

Watershed Agricultural Council's

Forestry Program

10 - Year Anniversary

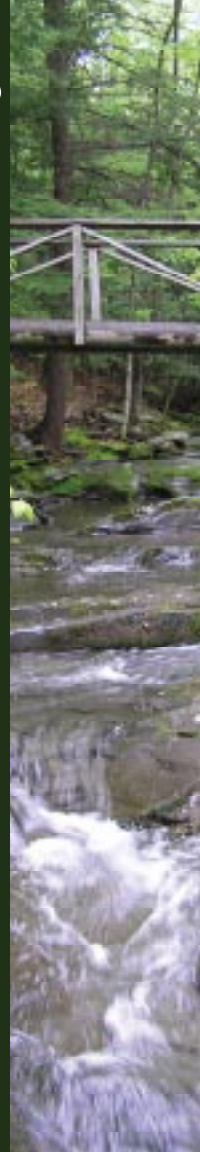
1997 - 2007





In November 1994, the *Catskill Mountain News* described a new partnership developing between New York City and forestry interests in its upstate watershed. This partnership between forest owners, loggers, and wood products businesses was modeled after the Watershed Agricultural Council, which was at that time a city-funded program of voluntary farm improvement projects. Later that year a consortium of approximately 75 forestry stakeholders convened in the aptly-named upstate town of Liberty, NY, to talk about New York City's proposed watershed protection efforts and to discuss the potential for a voluntary, city-funded forest management program. The success of this meeting led to another, and on January 5, 1995, the Watershed Forest Ad Hoc Task Force was formally established with the following mission:

“To improve both the short- and long-term economic viability of forest landownerships and the forest products industry to the benefit of local communities in the New York City water supply watersheds in ways compatible with water quality protection and sustainable forest management.”



Watershed Forest Ad Hoc Task Force

**POLICY RECOMMENDATIONS
for the watersheds of
New York City's water supply**



July 1996

During the following year, the Watershed Forest Ad Hoc Task Force met regularly to discuss the many challenges and opportunities facing the future of forestry in the watershed. The Task Force created a series of recommendations built on local expertise and current scientific knowledge to guide efforts and address issues. In July 1996, the Task Force adopted 14 forest-related policy recommendations for the New York City watersheds. These recommendations, along with five position statements and an appendix of supporting documentation, were compiled into a publication, *Policy Recommendations for the Watersheds of New York City's Water Supply*—the “Green Book.” The Green Book is a companion to the Brown Book which was published years earlier to address the needs of the agricultural community within the watershed. The Green Book would go on to serve as a blueprint for the Watershed Agricultural Council's Forestry Program.

An important milestone in its own right, the Green Book served a greater purpose by incorporating the interests of the forestry community into the watershed negotiation process facilitated through the New York State Governor's Office. At the time of the negotiations, then Governor George Pataki declared the recommendations “a blueprint for improving the economic future of forest landowners and the forest products industry in ways that are harmonious with the continued protection of the drinking water supply of nine million New Yorkers.” He encouraged Task Force members and other interested parties to “continue this partnership and work toward the possible implementation of the realistic and practical solutions identified by the Task Force.”

The Green Book is available for download at www.nycwatershed.org/downloads.html.

On December 12, 1996, the Task Force officially released the Green Book during a snowy winter press conference at the Frost Valley YMCA, future site of a watershed model forest. One month later, the historic New York City Watershed Memorandum of Agreement (MOA) was signed, containing a provision for the City to fund a forest management program. This commitment was realized in September 1997 when the New York City Department of Environmental Protection (NYC DEP) and the USDA Forest Service joined with the Watershed Agricultural Council (WAC) to create the Watershed Forestry Program.

Now, 10 years and many accomplishments later, the Watershed Agricultural Council's Forestry Program has evolved into an internationally recognized, award-winning partnership that is a core component of the New York City Department of Environmental Protection's Long-Term Watershed Protection Strategy as well as the US Environmental Protection Agency's Filtration Avoidance Determination (FAD) for the New York City water supply. The following pages connect 10 years of the WAC Forestry Program efforts to the Green Book recommendations that spawned five core program areas:

- Education & Training
- Watershed Forest Management Planning
- Best Management Practice Implementation
- Research & Demonstration
- Forest Products Utilization & Marketing

The support of the USDA Forest Service and the NYC DEP has allowed the WAC Forestry Program to pursue innovative solutions to the complex problems that confront working forests within watersheds. We acknowledge the invaluable support of our funders and help of our partners who have contributed greatly to our accomplishments. This history of watershed stewardship describes the origin as well as the current status of the programs inspired by the Green Book. The goal of this document is to not only provide this historical perspective, but to also highlight the important lessons and unique challenges of each program. It is our hope that the lessons we have learned and the challenges we have confronted will help others in their efforts to integrate a working forested landscape into the management of watersheds.



EDUCATION & TRAINING

The roots of the WAC Forestry Program's Education and Training efforts can be found in numerous Green Book recommendations which identify the need to educate the public about the relationship between watershed land uses, forest management, water quality, and rural economic viability. Educating landowners, school groups, loggers, and foresters promotes a greater awareness of water quality and forest stewardship.



URBAN/RURAL SCHOOL-BASED EDUCATION

The goal of the Urban/Rural School-Based Education effort is to establish and maintain a connection between downstate water consumers and the upstate watershed region. Teaching students from the upstate watershed and New York City about the role forests play in water quality forms the foundation of this connection. After early successes in pursuing this goal, the effort expanded to offer similar opportunities for environmental groups, municipal officials, and interested stakeholders. This resulted in the creation of three distinct programs: the Watershed Forestry Institute for Teachers, the Green Connections Program, and the Watershed Forestry Bus Tour Program.

Watershed Forestry Institute for Teachers: The Watershed Forestry Institute for Teachers acquaints teachers from the upstate watersheds and New York City with tools and curricula that promote and teach principles of forest stewardship in the context of watershed protection. Since 1999, the Watershed Forestry Institute for Teachers has become a forum for delivering innovative programming and featuring educational opportunities such as Project Learning Tree, Project Wild Aquatic, Ways of the Watershed, LeafPack, Trout in the Classroom, the Catskill Stream and Watershed Education Program, The Catskills: A Sense of Place, Green Connections, and Watershed Forestry Bus Tours.

The first Watershed Forestry Institute for Teachers was developed by the WAC Watershed Forestry Education and Outreach Committee in partnership with the Catskill Forest Association. The event took place at the Frost Valley YMCA Straus Center in July of 1999. Ten teachers from New York City and 10 teachers from the upstate watershed participated in the 4-day event. It was the clear consensus of the participating teachers that learning about forestry and its connection to water quality was of great importance to both teachers and students. The Watershed Forestry Institute for Teachers has hosted more than 200 teachers during 9 annual Institutes. The Catskill Center for Conservation and Development now organizes this annual event.

New York Timeline

by Ellen Ramey

Water is history
Trickling from
Cloud to leaf
Village to metropolis
Past to present
Shaping the land
Trees are the present
Anchoring life
To the land while
Providing protective shelter
And comforting beauty
Children are the future
Learning to
Keep water pure and trees strong
From young and not so old
Proud of the footprint they
Leave on New York

2007 Teachers Institute

The Teachers Institute visits a DEP logging site (top right) and Mack Custom Woodworking, an Economic Action Program participant (lower right).



Education & Training



Green Connections: The Green Connections Program was created to establish ongoing partnerships among students and teachers in schools from both New York City and counties in the upstate watershed region. This program reinforces the information provided to teachers during the Watershed Forestry Institute for Teachers and supports collaborative projects covering watersheds, invasive species, aquatic ecology, and sustainable forestry between partner classrooms throughout the school year.

The pilot Green Connections Program was conducted during the 2000-01 school year and coordinated by JLN Wolf Inc., a New York City-based environmental education consulting firm. Four teachers from the 1999 Watershed Forestry Institute for Teachers expressed interest in the pilot Green Connections Program. Two classrooms from the New York City Public School system and two from the Catskill/Delaware watershed region were selected to participate in mutual classroom activities throughout the year. A seventh-grade class from Junior High School 113 in Brooklyn and a fourth-grade class from Public School 11 in Queens were selected from New York City. A seventh-grade class from South Kortright School in Delaware County and a sixth-grade class from Ellenville Middle School in Ulster County were selected to represent schools from the upstate watershed region. Two field trips were then held to reinforce the students' collaborative classroom activities. The first trip was an overnight stay in New York City in March, 2001, and the second was a visit to the Frost Valley YMCA in Ulster County in May, 2001. More than 100 students and 5 teachers from the 4 classrooms participated in educational activities, planted tree seedlings and visited historic sites during the 2 field trips.

The Green Connections Program has gone on to provide support to more than 40 teachers and 1,500 students over 5 years. The success of this program is made possible by a strong partnership between the WAC Forestry Program, The Catskill Center for Conservation and Development, and Common Ground Educational Consulting. The support offered by Green Connections has allowed teachers and students to participate in collaborative projects and more than 70 separate field trips. This support reinforces the connection between the urban New York City landscape and the rural upstate watershed.

A student from Stamford School District in Delaware County points out his home to his Green Connections partner from PS 33, New York City.



How It Starts by Amanda Ruiz

Watersheds can be anywhere
And start at anytime
It can start as a drop and end like a stream
The stream can go into a reservoir
Where many fish live
And go right into our house
For us to drink
We take advantage of our water
And waste it all the time
We shouldn't even pollute the water
It's your choice and mine
To pick what to do

Fourth-Grade Student
Green Connections Program
Queens, NY

"I learned a lot and was also
able to teach my pen pal and
others all about the watershed
and reservoirs."

Katlyn Gerow
Fifth-Grade Student
Green Connections Program
Walton, NY

*Green Connection partners PS 133 from Queens NY,
and South Kortright School, Delaware County, visit
the Hanselman Farm, Delaware County (below left);
2002 Green Connections participants at Inwood Park,
Manhattan, NY (below right).*





*PS 57 from Staten Island, NY, at the Frost Valley
Model Forest, Ulster County.*



Watershed Forestry Bus Tours: Watershed Forestry Bus Tours offer policy-makers, school groups, environmental groups, and other stakeholders the opportunity to acquire a deeper understanding of the connection between forests and water quality. Watershed Forestry Bus Tours feature visits to model forests, reservoirs, sawmills, timber harvesting operations, museums, and streams within the watershed. The visits include speakers who provide additional information about water quality, ecosystems, forestry, and regional economic viability.

The Council on the Environment of New York City (CENYC) was the first organization to participate in the Watershed Forestry Bus Tour Program in May 2003. Until then, bus tours were organized for municipal officials, partnering organizations, and environmental groups on an as-needed basis. CENYC coordinated the 3-day trip for 35 students and 3 teachers from Dewitt/Clinton High School in the Bronx and the Downsview Central School in Delaware County. The students and teachers participated in educational activities at the Delaware County 4-H Camp, toured the Lennox Model Forest, participated in a riparian planting project and visited the Cannonsville Reservoir.

The WAC Forestry Program, in partnership with The Catskill Center for Conservation and Development and Common Ground Educational Consulting, has funded more than 70 individual bus tours for more than 2,500 students. Watershed Forestry Bus Tours are a uniquely rewarding opportunity designed to get students and adults out into the watershed to discover where their drinking water comes from. Designing a tour itinerary that provides for the needs of the various groups is challenging but results in a high-quality learning experience for participants.

Students from MS 243, NYC and Ellenville Middle School, Ulster County, listen to Tom Alworth from The Catskill Center during their tour of the Catskill/Delaware watershed (top). Students from Baruch College Campus High School, NYC, plant trees on DEP land in Delaware County, NY (bottom).





LOGGER & FORESTER TRAINING

Although New York State does not require licensure to harvest timber, the WAC Forestry Program supports training for certification to promote professional timber harvesting on watershed lands for two reasons. First, a trained logger is a safer logger with fewer injuries and better preparedness should an emergency occur. Second, a forestry professional with a better understanding of safety, silviculture, and forest ecology will make the right choices for water protection and forest health.

Schaefer Logging Inc. provided the initial consulting services that helped launch Logger Training efforts in 1998. Tom Axtel from Schaefer Logging scheduled annual logger training events and helped develop strategies to increase logger participation in Trained Logger Certification (TLC)[®]. Over the past 10 years, the WAC Forestry Program has partnered with Catskill Forest Association, Empire State Forest Products Association, and New York State Logger Training to host more than 150 workshops attended by over 2,000 loggers. In 2005, a strong partnership with Cornell Cooperative Extension of Greene County was forged. As a result of this partnership, Game of Logging[®], First Aid, and Forest Ecology & Silviculture workshops are offered twice annually to promote the certification of new participants. Courses such as Advanced Logger Rescue and Log Bucking for Quality provide opportunities for professional development that allow loggers to maintain their TLC[®] while learning skills that will prove useful on a daily basis. Currently, there are over 50 certified loggers working within the Catskills and Lower Hudson regions and many of the regions sawmills are providing financial incentives for their logging contractors to become TLC[®].

One of the true challenges of logger training is communicating with an audience that is composed of independent contractors and small businesses that spend a great deal of time working in forests. All outreach and education efforts that seek to engage this audience must prove valuable enough to draw the individuals out of the woods and into a venue where communication can begin.



Opposite page: (Clockwise from far left) Timber Harvest Road participant cutting timber in Westchester County; Game of Logging[®] instructor demonstrates open faced felling techniques; Logger Rescue course in Greene County; newly certified TLC[®] Loggers stand with their sign.





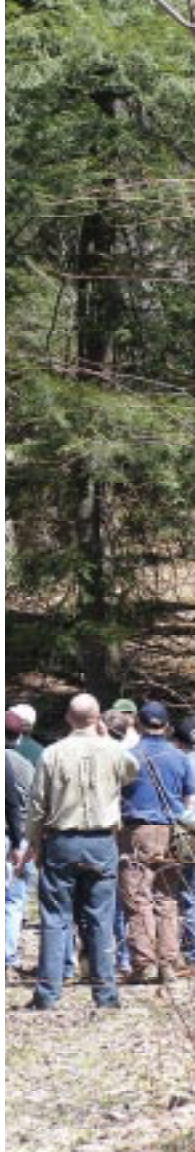
LANDOWNER EDUCATION

The concepts that surround sustainable forest management, water quality, biodiversity, silviculture, and ecosystems are complex. If the intention is to promote greater awareness of water quality issues and encourage the creation and implementation of forest management plans, it is necessary to establish a basic level of understanding among landowners regarding these issues. Landowner education efforts introduce people to the fundamental principles of working forests and watershed protection.

Landowner education efforts have taken many forms during the past 10 years. Conferences, demonstrations, woods walks, site visits, progressive workshops, and self-study courses are a few of the methods. The first landowner conference to fully integrate the WAC Forestry Program and its priorities was hosted by the Catskill Forest Association on December 8, 2001, at the SUNY Delhi college campus in Delaware County. This workshop offered landowners a diverse agenda with speakers from the SUNY College of Environmental Science and Forestry, the DEP, the WAC Forestry Program, the Catskill Center for Conservation and Development, and the Catskill Forest Association. More than 100 landowners attended the workshop to learn about forest parcelization, Best Management Practices, wildlife management, and conservation easements.

People own forestland for many reasons, so there are many possible topics to cover during education events for landowners. Topics such as bird watching and tree identification can often entice an audience to attend a workshop where more complex topics such as silviculture and invasive species can be introduced. Educational events will continue to play an important role in working forests and water quality by remaining responsive to the needs and interests of landowners.

Opposite page: (Clockwise from far left) WAC Forestry Program staff lead a woods walk at Lennox Model Forest, Delaware County; 2006 Forestry Field Days classroom session; landowner woods walk at Frost Valley Model Forest, Ulster County.





"I just wanted to thank the Council for their involvement in the conservation and future preservation of privately owned watershed property. I believe this Council's mission will truly enhance my own property as well as the overall watershed environment."

Steve Ondorf
165 acres
Delaware County, NY

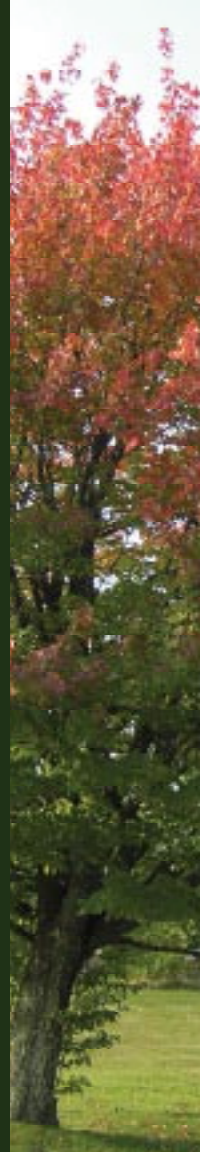
FOREST MANAGEMENT PLANNING

The creation and implementation of long-term forest management plans that protect water quality and ensure economic viability were the first steps in encouraging the sustainable management of watershed forests. The Watershed Forest Management Planning Program began in 1997 as a partnership between the WAC Forestry Program and private consulting foresters from the upstate watershed region. The WAC Forestry Program works with private consulting foresters to determine the content of Watershed Forest Management Plans. Each forest management plan includes basic information about forest structure, wildlife management, riparian planning, forest economics, and water quality that are tailored to suit the needs of individual forests and landowners. Watershed Forest Management Plans provide landowners with the basic information they need to make informed decisions regarding the future of their forests.

The first Watershed Forest Management Plan was written in February 1998 by Brian Bower, a watershed qualified consulting forester, for the 215-acre Mid-Island Rod and Gun Club in the Town of Jewett, Greene County. Since 1997, the WAC Forestry Program has worked with more than 50 watershed qualified consulting foresters to develop more than 700 management plans for privately owned forested properties within the watershed. There are more than 120,000 acres of forest land currently enrolled under WAC Watershed Forest Management Plans.

In 2003, the WAC Forestry Program created a staff position in the Croton Watershed region to address the unique needs of forest landowners east of the Hudson River. Higher rates of forest parcelization, rampant invasive species, and an encroaching urban-rural interface are a few of the issues that confront working forests and water quality protection in the Croton Watershed. Creative solutions such as outreach to municipal officials, an increased level of technical support for foresters and loggers, and targeted educational opportunities that are attentive to landowner needs are some of the methods used to advance program goals within this watershed region.

The many reasons landowners have for owning their forested properties continue to challenge the WAC Forestry Program. Encouraging the sustainable stewardship of privately owned watershed forests continues to be a program goal. Whether this stewardship takes the form of active timber management or the small-scale enhancement of wildlife habitat, the WAC Forestry Program staff seeks to strengthen and adapt the Watershed Forest Management Plan specifications to account for this diversity. This allows the WAC Forestry Program to support the decision-making process of a wide range of forest landowners and affect the landscape-level management necessary to protect water quality while promoting regional economic viability.



MANAGEMENT ASSISTANCE PROGRAM

The Green Book acknowledged the need to establish a system of incentives to encourage woodlot owners to maintain their forest land. In the fall of 2005, the WAC Forestry Program initiated a 2-year pilot program to increase the implementation of timber, riparian, and wildlife-management recommendations contained in Watershed Forest Management Plans. This pilot effort, the Management Assistance Program (MAP), builds upon the framework of forest management planning the WAC Forestry Program has been supporting in the watershed since 1997.

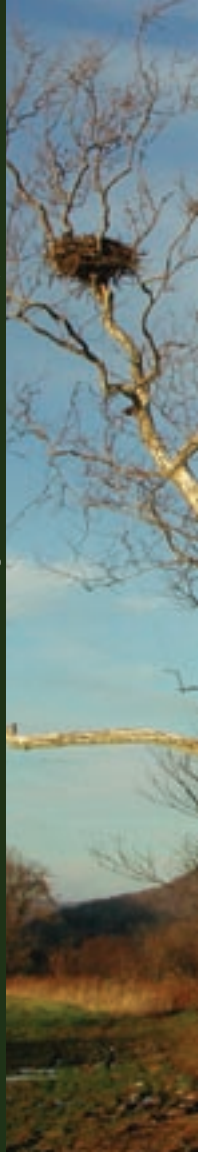
The first MAP practice was completed on Patrick Foreit's property in March 2006 with the assistance of his watershed qualified consulting forester, Jude Zicot. Patrick and Jude completed 20 acres of timber stand improvement that will result in a vigorously growing forest filled with high-quality timber. The pilot MAP has had four funding rounds since its inception. A total of 200 MAP applications have been submitted by landowners, requesting funding for a variety of practices ranging from timber stand improvement to establishing vegetation within riparian areas. More than 100 landowners have been approved to implement MAP practices that will impact more than 1,000 acres of watershed forests. In excess of 50 MAP practices have already been completed during the 2-year pilot project, impacting more than 500 acres of watershed forests.

MAP offers forest landowners the opportunity to pursue their interests and priorities. Since the inception of the WAC Forestry Program, research has shown that landowners own forests for reasons beyond economics: they value their forest land for its aesthetic beauty, the wildlife habitat it provides, and the recreational retreat it offers. The concepts of sustainable management and silviculture can play a role in helping landowners meet these non-commercial objectives. The opportunities provided by the Management Assistance Program capture landowners' interests and inspire them to become active stewards of their properties.





Management Plan Implementation



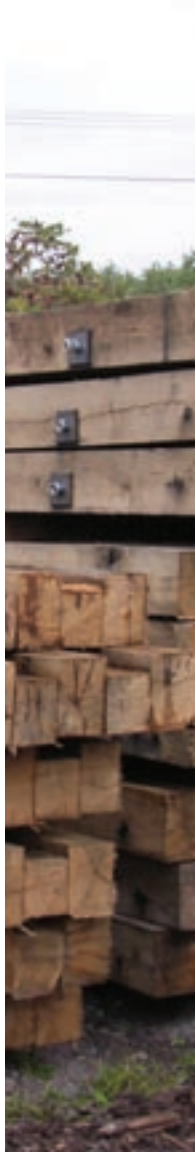


BMP IMPLEMENTATION

The Green Book establishes the need to promote the use of voluntary Best Management Practices (BMPs) among loggers, landowners, and foresters by providing technical support and economic incentives. The BMP incentive programs were founded on the idea that existing forest management activities are a negligible non-point source of pollution. Promoting the use of BMPs within the watershed region will further reduce the sediment and nutrient loading that could result from forest management activities.



BMP Implementation



*Opposite page: WAC Forestry Program 30 ft Portable Bridge.
Right: WAC Forestry Program 20 ft Portable Bridge.*



BRIDGE PROGRAMS

The WAC Forestry Program offers loggers and foresters three options to utilize portable bridges during logging operations within the watershed: The Bridge Loan Program, the Bridge Cost-Share Program, and the Bridge Rental Program. These programs encourage the voluntary use of various stream crossing structures in order to expose loggers and foresters to the benefits of portable bridges. Benefits include an increase in productivity, a decrease in maintenance costs, and the protection of water quality.

The Portable Bridge Loan Program was created in 1998 to provide stream crossing structures for use, free of charge, on logging jobs within the watershed. A 30-foot portable bridge was purchased from Clear Creek Crossings; this became the first bridge to be loaned by the program. It was loaned to Schaefer Logging Inc. in September 1998 and used to salvage 500,000 board feet of timber in the town of Tompkins, Delaware County. Since establishing this program, 16 additional crossing structures have been purchased. The current bridge inventory consists of six plastic arch culverts, eight 20-foot portable bridges, one 30-foot portable bridge, one 50-foot portable bridge, and one set of rubber tire mats. Bridges have been loaned more than 50 times to watershed loggers through the Portable Bridge Loan Program over the past 9 years.

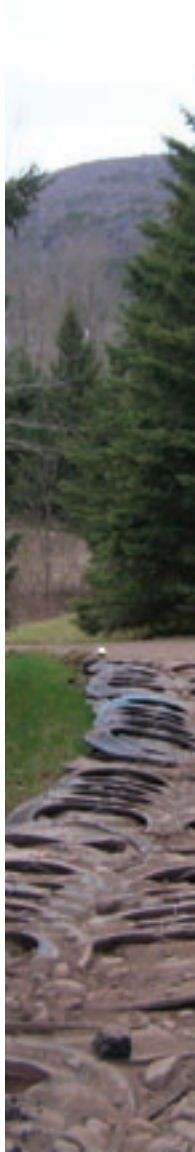
The Portable Bridge Cost-Share and Rental Programs were also created in 1998. These programs provide financial assistance to loggers and foresters who are interested in purchasing their own bridge or in renting one. Mike Arnold of Hurley, NY, was the first to construct his own portable bridge in June 1999. Since its inception, the Portable Bridge Cost-Share Program has worked with 18 watershed loggers to assist in the construction and purchase of eighteen 20-foot portable bridges and one 30-foot portable bridge. The first rented bridge was used by M&C Brothers Inc. to harvest timber as part of a helicopter logging job in the Town of Jewett, Greene County, in November 2000. One of the biggest challenges to participation in the Bridge Programs is overcoming the cost of transporting the bridges. To address this issue, bridges that are loaned are stored at popular sawmills located throughout the watershed region and loggers always have the option to purchase their own bridge or rent one if the cost of transportation is too high.

WAC Forestry Program portable plastic arch culvert (right). WAC Forestry Program 50 ft Portable Bridge (below).





BMP Implementation





BEST MANAGEMENT PRACTICE FREE SAMPLE PROGRAM

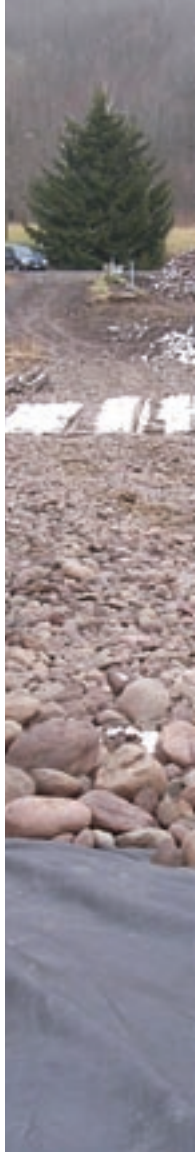
In August 1998 the Best Management Practice (BMP) Free Sample Program was created to provide free samples of geotextile fabric, biodegradable bar and chain oil, and silt fencing to watershed loggers. The intention of this program was to encourage the adoption of new and underutilized Best Management Practices (BMPs) among the logging community within the watershed.

The first free sample was distributed in October 1998 and consisted of 210 feet of geotextile fabric given to Thomas H. Newman & Sons Logging and used to construct a haul road to access a salvage harvest on NYC DEP lands. Since then, dozens of free samples have been distributed through this program. New BMPs have been made available in an effort to test the efficiency and promote their use on logging jobs. Culverts, erosion control mats, straw wattles, and grass seed are a few of the new BMPs that are provided to watershed loggers through the BMP Free Sample Program.

WAC Forestry Program staff members have recently taken a more aggressive role in encouraging participation in the Free Sample Program. Until recently, loggers were required to pick up their free samples from a centralized storage location. Many were reluctant to travel to obtain free samples, so the WAC Forestry Program began delivering samples to logging sites. This approach has proven to be effective in two ways. First, by assuming the responsibility of delivering samples, the WAC Forestry Program shows its commitment to working in partnership with loggers. Second, the interaction with loggers on logging jobs often results in their further participation in other BMP implementation programs.



BMP Implementation





TIMBER HARVEST ROADS PROGRAM

The Timber Harvest Roads Program was created in 1999 to provide financial incentives and technical support to assist loggers in the implementation of BMPs such as access layout, water bars, culvert installation, gravel, and post-harvest stabilization on active logging jobs within the watershed.

In November 1999, David Jaeger, a watershed logger, and Brian Bower, a watershed qualified consulting forester, were the first to participate in the Timber Harvest Roads Program at the City Park Rod & Gun Club in the Town of Jewett, Greene County. Twenty-two water bars, two broad-base dips, 200 feet of geotextile fabric, three 18-inch culverts, and 20 cubic yards of gravel stabilized the 1.2 miles of access trail used to harvest 23,000 board feet of timber on 20 acres during the winter of 2000.

Since its inception, the Timber Harvest Roads Program has worked with dozens of watershed loggers to implement BMPs on more than 90 timber harvests within the watershed. More than 150 miles of access trails have been stabilized with 4,500 water bars, 170 broad-base dips, 2,500 feet of geotextile fabric, 3,600 cubic feet of gravel, 500 bales of hay, 600 feet of corduroy, 800 feet of silt fence, 40 culverts, and 80 acres of post-harvest stabilization.

The Timber Harvest Roads Program serves to focus attention on water quality issues during logging. The technical support and perspective offered by WAC Forestry Program staff builds on the foundation created by logger training and helps to support decision-making on individual logging sites.

FOREST ROADS PROGRAM

The Forest Roads Program was created in 2000 to assist private forest landowners with the remediation of existing erosion problems associated with their forest roads. The first Forest Roads project was completed on the property of Richard, Thomas, and Glen Potter in the Town of Lexington, Greene County. Brian Bower, a watershed qualified consulting forester, and Floyd Dart, a local construction contractor, designed and installed the BMPs. Over 1.7 miles of access trail was stabilized by 60 water bars, eight broad-base dips, 24 cubic yards of gravel, 10 bales of hay, five culverts, and three acres of critical area stabilization.

More than 50 projects have been completed since the program was created. More than 70 miles of access trail have been stabilized with 2,500 water bars, 180 broad-base dips, 2,000 feet of geotextile fabric, 3,500 cubic yards of gravel, 600 bales of hay, 100 culverts, and 20 acres of critical area stabilization.

WAC Forestry Program staff identified an important distinction between the implementation of BMPs through the Timber Harvest Roads Program and the Forest Roads Program in 2004. The cost of implementing BMPs through the Forest Roads Program was more than twice that of the Timber Harvest Roads Program. The reason for this relates to the fixed costs associated with retaining the services of a heavy equipment contractor. When BMPs are implemented in conjunction with active timber harvests, heavy equipment and operators are already on site. This eliminates the need to transport equipment and results in projects being completed at a lower cost.



BMP Implementation



“The Model Forest taught us more about its role in preserving the quality of our water.”

Green Connections Participant
2004



RESEARCH & DEMONSTRATION

The desire to educate the general public regarding the relationships between watershed land uses, forest management, water quality protection, and rural economic viability spawned the need to create venues where stakeholders could meet. The three Model Forests provide a forum where individuals can interact with scientists and resource management professionals to learn more about the scientific foundations and practical applications that protect water quality and promote a working forested landscape within the watershed region.



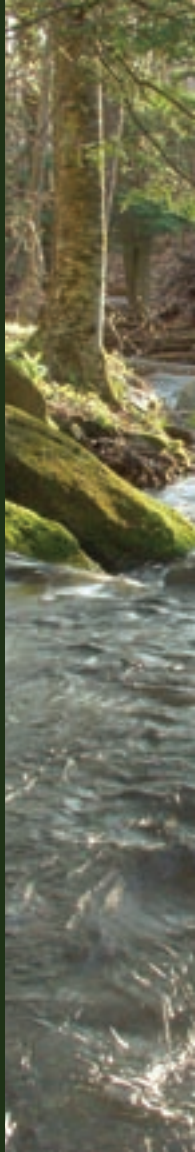
Right: Siuslaw Model Forest opening, May 2007.

MODEL FOREST PROGRAM

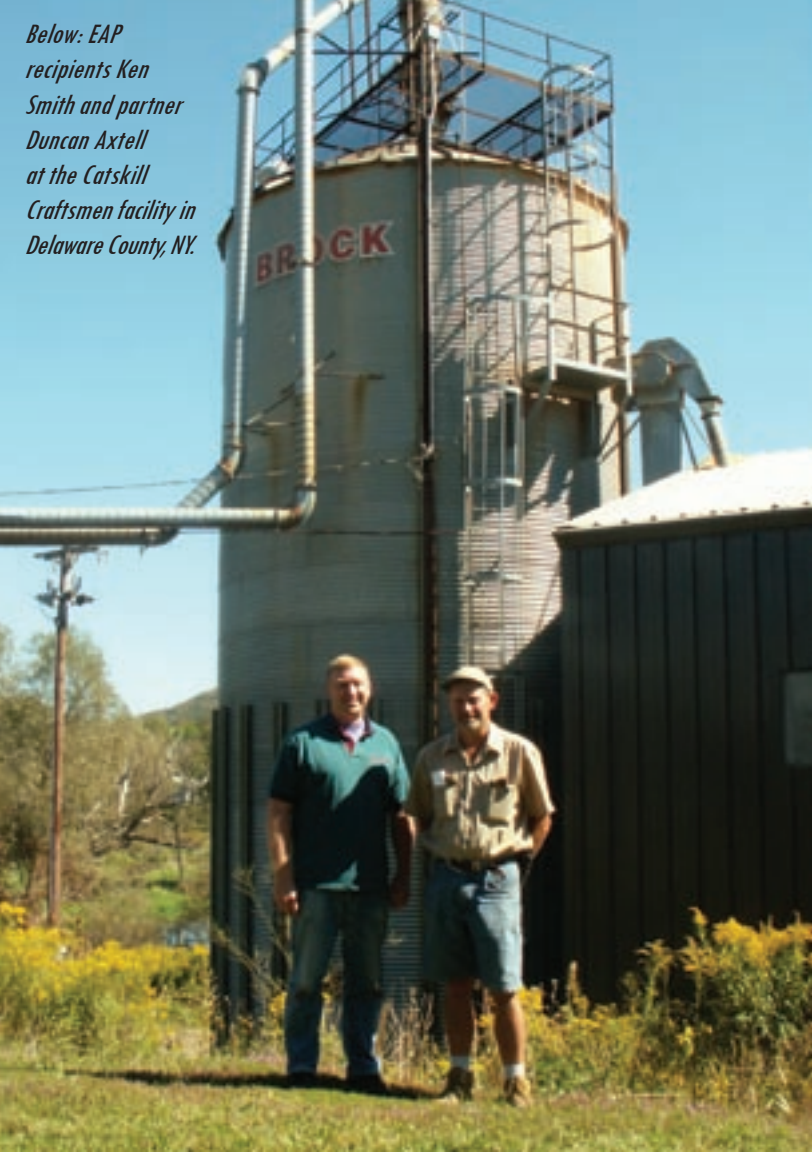
The Model Forest Program was created in 1997. The 85-acre Lennox Model Forest in Delaware County, hosted by Cornell Cooperative Extension of Delaware County, was the first to be established. The Lennox Model Forest was followed in 1998 by the 290-acre Frost Valley Model Forest, hosted by Frost Valley YMCA in Ulster County. The 140-acre Siuslaw Model Forest, hosted by Cornell Cooperative Extension of Greene County, was established in 2006 and is the newest addition to the Model Forest Program. The Model Forests demonstrate effective forest stewardship, sustainable forestry initiatives, and proper BMP implementation to non-industrial private forest landowners, foresters, loggers, and the general public. They represent a unique combination of demonstration sites, education venues, and outdoor laboratories.

Forest management is ongoing at all of the Model Forest locations, providing a living example of working forests for visitors. A network of more than 900 continuous forest inventory plots provides the scientific data that is used to demonstrate silviculture and fuel research. Over the past 10 years, more than a dozen peer-reviewed journal articles have been published as a result of the Model Forest Program. Topics for these articles range from woody biomass and silviculture on non-industrial private forestland to forest parcelization. The lessons learned through this research feed directly into the education and outreach activities hosted by each Model Forest.

Research, outreach, and education in the Model Forests are a collaborative effort among many partners including the State University of New York College of Environmental Science & Forestry (SUNY-ESF), the New York City Department of Environmental Protection (DEP), the USDA Forest Service, the US Geological Survey, the US Army Corps of Engineers, and the WAC Forestry Program. The Model Forests are a venue for landowner workshops, chainsaw safety courses, professional development for consulting foresters, bus tours, and educational forums for teachers and students. The key concepts that form the foundation of the model forest educational experience are water quality, biodiversity, ecosystems, and human interaction with the natural landscape.



Below: EAP recipients Ken Smith and partner Duncan Axtell at the Catskill Craftsmen facility in Delaware County, NY.



FOREST PRODUCTS UTILIZATION & MARKETING

The Green Book identifies the need to foster an improved business climate that provides information, services, and technical assistance to the forest products industry in the watershed. The WAC Forestry Program's efforts target both primary and secondary wood manufacturers from larger plants as well as the many "mom and pop" operations in the region. Technical assistance focuses on keeping local forest-based enterprises competitive in a rapidly changing marketplace while supporting jobs in rural communities. Through continued partnerships with the NYS DEC, Catskill Watershed Corporation, SUNY-ESF, and the USDA Forest Service, WAC Forestry Program staff continue to promote new business development, improved processing, and encourage markets for traditionally underutilized tree species.

ECONOMIC ACTION PROGRAM (EAP)

From 2000 to 2007, the WAC Forestry Program used over \$2.41 million in USDA Forest Service Economic Action Program Grants to make 80 awards to wood-based businesses and not-for-profit groups in the watershed region that use traditionally undervalued or waste wood harvested from local timber stands. The grants helped companies retool, launch marketing campaigns, hire apprentices, and increase efficiency. Award recipients provide a matching dollar for every dollar awarded to them, thereby doubling the federal investment. In total, more than 700 jobs were positively impacted through the Economic Action Program and WAC documented over \$3.2 million in matching funds yielding a total federal and local investment of \$5.6 million during the 7-year program.

The first wood-based business to receive an Economic Action Program Grant was Alta Log Homes in Halcottsville, Delaware County. Alta was able to install a dust collection system and improve engineering capabilities with a blueprint machine, computers, and software. As a result, production increased and the company added two jobs.



Forest Products Utilization & Marketing



Right: EAP recipients Fred Hathaway from Beaver Mountain Log Homes (top) and Richard Johnson from Sculptural Furniture, Inc (bottom) at their facilities located in Delaware County.

CATSKILL WOODNET

Catskill WoodNet — www.catskillwoodnet.org — represents a partnership between the USDA Forest Service's Wood Education Resource Center, the WAC Forestry Program, and the wood products industries in the New York City watershed region. This partnership builds on the successes of the Economic Action Program which helped to create over 20 new websites for local wood products businesses. The mission of Catskill WoodNet is to support wood products businesses in the Catskill region by strengthening business relationships, improving the utilization of local forest resources, and promoting healthy watersheds. The website provides information on dozens of wood businesses — from sawmills to fine craftsmen — for an audience ranging from building contractors to home owners searching for locally-made furniture. Visitors to the website will spend their dollars locally while learning about the important role working forests play in protecting water quality.

"... Grantees got more than just money out of the program. They expanded their businesses and more importantly the way they think about their businesses - something that will help foster growth in the future."

EAP Grantee
2005 Irland Report



Catskill WoodNet

visit us online

Promoting
locally - made
forest

Sawmills &
Woodworker
Listings



products
from
New York's
Catskill
Mountains



Member
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Local
Outlets

www.catskillwoodnet.org

For more information call the Watershed Agricultural
Council at 607.865.7790.



Forest Products Utilization & Marketing



THANK YOU

The WAC Forestry Program owes its success to the various funders and partners that have contributed resources, time and energy pursuing the answers to difficult questions. The original members of the Watershed Forest Ad Hoc Task Force, past and present members of the WAC Forestry Program Committee, consulting foresters, watershed loggers, teachers, students, landowners, farmers, local business owners, scientists, and the various non-profits throughout the Catskill and Croton watershed regions have played a pivotal role in this success. In addition to thanking our funders and partners, we would also like to thank the individuals who have participated in our programs. Without them, this voluntary, collaborative approach to addressing forestry issues on a landscape scale would never succeed.

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PARTNERS & FRIENDS

Agroforestry Resource Center
Catskill Center for Conservation and Development
Catskill Forest Association
Catskill Regional Invasive Species Partnership
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Frost Valley YMCA
Watershed Forest Ad Hoc Task Force Executive Committee
Watershed Forest Ad Hoc Task Force Policy Group
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New York Logger Training Inc.

New York ReLeaf
New York Society of American Foresters
Northern Woodlands
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SUNY College of Environmental Science & Forestry
The Nature Conservancy
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Catskill/Delaware Watershed



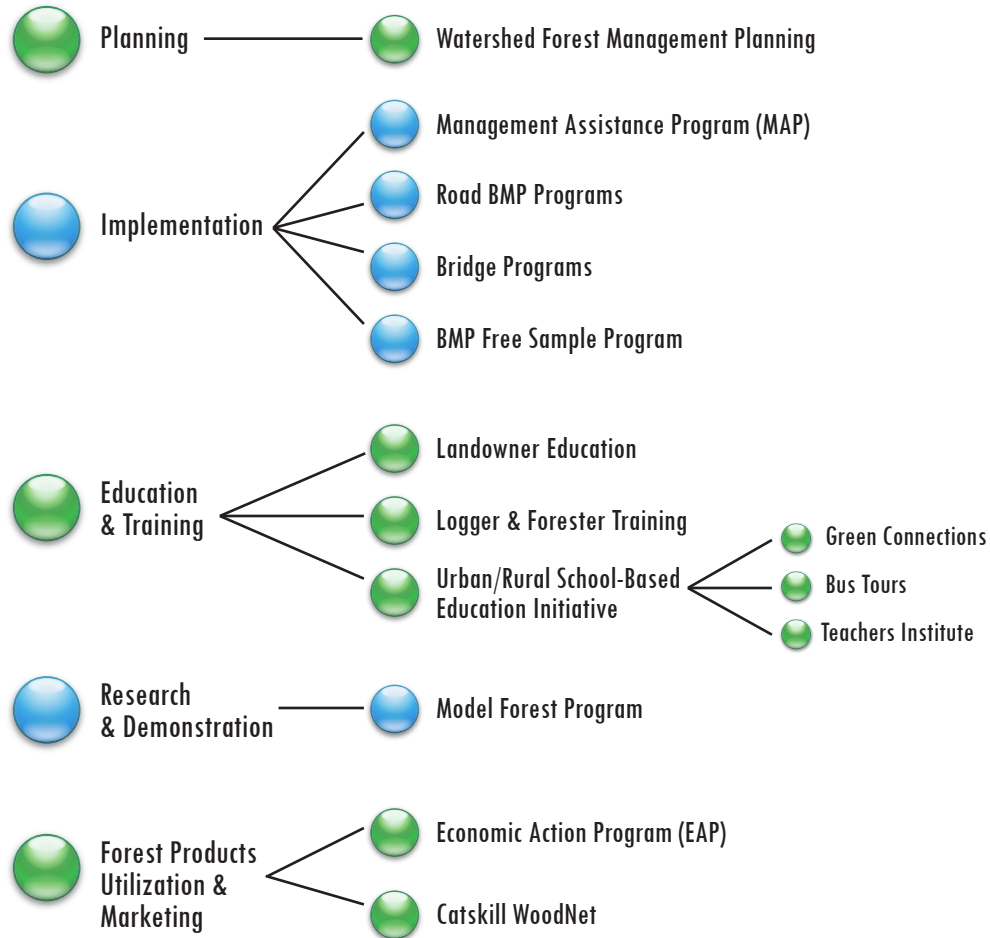
Croton Watershed

New York State





Watershed Agricultural Council's Forestry Program



Watershed Agricultural Council
Watershed Forestry Program
33195 State Highway 10
Walton, NY 13856
607.865.7790
607.865.4932 fax
www.nycwatershed.org



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