



# Montgomery County Conservation District

## Annual Report 2018

*To protect and improve the quality of life of the residents of Montgomery County and surrounding communities by providing, in cooperation with others, timely and efficient service, education and technical guidance for the wise use of our soil, water and related resources.*



# Montgomery County Conservation District

143 Level Road

Collegeville, PA 19426

610-489-4506

[www.MontgomeryConservation.org](http://www.MontgomeryConservation.org)

## 2018 Montgomery County Commissioners

Valerie A. Arkoosh, MD, MPH, Chair

Kenneth E. Lawrence Jr., Vice Chair

Joseph C. Gale, Commissioner

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# BOARD OF DIRECTORS

## 2018 Board Members

Sara Erlbaum, Chair  
Monica Burcik, Vice Chair  
Eliza Walbridge, Secretary  
Christopher Canavan, Treasurer  
Valerie A. Arkoosh, MD, MPH  
Diane Diffenderfer  
Andrew Frankenfield  
Jim Myers  
Timothy Woodrow PE

## Staff Members

Jessica Buck	District Manager / Ag Conservation Specialist
Eric Konzelmann	Assistant District Manager
Karen Thompson	Administrative Assistant
Alyssa Linker	Part-Time Administrative Assistant
Cody Schmoyer	Resource Conservationist
Jeffrey McKenna	Resource Conservationist
Rachel Hendricks	Resource Conservationist
Shannon Healey	Resource Conservationist
Brian Vadino	Watershed Specialist
Carl Hollenback	Engineering Technician
Gary Kulp P.E.	District Engineer

## MESSAGE FROM THE MANAGER

Greetings,

2018 brought forth a variety of positive and challenging changes to the Montgomery County Conservation District. Overall, it was a very successful and productive year.

I was delighted to accept the role of District Manager in March of 2018, and what an exciting year it had been, learning the new position and working hard to lead the District towards new goals, successes and growth.

Fortunately, we did *not* experience change in terms of staff turnover, and we continued to retain our wonderfully dedicated staff as well as added a part-time Administrative Assistant to assist with the increase in administrative workload of the NPDES program.

In 2018, MCCD added to our social media presence with the addition of a Facebook page to increase education and outreach throughout the community. Change is also ongoing with our office building as we move forward with an interior and exterior remodel.

We also saw change in 2018 with our permitting workload. The month of May was the busiest month in District history in terms of the number of incoming plans, but as development slowed entering winter, so did the number of submissions. We remain below average beginning 2019.

The spotted lanternfly remained a significant invasive pest of concern in 2018 in Montgomery County. The entire County entered the quarantine area, and MCCD participated in education and outreach to residents under the direction of Penn State Extension and the Pennsylvania Department of Agriculture.

Montgomery County had another great year participating in the Tree Vitalize Watershed program, assisting partner groups in implementing 13 riparian planting projects, investing over \$81,000 of grant funding, and planting over 3,887 trees and shrubs throughout Montgomery County.

2018 also brought change in weather. It was a year of rain, rain, and more rain. The record-breaking rainfall we received presented numerous challenges to the development community, residents, landowners, and farmers alike. Wet ground and seemingly-constant storms slowed construction, challenged E&S controls, as well as led to crop failures and farming struggles. As we approach spring, I feel confident in saying that we all have our fingers crossed for a more average year in terms of weather.

I am thrilled to have the opportunity to provide leadership, in cooperation with a wonderful Board of Directors and dedicated staff, to the Montgomery County Conservation District and residents of Montgomery County.

Sincerely,

Jessica Buck  
District Manager

## CHAPTER 102/NPDES

2018 Program Data	
Individual NPDES Permits Acknowledged	6
General NPDES Permits Acknowledged	130
Administrative Plan Reviews	350
Technical Plan Reviews	577
Site Inspections	488
Technical Assistance Efforts Provided	38,106
Complaints Received/Responses	60
Total Project Acres	5,616
Disturbed Acres	2,427

# ENVIRONMENTAL STEWARDSHIP AWARD



2018 Award Winner

## Environmental Stewardship



### 2018 Montgomery County Environmental Stewardship Award

#### Andorra Creek Floodplain Restoration Project

The Andorra Creek Floodplain Restoration Project, located in Whitmarsh Township, received the 2018 Environmental Stewardship Award for a successful floodplain restoration and wetland creation project along the Andorra Creek to control streambank erosion and sedimentation, reconnect the channel to the surrounding land, and mitigate flooding. The creek, which drains a 632-acre watershed, is impaired due to siltation and excessive stormwater runoff. This project involved considerable effort by the township, which received a \$300,000 grant from the Watershed Restoration and Protection Program. At the creek headwaters, undersized outfalls were replaced, and a wide, flat floodplain was created with shallow marsh systems planted with emergent vegetation, restoring flood storage capacity. All work was done in accordance with the Pennsylvania Stormwater Best Management Practices (BMP) Manual and the Keystone Stream Team's Guidelines for Natural Stream Channel Design for Pennsylvania's Waterways.

Project benefits include increased flood storage, flow attenuation, improved filtration, increased travel time, reduced streambank erosion and sediment load, and nutrient filtering and biological uptake. This successful project has restored much of the creek's habitat and ecological function and has created an aesthetically pleasing environment. It is an excellent example of how municipal action can benefit both the environment and residents.

## Healthy Watersheds, Healthy Communities

MCCD Watershed Specialist, Brian Vadino, works to protect and improve the quality of our water resources through education & outreach to residents of the county, watershed assessments, planning, restoration projects and technical assistance. The Conservation District supports the work of nonprofit watershed organizations and provides technical assistance to public and private entities to improve our water resources.

## Education and Outreach Events

### **Workshops/Presentations Delivered:**

- PSU Master Watershed Stewards Training Session at John James Audubon Center for Art and Conservation at Mill Grove—August 2018 (16 attendees)
- NPS Pollution Prevention Education for Businesses in King of Prussia—April 2018 (66 attendees)
- NPS Pollution Prevention Workshop for Montgomery Co. EAC's—September 2018 (14 attendees)
- Presentation to Pottstown Area Regional Recreation Committee.—July 2018 (8 attendees)
- Conshohocken Borough Rain Barrel Workshop—August 2018 (11 attendees)

### **Educational Outreach to Schools (Presentations):**

- Holy Rosary Regional Catholic School—March 2018 (120 students)
- Caley Elementary School—February 2018 (80 students)
- Upper Perkiomen High School "Trout in the Classroom" field day—April 2018

### **PPL Electric Utilities Community Roots Program:**

- 150 Native trees and shrubs provided to 11 partnering municipalities and local watershed organizations—April 2018

### **MCCD Staff Stream Cleanup:**

- 500 lbs. of trash collected from Evansburg Point Park , Skippack Creek—April 2018

### **Tabling/Display Events:**

- 2018 Watershed Congress Along the Schuylkill River—March 2018 (175 attendees)
- Earth Fest Events at Temple University (Ambler) and Ambler Borough—April 2018 (over 500 adult and student attendees)
- Montgomery County Science Teachers' Association Mini-Conference—October 2018 (approximately 200 attendees)

# WATERSHED MANAGEMENT



Top: Brian Vadino, Watershed Specialist, providing pollution prevention education to students

Bottom: Upper Perkiomen Valley High School students assist with invasive removal at a stream restoration project in East Greenville, along the Perkiomen Creek .

# WATERSHED MANAGEMENT

## TreeVitalize Watersheds

The TreeVitalize Watersheds program focuses on tree planting along stream corridors, wetlands, adjacent upland areas, headwaters and naturalized stormwater basins. Through this program, dozens of such watershed restoration projects are conducted throughout the five-county Southeastern PA region every year.

The program receives funding from the Pennsylvania Department of Environmental Protection and corporate sponsor Aqua PA. The program is also supported through in kind contributions from various partners. Montgomery County Conservation District partners with the Pennsylvania Horticultural Society to administer the program in Montgomery County.

In 2018, Montgomery County Conservation District assisted local project partnering organizations in completing thirteen riparian planting projects, through which the following results were achieved:

### 2018 Totals:

- More than **\$81,000** grant funding invested
- More than **\$91,000** match from local partners
- **3,887** native trees and shrubs planted
- **18.96** acres restored
- **2,351** volunteer hours reported



Upper Perkiomen Valley High School students assist with a riparian buffer tree planting project along the Perkiomen Creek.

# AGRICULTURAL CONSERVATION

## Nutrient Management/Manure Management

Montgomery County Conservation District is a delegated authority for agricultural-based programs. These programs are implemented through education and outreach, technical assistance and voluntary compliance efforts. The Conservation District is delegated the Nutrient Management/Manure Management Program through the State Conservation Commission and the PA DEP.

## Farmer Workshops

MCCD partnered with Penn State Cooperative Extension to host a pasture & manure management workshop. Ag Conservation Specialist, Jessica Buck, also partnered with Lehigh County Conservation District to present at the 2018 Southeast Crops Conference, on the topic of importing and exporting manure, and nutrient management requirements.

MCCD continued to loan out their no-till drill/interseeder to farmers, for conservation planting and interseeding, as a demonstration tool. An interseeding demo was held in July, and the drill was on display at the county fair in August. The drill was used for no-till planting, pasture renovation, seeding of cover crops, and planting a native pollinator plot.

The equipment - a 5.5' Esch no-till drill with attached sprayer - has the potential to improve conservation practices on farms, improve soil and water quality, and be of use to farmers and municipalities for establishment of no-mow and naturalized areas.



In part through a *Conservation Innovation Grant* from the NRCS, a no-till drill is made available to farmers in Montgomery county and surrounding areas for demonstration and educational purposes. No-till planting improves soil health while reducing soil erosion and benefiting water quality.

# DIRT, GRAVEL & LOW VOLUME ROADS PROGRAM

## Dirt, Gravel & Low Volume Road Maintenance Program

PA's Dirt Gravel and Low Volume Roads (DGLVR) Program provides local road-owning entities with grant funding for road and environmental improvements on unpaved and low volume (500 or fewer cars per day) paved roads .

Municipalities involved in the grant program in 2018 include:

- Salford Township
- Upper Frederick Township
- Royersford Borough
- West Pottsgrove Township

### 2018 Totals:

- Gravel road grant projects completed: **1**
- Low volume road grant projects completed: **2**
- Low volume road grant projects contracted: **3**

## DIRT, GRAVEL & LOW VOLUME ROADS PROGRAM



**BEFORE (contracted project):** Klingerman Rd in Salford Township is under contract to replace an undersized and highly eroding culvert. This stream crossing replacement project, on a tributary to the East Branch of the Perkiomen Creek, will reduce road flooding, improve stream conveyance through a properly sized bankfull-width structure, and reduce streambank & streambed erosion, which will improve water quality. Construction anticipated summer 2019.



**BEFORE & AFTER:** Yost Rd, LVR grant project in Upper Frederick Township, was completed in 2018. This project included stormwater, drainage and road swale improvements, to reduce swale erosion that was contributing sediment to the adjacent stream, a tributary to Deep Creek. The project also improved road surface condition, and address the road safety concerns.

## OTHER PROGRAMS

### Biosolids

In 2008, MCCD signed a delegation agreement with PA DEP to provide local field support to the Biosolids program. The District is sent 24-hour notices of intent to spread biosolids for beneficial use on mainly agriculture operations. The utilization of these products has decreased somewhat, but the concern over the land application of biosolids remains, and education and outreach is provided as requested, and complaints are investigated and/or referred to DEP for handling.

### Spotted Lanternfly Control Program

Montgomery county was hit hard by the spotted lanternfly invasive pest again in 2018. The lanternfly has continued to spread its geographic range throughout the county. The entire county is now under the quarantine zone. MCCD received a grant from the State Conservation Commission to implement a control and education program. A spotted lanternfly information session was held in Pottstown in September, for approximately 80 residents. Control work will be done in cooperation with the PA Department of Agriculture at local county parks. The goal is to prevent the pest from spreading outside of the quarantine area, while working towards eliminating the pest in Montgomery county.



# EDUCATION & OUTREACH

## Envirothon

The current topic for 2018 Envirothon was “benefits of grassland and pastureland management.” Over 200 students participated in the elementary, middle and high school events. Perkiomen Valley High School was the 2018 Champion, and went on to compete at the state-level competition.

Partners included educators from Montgomery County Parks, Trails and Historic Sites, PA Game Commission, PA Fish and Boat Commission, DCNR Bureau of Forestry, Penn State Extension, Elmwood Park Zoo, and local residents. The event was also supported by staff from the PA DEP and Aqua Pennsylvania, as well as Montgomery County’s Health Department and Planning Commission.

Envirothon teaches students the importance of protecting our natural resources, and instills values of environmental stewardship. The events, free of charge to schools, provide opportunity for students to get outside and learn from environmental experts on five topics: soils & land use, aquatic biology, forestry, wildlife, and a “current topic.”



## Master Watershed Stewards

MCCD worked with Penn State Extension and a host of local conservation partners to train another class of Master Watershed Stewards in 2018. The volunteer training program was created to help build the capacity of local watershed groups and others to carry out their missions and protect our waterways. Master Watershed Stewards receive extensive training on watershed stewardship and then put their expertise to use implementing projects to enhance and restore water quality. Master Watershed Stewards are leaders, educators, coordinators and mentors.





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