



ANNUAL REPORT

CELEBRATING 35 YEARS OF CONSERVATION, REHABILITATION, AND EDUCATION



DARBY CREEK VALLEY ASSOCIATION 2018 ANNUAL REPORT



Message from DCVA President Jaclyn Rhoads

DCVA is celebrating its 35th year! In looking back at what shaped this organization's growth, the life and blood of the organization are its supporters. This includes members, board members, and volunteers. This report highlights all the accomplishments as a result of these individuals. As we move forward into the next 35 years, we need to understand our challenges as well as our opportunities.

A challenge that we face like most organizations is building capacity. Over 35 years DCVA has achieved a great deal. For example, over the years we have removed so much trash that we have converted some clean up sites to rain gardens and trees planting sites. Recently DCVA has been implementing green stormwater infrastructure throughout the watershed. With all that we have done, there is still so much more to do especially with regards to trash cleanup and preventing further pollution of our waterways. We also find some of the last large tracts of land in the watershed are threatened with development. Conversion of previously open space to houses, roads and other impervious surfaces will increase stormwater runoff. Replacing rain-absorbing open land with impervious surface over which rain rushes into creeks may increase flooding. Increased stormwater from increased development carries road salt, lawn fertilizers and pesticides and other pollutants into our creeks at a much higher volume. The detrimental effects of these pollutants on stream life and water quality is well known.

All of these challenges also represent opportunities. DCVA is working with the Whetstone Run Coalition to protect a large tract of land in Marple Township. We advocated for open space funding in Delaware County which is anticipated in the new year. We plan to create a new campaign to further clean-up our waterways by advocating for monitoring illegal dumping, increasing fines for those violators, and helping communities move away from single-use plastic. Our new director, Sue Miller, is already helping us to achieve this new vision.

While launching these exciting new initiatives we will continue to focus on rain garden construction, the Streamwatch water quality assessment, education and our other established programs. With your help all of these objectives can be accomplished. We hope you will help us celebrate this new phase of our existence at our 35th Anniversary celebration on May 30th at the Springfield Country Club.

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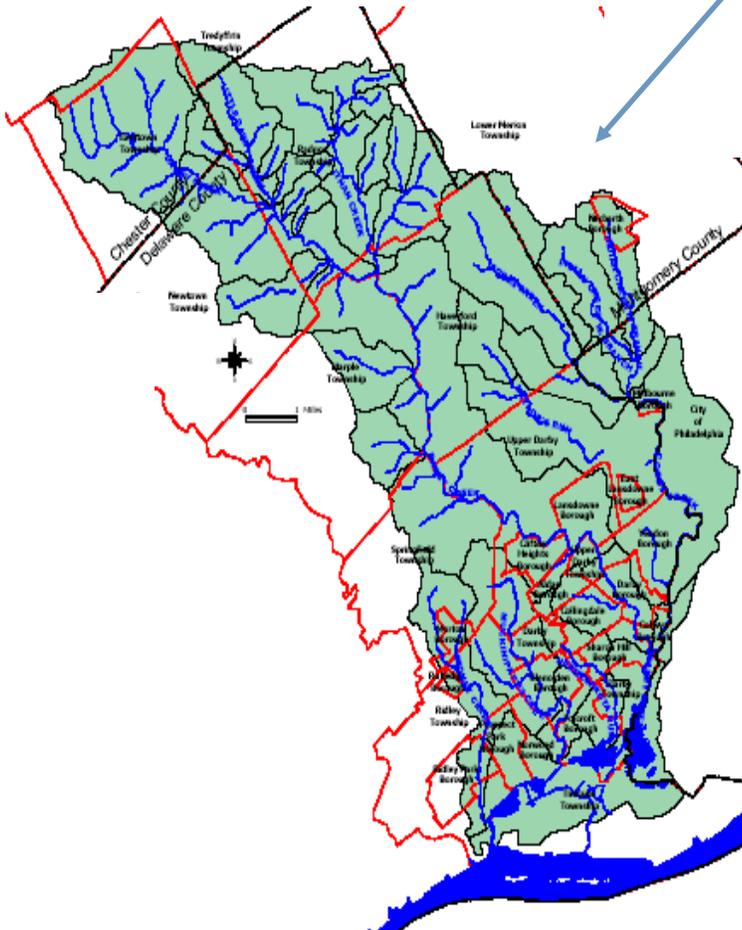
Where is the Darby Creek Watershed?

The Darby Creek watershed covers 77 square miles in southeastern Pennsylvania. The Schuylkill River Watershed is on the north and east and the Crum Creek watershed is found on the west. The Darby Creek watershed is mostly in Delaware County, with headwaters in Chester and Montgomery Counties.



www.delco.gov

A major tributary, Cobb Creek, arises within Delaware County and courses through western Philadelphia County and joins the main Darby just above the John Heinz National Wildlife Refuge (JHNWR). The Darby Creek flows through the JHNWR before entering the Delaware River south of Little Tinicum Island. The JHNWR contains the largest freshwater tidal marsh left in Pennsylvania. The rise and fall of the tides in the lower Darby and its tributaries and the marsh itself make this a unique ecosystem used by migrating waterfowl and home to a diversity of birds, reptiles, mammals, and fish.



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Mission Statement of the Darby Creek Valley Association

The Darby Creek Valley Association (“DCVA”) is dedicated to the protection and enhancement of all of the watershed’s resources, including water, wildlife, historical sites and the flood plain. The organization’s immediate goals are to prevent all forms of pollution in the Darby Creek and its tributaries, to prohibit dumping and construction on the floodplain, and to expand our educational programs for all residents within the watershed. The DCVA also seeks to improve water quality and maintain a debris-free stream through cleanups and public education.

At Right: Gayle Lawrence (standing at left) leading a meeting of the Darby Creek Valley Association at the “Yellow House” on the Scott Estate in Darby, Pennsylvania in the early years of the organization.

Photo provided by Thomas Roy Smith

Below: 1984 Annual Clean up Volunteers

Photographer unknown



Who We Are

The Darby Creek Valley Association was founded in 1984 by citizens from all throughout the watershed. They represented a vast diversity of occupations but they had in common the passion to clean up the watershed and the ability to get things done. The Darby Creek Valley Association upholds that tradition today.



Meadowbrook Run Wetland tion: Phase 2

By Ann Jackson

DCVA collaborates with the parents and students at Sacred Heart Academy to restore Meadowbrook Run wetland on the campus of Sacred Heart Academy. The goal of this project is to reduce storm-water runoff, increase bank stabilization and create upland and wetland meadow habitat for pollinators by removing invasive plants and planting herbaceous native plants that attract pollinators. Further, the goal is to create an outdoor environmental education area for students and the community.



- The vastly overgrown site was cleared of invasive plants.
- The wetland and upland meadows were stabilized by seeding them with native seed mixes.
- 46 trees, 79 shrubs, 72 grass plants, and 767 herbaceous plants for pollinators were planted.



- Funding for this project was provided by donations from individuals of approximately \$2000 and a Delaware County Conservation District Mini-Grant of \$500.00.

By Peter S. Puglionesi

Successful plantings in top two photos above. Parents, students and volunteers planting in bottom photo. *All photos by Ann Jackson*

Accomplishments 2018

Innovative Road-Capture Rain Gardens for Naylor's Run Micro-Watershed: DCVA Completes NFWF Project

Rain gardens are beautiful landscaped areas planted with low maintenance plants that intercept runoff from buildings, driveways and other impervious surfaces before it can reach the storm sewers and streams. Between 2016 and 2018, DCVA partnered with Haverford Township, the Hav-a-Rain Garden Program (a collaboration of the Haverford Environmental Advisory Committee and the Haverford Township Civic Council), and Eastern Delaware County Stormwater Collaborative to build rain gardens in the Naylor's run micro-watershed in the Darby Creek Watershed.

- Project volunteers evaluated 26 residential and commercial properties in the Naylor's Run micro-watershed for possible rain garden installation and constructed 10 rain gardens on private properties in this area, including two non-single family residential properties.
- Eight rain gardens were installed on public park land to receive run-off from public roadways, demonstrating that unsightly grassy areas can be beautified and repurposed to collect, treat, detain, and re-charge stormwater runoff from impervious areas which will reduce peak flow and pollutant load to protect stream water quality.



- DCVA completed this innovative work under a \$99,500 grant by the National Fish and Wildlife Federation and William Penn Foundation and assistance from the Pennsylvania Resources Council.

- DCVA and its partners were required to provide a match of at least \$78,000 in the form of expenditures and in-kind services. While the Township didn't quite hit its budget target, volunteer hour contributions were 373% of budget, pushing the over-all in-kind contribution to over \$122,000.

Accomplishments 2018

Photo by Nora Schmidt

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- Four of the public gardens were designed and installed solely by DCVA, its project partners and volunteers – demonstrating that rain gardens can be installed at low cost with sweat equity provided by Township Public Works Departments and volunteers. Hav-a-Rain Garden is a unique partner that has experience building over 40 rain gardens in Haverford Township at a rate of 10 per year.



Photo by P. Puglionesi

- Hav-a-Rain Garden also taps into a volunteer pool of over 300 people and has begun an apprenticeship program to train those in other townships how to assess, design and build rain gardens (email hava-raingarden@gmail.com with the subject "Apprentice").

Stream Monitoring and Public Education Supported by the WM Penn Foundation

By Derron LaBrake

DCVA and eight other local watershed and conservation organizations have been monitoring water quality since 2014 using support from the William Penn Foundation as part of their Delaware River Watershed Initiative. For the next three-plus years the clusters efforts will focus on:

- Developing robust Citizen Scientist training programs including macroinvertebrate collection and identification, algae monitoring and assessment, erosion, sedimentation and bank pin monitoring, invasive species identification, citizen science engagement, and surveying riparian habitat.
- Municipal Outreach and Education.
- DCVA continues to monitor water quality in Cobbs Creek and a tributary of Cobbs Creek by assessing macroinvertebrate samples and using a hand-held water quality meter using funds received from a William Penn Foundation grant. DCVA also operates a permanently installed water quality meter in the tributary of Cobbs Creek, using funds from Stroud Water Research Center grant.

Accomplishments 2018

Technical Assistance “TAG” Grant

DCVA continued to administer in 2018 a TAG grant from the US Environmental Protection Agency. The purpose of this grant is to fund an environmental consultant to:

- Provide information to citizens on the clean up and hazards of the Superfund site in their area.
- Translate the government and scientific information and terminology.
- Help them to understand the Superfund process.
- Facilitate citizen participation in the decision making process.

Whetstone Run

By Derron LaBrake

Whetstone Run is a creek running through the property in Marple Township that the Archdiocese of Philadelphia has placed on the real estate market. DCVA's studies of the southern tributary of Whetstone Run indicate that it is one of the watershed's highest quality streams found to date.

- DCVA petitioned the Pennsylvania Department of Environmental Protection (PADEP) in August 2016 to change the regulatory status of the southern tributary of Whetstone Run to protect this tributary.
- PADEP's draft response to DCVA's petition in June 2018 indicated that the agency intended to not change the designation.
- DCVA objected to their draft report over several technical issues. Numerous other individuals and organizations voiced their opposition to PADEP's proposal. The comment period closed in October 2018 and DCVA is awaiting a reply from PADEP.
- DCVA's efforts have contributed to a state-wide movement to address some of the deficiencies that exist when PADEP is petitioned to re-classify a stream.
- Our efforts contributed to the recent issuing of a \$5,000,000 grant from the William Penn Foundation that will be used to find ways to address the deficiencies of the stream reclassification process.

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Annual Stream Watch

By Alan Samel

Collecting, identifying and counting macroinvertebrates (stream insects and other invertebrates large enough to be seen with the naked eye or under low magnification) is a very well established technique for assessing water quality. Bathed their entire (juvenile) lives in creek water, they experience water quality every day. The presence and abundance of species that are tolerant and intolerant of pollution and stream impairment provides an assessment of water quality that complements or even replaces water quality assessment by studies of water chemistry which are costly and impossible to do on every creek. For 14 years the members of the Darby Creek Valley Association have carried out intensive macroinvertebrate sample collections and identifications.

NWnature.net



- Annual Stream Watch stream samples were collected May 5, 2018. We took 10 samples; two from each of five sites up and down Darby Creek. Thank you to the small army of volunteers who helped make this a great day. It

was a good day to get wet! It was overcast and about 65°F. Not a perfect day, but a good day to take stream samples. Samples were taken from five locations on Darby Creek: Bartram Park in Darby, Darby Creek Road in Havertown (downstream from the Haverford Reserve), Skunk Hollow in Radnor, the Brandywine Preserve at Waterloo Mills in Easttown, and the Swedish Cabin in Upper Darby.

- 11 volunteers of all ages identified macroinvertebrates at the Annual Insect Identification Workshop January 12, 2019 at the Haverford Reserve.



NABS (www.benthos.org)

- Macroinvertebrates were analyzed for the five locations sampled on May 05, 2018

Stream Watch Volunteers Photo provided by Alan Samel

Accomplishments 2018

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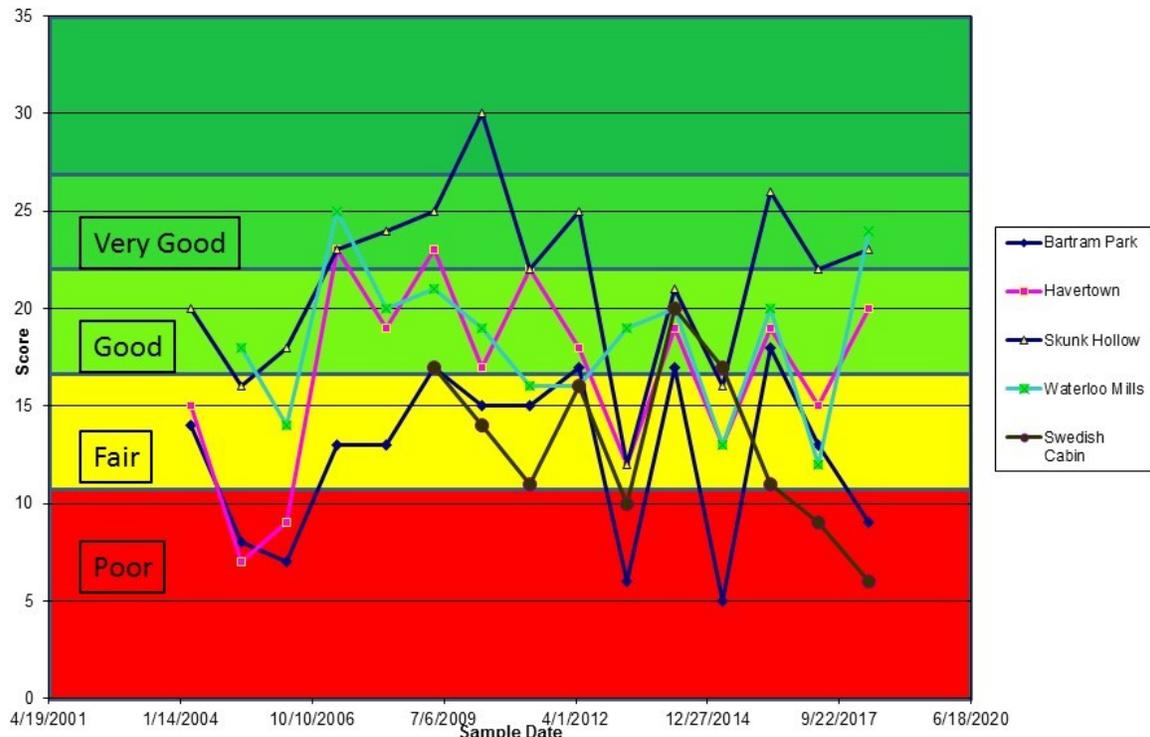


From 14 years of sampling a trend of the stream health at each site has been determined. It's a way of getting the big picture from a lot of very small bugs. The 2018 samples showed decreases in water quality at two of the five sample sites; Bartram Park and the Swedish Cabin sites (Figure 1). This has been a consistent downward trend at the two sites for the past three years at the Bartram park site and four years at the Swedish Cabin site. DCVA needs to investigate and start a dialogue with local government officials.

While we have seen down years followed by good years, and vice versa, a decline over at least three years does get our attention. Water quality trended up at the Haverford, Skunk Hollow, and Waterloo Mills sample sites. But one year does not tell the complete story; it takes sometimes three to five and possibly more years to determine if the water quality at a specific sample site is increasing or decreasing.

Photo of stream watch volunteers by Alan Samel

Macroinvertebrate Analysis



Macroinvertebrate Data from 2001 until 2017 from five collection sites in the Darby Creek Watershed. Provided by Alan Samel.

Darby Creek/Cobbs Creek Watershed Wide Annual Cleanup April 2018

By David Bennett, Chair

The watershed cleanup is the longest standing event since DCVA's founding beginning in 1984 and has continued every spring until the present. Removing trash and litter from the streams and their banks is within the prime mission of DCVA and is so important for keeping the waters, parks, and lands clean, safe, and beautiful. Dumping of construction waste and food packaging in our open space is an increasing problem on the international, national, and local level.



- The cleanup has grown to include 38 sites in Delaware County, Philadelphia County, and Montgomery County.
- The mainstem of the Darby plus tributaries within the Darby Creek/Cobbs Creek Watershed--approximately 50 miles of streams and 10 miles of roadsides are included.
- Over 370 volunteers participated in 2018 and more are recruited every year.
- Supported by Keep Pennsylvania Beautiful and its parent Keep America Beautiful which provide dumpsters and obtain trash bags, traffic vests, and work gloves from Penn DOT.
- Also supported by the Delaware County Conservation District which provides trash bags and local municipalities which help to pick up the trash.



Photo above by fellow volunteer

Accomplishments 2018

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- In addition to individual volunteers, Boy Scouts and Girl Scouts, public and private school groups, Philadelphia Parks and Recreation, Delaware County Department of Community Service, Delaware County Parks and Recreation, local businesses, churches, township and borough Environmental Advisory Committees all send volunteers.
- Over 9 tons of trash was collected in dumpsters and trash bags in 2018.



Above: Alan and Jan Marie Rushforth clean up the Blue Route

At Left: Photo of clean up volunteers by a fellow volunteer

Reforesting the Darby Creek Watershed

This year, like every year for many years, Clyde Hunt has lead DCVAs programs to plant and maintain trees and shrubs in the Darby Creek Watershed. This year 23 trees were planted in the watershed.



Clyde Hunt (center in green vest) planting trees with volunteers. Photo provided by Clyde Hunt

Accomplishments 2018

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AWARDS RECEIVED in 2018

DCVA Second Vice President Derron

LaBrake is a certified wetlands scientist and first vice president of DCVA. Derron's work as the lead designer of green stormwater infrastructure project was recognized by the Sustainable Business Network of Greater Philadelphia and the Green Stormwater Infrastructure Partnership with an Excellence in Green Stormwater Infrastructure (GSI) award for a Private Project. Derron's expertise has been a great benefit to DCVA in his work on the William Penn Foundation funded projects in the watershed, and other DCVA initiatives.



From left to right: Harriet Henry, Lauren McGrath, Derron LaBrake, and Charlie Coulter

Photo by Alan Samel



DCVA President

Dr. Jaclyn Rhoads was one of two awardees for the PennFuture "Woman of the Delaware River Watershed" for 2018 at the Independence Seaport Museum on April 19, 2018. Jaclyn is also president of the Friends of the Heinz Refuge. She is assistant executive director at the Pinelands Preservation Alliance.

Jaclyn Rhoads (at right) with other awardees: The Honorable Donna Bullock, PA House of Representatives, Phila. County (left) and **Dulcie F. Flaharty**, former Vice President of Community Relations for Natural Lands Trust and former executive director of Montgomery County Lands Trust (center).

Photo by K. Doms

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DCVA Third Vice President Earl Wilson

is a retired Philadelphia Public School science teacher, who is a member of the Eastwick Action Committee, Eastwick Friends and Neighbors Coalition, Darby Creek Valley Association and the Eastwick Lower Darby Creek Area Community Advisory Group. Earl received the Darby Creek Valley Association Ribbon of Green Award

for his lifelong dedication and commitment to over forty years of service to Eastwick and the surrounding communities. Nothing seems to slow Earl down as he continues to forge ahead with his journey of teaching and community service.

The Darby Creek Valley Association was very honored to receive the 2018 Organizational Stewardship Award from the Chester Ridley Crum Watershed Association



HOW YOU CAN GET INVOLVED

DCVA is looking for volunteers interested in helping and leading efforts to protect and enhance the Darby Creek watershed and its historical sites. If you would like to volunteer please contact DCVA President Jaclyn Rhoads at president@dcva.org or DCVA Director Susan Miller at 484-222-2502 or suedcva@gmail.com

***Darby Creek Valley Association
P.O. Box 732
Drexel Hill. PA 19026
www.dcva.org***

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Financial Report

Grants and Contributions	\$104,222.00
William Penn Foundation.....	\$7150.00
US Environmental Protection Agency Technical Assistance Grant.....	\$10,359.00
Contributions.....	\$46,372.00
Dues Revenue.....	\$4419.00
Investment Revenue.....	\$5464.00
Interest.....	\$34,231.78
Total Expenses including management, newsletter, canoe event, clean-up, etc.....	\$71,209.00
Land Holdings.....	\$27,725.00
Total Assests beginning of 2017.....	\$263,351.00
Total Assests beginning of 2018.....	\$324,939.00

Darby Creek Valley Officers

- Jaclyn Rhoads, President
- Alan Samel, First Vice President
- Derron LaBrake, Second Vice President
- Earl Wilson, Third Vice President
- Ann Jackson, Secretary
- Richard Carroll, Treasurer



Tom Roy Smith as Wm Penn

Board of Directors

- | | | |
|----------------------|------------------|------------------|
| Jamie Anderson | Jeannette Guess | Scott Maits |
| David Bennett | Richard Horowitz | Robin Mann |
| Timothy Denny | Clyde Hunt | Antonia McIntosh |
| Timothy Devaney | Barbarann Keffer | Martin Milligan |
| Kathryn Goddard Doms | Rosemary Kesling | Peter Puglionesi |
| Carl DuPoldt | Gerry Krieg | Mary Westervelt |

Board of Directors Emeriti

- | | | |
|----------------------------|-------------------------------|--------------------------|
| Anne Ackerman, deceased | John Furth, deceased | Andrew Saul |
| Joseph Ackerman, deceased | Jan Haigis | Thomas Roy Smith |
| Edward Ambrosio | John Haigis | James Stultrager |
| William Buchanan, deceased | Thomas Houghton | Fritz Thornton, deceased |
| David Cannan | Carol Laws, deceased | Olga Thornton |
| Robert Doherty, deceased | Jan Marie Rushforth, deceased | Gregory Vitali |
| William Frasch, deceased | | |