# Sustainable Jersey Small Grants Application Background Information Form

# **Municipality Background Information**

Municipality:	Mount Holly Township
County:	Burlington
Population:	9530
Setting (urban, suburban, rural):	urban

<b>Is your town currently registered with Sustainable Jersey</b> ? (Note: All applicants must be registered with the program by date of submission. For more information on how to register, visit:		Yes
http://www.sustainablejersey.com/actions-certification/getting-started/		
<b>Does your municipality have an active Green Team?</b> (Note: All applicant communities must have an active Green Team. To view the requirements of an active Green Team please <u>click here</u> , or see		Yes
the Application Checklist below)		

Is your municipality currently Sustainable Jersey Certified? If yes, at what level?	Yes – Bronze level in 2012
Has your municipality ever been certified in the past? If yes, when and at what level?	

Did your municipality receive a Sustainable Jersey small grant in previous years? If yes, which year(s) and at what level(s)?

Yes in 2010 we received a capacity building grant in the amount of \$1000

## **Grant Application Information**

For what grant level are you applying?	\$20,000			
			Yes	Yes
(Another Background Information Form and Application must be completed separately for each grant. See Section B in application for eligibility)		· · · · ·	No	

**Project Title** 

Save the Mount

#### Please provide a brief (2-3 sentences) description of your project.

The proposed Save the Mount project will: 1) restore 4 acres of the forested area in the Mount Holly Park to a healthy, diverse, native and sustainable state that is essentially free of invasive groundcover; and 2) increase youth engagement, and community volunteer stewardship of the Mount. This restoration demonstration project incorporates a three prong approach to rid the Mount of invasive English Ivy by utilizing Eco Friendly goats to initially graze on the ivy, followed by a targeted herbicide treatment, and finally physical removal of any residual live ivy. The forest understory will then be replanted with native herbaceous plants, shrubs and small trees. The goal is to use this project as model restoration project to engaging residents to be stewards of their local park and to educate homeowners in the importance of using native plants in their own landscaping.

#### Sustainable Jersey Action(s) that will be completed through grant.

All \$10,000, \$20,000 and \$50,000 grants projects must relate to the completion of a Sustainable Jersey Action. Please be sure to check the "What to do" and the "What to submit" section of each action to verify the project can fulfill the action requirements. Actions that would be "innovative demonstrations projects" are also eligible and will be judged based on their ability to model or improve the current slate of Sustainable Jersey Actions. All requirements for actions can be viewed <u>here</u>. \$2,000 Capacity-Building grants do not have to complete an action if only seeking general support funds.

1. Innovative Demonstration Project	4.
2.	5.

# Sustainable Jersey<sup>®</sup> Small Grants Application Contacts

Primary Municipal Contact NOTE: The grant application decision and follow-up will be directed to this contact.

Name	Vicki Conover
Title	Township Deputy Clerk
Affiliation	
Address	23 Washington St
	Mount Holly, NJ 08060
Phone	609-845-1102
Email	vconover@twp.mountholly.nj.us

Please list any **additional municipal or Green Team contacts** for the grant. Include key elected officials and any staff contacts.

Name	Title	Phone	Email
Randi Rothmel	Chair of Environmental	609-694-5780	rrothmel@twp.mountholly.nj.us
	Committee		
Dan Rita	Green Team Chair	609-267-7258	darita1@verizon.net
Alicia McShulkis	Green Team /Master	609-261-3989	lisabest62@msn.com
	Gardener		_
Steve Martin	Township Manager	609-845-1100	smartin@twp.mountholly.nj.us

Fiscal Contact name and mailing address where grant check will be sent.\*

Name:	Christina Chambers
Title:	CFO
Phone:	609-845-1107
Email:	cchambers@twp.mountholly.nj.us
Mailing	23 Washington St
Address:	Mount Holly, NJ 08060

Media Contact A municipal employee or affiliate that we contact for coordinating press/media events

Name:	Vicki Conover
Title:	Township Deputy Clerk
Phone:	609-845-1102
Email:	vconover@twp.mountholly.nj.us

Mayor's Information (The mayor may be directly invited to a press conference or other speaking engagement)

Name:	Richard Dow
Phone:	
Email:	rdow@twp.mountholly.nj.us

Additional Contact for Mayor (Secretary, assistant, aide etc.)

Name:	Richard DiFolco
Title:	Deputy Mayor
Phone:	
Email:	rdifolco@twp.mountholly.nj.us

\*Only New Jersey municipalities are eligible grant applicants. Funding may be passed through to a non-profit, partner organization, or contractor, but the municipality must be the applicant and will be responsible for the reporting requirements. Checks will be made payable to the municipalities and sent to their fiscal agent.

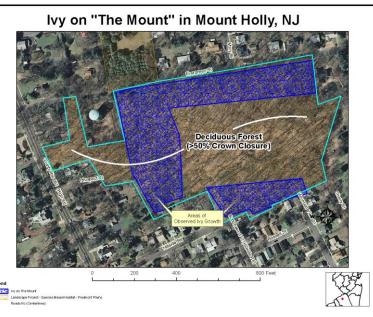
#### **PROJECT DESCRIPTION**

Invasive species degrade natural communities, wildlife habitat and scenic trails. Invasive species also threaten the economic productivity of forests and reduce the diversity of species. Aggressive forest pests such as the Emerald Ash Borer and Asian Longhorn Beetle threaten to cause widespread mortality and loss of tree species. Unchecked invasive plant infestations can result in local collapse of forest ecosystems as woodlots and entire forest stands convert from native forest species to thickets of nonnative shrubs and groundcover.

A single seed spread unintentionally can explode into a large infestation in only a few years. Spread of invasive in this manner affects both forests and small woodlots and community parks in urban areas. In comparison, a healthy sustainable urban forest purifies the air we breathe, controls stormwater runoff, provides bird and wildlife habitat, provides recreational opportunities, improves soil quality, reduces stress and crime rates, creates a natural buffer to reduce the everyday noise of the city, and adds to property value.

One such forested property in Mount Holly, "The Mount" has been overrun with invasive plants. English Ivy (Hedera helix) with some smaller pockets of myrtle (Vinca Minor) has essentially blanketed the perimeter of the Mount covering approximately 40% of the forest floor. The ivy has also grown up into the tree canopy preventing trees from leafing out. In addition, the weight of ivy on trees make them susceptible to blowing over during storms, the dense forest floor growth smothers native plants, preventing sunlight from reaching leaves, and the ivy is a poor soil stabilizer because of its shallow root system which can lead to increased erosion. Recent heavy rains have made the erosion on the Mount very evident and is exacerbated by the poor soil stability. The primary source of the initial infestation is from a number of private residential properties that back up to the park.

As Mount Holly's most prominent land feature and its namesake, the Mount stands 185 feet above sea level. Located in the township of Mount Holly, Mount Holly Park is approximately a 10 acre urban forested park with nearly 1.5 miles of trails that are easily accessible to residents and visitors to Mount Holly. Historically, it is a very important area in town, not only as the township's namesake but as a prominent survey feature in the early layout of the town, which started in 1677. On December 23, 1776, the Mount was where the Hessian army positioned itself and its cannons during the Battle of Iron Works Hill. The three-day battle that ensued with Colonial forces, who encamped across the Rancocas Creek at Iron Works Hill off Pine Street, was an important skirmish during the war. General George Washington's surprise attack on Trenton on December 26, 1776 was successful in part due to this diversionary battle in Mount Holly which drew about 2,000 Hessians away from the Battle of Trenton. There is an annual enactment of the battle by the Pennsylvania Regiment Mount Holly every December. Over time the original 100 acres was sold off in parcels and the Township purchased the remaining land in 1921in order to protect and preserve it. In 1934 a group of local businessmen decided it was time to clean up the Mount to make it a public park. The Mount was accepted as a Civil Worker's Administration project at this time. An altar was added in 1935 by the



Protestant Churches of Mount Holly for Easter Sunrise Services who still use it today for their services. In the 1980's Mount Holly Park became an outdoor classroom where nature classes were held amongst the labeled plant life and the local high school track and cross country teams used it for training purposes. Over the past 20 years, the Mount has not been regularly maintained and it has fallen into disarray

The primary activities being proposed for this grant project are to 1) restore 4 acres of forested area in the Mount Holly Park (outlined in adjacent map) to a healthy, sustainable diverse, native state that is essentially free of invasive plants; 2) educate home owners on importance of using native plants for their own landscaping and controlling or removal of invasive plants and 3) increase youth engagement, and community volunteer stewardship of the Mount.

#### Demonstration project - Ivy eradication Three phased sequential approach:

Although manual control of English ivy is quite effective, it is very labor intensive requiring a substantial work force. Based on research conducted by The Nature Conservancy (TNC) and The Three Rivers Land Conservancy, it typically requires from 300 to well over 1,000 human hours to perform the initial manual clearing on an acre of heavily infested ground and a second round of clearing is generally needed to complete the restoration. In April 2012, a volunteer effort with the TCNJ Bonner Students showed just how difficult a manual removal of the ivy would be. Twenty students spent approximately 100 hours to remove just the ivy growing up the tree trunks in 2 acres of the park without addressing removal of the ivy ground cover. This cost of a manual removal could easily climb to over \$30,000 for the 4 acre infested area on the Mount. Alternatively, there are several herbicide control options that would offer a substantial cost savings over manual control, however because of ivy's waxy cuticle, herbicide treatment is difficult. An initial herbicide spraying of a portion of the Mount by the NJ Invasive Species Strike Team (NJISST) in September 2012 showed only a limited effect on controlling the ivy even when using a glyphosate – surfactant mixture. Because of these limitations a three phase approach is being proposed as outlined below. The overall effectiveness of this multiphase approach will be closely monitored in a selected 1/10 acre plot that will be marked out in the beginning of the project so that it can be evaluated after each phase of the project ivy eradication, and restoration and will serve to evaluate and monitor the long term conservation effort.

Phase 1 – grazing. Starting in October or November of 2013 two herds of goats from Eco-Goat (Maryland) will be utilized to graze on the ivy. Each herd will cover one acre area in five days for a total of ten days to cover the 4 acre area. As noted in the TNC's Handbook of Weed Control (2011) grazing will rarely, if ever, completely eradicate invasive plants. However, when grazing treatments are combined with other control techniques, such as herbicides or biocontrol, severe infestations can be reduced and small infestations may be eliminated. Grazing animals may be particularly useful in areas where herbicides cannot be applied (e.g., near water) or are prohibitively expensive (e.g., large infestations). Animals can also be used as part of a restoration program by breaking up the soil and incorporating in seeds of desirable native plants.

Phase II- herbicide treatment. It is anticipated that the use of goats will result in a stressed /weakened English Ivy crop that will be more susceptible to a follow up treatment of an herbicide spraying. Working with the NJISST and their contractors and appropriate mix of herbicide and surfactant will be used to kill the ivy. The herbicide spraying will directly follow the grazing of the ivy in late fall or early winter. It has been shown that the effect of an herbicide treatment may take several months, but 95% control is possible.

Phase III - spot manual removal. In March 2014, the final phase of the eradication effort will utilize manual removal of any ivy that was not killed during the Phase I and Phase II treatment. For this phase of the work, volunteers will manually remove any residual ivy.

It is estimated that this three phase approach will result in up to a 50% savings over the traditional mechanical removal of the ivy. It is also intended to be used as a model of a more sustainable method for removal of English Ivy, a difficult invasive to control, by using goats as an environmentally friendly sustainable method of control which should limit the need for multiple rounds of herbicide treatment to eradicate the ivy.

#### Reforestation with use of volunteers:

Beginning in the Spring of 2014, a volunteer crew of up to 400 people will utilized to plant up to 4,000 native herbaceous plants, 400 shrubs/bushes and 100+ trees to reforest the Mount with a multi-level canopy. In addition to the native plants, a native seed mixture will be broadcast in any areas not easily accessed by foot and along edges of the Mount that border private homes to help more quickly establish a native ground cover in areas that will be prone to new ivy infestation. Planting will take place over four separate weekends. Local boy scouts, girl scouts, high school students, college students and residents will be recruited for this phase of the work. The Mount Holly Environmental Committee/ Green Team (EAC/GT) will coordinate the volunteer recruiting efforts. The EAC/GT has had experience recruiting volunteers for Arbor Day Tree planting events where over 100 volunteers have been involved for tree planting activities. Mount Holly has also be working with the TCNJ Bonner students as part of Sustainable Jersey and this planting effort will be one of the Community Engaged Leaning Days for TCNJ students.

A vegetation plan will be developed by consulting with the New Jersey Native Plant Society, Bruce Barbour of Rutgers University and Alicia McShulkis (Green Team member and Master Gardner). It will be important to identify the native species that will be appropriate for the site, taking in consideration the slope of the area, soil moisture, soil texture, sunlight, existing vegetation, and access to water and any human impact in the area in order for the restoration

effort to be successful. All plant materials will be purchased locally from Pineland Nursery, Fernbrook Farms or other wholesale native plant nurseries. The tree saplings will be made available for this project from the NJ Tree Foundation. We currently have approximately 100 tree saplings that were planted in container pots from the 2013 Arbor Day event. Additional trees if needed will be reserved as part of the free trees available from the NJ Tree Foundation in 2014. The Tree Foundation will also help with the tree planting and consultation for developing an appropriate vegetative plan for the site as needed.

#### **Build Community Support for Restoration**

1) Work with neighbors to reduce the threat of ivy re-infesting the Mount following the restoration effort. This will be done in part by having neighborhood and community workshops about the issue of invasives on the Mount and the need for neighborhood involvement as well as training sessions on stewardship. An important component of this effort will be to establish a "friends of the Mount" volunteer group to be responsible for the follow up maintenance and long term environmental stewardship of the Mount. One of the workshops will be geared for neighbors of the Mount to discuss ways to control ivy on private properties as well as alternative native ground cover that could be used to replace the ivy currently used as ground cover on steep slopes of homes that surround the Mount. Another community workshop will focus on use of native plants for home landscaping versus exotic ornamentals that can be invasive as well as the importance of native landscaping to help control storm water runoff. Speakers for these workshops will be experts and will be obtained from a number of local organizations, the NJ Tree Foundation, NJ Invasive Species Strike Team, Native Plant Society of NJ and from the Rutgers Environmental Stewardship program.

2) Design an educational brochure to be used by local schools for educational field trips to the Mount to discuss importance of environmental stewardship and urban forest sustainability. The brochure will be developed by the Mt Holly Green Team and Environmental Committee and will be made available to the school district (science teachers) in an electronic format. It is also envisioned that with additional funding that new tree identification markers will be placed on trees, and trail maps developed to identifying their locations as well as information about the flora and fauna on the Mount. This proposed brochure can serve as part of outdoor educational classroom experience for local students. The Green Team will also work with local Science teachers to lead at least one nature hike to the Mount, to educate the students about the restoration project, issue of invasive plants, and ecology of the Mount.

#### **PROJECT IMPACT**

As stated in Mount Holly's Master Plan "Trails in this park (the Mount) need improved maintenance, and an educational component. It notes that "the Mount's diverse tree species has fallen into disrepair. Additionally, there is an issue with invasive, non-native vines spreading on the Mount and in the backyards of adjacent homes. These invasive vines threaten a key strength of the park: its diverse array of tree species. An additional strength of the Mount is its connectivity to the surrounding neighborhoods, with trail entrances from the north, west, and south."

Although this is a relatively small park it is very important to the local community because it is the only park that has a defined network of trails within an upland forested area. The only other park offering a trail in a forested area is Creek Island Park which lies within the Rancocas Creek basin. The Creek Island trail is a single trail that transverses the park and was established as a rails to trails project. It is worthy to note that diversity of the tree species on the Mount that are threatened by the English Ivy are (to name a few): American Linden, Black Walnut, Red Oak, Pin Oak, Sugar Maple, and Tulip Poplar. Other species dependent on the Mount



includes common mammals (including squirrels, rabbits, groundhogs, opossum); numerous song birds (such as: nuthatches, titmice, flickers, woodpeckers, wrens, finches, chickadees), and raptures (red tail hawks, vultures). Threatened species that have been observed in this area include a barred owl and an unconfirmed sighting of a red-headed woodpecker.

The immediate impact of restoring the Mount is to enhance the long-term sustainability of this natural area by removing invasive plants and maintaining a functional ecosystem. This restoration will result in enhanced biodiversity of both flora and fauna, improved soil quality, a reduction in erosion, improved quantity and quality of water as trees and native plants filter and cleanse water run off before it reaches underground aquifers, and purification of our air through both CO2 and air pollution capture.

Lessons learned from this project will be used to develop a Best Management Practice for controlling invasive plant species in Mount Holly and will be used to develop recommendations for both home owners and developers in Mount Holly on the use of native plants for landscaping, In addition a list of recommended native species will be developed that can be used as alternatives to particularly invasive species such as English Ivy, Japanese Wisteria, Norway Maples, Callery Pear, Purple Loosestrife, Multiflora Rose, common periwinkle etc. Working with the NJISST and the township council it is hoped that an invasive plant ordinance can be adopted by the township to help control the spread of invasive plants. Resources such as information from the New Jersey Invasive Species Council and the NJ Strategic Management Plan for Invasive Species will be used to develop a local best management plan and invasive species ordinance.

The long term impact of the Save the Mount project is to set in place a long term stewardship program that involves the neighborhood patrolling the park trails each year to monitor the occurrence of invasive plants and other maintenance needs of the trail system. This model of using the engagement of the neighborhood will be employed for other parks in Mount Holly including Mill Dam, Iron Works, Monroe and Creek Island Park. In addition, educating and involving the neighbors to become active stewards of the Mount represents an opportunity as noted by a report from the Trust for Public Land (Measuring the Economic Value of a City Park, 2009) that community cohesiveness "is strengthened in some cities by parks.... Perhaps more significantly, the acts of improving, renewing, or even saving a park can build extraordinary levels of social capital."

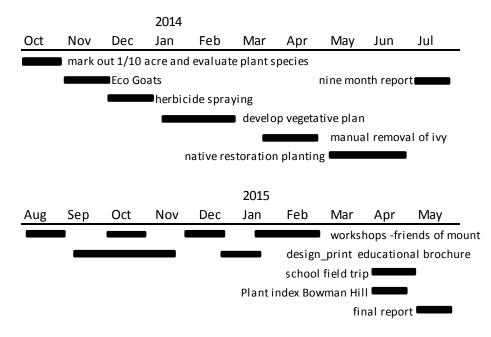
#### **GRANT FUNDING IMPACT**

The Mount Holly Green Team and Environmental Advisory Committee receive minimal funding through the Township. We are dependent on grant funding for all of our projects. We have successfully used the grants we have received to create projects that are environmentally significant that have contributed to improving the quality of life of the Township. Two rain gardens, one on Township property, the other on county property, have been installed with funding from an American Water Company grant. The Green Team also received a 2010 Sustainable Jersey \$1,000 capacity building grant which helped fund a number of educational events during the first year of its establishment. Arbor Day tree planting and our annual children's recycled art project contest have been funded with donations gathered by volunteers from the committee. We also received a \$3,000 grant to write our first 5-YearCommunity Forestry Management Plan in 2011 and have currently applied for a Community Stewardship Incentive Program Grant to complete an Urban Tree Inventory. Without this grant funding for the Save the Mount Project, the invasive ivy will continue to spread and further decimate the ecosystem on the Mount, making a restoration project more extensive and costly to conduct if we are unable to secure the funding to complete this project.

#### **BUDGET NARRATIVE**

The \$20,000.00 funding from this grant would be used for the required contractual work to 1) rent the Eco Goats for a 10 day period to consume the ivy (\$12,000) and for 2) the follow up herbicide spraying (\$2,000). The goat rental includes transportation, 24 hour monitoring and temporary electric fence set up to contain the two herds of goats (60 total) within the four acre designated treatment area. Each herd will be confined to one acre lots for a period of 5 days on each acre. The herbicide spraying will be completed by the New Jersey Invasive Species Strike Team over a period of one two weeks. The funding (\$5200) will also cover the purchase of herbaceous plants, small shrubs, and upland seed mix for the planting restoration. Small tree saplings will be donated from the NJ Tree Foundation as part of their annual Arbor Day Tree planting event. Fernbrook Farm has also indicated that they could provide trees for free or reduced costs. The remaining \$800 will be used to hire a botanist from the Bowman Hill Wildflower Preserved to conduct a Plant Stewardship Index Site Survey following the restoration process.

#### TIMELINE



#### **EVALUATION**

Monitoring the Effectiveness of the Forest Restoration Project

Many of the monitoring methods developed by Green Seattle Partnership <u>http://greenseattle.org/forest-steward-resources-1/monitoring/draft-monitoring-protocols</u> will be utilized in the proposed project in order to provide an objective way to evaluate the progress of the restoration project. As noted in this manual, a 1/10<sup>th</sup> acre section will be designated at the start of the project as the monitoring/evaluation "test" plot. This zone will be used to monitor the effectiveness of the restoration effort. Methods used to evaluate the restoration will include an initial inventory of the 1/10<sup>th</sup> acre zone to set a baseline for the percent coverage of native and non-native shrubs, vines, and herbaceous species; and tree species diversity.

The initial evaluation of species diversity will be done by volunteers with collaboration of Bruce Barbour of Rutgers Collaborative and the final evaluation done by Bowman Hill's Wildflower preserve <u>http://www.bhwp.org/plant-stewardship-index.htm</u>. Bowman's Hill offer professional services of a botanist to conduct a plant survey to develop a Plant Stewardship Index assessment of both the 1/10<sup>th</sup> acre test plot as well as a general overview of the entire restoration zone. This plant index value will be used evaluate the success of the restoration effort compared to the initial evaluation.

Other data that will be collected in the test plot before and after restoration will include tree diversity, species count; tree height and diameter at breast height (DBH); composition of regenerating (sapling) trees; and snag (standing dead trees) size and density. This information allows tracking both the survival of planted trees as well as an understanding of how many trees of each species are regenerating on the site. A detail tree survey will be conducted in the  $1/10^{th}$  acre test plot before and after the restoration effort. In addition, a walkthrough of the entire Mount Park will be conducted to evaluate the overall health of the tree canopy on the Mount.

Another metric to measure the success of the restoration project will be to evaluate the success of implementing a management plan for the Mount. Although, evaluation of the management plan will take a number of years to determine its success, an initial indicator will be successfully establishing a "Friends of Mount" volunteer group that has a strong dedicated core of individuals who are committed to being stewards of the Mount.

# Attachment 1: Detailed Budget - Save the Mount Project

Description	Quanity	unit	unit price	total price
Eco Goats - cost includes equivalent of 20 days of grazing [two herds of 30 goats each grazing 10 days each], set up of padlocks, transportation and onsite personnel - details in attached email quote	10	days	\$1,200.00	\$12,000.00
Herbicide spraying - conducted by NJISST licensed herbicide applicators - estimated time 4 days	4	acres	\$500.00	\$2,000.00
conduct plant stewardship indexing - Bowman Hill Wildflower Preserve professional services http://www.bhwp.org/psi/PSI- Professional-Services.htm	1	day	\$800.00	\$800.00
herbaceous plants - to be purchased from Pineland Nursery and/or Fernbrook Nursery	4,000	ea	\$0.75	\$3,000.00
small shrubs to be purchased from Pineland Nursery and/or Fernbrook Nursery	400	ea	\$5.00	\$2,000.00
larger tree sapplings (donated Fernbrook/ NJ Tree foundation)	100	ea	\$0.00	\$0.00
upland seed for Mount (Pineland Nursery)	4	bags	\$50.00	\$200.00
			Total:	\$20,000.00

## Attachment 1a – Budget Quote Eco Goats

Hi Randy,

Good to talk with you today. You are about 150 miles from the farm. The grazing rate at this distance will be \$450/grazing day with a setup fee of \$400 for each paddock. Given the size of the area, I think bringing up two herds of around 30 goats each would be the most efficient time wise (2 grazing days/calendar day). As we discussed, the goats will pick every leaf they can reach off the trunks of the trees but only around 40-50% of the ones on the ground. With what I can see from the photos, one herd should be able to work through an acre in 4-5 days. We get the most effective foraging when we limit the size of the paddocks to an ac or less. With out seeing the site, ball park pricing wise we are looking at:

4 ac @ 4-5 days ea 20 grazing days @ \$450 =	\$9000
Setup 4 paddocks (safety fence as needed) @ \$500 =	\$2000
Onsite personnel 10 days @ \$100 =	\$1000
Total	\$12,000

Give or take

Municipalities we have worked with: Baltimore, MD - Parks and People - Druid Hill Park Gaithersburg, MD Isaac Walton League National HQ Anne Arundel County MD - kudzu on steep waterfront slopes Villages of Urbana , MD - public green space

Let me know if you need more info. Feel free to lift things off the web site

Brian

Brian Knox Sustainable Resource Management, Inc. Sustainability. It's where we start. Supervising Forester Eco-Goats 410-770-4502 forests@earthlink.net www.SustainableResourceManagementInc.com www.Eco-Goats.com

#### ATTACHMENT 2: RESUMES OF KEY MEMBERS OF PROJECT TEAM

**PROJECT TEAM:** key individuals and their qualifications relevant for project implementation.

**Randi Rothmel,** Ph.D Biochemistry. Chairman of the Mt Holly Environmental Advisory Committee (EAC) since 2010. Coordinates activities of the EAC in conjunction with Mt Holly Green team such as Arbor Day tree planting, stream clean ups, recycling initiatives, educational outreach Obtained Environmental Steward Certification from the Rutgers Cooperative Environmental Stewardship program 2009. Volunteer at Woodford Cedar Run Rehabilitation Center in Medford, NJ. Currently is the Laboratory Director of Chicago Bridge and Iron Federal Services' Analytical & Treatability Laboratory in Lawrenceville, New Jersey. Role: Manage Overall Project and make sure it stays on Schedule, coordinate the volunteer effort for planting of natives.

Alicia McShulkis, Master Gardener and graduated Rutgers Environmental Steward Intern program. Author of Mount Holly's Historic Gardens, a legacy in Landscape. Past design committee member on landscaping taskforce for Main Street Mount Holly. Past design committee chair for Main Street Mount Holly for three years; winning two awards for landscaping, the New Jersey Garden Club Historic Garden Preservation award and the Pennsylvania Horticultural Society Suburban Greening Award. Role: Work on vegetative planting plan and restoration efforts as well as plant and tree inventory.

**Dan Rita,** Retired Moorestown High School special education teacher of 37 years. Member of the Mount Holly Green Team. Obtained Environmental Steward Certification from the Rutgers Cooperative Environmental Stewardship program 2012 working on project for Mount Holly to obtain its Bronze Level Certification through the Sustainable Jersey Program. Coordinated activities with students from The College of New Jersey through a collaboration between TCNJ Bonner Program and Sustainable Jersey on various projects in Mount Holly such as installation of two rain gardens, promotion of a Buy Local campaign, and an initial invasive plant project to reduce the negative effects of English Ivy growth on the Mount. Role: help develop educational brochure for schools, educational lead and workshops.

**Johannus Franken,** BS Environmental Science; certificate in geospatial technology. Currently, an Environmental Specialist with the NJDEP and Project Officer for the Ambient Lake Monitoring Network. Has 13 years of environmental field work experience ranging from contaminated site investigations to ambient chemical and biological monitoring networks. Lead the implementation and coordination of the statewide Ambient Lake Monitoring Network (ALMN). Performs Geographic Information System (GIS) work using ArcGIS software package for the ALMN. Role: Co-lead the implementation of project with Randi Rothmel. Focus on developing the Friends of Mount Stewardship group and neighborhood outreach, help with setting up workshops.

**Bruce Barbour**, B.S. Agricultural Science, M.S. Weed Science, Professor Rutgers University. Current Research and demonstration interests include invasive species, ecological restoration, vegetation management and water quality and alternatives to conventional turf management. Working with a team of Rutgers faculty and staff and partners from the Duke Farms Foundation he has initiated the Rutgers Environmental Steward Volunteer Training program in New Jersey, a new form of the successful Master Gardener program developed and run by Cooperative Extension. The program was awarded the Governor's Award for Environmental Excellence in 2007. He serves on two committees of the NJ Invasive Species Council. Role: Consultant for determining native planting for restoration and removal of invasive species. Role: Expert speaker for a workshop session as well as consultant for developing native plant listing for project.

**Susan Brookman**, Executive Director NJISST. Susan holds a B.A. in Education from the University of Montana and an M.B.A. from Georgia College. She served as a founding member of our Board of Directors before becoming Executive Director in June of 2013. An experienced non-proft administrator, Susan spent eight years as the Executive Director of the Calusa Nature Center and Planetarium, an environmental education center in Florida, and worked in a variety of positions with Girl Scout Councils in Missouri and Georgia and with the Raritan Headwaters Association. Susan was a co-founder of the Southwest Florida Watershed Council, a member of the South Florida Water Management District's Water Resources Advisory Committee, the Lee County Local Planning Agency and the Boards of Directors of many community organizations including RiverWatch, Audubon of Southwest Florida, the Girl Scouts of Gulf Coast Florida and the Hill Runners of Hunterdon. 1. Role: Consultant and Contractor for conducting the herbicide treatment and potential workshop speaker.

Lisa Simms, Director of the New Jersey Tree Foundation since its inception in 1997. She develops and directs all the Foundation programs and projects, and coordinates partnerships with corporations and other organizations. Ms. Simms provides technical assistance and educational programs to other forestry groups, educators and community organizations. Her other duties include staff oversight, budgeting, grant writing and program administration. Prior to directing the NJ Tree Foundation, Ms. Simms was the Greening Program Director for the Greater Newark Conservancy which targeted low-income residents of Newark in the beautification and revitalization of their neighborhoods. She coordinated all aspects of the Vacant Lot Revitalization Program, the Flower Blocks Program and Urban Forestry Project. Ms. Simms has a Bachelor of Science degree from Cook College, Rutgers University, New Brunswick and is the recipient of many awards including the *Arbor Day Award* from the National Arbor Day Foundation, the *Joyce Kilmer Award* and the *Green Community Achievement Award* from the NJ Forest Service. Role: consultant for tree species plantings and restoration and expert speaker for a workshop session.

# Attachment 3: Resolution in Support of Grant Application

# Resolution No. 2013-124

# Resolution of Support from Local Governing Body Authorizing the Sustainable Jersey Grant Application

WHEREAS, a sustainable community seeks to optimize quality of life for its residents by ensuring that its environmental, economic and social objectives are balanced and mutually supportive; and

WHEREAS, the Township of Mt Holly strives to save tax dollars, assure clean land, air and water, improve working and living environments; and

**WHEREAS**, Township of Mt Holly is participating in the Sustainable Jersey Program; and

WHEREAS, Township of Mt Holly received a Bronze Certification under the NJ Sustainable program in 2012 and

WHEREAS, one of the purposes of the Sustainable Jersey Program is to provide resources to municipalities to make progress on sustainability issues, and they have created a grant program called the Sustainable Jersey Small Grants Program;

**THEREFORE,** the Township Council of the **Tow**nship of Mt Holly has determined that Mount Holly's Green Team should apply for the aforementioned Grant.

**THEREFORE, BE IT RESOLVED**, that Township Council of the Township of Mt Holly, State of New Jersey, authorize the submission of the aforementioned Sustainable Jersey Grants in the amount of \$20,000 and for a capacity building grant in the amount of \$2,000.

I hereby certify the foregoing to be a true copy of a Resolution adopted by the Mount Holly Township Council at a meeting held on July 22, 2013.

MALLITO

KIM-MARIE WHITE Municipal Clerk

# Attachment 4: Signed Certification and Declaration

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GRANTEE'S CERTIFICATION AND DECLARATION	
I certify under the penalties of the law that the description of the grant project is correct in all its particulars; that the articles will be furnished or services rendered as stated therein; that all	
expenditures submitted will be allowable charges against the grant and that all compliance issues	
of this grant have been met per the grant agreement.	
SIGNATURE A. Z. Mat DATE 7/19/13	
POSITION Chief ACT. Twp. MANASET	

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# Attachment 5: Documentation of Active Green Team [Activity 7/12-7/13]

Since forming in 2010, the Mount Holly Environmental Committee/ Green Team (EAC/GT) has engaged all segments of the community to actively participate in everything from planning programs, to getting their hands dirty in cleaning the township's waterways.

Activities over the past year (7/2012-1/2013) include

July 18<sup>th</sup>, 2012 - Approximately 20 people attended a presentation on invasive insects on July 18<sup>th</sup> at the Mt Holly Library. John Cambridge and Jake Spooner from the NJ Department of Agriculture as part of their the state forest pest outreach program gave the presentation on invasive insects at the Mount Holly Library. The talk covered information on long- horned beetles, emerald ash borer, southern pine beetle, sirex wood wasp and thousand canker disease.

July 28, 2012 - The EAC/Green Team had a booth at the Holly Stock festival and will have information and a

Sept 8-9, 2012 -A Green Element was added to the BBQ and Blues Festival this year as Organic Diversions provided 64 Gallon Bins so that competitors were be able to collect food waste for composting.

September 17, 18, 2012, the Mount Holly Park was sprayed with an herbicide to kill the invasive English Ivy. This is being done by trained interns from the NJ Invasive Species Strike Team. This was part of the continued effort of restoring the mount to a natural state.

On October 6, 14 TCNJ students and 11 residents helped clean up the spillway from Mill Dam Park towards White Street. Garbage, glass, bottles, tires, a grill and more was pulled from the stream. Information on keeping the waterways clean and home water conservation efforts water distributed to approximately 150 households in the area surrounding Rancocas Creek and Buttonwood Run.

October 2012 – First 5-yr Urban Forestry Management Plan was approved by the State Park and Forestry Department. Work began on plan to commence work on the Township street tree inventory and hazard tree identification. A street map plan was developed – dividing Mt Holly into Five regions in order to conduct a Tree inventory over the next five years.

November 3, 2012, The EAC/GT helped with a 200 tree (free give away program) to County Residents as part of the Plant A Million Tree Effort in the Tri Stat Area. The 5-6 ft (1 caliber) trees were made available from the NJ Tree Foundation. Free compost ( $\sim 1/2$  cu ft) was also available – the compost was donated by the Burlington County.

November 8, 2012 - there was a screening of the movie "Bag It" at 7PM at the Mt Holly Library. This 2010 movie explored the impact of plastic in our environment and on our health. Pam Tidswell (Burlington County Clean Communities) gave an overview of want can and can not be put into your recycling bins and she set up two interactive displays for the audience to view and provided free reusable shopping bags and water bottles. A discussion following the movie was lead by the TCNJ students. A petition was also made available for people to pledge their support on the Bill being considered by the NJ Legislature – the Paper and Plastic Bag Reduction Act

November 2012 - Mount Holly achieved the Bronze Level Sustainable Jersey Certification. Mt Holly was certified with 180 action item points in 8 of the 16 categories. The township will be recognized at the Sustainable Jersey Annual Awards Luncheon (postponed to Jan 2013)

February 19, 2013 - Movie Screening of "Green Builders" at the Burlington County Library. Regan Young (architect) and Kent Pipes (affordable housing) lead a discussion on Green Sustainable building for following the movie. TCNJ Bonner Students ran the program.

Mar 9, 2013 as a follow up of the Green Building movie screening, Kent Pipes lead a group of people to see several projects in town (renovations and new construction) that have incorporated Green design such as use of sustainable building materials, radient floor heating, efficient heat pumps, whole house insulation with appropriate ventilation, and water conservation measures to lower the carbon footprint of these buildings. In addition, we visited a high tech residential project on Filbert St that is an Energy Star Certified home where the homeowner has incorporated geothermal heating, solar panels, collection of rain water as grey water to flush toilets, and upcyling of material in construction of the house that was obtained at auctions.

March 19, 2013 - Environmental Film screening of "GIMEE GREEN Gimee Green is an award winning documentary that offers a humorous look at America's obsession with residential lawns and their effect on our

environment, our wallet and outlook on life. Following the movie, Guest Speakers Peter Zampella (Americorp Watershed Ambassador) and Alicia McShulkis and Kathy Misunas – (master gardeners) discussed Sustainable Landscaping using native plantings as an alternative to traditional lawns TCNJ Bonner Students ran the program.

April 6, 2013 - TCNJ Community Engaged Learning Day where 20 TCNJ students will helped with preparing several plots at the Community Garden behind the library. They also helped weed/ clean the two rain gardens in town as well as work on building compost bins that were made available to the public on Daffodil Day – April 13 when a composting workshop was held and potentially a rain barrel workshop.

April 9, 2013 – final Environmental film screening led by the TCNJ Bonner Students of Food Inc. Larry Kuser from Fernbrook CSA (community supported agriculture) was the guest speaker.

April 13, 2013 – A Rain Barrel Workshop let by Mike Haberland from Rutgers Cooperative was held along with a Compost Workshop with compost bins (made from pallets) were available to participants.

April 20, 2013 – Arbor Day Tree planting in Mill Dam / Iron Works Park. Over 100 tree sapplings were planted in the park by local volunteers, boyscouts, girlscouts and ROTC cadets.

Mau 2013 – Fourth Annual Recycle Art Project for Mount Holly Students pK-8<sup>th</sup> grade. Award Ceremony was May 18<sup>th</sup> and the Art Work was also displayed at the Burlington County Earth Fair on June 9, 2013

#### Name and contact info for Green Team members

Randi Rothmel 33 Union Street, Mount Holly NJ phone number 609-694-5780 email – <u>randirothmel@yahoo.com</u>

Alicia McShulkis 38 Broad Street, Mount Holly, NJ Phone number -609-261-3989 Email: <u>lisabest62@msn.com</u>

Daniel Behrens 35 Buttonwood St Mt Holly, NJ 08060 <u>moonmanlost@yahoo.com</u>

James Giquinto 73 Walnut Street Phone number: 609-865-4255 Email: <u>giqu1@verizon.net</u> Nick Sodano 47 garden street Mt Holly NJ 08060 Phone number 609-351-5250 Email: <u>nick.sodano@verizon.net</u>

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Luke Wolfrom 20 W Monroe Street Mt Holly NJ 08060 Email: <u>ljw220@gmail.com</u> Phone: 609-784-3552

Dan Rita 30 Tinker Drive Mt Holly, NJ 08060 Email: <u>darita1@verizon.net</u> Phone:609-267-7258

#### **MOUNT HOLLY TOWNSHIP**

#### **RESOLUTION NO. 2013-53**

## A RESOLUTION AUTHORIZING CONTINUED SUPPORT OF A "GREEN TEAM" UNDER THE SUSTAINABLE NEW JERSEY PROGRAM

WHEREAS, the Township of Mount Holly ("Township") strives to provide improved working and living conditions and environments within the community by working to assure clean air and water and create an economically, environmentally and socially sustainable community all while conserving municipal resources and tax dollars; and

**WHEREAS,** the Township wishes to create a model of government for its residents that through the use of affordable and reproducible green community initiatives; and

WHEREAS, the Township is registered as a community under the Sustainable New Jersey Program and is moving toward more environmentally responsible and sustainable programs such as energy conservation and waste management and encourages recycling while reducing the use of landfills; and

**WHEREAS,** the Township Council has determined that the continued support of a Green Team Committee will help to identify sustainable initiatives and focus attention of sustainability; and

**WHEREAS,** the Green Team Committee has been working as a subcommittee of the Environmental Advisory Committee since its establishment in 2011; and

WHEREAS, the Township Council desires that this committee represent a cross section of the community with volunteer time available to identify and pursue, with Council direction and consent, action items under the Sustainable New Jersey Program with the goal of maintaining its bronze certification under the Sustainable New Jersey Program;

NOW, THEREFORE, BE IT RESOLVED by the Township Council of the Township of Mount Holly that the Green Team Committee ("GTC") continues as an Advisory Committee to Attachment X the Township Council consisting of not less than seven (7) nor more than fifteen (15) members who shall organize themselves as a subcommittee to the Environmental Advisory Committee to pursue action items as established by the Sustainable Jersey Program;

**AND BE IT FURTHER RESOLVED** that members of the GTC shall be uncompensated and will work jointly with members of the Environmental Advisory Committee as who are appointed for term period of three years as established by ordinance in 2010;

**AND BE IT FURTHER RESOLVED** that the Environmental Advisory Committee shall appoint members to the GTC within thirty (30) days of the passage of this resolution and the GTC shall further designate a chair person who shall have the responsibility for organizing the members of the GTC to work on action item tasks as part of the Sustainable Jersey Program.

I Patricia A. Clayton. Municipal Clerk of the Township of Mount Holly hereby certify that the above is a true copy of a resolution adopted by Township Council on the 25th day of February 2013.

Patricia A. Clayton, RMC