

Conservation Crier

Newsletter of the  LANCASTER COUNTY CONSERVATION DISTRICT



43RD ANNUAL TREE SEEDLING SALE

Drive Thru Pick Up on Thursday, April 15, 2021

Order form will be available February 2021.

Sign up for email notification at
www.lancasterconservation.org.



The Conservation Excellence Grant (CEG) Program

We all know that making positive environmental changes to your agriculture operation can be costly. Environmental changes can impact us all, funds are available to help. In 2019, the state passed Act 39 to provide financial and technical assistance for the implementation of best management practices (BMPs) through a combination of grants, loans, and tax credits. These BMPs can include improvements to barnyards and waste management systems, better pasture management through fencing and buffers, stream crossings, and other conservation efforts. Lancaster County and York County farms are top priorities this year because of their importance in keeping the Chesapeake Bay clean.

The grant allows us to offer up to 75% CEG funding for BMP projects, and can be used in conjunction with the Resource Enhancement and Protection Program (REAP). In addition, if a farm has some unfinished BMPs that are detailed in an agriculture erosion and sedimentation plan or conservation plan, this is an opportunity to get funding to help finish them. The grant can help cover eligible costs involved in getting those BMPs in place. There's no application deadline, but the funds are available now, so call the Conservation District to apply at 717-299-5361 x.5.

—Steven Reiff, Ag Conservation Technician

BOARD OF DIRECTOR SPOTLIGHT: Conservationist Recognized for Making a Difference

The Pennsylvania Association of Conservation Districts (PACD)/State Conservation Commission's 73rd Joint Annual Conference was held virtually due to the coronavirus. Sonia Wasco from Narvon, Lancaster County was recognized during the online event this summer. You might say Sonia is an individual who knows how to get M.A.D. Meaning she's a conservationist who Makes a Difference. Sonia received the Ann Rudd Saxman Conservation District Director Excellence Award. This award is presented to a Conservation District Director for outstanding volunteer efforts that have furthered the work of Conservation Districts across the state.

Sonia Wasco has been connected to and supported the work of the Lancaster County Conservation District (LCCD) for more than 40 years. Sonia is currently serving as a director on the LCCD board of directors for 12 years after serving as an Associate Director for ten years. She is also an active member of the PACD Executive Board, serving as treasurer.



Sonia's most unique and priceless volunteer work benefitting generations of students is her passion in serving as the co-director of the Lancaster County Youth Conservation School. For more than 40 years, Sonia has donated her time to facilitate a residential field school for students 14-16 years old. Although this year was different, the school celebrated its 42nd year with co-directing the virtual school experience with Sallie Gregory, Conservation District Educator. "Sonia's ingenuity and creativity inspire conversations even virtually that keep high school students involved in building a future for natural resources.", Gregory shared.

Working with county cooperating agencies or state legislators, Sonia is well informed and up to date regarding conservation issues in Pennsylvania. Communications is a skill Sonia practices, whether at a board meeting, legislative breakfast, volunteering at farm tour, or meeting in a small group to help organize Conservation District events. Sonia's many volunteer efforts are a testament to the accolade of this recognition.

CONGRATULATIONS SONIA!

WELCOME TO NEW STAFF

to Lancaster County Conservation District (LCCD), Natural Resources and Conservation Service (NRCS), and Clean Water Partners (CWP)

Board of Directors

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Kent Weaver, *Treasurer*
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Alfred Wanner Jr.
Matthew Young
Cynthia Zawrotuk

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Gerald Heistand, *Business Manager*
Holly Shaub, *Ag. Admin. Asst.*
Stacey Meyer, *Finance Manager*

Erosion and Sedimentation

Richard Snyder, *Department Manager*
David Bednar, *Resource Conservationist*
Emily Broich, *Resource Conservationist*
Eric Hout, *Resource Conservationist*
Adam Stern, *Resource Conservationist*
Ryan Weck, *Resource Conservationist*
Suzanne Kopp, *E & S Admin. Asst.*

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Kevin Seibert, *Ag Compliance Coordinator*
James Saltsman, *Ag Eng Tech Spec*
Adam Hartz, *Ag Eng Tech Spec*
Kent Bitting, *Professional Engineer*
Francesca DePrator, *Ag Compl. Insp*
Greg Heigel, *Ag Conservation Tech*
Kevin Lutz, *Ag Conservation Tech*
Steven Reiff, *Ag Conservation Tech*
Maddie Klein, *Ag Conservation Tech*
Samantha Adams, *Ag Conservation Tech*
Emily Corkhill, *Ag Conservation Tech*
Derrick Fidler, *Ag Conservation Tech*
Amanda Goldsmith, *Ag Conservation Tech*
Dennis Eby, *Plain Sect Outreach*

Watershed and Education

Shelly Dehoff, *Ag/Public Liaison*
Sallie Gregory, *Education Coordinator*
Matthew Kofroth, *Watershed Specialist*
Nate Straw, *Watershed Assistant*
Bryce Workman, *Watershed Resource Tech.*
Allyson Gibson, *Clean Water Partners Coord.*
Emily Smedley, *CWP Program Manager*

USDA Natural Resources Conservation Service

Heather Grove, *District Conservationist*
Mark Myers, *Soil Conservation/District Conservationist*
Jared Boger, *Soil Conservationist*
Mark Long, *Soil Conservationist*
Mick Albert, *Soil Conservationist*
Christine Griesemer, *Soil Conservationist*
Ashley Spotts, *Restoration Specialist-CBF*
Jeff Sholly, *TAG Engineer*
Julia Smith, *Wildlife Biologist, Pheasants Forever*
Lari Jo Walker, *Program Asst.*

Lancaster Co. Conservation District

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Phone: 717-299-5361 Fax: 717-299-9459
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Amanda Goldsmith joined the District team in March this year as a Spotted Lanternfly Resource Technician. She was also a part of the team last year when she served as the summer intern at the District, assisting in the watershed and education departments. Currently, she will be the Spotted Lanternfly Technician until the end of the year. Then, she will be transitioning to the Agriculture Conservation Technician position from 2021 onward. Amanda loves working with people to help them conserve, and she is delighted to expand her knowledge from invasive species to agronomy. Before she came to the District, she finished up her degree at Millersville University with a summa cum laude honor and a B.S. in Environmental Biology. During her time at college, she tutored K-12 and college students, interned at a zoo and a nature conservancy, and volunteered at science competitions. In her free time, she enjoys hiking, boating in her inflatable kayak, camping, and playing with her tortoiseshell cat, Maltese dog, and curly-haired tarantula.



Amanda Goldsmith



Richard Snyder

After twenty-one (21) years of service with the Dauphin County Conservation District (DCCD) as a Resource Conservationist, **Richard Snyder** accepted the position of LCCD E&S Control Department manager in May 2020. Born and raised in Jim Thorpe, PA, Richard became fond of the outdoors, and all of the opportunities it presented. He attended Penn State University, where he received a Bachelor of Science (B.S.) in Environmental Resource Management. While employed by DCCD, he achieved his certified professional in erosion and sediment control (CPESC). Richard resides in Lancaster County with his wife, Deb, and two (2) children, Kaitlyn and Cadyn. Beyond his work with the District, Richard is employed part-time by Northwest EMS, INC. (NWEMS) as an EMT-Paramedic, and volunteers as director of NWEMS's junior academy program. In his free time, Richard enjoys attending his children's sporting events, coaching baseball, coaching / refereeing basketball, fishing, and hunting.

Jared Boger joined the Lancaster County NRCS Team as a Civil Engineering Technician in early July. Jared was born and raised in Lebanon County. He is a 2007 graduate from Shippensburg University, where he received a Bachelor degree in Geography and Earth Science. He participated in ROTC and as a player for the Shippensburg University baseball team. After college, he was hired by Reading Anthracite Company in Pottsville, PA. Then, he was hired by the Pennsylvania Association of Conservation Districts (PACD) as an Engineering Technician, where he worked as a partner for NRCS under the supervision of the NRCS Lebanon Tech Center. He spent the next 6 years designing manure handling systems and cropland practices. After PACD, he worked for NRCS for 5 years as a Soil Conservation Technician in the Lebanon Field office. He designed practices to solve resource concerns on various farmsteads, in Lebanon, Dauphin and Perry Counties. He is now thrilled to join the NRCS Lancaster Field Office as a Civil Engineering Technician. Jared enjoys hunting, fishing, coaching baseball at LVC, cooking, spending time with his wife Holly, his son Chase and his daughter Tenleigh.



Jared Boger



Lari Jo Walker

Lari Jo Walker joined the NRCS as a new Program Assistant in April. Born in Lancaster, she loves this area and is excited about helping in the efforts to conserve the County's natural resources. A graduate of Millersville University, she was a teacher at Columbia Borough School District and Harrisburg Area Community College. She lives with her husband, adult son, and their Jack Russell Terrier in Lancaster. As a child, she spent many hours hiking with her father to climb as many fire towers as possible. Today she plans to see as many conservation areas and Champion trees as she can. Her hobbies are reading and gardening with native plants.

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Christine Griesemer

Christine Griesemer joined the NRCS Lancaster team as a Soil Conservationist in June. Christine was born and raised in Berks County. She is a 2012 graduate from Delaware Valley College, where she received a Bachelor of Science degree in Environmental Science. After graduation, she started her conservation career at Berks County Conservation District. She worked at the District for 8 years as an Agricultural Resource Conservationist where

she gained lots of experience relating to conserving natural resources on agricultural land. She earned her Act 38 Public Dual Certification and NRCS Certified Planner certificate. She spent the last few years focused on Forested Riparian Buffer work in partnership with Conservation Reserve Enhancement Program (CREP) and other programs to assistance landowners with implementing Forested Riparian Buffers as part of a comprehensive Conservation Plan. Now, she is excited to join the NRCS team in Lancaster County where she will continue

her conservation career helping to conserve natural resources. In her free time, Christine enjoys crocheting and other fiber related crafts, gardening, raising monarch butterflies, sourdough baking and beekeeping.

Emily Smedley joined the team in February 2020 as the Communications and Program Manager with the Lancaster Clean Water Partners. She manages all communications and works with grantees, workgroups, and partner organizations to ensure a collective approach to clean water throughout the county. She started her career at a full-service communications firm in Maryland, focusing on Baltimore-based clients in the public health, education, and social justice sectors. She grew up in neighboring Chester County and enjoys exploring craft breweries and coffee shops, hiking, reading, and snuggling with her hound mix, Marlo.



Emily Smedley

RING NECKED PHEASANT



Phasianus Colchicus

Conservation

Pheasant numbers have declined since a peak in the mid-twentieth century. The North American Breeding Bird Survey noted that despite increases in some areas, overall there was been a population decline of about 32% between 1966 and 2014. Pheasants are popular game birds, and in some places game managers stock pheasants on land. Hunters kill large numbers of male pheasants, nationally several million in a single season, but the overall effect of hunting is probably not great, although in central Pennsylvania numbers have severely declined and stocking is now the only way to see once common pheasant populations. Auto accidents kill huge numbers of pheasants, and farm machinery also poses a threat. Contemporary farming practices have degraded most prime pheasant habitats in the U.S., by replacing small, diversified farms with large monocultures; eliminating edge habitat; draining wetlands; burning, spraying weeds, and mowing roadsides; applying chemical fertilizers and herbicides; overgrazing; and moving up hay-mowing dates, which can destroy late nests. To manage habitat for the pheasant later in summer do not mow hay after August 30th, create and maintain field borders, and plant cover crops as soon as possible for winter protection. The Conservation Reserve Program, funded by the Farm Bill, has helped conserve and restore habitat for Ring-necked Pheasants.

Habitat

Most types of pheasants are shy forest birds of Asia. The ring-neck, better adapted to open country, has been introduced as a game bird to several parts of the world, including North America. Ring-necked pheasants are found on agricultural land and old fields, especially fields that are interspersed with grass ditches, hedges, marshes, woodland borders, and brushy groves. Typically, they roost in trees or dense shrubs in spring and summer and in forested wetlands, farm fields and weedy areas in fall. For early season nesting, they seek cover along grassy roadsides, fence lines, ditches, and wetlands. As the season progresses and vegetation grows taller and denser, they shift their nesting activity to fields of hay, particularly alfalfa.

Food

Ring-necked pheasants eat seeds, especially grain from farm fields, as well as grasses, leaves, roots, wild fruits and nuts, and insects, such as grasshoppers, beetles, caterpillars, crickets, and ants, as well as snails and earthworms.

Nesting

The female ring-necked pheasant chooses her nest site, which is usually less than half a mile from her wintering range. Nests are usually surrounded by tall vegetation and built on the ground, often in a natural depression or a hollow that the female scoops out herself, about a third of an inch to 3 inches deep. Clutch size is 7-15 eggs. 1-2 broods per year includes incubation of 23-28 days. Average first hatch is mid-June. Pheasant chicks hatch completely covered with down, eyes open. They leave the nest immediately, following the female and feeding for themselves.

Ag producers interested in adding pheasant habitat can consult a Conservation District Ag Conservation Technician to review your conservation plan at 717-299-5361 x.5.

– Greg Heigel, Ag Conservation Technician

Sources:

-Cornell Lab of Ornithology

-<https://www.pheasantsforever.org/Habitat/Pheasant-Facts.aspx>

Dirt & Gravel Program Update

Lancaster County's Dirt & Gravel Road Program awarded several local municipalities funding for specific road/water quality improvement projects this past spring. A list of funded projects is below.

If municipalities have any potential Dirt & Gravel Road projects for 2021, funding for these projects will open up in January and be due February 12, 2021. The next Low Volume Road funding round will take place June - August 13, 2021.

If you have any questions about the Dirt & Gravel/Low Volume Rd. Program please feel free to contact the Conservation District to answer your Dirt & Gravel or Low Volume Road questions at 717-299-5361 x.5.

–Matt Kofroth , Dirt & Gravel/Low Volume Rd. Program Manager

2019 Dirt & Gravel Road Funded Projects		
Municipality	Road Name	Awarded Amount
Strasburg Township	Sides Mill Road	\$ 16,659.00
Elizabeth Township	Pumping Station Road	\$ 61,077.00
Drumore Township	Fishing Creek Road	\$ 2,600.00
Conestoga Township	Green Hill Road	\$ 2,600.00

Watershed Program Update

Lancaster County's Watershed program was busy this past spring and summer completing another stream restoration project in partnership with East Lampeter Township and the Millcreek Preservation Association. The Gibbons Park at

Gibbons before



Gibbons after

Nolt's Mill project involved over 1,800 linear ft. of stream bank regrading, over 600 ft. of muddill for instream aquatic habitat creation, 475 ft. of brush mattress to capture sediment within the stream, 3 log/cross vanes to direct high flows in the stream, and nearly 175 ft. of rock for shoreline protection.

Add in the nearly 400 native tree and shrub plantings that were planted to compliment the project and one can see the true value of this project. Prior to this work this future park property was plagued with little to no in stream aquatic habitat, 5-8 ft. high vertical eroding stream banks, invasive riparian species on streambanks, and a limited native riparian buffer along the stream. With this project now complete the landscape for this area has been drastically changed and local water quality has been vastly improved. This project compliments over 10 previous projects in the Mill Creek Watershed that various partners have completed over the last 10 years. Gradually sections of the Mill Creek Watershed are improving through local conservation efforts.

–Matt Kofroth, Watershed Specialist

STOP THE BLEED® Training

If the trauma doesn't kill a person outright, the next few minutes are critical for surviving in a life-threatening injury or accident. Stopping blood flow after a disaster or emergency is critical to saving lives. YOU don't have to be the trained medical professional to still save a life. If you are willing to learn to stanch the flow of the blood until the trained medical professionals can take over, you can make a difference!

According to the Department of Homeland Security, STOP THE BLEED® is a national awareness campaign and call-to-action. It is intended to cultivate grassroots efforts that encourage bystanders to become trained, equipped, and empowered to help in a bleeding emergency before professional help arrives. The PA Agricultural Ombudsman Program in cooperation with the South-Central Task Force's Agriculture Subcommittee is offering STOP THE BLEED® training to the agricultural community. Why? How quickly can trauma, injury and accidents happen around a farm? Horrifying quickly. How about vehicle accidents along a highway? Whether you live on the farm, or arrive on multiple farms because of your job, or even if you have NOTHING to do with a farm, you still might witness trauma and be able to help. With minimal training, you can make a maximum difference no matter where it happens.

According to www.stopthebleed.org, "In a STOP THE BLEED® course, you'll learn three quick techniques to help save a life before someone bleeds out: (1) How to use your hands to apply pressure to a wound; (2) How to pack a wound to control bleeding; (3) How to correctly apply a tourniquet. These three techniques will empower you to assist in an emergency and potentially save a life."

When is the training? Where is the training? That depends on you. We can create stand-alone training sessions, but attendance and interest tend to be higher if we add it to the agenda of existing meetings. If you know of a meeting that is being held, and you think STOP THE BLEED® is a great addition, please reach out to shellydehoff@lancasterconservation.org. The training is done in person. We are aware of the challenges created by a pandemic, but if you know of an in-person meeting in the remainder of 2020 or anytime in 2021, and are interested, contact Shelly Dehoff at the email above, or at 717-880-0848.

–Shelly Dehoff, PA Agricultural Ombudsman





LESSONS FROM THE Spotted Lanternfly

Spotted lanternfly sightings have become so commonplace in the county that they almost don't feel newsworthy with the insect's sudden but steady creep westward across Lancaster over the last year. Like many events of 2020, we have grown weary of hearing about them, and equally weary of squishing them.

The Spotted lanternfly is only the most recent of many past examples proving how challenging, and costly, control of an invasive species can be once the genie is out of the bottle.

It is a lesson we tend to forget. We don't realize a plant or insect is problematic until its escape and disruption of the natural environment is inevitable. The host plant of the Spotted lanternfly, the Ailanthus tree (Tree-of-heaven), was originally valued as an urban tree in the Mid-Atlantic area as long ago as the late 1700s. However, the original planters certainly could not have anticipated how this non-native tree would aid the dispersal of the Spotted Lanternfly in the 21st-century, threatening economic losses to agricultural producers and the hardwood industry.

Many landscape plants readily available for sale at nursery centers, including burning bush, butterfly bush, vinca (common periwinkle), Bradford pear and Japanese barberry, are in fact, listed as invasive by PA DCNR (Department of Conservation and Natural Resources). Japanese barberry is particularly concerning, as it is associated with higher populations of ticks.

We have a poor track record of predicting which non-native plants will become problematic in the future. We don't know if a non-native landscaping shrub that we plant today will be a host plant for another invasive insect or plant disease sometime in the future. In an age of international shipping and travel, the likelihood exists. By asking for and choosing native plants at the



English Ivy taking over 100 year old Sycamores.

nursery center, we can limit that possibility.

As many of us have taken to natural areas during the pandemic for recreation and to restore a sense of personal wellbeing, there were no shortage of invasive species to greet us. Garlic mustard sprouting along the trail. Mile-a-minute blanketing patches of native jewel-weed beneficial to native bees and Ruby-throated Hummingbirds. Japanese knotweed firmly established along portions of Northwest River Trail, to the exclusion of other plants. Carpets of

English ivy choking out native vegetation and disfiguring some of our oldest trees in the county; it has been around for so long we may not even recognize it does not belong in the landscape.

Fall can be a great time to take inventory of any invasive species on your property. Is there a Japanese barberry or Bradford pear that could use replacing in the spring with an alternative native to our area? A tree that needs rescued from the stranglehold of English ivy? Unfortunately, many invasive are here to stay, but collective efforts to remove and restore could prevent the next non-native pest from becoming an ecologically or economically-threatening infestation.

– Emily Broich, Resource Conservationist

Invasive Exercise Plan

Natural areas have been a refuge for many of us during the past chaotic year. If your gym routine is looking a bit different these days, try incorporating a little invasive species removal on your next hike:

Instead of 25 lunges: Pull out 25 garlic mustard seedlings. They are in their first year of growth right now. Learn to recognize this kidney shaped leaf an inch to several inches off the ground. See photo for ID. Be careful not to confuse with the native violet, which has more sheen to the leaf.

For a nice side stretch: Reach for a tangle of mile-a-minute (with gloves on!) and dispose of in a bag. You'll prevent the seeds from being dispersed by birds and deer.

Work on that manual dexterity: Bag a few Japanese barberry seedlings to prevent seed dispersal. For very young plants, hand pull with leather gloves on. Plants growing in dense shade tend to be green, not burgundy. A yellow root is a good ID mark. Watch out for thorns.



Garlic Mustard. Photo Credit: Emily Broich



Mile-a-minute. Photo Credit: NatureServe.



Japanese Barberry—**DON'T BUY.**
Photo Credit: Home Depot.

Close up of Japanese barberry leaves and berries.
Photo Credit: Creative Commons, Jamie Richmond.



Soil Health Perspective in 2020



As we navigate through 2020, we must change the way we think about our new normal routines, protective measures such as wearing face coverings and social distancing, and preventative care such as healthy diets, drinking water and taking vitamins. As humans are facing challenges in 2020, so is our Soil. Just as we must change the way we manage our health in 2020, we must think about ways to change our soil's health, it's our foundation to life. In the 21st century, we are abusing the soil as we try to produce higher yields to feed the growing population on less land each year.

Since the development of the Soil Conservation Service (SCS) in 1935 as a response to the Dust Bowl, the mission has been "Help the People Help the Land." Despite the name change to Natural Resource's Conservation Service (NRCS), the mission remains the same. NRCS is focused on providing technical and financial assistance to private landowners to conserve our natural resources. NRCS staff recently received extensive training on Soil Health to better assist local clients. Soil Health is the continued capacity of soil to function as a vital living ecosystem that sustains plants, animals, and humans. Understanding the complex ecosystem within the soil can be confusing. However, following four simple Soil Health Principles can improve and protect soil in any land use from cropland to pastureland to backyard gardens or forests. Basic needs for humans are air, food, water, and shelter. Similarly, soil needs air, organic matter, water, microorganisms.

We feed our bodies food and water to keep us healthy. But, how do you feed your soil to keep it healthy? Feed the soil with Conservation Practices that maximize living roots and biodiversity which include: Conservation Cover, Conservation Crop Rotation, Cover Crop, Forage and Biomass Planting, and Prescribed Grazing. **Maximizing Continuous Living Roots** is key for soil health. Not only do roots provide uptake of water and nutrients for the plant, the roots create biological hot spots that release organic carbon to feed soil organisms, provide habitat and preserve soil structure. **Maximize Biodiversity** by growing diverse crop rotations or multispecies plantings that will improve soil biology. Different plant species affect the kinds and abundance of soil organism because of their associate with microorganism communities. Thus, providing nutrient cycling, organic matter, food for diverse soil communities and soil stability.

We are protecting our bodies from COVID-19 by wearing face coverings and implementing social distancing measures. How do

you protect your soil? Conservation Practices to protect your soil by minimizing disturbance and/or maximizing soil cover include: Conservation Cover, Cover Crop, Forage and Biomass Planting, Pest Management Conservation System, Residue and Tillage Management, Mulching, Nutrient Management and Prescribed Grazing. **Minimize Disturbance** this includes physical, chemical and biological disturbances which can reduce carbon loss, protect soil structure and reduce habitat loss for microorganisms. **Maximize Soil Cover** on the surface includes crop residue, growing crop or other organic materials to provide a protective barrier between the soil and destructive energy from raindrops. Keeping a protective cover on the surface all year long improves soil structure, habitat for microorganisms and food source for microorganism communities.

Following these four basic Soil Health Principles can help grow your soil, which can increase yields, and reduce input expenses. Whether you are managing a small garden, acres of cropland, hay fields or pastures, the four basic principles of feeding your soil with biodiversity of plants and year round living roots while protecting the soil by maximizing soil cover and minimizing soil disturbance are key to build soil structure, organic matter, microorganism communities and increase nutrient cycling for biological hotspot of roots and microorganism communities for a healthy, living soil.

If you have questions about Soil Health or interested in assistance, contact Lancaster County USDA-NRCS office at 717-874-2530. NRCS staff are still working while following strict COVID-19 guidance to keep staff and clients safe.



Looking at the soil from two locations in the same pasture. On the left, the pasture was overgrazed providing minimal cover, lacked biodiversity of species and lots of disturbance from livestock created poor roots and soil structure. The picture on the right, the pasture is not overgrazed providing adequate cover, increased biodiversity in plant community, less disturbance from livestock allow for good roots, soil structure and organic matter.

Countywide Action Plan Update

More than half of Lancaster County's 1,400 miles of streams and much of its groundwaters are unhealthy. Thankfully, the Lancaster County Conservation District and the Lancaster Clean Water Partners (The Partners) are leading the charge to ensure clean streams throughout the county.

The Partners is a countywide, collaborative partnership of diverse partner organizations; local leaders in business, municipal public service, higher education, conservation planning, and non-profit management, that come together with a shared vision of clean and clean water in Lancaster by 2040.

Lancaster County is a priority area designated by the Environmental Protection Agency to reduce nitrogen and phosphorus pollutants by 2025 because of the high number of impaired streams and unhealthy groundwater. According to Pennsylvania's Watershed Implementation Plan (WIP), Lancaster is responsible for 21% of the state's nitrogen and 23% of the phosphorus reduction goals. That's a lot of work in one county!

The Lancaster Countywide Action Plan (CAP) outlines Lancaster's path for achieving nitrogen and phosphorus reductions for clean and clear water throughout the county. Written in 2018, the Lancaster CAP was recently updated to include a status of each priority initiative (agriculture, buffers, stormwater, and data management), programmatic and policy

hurdles, and achievements after beginning the implementation phase in 2019.

The Partners and the Conservation District are grateful for the additional capacity that the Pennsylvania Department of Environmental Protection (DEP) is providing with funds for a Countywide Action Plan (CAP) Coordinator to tackle the job. With the Partners and Lancaster County Conservation District as the lead entity, the CAP Coordinator team is made up of three local partners; LandStudies, Lancaster Farmland Trust, and David Miller/Associates, who can focus on specific work that will help us reach local reduction goals. The CAP Coordinator team was put into place in spring 2020 and is gearing up for a second year.

In spring 2020, DEP provided funding to fuel implementation efforts in Lancaster. A portion of the funding was awarded to the Conservation District, which is focusing on best management practices for agricultural operations. For example, an Amish farm in Salisbury Township recently had a grassed waterway, cattle lane, and fencing installed which will not only reduce nutrient and sediment runoff from reaching local waters, but will also protect the health of the livestock.

More information on the Lancaster CAP is available on the Partners' website: <http://lancastercleanwaterpartners.com/lancaster-countywide-action-plan/>

-Emily Smedley, Clean Water Partners



Diversion.



Diversion after matting.

Fall BMP Maintenance

Though there has been a lot of change and adaptation to overcome this year, the Ag Staff at the Conservation District was able to keep on track with BMP (Best Management Practice) Implementation this fall. Following all proper CDC Guidelines for social distancing and wearing masks, field work was able to resume and construction was able to be scheduled. A wide variety of BMPs were installed across the county this fall; from waterways, diversions and terraces to fencing, roof runoff structures and underground outlets.

With all installed BMPs comes some necessary maintenance that will help maintain the lifespan of each specific practice. BMP maintenance should be occurring all year long but as the fall leaves drop, it's a good reminder to check out any BMPs you may have on your own property before winter hits.

Here are some basic maintenance tips for common BMP's found in the County. For roof gutters, inlets, outlets and drop-box systems, make sure that they are free of leaves and any woody debris that could potentially clog or interfere with the system's ability to properly divert rainwater. Also, make sure that outlet pipes have animal guards that are intact to deter animals from burrowing in pipes. For waterways, diversions and terraces, be sure to mat and reseed any potential bare areas to ensure there is good coverage and growth as soon as possible. Avoid these areas when the ground is saturated to ensure that future gullies don't form from any tire ruts. For fencing, all fence rows should be clean and clear of any fallen limbs and trees, making any repairs as needed. For further assistance and/or any questions regarding BMP maintenance, please contact the Conservation District at 717-299-5361 x.5.

-Samantha Adams, Ag Conservation Technician



Waterway.



Waterway after matting.