

**CONSERVATION INNOVATION GRANT
EXTREME FOREST MAKEOVER
FINAL REPORT
(NRCS GRANT 69-3A75-9-124)**

Submitted by: New River-Highlands RC&D Council

To: Natural Resource Conservation Service

December 2, 2013



Participating forest landowners get some hands on training on how to measure their forest resources. Many such workshops were offered to participants throughout the course of the Extreme Forest Makeover program.

TABLE OF CONTENTS

EXECUTIVE SUMMARY	2
INTRODUCTION	3
THE NEW RIVER-HIGHLANDS RC&D COUNCIL AND PROJECT PARTNERS:	3
PROJECT BUDGET:	4
PROJECT ACTIVITIES	4
PARTICIPANT RECRUITMENT	4
FORESTRY EDUCATIONAL OPPORTUNITIES	4
INDIVIDUAL/GROUP TECHNICAL ASSISTANCE	6
RESULTS	7
THE RESULTS—IN THEIR OWN WORDS	9
CONCLUSION	9

Executive Summary

A significant percentage of privately owned forestland in the Appalachian Hardwood Region of Virginia has a history of mismanagement and/or under-utilization. Diameter limit cutting and other high-grade timber harvests have reduced the short-term productivity of the forest. Few, if any forest producers avail themselves of cost-share programs (such as Environmental Quality Incentives Program--EQIP) to sustainably manage their forest land, and for some forest landowners, the prevalence of shortsighted silviculture has reinforced a mindset that no management is still the best available option for forest management.

In September 2009, the New River-Highlands RC&D Council received a \$111,000 grant from the Natural Resource Conservation Service through the Conservation Innovation Grant Program to coordinate a “coached” forest stewardship planning and implementation project with a group of 20-25 EQIP-eligible forest producers. These EQIP-eligible forest producers experienced sustainable forest management through a series of classroom training and field work, using Virginia’s Matthews State Forest and participants’ own forest land as a field laboratory. Specific forest management projects have been implemented using a combination of project funds, available cost-share funds, in-kind contributions, and participants’ funds.

The impacts of this project have been positive. Participants developed a forestry network in the region and have, in many cases, served as mentors to other forest landowners in the region. Sustainable forest management demonstration projects implemented on participants’ land and on nearby public land will continue to demonstrate the positive economic impact of sustainable forest management, and the benefit of participating in forestry cost-share programs.

Introduction

A significant percentage of privately owned forestland in the Appalachian Hardwood Region of Virginia has a history of mismanagement and/or under-utilization. Diameter limit cutting and other high-grade timber harvests have reduced the short-term productivity of the forest. Furthermore, for some forest landowners, the prevalence of shortsighted silviculture has reinforced a mindset that no management is still the best available option for forest management.

Despite valiant efforts by natural resource management agencies to promote sustainable forest management via management planning advice and numerous landowner workshops, few Forest Stewardship Plans (FSPs) are implemented fully (if at all), and participation in hardwood forest management cost-share programs (such as EQIP) is limited. In the region surrounding the project area, few EQIP eligible forest producers avail themselves of cost-share programs to sustainably manage their forest land. In the two counties that comprise the project area, fewer than 5 EQIP eligible forest producers per year have signed up for forest stand improvement practices between 2002 and 2009, according to Natural Resource Conservation Service staff and Virginia Department of Forestry Staff.

In September 2009, the New River-Highlands RC&D Council received a \$111,000 grant from the Natural Resource Conservation Service Conservation Innovation Grant Program to coordinate a “coached” forest stewardship planning and implementation project with a group of 20-25 EQIP-eligible forest producers. This report describes outreach and education efforts conducted by the New River-Highlands RC&D Council, including the curriculum of forestry courses and workshops offered to participating forest landowners over a 4 year period, and direct technical assistance provided via on-site visits and forest stewardship demonstration projects.

The New River-Highlands RC&D Council and Project Partners:

The New River-Highlands RC&D Council is a non-profit 501 c4 organization that promotes the management of natural resources within their capability for the enhancement of the quality of life and environment in the New River-Highlands Resource Conservation and Development Area. The New River-Highlands RC&D Area, which lies in southwest Virginia, includes 11 counties, 1 independent city, and 6 Soil and Water Conservation Districts. The RC&D Area is served by 3 Planning District Commissions.

The New River-Highlands RC&D Council has a history of working to sustainably manage the region’s forest resources. Some of the projects include forest stewardship demonstrations, publications, and the development of a forestry committee.

To complete this project, the New River-Highlands RC&D Council relied on its partners, including the New River Soil and Water Conservation District, the Virginia Department of Forestry, Virginia Cooperative Extension, the Virginia Department of Game and Inland Fisheries, the American Tree Farm Program, local consulting foresters, and other forestry related organizations.

Project Budget:

The Natural Resource Conservation Service-Conservation Innovation Grant Program provided a \$111,000 grant to the New River-Highlands RC&D Council to fund project activities including personnel expenses, equipment, travel, supplies, and contractual expenses. The New River-Highlands RC&D Council provided an 58.4 % match of in-kind services including personnel, forest landowner participation, equipment, supplies, and contractual services. The value of these matching contributions is \$155,540.50.



November 19, 2009 Galax, Virginia: New River-Highlands RC&D Council Treasurer Bob Martin, Virginia State Conservationist “Jack” Bricker, and Virginia State Forester Carl Garrison help announce the Extreme Forest Makeover project.

Project Activities

Participant Recruitment

New River-Highlands RC&D Council staff and project partners recruited forest landowners to participate in this three year program. Participants were required to have a minimum of 10 acres of land (similar to Forest Stewardship Plan requirements) and demonstrate an interest in sustainable forest management. Participants were recruited through a variety of media, including television, newspaper, direct personal contact, mailings, the internet, and outreach materials distributed through local natural resource organizations. Participants provided basic information about their forest, their forest management goals and objectives. Approximately 40 forest landowners agreed to participate in the Extreme Forest Makeover Program.

Forestry Educational Opportunities

New River-Highlands RC&D Council staff and project partners provided participating forest landowners with a series of forestry and natural resource educational opportunities. While the participating forest landowners were the primary audience at these forestry programs and workshops, all of these events were public and often were advertised in the local newspapers. These forestry programs and workshops were developed using input from the participants. Within months, these forestry programs became something of a social gathering, and the participants became very engaged in the subjects being offered, frequently generating lively discussions.



February 23, 2010: Galax, Virginia: Project forester Donnie Garman discusses the importance of a multiple-resource management plan with EQIP-eligible forest producers in the New River Valley as part of the extreme forest makeover

Throughout the project the following forestry programs and workshops were offered:

- Natural history of Virginia
- Basic forest ecology
- Fire history in the Southern Appalachians
- Basic tree identification
- Advanced tree identification
- Eastern white pine silviculture
- Hardwood silviculture
- Small scale forest harvesting equipment demo (2)
- Forest harvesting
- Cost share programs for forest landowners
- Forest site quality
- American Tree Farm Program
- Basic forest measurements
- Integrated pest management
- Building and maintaining forest roads
- Building and maintaining water crossings
- Timber tax
- Harvesting timber with horses
- Timber stand improvement
- Preparing for your next timber sale
- Estate planning for forest landowners



August 31, 2010: Galax, Virginia: Project forester Zach Olinger discusses silvicultural considerations in the context of managing a 45+ year old stand of planted Eastern White Pine.

Individual/Group Technical Assistance

New River-Highlands RC&D Council staff and project partners also provided individual and group technical assistance to participants. Each project participant was “assigned” to a project forester who tracked their progress and maintained contact with the participant. Project foresters worked with each participant to develop a current forest stewardship plan (over half of the participants did not initially have a current forest stewardship plan). In addition project foresters helped the participants develop an implementation list of forest management activities as part of this extreme forest makeover project.

Once the participants identified forest management activities, New River-Highlands RC&D Council staff and project partners assisted with the implementation of these activities. Sometimes the technical assistance was very basic in nature, providing contact information for contractors, or directing the participant to the appropriate informational resource. In other cases, the project partners assisted with the physical implementation of the identified forest management activities. It was this part of the project, where tangible results emerged on the ground, that provided the origin for the name of the project.



Fries, Virginia: Before and after photos of the Kendy Sawyer / Robert Hines timber stand improvement demonstration project

Throughout the project, nearly all of the participants participated in the program at some level. A core group developed at least one forest stewardship demonstration on their land. These forest stewardship demonstrations, listed below, will help to educate future forest landowners in the region:

- Timber stand improvement in young stands (2)
- Timber stand improvement in mid-rotation stands (4)
- Road improvement (1)
- Temporary timber bridges (1)
- Fords and water crossings (1)
- Deer exclusion to regenerate native vegetation (2)
- Salvaging storm damaged timber (1)
- Low impact timber harvesting (2)

- Tree planting (2)
- Reclaiming marginal pasture land for forest (1)
- Controlled burning for wildlife habitat/species composition improvement (2)
- Invasive species control (2)

Results

New River-Highlands RC&D Council staff and project partners learned that these forest makeover participants are eager to collaborate. Participants shared, and continue to share, their experiences with other participants and other forest landowners. Favorite topics for discussion include control of invasive species, identification of wood destroying insects / fungi, fencing, harvesting of timber, habitat improvement for non-game and/or diminishing wildlife species, and timber stand improvement. RC&D Council staff and project partners had been hopeful that such peer to peer learning would occur; this peer to peer learning has also enabled the project partners to learn from the participants.



Galax, Virginia: Forest makeover participants share information and ideas about tree growth patterns and hardwood lumber properties.



Fries, Virginia: Road improvements to improve water quality—a participant's applied knowledge from classroom and field programming.



Hillsville, Virginia: Geo-web™ cellular confinement system to be used as a minimalist approach to hardening a portable timber bridge abutment.



Hillsville, Virginia: Portable timber bridge installation nearing completion.

To date the project results have been very positive. After more than 4 years, a core group of participating forest landowners remains engaged in the project and a number of timely and innovative forest management activities have been implemented. To the satisfaction of the staff and project partners, many of these forest management activities have been **fully funded by participants**, further leveraging the grant funds beyond what was originally proposed. These activities will serve as working demonstrations and will be made available for other forest landowners in the region.

Despite this positive level of participation, over time, the core group of participants self-selected into two different groups. Approximately 10 participants (10 forest parcels) were self-directed and took initiative to implement forest stewardship projects on their own (with project partners providing technical assistance as needed). These are participants who have successfully transitioned from passive forest managers (at the start of the program) to active forest managers. It is likely that they will continue with the active management of their forest parcels even beyond the official end of the project.

Approximately 20 participants (20 forest parcels) have remained in the passive forest management category. These participants remain interested in forest management generally but have not made the transition from passive to active management. One possible reason for this diminished participation is that many forest landowners may not have (or be aware of) the significant quantity of time and other resources that goes into active forest management.

Although a percentage of the forest landowner population may always fall in this category, staff and project partners might have spent more time identifying specific actions needed for individual parcels (i.e. initial programming on forest management was presented on too conceptual a level to motivate a transition from passive to active management). Similarly, project partners might need to temper forest landowners' expectations. For example, invasive species management is a growing challenge in the region, and disappointing initial results may have frustrated some participants and discouraged further participation. Project partners will continue to look for information that could provide insights into why some of the forest landowners made the transition to active management and others did not.

The Results—In Their Own Words

At the close of the project, New River-Highlands RC&D Council staff and project partners worked with participants to develop a brief video clip that shares the results of the Extreme Forest Makeover Program. This clip can be downloaded at:

<http://www.youtube.com/watch?v=dKtigg-GQYU&feature=youtu.be>.

Conclusion

The impacts of this project have been positive. Participants developed a forestry network in the region and have, in many cases, served as mentors to other forest landowners in the region. Sustainable forest management demonstration projects implemented on participants' land and on nearby public land will continue to demonstrate the positive economic impact of sustainable forest management, and the benefit of participating in forestry cost-share programs.