



MARION COUNTY  
SOIL AND WATER  
CONSERVATION DISTRICT

# Conservation in the Neighborhood

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## SWCD Hosts Pond Workshop

**By John Hazlett, District Manager**

On September 14<sup>th</sup> the District partnered with the City of Indianapolis Office of Land Stewardship, IN Division of Natural Resources and Eco Logic on a pond edge enhancement workshop. The workshop was funded through the ISDA Clean Water Indiana program and was attended by 14 residents representing HOAs and conservation organizations. The workshop featured presentations by local experts on native plant selection for pond edge enhancement, invasive plant and wildlife habitat strategies and a local HOAs experience with pond shoreline restoration. Following the presentations, attendees helped plant over 200 native emergent and submergent plugs at a pond along the Eagle Creek Greenway.



*Kevin Tungesvick from Eco Logic explained varieties & benefits of native plants.*

## 2020 Indiana Watershed Leadership Academy Online Application Available

If you're interested in water quality and watersheds, consider applying for the 2020 Indiana Watershed Leadership Academy. The Academy, organized by Purdue University with support from the Indiana Department of Environmental Management and other Indiana conservation agencies and organizations exposes attendees to basic watershed topics, science, policy skills and much more. District staff John Hazlett and Cheyenne Hoffa both are graduates of the program. The web-site for the online application and more information is available here:

<https://engineering.purdue.edu/watersheds/academy.html>



*Participants stayed after to help plant.*



The Indiana State Fair rain garden gets a face lift with clean up, new border & plantings.



Coordination and volunteerism benefited Christian Park's rain garden.

## A Tale of Two Rain Gardens

*By John Hazlett*

Our district recently saw the culmination of two rain garden “rehab” projects where we worked with a variety of non-traditional partners to renew local stormwater assets which were not functioning properly due to ongoing lack of maintenance. Rain gardens function as small scale distributed storage capable of treating stormwater pollutants through the natural processes of infiltration and evapotranspiration but must be maintained monthly in order to function properly. As the deep rooted native plant communities used in rain gardens get established, maintenance activities such as watering and weeding certainly decrease- but these two projects demonstrate how an ongoing lack of maintenance may require a larger overhaul effort to restore function and aesthetics.

The first project we worked on was the Normandy Barn

Rain Garden at the Indiana State Fairgrounds. This approximately 200 square foot rain garden was constructed in 2009 and drains a 2,600 square foot area including the east roof of the greenhouse building immediately adjacent to it. The native plant community in the garden was well established but the garden had become overrun with Bindweed and Johnson Grass as well as Siberian Elm and Mulberry trees. In July 2018, the District collaborated with local healthcare provider CareSource on a volunteer weeding and mulching project to remove invasives at the garden. After this initial cleanup, District staff removed additional invasives and replanted the border and bottom of the rain garden with Prairie Dropseed, Joe Pye Weed and Ironweed in May 2019. Finally, in July 2019 a landscape paver border was installed to protect the new plantings from foot traffic. District staff have

continued to water and weed the garden and it made an official renewal “debut” at the first day of the State Fair!

The other rain garden renewal project was a collaboration between the District and our partners at Citizens Energy Group (CEG) and Christopher Burke Engineering (CBE). In 2009, a rain garden was installed at Christian Park to accept roof runoff from an addition at local IPS School #82. Over the last 10 years the garden became overgrown with weeds and large invasives trees. CEG and CBE removed the large trees and a group of volunteers weeded, mulched and replanted the rain garden in June 2019. The City of Indianapolis also contributed dumpsters and debris hauling services for the rehab. Continued maintenance for the garden will be provided by Keep Indianapolis Beautiful and IPS Staff.

**GROWING FOOD  
WITH BENEFICIAL INSECTS  
AND POLLINATORS  
A Workshop for Urban Growers**



**SAVE THE DATE: December 6, 2019**  
**LOCATION: The Nature Conservancy**  
**Indianapolis, Indiana**



# Non-point Source Pollution

## A Needed Focus for Marion County



Robert Scheer/IndyStar

The Indy Star recently had articles focusing on water quality of White River.

One of the main goals of the Marion County SWCD in its 50 year history has been to improve water quality.

Much effort has been made by federal, state & local government and industry to help minimize point source pollution and improvements are definitely being seen. Unfortunately, as pointed out in a recent [Indy Star article](#) addressing point source pollution such as the combined sewer overflow problem helps tremendously but doesn't reach the ultimate

goal of having our streams and rivers safe enough for swimming and uncontaminated fish consumption. In order to reach this goal other

sources of pollution must be addressed. The SWCD's focus for water quality improvement is addressing nonpoint source pollution problems. We do this in a variety of ways.

Indiana's number one pollutant by volume is sediment. The district works tirelessly to help developers, farmers and landowners minimize erosion on their property. We promote the use of buffer strips along waterways to help trap sediment and other pollutants before they reach our streams. Our soil health program strongly promotes the use of cover crops to help protect the soil from erosion. We provide consultation for landowners with streambank erosion problems and our website contains a plethora of [fact sheets](#) on how to improve water quality in our county.

Other practices that individual homeowners can do to help include installing [rain gardens and bioswales](#), properly disposing pet waste and converting to organic or more environmentally friendly [lawncare options](#).

We work alongside the Marion County Health Department to find ways to help homeowners on septic systems keep their systems functioning properly. We do this by investigating ways to better drain the soil so that the septic system doesn't bleed out or back up. We have also created a [booklet](#) for homeowners on how to properly care for their septic system.

Cooperation between government agencies and the public is imperative in order to further improve the quality of our streams and rivers. Get involved by volunteering with the District or one of [our partners](#) and be a part of the ultimate solution!

For more information on how stormwater affects water quality read this [Indy Star article](#).



Native Plantings help hold streambanks.

# District Explores the DigIndy Tunnel

In July District staff and supervisors joined the Indianapolis Parks Foundation staff on a tour of the DigIndy project being implemented by Citizens Energy Group. The project includes approximately 28 miles of 18-foot diameter concrete lined tunnel to address combined sewer overflows. During the tour, the staff learned that some of the limestone fines left over from the project are being used in southern Indiana to help supplement soil magnesium levels.

Along with other projects in the combined sewer system and at Citizens two advanced wastewater treatment plants, the \$2 billion program is Indy's solution to reducing combined sewer overflows into area waterways by up to 97 percent, and keeping the utility in compliance with a Consent Decree with the U.S. Environmental Protection Agency.



CEG hosted District staff & Supervisor Brian Neilson with a tour of the DigIndy Tunnel.

## Marion County SWCD's Soil Health Program Featured on NACD Webinar

District staff members Kevin Allison and John Hazlett were the featured presenters for the National Association of Conservation District's July 2019 Urban and Community Conservation Webinar with a focus on Urban Soil Health. John and Kevin presented background on the various district programs and specifics on the Urban Soil Health Program developed over the last several years leveraging a 2016 NACD Urban Agriculture Conservation grant.

The webinar recording and presentation PDF can be viewed at the link below-click on FY 2019, then on the July 18<sup>th</sup> topic title. Note you will need to download the Adobe Connect app to view the webinar.

<https://www.nacdnet.org/general-resources/webinars/>

## Welcome Our New Student Intern!

A Big Welcome to our new student intern Nick Schwaberow! Nick is working towards his Masters degree in Public Affairs at Indiana University where he will graduate in May. He recently interned with the City of Indianapolis' Office of Sustainability and is now campus farm manager at IUPUI.

Nick assists us one day a week with a number of projects. He is working with our soil health system demo trials, site stewardship at several Land Stewardship properties, State Fair rain garden plantings and maintenance and integrating GIS layers from our private property drainage database with the City's THRIVE plan data. He is also helping with logistics for several workshops. We are very fortunate to have Nick's assistance through the spring semester!



## Winter Stabilization on Construction Sites

**Cheyenne Hoffa, Urban Conservationist**

Late fall and winter can be a tough season for contractors working on large construction sites. Falling temperatures mean that one of the most effective erosion control practices can no longer be used; temporary and permanent stabilization. During the spring, summer and into the fall, it is easy for contractors to grow vegetation on their sites. Once an area is stabilized with vegetation, it poses a much lower risk for contributing to off-site sedimentation. If a contractor misses the seeding window due to phasing, weather or other circumstances they still have some options to prevent erosion and stay in compliance with Rule 5.

Dormant seeding is the best option for construction sites that have missed the seeding window. In Indiana that cutoff is mid-October. This is because seed cannot germinate in soil that is less than 50 degrees Fahrenheit. Dormant seed will lay dormant in the soil until spring brings warmer temperatures and then germination and vegetative growth will begin. But a contractor cannot dormant seed alone, the seeding must be accompanied by a heavy layer of anchored

mulch. This mulch will prevent erosion from the rain, snow and wind that the site will be subject to throughout the winter. Topsoil can also be added before seeding and mulching to ensure that once seeds begin to germinate, they will have the nutrients they need to thrive. Otherwise, fertilizer can be added. Suggested permanent dormant seed mixtures vary depending upon the type of area contractors will be seeding and can be

found in [chapter 7](#) of the [Indiana Stormwater Quality Manual](#).

Contractors should be sure to inspect the dormant seeded areas along with the other temporary erosion and sediment control measures weekly and after 0.5-inch rainfall events. Eroded areas should be reseeded and mulched.

## SWCD at the Dragon Races

The SWCD once again participated in the Dragon Boat races on September 28th, a fund raiser for the White River Alliance during the White River Festival. Dragon boat racing originated over 2000 years ago in China where the tradition remains strong, and it's popularity in the West has been growing since the 1970s. The ultimate team sport, dragon boats are 46-foot long vessels propelled by a coordinated crew of 22 – 20 paddlers, a drummer who keeps the pace, and a steerer who guides the craft.

This was a fun event for a great cause! Plan to join us next year!!!



This site, properly mulched & dormant seeded is ready for winter.



# Water Quality Concerns for Small Scale Livestock Farms

Jerod Chew, NRCS District Conservationist

Whether it is backyard chickens, a side lot for 4-H goats or a space in the back for a few pigs; many people are interested in raising animals on their property. There is a long list of the many reasons why this is a good thing such as: food independence, a closer connection to the land, teaching responsibility for our children and health. However here are just two important factors to consider regarding your impact on natural resources well before you take the step to bring an animal home.



**POOP!!!** Yep, as they say...it happens! All too often we see a pile in the back corner right on the edge of the property, perhaps in a drainage swale or right next to the creek. One of our biggest pollutants in waterways is E.coli and it's a direct connection to animal waste (pets too!). You need a plan for safely storing and utilizing/ disposing of the waste. A dumpster is not an ideal sustainable solution.

**Suggestions:** 1) A covered containment area located away from water, not on sandy soil  
2) Install gravel (topped with lime) pads around watering and feeding areas where the poo can be scooped up and put in your containment area.  
3) Have a plan. Can you compost and use the poo as a nutrient resource for yourself or is someone willing to utilize it on a neighboring farm? Don't let it pile up, rainwater leaching through a manure pile can ruin a stream or a yard for a long time.

**Space** Take into account the fact that animals need to spread out and/or forage. Do you plan on providing enough space for them to get their nutritional needs from the pasture area? For horses, cows, sheep, goats & even chickens, they are going to be foraging, so even if you plan to feed hay they still need the space to keep cover on the ground along with eating hay and grain. If you walk in the same spot in your yard every day it will eventually become bare and void of any grass. This area then will get muddy and become a mucky, stinky mess. This is doubly-true with animals as they are also generally eating the grass/scratching/rooting around, etc.

**Suggestions:** 1) Know how many animals you can support. It is essential to find the right balance between your herd size and your available forage. This is tricky obviously because animals are different sizes, not all pastures are created equal, and grass growth rate varies based on the time of year and the amount of rest given.  
2) In short, you need a **Prescribed Grazing Plan**.

Sadly, all too often we see situations where these considerations are not made and the impact on the environment, landowner and the animals is tremendous. These are just two big issues, but there are more. We are happy to help you plan around these important factors, [so give us call.](#)

Portable pens such as these chicken tractors are a means of safely rotating small livestock around a pasture. Pens are moved one or more times a day effectively managing grazing activity and minimizing manure accumulation.

*“it’s about 45 pounds per hen, per year...”*

credit *Modern Homesteading*, Victoria Gazely, 8-18-2011



MARION COUNTY  
**SOIL AND WATER**  
—CONSERVATION DISTRICT—

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The Mission of the Marion County Soil & Water Conservation District is to assist Marion County land users in conserving soil, water, and related natural resources by providing technical, financial and educational services.

**We are now looking for 2020 Supporting Affiliate Members! Please consider supporting your Marion County SWCD. Applications are available on our website: [www.marionswcd.org](http://www.marionswcd.org)**

**Find us on the web: [www.marionswcd.org](http://www.marionswcd.org)**

## Invasives Highlight: Garlic Mustard

Garlic mustard poses a severe threat to native plants and animals in forest communities in Indiana. It is also found in parks, roadsides and in residential areas. The crushed leaves have a garlic smell. It was originally brought from Europe to flavor wild meats. It is a biennial plant meaning it takes two years from seed sprouting to maturity. The basal rosette plant shown below stays green through the winter and in early spring begins to form its taller flower and seed stalk at which time it crowds out most native wildflowers that also have their main growth in early spring. By late May flowering is generally complete and the seed stalk has formed.

The most common control method is to pull the plants during or before flowering and putting the plant in a plastic garbage bag and sending to the landfill where the heat will kill the seed. Seed stays viable in the soil for several years so control takes commitment for a long time. Foliar sprays labeled for Garlic Mustard are also effective before seed formation.

[For more information on invasive species check out our website.](#)



First year plant—basal rosette



Second year bloom & seed stock



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