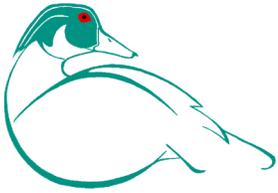


Potomac Headwaters Leaders Of Watersheds - 2015 Report



Cacapon Institute

From the Cacapon River to the Potomac to the Chesapeake Bay we protect rivers and watersheds using science and education.

Founded in 1985, CI has grown from a local watershed research and protection group to an organization reaching a broad audience across the Mid-Atlantic.

Our vision is a future where polluted watersheds are history. As educators we teach students first and then, through them, we reach the larger community. As problem solvers we find solutions and build partnerships to address environmental problems. As fact finders we research watershed issues of importance. As foresters we are creating healthy communities alive with trees.

We coordinate the [Potomac Watershed Partnership](#) working to protecting the lands and waters of the Potomac River Basin. CI is an active participant in the [WV DEP Chesapeake Bay Program](#) and contributes to the [EPA Chesapeake Bay Program's Education and Forestry Workgroups](#) in Annapolis.



[Potomac Headwaters Leaders Of Watersheds \(PHLOW\)](#) was established in 2008. Over the years PHLOW has had many evolutions and supporters but since 2011 our primary partners have been the [WV DEP](#), [National Fish and Wildlife Foundation](#), and [USDA Forest Service](#). Spreading from its West Virginia base, PHLOW also engages schools in Western Maryland and Virginia's Shenandoah Valley.

PHLOW has many outreach platforms but focuses on three programs:

-  **Grow-a-Garden** teaches students about watersheds and non-point source water pollution, especially stormwater runoff pollution. Students learn the benefits a rain garden has on their local watershed and the broader Chesapeake Bay Watershed. The education continues outdoors when the classes participate in a rain garden planting on their school grounds.
-  **Growing Native** focuses on growing native tree species. Education sessions cover topics of tree structure, species identification, and the important role trees have on watershed health. Students plant native tree seeds or tree whips (two-year-old seedling) in mobile containers which are placed in a grow-out station. Classes nurture the seedlings and monitor their growth until they are large enough to be planted throughout the community.
-  **Plant-a-Tree** is composed of an education session focused on the overall importance of trees within both urban and rural environments. The hands-on conservation project is comprised of a native tree planting on their school grounds which provides a number of environmental benefits including decreasing stormwater runoff pollution and increasing wildlife habitat.

PHLOW Schools:

-  Blue Ridge Elem.
-  Boonsboro Elem.
-  Capon Bride Middle
-  Cub Run Elem.
-  Driswood Elem.
-  Eagle Inter.
-  Fountain Rock Elem.
-  Greenwood Elem.
-  Harpers Ferry Middle
-  Linville-Edom Elem.
-  Moorefield Elem.
-  North Jefferson Elem.
-  Orchard View Inter.
-  Page Jackson Elem.
-   Paw Paw School
-  Pleasant Valley Elem.
-  Ranson Elem.
-  Riverheads Elem.
-  Sharpsburg Elem.
-  Shepherdstown Elem.
-  Slanesville Elem.
-  South Jefferson Elem.
-  St. Joseph's Parish
-  T.A. Lowery Elem.
-  Warm Springs Inter.
-  Warm Springs Middle
-  Winchester Academy

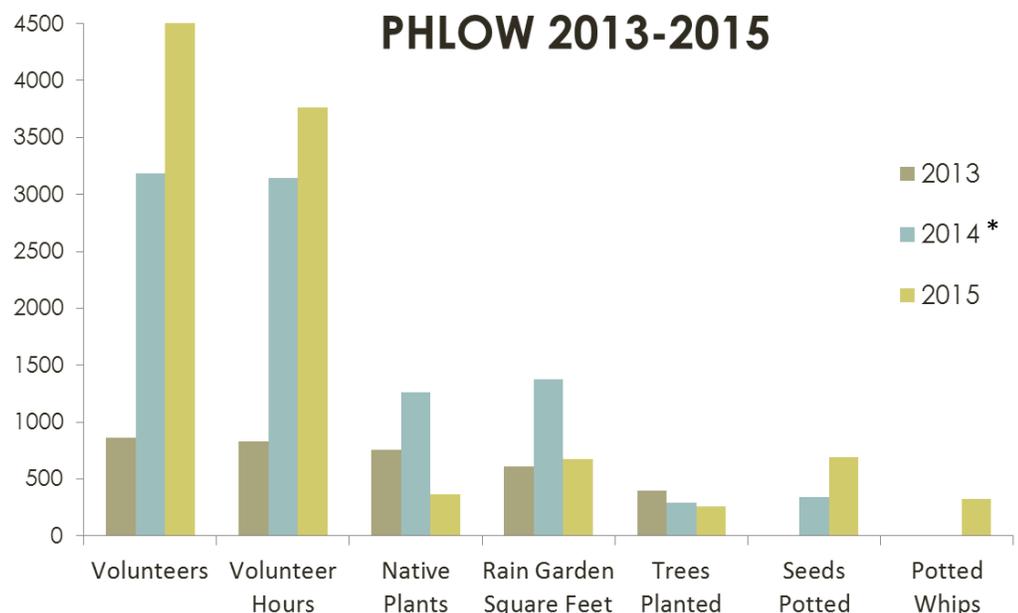
Educating Environmental Stewards

In 2015, thirty-three schools from West Virginia, Virginia, and Maryland participated in the Potomac Headwaters Leaders of Watersheds programs. More than 4,100 students investigated environmental stressors that are affecting our local streams, Potomac River, and the Chesapeake Bay. Students took their new found knowledge and made a positive impact on their school grounds by installing a rain garden, planting native trees, or propagating native trees. All hands-on projects reduce the amount of stormwater runoff: rain water carrying harmful substances into our local waterways that degrades their quality.



Parents and community members support PHLOW. Nearly 400 adult volunteers contributed 702 volunteer hours toward conservation projects at their local school. Youth and adult volunteers successfully installed five rain gardens composed of 366 native plants, planted 256 large stock native trees, planted 688 native oak seeds, and potted 327 tree whips to grow at community grow-out stations for planting during the 2016-2017 season. These community grow-out stations are located at Eagle and Orchard View Intermediate Schools in Berkeley County and Paw Paw School in Morgan County (WV).

Together, more than 4,500 youth and adult volunteers logged nearly 3,800 volunteer hours across nine counties and three states while engaged in conservation practices that decrease pollution and improve the health of the Chesapeake Bay.



* CI adopted the USDA Forest Service's Growing Native program leading to the planting of native seed and tree whip stock at area schools. CI transitioned to planting larger-size native plant stock in rain gardens, thereby decreasing the overall number of plants installed but covering the same amount of garden surface area.



2015 Quick Facts



33 Schools Engaged



366 Native Plants



4,512 Youth & Adult Volunteers



327 Tree Whips Potted



3,765 Volunteer Hours



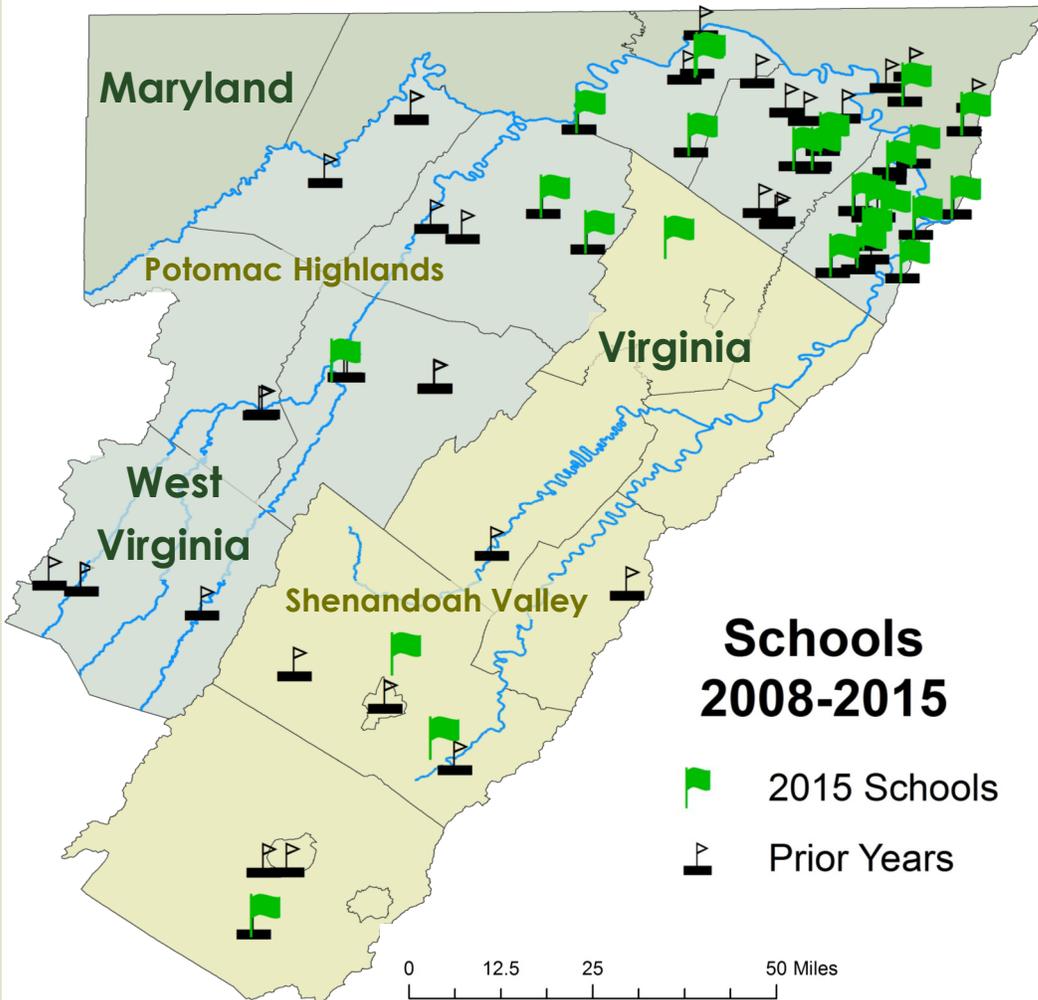
256 Native Trees Planted



673 Square Feet of Rain Gardens



2 Cisterns Installed



Students are learning by doing and leading by example to protect rivers and watersheds using science and education.

Supporting Programs

PHLOW utilizes technical and material resources from many organizations. PHLOW supporters include WV Bay Tributary Team, USDA Forest Service, NOAA Chesapeake Bay Program, US EPA, Potomac Watershed Partnership, Evenor Armington Fund, Virginia Environmental Endowment, and CI's members.

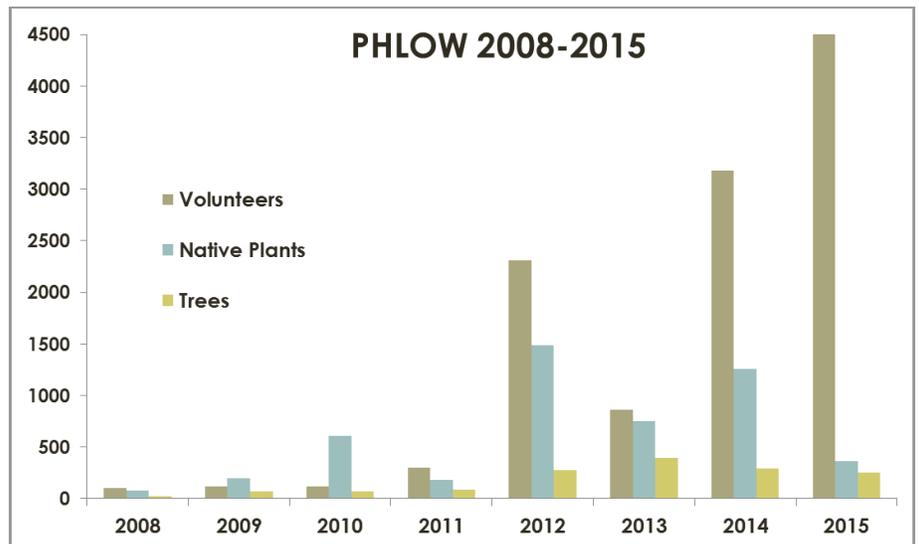
CI oversees **WV Project CommuniTree**, a partnership of the WV Chesapeake Bay Program. CTree supports PHLOW by providing trees and educating students on the importance of trees in the environment and community. CTree promotes tree plantings and education on public lands through volunteerism in the Potomac Headwaters of West Virginia (Berkeley, Jefferson, Morgan, Mineral, Hampshire, Grant, Hardy, Pendleton counties). Technical assistance is provided by CI, WV Conservation Agency, WV Division of Forestry, and the Eastern Panhandle Regional Planning and Development Council.

Continuing the Trend—PHLOW Forward

During 2015, PHLOW engaged the most youth and adult volunteers since it began in 2008. Thanks to funding from the USDA Forest Service, West Virginia DEP Chesapeake Bay Program, National Fish and Wildlife Foundation (NFWF), and CI's members, PHLOW will keep the momentum going in 2016 and beyond. We are making progress towards our 2017 goals of engaging 6,000 students through the implementing of 50 school projects that include planting 300 trees, installing 17 rain gardens, 2 rain cisterns, and a green roof.

We are well on our way and anticipate reaching all of our goals by the end of the 2016-2017 school year.

PHLOW is continuing to improve real-world water quality and fostering a generation of environmentally literate youth. All students participate in both classroom lessons and hands-on learning which fosters a future generation of environmental stewards. These stewards will set the path towards a future with less pollution and a healthier Chesapeake Bay.



**To learn more or apply for PHLOW,
please click on the [Education Tab](#) at CacaponInstitute.org**



Want to make a difference on your school campus? We can help! CI has released **PHLOW applications** for Grow-a-Garden, Growing Native, and Plant-a-Tree projects. Applications are online now for 2016 projects in spring or fall (proposals due February & August respectively).

This is a publication of Cacapon Institute. For more information visit our website or contact:

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