

Joint Chiefs' Landscape Restoration Partnership Project FY 2015 Progress Report



WEST VIRGINIA	West Virginia Restoration Venture (WVRV)
Natural Resources Conservation Service	United States Forest Service
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Project Description:

The United States Department of Agriculture's Forest Service (FS) and Natural Resources Conservation Service (NRCS) have been working together for decades on collecting scientific data and developing assessment tools in West Virginia. This strong relationship and ability to share resources has been a springboard for implementing high priority restoration in the Greenbrier, Cheat, Potomac and adjacent watersheds. Traditionally, NRCS has implemented programs that are focused at the farm scale, working one-on-one with landowners to promote conservation and implement Farm Bill initiatives. The Forest Service has worked within individual watersheds to implement conservation practices on public land in the Monongahela National Forest (MNF). By working together, NRCS and FS are developing a strategy to identify projects in high-priority restoration landscapes that will result in measurable improvements to local water quality and wildlife habitat across a much broader landscape in years to come. Such projects use joint science products, incorporate NRCS program criteria, and engage a wide range of partners who can help align and multiply agency resources to maximize on-the-ground results.

The West Virginia Restoration Venture has accelerated ecosystem improvement through strengthened interagency planning and project implementation. NRCS and the FS are working with Trout Unlimited (TU), The Nature Conservancy (TNC), Canaan Valley Institute (CVI), the West Virginia Division of Forestry (DOF), and other organizations to expand their efforts to restore ecosystems. The partners are pursuing restoration activities that address habitat connectivity, soil health, climate resiliency, carbon sequestration, water quality, at-risk species habitat, early successional habitat, wetlands, aquatic habitat, and watersheds.

The project has just completed year two of a three year period of funding. This report documents the progress and success of this partnership. The highlights of year two include: 1) the agencies have moved forward in developing a better understanding internally of how each agency operates: the culture, the communication style, and what success looks like for each agency. FS District Rangers are now working directly with NRCS District Conservationists and talking not only about the project under this initiative, but other issues and concerns that are occurring within their area of oversight; 2) the non-federal partners have also moved forward and have started to bridge the gap and learn how to connect both with NRCS and USFS. They are able to identify opportunities to build a greater spatial connectivity in conservation management, and to also understand how to work with private landowners and bring them to the table to receive technical and/or financial assistance from NRCS; 3) partnerships are expanding staffing capacity to respond to the influx of funding and to stage themselves for future opportunities for projects and funding. Partners have been able to leverage Joint Chiefs' funds with their own funds and in-kind services; furthermore, they have been

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instrumental in assisting agencies with implementation of FY15 projects. Outreach continues to occur as new communities and individuals are being reached, setting the stage for implementing new projects in FY16.

Partners:

Please highlight partners and stakeholders that are involved in this project (i.e. NRCS field offices, FS units, schools or community organizations). Describe contributions (FTEs, funding, materials, etc.) from other partners.

Organizations participating in the partnership	
American Bird Conservancy	USDA Forest Service, Monongahela National Forest (MNF)
American Chestnut Foundation (TACF)	
American Forests (AF)	USDA Forest Service, Eastern Region (R9)
Appalachian Forest Heritage Area (AFHA)	USDA Forest Service, State & Private Forestry (SPF)
Appalachian Mountain Joint Venture (AMJV)	U.S. Fish and Wildlife Service (USFWS)
Appalachian Regional Reforestation Initiative (ARRI)	USFWS Canaan Valley National Wildlife Refuge (CVNWR)
Canaan Valley Institute (CVI)	USDA Natural Resources Conservation Service (NRCS)
Central Appalachian Red Spruce Initiative (CASRI)	USDA NRCS, Appalachian Plant Material Center
Davis and Elkins College	West Virginia Department of Agriculture (WVDA)
Environmental Protection Agency (EPA)	West Virginia Department of Environmental Protection (WVDEP)
Green Forests Work (GFW)	West Virginia Division of Highways (WVDOH)
National Wild Turkey Federation (NWTFF)	West Virginia Division of Forestry
Potomac Highlands Cooperative Weed & Pest Management Area (PHCWPM)	West Virginia Division of Natural Resources (WVDNR)
Ruffed Grouse Society	
The Nature Conservancy (TNC)	West Virginia Native Plant Society (WVNPS)
Trout Unlimited (TU)	West Virginia University

** Direct funding, significant in-kind support through staff and resources; remaining organizations provide in-kind staff time, focused expertise and resources (resources include database creation and support, meeting supplies and logistics, GIS expertise)*

Central Appalachians Spruce Restoration Initiative (CASRI)

- The Nature Conservancy (TNC)
- U.S. Fish and Wildlife Service (USFWS)
- USFWS's Canaan Valley National Wildlife Refuge (CVNWR)
- USDA Forest Service, Monongahela National Forest (MNF) and Northern Research Station (NRS)
- West Virginia Division of Forestry (WVDOF)
- West Virginia Division of Natural Resources (WVDNR)
- West Virginia University (WVU)

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- Appalachian Regional Reforestation Initiative (ARRI)
- West Virginia Highlands Conservancy
- Green Forests Work (GFI)

CWPMMA

- The Nature Conservancy (TNC)
- U.S. Fish and Wildlife Service (USFWS)
- West Virginia Department of Agriculture (WVDA)
- West Virginia Division of Forestry (WVDOP)
- West Virginia Division of Natural Resources (WVDNR)
- West Virginia Department of Highways (WVDOH)
- West Virginia Native Plant Society (WVNPS)
- Appalachian Forest Heritage Area (AFHA)
- Natural Resource Conservation Service (NRCS)
- USDA Forest Service, Monongahela National Forest (MNF)
- USDA Forest Service, George Washington National Forest (GWNF)

Concisely describe how this project enabled you to achieve higher quality or more effective outcomes than could have been accomplished by a single agency.

By working together with multiple agencies and organizations, the Monongahela National Forest and NRCS have been able to work across federal, state, and private boundaries to accomplish work in priority watersheds. The following projects would not have been possible without the framework of WVRV:

1. Combining grazing management with creation of early successional habitat to benefit early successional species like grouse, turkey, and the golden-winged warbler, a Regional Forester Sensitive Species. With the support of multiple partners, the West Virginia Division of Forestry (WVDOP), Monongahela National Forest, and WVDNR are planning to expand efforts to create early successional habitat on both the Kumbrabow State Forest and the Monongahela National Forest.
2. Continuing the efforts of the Ecological Restoration Team (ERT) to conduct high-quality, on the ground restoration projects on the Monongahela National Forest and within the service area of the PHCWPMMA. Primary focus areas include spruce ecosystem restoration and non-native invasive species control. Primary project partners consist of CASRI and PHCWPMMA, both of which are made up of multiple agencies and organizations. Collaboration among many agencies has enabled the Ecological Restoration Team to be much more effective and efficient at a landscape scale than would otherwise be possible. Site selection and restoration methods have been based on data, analysis, and expertise from multiple sources including WVU, NRCS, USFS, WVDNR, and WVDOP. Partnerships with state and private entities give the team access to a much more contiguous landscape than would otherwise be accessible, enabling restoration that is ecologically-based rather than constrained by ownership boundaries.

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3. Completing range allotment pasture improvement projects; NRCS has been able to partner with Monongahela National Forest to a) evaluate springs and design livestock watering systems to replace streams being excluded by riparian fencing; and b) establish and oversee ongoing water development and exclusion fencing contracts within the Monongahela National Forest grazing allotments. Range Permittees (private individuals) have agreed to complete EQIP projects on Forest lands, and are taking on NRCS water site improvement activities for Fee Credit Agreements to improve riparian health and water access for livestock. The increased financial support and knowledge provided by both the NRCS and Trout Unlimited made it possible to protect sensitive areas on the Forest. By working together, NRCS, the Forest Service, and Trout Unlimited were able to identify areas where riparian protection would provide the greatest benefit to the waters on the Monongahela National Forest and were able to use the soundest available practices to protect them.
4. Organizing a workshop focused on management of forests and farmlands for high priority bird species. The cooperation of participating agencies was critical to a) providing a successful presentation on birds and bird habitat, and agricultural and forestry management techniques that create bird habitat, b) providing showcase field sites to visit, and c) ensuring that the attendees would include those best able to integrate private landowners and public land managers to encourage use of presented management techniques and programs on a landscape level (crossing public/private boundaries).
5. Combining mined land reforestation with native plant propagation, early successional habitat creation, and spruce ecological restoration has allowed the Forest Service, WVDNR, ARRI, and GFW to achieve various habitat improvements and restoration actions on 226 acres of legacy mined land areas on the Monongahela National Forest. The WV DOF also worked with ARRI & GFW on a similar project on the Summit Bechtel Scout Reservation, to restore 50 acres of legacy mineland. This project also included an observation deck and interpretive sign for conservation education outreach.

Funds Obligated To Date:		
	FY 2015	FY 2014
EQIP Financial & Technical Assistance	\$2,181,405	\$1,783,777
FS - National Forest System	\$1,258,773	\$850,000
FS- Hazardous Fuels	NA	
FS- State and Private Forestry	\$250,000	\$250,000
Other (partner investments)	\$499,386	\$391,913
TOTAL	\$4,189,564	\$3,275,690

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For EQIP TA, assume TA at the “current year” rate (FY 15 = 6.9% of FA; FY 14 = 8.85%) unless additional funding was invested through partner agreements, etc.

Conservation Highlight:

Concisely describe in one to three sentences a unique or significant conservation highlight resulting from activities of the partnership in FY15.

- Red spruce restoration efforts continue with the ERT, contractors, and volunteers: understory red spruce seedlings were released on 497 acres across six units; spruce monitoring was conducted on 437 acres across seven units; and 64,414 red spruce seedlings on two units.
- Non-native invasive species were controlled on 1,647 acres of public lands with the ERT. An additional 430 acres of private lands were released by a combination of ERT and PHCWPMMA field crews. Total gross acreage of NNIS species treated in 2015 is 2,077 acres. The ERT treated garlic mustard, brown knapweed, spotted knapweed, viper’s bugloss, musk thistle, Japanese knotweed, tree of heaven, and mile-a-minute. Eight prior year NNIS treatment sites, covering 500 acres, were monitored; an average treatment success rate of 80% was documented.
- Improvements to grazing allotments create early successional habitat and ensure continued grazing into the foreseeable future.
- Early successional habitat was created on over 309 acres by working with WVDNR, RGS, and NWTF.
- Fencing has been constructed around sensitive riparian areas in high mountain pastures. By eliminating livestock access to these areas, we have decreased erosion and sedimentation, and encouraged natural revegetation of streambanks on the headwaters of many streams within the Greenbrier District’s grazing allotments. This decreased disturbance and increased vegetation leads to cooler stream temperatures and better water quality throughout the rivers of the Monongahela National Forest. Partnerships between Trout Unlimited, NRCS, and the MNF increased our capabilities.
- The bird habitat workshop for forest and land managers was attended by over 60 land managers from four states and a variety of state and federal agencies and NGOs. Workshop participants included agency personnel and consultants that work regularly with private land owners and can share the knowledge gained at this workshop with them; engaging private landowners, as well as public land managers. Bird-friendly land management is critical to provide a suitable landscape for declining bird species across the region. This workshop also provided a template that the Forest Service plans to use, with location-specific modifications and partners, for additional management workshops across the Region as additional funding becomes available.

Project Accomplishments:

Federal Lands

Activity/Treatment	FY 2015		FY 2014	
	Target	Actual	Target	Actual
Upper Greenbrier Watershed Improvement – Road Decommissioning	12 miles	14 miles	12 miles	12.7 miles; 7.3 miles stream enhancement

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Activity/Treatment	FY 2015		FY 2014	
	Target	Actual	Target	Actual
Upper Greenbrier Watershed Improvement – Large Woody Material	15 stream miles	15 stream miles		1,476 feet of streambank and shoreline protection from Natural Stream Design work
Upper Greenbrier Watershed Improvement – Aquatic Passage	Implement 4 AOP sites to connect 3 stream miles of aquatic habitat	4 AOP sites designed, 2 AOP sites corrected, connected 23 stream miles		1 AOP barrier eliminated, 22 miles of stream restored
Lambert Restoration Project				
Mined land reforestation/restoration (forest vegetation established and terrestrial habitat enhanced)	150 acres	150 acres		105 acres
Mined land restoration site prep (soil and water improvement)	80 acres	76 acres		
Wetlands created on restored mine land (terrestrial habitat enhanced; soil and water improved)	70 wetlands created	130 wetlands created		75 wetlands created
Early Successional Habitat project				
Early successional habitat enhanced or restored (forest vegetation improvement)	350 acres	309 acres		
Early successional habitat enhanced or restored (terrestrial habitat enhanced)	350 acres	352 acres		
Ecological Restoration Team (ERT)				
Understory spruce release (terrestrial habitat enhanced and forest vegetation improved)	1500 acres	497 acres	1500 acres	500 acres

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Activity/Treatment	FY 2015		FY 2014	
	Target	Actual	Target	Actual
Spruce planting (terrestrial habitat enhanced and forest vegetation established)	100 acres	193 acres +9600 trees at High Mtn	100 acres	200 acres + 170 acres on private land
NNIS treatment	1500 acres	1647 acres + 430 acres private	1500 acres	755 acres
NRCS Ecological Site Description and Soil Survey Updates in High Elevation Red Spruce Ecosystem	18,750 acres	132,730 acres	20,000 acres	
USFS Watershed Restoration/Rehabilitation Trail Crew		4 miles of trail improved		
USFS Range Allotment Pasture Improvements				
Riparian Fence Constructed	3.35 miles	3.98 miles		4.49 miles
Riparian Area Protected		348 acres	150 acres	167 acres
Spring Development	0	4	0	2
Watering Facility	0	7	0	2

Please include treatments/activities accomplished and units. Add rows if necessary. Examples: Fuel reduction treatments completed on 9,326 acres; 2 miles of stream corridors improved, 2.5 miles of road decommissioned and restored, and 520 acres treated to improve soil and water resources; 533 acres of habitat restored and 35,690 acres treated for invasive species.

State or Tribal Lands

Activity/Treatment	FY 2015		FY 2014	
	Target	Actual	Target	Actual
Calvin Price State Forest Invasive Species Treatments	2.7 acres	2.7 acres		
Greenbrier State Forest Invasive Species Treatments	15 acres	15 acres		
Greenbrier State Forest	17 acres	17 acres		

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Golden-winged warbler habitat creation				
Seneca State Forest Invasive Species Treatment	42 acres	42.8 acres		
Kumbrabow State Forest Red Spruce restoration work Morgan Camp Project	40 acres	40 acres		
Kumbrabow State Forest Wildlife habitat creation	10 acres	10 acres		

Please include treatments accomplished and units. Add rows if necessary.

Private Lands

	FY 2015			FY 2014		
	# of Contracts or Plans	Total Acres		# of Contracts or Plans	Total Acres	
		Target	Actual		Target	Actual
EQIP Contracts Obligated	77		5909.3	86		9825.1
New Conservation Plans or Forest Management Plans						
WV Division of Forestry Projects for Private Landowner Assistant (749 requests; 146 reconnaissance efforts for plans)	13		92			

EQIP Practices Implemented FY 2015	Units	Total Amount
Access Control	Acres	9
Access Road	Feet	892
Brush Management	Acres	2
Critical Area Planting	Acres	4
Fence	Feet	24,269

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EQIP Practices Implemented FY 2015	Units	Total Amount
Forage and Biomass Planting	Acres	244
Heavy Use Area Protection	Acres	4
Lined Waterway or Outlet	Feet	50
Livestock Pipeline	Feet	23,665
Pond	Number	2
Pumping Plant	Number	3
Roof Runoff Structure	Number	1
Spring Development	Number	1
Stream Crossing	Number	6
Structure for Water Control	Number	5
Tree/Shrub Establishment	Acres	1
Underground Outlet	Feet	120
Water Well	Number	2
Watering Facility	Number	34
Well Decommissioning	Number	1

Outcomes Achieved and Benefits Realized:

Describe the realized benefit resulting from this project, focusing on the outcome of the activities/actions/treatments described in the tables above. This should include positive impacts and changes to ecological, social, and economic indicators. For example, impacts on T&E species or concerned wildlife, long term ecosystem benefits expected, ecosystem services/financial savings due to natural resources enhancement (i.e. fire protection, water quality, and recreational value).

- Funding has further advanced and accelerated projects that are linked together for landscape scale restoration activities in the headwaters of the four priority watersheds. This second year of funding has greatly increased the capacity of both agencies to focus on the headwaters of the four priority watersheds, and in particular for the implementation of the projects in Upper Greenbrier River and the planning of projects for the Big Run watershed, which is an important tributary to the South Fork of the South Branch of the Potomac watershed.
- Projects have created early successional habitat and improved grazing conditions; Forest Service investment in the allotments has allowed permittees and the NRCS to do additional improvements on the grazing allotments. This investment by the agencies and the permittees' not only improves grazing conditions and early successional habitat, but it enables grazing to continue into the future. This continued

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grazing will provide the disturbance needed to perpetuate wildlife habitat on the allotments, including the ruffed grouse and the golden-winged warbler.

- WVRV funding allowed the collaborative effort that has been occurring on the Mower Tract high elevation landscape to continue. Mined land reforestation has been combined with native plant propagation, early successional habitat creation and spruce ecological restoration. This work has built upon the sound reforestation approaches developed by ARRI; we are not only reforesting mined land areas, but taking actions to initiate ecological restoration. This high elevation site was historically a red spruce-northern hardwood ecosystem prior to mining activities. The red spruce ecosystem of the Central Appalachians is characterized by exceptionally high biodiversity and is a priority for conservation and restoration. Watershed health is an important component of this project. In 2015, approximately 130 wetlands were created across a 116 acre area. In addition to providing wildlife and amphibian habitat, the wetlands were created in areas most likely to help restore natural surface and subsurface drainage and improve water quality and reduce sedimentation into streams. Approximately 150 acres were planted with native plants, with an emphasis on not only red spruce, but other species that are favorable for early successional habitat and pollinator habitat. Approximately 65 acres were site prepped through the knocking down and scattering of nonnative conifer trees and deep ripping to loosen compacted soils left as a result of past mine reclamation efforts. Restoration efforts are expected to not only create early successional habitat in the short term, but to achieve ecological restoration and improve watershed health in the long term. Ecosystem services that are improved for the future include regulating services like carbon sequestration, erosion control, and pollination; cultural services like hunting, recreation, ecotourism, and educational and spiritual values; and supporting services like nutrient cycling, soil formation, and primary productivity. Accomplishments also included the installation of an interpretive kiosk to explain our restoration efforts, with a focus on the importance of ecological restoration.
- WVRV expands the conservation network and facilitates the exchange of concepts/strategies/techniques for more effective watershed restoration. NRCS is working with Trout Unlimited to expand the use of natural materials and large wood to create habitat for target native brook trout populations. Canaan Valley Institute and Trout Unlimited continue to implement projects successfully on the Monongahela National Forest.
- In 2015, four miles of Forest Service trail received tread, drainage, and erosion control maintenance. The crews used a variety of techniques, equipment, and materials to improve the trails and reduce erosion. Dozens of standard drainage structures (50-100) were put into place throughout the region. At Seneca Rocks, erosion control matting was utilized to reduce the amount of erosion being caused by user damage adjacent to the Seneca Rocks Trail. At the Big Bend Loop Trail, older rock work was protected by using a permeable paving system to arrest erosion. This was the first year the watershed restoration/rehabilitation trail crew was implemented. Along with crew work, supplies such as a permeable paving system, motorized wheelbarrows, and erosion control matting were purchased with the WVRV funding.

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- Adrienne Nottingham, USFS MNF Pathways Soil Scientist and Graduate Student at WVU is investigating the effects measured soil moisture and soil temperature values will have on the results produced by the model MaxEnt, which is used to predict current and future red spruce extent within the Monongahela National Forest. The results of the Soil Climate Study project should help USFS MNF, the NRCS, and non-government organizations (NGOs) understand the relationships between soil climate and red spruce. This will help target areas for red spruce restoration. This output could also help land managers decide where to invest in climate change mitigation through carbon sequestration.
- Range pasture improvement projects have 1) reduced the impacts of grazing animals on headwaters located within grazing allotments on the Monongahela National Forest; 2) created reliable water sources within the grazing allotments, outside of sensitive riparian areas; 3) created employment for multiple small business contractors in the area; 4) improved water quality throughout the Forest by decreasing erosion and sedimentation in upper reaches of high tier streams; 5) improved native brook trout habitat by decreasing stream temperatures with increased vegetative cover in protected areas; 6) replaced dilapidated exterior fencing on allotments by moving range pasture boundaries within the allotments to protect riparian sections. This will save long term maintenance costs on perimeter fencing.
- NRCS continues to collaborate with the Trout Unlimited, the Nature Conservancy and other partners to implement stream restoration conservation practices, as well as additional best management practices on private lands. The main focus of the projects are water quality, which has an impact on the community and fish habitat for all residents along the lower Potomac. There are now miles excluded from livestock, which reduces the amounts of manure and sediment going in producing cleaner water downstream and rebuilds a lost fish habitat. By offering alternatives for livestock watering sources and installing stabilized structures for crossing the stream to adjacent pastures, landowners are willing to fence the stream and allow regeneration of the riparian areas. This will decrease sedimentation, coliforms, and nutrient loading, which will provide a more suitable habitat for trout and other aquatic wildlife. In the future, NRCS is concentrating work in a Focused Conservation Approach to tackle significant natural resource concerns and target specific goals with landowners and local, state, and federal partners.

Community Benefits:

Briefly describe benefits to the community or counties achieved through this partnership, as applicable.

1. *Employment opportunities created:*

Partners continue to expand capacity and add to their workforce. There was a high percentage of retention from FY14. Some of the temporary positions were converted to permanent positions. Nine interns were added to Trout Unlimited's local workforce.

Range Allotment Pasture Improvement projects:

- Contractors were hired, through a Forest Service Blanket Purchase agreement, to construct fencing around sensitive riparian areas in high mountain pastures. By eliminating livestock access to these areas, we have decreased erosion and sedimentation, and encouraged natural

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revegetation of streambanks on the headwaters of many streams within the Greenbrier District's grazing allotments. This decreased disturbance and increased vegetation leads to cooler stream temperatures and better water quality throughout the rivers of the Monongahela National Forest.

- Trout Unlimited partnered with the Forest Service to construct Riparian Fencing around sensitive riparian areas in Forest pastures. By utilizing this existing partnership, the Forest was able to maximize the amount of work performed on the ground using available funds. Mutual goals of the Forest, Trout Unlimited, and the NRCS were achieved, in multiple areas, through the use of this agreement (see *Riparian Fence and Water Development* briefing paper).

Ecosystem Restoration Team (ERT) project: The ERT coordinator and field crew members have been hired and are implementing projects. TNC has hired a field crew leader and is now on the second round of four AFHA AmeriCorps members, plus an additional six month term crew member through Civilian Conservation Corps (CCC) WV. Crew members are all trained in safe herbicide handling and application, restoration methods, non-native invasive species identification and treatment methods, tool use and maintenance, first aid/CPR, defensive driving, and GPS use. A second crew leader for the PHCWPMMA was not hired and all AFHA AmeriCorps members have been combined to work under the direction of the ERT crew leader (see *Stream Restoration Crew*).

Watershed Rehabilitation Trail Crew project: Four new seasonal recreation crew members were hired to complete Trail Erosion and Rehabilitation projects (see *Watershed Rehabilitation Trail Crew*).

Road Decommissioning and Lambert Contractors: The WVRV supported road decommissioning and landscape-scale restoration including creation of vernal pools and deep ripping by local heavy equipment operators (see *Lambert Ecological Restoration* and *Road Decommissioning*).

Pendleton County contracts: Collectively, the NRCS contracts created employment opportunities for local, private contractors with vast knowledge and understanding of the area and watershed. The NRCS success story shows the commitment of Mr. Phares working with NRCS to make positive changes to his own land and others around him. NRCS has invested more than \$2 million in financial assistance to fund practice installation with the majority spent on contracted work, materials and other support services in Pendleton County (see *Native Brook Trout Restoration*).

2. Educational opportunities provided

The Forest Workshop for Birds and Habitat Creation was attended by over 60 land managers from four states and a variety of state and federal agencies and NGOs. Workshop participants included agency personnel and consultants that work regularly with private land owners and can share the knowledge gained at this workshop with them; engaging private landowners as well as public land managers in bird-friendly land management is critical to provide a suitable landscape for declining bird species across the region. This workshop also provided a template that the Forest Service plans to use, with location-specific modifications and partners, for additional management workshops across the Region as additional funding becomes available.

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The Lambert Restoration project provided opportunities to community members and volunteers to learn about conservation through tree plantings and field trips. An interpretive sign was installed on-site and has received positive feedback from both an adjacent homeowners' association and from community members.

The Forest was able to hire a media/public relations intern in cooperation with the local college (See *Documenting the WVRV Story* briefing paper). The student spent the summer preparing the format for the briefing papers, documenting projects with before and after pictures, learning about landscape scale restoration, and developing skills that enabled her to work within the public sector of service and the FS culture.

This year, CASRI has a new tool in its traveling High Elevation Spruce Tool Box. A traveling soil monolith of a scaled down model of a *Spodosol* or soil that forms underneath mature red spruce forests displays soil characteristics and a sample representation of the ground beneath a red spruce tree. This soil monolith was part of the 2015 WV Forest Festival Outdoor Education event. (See *Traveling Soil Monolith* briefing paper for details) Thousands of children and adults passed through the FS booths and listened to presentations given by our FS AmeriCorps member and Forest Service staff.

3. *Community safety enhanced:*

Water quality was increased throughout the area due to decreased sedimentation of streams and cooler water temperatures.

4. *Dollars invested in communities:*

The Lambert Restoration project has a connection with many members of the local community. They share a connection to the project site because their families worked for the mining company that worked on the mountain 40 years ago. They cut the timber, mined the coal, worked on the permits, and helped operate the machinery during the reclamation of the larger Mower Tract. There is a deep connection between local citizens and the project site. In fact, we have contracted local equipment operators from the area to work on aspects of the project, some of whom actually worked on the former coal mine. The Mower Tract is a high use recreation area for activities including fishing, hunting, camping, and hiking. The project presents a unique opportunity for community members to improve recreation opportunities and reconnect to the land they once worked by getting involved in the restoration effort through volunteer tree planting events. During all phases of our restoration work on the Mower Tract, we have hosted volunteer planting events. In 2015, we hosted a volunteer planting event for the Tygarts Valley School.

In the Forest Management workshop, presenters discussed financial incentives and specific federal programs that are available to assist land owners/managers in conducting management to enhance bird habitat and land conservation values.

Component parts of the range allotment project were purchased locally and erected by local contractors.

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Success Story:

Please share a success story from this partnership project. If possible, highlight stories that document conservation successes across landownership boundaries.

See attached 2015 briefing papers for project narratives as well as project map (at end of this report). This year we are choosing to highlight a story that show successive progress between the USFS, NRCS, Trout Unlimited and the private landowners within the Big Run Watershed of the Potomac watershed.

(see *Native Brook Trout Habitat Restoration: North Fork of the South Branch of the Potomac River* at end of this report).

Lessons Learned:

Please describe any lessons learned or successful practices, including how you adapted your approach, implementation or partnership goals; the impact the challenge or new information had; and any recommendations for other partnerships in the future. For example, did you run into any unforeseen circumstances or barriers that prevented you from achieving project goals or have required you to adapt the project goals? If so, please describe the circumstances and the actions that you took to address them.

Barrier/Change in Circumstance	Adaptation or Course Corrections	Impact	Recommendations
USDA NRCS Soil Survey did not have delegation of authority to sign for the FY15 funds needed for agreement to continue ESD work on Forest.	WV State Conservationist signed an amended FY14 agreement and extended the terms for deliverables due.	The situation created an anxious environment when fire transfer required USFS funds to be obligated or lost.	NRCS MOR Leaders for Soil Survey need to have delegation of authority so that they can sign interagency agreements and partnerships.
Identifying how to move the WVRV to the local level so that it is locally led.	We collaboratively moved our meetings from the State and Forest Supervisor's Office level to the District level. District Rangers and District Conservationists organized local	This brought about a strategic connectivity in conservation management at the local level, especially when considering watershed aquatic habitat improvements. Also, it brought	Ensure that the appropriate line officers and staff are talking about projects at the same level between the two agencies. Use NGOs to help span the bridge between Forest Service and NRCS with

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Barrier/Change in Circumstance	Adaptation or Course Corrections	Impact	Recommendations
	strategy meetings for input into project outreach and coordination on federal and other lands.	a greater local level awareness, both internally and externally, between federal staff and the private citizens regarding what WVRV is and how it can work to make conservation more meaningful when it is spatially connected.	private citizens. NGOs like TU have a unique skill set in being able to approach private land owners about conservation management and helping them to see what role they can play in restoring a valuable ecosystem like native brook trout habitat (see briefing paper).
The Early Successional Habitat project focused on MNF high elevation range allotments created an intensive work schedule for internal staff to mark timber for wildlife timber stand improvement. (See <i>Pasture Reclamation & Early Successional Cutback</i> briefing paper)	Worked with and trained West Virginia State DNR employees to mark the timber with us. Used technical expertise from Ruffed Grouse Society to improve our wildlife early successional habitat work on the ground.	Huge impact on workloads getting accomplished. We actually stopped marking all trees and came up with prescription for light and heavy cutting areas and only marked boundaries of the units.	Partners make a difference! We let the partners be a part of the project instead of just a side partner. We listened to their comments, concerns and recommendations and acted on it.
Establishing an accomplishable communications plan that is both cost effective and successful at reaching audiences.	In Spring, both agencies met and developed a draft communications plan. This plan was developed utilizing a design provided by the WVDOF, but would have been too costly to implement with available funds, given the restrictions of such funds.	USFS was able to further realize the goals and strategies of utilizing student help to document the projects with photographs and briefing papers. NRCS adopted this strategy and also organized the primary success story for this document. Field tours continued, as they were successful in FY14 in delivering the message internally and utilizing our partners to further the outreach to those interested in learning	Utilize a well thought out and constructed communication plan. Be creative and flexible in who can implement portions of the plan, including the photo documentation of projects. Students are great sources of innovative ideas for creating media outlets. One page briefing papers and YouTube style videos will go a long way in delivering the messages and highlight all involved. These become the basis for other styles of reporting.

**Joint Chiefs' Landscape Restoration Partnership Project
FY 2015 Progress Report**



Barrier/Change in Circumstance	Adaptation or Course Corrections	Impact	Recommendations
		about landscape scale restoration techniques.	
A common barrier exists with our WV Division of Forestry partner due to differences in fiscal year cycles; typically, they receive funding near the end of the federal fiscal year.	WVD OF has adapted to spending the money into the next FY year. Therefore, many of the accomplishments are not seen until a year later.	This has resulted in a lag time for implementing their projects, as well as an accumulation of funds for this FY. Currently WVD OF is short staffed and this has added to their challenge to implement their projects.	The State Forester will be meeting with his co-leads in January to strategize how WVD OF can better position themselves to work with partners to add staffing to assist with conservation plan writing and to continue to learn about the role the agency plays in managing their lands and administering to private forest land owners within these four high priority watersheds.

Signatures:

LOUIS ASPEY

NRCS, State Conservationist

CLYDE THOMPSON

Forest Service, Monongahela National Forest Supervisor

Joint Chiefs Landscape Restoration Project
West Virginia Restoration Venture Success Story:
Native Brook Trout Habitat Restoration
North Fork of the South Branch of the Potomac River



2015 Summary



United States Department of Agriculture
Natural Resources Conservation Service



Year initiated:
FY 2015

Contact Person:
Louis Aspey,
West Virginia
State
Conservationist,
NRCS WV

Partners:
Trout Unlimited

Website:
<http://www.nrcs.usda.gov/wps/portal/nrcs/site/wv/home/>

Raymond Phares is no stranger to the importance of stream restoration efforts and jumped at the chance to participate in the West Virginia Restoration Venture through the Natural Resources Conservation Service. As an excavation business owner in Pendleton County, Phares sees the importance of taking care of natural resources through his own work as well as on his property.

"I really believe the farmers in this area are good stewards of the land and know that stream restoration projects help people both up and downstream," Phares said. "It makes sense as part of preventing erosion and farm damage as much as it does to keep our waters clean and of high quality. People understand it and I'm happy to spread the word to others about the West Virginia Restoration Venture."

Phares father, Raymond Sr., who goes by Eddie, also has a WVRV contract for stream restoration. The younger Phares, believed in the program so much that he crossed over into nearby counties to promote it to other landowners.

"I've done a lot of work over the years in the surrounding area so many of those farmers who may have been uncertain, knew me and my work," said Phares. "Putting my name and work behind it, helped them have a neighbor who used the program with success and also in some instances performed the work. They were more eager to put in an application with that simple fact in place and I was happy to help them out by providing information."

Stream restoration is a complex conservation practice with many variations from site to site even within the same watershed. The elements are unpredictable and can change at any time so it's important to gather as many partner agencies together to find the best solution.

"The folks at NRCS and Trout Unlimited have been awesome and great to work with as they are very knowledgeable about stream restoration and the needs of this community," said Phares. "There haven't been fish in this area since the '85 flood when the fish habitat was destroyed. It would be great not only to bring them back, but also have a good, clean and functional water resource."

