

## West Nile & Zika Virus

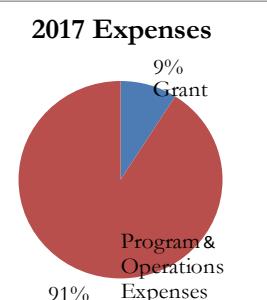
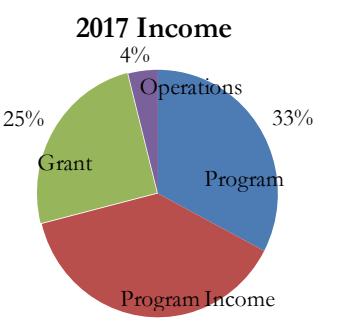
Evan Corondi

The Berks County mosquito season resulted in 1,746 samples collected, of which 630 were tested for mosquito-borne diseases. In total 53,985 mosquitoes were collected. Of the samples tested for WNV, there were 112 positives. This is an increase in positive mosquito activity from the 2016 season which only yielded 40 positive specimens.

Frequent rainfall increased mosquito breeding habitat ultimately increasing the mosquito population and presence of mosquito-borne diseases during the 2017 season. Five birds were sampled and tested for WNV, all of which returned positive. There was one human case in 2017. Furthermore, the earliest mosquito positive recorded was collected 04/18/2017 in the City of Reading.

BCCD held its first tire collection in June in order to reduce breeding habitat. There were over 2,800 or approx. 129,960 lbs. of tires collected that filled 2 - 53' tractor trailers and five large roll-off containers.

Adult mosquito control was conducted through the use of the Truck-Mounted Ultra Low Volume (ULV) sprayer or barrier treatments, using the new STIHL SR450 Backpack sprayer.



1238 County Welfare Road, Leesport, PA 19533  
610-372-4657

For more information visit: [www.berkscd.com](http://www.berkscd.com)

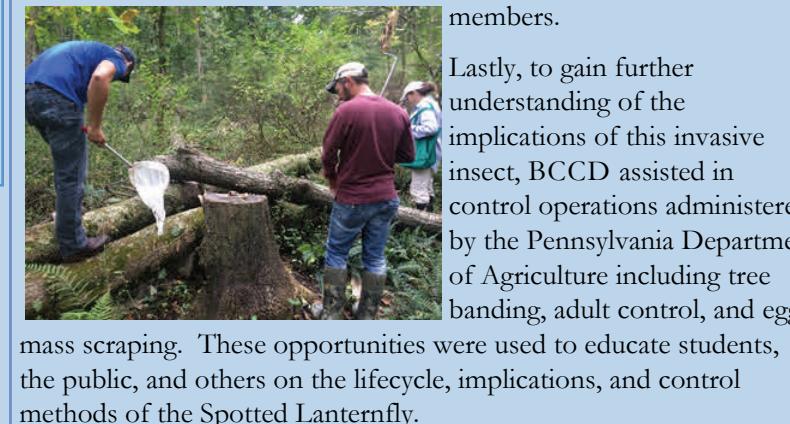
## Spotted Lanternfly

Throughout the year the Berks County Conservation District spread awareness of the Spotted Lanternfly in a variety of ways including educating students at the DCNR Junior Forum, which was presented to 120 seventh grade students over 3 days. They went on a "field trip" at Nolde park and in total removed 300 adult males and females and 5 egg masses.



General public education included public meetings, workshops, or social media. The Conservation District presented at public events such as *Go Day* at Blue Marsh Lake which reached approximately 40 children and adults; the Berks Keim Festival in Oley reaching 20 children and adults; a Public officials' meeting for township and county officials from a wide area, some as far as Monroe and Philadelphia counties, brought approximately 100 attendees; and at the Berks Nature Breakfast with about 150 in attendance.

Another way that awareness was spread of this invasive insect was by informing and training industry professionals and other working groups. This was accomplished by a monthly conference call, providing information at the PA Greenways & Trails summit in Reading where approx. 40 people were reached, and presenting to the Penn State Master Watershed Stewards which reached 25 of its members.



Lastly, to gain further understanding of the implications of this invasive insect, BCCD assisted in control operations administered by the Pennsylvania Department of Agriculture including tree banding, adult control, and egg mass scraping. These opportunities were used to educate students, the public, and others on the lifecycle, implications, and control methods of the Spotted Lanternfly.

## Affiliate Membership Program

### Champions of Conservation:

Allegheny Towing & Salvage Company,  
Berks County Department of Agriculture,  
Cushion Peak Rod and Gun Club,  
and Pine Creek Valley Watershed Association  
along with 55 individuals and organizations gave donations for  
the continuation and growth of the work of the  
Berks County Conservation District's mission to serve the  
community by protecting natural resources.

### Defenders of Conservation:

Barwis Construction LLC  
Berks County Planning Commission  
Trumbull Corporation



**BERKS COUNTY  
CONSERVATION DISTRICT**  
**Since 1946**

# 2017 ANNUAL REPORT

The Berks County Conservation District (BCCD) faced many challenges and celebrated much success in 2017.

Our **Bite of Berks Banquet** and **70 Year Celebration** was a great success. Looking back to our humble beginnings and forward to our District today makes me proud of how seriously our residents regard our soil and water resources. Our **Tree Seedling Sale** and **Backyard Basics** celebration raised scholarship monies, and we were awarded a proclamation from our Commissioners. Our educational programs were expanded to fund **Trout in the Classroom** into every school in the County. We continued our core programs and plan writing assistance. For the very first time all of our AG staff are plan certified.

Perhaps the biggest disappointment was the unthwarted expansion of the invasive Spotted Lanternfly. We are and will continue to work with our local and national partners to formulate a statewide strategy to eradicate and control invasive species that threaten our resources - our industries - our revenue - our good standing as a leader in the export of hardwoods and agricultural products, and our very way of life.

Let the good fight continue.

--Piper Sherburne, Chair

### Annual Award and Scholarship Banquet



### Macro Invertebrate Stream Study



## Agricultural Team

**Joshua Hanna - Ag Supervisor; Olivia Carlson, Christine Griesemer, Nicole Kerstetter, Jeff Overstreet, Rita Seidel**

In 2017 the team completed 59 Conservation Plans protecting 2,645.5 acres from soil erosion and nutrient runoff. As a result of those Conservation Plans, 40 Best Management Practices (BMPs) were planned and implemented on 22 operations with assistance from our partnering agencies such as PACD and NRCS. These BMPs were designed to treat resource concerns that if left untreated, could have a negative impact on water quality in Berks County and beyond.

The team reviewed 21 Nutrient Management (NM) Plans that were approved by our Board of Directors, plus conducted 48 Status reviews. In total, Berks County currently has 73 operations in the NM program, of which 32 are Concentrated Animal Feeding Operations (CAFOs), and 10 are volunteers to the program (VAOs).

As always, BCCD educated and kept Berks County's farmers up-to-date on the rules and regulations that affect them.

Through various outreach events and workshops we reached over 300 members of the farming community.

In 2017 a total of \$16,000 of Chesapeake Bay Special Projects funding was utilized for Conservation Plan Implementation in the Conestoga Creek watershed. The available funds were utilized to construct a manure storage facility. Berks County Conservation District applied for and was awarded over \$580,000 in grant money through the Growing Greener program for BMP implementation on 3 operations, two in the Chesapeake Bay watershed and one outside the Bay which covers multiple watersheds and drinking water supplies including: the Sacony/Maiden Creek, the Perkiomen West Branch, the Manatawny, and the Little Lehigh watersheds. This project will have a positive impact on drinking water supplies including the City of Reading, Borough of Kutztown, the City of Allentown, Green Lane Reservoir, and the City of Philadelphia. In addition to Growing Greener, these projects are also being cost shared through the NRCS EQIP program.

Work continued on a \$111,000 3-year Growing Greener Grant from PA DEP for which the BCCD is working with mushroom operations to get them into compliance with state guidelines. Site visits and surveys were conducted at several mushroom facilities in 2017 to implement BMPs that will address runoff and waste products from the operations.

**Below Left:** Unimproved Animal Heavy Use Area

**Below Right:** Prior to construction of the Improved Heavy Use Area, a survey was conducted which was used to design the project. Excess accumulated manure was removed and spread on nearby agricultural fields. Next, concrete was poured to construct the heavy use area and a new manure storage according to NRCS standards and specifications.



**DEDICATED TO THE ENCOURAGEMENT AND INSTRUCTION OF THE WISE  
STEWARDSHIP OF THE SOILS AND WATERS OF BERKS COUNTY SO THAT...**

## Urban Team

**Eric Hout - Team Leader;  
Shane Conville, Kelsey Schwenk, Brian Shields**

In 2017, over 1,235 acres of disturbed soils were reviewed in E&S plans, NPDES permit applications and Chapter 105 General Permit registrations. The implementation of these plans will result in approximately 4.5 million gallons of stormwater being treated by Best Management Practices (BMPs) for every one inch of rainfall. BCCD provided approximately 750 staff hours of technical assistance for landowners, plan preparers, and construction contractors.

The Sunoco Pennsylvania Pipeline Project crosses through 7 municipalities within Berks County, covering 233 acres. During the course of this project 81 streams were crossed using either the horizontal direction drilling method, open cut method, or traditional boring method. The streams varied from intermittent to perennial, and in size from a small 2 foot bank width, to a very large 25 foot bank width. Classifications of these streams ranged from warm water fisheries all the way through to exceptional value. Additionally, 41 wetlands were crossed during the course of this project. At the completion of the project, more than 20 miles of new pipeline will have been installed through Berks County with two pipes of 16 inch and 20 inch sizes.



Before: Trenching for the Pipeline; grading after pipe has been installed.

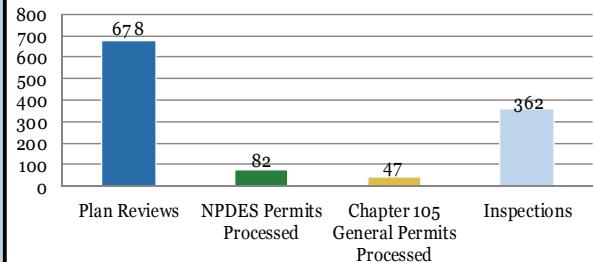


2017/08/16 11:15  
After: Final stabilization with erosion blanketing and straw.

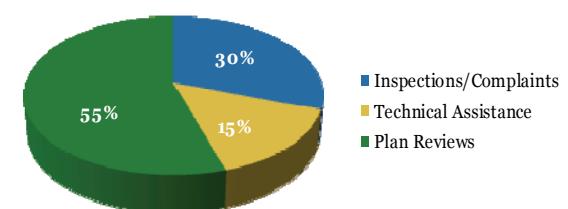


2017/12/04 12:37  
Skimmers (shown in white) functioning in a large sediment basin.

### Urban Team: Plan Reviews & Inspections



### Activities vs. Time Analysis



**... PRESENT AND FUTURE GENERATIONS MAY HAVE HEALTHY LAND TO LIVE  
AND WORK ON AND CLEAN WATER FOR DRINKING AND RECREATION.**

## Education and Outreach

### Evan Corondi, Kent Himelright & Staff

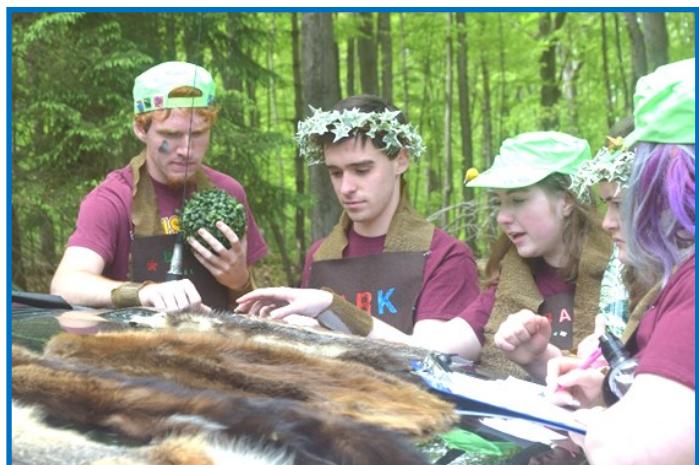
In 2017, the Berks County Conservation District again increased the amount of people that have heard the conservation message. Due to the success of various partnerships, over 3,100 people received direct education and outreach. The 31st Annual Berks County Envirothon saw a record number of participating students and had a total of 3 new schools participate. *Aquapolluzzza* was an event developed by several major contributing partners, including BCCD, in an attempt to educate elementary aged students about the importance of clean water. This year *Aquapolluzzza* was scaled back to 125 students in order to be more manageable and to concentrate the message of clean drinking water. BCCD hosted the 2nd annual *Paint the Rain Contest* and had 14 barrels from 7 different schools entered, which generated hundreds of dollars for the Scholarship Fund, all while educating many people on the importance of point source pollution and run-off. Don Hartman Conservation Leadership School has been tailored to a 3-day program. Attendance is expected to increase in the following years as it has from 2016 to 2017.

ENVIROTHON: 245 students educated

DON HARTMAN: 18 students

SCHOOL & YOUTH: 1,986 youth educated

ADULT EDUCATION: 1,153 adults received information relating to MS4, agriculture, rain barrels, Spotted Lanternfly, West Nile Virus, and BMPs at our workshops and events.



### Hickory Road



⇒ Before  
After ⇒



### Richland Road



## Dirt, Gravel and Low Volume Road Program

### Dean Druckenmiller

Goal of the Dirt & Gravel Road Program is to aid in the reduction of pollution to nearby streams, while improving the rural road network. Two Low Volume Road and three Dirt and Gravel Road projects were completed in 2017. The project value of the low volume road projects was \$171,600. The Dirt and Gravel projects totaled just under \$100,000. Two low volume road projects completed in Marion Township were Hickory Road and Richland Road. They required much needed improvements and assistance in reducing sediment impacts in the tributaries to the Tulpehocken Creek.



**BERKS COUNTY  
CONSERVATION DISTRICT**

Since 1946

## Watershed Coordination Efforts

Kent Himelright

### 2017 BCCD Water Quality & BMP Implementation Grants

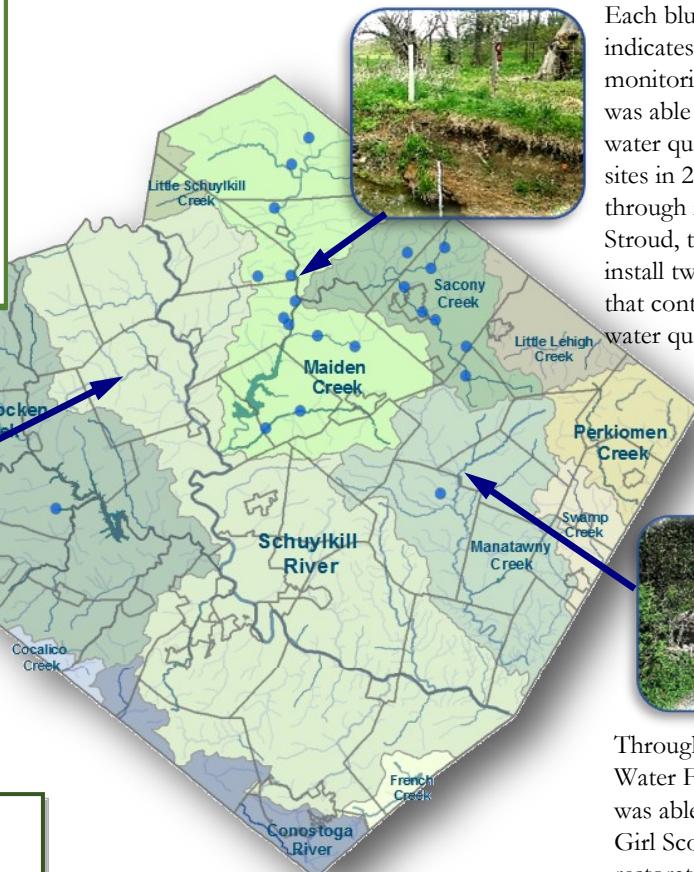
Grants Applied For	10
Grants Awarded	7
Total Amount Awarded	\$ 668,370.00
Total amount of Grant funds utilized for WQ Improvement & BMP Implementation	\$ 329,976.96

Each blue dot on the map indicates a water quality monitoring site. The BCCD was able to assess surface water quality from over 20 sites in 2017. In addition, through its partnership with Stroud, the BCCD was able to install two stream stations that continuously monitor water quality.



Through a SRRF grant, the BCCD was able to install over 300 ft. of streambank protection on the Irish Creek that was also planted in a CREP Riparian Forested Buffer.

In 2017, BCCD took on the role as the Source Water Protection Coordinator for the Berks County SWP Program. The countywide SWP plan covers almost 30 drinking water systems, and over 260,000 Berks County residents.



Through the BCCD Clean Water Fund Jenna Ulrich was able to complete her Girl Scout Gold Star stream restoration project on Bieber Creek. The Creek is Exceptional Value (EV)

This year approximately 4,850 plants were sold during BCCD's Annual Seedling sale which will provide soil retention, shade, fruit, habitat, and improve water and air quality in Berks County.

### Board of Directors

Piper L. Sherburne, *PM*  
*Board Chair*  
Troy Alderfer, *FM*  
*Vice Chair*  
Brian D. Boyer, *PM*  
*Treasurer*  
Larry Gelsinger, *FM*  
Christian Y. Leinbach, *CM*  
Joseph Rosenbaum, *FM*  
Troy Alderfer, *FM*

*Farmer, Public or Commissioner Member*

### Associate Directors

Jason Bailey  
T. John Bicksler  
Leonard Good  
Larry Kehl  
James McCarthy  
Steve Miller  
John Rost  
John Schueller  
Ross Stowell

### BCCD STAFF

#### Operations:

Dean Druckenmiller      District Executive  
Tammy Bartsch      Office Manager  
Deborah Winkler      Administrative Assistant  
Kent Himelright      Watershed Coordinator  
Evan Corondi      WNV/Vector Control & Outreach Coord  
Taylor Moyer      Mosquito Borne Disease Control Tech & Riparian Buffer Tech

#### Ag Resource Conservationists:

Joshua Hanna      Ag Supervisor  
Olivia Carlson, Christine Griesemer,  
Jeff Overstreet, Rita Seidel

#### Urban Resource Conservationists:

Eric Hout      Team Leader  
Kelsey Schwenk, Brian Shields      as of 12/31/17