

WV Project CommuniTree

Fall 2015 Report



“Building Communities from the Roots Up”



Prepared by

Tanner Haid, Urban Watershed Forester

Frank F. Rodgers, Executive Director

Cacapon Institute

#10 Rock Ford Road

Great Cacapon, WV 25422

Office: 304-258-8013

CTree@cacaponinstitute.org

www.cacaponinstitute.org

WV Project CommuniTree Fall 2015 Report

Executive Summary

Fall 2015 was the 8th planting season for WV Project CommuniTree since the 2011 USDA Forest Service WV UTC Assessment & Enhancement grant award. Since 2011, CTree Project Leaders have organized 107 tree planting events, planted 3,426 trees, and engaged over 7,500 volunteers in more than 13,300 hours of volunteerism and tree stewardship activities (see table below).

<u>Planting Season</u>	<u>Planting Events</u>	<u>Trees Planted</u>	<u>Acres of Trees (100/acre)</u>	<u>Volunteers Engaged</u>	<u>Volunteer Hours</u>	<u>Volunteer Contribution</u>
2008-2011	9	1,722	17.2	*	*	*
Spring 2012	10	444	4.4	570	1,286	\$ 22,948.55
Fall 2012	11	282	2.8	759	1,116	\$ 21,618.35
Spring 2013	16	710	7.1	1,319	1,877	\$ 46,706.81
Fall 2013	10	204	2.0	429	848	\$ 19,724.48
Spring 2014	19	528	5.3	1,554	3,141	\$ 57,557.87
Fall 2014	10	370	3.7	504	1,233	\$ 22,440.50
Spring 2015	18	596	6.0	1,408	2,687	\$ 53,119.51
Fall 2015	13	292	2.9	959	1,191	\$ 24,837.17
Total 2012-2015	107	3,426	34.3	7,502	13,379	\$ 268,953.24

*Records for each category are in bold. * = values were not recorded in those years.*

CTree groups this fall generated more than their required contribution through volunteerism and material donations. The majority of this “over-match” was provided by one school, Page Jackson Elementary School, and two watershed groups, Warm Springs Watershed Association and Blue Ridge Watershed Coalition. The metrics that make a good volunteer group include the ability to organize and implement quality tree planting events, maintain healthy trees, and contribute above and beyond their volunteer contribution requirement. Continuing to engage groups with these attributes will be beneficial to successfully marketing the CTree program and providing outreach to new and potential applicants.

Project Leaders this fall 2015 engaged more volunteers (959) in more tree planting events (13) and generated more volunteer contribution (\$24,837) than any other fall planting season.

In this report volunteerism and material donations are reported as “Volunteer Contribution” (formerly “in-kind match”) and are given a monetary value based off of USDA Farm Bill in-kind rates.

WV Project CommuniTree Fall 2015 Report

Background

WV Project CommuniTree (CTree) promotes tree planting and education on public land through volunteerism in the Potomac Headwaters of West Virginia (Berkeley, Grant, Hampshire, Hardy, Jefferson, Mineral, Morgan, & Pendleton counties). The program also focuses on enhancing and promoting awareness of watershed and riparian area needs such as storm water management, water quality issues, buffer zone planting, and soil erosion. The program is volunteer based and engages stakeholders in the process of making priority decisions within their respective communities and offers a strong educational message along with a physical planting component. CTree is a program of the WV-DEP Chesapeake Bay Program that includes WV Division of Forestry, WV Conservation Agency, Cacapon Institute, and Eastern Panhandle Regional Development & Planning Council (Region 9).

CTree's first planting was in 2008 under the direction of Carla Hardy (Potomac Valley Conservation District) and Jennifer Hammer (WV Division of Forestry). For several years CTree held one or two plantings each season. In 2011, with support from the USDA Forest Service, CTree expanded the number of annual plantings. Under the Forest Service grant, WVDOF has provided ~\$20,000 annually for the purchase of trees and Cacapon Institute has been able to dedicate considerable staff time on a year-round basis. Spring 2015 was the final season of USDA Forest Service funding for CTree. However, in 2014 Governor Tomblin signed the U.S. EPA Chesapeake Bay Program Partners' Agreement and West Virginia was awarded additional "Bay funding." The WVDEP has committed funds to continue CTree into the future. There is sufficient funding in place through the five year work plan (2016-2020) to continue CTree at its current capacity.

New in 2016, since the WVDOF state match for the tree purchase will no longer be available, CTree will be required to secure more volunteer labor and in-kind support than previous years. A non-federal match equal to 100% of the WV Chesapeake Bay funds is required (1:1 match). This match must equal the entire cost of WV Project CommuniTree including transportation & travel, Cacapon Institute staff time, and the cost of trees and materials. It is important to note that many of the professional CTree liaisons (including but not limited to WVDOF, WVCA, and Region 9 staff) are also working under WV Bay grants and have their own non-federal match requirements.



Students plant 24 trees and gather for a silly group picture on "Hat Day" at Blue Ridge Elementary School in Harpers Ferry.

WV Project CommuniTree Fall 2015 Report

The WV Urban & Community Forestry Council recognizes CTree as the largest citizen tree steward program in the state. In 2013, CTree was awarded the ISA Gold Leaf Award for making significant impacts on increasing tree canopy. In 2014, CTree was awarded a [Chesapeake Forest Champion](#) award for "Greatest on the Ground Impact" from the Alliance for the Chesapeake Bay.

CTree is unique in that it does not require participant-organizations to purchase trees as most reimbursable grant programs do. In place of traditional reimbursable monetary grants, a process was created for groups to apply for "CTree Kits" (Table 1). Providing tree kits up front, in place of monetary reimbursement upon project completion, allowed many groups to apply that would have been unable to spend the money up front. Successful applicants also received support from partnering agencies. The kits include everything the groups need for organizing and implementing community tree plantings:

- Trees in a variety of species and stock sizes
- Protective materials such as tubes, stakes, cages, arbor strap, and a CTree sign
- Mulch to foster good root growth

WV Project CommuniTree in Fall 2015

Thirteen (13) groups successfully applied in fall 2015 and were awarded CTree Kits and technical support. A wide range of organizations participated, from elementary school students to seasoned adult volunteers, and a total of 292 trees were planted (Table 1, Pages 9-10).

Each group was asked to provide \$1,500 worth of volunteer contribution in the form of volunteerism and material donations to match the federal contribution of trees and materials for the CTree Kits. Overall the groups produced \$24,837 worth of volunteer contribution, \$5,337 beyond the requirement. The contribution was primarily in volunteer labor but some groups provided their own donations of materials. Only nine (9) of the thirteen (13) groups exceeded their \$1,500 volunteer contribution requirement. The four groups that did not meet their match were short \$16 (Fairways West HOA), \$144 (Berkeley County Council), \$174 (Village of Washington Trail HOA), and \$561 (Wildflower Ridge HOA). No group may apply for future CTree grants until they have met their match goal from prior plantings. Volunteers can meet their requirement through post-planting maintenance and follow-up. All the projects were on public land or privately held land that is open to the public. Planting sites included schools (2), subdivisions (5), churches (1), parks (2), walking trails (1), county lands (1), and business parks (1). Projects took place in five (5) of the eight (8) counties of the Potomac Basin.



Teen volunteers planting trees in the Town of Moorefield

WV Project CommuniTree Fall 2015 Report

School Projects

Only two schools participated in WV Project CommuniTree this season – Page Jackson Elementary School (Charles Town) and Blue Ridge Elementary School (Harpers Ferry). Together, 601 students spent 420 contact hours learning about trees and planting a total of 41 trees at two schools, both of which are in Jefferson County (see table below).

<u>Applicant</u>	<u>Planting Site</u>	<u>Trees Planted</u>	<u>Grade Level</u>	<u>In-Class Education</u>		<u>Hands-on Conservation</u>		<u>Total</u>	
				# Students	Education Hours	# Students	Volunteer Hours	# Students	Contact Hours
Blue Ridge Watershed Coalition	Blue Ridge Elementary School	17	2nd-5th	0	0	301	120	301	120
Page Jackson Elementary School	Page Jackson Elementary School	24	K-2nd	300	150	300	150	300	300
Totals		41	---	300	150	601	270	601	420

Page Jackson Elementary School submitted the application to plant 24 trees at their school. On October 6th-7th, one Kindergarten class, five 1st grade classes, and six 2nd grade classes (6 classes/day, 12 classes total) received 30-minute educational lessons from Cacapon Institute staff. The 30-minute lesson included a 15-minute book reading of *We Planted a Tree* by Diane Muldrow and then a 15-minute exercise in learning about the different parts of trees and their functions. On October 13th-14th the same 300 students came out on the same rotation to plant the trees with Cacapon Institute staff.

Blue Ridge Elementary School was assisted by the Blue Ridge Watershed Coalition, who submitted the application. The Project Leader, working in conjunction with principal, was not able to pull together an education day prior to the planting event. On November 20th, 301 students participated in planting the trees from 2nd grade (4 classes), 3rd grade (4 classes), 4th grade (3 classes), and 5th grade (3 classes). Each class spent at least 20 minutes outside planting trees. Three of the classes had the privilege of staying out an additional 20 minutes to plant a second tree. Although there was no in-classroom education at this school, planting day included a demonstration on how to plant trees and their benefits for the school presented to each class by Cacapon Institute staff and a Blue Ridge Watershed Coalition volunteer.

WV Project CommuniTree Fall 2015 Report

Conclusions

The CTree fall 2015 planting season reached new milestones – more planting events were held (13), more volunteers were engaged (959), and more volunteer contribution was generated (\$24,837) than any other fall planting season. New community groups were engaged (nine of thirteen groups were new to the CTree program), existing groups continued to receive technical support (four of the thirteen groups have successfully completed CTree projects in the past), and the Potomac Headwaters has 292 new urban trees that will provide benefits for local communities. Lessons learned this fall 2015 planting season include:

- **The most successful projects have multi-layered support.** Successful projects are a culmination of many factors, including having a strong and dedicated Project Leader, a knowledgeable CTree Liaison, and support from within all levels of the applicant's organization and throughout the broader community. For example, the CTree Project Leader at Page Jackson Elementary School had great support for her project from teachers (16 classes participated) and parents from the Parent-Teacher Volunteer Organization at the school (35 parents participated). There was also support from Jefferson County Schools, wherein they helped the Project Leader get recognition for the project in both print news (Martinsburg Journal) and TV news (WHAG-TV in Hagerstown and JCS-TV Mascot Roundup). Jefferson County Schools also assisted by auguring the 24 tree holes. By having strong, multi-layered support, this project was able to succeed smoothly and gave the Project Leader and her community a positive impression of the CTree program which will help encourage them to participate again in the future. Multi-layered support is attainable on all projects. Project Leaders and CTree Liaisons are encouraged to make connections with their community in the planning process, build upon those connections throughout the project, and provide them with positive recognition upon project completion.
- **Project Leaders are most effective at engaging their community when they live, work, or congregate at the planting site.** The most successful projects at schools are organized by teachers or principals; at churches by a congregation member; at parks by park staff; at HOA's by a board member or active resident; and so forth. Projects must be organized by the community, for the community, and from within the community. If not, it will inevitably become much more burdensome for the Project Leader to engage enough volunteers to host a successful community tree planting, and the ultimate goal of building communities won't be achieved. In the future, applications should be viewed with community support in mind to ensure all projects have the greatest chance of success.
- **Distribution of projects across Potomac Headwaters is critical to sustained levels of volunteerism.** CTree volunteers work hard throughout planting season and oftentimes also participate in other tree planting and stewardship activities throughout the spring and fall. To sustain volunteers at the level needed for programmatic success, projects must be dispersed throughout the Potomac Headwaters so that volunteers don't become jaded and overworked. Five (5) of the eight (8) counties in the Potomac Headwaters participated this fall 2015 (Jefferson, Berkeley, Morgan, Hardy, and Pendleton). Similar to

WV Project CommuniTree Fall 2015 Report

previous CTee planting seasons, the vast majority of trees planted this season (236 of 292, 81%) were planted in Jefferson and Berkeley Counties. To ensure we are engaging a diverse audience, and in an effort to encourage participation from all of our CTee Liaisons at partnering agencies, it is important that CTee continues to seek out applications from across the Potomac Headwaters. CTee partners must continue to work diligently throughout the year to engage new communities and provide outreach to previously underserved regions.

- **More research is needed into the long-term success of the program.** As noted in previous seasonal planting reports, there is generally more activity in the spring seasons than the fall. While spring planting seasons have higher numbers of trees planted, more investigation is needed into survival of the trees to see if, in fact, spring plantings are producing better long-term results. As noted previously, it is generally accepted that fall is the preferred planting season and that fall plantings have lower mortality rates. Since 2013, Cacapon Institute has conducted an annual projects inventory and CTee plantings are evaluated for aesthetics, health, recent maintenance, and survival (see Appendix). Furthermore, a larger number of planting events may negatively impact the quality of stewardship-education because the CTee Liaison's time is split between more groups. Education is a central theme of CTee so scientific investigation into the impacts of CTee education and the likelihood of positive environmental behavioral change is needed. CTee's plantings will present many other benefits including economic and environmental that could be quantified. Additional research to quantify those benefits should be pursued. Scientifically measuring success and benefits of CTee and promoting those successes may lead to additional investment to strengthen CTee. We can strengthen the program through research with the ultimate goal of promoting the CTee model across West Virginia.
- **Additional volunteer contribution & material donations are needed in future planting seasons.** CTee projects this fall 2015 provided the lowest percentage of overmatch than any other planting season (127%). It has not been uncommon in previous planting seasons for the volunteers to double the amount of volunteer contribution they are required (spring 2014 = 202%, spring 2015 = 197%). Fortunately, there has not yet been a planting season where the groups failed to cumulatively exceed their contribution requirement. To better leverage federal funding, innovative and unique approaches to finding new non-federal match in labor and materials are required. Four (4) of the CTee fall 2015 groups did not reach the \$1,500 volunteer contribution requirement, and were short a collective \$896. CTee Project Leaders and CTee Liaisons should remain vigilant in providing successful planting events that engage more volunteers so that a trend doesn't develop. The nine (9) groups this fall 2015 that exceeded their \$1,500 volunteer contribution requirement met the \$896 shortfall and provided an additional \$5,337 overmatch for the grant (\$24,837 total). CTee Project Leaders and CTee Liaisons need to continue to strive to exceed volunteer contribution and materials donations to the highest degree possible in future planting seasons by developing innovative approaches to engage new volunteers, market tree planting events, and provide successful outreach that reaches new audiences.

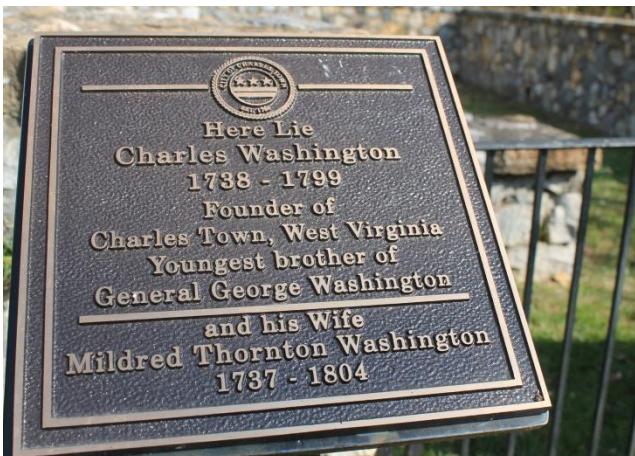
WV Project CommuniTree Fall 2015 Report

Appendix

Table 1.	Tree Kits.....	Pages 9-10
Table 2.	Trees Planted by Group.....	Page 11
Figure 1.	CTree Groups and Planting Sites.....	Page 12
Figure 2.	Planting Map and Number of Trees by County.....	Page 12
Table 3.	Volunteer Contribution by Group.....	Page 13
Figure 3.	Volunteer Contribution by Description.....	Page 13
Table 4.	Federal Contribution.....	Page 14
Figure 4.	Project Investment by Volunteer and Federal Contribution.....	Page 14
Tables 5	Volunteer Contribution.....	Page 15
Figure 5.	Volunteers, Hours Worked, and Total Volunteer Contribution by group.....	Page 16
Cacapon Institute Projects Inventory – Preliminary Investigations for CTree Survival.....		Page 17



A budding CTree volunteer at Hammonds Mill HOA



24 trees were planted along Craighill Walking Trail, burial place of Charles Washington



Inquisitive students at Page Jackson Elementary School



Staking in trees at the Eastern Panhandle Transit Authority



Caging white pines at Fairways West HOA is a fun job for kids in the neighborhood



Volunteers pose for a picture at Thorn Spring Park 4-H Camp

Photos of past projects, a map of suggested planting sites, and the current CTree application are available by clicking the Forestry tab at www.cacaponinstitute.org. For additional questions and comments, please contact Tanner Haid, Cacapon Institute's Urban Watershed Forester, at thaid@cacaponinstitute.org.

WV Project CommuniTree Fall 2015 Report

<u>CTree Kits Fall 2015</u>				
<u>Projects</u>	<u>Kit</u>	<u># of Trees</u>	<u>Stock Size</u>	<u>Species</u>
<u>Berkeley County Council</u>	Mixed-16*	16	(16) 1" caliper, 6-10' height	(3) sweet gum, (3) swamp white oak, (2) red maple, (2) willow oak, (2) tulip poplar, (2) Allegheny serviceberry, (1) eastern redbud, (1) kousa dogwood 'Green Sleeves'
<u>Blue Ridge Watershed Coalition</u>	Mixed-16	17**	(17) 1" caliper, 6-10' height	(3) eastern redbud, (2) willow oak, (2) chestnut oak, (2) Allegheny serviceberry, (1) red maple, (1) sweet gum, (1) tulip poplar, (1) sycamore, (2) pin oak, (1) flowering dogwood, (1) multi-stem river birch
<u>City of Charles Town</u>	Mixed-24*	24	(12) 1" caliper, 6-10' height (12) 4-6' height	(5) eastern redbud, (4) eastern white pine, (4) swamp white oak, (3) Allegheny serviceberry, (2) northern red oak, (2) sweet gum, (2) sycamore, (2) American linden
<u>Fairways West HOA</u>	Mixed-24*	24	(10) 1" caliper, 6-10' height (14) 4-6' height	(14) eastern white pine, (5) eastern redbud, (4) eastern red cedar, (1) kousa dogwood 'Green Sleeves'
<u>Hammonds Mill HOA</u>	Mixed-50*	50	(6) 1" caliper, 6-10' height (44) 4-6' height	(22) eastern white pine, (6) river birch, (3) Allegheny serviceberry, (3) eastern redbud, (2) red maple, (2) northern red oak, (2) sweet gum, (2) sycamore, (2) white oak, (2) swamp white oak, (2) American linden, (1) sycamore, (1) eastern redbud
<u>Moorefield Parks & Recreation</u>	Mixed-16	16	(16) 1" caliper, 6-10' height	(4) northern red oak, (4) sycamore, (4) eastern redbud, (2) Allegheny serviceberry, (2) kousa dogwood 'Green Sleeves'
<u>Page Jackson Elementary School</u>	Shade-24	24	(12) 1" caliper, 6-10' height (12) 4-6' height	(2) red maple, (2) willow oak, (2) willow oak, (2) sweet gum, (2) tulip poplar, (2) sycamore, (2) white oak, (2) swamp white oak, (2) black gum, (2) multi-stem river birch, (2) eastern hophornbeam, (2) American linden
<u>Pendleton County Ext. Service</u>	Mixed-16*	16	(16) 1" caliper, 6-10' height	(5) multi-stem river birch, (5) eastern hophornbeam, (2) Allegheny serviceberry, (2) flowering dogwood, (2) eastern redbud
<u>Quad/Graphics Inc.</u>	Mixed-24	24	(12) 1" caliper, 6-10' height (12) 4-6' height	(4) eastern redbud, (4) eastern white pine, (2) red maple, (2) willow oak, (2) sweet gum, (2) tulip poplar, (2) sycamore, (2) Allegheny serviceberry, (2) pagoda dogwood, (2) swamp white oak
<u>Tabler Station Manor HOA</u>	Shade-16	16	(16) 1" caliper, 6-10' height	(4) willow oak, (2) red maple, (2) sweet gum, (2) tulip poplar, (2) sycamore, (2) black cherry, (2) swamp white oak

WV Project CommuniTree Fall 2015 Report

<u>Villages of Washington Trails HOA</u>	Evergreen-24*	25**	(12) 1" caliper, 6-10' height (13) 4-6' height	(12) eastern red cedar , (12) eastern white pine, (1) eastern redbud
<u>Warm Springs Watershed Association</u>	Mixed-24	24	(16) 1" caliper, 6-10' height	(4) eastern redbud, (4) eastern white pine, (2) red maple , (2) willow oak , (2) sweet gum , (2) tulip poplar , (2) sycamore , (2) Allegheny serviceberry, (2) pagoda dogwood, (2) swamp white oak
<u>Wildflower Ridge HOA</u>	Mixed-16	16	(16) 1" caliper, 6-10' height	(4) sweet gum , (4) sycamore , (4) multi-stem river birch, (2) willow oak , (2) swamp white oak
TOTALS		292 trees = (173) 1" caliper, 6-10' height and (119) 4-6' height		

Table 1: Description of WV Project CommuniTree Kits that were awarded in fall 2015. Tree substitutions were allowed when they were justified based on site specific needs. * = kits with substitutions. ** = additional trees were purchased by the group or donated from other sources. **Bold** trees were larger stock size, typically 1" caliper and 6-10 ' height. For a full list of CTree kits, visit the Forestry tab at www.cacaponinstitute.org.

WV Project CommuniTree Fall 2015 Report

Trees Planted by Group and Location

<u>Group</u>	<u>Planting Location</u>	<u>Community</u>	<u>County</u>	<u># Trees</u>
Berkeley County Council	Eastern Panhandle Transit Authority	Martinsburg	Berkeley	16
Blue Ridge Watershed Coalition	Blue Ridge Elementary School	Harpers Ferry	Jefferson	17
City of Charles Town	Craighill Walking Trail	Charles Town	Jefferson	24
Fairways West HOA	Fairways West Subdivision	Martinsburg	Berkeley	24
Hammonds Mill HOA	Hammonds Mill Subdivision	Spring Mills	Berkeley	50
Moorefield Parks & Recreation	Moorefield Town Park	Moorefield	Hardy	16
Page Jackson Elementary School	Page Jackson Elementary School	Charles Town	Jefferson	24
Pendleton County Ext. Service	Thorn Spring Park 4H Camp	Franklin	Pendleton	16
Quad/Graphics Inc.	Caperton Boulevard Business Park	Martinsburg	Berkeley	24
Tabler Station Manor HOA	Tabler Station Manor Subdivision	Inwood	Berkeley	16
Village of Washington Trais HOA	Village of Washington Trail Subdivision	Kearneysville	Berkeley	25
Warm Springs Watershed Assn.	First United Methodist Church	Berkeley Springs	Morgan	24
Wildflower Ridge HOA	Wildflower Ridge subdivision	Martinsburg	Berkeley	16

Table 2: fall 2015 groups, planting location, community, county, and number of trees planted.

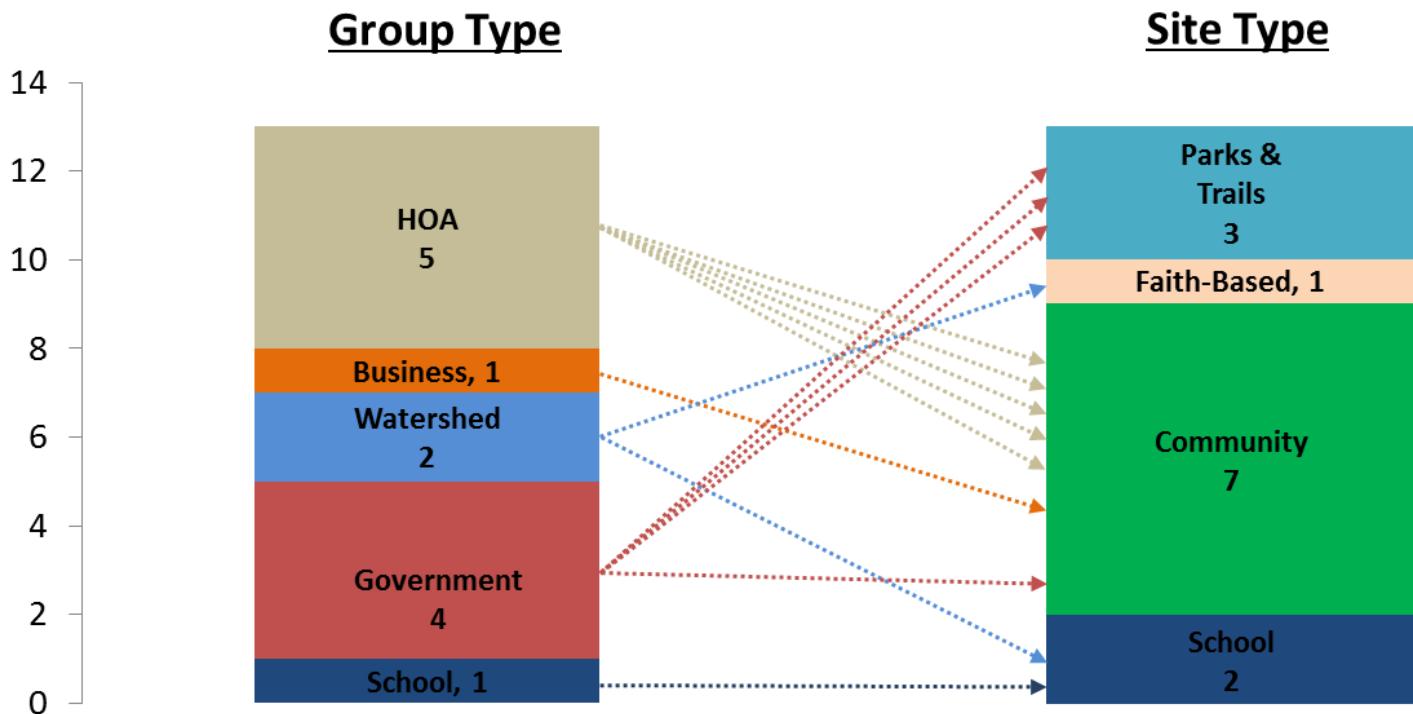
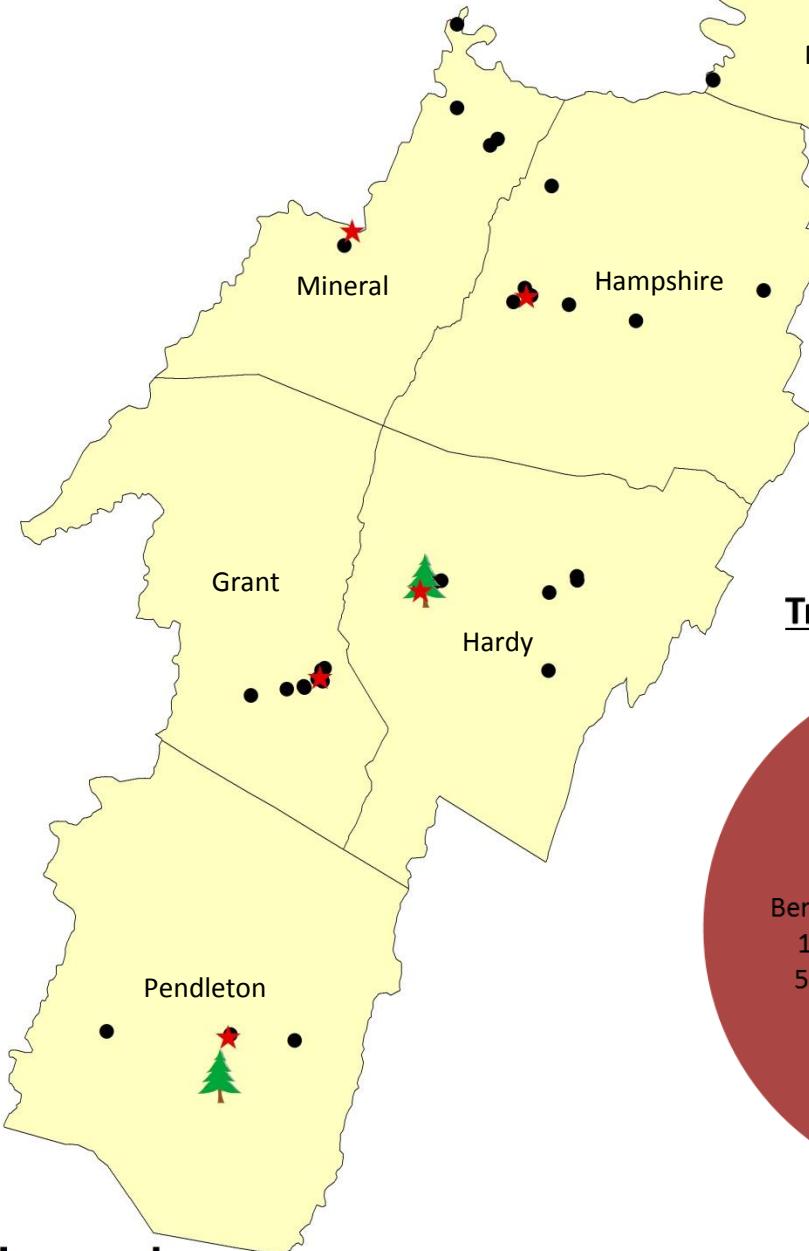


Figure 1: CTree Group Types (left) and Planting Site Types (right) in fall 2015. The perforated connections show the Site Type for where each Group Type planted their CTree Kit.

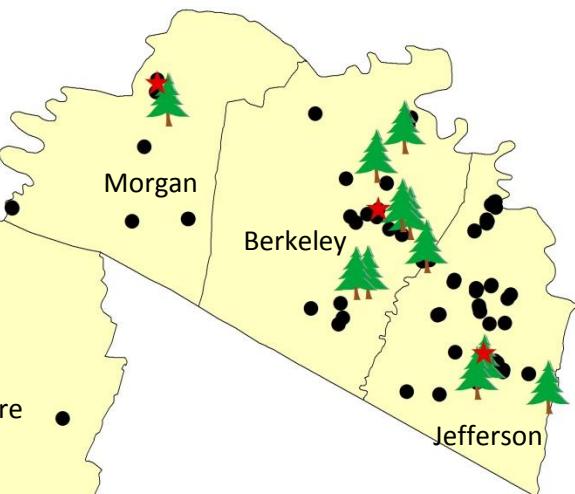
WV Project CommuniTree Fall 2015 Report

Fall 2015 Projects Map and Number of Trees by County

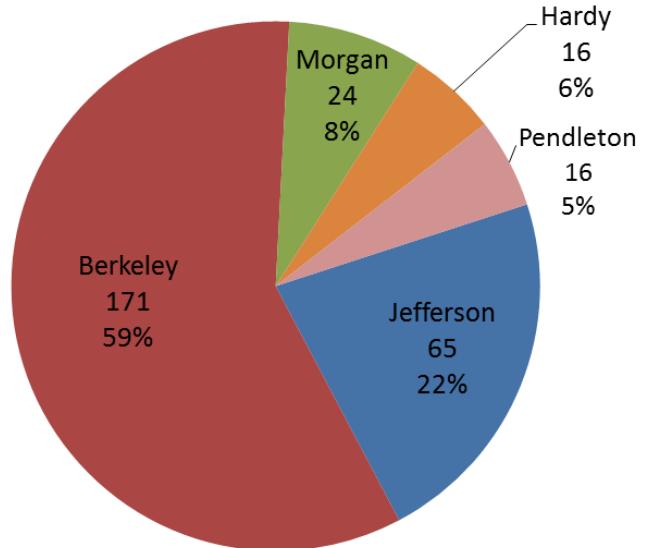


Legend

- Fall 2015 (13)
 - Past Projects (94)
 - County Seats
- Potomac Headwaters



Trees Planted by County



WV Project CommuniTree Fall 2015 Report

Volunteer Contribution by Group

Group	# Volunteers				Volunteers Hours				Volunteer Contribution	Overmatch
	YV	AV	SL	PL	YV	AV	SL	PL		
Berkeley County Council	0	3	12	2	0	10	44	11	\$ 1,356	\$ (144)
Blue Ridge Watershed Coalition	301	27	1	2	120	21	3	18	\$ 2,707	\$ 1,207
City of Charles Town	5	20	5	3	10	40	11	11	\$ 1,677	\$ 177
Fairways West HOA	3	6	0	2	9	20	0	35	\$ 1,484	\$ (16)
Hammonds Mill HOA	3	2	4	3	12	8	18	22	\$ 2,378	\$ 878
Moorefield Parks & Recreation	5	0	6	11	15	0	18	29	\$ 1,506	\$ 6
Page Jackson Elementary School	300	56	1	1	150	37	1	6	\$ 3,039	\$ 1,539
Pendleton County Ext. Service	3	19	1	2	9	61	4	15	\$ 1,819	\$ 319
Quad/Graphics	0	15	1	6	0	30	6	48	\$ 2,164	\$ 664
Tabler Station Manor HOA	7	11	5	2	18	28	3	24	\$ 1,522	\$ 22
Village of Washington Trail HOA	1	7	0	2	4	28	0	25	\$ 1,326	\$ (174)
Warm Springs Watershed Assn.	43	36	6	2	86	65	24	5	\$ 2,921	\$ 1,421
Wildflower Ridge HOA	1	3	0	2	2	7	0	23	\$ 939	\$ (561)
SUB-TOTAL	672	205	42	40	435	354	132	271	\$ 24,837	\$ 5,337
TOTAL		959				1,191				

Table 3: Volunteer labor hours, number of volunteers per type, and volunteer contribution and material contributions each group provided. YV = Youth Volunteer, AV = Adult Volunteer, SL = Skilled Labor, and PL = Project Leader. Each group was asked to provide \$1,500 in volunteer contribution to offset the cost of the CTree Kits and the value of the professional technical assistance. A complete breakdown of volunteer contribution can be found in Table 5 on Page 15.

Volunteer Contribution and Material Donations

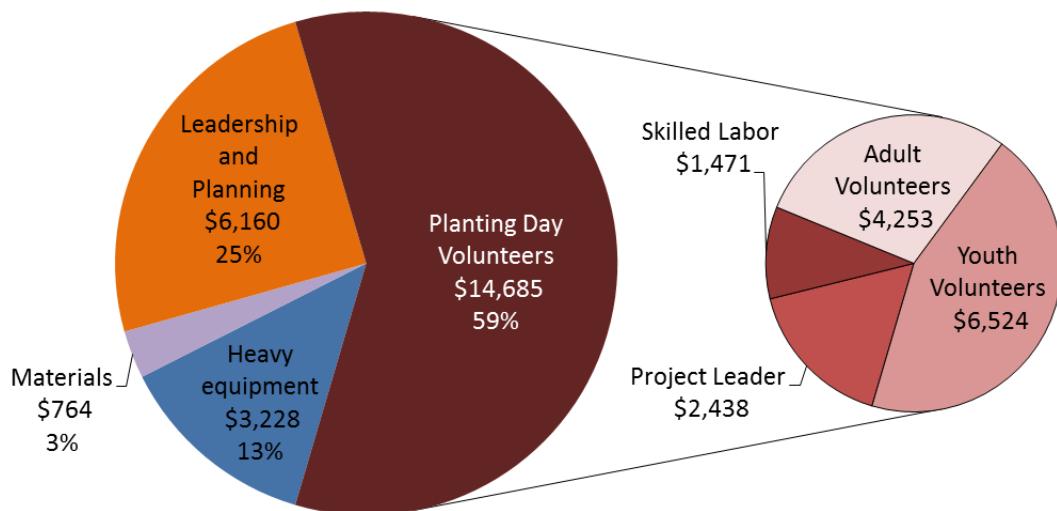


Figure 3: The pie on the left is the complete volunteer contribution and material donations for fall 2015. The break-out pie on the right is the contribution provided by volunteers on the planting day.

WV Project CommuniTree Fall 2015 Report

Federal Contribution

<u>Item</u>	<u>Description</u>	<u>Quantity</u>	<u>Price</u>
Trees	Clear Ridge Nursery	280	\$ 10,986.70
Mulch	Potomac Farms, bags + delivery	188	\$ 586.31
Stakes	Burch Wood Products, multiple sizes	550	\$ 678.00
Tubes	Plantra & Conservation Services	250	\$ 461.49
Cages	Home Depot, welded Woven Wire	5	\$ 317.35
Arbor Strap	Forestry Supplier, 250' rolls	6	\$ 256.45
Sign Posts & Hardware	Home Depot, Lowes, & Walmart	17	\$ 131.76
Tools	Home Depot, stake post driver	1	\$ 29.90
TOTAL			\$ 13,447.96

Table 4: fall 2015 WV Project CommuniTree expenses to purchase trees and materials

Project Investment by Volunteer & Federal Contribution

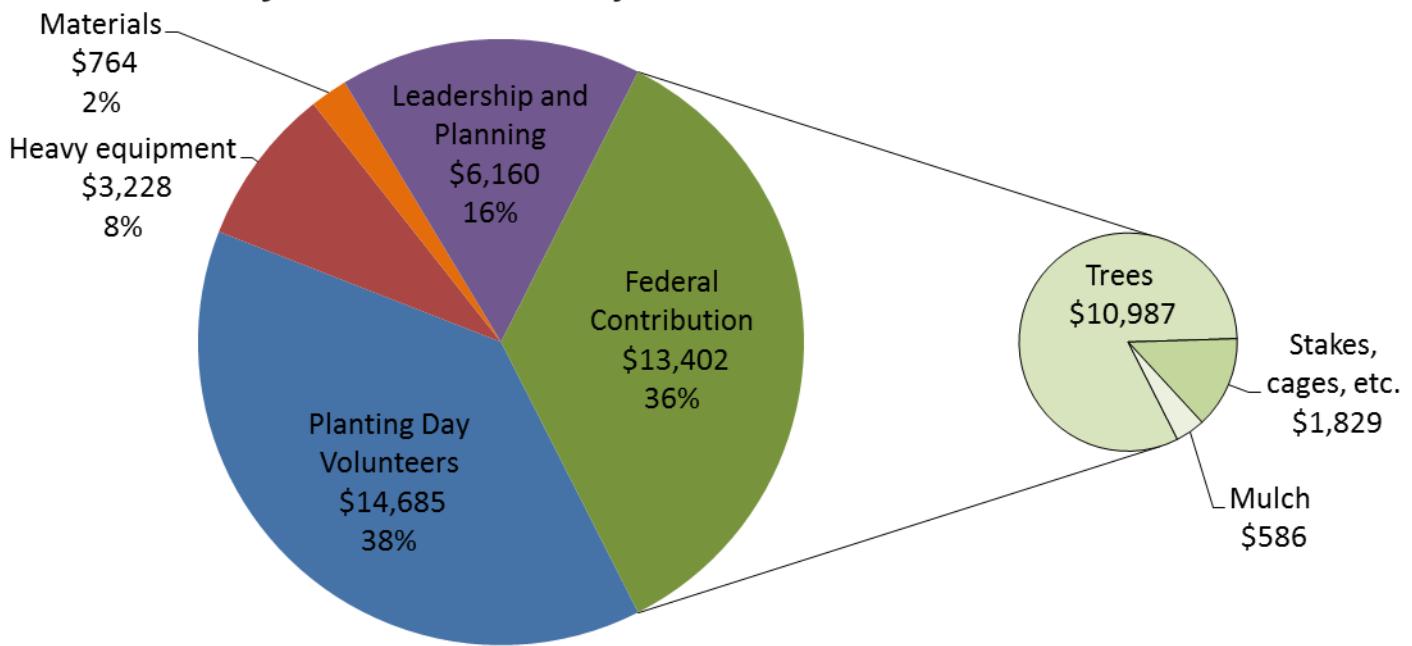


Figure 5: Project investment by volunteer and federal contribution. The pie on the left shows project investment, both in terms of volunteer contribution and materials donations as well as by federal contributions. The pie chart on the right shows a breakdown of the federal contribution by material.
*Federal contribution towards salary for WV-DOF, WVCA, Cacapon Institute, or others is not included. This reflects materials costs only in federal contributions.

Volunteer Contribution and Material Donations							
Group Name	Berkeley County Council	Blue Ridge Watershed Coalition	City of Charles Town	Fairways West HOA	Hammonds Mill HOA	Moorefield Parks & Recreation	Page Jackson Elementary School
Heavy equipment	\$ 544.50	\$ 475.00	\$ 362.00	\$ 775.00	\$ 536.00	\$ 275.00	\$ 197.00
Leadership & Planning	\$ 624.75	\$ 2,151.80	\$ 850.00	\$ 535.00	\$ 620.00	\$ 981.00	\$ 2,775.00
Planting Day Volunteers	\$ 169.71	\$ 72.50	\$ 364.50	\$ 161.60	\$ 607.00	\$ 250.00	\$ 67.40
Materials	\$ 16.75	\$ 8.00	\$ 100.00	\$ 12.00	\$ 615.00	\$ -	\$ -
Volunteer Contribution	\$ 1,355.71	\$ 2,707.30	\$ 1,676.50	\$ 1,483.60	\$ 2,378.00	\$ 1,506.00	\$ 3,039.40
Overmatch	\$ (144.29)	\$ 1,207.30	\$ 176.50	\$ (16.40)	\$ 878.00	\$ 6.00	\$ 1,539.40
Group Name	Pendleton County Ext. Service	Quad/Graphics	Tabler Station Manor HOA	Villages of Washington Trails HOA	Warm Springs Watershed Association	Wildflower Ridge HOA	<u>Totals</u>
Heavy equipment	\$ 343.00	\$ 750.00	\$ 500.00	\$ 502.50	\$ 400.00	\$ 500.00	\$ 6,160.00
Leadership & Planning	\$ 1,150.00	\$ 1,002.00	\$ 805.00	\$ 582.50	\$ 2,398.00	\$ 210.00	\$ 14,685.05
Planting Day Volunteers	\$ 326.10	\$ 411.60	\$ 217.40	\$ 229.00	\$ 122.56	\$ 229.00	\$ 3,228.37
Materials	\$ -	\$ -	\$ -	\$ 12.00	\$ -	\$ -	\$ 763.75
Volunteer Contribution	\$ 1,819.10	\$ 2,163.60	\$ 1,522.40	\$ 1,326.00	\$ 2,920.56	\$ 939.00	\$ 24,837.17
Overmatch	\$ 319.10	\$ 663.60	\$ 22.40	\$ (174.00)	\$ 1,420.56	\$ (561.00)	\$ 5,337.17

Table 5: Complete breakdown of volunteer contribution by group

WV Project CommuniTree Fall 2015 Report

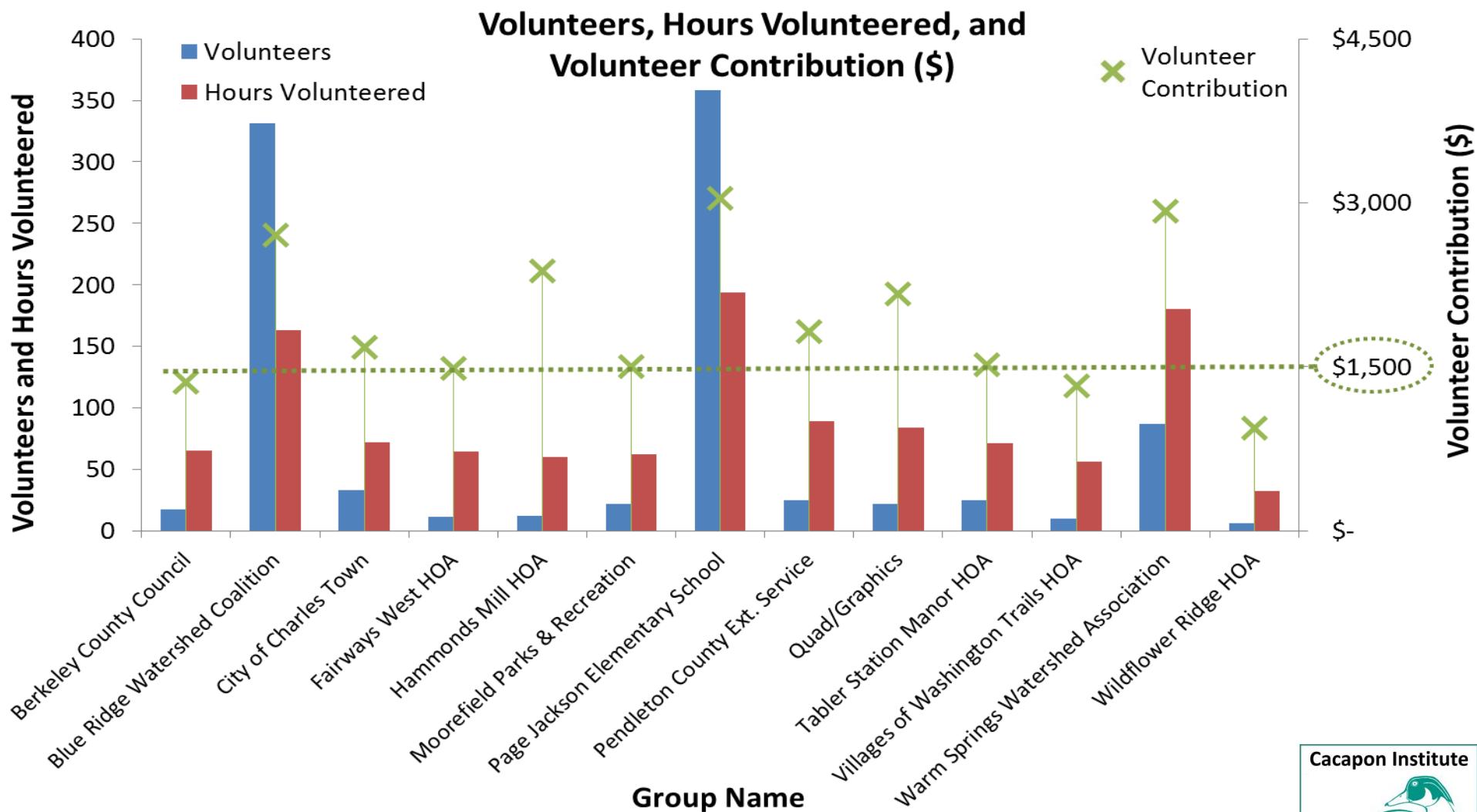


Figure 5: Volunteer hours and total number of volunteers that worked on the project are displayed on the primary vertical axis (left). The cash value of the volunteer contribution and material donations provided per group is displayed on the secondary vertical axis (right). The green perforated line connected to the green perforated circle represents the \$1,500 volunteer contribution requirement. Nine groups exceeded the \$1,500 volunteer contribution requirement. The total contribution for CTree fall 2015 was \$24,837.17.



WV Project CommuniTree Fall 2015 Report

WV Project CommuniTree Long-Term Tree Survival

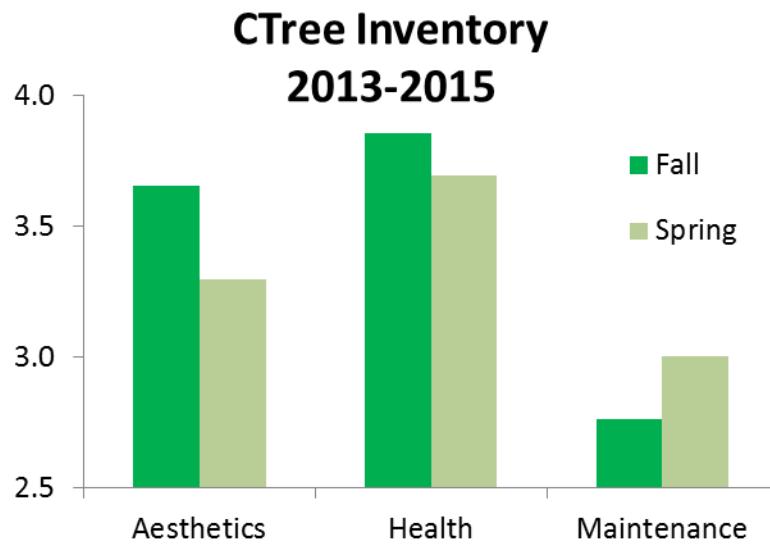
Preliminary Investigations

Cacapon Institute inventories all WV Project CommuniTree projects annually in the summer to determine if the trees are surviving and to measure aesthetics, health, and recent maintenance.

Aesthetics were measured from an outsiders perspective – i.e., whether or not a random passerby would find the trees aesthetically pleasing. Tree Health was measured visually on the same scale based on canopy fullness, leaf and branch health, and tree form. Recent maintenance was measured to determine whether or not it was evident that the project is being maintained, with obvious signs being new mulch, wet soil from watering, stakes and tubes removed, or pruning evidence. All three were measured visually and on a scale of 1-5, with 1 being the worst and 5 being the best.

Inventory data from 2013-2015 suggests that fall projects tend to have slightly better ratings for aesthetics and health. A possible explanation is that trees planted in the fall have had at least six months to acclimate to the planting site and are therefore more robust, aesthetically pleasing, and seem to be in better health. Newer projects from the previous spring may be experiencing symptoms of shock from planting.

The same data also suggests that maintenance has been conducted on spring projects more recently than fall projects. Again, this finding is most likely attributable to the time of year that the inventory is conducted where the likelihood of recent maintenance is higher.



Preliminary investigations suggest a 70% survival rate for trees planted through the WV Project CommuniTree program. There was no significant difference found between fall and spring plantings (68% and 71%, respectively).

These preliminary findings are not conclusive and more research is needed to determine long-term survival rates of trees planted through the WV Project CommuniTree program.