



MS4 DEPARTMENT MONTHLY REPORT

CONNECT WITH NATURE * CRAFTS * FUN FOR KIDS & ADULTS
GIVEAWAYS * PRIZES * ENGAGING ACTIVITIES * FOOD TRUCK

FREE COMMUNITY EVENT!

ARBOR DAY FESTIVAL

10 AM - 2 PM | SATURDAY, 4/27/24 | MEMORIAL PARK, LEMOYNE



10 AM - 12 PM

Meet the world-famous Wally the Emotional Support Alligator and Joie!



10:00 AM

MONARCH BUTTERFLIES

Join Wildlife Conservationist and Monarch Expert Heather Mulhollan of Fairhaven Healing to learn about the importance of the endangered monarch butterflies and how we can all help restore this incredible species and other pollinators.

11:00 AM

RESCUED RAPTORS

Wildlife Rehabilitators from the Red Creek Wildlife Center will introduce us to the amazing live birds and animals that rely on our forests for habitat and food, including a hawk, owl, vulture, reptile, and mammal.

12:15 PM

PENNSYLVANIA WILDLIFE

Environmental Educators from Critter Connections will bring live animals and teach us about the local wildlife that depend on our trees and plants to survive. Touch reptiles, small mammals, amphibians, and more.



Enjoy free art stations, craft projects, fun hands-on STEM activities, giveaways, vendor tables, prizes, a pop-up Story Walk, & more! Free trees and seeds!

Discover all the amazing things that trees and native plants do! Meet the animals that live nearby!

Learn how to make changes at home to help our birds, pollinator insects, and wildlife, while filtering pollutants. Make your home watershed-friendly!

Visit www.lemoynepa.com/home/events/38536 for more information!



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ARBOR DAY FESTIVAL 2024

WHEN: Saturday, 4/27/2024 from 10:00 am – 2:00 pm
WHERE: Memorial Park (50 Hummel Ave, Lemoyne, PA 17043)
WHAT: FREE activities for kids and adults, including – Live Animals, Vendors, Arts, Crafts, Prizes, Giveaways, STEM Activities, & More!
WHO: Kasha Griva, kgriva@lemoynepa.com, (717) 317-1412

- ❖ Event is rain or shine – all activities under tents! All day fun for adults and children!
- ❖ If you would like to sponsor, volunteer, or participate, please contact Kasha Griva at the contact information listed above!

Lemoyne Borough is hosting our 2nd annual free community outreach educational event for children and adults of all ages on Saturday, 4/27/2024 from 10 am – 2 pm at Memorial Park in Lemoyne. **This event is being held rain or shine, with all activities held under tents & pavilions!**

See how native trees and plants clean water, mitigate stormwater pollution, reduce erosion, and balance the ecosystem. Learn how to make changes at home to help native birds, pollinator insects, and wildlife.

There will be presentations with time in between to visit tables of local organizations as well as art stations, craft projects, fun hands-on STEM activities, giveaways, and more. Some of the events will provide interactive education about how to help butterflies, birds, and animals that live in our community and depend on clean water and air.

Discover how to help endangered Monarch Butterflies and critical pollinator insects at home! **10:00 am**
Meet live animals from Red Creek Wildlife Rescue that depend on our trees and clean water! **11:00 am**
Touch or hold reptiles, amphibians, and small mammals from Critter Connections! **12:15 pm**

Discover all the amazing things that trees and native plants do!
Plan your garden with the Master Gardeners.
Pick up a free native tree, shrub, and seeds to start your garden!
Dig in the dirt, practice planting, and check out a composting bin with worms! Grab a free book!
Learn how to fish! Connect to your local waterways!
Discover local water bugs at the Stream in the Bucket experiment.
Meet Wally the Emotional Support Alligator!
See a hawk, an owl, and vulture up close! Touch bugs, snakes, turtles, rabbits, and more!
Donate your old bike! Get free minor bike repairs on site. Learn how to ride!
Create art and do craft projects at many of our vendor tables!
Play interactive environmental games!
Learn about rain barrels and how to conserve water.
Check out our pop-up Story Walk in the park!
Enter raffles and win prizes! See end of report for vendor details.



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March 1, 2024 – March 31, 2024

NOTEWORTHY ITEMS

- ❖ March brought fluctuating weather with freezing to warm temperatures, high winds, and light to moderate rain events throughout the month.
- ❖ Monitored flow of stormwater, inspected, and assessed conditions and performance of storm drains, inlets, outfalls, tributaries, BMPs, and green infrastructure (including newly planted Bare Root Trees) throughout the month during all weather conditions.



- ❖ Westwind Area Storm Sewer project – comprehensive televising and flushing of select MS4 infrastructure including drain boxes, grates, stormwater pipes, underground water flow, etc. to clear clogged sediment and debris out of pipes and drain boxes, assess condition of infrastructure, and determine appropriate repair or replacement needs.





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- ❖ Street sweeper has received a checkup and annual maintenance in preparation for her return to the streets of Lemoyne in April! Check signs on your street for scheduled street cleaning and parking details.



- ❖ Rain storms and wind caused buildup on many storm drains. MS4 and Maintenance staff removed leaves, debris, and trash from drains throughout month.

BEFORE



AFTER



- ❖ Maintenance staff cleared storm drain, inlet, and vegetated swale at 5th St & Washington Terrace by raking and shoveling out mud, compacted leaves, and debris.

BEFORE



AFTER



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- ❖ Removed trash, leaves, and debris from Rain Gardens and pots.
- ❖ Several snow, rain, and mixed precipitation events over the last couple months caused a buildup of sludge, dirt, oil, salt, pollutants, skid stones, and more in our rain garden forebays and bricks.
 - Maintenance staff performed manual heavy duty clean out of impacted areas.
 - The removal of these stones, debris, and pollutants prevents them from reaching the Susquehanna River and improves function to the infiltration practices of the rain garden.



- ❖ Cumberland County Land Partnerships Grant:
 - ADA accessible Gaga Ball pit assembled, prepared for weather conditions, and built.
 - Repaving/ resurfacing of basketball court completed along with measuring, marking, taping, and painting of new lines on court.
 - Brackets for basketball equipment have been cleaned, sanded, and resurfaced.
 - New asphalt surface for Gaga Ball foundation installed next to playground equipment.
 - Safety rubber matting for Gaga Pit has been laid and installed.





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- ❖ Demonstrated Rain Gardens on Market Street, Permeable Asphalt on Poplar St, and Phase II Stream Restoration Area on Walnut St for Chesapeake Bay Landscaping Professionals Training.
 - Met with 20+ trainees and members of Penn State Agriculture & Environment, Penn State Extension, Chesapeake Conservation Landscaping Council, Center for Watershed Protection, Land Studies, and other organizations.
 - Provided landscaping presentation & discussed conditions before projects, installation, plantings, soil quality, weekly/ monthly/ quarterly/ annual maintenance procedures, hardscaping, changes over years, plans for spring plantings, etc. and additional stormwater BMPs throughout Borough.
 - This activity will give Lemoine Borough credit for collaborative contacts on our annual DEP report.
 - Thank you to Lemoine resident and Penn State Master Gardener Shirley Stark for demonstrating and providing detailed lessons on her conservation landscaping at her home!



- ❖ Along with select maintenance staff, participated in Chesapeake Bay Landscape Council Training Program and earned certification as Chesapeake Bay Landscaping Professional.
 - This program is designed to educate professionals in the design, installation, and maintenance of sustainable landscaping practices, emphasizing proper function of stormwater best management practices and environmental stewardship.
 - The achievement of the CBLP Level 1 designation demonstrates an advanced level of professionalism and knowledge of sustainable landscaping practices for a healthier Chesapeake Bay, as well as an in-depth knowledge of sustainable landscape best practices and a focus on maintenance of stormwater best management practices.





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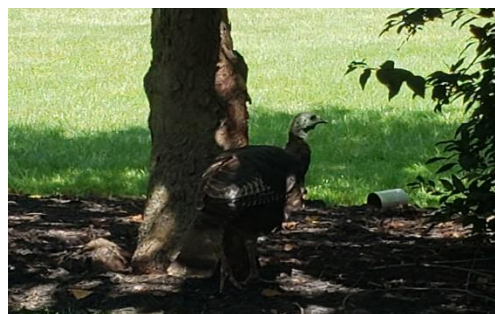


- ❖ March 3rd was World Wildlife Day... have you seen our rafter of wild turkeys strutting around Lemoyne?

According to the National Wild Turkey Foundation (NWTf), wild turkeys benefit from the same mixed plant and insect community that supports our native pollinators and naturally removes pollutants from our stormwater.

“If you see a grassland with bees and butterflies, there are more than likely turkeys around. This, coupled with the increasing decline of pollinator habitat throughout the U.S., is why the NWTf takes creating and enhancing pollinator habitat seriously.”

- ❖ How can we support the habitat needs of our wild turkeys?
 - Open canopy forests with adjacent fields are their preferred habitat.
 - Save mature trees – turkeys fly short distances and like to roost in trees.
 - Plant tall grasses near the base of trees where they prefer to build nests.
- ❖ How can we help our wild turkeys as they forage for food?
 - Turkeys eat seeds and nuts from the forest floor, as well as plants and insects.
 - Plant nut and berry-producing trees, such as native oaks, hickories, beech, and cherries.
 - Plant pollinator-friendly plants in your garden and allow beneficial insects and plants to thrive.
- ❖ Visit the Bee and Butterfly Fund for free information about planting practices:
[Pollinator Habitat Guide - BEE AND BUTTERFLY HABITAT FUND \(beeandbutterflyfund.org\)](https://www.beeandbutterflyfund.org/habitat-guide.html)
(<https://www.beeandbutterflyfund.org/habitat-guide.html>)





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- ❖ Groundwater is found below the surface of the earth. Water is constantly in cycle, and stormwater that infiltrates through our soils often penetrates through underground rock layers and flows into groundwater aquifers. Pennsylvania receives an average of 41" of rain each year and has 30 times more groundwater than surface water.

10 ways to protect and conserve groundwater from www.ngwa.org:

1. Use native plants in your landscape.
2. Reduce chemical and fertilizer use.
3. Properly dispose of toxic substances / hazardous waste.
4. Shut off water when brushing teeth, shaving, or washing dishes.
5. Fix all drips around your home and install water-efficient appliances.
6. Limit showers to 5 minutes and run full loads for the laundry and dishwasher.
7. Water plants during the coolest parts of the day and only when needed.
8. Reduce, reuse, and recycle.
9. Use all natural / non-toxic household cleaners.
10. Get involved in water education! Share your knowledge.

To learn more about groundwater, visit www.groundwater.org.



**INTERNATIONAL DAY OF
ACTION FOR RIVERS**

- ❖ March 14th was International Day of Action for Rivers!

The Susquehanna River flows 444 miles from NY to MD, is the longest river on the east coast, stretches to its widest at Harrisburg, supplies drinking water to millions of Pennsylvania residents, and is the single largest and longest flyway for migratory birds on the east coast. How can we help?

- Participate in **Lemoine Community Clean Up Day**: Saturday 4/20/24, 9 am – 12 pm
- Participate in a **local creek clean up**: www.conocreek.org / www.ybwatershed.org
- Commit to **cleaning up one (or more) piece of trash every day** for a month!



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❖ March 21st was World Forestry Day/ International Day of Forests!

American Forests (www.americanforests.org) informs us that every \$1 invested in urban trees results in \$2 to \$4 in benefits, including lowered energy costs, reduced stormwater flows, improved aesthetics, higher air quality, and reduced carbon dioxide concentrations. **Spring is the perfect time to plant trees!**

- Trees act as natural pollution filters, removing polluted particulate matter from water and absorbing nutrients like nitrogen, phosphorus, and potassium.
- A single tree can intercept 760 gallons of rain water in its crown alone, reducing runoff and flooding on your property.
- Three large trees planted in the appropriate areas around your home can reduce air-conditioning use and costs by 30%.
- When planted properly to reduce wind exposure, trees can reduce heating bills by 2% - 8%.
- Greener urban areas lead to healthier and more social interactions between adults and children, as well as lower levels of graffiti, property crimes, and violent crimes.
- Views of nature and trees can reduce the stress response of body and mind when stressors in urban conditions are present. Studies show that both adults and children who can easily reach a green space reported less stress and a lower body mass.
- Strategic plantings of trees and shrubs can reduce noise considerably. Tall, dense trees with soft ground surfaces can reduce noise by 50% or more.

If you're interested in volunteering, sign up for a shift below and help plant trees this April!

<https://www.allianceforthebay.org/volunteer-tree-planting-relay/>



The Alliance for the Chesapeake Bay has engaged communities in watershed conservation via volunteer tree plantings for decades. The organization and its volunteers have a goal to plant 96,000 trees from 3/29 – 4/27. You can also participate in **TREELAY 2024** from 4/5 – 4/6 where thousands of trees will be planted to restore the land and water in the Chesapeake Watershed.

2024 TREELAY SITES FOR PENNSYLVANIA INCLUDE: Upper Oxford Township Arboretum, Elizabethtown, Lititz, Lancaster, Abbotstown Park, Millersville, and Big Elk State Park.



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❖ March 21st was World Water Day!

❖ **What can we do to help improve water quality?**

Conservation landscaping preserves the natural water cycle and helps keep waterways clean in local watersheds. Healthy soils and landscapes allow rainwater to penetrate the ground and help to filter out pollutants. Every piece of land has the ability to affect a waterway! Conservation landscaping techniques reduce pollutants in the landscape, reduce wastewater amounts, increase groundwater recharge, reduce overall water use, help keep waterways clean, and lower monthly water bills.

❖ **What is conservation landscaping?**

Conservation landscaping is a guiding principle that works with nature to reduce pollution, incorporates environmentally sensitive design, low impact development, native plants, and integrated pest management to create diverse landscapes that help protect clean air and water, support wildlife, and provide a healthier and more beautiful environment. It protects the soil and is maintained using the minimum amount of chemicals to improve air and water quality, support wildlife, and provide a healthier and more beautiful human environment.

❖ **Conservation landscaping supports clean air and water by:**

- Incorporating native plants that provide ecological benefits, are adapted to local conditions, and may require fewer chemical inputs.
- Collecting stormwater on site and employing stormwater best management practices (BMPs) to promote infiltration, slow and cool runoff, and reduce pollutants and erosion in local waterways as well as the Bay.
- Reducing the amount of turfgrass that requires mowing, thereby reducing the number of mower-produced pollutants released into the air and the amount of atmospheric deposition of nutrients into water.

❖ **Conservation landscaping supports wildlife by:**

- Providing diverse plant communities that attract and provide wildlife habitat.
- Creating migratory corridors of conjoined healthy ecological communities.

❖ **Conservation landscaping supports a healthier and more beautiful human environment by:**

- Reducing the amount of pollution entering the environment.
- Providing beautiful, functional, sustainable spaces for people to enjoy.

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THE EIGHT ESSENTIAL ELEMENTS of Conservation Landscaping

1. Conservation landscaping is designed to benefit the environment and function efficiently and aesthetically for human use and well-being.
2. Conservation landscaping uses locally native plants that are appropriate for site conditions.
3. Conservation landscaping includes a management plan for the removal of existing invasive plants and the prevention of future invasives.
4. Conservation landscaping provides habitat for wildlife.
5. Conservation landscaping promotes healthy air quality and minimizes air pollution.
6. Conservation landscaping conserves and cleans water.
7. Conservation landscaping promotes healthy soils.
8. Conservation landscaping is managed to conserve energy, reduce waste, and eliminate or minimize the use of pesticides and fertilizers.

For more information about conservation landscaping, visit www.chesapeakelandscape.org.

For native plant help, visit www.panativeplantsociety.org.



We look forward to seeing you at Arbor Day! Here are some of the organizations joining our Festival:

Barlett Tree Experts – [Bartlett Tree Experts: Tree Services](http://BartlettTreeExperts.com)

Create a tree and shrub care plan with experts! Learn how to promote the best health of your trees. Pick up a free tree to plant at home while supplies last!

Blue Moon Games – [Blue Moon Games \(bluemoongamer.com\)](http://BlueMoonGames.com)

Play an interactive environmental game! Check out their supply of trading card games, board games, dice, miniatures, and more!



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Bird Town Pennsylvania – [Home - Bird Town Pennsylvania \(birdtownpa.org\)](http://birdtownpa.org)

Discover Backyard Habitat Programs and learn how to naturally reduce stormwater runoff, greenhouse gases, and use of pesticides to create a healthier, more sustainable environment for birds, wildlife, and people! 1

Chesapeake Bay Foundation – [Homepage - Chesapeake Bay Foundation \(cbf.org\)](http://cbf.org)

Free native tree and shrub giveaway while supplies last at the Conodoguinet Creek Watershed booth.

Critter Connection – [Critter Connections - Critter Connections \(critterprograms.com\)](http://critterprograms.com)

Hold snakes, geckos, turtles, a tortoise, bearded dragons, rabbits, guinea pigs, and a toad!

The Cumberland County Team, including:

Clean Water Cumberland – [Clean Water Cumberland | Cumberland County, PA - Official Website \(cumberlandcountypa.gov\)](http://cumberlandcountypa.gov)

Conservation District – [Conservation District | Cumberland County, PA - Official Website \(cumberlandcountypa.gov\)](http://cumberlandcountypa.gov)

Keep Cumberland County Beautiful – [Keep Cumberland County Beautiful | Cumberland County, PA - Official Website \(cumberlandcountypa.gov\)](http://cumberlandcountypa.gov)

Planning Department – [Planning Department | Cumberland County, PA - Official Website \(cumberlandcountypa.gov\)](http://cumberlandcountypa.gov)

Vector Control, Weights & Measures – [Vector Control | Cumberland County, PA - Official Website \(cumberlandcountypa.gov\)](http://cumberlandcountypa.gov)

Waste & Recycling – [Recycling & Waste | Cumberland County, PA - Official Website \(cumberlandcountypa.gov\)](http://cumberlandcountypa.gov)

Watershed Program – [Watershed Program | Cumberland County, PA - Official Website \(cumberlandcountypa.gov\)](http://cumberlandcountypa.gov)

Conodoguinet Creek Watershed Association – [Home - Pennsylvania Conodoguinet Creek Watershed Association \(conocreek.org\)](http://conocreek.org)

Meet Freddy the Fish and learn about pollution impacts and how to clean our streams. Pick up a free tree while supplies last! Learn about clean up efforts on the Conodoguinet Creek and how to help!

Fairhaven Healing – [Fairhaven Healing | Reiki | Camp Hill, PA, USA \(fairhaven-healing.com\)](http://fairhaven-healing.com)

Making changes at home in your garden can make a big impact in helping save Monarch Butterflies! Decorate a flower pot and take home wildflower seeds to help pollinators at your home!

[Monarch Butterfly Conservation | My Site \(fairhaven-healing.com\)](http://fairhaven-healing.com)

[Wildlife Rescue | My Site \(fairhaven-healing.com\)](http://fairhaven-healing.com)

Fredricksen Library – [FRE | Cumberland County Libraries](http://cumberlandcountypa.gov)

Browse great books and participate in STEAM activities from the Kunkel Creation Station and our Jane Goodall Roots to Shoots educator! Dig in the dirt and learn to plant! Experience a composting bin in action!

Hampden Township – [Welcome to Township of Hampden, PA \(hampdentownship.us\)](http://hampdentownship.us)

Learn about Hampden's work in reducing pollution!



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Lemoyne Borough Shade Tree Commission – [Shade Tree Commission | Lemoyne PA](#)

Visit this table for raffles and prizes from our sponsors!

Lemoyne Borough Stormwater / MS4 – [Stormwater | Lemoyne PA](#)

Discover stormwater best management practices, including our rain gardens, and learn how to plant pollinator-friendly gardens at home!

Members 1st Federal Credit Union – [Members 1st Federal Credit Union | PA Credit Union](#)

Play games, make a craft, and enter to win prizes!

PA Dept of Agriculture Bureau of Plant Industry – [Plant Industry \(pa.gov\)](#)

Learn about new fertilizer laws enacted in July 2022, and best practices to reduce stormwater runoff.

PA Dept of Agriculture Bureau of Plant Protection – [Plant Protection \(pa.gov\)](#)

Discover how to identify and control plant pests, including insects, nematodes, fungi, bacteria, and viruses that impact PA's natural resources.

PA Department of Agriculture, Hardwood Development Council PA WoodMobile – [WoodMobile \(pa.gov\)](#)

The WoodMobile is a traveling museum providing interactive experiences to help our visitors understand our forests, the sustainable forest products industry, how products are made, and threats to our forests such as invasive plants and insects, diseases, and white-tailed deer.

PA Fish & Boat Commission – [Pennsylvania Fish & Boat Commission - Homepage \(fishandboat.com\)](#)

Connect with our local waters and learn how to fish!

PA American Water – [Pennsylvania American Water | We Keep Life Flowing \(amwater.com\)](#)

Join the Environmental Educator team from the Splash Lab for hands on crafts or STEM activities and giveaways! [Our Story \(amwater.com\)](#)

PA Rural Water – [Home - Pennsylvania Rural Water Association \(prwa.com\)](#)

Play in the Augmented Reality sandbox and learn how rain flows right here at home - from our streets into our streams and our river! Learn about our topography. Discover our local watersheds, including the Susquehanna River Basin, Conodoguinet Creek Watershed, and Yellow Breeches Watershed.

Penn State Master Gardeners – [Master Gardener \(psu.edu\)](#)

Create leaf paintings and learn all about native trees and plants, invasive plants and insects, rain gardens, pollinator-friendly gardens, and more!

Penn State Master Watershed Stewards – [Master Watershed Steward Program \(psu.edu\)](#)

Participate in hands on Watershed experiments and see the creatures that live in our creeks and streams! Learn about Lawn Conversion, Watershed Property Certification, and more.

Red Creek Wildlife Center – [redcreekwildlifecenter.com](#)

Meet live animals, including a mammal, a reptile, a hawk, a vulture, and an owl that were all rescued here in PA!



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Recycle Bicycle – [Recycle Bicycle Harrisburg - Recycle Bicycle Harrisburg \(rbhburg.org\)](https://rbhburg.org)

Learn how to ride a bike! Discover helmet safety. Receive free minor bike repairs onsite. Donate your old bikes! Receive information about how to obtain a free bike.

Susquehanna River Basin Commission – [Susquehanna River Basin Commission: Coordinating Water Resource Efforts \(srbc.gov\)](https://srbc.gov)

Stop by for information about native Pennsylvania species that depend on a clean river, stormwater best management practices, PFAS, water rights, the Susquehannock, and a fun activity for kids!

Wally the Emotional Support Alligator – [Wally The Alligator Just Wants To Cuddle With You \(youtube.com\)](https://youtube.com)

Meet the world-famous Wally, the Emotional Support Alligator and his dad, Joie Henney! 10 am – 12 pm.

Optional: photos standing next to Wally cost \$5; photos holding Wally cost \$10.

[@Wally Gator \(@wallygatorjoie\)](https://www.instagram.com/wallygatorjoie) • [Instagram photos and videos](#)

West Shore Historical Society – [West Shore Historical Society](#)

Learn about the history of Central Pennsylvania through books, artifacts, and photos. See how historic flooding has changed our towns. Make seed bombs to throw in your garden for easy planting!

West Shore Bureau of Fire – [West Shore Bureau of Fire \(wsbf.org\)](https://wsbf.org)

West Shore Regional Police Department – [West Shore Regional Police Department | Cumberland County \(crimewatchpa.com\)](https://www.crimewatchpa.com)

West Shore School District Bookmobile – [Bookmobile \(wssd.k12.pa.us\)](https://wssd.k12.pa.us)

Meet Beatrice, the Bookmobile and Mr. Bishop, our 4th Grade Teacher (and 2024 Bookmobile Driver)! Help Drive Literacy Home! Children are welcome to select a free book.

Whitaker Center – [Whitaker Center](#)

Experience the Whitaker on Wheels Van and perform hands-on STEM activities with the Whitaker educators!

Wildlife In Need – [Wildlife In Need Emergency Response of Pennsylvania - Home \(winemergencyresponse.com\)](https://winemergencyresponse.com)

Meet a Wildlife Rescue Volunteer and learn how to safely help sick, orphaned, or injured wild animals.

Wormleysburg Borough – [Borough of Wormleysburg \(wormleysburgpa.org\)](https://wormleysburgpa.org)

Learn about stormwater management and pick up an activity book!

Yellow Breeches Watershed Association – [Home | Yellow Breeches Watershed Association \(ybwatershed.org\)](https://ybwatershed.org)

Learn about clean up efforts on the Yellow Breeches and how you can help!

ZHAGA Coffee Shop – [ZHAGA Coffee Shop](#)

Food truck items available for purchase – see menu online.