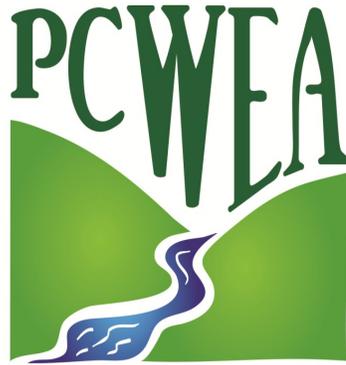


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Paxton Creek Watershed  
and Education Association

PCWEA is on Facebook



[www.facebook.com/PCWEA](http://www.facebook.com/PCWEA)

# Paxton Creek Watershed & Education Association Newsletter

Summer 2017 (Vol. 15, Issue 2)  
[www.paxtoncreek.org](http://www.paxtoncreek.org)

## PCWEA Hosting FREE Workshops

We will be hosting two different educational workshops in August. Everyone is welcome to join us for these workshops, however registration is required. Each Workshop is geared to a different audience.

Registration for both workshops online at: [www.paxtoncreek.org/data](http://www.paxtoncreek.org/data).

**Rainbarrel Education for Businesses (and Churches) – Thursday, August 10 at 6:00 PM.** Workshop attendees will learn how to build and properly utilize rainbarrels on properties with large buildings and macadam surfaces. You will also learn about stormwater runoff, non-point source pollution, and ways to conserve water. Business properties often contribute large quantities of stormwater runoff to streams, roadways, and sewer systems. This workshop will address concerns related to this type of stormwater management. **Location:** Lower Paxton Township Municipal Building, Rm. 171, 425 Prince Street, Harrisburg.



**Paxton Creek, Your Local Waterway – Saturday, August 12 at 9:00 AM.** This workshop is geared toward home owners and residents along Paxton Creek and its tributaries. It will provide basic educational information about stormwater runoff, water quality, and water quantity issues facing the Paxton Creek Watershed. **Location:** Susquehanna Township Municipal Building, 1900 Linglestown Road, Harrisburg, PA 17110. **Time** 9:00 – 10:30 AM.

For additional information see the PCWEA website at: [www.paxtoncreek.org](http://www.paxtoncreek.org)

We will be providing updates on our Facebook Page at: [www.facebook.com/PCWEA](http://www.facebook.com/PCWEA)

## New Logo for PCWEA



**Paxton Creek Watershed  
and Education Association**

Did you notice anything different on the cover of this Newsletter? Paxton Creek Watershed and Education Association has a new logo! It is bright and colorful, and it reflects the nature of what we do (pun intended).

The PCWEA board of directors has been considering a new logo for many months. We have reviewed many designs, and several people have provided us custom designs of logos. But, none of them were quite what we were looking for. Recently, HACC student Gwen Anderson designed a logo that is eye catching and is representative of our organization. We hope all of our members like the new logo as much as we do. You'll soon be seeing it on our letters, marketing literature, Facebook page and website.



Gwen Anderson recently graduated from HACC with a degree in Graphic and Interactive Design. She is continuing her studies toward a degree in high school education. The nature oriented photograph of Gwen, above, was taken by Madi Wolfe Photography.

## No Dumping Down the Drain

*By Betsy Logan*

Do you know that only stormwater is legally allowed to go into the storm drain? These drains discharge directly into creeks, streams, ponds and lakes without being treated. Non-storm water discharge, also known as illicit discharge, causes water pollution by sending pollutants right into surface water bodies, causing public health concerns, harm to wildlife, and unpleasant odors or color.

Examples of illicit discharges include:

- Sanitary wastewater
- Carwash water
- Septic tank effluent
- Inappropriate disposal of yard and pet waste
- Improper disposal of vehicle and toxic wastes including motor oil, pesticides, and paint
- Sediment leaving a construction site in stormwater
- Spills (Chemical, Gas, Oil - PLEASE CALL 911 if you detect a spill)

**No Dumping continued from Page 2**

Residents may be the first to recognize illicit discharges such as dumping into storm sewers or fluid coming out of storm sewer outfalls. You may not always catch an illicit discharge as it is happening. Other things to look for include: makeshift pipes or hoses that lead to a storm drain or water body, unusual odors accompanying any discharge, water flowing during dry times of the year, dead or distressed fish, plants, or other wildlife.

You can reduce pollution entering the storm sewer by:

- Never dumping anything into a storm drain
- Taking your used oil to your local waste oil recycling site
- Disposing household hazardous wastes properly
- Bringing yard waste to your local compost site
- Using fertilizers properly and efficiently to prevent excess runoff.
- Discarding pet waste in a garbage can
- Washing your car on your lawn to allow excess water, chemicals, and dirt to be filtered through the grass
- De-chlorinating pool water before draining



If you see an illicit discharge or you see someone dumping, please contact your Township Office, Capital Region Water (if you are located in the City of Harrisburg) or the Pennsylvania Department of the Environmental Protection (PADEP).

### Numbers To Call

Capital Region Water: 1-888-510-0606

Lower Paxton Township: 717-657-5600

Susquehanna Township: 717-545-4751

Penbrook Borough: 717-232-3733

PADEP: 1-800-541-2050



## Welcome New Member - Catherine Prince

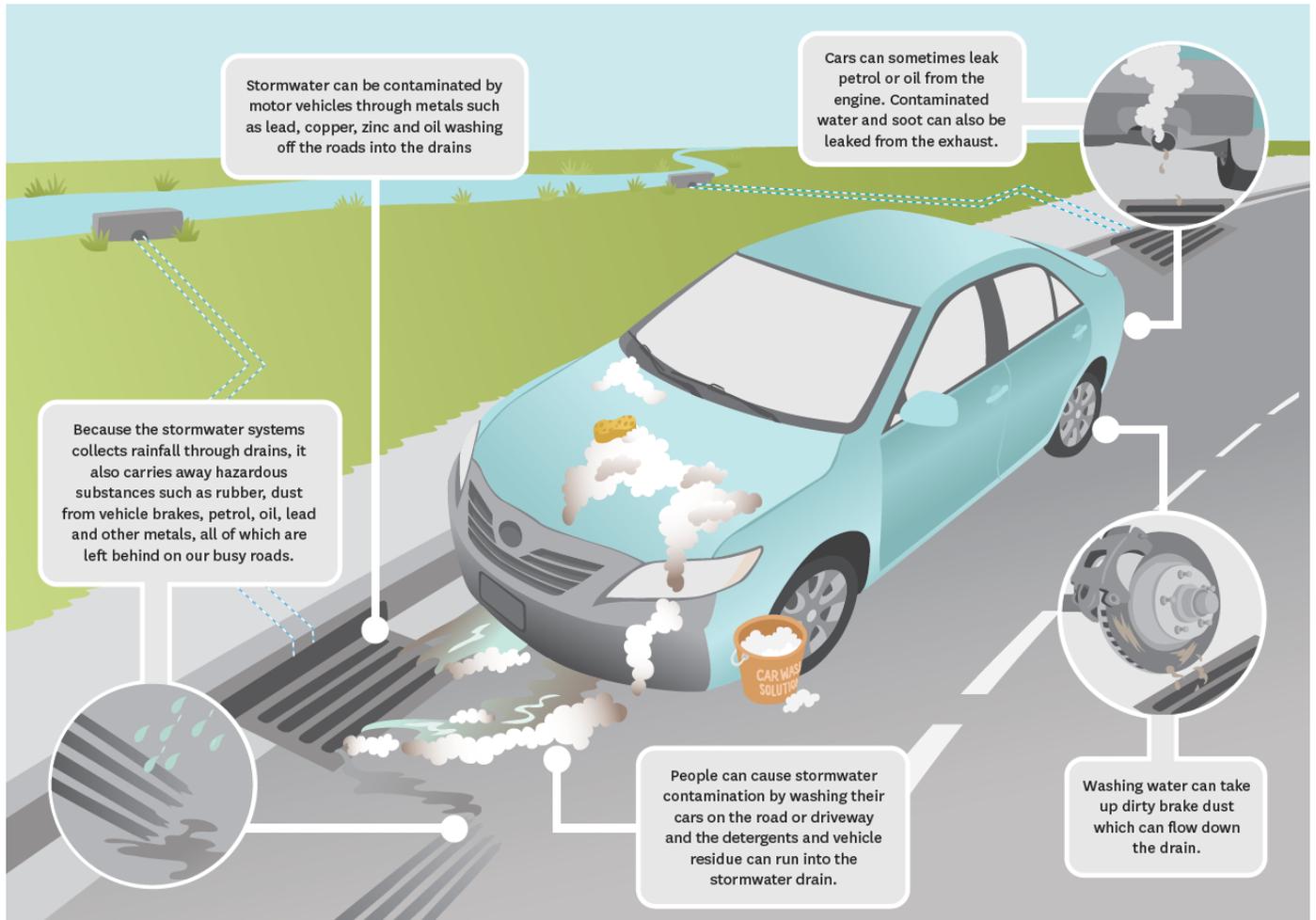
As Vice President of Development and Construction for Vartan Group, Inc., Catherine is responsible for the management and implementation of development and construction projects associated with Vartan Group, Inc. She is a Professional Engineer in both Pennsylvania and Maryland and a LEED Accredited Professional.



Throughout her career Catherine has been involved with Stormwater Management design in Land Development Projects. She was the lead civil engineer on notable professional engineering and development projects in our region, including 1500 North 6<sup>th</sup> Street Condominiums and Rooftop Garden in Harrisburg, The Pennsylvania State University Harrisburg Campus Educational Activities Building, Pennsylvania State University Harrisburg Campus Student Enrichment Center, and the William Howard Day Homes. These facilities implemented sustainable stormwater treatment facilities including pervious pavements, constructed wetlands, and bioretention facilities.

Her love for watershed protection and enhancement was instilled by summers spent at her family lake house in rural Wisconsin. Seeing the effects of poor watershed planning causing increased sediment and nutrients to enter the lake and other downstream waters where people swim and fish provides context for her desiring involvement with PCWEA.

### No Dumping continued from Page 3



# PCWEA at Wildwood Lake Wetlands Festival

By Bryan Genesse

This year, Paxton Creek Watershed and Education Association brought EnviroScope to the Wetlands Festival at Wildwood Lake. EnviroScope is a portable model that demonstrates water pollution concepts and their prevention.

Children and adults were drawn to the detailed landscape as one of our volunteers communicated using the model. As crowds gathered, their attention turned to the source of water pollution. PCWEA did its part to help bring awareness to problems facing our local waterways. Through this public event, we hope we gave new understanding to our community and its responsibility for cleaner water.



Matt Bonnano and Bryan Genesse at the PCWEA display tent during the Festival.



Betsy Logan explaining the EnviroScope model at the Festival.

# Designing for Beauty & Biodiversity

by Arlene Taylor

On April 27 I attended the program "The Living Landscape: Designing for Beauty and Biodiversity". It was presented by the Manada Conservancy and Appalachian Audubon Society. The speakers were Doug Tallamy and Rick Darke, co-authors of the book on which the program was based.

Darke is a landscape design consultant, author, lecturer, and photographer based in Pennsylvania who blends art, ecology, and cultural geography in the creation and conservation of livable landscapes. He shared numerous pictures of his landscape designs which support nature and wildlife, use layering, and have beauty. Tallamy is professor and Chair of the Dept. of Entomology and Wildlife Ecology at the University of Delaware, and author of the award winning book "Bringing Nature Home". He spoke on the importance of using native plants in our landscapes. They are better hosts for insects and organisms, and contain nutrition needed for the life cycle of birds, pollinators, and other wildlife than non-natives.

A key theme of the program was that population growth, unmitigated development, and exotic plants are reducing biodiversity and usable habitat. Native plants contribute to biodiversity and desirable habitat.

### Example of native plants landscape (mid-summer phase), Andrew Ohrman

Also... see discussion by Andrew Ohrman on Page 8 on native plants



Nine -bark shrub/tree



Oakleaf Hydrandra



Pieris and Swamp Milkweed (20 Monarch caterpillars have fed on the Swamp Milkweed and formed into butterflies)



False Sunflower

## Thorny Issues in Native Plant Design and Maintenance

### What is needed in native plant books and lectures

by Andrew Ohrman

Authors and lectures Doug Tallamy and Rick Darke, are great at impressing audiences with their slides shows of the wonders of native plants. Their books are a great read and valuable reference. But, when you, as a potential native plant gardener are faced with the details of implementing native plants, the information provided by these authors has limits.



These limits fall into two categories: Removal of invasive plants before planting native plants, and hybridized or cultivated native plants. Native plants don't usually do well when they are planted in a sea of invasives like Garlic Mustard, or English Ivy. Many desirable flowering native plants require full sun, which means they don't do well under invasive trees like Norway Maples. Removing established invasives, depending on the extent of their coverage, can range in difficulty from an afternoon of pulling to a nearly impossible task that may involve heavy equipment and weeks of work. It would be extremely helpful to so many struggling to start a native garden, if authors of "native plants"

books would dedicate a chapter on creative techniques for removal of invasives, With few options, some may have no other choice, but to responsibly apply a herbicide, especially if you can't afford to hire a backhoe to clear out a large area of invasives. For example, what if you have a 1/4 acre of English Ivy. Imagine manually removing it. I have personally pulled out large blankets of ivy using a heavy pick and shears and loppers, but it takes both a lot of physical strength and patience. I generally don't use a herbicide, but under special circumstances there may be no other alternative than to use a herbicide in ONE SINGLE STRATEGIC application. The problem with herbicides is they can be easily misused. There are no non-toxic home remedies to kill super stubborn invasives like English Ivy, especially on a large scale. **Fortunately, there are many ideas for invasive removal on the internet.**

Ok, you are ready to plant your native plants. So off to the native plant sale or nursery you go. You observe plants marked "native", but the term native can be subjective. Is the plant native to this specific area, or 500 miles further south or north, or west? Is the plant genetically pure or a hybrid? Unfortunately, it can all be very confusing. There is a good chance the person selling the plants will say something like: "Don't worry its native" whether it is truly native or not. Most shoppers are so confused and tired, they just buy because the tag says native. And the situation is much worse at home improvement stores, where the majority of the staff know very little about any of the plants they sell.



## Return on the Environment by Betsy Logan

On April 20, 2017, The Ned Smith Center for Nature and Art hosted a public meeting to present findings from a study estimating Dauphin County's Environmental Worth. This study was sponsored by Audubon Pennsylvania and the Appalachian Trail Conservancy with funding assistance provided by the Pennsylvania Department of Natural Resources, Environmental Stewardship Fund. The resulting information was presented to the public and documented in, "Dauphin County Return on Environment Study 2016." The study outlines the economic value of protecting, restoring, and expanding nature's financial benefits. It assigns a monetary value to our clean air, water, and open space while demonstrating what happens to our quality of life if we continue to lose forests, streams, and wetlands.

Highlights from study include:

- Dauphin County boasts 161,000 acres of forest, 880 acres of forested wetlands, 142 herbaceous wetlands, and over 850 miles of streams.
- Dauphin County's open spaces provide natural system services, recreational, and property-value benefits estimated at nearly \$1 billion annually.
- By maintaining Dauphin County's existing natural system services, there is an annual savings of \$573.7 million.
- Outdoor recreation generates between \$128.4 and \$359.4 million in annual revenue.
- Approximately 3,440 jobs related to outdoor recreation are created annually in Dauphin County.

The entire study, summary booklet, and fact sheets can be found under Dauphin County

<http://kittatinnyridge.org/explore/research-education/>

### Thorny...Native Plants continued from Page 7

Most good reference books on native plants, such as Doug Tallamy's, will list desirable native plants both by their scientific and common names. The Scientific name is the name to refer to. Try matching store native plants as close as possible to the scientific name. In many cases, it will not be a complete match. This is because the native plant was hybridized with another plant for something desirable, such as longer blooms. However, the effect and value of a hybridized native plant is an unknown wild card, and authors of native plant books typically offer little or no advice on this expanding category of plants. For example: A hybridized native may bloom longer and be more pleasing to the human eye, but be less attractive to native insects. **There is little information on the topic of native plant hybrid issues in general, even on the internet.** But a native hybrid is still better than a non-native or exotic. So a lot of good can still be done with native hybrids.



The best scenario for a person starting a native garden is to find someone who has experience growing and maintaining native plants (not just identifying them), experience removing invasives, and is willing to share their knowledge. Otherwise, the next best thing is to simply read, experiment and slowly gain your own knowledge and the satisfaction of working with native plants yourself.

## STORMWATER SPOTLIGHT

By Matthew S. Bonanno, P.E.

In this issue...

### Best Management Practice – “Riparian Buffers”

Location – Streamside properties along Paxton Creek

Installation Details – Did you know that PCWEA maintains a tree nursery, and that trees are an important part of Riparian Buffers? Our nursery is flourishing with approximately 100 trees of varying species. We are looking for a good home for these trees. Many have been growing in pots for 3-4 years and are ready to be permanently planted into the ground.

Check out our video: <https://www.facebook.com/pcwea/videos/641396402719901/>

Benefits – Riparian buffers are lands adjacent to streams where vegetation is strongly influenced by the presence of water. Buffers help improve the water quality in streams by reducing sediment, nitrogen, phosphorus, pesticides and other pollutants from reaching the water. The best buffers have native vegetation with deep rooted trees. Root masses help to stabilize stream banks, while tree leaves help to shade the stream. Buffers also help to improve habitat for aquatic wildlife, while providing food and cover. Remember, the wider the buffer is, the more effective it is to filter pollutants.

How you can help? – First -- please do not mow up to the stream edge. Second -- if you own streamside property and would be interested in establishing a riparian buffer on your property, please contact us.

No Riparian Buffer



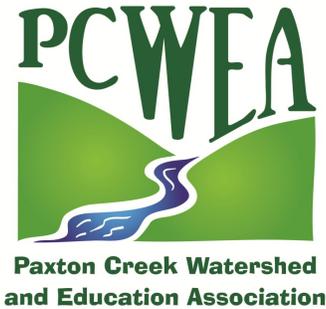
Healthy Riparian Buffer



**We hope everyone enjoyed our “Freedom From Membership Dues” in 2016. Unfortunately, it will be necessary to charge membership dues in 2017.**

Take a look, where else can you get reasonable membership dues like this:

- Individual - \$5
- Student - \$0
- Family - \$15
- Business - \$35
- Lifetime - \$100



Membership runs from January to January. 2017 dues should be paid by January 31, 2017. Please see the Membership Form at the end of this Newsletter for details.

We'd like to give a warm thank you to all of our Lifetime Members. These generous members will never have to be bothered by paying dues again. Have you considered becoming a Lifetime Member?

### **Lifetime Members:**

Frank & Judy Beskid, Matt Bonanno, E. Drannon Buskirk, Robert J. Davis, Tom Embich, Jan Sieger, Bryan Genesse, Frederick Heagy, Jr., Erik Johnson, Kevin Kelly, Joseph V. Link, David Sheridan, Arlene Taylor and Rhonda Hakundy.

### **About the**

### **Paxton Creek Watershed & Education Association (PCWEA)**

The Paxton Creek Watershed & Education Association (PCWEA) was founded in 2001 with a three-part mission: to protect and enhance watershed resources, solve watershed problems, and facilitate hands-on environmental education.

The Paxton Creek watershed covers 27-square miles northeast of the City of Harrisburg, in central Pennsylvania. Upstream portions of the watershed historically consisted of woodlands and farmland. While downstream portions of the watershed are situated within the City of Harrisburg where Paxton Creek flows through industrial and commercial properties. In places, downstream, the creek is channelized and receives heavy sediment loads eroded from rapidly developing areas upstream.

Development in the upland areas of the watershed has led to the construction of impervious surfaces in the form of roads, parking lots, commercial, and residential buildings. These impervious surfaces severally limit infiltration of surface water into the ground and perpetuate storm water runoff problems. Paxton Creek Watershed generates 15 times the amount of suspended sediments released by typical forested watersheds.

**Paxton Creek Watershed & Education Association (PCWEA) can be found on the  
Web at [www.paxtoncreek.org](http://www.paxtoncreek.org) Email at [info@paxtoncreek.org](mailto:info@paxtoncreek.org)**

**PCWEA is on Facebook [www.facebook.com/PCWEA](http://www.facebook.com/PCWEA)**



**PCWEA PO Box 61674, Harrisburg, PA 17106**

Paxton Creek Watershed and Education Association

## PCWEA Membership Form

# Yes

I want to help enhance and protect Paxton Creek, solve problems such as erosion and flooding, and facilitate environmental education in the watershed.

Name \_\_\_\_\_ Phone (\_\_\_\_) \_\_\_\_\_

Company/Organization \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ ZIP \_\_\_\_\_

E-Mail \_\_\_\_\_

### Membership Dues

**Please complete this form and return to become a member of the organization. PCWEA welcomes donations and Lifetime memberships.**

___ Individual	\$5
___ Student	\$0
___ Family	\$15
___ Business/Corporate	\$35
___ Public/Non-profit	\$0
___ Lifetime	\$100

Amount Enclosed \$ \_\_\_\_\_ Renewal \_\_\_ Yes \_\_\_ No

Make checks payable to PCWEA, and send the application and check to PCWEA, P.O. Box 61674, Harrisburg, PA 17106