. All data entry should be up to date this year, and a system will be developed for working with the Department of Public Works to update the inventory and for use when tree service requests are received from residents.
- Meet with the Planning Board to involve them in the formation of the next 5 year Community Forestry Management Plan. Representatives of other committees and boards in Berkeley Heights will be invited to this meeting as well.
- Public Relations activities will remain the same: Tree City USA recertification, Arbor Day

celebration, quarterly newsletters and Sunshine Law notification and 2 articles in local newspaper (one of these should be a review of accomplishments in following the Management Plan over the past 5 years.

-Based on the success of last year, plans will be made to have another resident seminar.

- Training goals will also remain the same as last year, with a focus on any specific topics/problems that may have come up as a result of working through this management plan, or topics that may be seen as necessary to move forward through the next 5 year plan.
- Continue to work with local utilities in the removal and replacement project.
- Based on the outcome of previous years, look to expand the budget to include a part time forester position.
- Continue working with volunteers along the Passaic River Pathway.
- Seek help from the public to locate other significant trees and develop the walking trail for trees already on the list.
- Submit the Annual Accomplishment Report to the state.
- Continue twice monthly meetings with site plan review.
- Create and submit the next 5 year Community Forestry Management Plan. Apply for a CSIP grant to fund this project.

#### Some ideas for goals for the next 5 year plan

- Continue to use the five zones established in this plan. Begin this cycle again as a preventive maintenance pruning cycle, and consider also using the zones for planting plans.
  - Complete and continue to update the comprehensive street tree inventory as maintenance is done and as new trees are planted.
  - Continue to build on the Environmental Commission's relationship with the Department of Public Works and with the Planning Board.

## X. Community Stewardship Incentive Program (CSIP)

The thirteen items listed below as a part of the Community Stewardship Incentive Program (CSIP) have been identified throughout this plan with current procedures or a recommended course of action.

The following is a synopsis of the suggested practices.

### CSIP #1 Plan Preparation

This second 5-year Community Forestry Management Plan for Berkeley Heights has been funded by a New Jersey Green Communities Challenge Grant and completed with the cooperation of the Berkeley Heights Environmental Commission. Upon approval by the Community Forestry Council, implementation of the plan will begin and this plan will be reviewed and revised as necessary in the year 2013.

## CSIP #2 Training

Currently two members of the Berkeley Heights Department of Public Works and one volunteer are CORE trained. It is expected that one or two people will be trained each year until several persons on the Commission and several Department of Public Works employees are trained. Training in tree care practices for Public Works crews will also be expanded, especially with regard to hazard tree identification, equipment safety and electrical hazards awareness. Further information can be found in section VI on page 13.

## CSIP #3 Public Education and Awareness

The Berkeley Heights Environmental Commission would like to expand all current public outreach concerning trees and take a more proactive role in the community. The Commission recognizes that public education and support is vital to its success and intends to implement an outreach plan, which can be found in section VII of this plan on page 14.

## CSIP #4 Arbor Day Activities

Arbor Day has been celebrated by the local schools, with the support of the Environmental Commission. Berkeley Heights attained Tree City USA status during the first 5-year plan and hopes to expand upon this success.

- 1.) Continue to have the mayor proclaim the last Friday in April as Arbor Day on an annual basis.
- 2.) Continue to sponsor tree planting programs in cooperation with the local schools.
- 3.) To seek the involvement of local civic and youth organizations to participate in Arbor Day programs.
- 4.) To develop a school bumper sticker or poster contest to be recognized on Arbor Day.
- 5.) Continue to achieve Tree City USA status over the next five years and beyond, striving for 'Growth Award' achievements.

## CSIP #5 Assessment and Inventory

The Township of Berkeley Heights would like to develop a street tree inventory plan in 2009, and initiate the plan in 2010. Fieldwork would begin with basic information to record existing tree species, size, condition and location. Potential planting sites would also be identified. See section IX on pages 16 - 24.

## CSIP #6 Tree Hazard Identification Plan

Tree hazard identification is a major area of concern for Berkeley Heights and has already been initiated with the preliminary windshield survey done during the writing of the initial plan. This CSIP practice is of the highest priority to Berkeley Heights and will be the first section of the plan implemented in an effort to ensure public safety regarding Township owned or maintained trees. A windshield survey should be completed and reviewed annually to aid in the quick identification and remediation of potential hazards to the public. See section IX on pages 16 - 24.

#### CSIP #7 Tree Planting

All future tree planting projects undertaken or overseen by the Berkeley Heights Environmental Commission will be guided by the goals and objectives outlined in sections II and IX on pages 4 and 18 of this plan.

#### CSIP #8 Tree Maintenance

Berkeley Heights is currently evaluating the Township's future needs for general tree care and future equipment purchases. Berkeley Heights would like to establish a cost effective plan to care for its tree resource whether through conventional or innovative means to help newly planted materials as well as established and mature trees. Future plans to fund a part time forester and crew could become a reality within the next five years. If Berkeley Heights decides to employ a tree crew they will be seeking funding to purchase buckets, chippers, stump grinders, chainsaws and other necessary tree care equipment at that time. See section IX on pages 16 - 24.

#### CSIP #9 Tree Recycling

Berkeley Heights does not generate enough green waste to warrant its own recycling plant. The tree recycling program as it exists now consists of providing woodchips for residents throughout the year and chipping of brush twice a year. During tree maintenance and removal operations, some firewood is left for residents and woodchips are used in parks. Other debris is hauled to a private facility. Outside contractors are responsible for disposal of all materials generated during tree pruning and removal operations the D.P.W. collects leaves in biodegradable bags and takes them to the Union County Leaf Recycling Center. Most Christmas trees are hauled away by the local carting services. There are no further improvements planned for the recycling program at this time.

#### CSIP #10 Ordinance Establishment

The Berkeley Heights Environmental Commission was created by ordinance on July 6, 1970. The Environmental Commission recently reviewed the current tree ordinance which was just revised in 2004 and amended in early 2008 and found that no update is necessary at this time. The ordinance will be reviewed before the end of this five year period and the Commission will update the document to meet arboricultural practices as necessary. See section IX on pages 16 - 24.

#### CSIP #11 Tree Care Disaster Plan

Berkeley Heights does not currently have a Tree Care Disaster Plan. At present, tree emergencies are handled by Union County tree crews, utility tree crews, outside contractors and public works tree crews for downed trees. In case of any large-scale tree emergencies, Berkeley Heights would follow plans developed by Union County or the Office of Emergency Management. No future

plans are being considered at this time.

CSIP #12 Insect and Disease Management

No formal management plan exists for trees along township roads or on other properties. Any insect or disease outbreaks are handled on a case-by-case basis. Diagnosis and consultation would be sought from NJ State Department of Agriculture, Rutgers Cooperative Extension Service, or a Certified Tree Expert. In the event of an outbreak, State or Federal assistance would be requested.

CSIP #13 Other

-Significant Tree List

To further develop and chart all of the historic and significant trees in Berkeley Heights. Possibly developing a map and walking trail for residents to follow.

No other management practices have been identified at the time of this writing.