

PENNS VALLEY CONSERVATION ASSOCIATION

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Front Cover Photo Baby Screech Owl: Greta Haney

### GROUP OVERVIEW

The Penns Valley Conservation Association (PVCA) was formed and incorporated in Pennsylvania as a non -profit organization, receiving designation as a 501(c) (3) corporation in 1994. PVCA was the outgrowth of a citizen effort to stop the location of a quarry in Aaronsburg, PA in the early 1990's. From these beginnings, PVCA successfully lobbied for Exceptional Value designation for portions of Pine and Elk Creeks, conducts water quality monitoring throughout the watershed and developed the privatelyowned Muddy Paws Marsh Wetland Education Center. PVCA also hosts a yearly spring stream cleanup, organizes the annual "Crickfest" Celebration, and completes many other habitat restoration and agricultural best management practice (BMP) projects.

### **PVCA Mission and Impact Statement**

PVCA's mission is to serve as a steward for the natural and cultural communities in the Upper Penns Creek watershed. We seek to preserve and honor the agricultural roots of Penns Valley by protecting and conserving its waters, farmlands, forests, and rural heritage.

In service of PVCA's mission and vision, we seek to foster a sense of community and a healthy economy within the Upper Penns Creek Watershed by maintaining water quality, sound environmental education and planning, and the Valley's rural heritage.

In 2013, PVCA took part in a capacity building opportunity that engaged the board of directors to revisit the strategic direction for the organization. Five key goals emerged:

- Environmentally educated, inspired, and engaged watershed community;
- All watershed municipalities consistently practice sound environmental stewardship;
- Achieve and maintain drinkable, fishable, and swimmable quality water in all surface and ground water sources.;
- Encourage entrepreneurial spirit, locally owned businesses, and farms that create environmentally sound jobs;
- Continue to strengthen PVCA's organizational infrastructure and community image.

### **PVCA Accomplishments**

- Protected 25,000 feet of stream banks
- Planted 10,150 trees and shrubs
- Installed 81 in-stream fish habitat and stabilization structures
- Implemented agricultural best management practices on 25 farms
- Educated 1,000 children a year about environmental issues for 10 years
- Leveraged \$1.1 million for projects in the community

Since its beginnings, PVCA has been a leading steward for conservation in the upper Penns Creek watershed. They have protected over 25,000 feet of stream through stream bank fencing, in-stream fish habitat, riparian buffers, and agricultural best management practices.

### **PROJECTS**

Below is a timeline of PVCA's implementation projects. This group has been extremely active in implementing conservation projects throughout the watershed.

# **Upper Penns Creek Watershed Assessment (2000)**

In 2000, PVCA received a Pennsylvania Department of Environmental Protection (DEP) Growing Greener grant to complete a watershed assessment of the Upper Penns Creek watershed. This assessment helped to identify strategies in six key areas that have served as the basis for future projects in the watershed.

# **Stream Bank Fencing (2000)**

In 2000, PVCA received a DEP Growing Greener grant to implement stream bank fencing projects within the watershed. With funds from this grant, PVCA was able to protect 250 acres of riparian area through streambank fencing.



# Fish Habitat Improvement Plan for Penns Creek (2001)

In 2001, PVCA received a grant from DEP to complete habitat improvement projects. This project installed bank

stabilization and velocity enhancement structures on Penns Creek. In total, six log frame deflectors, one mudsill crib, and 25 random boulders were installed. These devices also provide habitat for trout and other fish species.



# **Assessment Strategy Implementation (2002)**

PVCA received a Growing Greener grant from DEP in 2002 to implement some of the strategies from the watershed assessment. With funds from this grant, PVCA was able to protect 7,265 feet of stream bank on 18 properties by removing

invasive plant species and planting 4,150 trees and shrubs. Additionally, PVCA was also able to plant native grasses and wildflowers.



PVCA also helped develop the privately-owned Muddy Paws Marsh Wetland

Education Center. Muddy Paws Marsh is a 25 acre wetland and an ongoing restoration site. Since 2001, the first environmental educator, Jared Woolsely, had the passion and desire to encourage Penns Valley students to experience and develop a love of nature first hand. He first brought students to what was then an un-restored field along Route 45. Owned by Greg and Mary Kay Williams, they were in the beginning stages of restoring the property back to its original state of wetlands along beautiful Penns Creek. In 2004, through a partnership with the U.S. Fish and Wildlife Service, Ducks Unlimited, and others, PVCA restored the wetlands by removing the clay tiles that drained the area that was once created for agriculture. Muddy Paws Marsh has offered programs for school groups, community members, and organizations from the Penns Valley School District, Penn State, and the community at large to come and enjoy the wetlands and to appreciate the importance of this native habitat. An annual Frog Festival each June celebrates the wonderful sounds of the Marsh and all the important inhabitants.

### **Publication of Penns Creek Companion (2003)**

In 2003, PVCA received funds from the Centre County Convention and Visitors Bureau and the Centre County Community Foundation to aid in the publication of <u>A Penns Creek Companion</u>, authored by local resident Doug Macneal. This 205 page book provides a guide to Penns Valley's historical, ecological, cultural, and recreational wonders.

### PROJECTS CONTINUED

# Stream Bank Fencing and Agriculture Best Management Practices (2007)

In 2007, PVCA received funds from the National Fish and Wildlife Foundation's Chesapeake Bay Small Watershed grant for continuing the Stream Bank Fencing and Agriculture Best Management Practices project. With these funds, PVCA implemented BMPs on three farms in the watershed. In total, 4,000 feet of stream bank fencing, one stabilized stream crossing, three alternative watering systems, two access lanes, one diversion ditch, one waterway, one filter area, and one roof runoff system were constructed. In total, four acres of riparian area were protected. All of these BMPs are designed to reduce nutrient and sediment loads in area waterways.

### Kline Road Project (2009)

PVCA received funds from the Northcentral Pennsylvania Conservancy and an anonymous donor to implement BMPs on two farms along Penns Creek. This project entailed the construction of a 900 foot mudsill crib and four multi-log vane deflectors along a severely eroded, undercut stream bank.

Partners included the Pennsylvania Fish and Boat Commission's Habitat Division, Centre County Conservation District, and the US Fish and Wildlife Service.

### Thermal Monitoring (2010)

In 2010, PVCA initiated a thermal monitoring program with a network of 10 data loggers that continuously measure stream temperature. Water temperature is an important factor for aquatic life, especially brook trout. Data loggers were placed on Penns Creek, Muddy Creek, and an unnamed tributary to Penns Creek. This project has since grown to a network of 24 data loggers throughout the watershed.

### Agricultural BMPs (2010)

PVCA received a DEP Growing Greener grant to implement agricultural BMPs in the watershed. This project was also made possible by the Penn State Center for Watershed Stewardship, which provided project design and implementation, educational outreach, watershed assessment, and planning.

With these funds, PVCA was able to complete agricultural BMPs on four farms in the watershed. This work included the construction of 8,710 feet of streambank fencing, seven stabilized stream crossings, one alternative watering system, and 2,350 feet of stream bank grading for stabilization. Additionally, fencing was constructed around a pond and a barnyard.

# **Riparian Tree Planting Young Forest Initiative (2013)**

In 2013, PVCA received funds from the Foundation for Pennsylvania Watersheds and the Coldwater Heritage Partnership for a riparian tree planting along Muddy Creek and George's Valley. With these funds, PVCA was able to plant 6,000 trees.

### Annual streambank clean-up

The annual stream clean-up is an ongoing project that began in 1995. This past year, over 50 volunteers helped clean up the watershed.



### ENVIRONMENTAL EDUCATION

PVCA began its Environmental Education Program in 2001. This program allows PVCA to go to area schools in order to teach students about conservation and the environment. Since then, 10,000 children have been educated about the environment.

# K-12 Watershed Education and Outreach (2001-2005)



In 2001, PVCA initiated the Environmental Education Program, supported through a PA DEP Growing Greener grant, in the Penns Valley School District. PVCA employs an educator that works with school administration and staff, instructing students about environmental principles in classroom settings and local, outdoor placebased learning centers, while meeting or exceeding established core educational standards.

With monies from this grant, PVCA also published <u>Waterways and</u> Wildlife: *A Guide to Assessing and Improving Riparian Buffers*, by Nell

Hanssen. This is a manual designed to help landowners and other stewards assess and improve the quality of wildlife habitat provided by their riparian areas.

### Penns Valley School and Community Watershed Education and Outreach (2005-2007)

PVCA received funds from DEP Growing Greener to continue its school and community watershed education and outreach.

PVCA also received funds from the Centre County Community Foundation for its Meaningful Watershed Experiences, an environmental education program for the Penns Valley Area School District.

### **Environmental Education (2006-2010)**

In 2006, PVCA received funds from the Centre County Community Foundation and the National Oceanic and Atmospheric Association (NOAA) to maintain the environmental education program. In addition, these funds were used for teacher training and development, and

curriculum supports.

### Watershed-Based Education k-12 (2010)

PVCA received funds from the Centre County Community Foundation and a DEP Growing Greener grant for supporting the environmental education program.

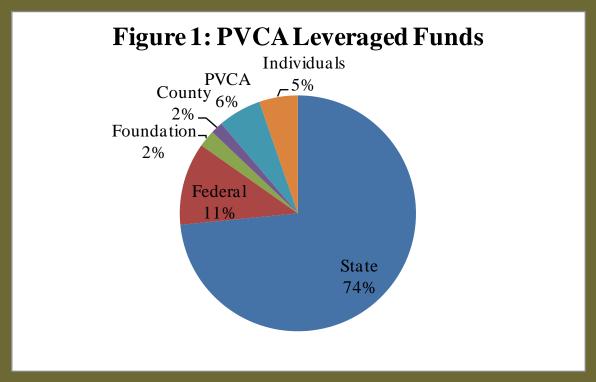
## **Environmental Stewardship Award**

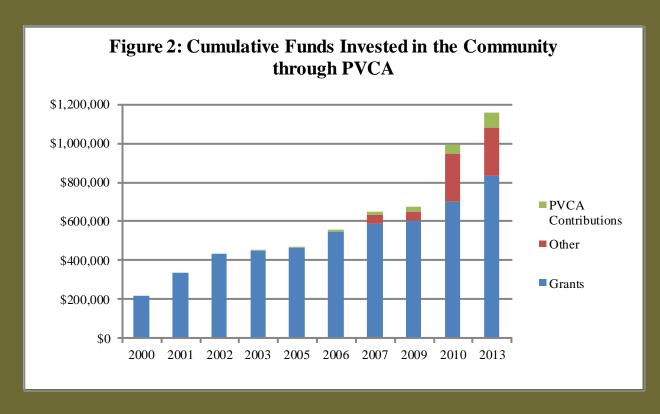
PVCA offers an annual \$300 scholarship to a PVASD graduating senior who demonstrates exceptional engagement and action in accordance with the mission and goals of PVCA.



### **FUNDING**

Since 2001, PVCA has leveraged over \$1.1 million. These funds come from state, federal, county, and foundation resources, as well as individual supporters (Figure 1). Each year, PVCA invests more money into the community (Figure 2).





### FUTURE GOALS AND PRIORITIES

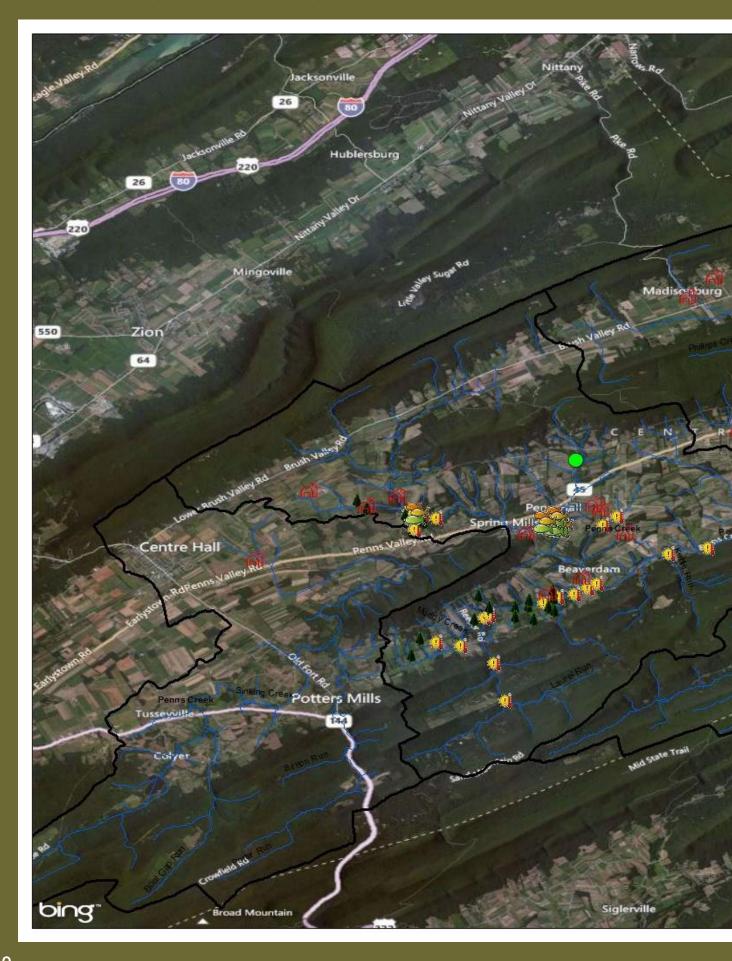
Our Strategic Funding Plan over the next three years is focused on diversifying funding streams in ways that help us to meet the mission of the organization. It projects that one third of our annual budget will come from value-added goods and services, one third from fundraisers and membership dues, and the remaining one third from private and governmental grants. We will continue our focus on youth led, community-based, interdisciplinary education, as well as agricultural BMP's, continued stream assessment, and restoration. PVCA is focused on creating and maintaining the mosaic of habitat for species of concern, including eastern brook trout, American woodcocks, whip-poorwills, and an array of amphibian species, through diverse collaborations with landowners and farmers (Amish and English alike) through the best available science. This next year, PVCA will be launching a community-based low powered radio station, while continuing to build our network with local businesses. Additionally, we look forward to continuing our work with the expanding Amish community, which represents a growing 35% of the youth population

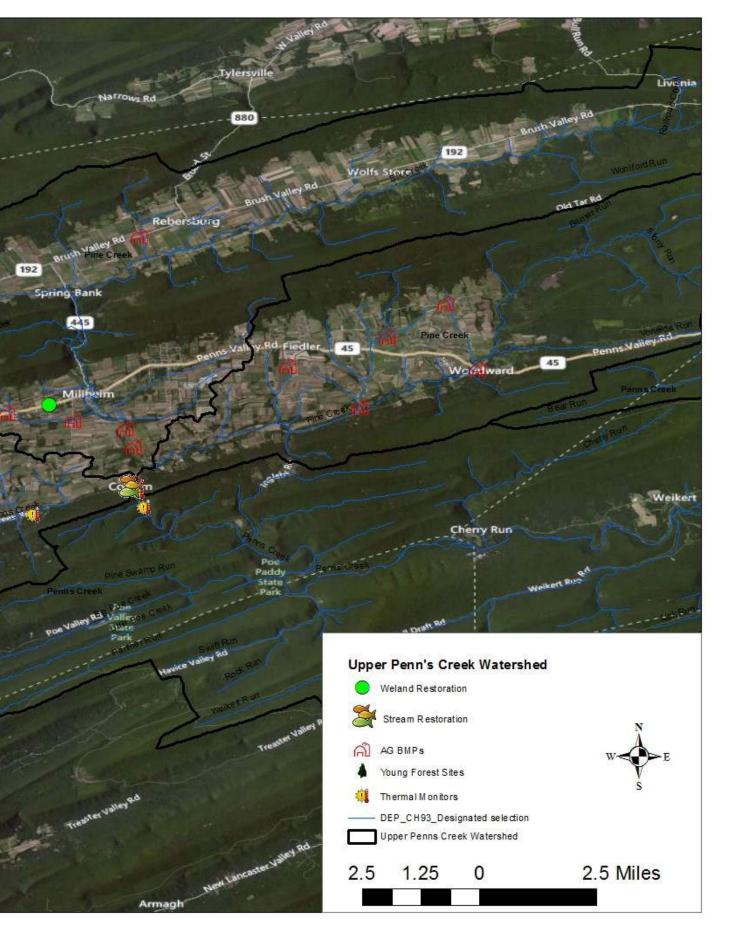
In the fall of 2013, PVCA began a collaborative conversation with Martin's Feed Mill located along Penns Creek in Coburn, PA to increase the demand for their watershed-friendly products. Interviews with our constituencies and local residents have determined a high level of interest in no-spray or non-GMO (genetically modified organism) corn, non-GMO soybeans, layers mix, and locally grown and milled birdseed, which the mill currently does not offer. PVCA can help the mill increase the demand for these products by forming buying clubs and sourcing locally. We envision strengthening connections with farmers and regional consumers through the development of a "Watershed Friendly" line of products. The mill is greatly interested in our added marketing capacity and the social-entrepreneurship we can bring in the development of these products. These products will help us to meet the mission of the organization while generating revenue.

Additionally, PVCA has a long standing history with the Environmental Education Center and Penns Valley Area School District. The Center was started in 1967, thanks to a generous donation from a neighboring property owner, and encompasses 65 forested and rangeland acres intended for use as a natural laboratory. This space was thriving until the mid-1980's, when the school shifted its focus away from vocational learning. PVCA is seeking funds to establish a youth-led Sustainable Forest Management Plan focused on sound ecological, economic, and socio-cultural principles. Working in collaboration with 1,500 Penns Valley students, 225 PVCA member households, Boy Scouts, college groups, and senior citizens from the Senior (Citizen) Environmental Volunteer Corp, the PVCA Environmental Educator and the Education Committee proposes to restore the intended use of the Center including overseeing the propagation of native plants and trees, edible nuts and berries, and the rebuilding of nearly a dozen educational demonstration stations.

The Penns Valley community and future generations of youth will benefit through youth-based environmental education, service learning, and eco-tourism. We envision this project growing into a model sustainable forestry initiative, where income is generated from implementing tours in the Penns Valley Environmental Center and through growing a diverse cross-sector of native hardwoods, evergreens, and fruit and berry trees with high economic value and resistance to disease.

Utilizing an interdisciplinary education, this site will encourage active engagement through the STEAM Model: S(science) T(technology) E (Environment) A (Arts) M (Math). Youth leaders will facilitate the education of the younger students and our community at large, growing our network of sustainability stewards and membership, while supporting our next generation of leaders through sustainable forestry and multi-media.







# Technical and Organizational Assistance Provided by:







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