



Sustainable Jersey Community Certification Report

This is the Sustainable Jersey Certification Report of MOUNTAIN LAKES BORO (MORRIS), a Sustainable Jersey silver certified municipality.

MOUNTAIN LAKES BORO (MORRIS) was certified on December 17, 2014 with 375 points. Listed below is information regarding MOUNTAIN LAKES BORO (MORRIS)'s Sustainable Jersey efforts and materials associated with the municipality's certified actions.

Contact Information

The designated Sustainable Jersey contact for MOUNTAIN LAKES BORO (MORRIS) is:

Name: Marnie Vyff

Title/Position: Green Team Manager

Department: Environmental Commission

Address: 10 Vale Drive

Sustainability Actions Implemented

Each approved action and supporting documentation for which MOUNTAIN LAKES BORO (MORRIS) was approved for in 2014 appears below. Note: Standards for the actions below may have changed and the documentation listed may no longer satisfy requirements for that action. Additionally, points associated with actions prior to 2013 certifications may not be accurate.

Animals in the Community

Animals in the Community Education **10 Points**

Program Summary:

Mountain Lakes has an abundance of Black Bears, primarily due to the availability of excess food – residents garbage and extensive woodlands. The Mountain Lakes Police have an ongoing Black Bear Program to Educate residents on Black Bear issues. In the last three years evening presentations have been in the Highschool – Sept 14th, 2011, Sept 12th, 2012, Sept 25th, 2013. On Oct. 11th, 2013, an additional presentation was at St. Catherine’s church for the 55+ organization. Police Chief, Shawn Bennett was the presenter. The Sept 25th presentation also included the NJ Fish and Wildlife Officer in charge of the State Bear Program. The events were publicized on the Borough Website, Borough email blasts, announced in Council Meetings, and sent home in virtual backpacks. The priority points – how people should behave when encountering a black bear and what individual bear behaviors mean; how people may unknowingly encourage Black Bears; the myths and facts about Black Bears; why we have Black Bears in Mountain Lakes; State laws relating intentional or unintentional feeding Black Bears; and how Law Enforcement will respond to different type calls involving Black Bears and what levels of force is permitted in given situations. Chief Bennett created the Powerpoint from NJ Fish and Wildlife literature, his own training in “Black Bear Response and Control”, NJ State Statutes, and others. Attendance varied but 2013 was best turn out – approximately 40 people at Highschool and 30 for 55+ organization. The crowd was split between people who wanted the bears destroyed/removed permanently (neither legally aloud) and those wanting to be a voice for bears and have them protected. Ultimately, the presentation had intended impact which was to educate. After the 2013 presentations, police saw a drop in calls about bears. That may be because people now feel less threatened by wandering bears.

 [Black Bear Education Powerpoint](#)

Climate Mitigation & Adaptation

Municipal Carbon Footprint **10 Points** **Bronze Priority** **Silver Priority**

Program Summary:

The Green Team worked with the Acting Borough Manager to calculate the municipal carbon footprint for the year 2011. Gas and electric bills were obtained for all municipal facilities, street and traffic lights and wells. Our municipal carbon footprint is 908.09 metric tons. I would be very interested in knowing how this compares on a per capita basis with other towns in the program.

 Carbon footprint calculator

 Backup 2011 Utility Bills

 Municipal vehicles

Community Partnership & Outreach

Community Education and Outreach **10 Points**

Program Summary:

The Green Team got a SJ Grant and held a number of movie nights in 2013, named "Green Reels," some of which are being used for other Actions. The five used for Community Education are described here. The preparations ran smoothly and all the volunteers did their part. For some we invited speakers from various local organizations that are making a difference in New Jersey, and we coupled with other groups in town to attract visitors. Budget, timetable, logistics, and evaluation are described in the attached grant final report. Promotional material and photos etc are also attached. • February was in conjunction with a local green architecture firm, Walter Sedovic Architects, to discuss ways houses can be renovated to naturally need less heating and cooling. Their experts Walter Sedovic and Jill Gotthelf presented a slide show and answered questions. • March we showed Food Inc and a representative from the nonprofit Food and Water Watch spoke to educate the audience on modern food issues. We also made up and distributed a listing of local distributors of local foods. Mountain Lakes Organic Co-op and Starbrite Farms CSA exhibited displays as well. • May we showed Mother: Caring for 7 Billion, Marnie Vyff ran the discussion after the film and the high school science classes studying population growth were encouraged to come. • May we also showed Renewal at the

Community Church where Allison Rankin managed the discussion afterward. Congregations of neighboring churches were also invited – St. Peter’s Episcopal, and St. Catherine’s of Sienna, though only members of the Community Church came. • In June we showed Dirt! in conjunction with the Girl Scouts, and the speaker, Meredith Compton, from Peaceful Valley Orchards and Board Member of America’s Grow-a-Row.

 [Small Grants Final Report](#)

 [2013 February Event Documentation](#)

 [2013 March Event Documentation](#)

 [2013 May Events Documentation](#)

 [2013 June Event Documentation](#)

Create Green Team **10 Points** **Bronze Mandatory** **Silver Mandatory**

Program Summary:

With the achievement of Bronze level certification in 2012, the EC re-formed the Green team with a focus on school-related environmental initiatives. Our kickoff meeting was March 15, 2013. Marnie Vyff, of the EC and Shade Tree Commission, was made the new Chair, and would keep tabs on all the groups doing actions and make sure the entries in SJ are properly entered, as well as run the Green Reels community education program. Jackie Bay, Chair of the EC and former Green Team Chair, would manage the EC Actions and assist Marnie when needed. Mimi Kaplan works with the recycling and paper Actions. Frank Sanchez manages school related Actions. Bob Tovo, Town Manager, is the Borough liaison and manages the energy tracking Action. There were a number of other interested people, some attended the kickoff meeting, and their help was enlisted in various Actions. Police Chief Shaun Bennett manages the Animals in the Community. Paul Odenwelder of Traffic Safety Committee, manages the Safe Routes to School and Anti-idling Actions. Janet Horst of the Shade Tree Commission, manages all of the tree related Actions. On Earth Day, April 22nd, 2013 the Green Team made a presentation to the Mtn Lakes Borough Council reviewing what we’ve done, are doing and our plans for bronze recertification in 2014. We asked the council to pass a resolution of support for our Green Team which they had written up and passed in October 2013. We held group meetings periodically, but the members met individually with Marnie more frequently. The Green Team manages pages on the EC website, that include a description of SJ, a list of the members, our minutes, and a few pages about our Actions: http://www.mlenvironmental.org/?page_id=321

-  [Green Team Resolution 2013](#)
 -  [ML Council Minutes 4/22/2013](#)
 -  [ML Council Minutes 10/28/2013](#)
 -  [SJ Presentation to Council April 2013](#)
 -  [Handout for Council](#)
 -  [NeighborNews Article- ML GreenTeam/Council Presentation May 2013](#)
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Education for Sustainability Programs **10 Points**

Program Summary:

Since 2010, Mountain Lakes Schools, have emphasized an EfS theme in all new K-12 curriculums, including a sustainability lesson in each study unit. In 2012, Frank Sanchez, Head of Curriculum, attended a NJ LEARNS workshop. He then distributed lessons and presented workshops on incorporating EfS standards used by the Cloud Institute (<http://www.cloudinstitute.org/cloud-efs-standards>). These lessons were promoted on Earth Day and Green Apple Day of Service. By clicking on our district curriculum blog, <http://blogs.mtlakes.org/curriculum/2013/04/12/k-12-earth-day-resources/>, one can find the K-12 TerraCycle lessons from the Cloud Institute that we promoted. By clicking the tag “Sustainability” you will see our dedication to sustainability. Furthermore, teachers helped archive “best practice” lessons on our district’s ML LiveBinder . The tabs focus on grade-appropriate resources and thematic resources, and possible partnering organizations. Finally, we included some of the modules from the Cloud Institute’s Business and Entrepreneurship Education for the 21st Century in the district’s economics elective, guaranteeing all seniors are exposed to these important lessons. In 2012, a new lab science course for high school upperclassmen, Environmental & Sustainability Science, brings the outside world into the classroom through real case studies, current data, inquiry activities, and multimedia support. Students gain an understanding of Environmental Science, current economics and environmental policy, ecology, humans and the environment, and how Sustainability Science can ensure a livable, productive planet Earth now and for future generations. In 2013, we launched Advanced Placement Environmental Studies to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them.

-  [Head of Curriculum - Summary](#)

-  Curriculum AP Environmental Science
-  Curriculum Environmental & Sustainable Science
-  ML Board of Ed Minutes 06/17/2013 (see red highlight)
-  ML Board of Ed Minutes 03/03/2014 (see red highlight)
-  Curriculum Resources on Webpages

Energy Efficiency

Energy Tracking and Management

10 Points **Bronze Priority** **Silver Priority**

Program Summary:

Our Borough Manager, Robert Tovo, has allocated the funds and hired Facility Dude to track our energy use. Attached you will find the Contract and Voucher. We will have more information by the September deadline. Facility Dude will be responding to Danielle, in the Borough office, with an end date for the importation of the data, and I'm hopeful we will have the date by the end of this week. Facility Dude confirmed that the Borough Staff/Green Team would be responsible for submitting data to the New Jersey website. They can, however, assist with the training needed to be able to generate the reports.

 2014 Contract and Voucher

Energy Audits for Municipal Facilities

Inventory and Upgrade All Buildings

50 Points **Bronze Priority** **Silver Priority**

Program Summary:

In 2010 Mountain Lakes performed an energy audit of both municipal buildings under the NJ Office of Clean Energy Direct Install Program. Estimated annual savings for the Borough Hall, a 9,340 sq foot office building built in 1970, is \$8480 driven primarily by the installation of new energy-efficient lighting. Estimated annual energy savings for the Department of Public Works, a 10,300 sq ft warehouse built in 1955, is \$6,140 driven almost equally by the installation of energy efficient lighting and electronic fuel-use economizers. The vendor used was Donnelley Energy Solutions and all proposed work contained in files #1 and #2 was completed as confirmed by the letter from the Borough Manager in file #3.

 [Direct Install Energy Assessme](#)

 [Direct Install Energy Assessme](#)

 [Confirmation work completion](#)

Food Production

Community or School Gardens **10 Points**

Program Summary:

Wildwood Kindergarten has an herb garden called “Kinder Garden - 5 Senses Garden” where plants can be seen, smelled, felt, tasted and heard. They made signs and keep a compost bin of their snack scraps for their garden. Wildwood also partnered with the Mountain Lakes Garden Club to host a Garden Club for the students. They care for the School Butterfly Garden, and used rock wool to plant seeds in a Hydroponic Tower Garden awarded to Wildwood through a community donation. The Board of Education had a vegetable garden professionally designed for the front of the middle school. The Department of Public Works graded the landscape, put in raised beds, stone walkways, and shrubbery. This past winter, the 6th grade science teacher, Robin Anderson has offered two 10 week Personal Enrichment Programs - “Winter Gardening” then “Gardening,” that met once a week. The students tasted varieties and researched conditions needed by each of the herbs before planting them. Currently, the garden is tended by 15-20 students who are part of the Gardening PEP and the Environment Club (after school group). They planted carrots, lettuce, spinach and peas, along with herbs & strawberries. Because of the cold, germination was delayed, but it paid off with good results. So far just the students have eaten the produce. The cafeteria is checking with authorities if they can use it too. The high school kitchen garden is in it’s fifth season. Mr. Fewell’s Biology, and AP Environmental classes plant and cultivate this garden. The food classes and Cooking Club use some of the produce. They kept spinach growing all winter under a cold frame; they have planted raspberries and blueberries; and they have been cultivating native chestnut trees for 3.5 years. The compost they create is from brush and leaves.

 [Community or School Gardens Documentation](#)

 [2014 Middle School Garden Summary](#)

Health & Wellness

Anti-Idling Education & Enforcement Program **10 Points**

Program Summary:

Beginning as a staff initiative in 2010, the Mountain Lakes Police Department has partnered with all the schools to provide education on the effects of idling is harmful to our environment. Magnets for the cars and flyers were made and distributed and the ML Police Department visits the schools in the beginning of each school year. There are signs at all the schools and Island Beach. 2013-2014 school year, during Bus drills and orientations, the Wildwood School Personnel, worked with the transportation companies to enforce these regulations. September 2014, the bus drivers were given a no-idling pledge and over 90% have returned them signed. Because there were still many parents idling their cars, The Borough Transportation Safety Committee (TSC) has gotten involved and launched an anti-idling campaign for the beginning of school. Remapping of anti-idling locations was completed this summer by volunteers. The attached Anti-Idling resolution was passed at the Borough Council meeting on June 9, 2014. At the opening of school in September 2014, Educational materials created by the League of Women Voters were distributed. Police officers assisting with drop off and pick up, during the first weeks of school, have been giving out their "Notice to All Parents" which states NJSA 39:4-139. The School Resource Officer, Policeman Gil Benitez, will present anti-idling information September 15 and 16 to the students in their classes in the elementary school. And finally, an article was written and published in the September issue of our local Mountain Lakes Living magazine.

 [Map & Signs](#)

 [2014 Borough Anti-Idling Resolution](#)

 [Bus Driver Pledge](#)

 [Anti idling Police Enforcement and Notice to Parents](#)

 [ML Living Anti-Idling Article 09 2014](#)

 [LWV Anti-Idling Brochure](#)

Safe Routes to School **10 Points**

Program Summary:

SRTS Team is the Borough Traffic and Pedestrian Safety Committee (TPS), which convenes quarterly to address issues relating to traffic and pedestrian safety. Nearly every meeting, a report is heard concerning the Walk to School initiatives supplied by the elementary school principal. 2013-2014 the elementary school held monthly "Walk n Roll" events during school encouraging exercise for healthy lifestyle. All staff and students congregated on the field and walked or

ran for 30 minutes, helping build community within the school. Students were given an opportunity to walk or ride bicycles in the annual Memorial Day Parade. “Scoot to School” is happening June 11th when students are encouraged to ride scooters or skateboards to school. A Police Officer and the Student Council will walk with any students from St. Peter’s Church, teaching them the safest route, what to do in an emergency, and how to store scooters while in school. Stickers are being created that provide important phone numbers to attach to the scooters. June 17th, in partnership with the Police Department, we will hold a Bike Rodeo. Grades 1 and 2 are invited to ride their bikes to school. The Police will then meet with each grade to review bicycle safety, safe routes to school, and even distribute new helmets. Students will also be taught about the “Helping Hands” initiative in Mountain Lakes. More Walk/Bike Initiatives will occur in the fall. Teachers, administration, and parent volunteers, will choose the dates. The Borough library and St. Peter’s Church are good starting locations as they are centrally located on opposite sides of town. Recognizes the homeroom having the most participants will help motivate participation. A Board of Education Resolution was adopted at the June 2, 2014 meeting. A Borough Council Resolution will be passed at the June 9, 2014 meeting.

 [Safe Routes to School Summary](#)

 [2014 Safe Routes to School Documentation](#)

 [Signed Safe Routes to School Resolution](#)

 [Safe Routes to School Team](#)

Innovation & Demonstration Projects

Innovative Community Project 1 (Formerly Other) **10 Points**

Program Summary:

ERI Education The goal of our project was to create collaborative quilts that feature the work of students and faculty to be hung in the multipurpose room in the public library. The subject was the fauna and flora of our community and would be used as a teaching tool for humane education programs, to foster appreciation and respect for indigenous plants and wildlife in our shared environment. For many years, interested residents have contributed to a growing body of information describing the natural resources which characterize the environment of the Borough. This accumulated knowledge form the basis for our Environmental Resource Inventory (ERI) http://www.mlenvironmental.org/?page_id=2 . High School Students in Foundations of Art classes hand painted quilt blocks on 9 “ squares of muslin fabric of flora and fauna indigenous to

Mountain Lakes as presented in the ERI. The work of the students was then handed off to faculty and student participants in Sharing Stories: Building Community Through Quilting Institute class. Participants in this class created quilt blocks, sashing, borders, and backing for several quilts. The Marion Roberts Fund provided funding for this and various projects at the High School. These quilts incorporate more than 200 squares. Because of the enormity of this project a separate class, Public Art Installation of Environmental Quilts, was created to handle the commitment. With a total of 10 quilts – three featuring the birds of Mountain Lakes, two for the mammals, and one for each – reptiles, fish, fauna, insects, and mixed. The quilters created quilt blocks based on the eight hour quilt pattern and frame out the painted student blocks with sashing. The backside is the same for all. Student art work was scanned and cataloged based on flora and fauna so that credit can be given at installation site.

 [Innovative Community Project 1 \(Formerly Other\) Documentation](#)

 [Photos of Quilts 2014](#)

Innovative Community Project 2 (Formerly Other 2) 10 Points

Program Summary:

In late 2011, the Parsippany Planning Board reviewed a request for an overlay ordinance to build a high-density retail/residential development on a 22 acre wooded tract adjacent to Mountain Lake called Waterview. The developers requested the zoning be changed, the wellhead protection ordinance be waived, the 200 foot buffers be reduced to 50, and impervious coverage limit increased to 75%. A few Mountain Lakes' residents realized there were serious long-term environmental and sustainability issues. Waterview sits on the most efficient recharge area of an aquifer with the highest water deficit of NJ. A multi-community team of residents was formed "Citizens for Health, Safety and Welfare" (C4HSW) with goals to: Educate residents and governments, and raise funds for an effective defense. Using several education strategies, C4HSW spoke at all Parsippany and Mountain Lakes Council meetings, wrote many letters to the editor, and ghost wrote a letter signed by former Council people. Political outreach was probably the most effective tactic. Critical allies were formed within the Parsippany Council. The Mountain Lakes Council wrote letters detailing concerns to the Parsippany Council, and signed a petition forcing Parsippany's Council to use super majority. Please see attached summary of the Council's involvement. C4HSW's outreach led to nearly 600 citizens attending Council meetings. C4HSW hired a municipal land use lawyer, and many experts, which effectively brought new information and cast doubt on the developer's

analysis. C4HSW hired a fundraiser and graphic artists to create the event “Jump in the Lake”. On April 21, 2013 over 100 people paid to jump into Mountain Lake raising over \$11,000, generating awareness and support. C4HSW also received a \$3500 grant from NJ Highlands Coalition. In October 2013 the overlay zoning was voted down. Please see the more detailed accounts in attachments.

 [Highlands Grant Application](#)

 [Web Highlights](#)

 [Jackie Bay's Summary](#)

 [Web Highlights](#)

 [Typical Letter to the Editor](#)

 [Borough Council Involvement](#)

Innovative Community Project 3 **10 Points**

Program Summary:

Pass a Wellhead Protection Ordinance to Safeguard Public Drinking Water
Mountain Lakes relies upon groundwater as our sole source of drinking water. Our primary well is located on Route 46 – a busy commercial area. Although the Borough has an ordinance protecting its prime aquifer zone, a review by the Environmental Commission revealed that this ordinance had several flaws. The existing ordinance no longer adequately protected the water supply. The geographic protection of the aquifer zone was incorrect, leaving out a critical polluter – a gas station that sat within Tier One and Two protection zones. Secondly, the existing ordinance was supported by individual block and lot numbers that can be split and renamed, instead of by a modern GIS map. A map from an outside source is unambiguous and more easily defended in court. The existing ordinance over-regulated the Borough because it included many lots that are not in proximity to a wellhead. It also lacked specificity in terms of the exact quantity and chemical make up of pollutants allowed within protection zones, making it hard to enforce. The EC turned to the Passaic River Coalition for advice on how to draft a new ordinance. They suggested that we use the Parsippany ordinance that had already been approved by NJDEP. For years, the Borough Council was not in favor of passing a new ordinance. They questioned why existing laws were not adequate and wanted to know the long-term impact upon development. Through a thorough education process that included many meetings, presentations, and letters to the editor, the Environmental Commission was able to win Council support. The ordinance had its first reading on May 12, 2014. Council voted unanimously to accept it. The NJDEP has it for

review and its second reading is on the July agenda.

 [2014 Council Minutes with Wellhead Protection Ordinance](#)

 [Tier Map](#)

 [April 2013 Presentation to Borough Council](#)

 [2013 Letter to the Editor](#)

 [Wellhead Protection Ordinance 2014](#)

Raingardens **10 Points**

Program Summary:

The Rutgers Cooperative Extension Water Resources Program has just accepted the sites for two rain gardens on Mountain Lakes Municipal property. They have a grant to pay for the work and plants for demonstration rain gardens on municipal lots in the Troy Brook Aquifer Watershed. Part of Mountain Lakes is on this aquifer. The Green Team also has permission from the Borough Manager for these gardens. Jessica Brown, Rutgers Program Associate, will have plans in place September 19th. The Department of Public Works (DPW) will then dig the sites and Rutgers students and our Green Team will plant the gardens this fall starting in the beginning of October. The first site is in front of Wildwood Elementary school where the present Kinder-Garden is. There is a pipe that releases sump-pump and rain water, making it a perfect location for a rain garden. The second location is in front of the Municipal building, also fed by a few gutters from the roof. Both locations are in front of the buildings, making them ideal locations for demonstration garden. Once the gardens are in, we will write an article about them for the local papers, announce them on the Borough Homepage, and create a page talking about them on the website. A discrete sign will be made that talks about raingardens and refers the viewer to look it up on the Mountain Lakes website.

 [Potential Raingarden Sites](#)

 [Raingarden Approval Letter for Rutgers Grant Sept 2014](#)

Solar **10 Points**

Program Summary:

In February 2010 the Morris County Improvement Authority ("MCIA") selected Power Purchase Agreement provider Tioga Energy to develop, install and operate 3.2 MW of solar power systems on 19 Morris County school buildings and county

government facilities. The Board of Education of the Borough of Mountain Lakes is part of the MCIA's Renewable Energy Program, and includes roof systems at the Mountain Lakes High School, located at 96 Powerville Road and the Wildwood Elementary on Glen Road. The High School system consists of 754 Yingli 230 watt solar panels installed on rooftops as well as free-standing units in the parking lot. According to a solar kiosk installed at the school, the high school system has generated 187.01 MWh of electricity to date which equates to 131,159 miles not driven. Under the Tioga Energy SurePath Solar Power Purchase Agreement, the facilities purchase electricity produced by the solar systems for 15 years. For the MLHS system, the rated output is 176.4 kilowatts of electricity, amounting to approximately 203,472 kilowatt-hours of electricity per year that are not purchased from the local utility company. Mountain Lakes High School pays for solar power that is approximately 35% less expensive than energy purchased from the local electric utility in the first year. Solar vs. traditional cost savings are expected to increase to 44% less expensive by the last year of the agreement in 2025. The total estimated cost savings is estimated to be \$234,000 over the life of the agreement. The Borough of Mountain Lakes worked with the developer during the project to issue permits/approval for the solar installations within the municipality (attached as supporting project documentation). File #3 contains a screen shot from one of the solar kiosks that were installed in the High School.

 [ML Solar Project Scope](#)

 [Mtn Lakes Tioga Energy Contrac](#)

 [Solar Interactive Kiosks](#)

Natural Resources

Environmental Commission **10 Points**

Program Summary:

The Mountain Lakes EC was established in 1975 when the Borough passed a resolution I-75 to adopt a Council-Manager Plan E type of government. The rules for appointments and the power and duties were outlined in Part 1, Chapter 9 of the Council-Manager Plan. The current commission is Chaired by Jackie Bay with Vice Chairman Margaret Gossett. Member Todd Terhune serves on both the EC and the Planning Board. The Council liaison is Bill Albergo. The EC members are: Todd Terhune, Marnie Vyff, Mimi Kaplan, Allison Rankin, John Horan, and Gretchen Fry. The EC meets the first Wednesday of the month at 7:30pm at the Borough Hall. EC priorities for the last two years have focused upon creating a wellhead protection ordinance and applying for Silver level certification under the

Sustainable Jersey program. We have uploaded the first page of Ordinance I-75, the first page of Part 1 Chapter 9, the EC Mission, 2013 Accomplishments Report, and 2014 Goals. The Ordinance covered the entire Borough government and is thus very large. Additional pages are available upon request. Further information including meeting minutes, can be found on Mtnlakes.org under "Committees and Commissions".

 [Mtn Lakes Resolution Re. Borou](#)

 [Mtn Lakes Gov't Part 1 Chapter](#)

 [2013 EC Accomplishments Report](#)

 [2014 EC Mission Goals](#)

Natural Resource Inventory 20 Points Bronze Priority Silver Priority

Program Summary:

In 2009 the Environmental Commission of Mountain Lakes undertook the updating of the existing Natural Resources Inventory (NRI) dated 1979. A Smart Growth Planning Grant was obtained from ANJEC to assist in the development of an interactive NRI containing links to digital GIS maps. These maps contain data layers that provide rich information about Mountain Lakes topography, lake bathymetry, steep slopes, soil types, etc. These maps will be hosted on the Morris County Planning Department site as a county pilot program. The Morris County Planning Department has created an interactive database for use by the public known as the Morris County Public Resources Interactive Mapping Application (MCPRIMA). Live links for this resource are found throughout the NRI. Because we have created a "living" rather than a traditional static document, the Mountain Lakes Planning Board has determined that the NRI cannot be "adopted" as was done in the past. Instead, the NRI will be referenced within the Mountain Lakes Master Plan (currently under construction) and will be available on a new website, MLenvironmental.org, which is currently under construction in wordpress as a project of the ML High School computer class. It is estimated that it's completion required approximately 3,000 hours of volunteer time primarily on the part of the Environmental Commission. The Borough Engineer also made significant paid contributions as did Rick Radis who was hired to do inventories of both flora and fauna. These reports were edited and included within the NRI. The Environmental Commission and the Borough Engineer has committed to updating the NRI text and maps as needed per the resolution in file #3.

 [NRI Reviewed by Planning Board](#)

Water Conservation Education Program **10 Points**

Program Summary:

In April 2013 the Green Team held a GreenReels night showing the film, Flow, and Ella Fillipone, from The Passaic River Coalition, spoke and took questions. Later in the week we also had a rainbarrel making class in conjunction with Rutgers. Three pages were then added to the town's 2014 annual Solid Waste Program mailer about water pollution solutions, see attachments. The events were posted online at a number of sites including the town bulletin board, the School's Virtual Backpacks, and various Meetup and Facebook pages. The students were given extra credit to attend. Email reminders were sent out to town officials. The Green Team made organic popcorn and lemonade from organic lemons. Rutgers was partnered to give the rainbarrel construction class as part of their Troy Brook Watershed project. Rainbarrels were \$10 each. The event sold out at 25. Others came anyway and all barrels, even the extra ones, were distributed. Rutgers' Ben Pearson made a comprehensive presentation on why we need to use rainbarrels. The effects of these events were far reaching. The students were quite taken by the information in the film, which isn't so readily available on tv. The articles published in the local papers were also read by many more people than came to the events. A development controversy was also brewing about a property neighboring Mountain Lakes in Parsippany, called Waterview. At the movie event, our speaker, Ella Filipone stayed late and gave concerned residents ideas for directions they could take. They were inspired by Ella. They then launched a nonprofit group, Citizens for Health, Safety & Welfare, to fight the development - which then became Innovative Community Project 2. Also, the Environmental Commission proceeded to research, recommend and assist the Borough Council to pass a Wellhead Protection Ordinance - Innovative Community Project 3.

 [Water Conservation Education Program Documentation](#)

 [2014 Clean Water Mailer Pages](#)

Natural Resource Protection Ordinances

Tree Protection Ordinance **10 Points**

Program Summary:

In 2000 Mountain Lakes passed Ordinance No. 13-2000 to protect and preserve

street trees and shrubs in right of ways and to preserve trees within residential setback areas. Fees and penalties were established. In 2005 this ordinance was ammended with No. 10-05 which is attached.

 [Mountain Lakes Tree Protection](#)

Tree & Woodlands Management

Community Forestry Plan and Tree Cover Goal **20 Points**

Program Summary:

The Shade Tree Commission has engaged in active tree-planting programs in the past and has recently changed focus from planting on public right of ways to maintaining the current cover. The necessary 2013 CEU's were earned by Commissioner Janet Horst's attendance of the Riverdale CEU Training and, Municipal employee, Dan Denison's two-day attendance at the Shade Tree Federation Meeting in October 2013. In 2013, the Shade Tree Commission continued its community engagement efforts meeting with homeowners who applied for permits for tree removals. Our meetings provided homeowners the opportunity to consider pruning rather than tree take downs. New residents where guided in balancing maintenance with protecting their canopy. We published an article in the community magazine Mountain Lakes Living on the Emerald Ash Borer. Arbor Day is celebrated at the Mountain Lakes' Elementary School, and has become an important public awareness program. The theme this year was the importance of trees for wild animals. The entire elementary school participates in this ceremony and families are invited. The Municipal Arbor Day Proclamation was read by the Mayor and the Shade Tree Commission recognized Heather Carr, retired Commissioner and Chairperson. In her honor, a tree was planted on Borough property. First graders then received a sapling with planting instructions. Our website continues to be an excellent source of current information about tree related concerns for the town residents as well as posting the minutes of the Shade Tree Commission meetings:

<http://www.mtnlakes.org/Borough/ShadeTree/Treehome.htm> The ongoing responsibilities of the STC are: Tree Assessment and Inventory; Hazard Tree Identification and Management; Borough Tree Management Plan and Residents Tree Removal Permit; advisory role to the Borough Council regarding tree management for the town's canopy; Tree Planting - 5 trees in 2013 and 100 saplings distributed to students.

 [Tree Canopy Resolution](#)

 [2013 Community Forestry Plan Annual Report](#)

 [Arbor Day Celebration 2014](#)

 [2013 Approved Status](#)

Tree Maintenance Programs **10 Points**

Program Summary:

The Mountain Lakes Shade Tree Commission consists of 7 members. The Borough is divided into 7 districts and each member is responsible for an annual inspection of all the shade trees located on Borough publicly owned land and right of ways in their district. Each volunteer is armed with a computer print out by location, size, species and general health of all trees in the Borough right-of-ways. Every tree must be inspected and assessed for overhanging branches, rot or other adverse conditions. Any trees that need to be pruned or removed are recorded and any questions are forwarded to an arborist. The Borough tree inventory is maintained on the Tree Source database. The inventory contains 35 reports detailing tree location by species, tree removals by tree diameter, tree pruning by priority designation, trees by condition - good, fair or poor, trees with surface root problems, etc. The front page of the Inventory listing all the reports available is uploaded. The Commission is presently looking into changing over to iTree. A plan for shade tree maintenance is assembled based on an assessment of the annual updates. Maintenance work is competitively bid. The attached Mountain Lakes' 2013 Annual Accomplishments Report describes our policies for tree maintenance, the value of our Shade Tree Commission's volunteer hours, and expenditure for tree removal and pruning. In 2013, the Borough of Mountain Lakes removed 20 trees and pruned 22 trees.

 [Tree Source Database Cover Pag](#)

 [Annual Accomplishments Report 2013](#)

Tree Planting Programs **10 Points**

Program Summary:

Mountain Lakes planted 54 shade trees on Borough property in 2009. Funding was provided by a CSIP grant that required a match from the Borough. See the Planting Report for project details, including a tree inventory, competitive bidding information, verification of volunteer hours delivered and an after planting inspection report.

 [Mountain Lakes 2009 Tree Plant](#)

Green Purchasing Program

Recycled Paper **10 Points**

Program Summary:

With the instigation of the Green Team, Mountain Lake Borough's purchasing personnel, Amy Connolly, has switched the Boroughs copy paper to 30% recycled content. She has also switched other types of padded papers and some hanging folders to recycled content. In the documentation we have marked with red arrows the purchases of copy paper and orange arrows the purchases of other recycled paper products. There was only one purchase of non-recycled paper purchased for special use. We could not get a copy of EnviroCalc as the links are broken. We added all the paper purchased by sheets. Then calculated out how many sheets worth were recycled content. By dividing that out of the total purchased we came to 28.42% recycled content in all.

 [Recycled Paper Documentation](#)

 [Recycled Paper Calculations](#)

Grounds & Maintenance

Create a Policy **10 Points**

Program Summary:

We already practice IPM, water conservation, recycled materials and we insist on native plantings as seen in the photos of the Cove Project which was installed in 2012. And, we have a comprehensive grounds plan for the schools that has been practiced throughout the Borough for years. Spring 2014, the DPW wrote the Green Grounds and Maintenance Policy based on the Chatham Borough policy which follows our practices. The head of the DPW Mark Prusina, and the Borough Manager Robert Tovo, agreed this policy was good for the whole Borough and on Oct 27th the Borough Council passed the resolution to incorporate it. The DPW then emailed it to all relevant employees and committee members. As proof that we are incorporating these practices, also attached is the description and photos of the Cove Project which was planted with indigenous plants in the riparian buffer zone of the cove; the IPM policy for the schools; and the Plan for the high school that is followed for the entire Borough. We know the IPM plan documentation for the school isn't good enough for the

whole town, but it is the detail of actions for the new Green Grounds Policy.

 [School IPM Policy](#)

 [High School Plan](#)

 [Cove Project](#)

 [Certified Green Grounds Policy & Resolution](#)

Efficient Landscape Design **10 Points**

Program Summary:

In 2011 money was put aside for a project for our town's Centennial birthday. The cove has a waterfront that is used by boaters and ice skaters, that was lined with barberry to keep the Canadian geese off. A group of citizens won the right to redesign the plantings to create a noninvasive, native riparian buffer that would be a good teaching example to students and lake front homeowners. The Borough Manager and a Council person stayed on the committee to assure things went well. They hired a landscape designer who came up with a drawing. This drawing was shown to the various committees, commissions, and clubs that deal with plantings. And in the spring the plants were ordered. As with many projects, politics and differences of opinion got in the way of scheduling, the correct plants and soil types were not delivered, and the cove ended up being planted in the heat of the summer. Other monkey wrenches were thrown in, the designer of the project died, and a neighbor of the cove raised a lot of negative attention to the project causing the gardener who was to tend the plants in their first couple years to stop coming. Even being left to it's own resources, the cove garden did somehow survive. A few of the plants had died off, so in the summer of 2014 the cove was reassessed. The paths into the lake were moved to more central locations and some of the plants were replaced. The plants that had flourished from the initial planting, mixed with the new ones, have created a lovely park which is a fine example of native, low maintenance landscaping, which also is an excellent riparian buffer for the waterfront.

 [Efficient Landscape Design Documentation](#)

Waste Management

Prescription Drug Safety and Disposal

10 Points **Bronze Priority** **Silver Priority**

Program Summary:

Mountain Lakes Police Chief Bennett tried to establish a permanent drop site in our Police Department, but our facility does not meet the space and security requirements. So in conjunction with DEA National Take Back Day, the Morris County Prosecutor's Office, and The Mountain Lakes Police, he started a biannual Prescription Drug Take-back Day. The last two Operation Take-Backs were October 26th, 2013 and April 26th, 2014. It coincides with our Spring/fall Clean Up, Paper Shredding, Blood Drive, and Trash drop off Days to get more participation. It was held at the same location as the Blood drive and Paper Shredding Day - the Fire Department, at 400 Boulevard, Mountain Lakes, NJ from 10 am to 2 pm. The event was publicized through Flyers, Borough Email Blast, Morris County Prosecutor's Office Press Releases which resulted in printed articles in the local papers. Please see attachment. The drug disposal is free to residents and The Police Department pays overtime costs. The Take-Back station was manned at all times by a minimum of three Police officers from The Mountain Lakes Police and Morris County Prosecutor's Office. The Morris County Prosecutor's Office took custody of the 152 pounds of drugs from the Mountain Lakes Police and subsequently turned them over to the DEA for disposal. The Police requested no photographs. The Mountain Lakes website has a page that discusses the environmental impacts and health impacts of improperly disposed drugs, information on drug disposal, and links to the national program: <http://www.mtnlakes.org/Environment/Waste/Waste.php#>

 [Prescription Drug Safety and Disposal Documentation](#)

Recycling

Community Paper Shredding Day **5 Points**

Program Summary:

Mountain Lakes has held a paper shredding day annually since 2009 and bi-annually since 2011, in April and October. The spring date, on Earth Day weekend, have become a town-wide cleanup day, with many other events like a blood drive, large garbage & medical refuse dropoffs, and litter patrols. Residents bring boxes of paper to the Fire Department Driveway at 400 Boulevard and pay a per box fee. Councilman/Fireman Doug McWilliams organizes this event and volunteers from our Volunteer Fire Department and Junior members manage the paper collection. The spring events are more popular. Last October 2013 we shredded 2,520 lbs and this spring shredded a record 5,880 lbs! The moneys collected offset the \$200 fee we pay to Secure Shredding in Morris Plains and the remainder is a donation to the Volunteer Fire Dept and the Boonton Kiwanis Ambulance Squad. Shredding Day is promoted

via published articles in the local paper, the www.MtnLakes.org website, Mtn. Lakes Broadcast email news, a flier Borough Council minutes (see attached).

 [Community Paper Shredding Day Documentation](#)

Non-Mandated Materials Recycling **10 Points**

Program Summary:

In the Borough's Master Plan, the recycling program has three primary objectives. 1. Provide all Borough residents with information explaining the environmental and economic benefits of recycling to the Borough and to society at large. 2. Provide a simple, convenient and cost effective recycling collection system that maximizes recycling and minimizes the amount of solid waste disposal. 3. Match residents' individual costs of solid waste disposal to the amount of solid waste they generate. In 2012 a Solid Waste Committee was formed to researched the best available means for our Borough to recycle. They developed an RFP with desired criteria and the Borough entered a new five year waste contract in January 2013. ReCommunity now gets all of our dual stream recyclables and they pay Mountain Lakes for them at the going rate making it the most cost efficient means of recycling. Residents now enjoy residential recycling pick up of all mandated items plus plastics #4, #5 and #7, clean aluminum containers and foil, aseptic containers (juice boxes, milk cartons). Additionally, residents can take these items to our Recycling Center for disposal in specially marked 30 yard roll off containers, and there are other receptacles for clothing and shoes, hard and soft cover books, all scrap metal (including appliances), and antifreeze. Cameras have been installed at this site to guard against abuse. A Solid Waste brochure is mailed out annually to all households. The brochure is available in the Borough Hall for pickup, and the information is available online at: <http://www.mtnlakes.org/Environment/Waste/Waste.php> . See files. Please note page 2 which offers recycling information for "Common Recycling Errors" and "Local Donation Opportunities" because reusing is better than recycling. The website www.recyclingNJ.com/recycle.html is also given so residents can find where to recycle anything.

 [Mtn Lakes 2014 Solid Waste Website](#)

 [Mtn Lakes 2014 Solid Waste Brochure](#)

 [2013 Tonnage Report](#)

 [Photos Non-Mandated Materials Recycling](#)

Recycling Depot **10 Points**

Program Summary:

Mountain Lakes residents began recycling in the 1970's, a permanent facility was established at the Borough's Department of Public Works in the 1980's, and residential recycling pick up was implemented in 1994. The recycling program at that time incorporated a dual stream system. Though single stream is popular, the Borough has retained the dual stream because recyclables remain cleaner, therefore more valuable on the market. According to the Borough's Master Plan, the recycling program has three primary objectives. 1. Provide all Borough residents with information explaining the environmental and economic benefits of recycling to the Borough and to society at large. 2. Provide a simple, convenient and cost effective recycling collection system that maximizes recycling and minimizes the amount of solid waste disposal. 3. Match residents' individual costs of solid waste disposal to the amount of solid waste they generate. The Borough entered a new 5 year waste collection contract in January 2013. Residents enjoy residential recycling pick up of paper including cardboard, magazines and junk mail, and commingled glass bottles and jars, steel container and lids, aluminum containers and foils, plastics #1, #2, #4, #5, and #7, and aseptic containers. Additionally, residents can take these items to our Recycling Center for disposal in specially marked 30 yard roll off containers. There are also designated areas for the recycling of anti-freeze, motor oil, electronics, scrap metals, books, clothing and shoes, tires, batteries, leaves and brush. Cameras have been installed at this site to guard against abuse. A Solid Waste flyer is mailed out annually to all households. Included in the mailing is information on solutions to storm water pollution and the annual pet licensing application. It is also available at the Borough Hall and online at: <http://www.mtnlakes.org/Environment/Waste/Waste.php> .

 [Mtn Lakes 2013 Tonnage Report](#)

 [Mtn Lakes 2014 Solid Waste Brochure](#)

 [Mtn Lakes 2014 Recycling Depot images](#)

Recycling Education & Enforcement **5 Points**

Program Summary:

Mountain Lakes has an Ordinance for Recycling § 295. Within this ordinance there is a section § 295-9 Enforcement and § 295-10 Violations and penalties. There is no chapter on education of recycling, but we do educate our residents and students on recycling in Mountain Lakes. The Mountain Lakes Recycling

Guidelines is a comprehensive outline of our solid waste program with suggestions on where other items can be disposed of and repurposed as well as water pollution guidelines. We have a graphically simple Mountain Lakes/ReCommunity Recycling Guide that is part of the Guidelines, page three. Both items are mailed out to all residents annually and available in the Borough Hall. The DPW has previously sent out the Recycling Tonnage Report Form (2013) with a cover letter to all Landscapers working for Mtn Lakes residents. With the assistance of S.J. showing us the Denville form, our DPW has remade the form (2014) and will make it available for all high volume landscapers, businesses, and residents who use a different hauler from the town's contracted hauler. We focus on teaching the younger children to establish behavioral policies that then carry through as they get older. The Green Team held 45 minute recycling assemblies for each class K-5 at Wildwood elementary school March 28, 2013. They used the ReCommunity, K-6 Introduction to Recycling lesson plan. In the assemblies they also showed the ReCommunity videos on How Recycling Works and the Materials Recovery facility. These lessons then are reenforced at the classroom level, where our school mascot, the tiger, becomes the "Sustainable Tiger" role. The Sustainable Tiger role is given on a rotating basis to students who are then responsible for emptying recycling bins, turning off lights, etc.

 [ReCommunity Lesson Plan](#)

 [Recycling Education in Wildwood](#)

 [2013 Recycling Movie Night and Presentation](#)

 [Recycling Ordinance](#)

 [2014 Recycling Guidelines](#)

 [Corp Letter and Recycling Forms 2013 and 2014](#)

Waste Reduction

Grass - Cut It and Leave It Program **5 Points**

Program Summary:

The Mountain Lakes Municipal Solid Waste Coordinator has for years put out a brochure about Cutting and Leaving Grass Clippings. The website was updated, and in spring 2014 the Green Team assisted and made a more attractive brochure to put out in the Borough rack. The rack is right by the front door of the Borough Hall where the various town organizations put all their fliers. In the Solid Waste Program mailer that is mailed out to all households once a year, it is stated that the Recycling Center does not accept grass clippings. We also posted

a notice on the Bulletinboard which is on the Borough homepage – “This summer enjoy a healthier lawn, save money, and reduce your work by GrassCycling! GrassCycling is the practice of leaving grass clippings on your lawn when mowing. It provides your lawn with the valuable nutrients and water that it needs. Find out more on the Borough website:

www.mtnlakes.org/Environment/Waste/Waste.php#.” Residents can find GrassCycling information now both on the Waste Management part of the website and at the Borough Hall.

 [Grass - Cut It and Leave It Program Documentation](#)

Pay-As-You-Throw Program **10 Points**

Program Summary:

A Solid Waste Committee was created in 1992 to investigate a new solid waste collection system. The Committee started with a community survey assessing current garbage and recycling attitudes. Over 50% of the residents returned the survey and there was considerable support for a "pay as you throw" program. A rate analysis was done in 1995 to support the pricing of \$1.00 and \$2.00 for 15 gallon and 30 gallon custom disposal bags. The bags were sold at local merchants and the price was designed to cover the cost of disposal of both garbage and recyclables as well as the running of a Borough recycling depot. See File #1. After its first year in existence, an annual report was prepared that showed that the levels of waste collected, revenues, and expenses were very close to prediction. One disappointing finding was that recycling levels did not seem to have increased from their survey levels of 46% of solid waste. In 2011, the per bag charges rose to \$1.25 and \$2.50 respectively. The bags are now a revenue source to the Borough. The higher rate adds an impetus to the residents to recycle and compost as those methods are free of charge. A new Solid Waste Committee took a fresh look at the program in 2012 and awarded a new pickup contract starting January 2013 that dramatically increased the recyclables. The bags themselves were discussed and the supplier was changed, so they now have a cinch strap. For the future, there is great interest in getting a smaller size for the households that find they are producing much less garbage and we would like to get them in biodegradable plastic. The Mountain Lakes website exhibits a comprehensive selection of Waste Reduction and Recycling Programs: <http://www.mtnlakes.org/Environment/Waste/Waste.php#>

 [Solid Waste Utility Rate Analy](#)

 [Solid Waste Utility Annual Rep](#)

Waste Audit of Municipal Buildings Schools **10 Points**

Program Summary:

Two Waste Audits were performed at Mountain Lakes High School (highest population of students and administration) in April 2013 and a follow-up audit in April 2014, under the direction of the Mountain Lakes Solid Waste Committee, made up of Borough Council Members, DPW employees, a school representative, and resident volunteers. The MLHS Environmental Club weighed and recorded the refuse. The results from 2013 to 2014 demonstrated overall decrease in waste generated, 37.2% and actual recycling rates increased 51.3%. The most significant change was observed in the decrease of recyclables recovered from the waste stream, 65.5%. Our goal of 50% recyclable rate was exceeded by 15.5%. After 2013 audit – All rooms were supplied with 3 receptacles – Paper, Plastics/Glass/Metal, and Trash; paper shredder purchased for teacher copying room; and presentations were made. 2014 Audit Results and Observations Recycling volume doubled. 2/3rds decrease of recyclables recovered from the waste stream. Food waste remains largest contributor, however, is down significantly. Receptacles in all classrooms, clearly labeled, some teachers added additional signage. Two receptacles now positioned together at all athletic fields. Despite great progress, estimated that 4500 lbs of recyclables per year are still commingled with trash. Cross contamination of white paper is most significant. Our goal of 50% recyclable rate was exceeded by 15.5%. Action Plan Increase student/teacher awareness Add presentation to Freshman orientation. Write articles for school and local paper. Engage Student Government, Environmental Clubs. Develop their own slogans, start a social media recycling campaign. Purchase shaped receptacle lids to prevent cross contamination. Increase size of paper receptacles in high volume areas (Guidance, near copiers) Highly visual signage on receptacles Move all receptacles into hallways Eliminate waste before generation: Promote use of multiuse drink bottles Decrease use of Styrofoam in cafeterias Develop composting program

 [Waste Audit of School Stats](#)

 [Images Waste Audit 2013](#)

 [Waste Audit Report 2014](#)

 [Top to Top presentation](#)

 [Waste Audit Article July 23, 2014](#)

