

**Ohio Environmental Education Fund  
Awarded Mini Grants, SFY 2017**

*In the fall 2016 and spring 2017 funding cycles, Ohio EPA awarded the following 14 mini grants, for a total of \$57,644.*

**Ohio Northern University – Chemistry and Biochemistry**, “Blanchard River Report Card,” F-17M-003, \$800, Allen, Hancock, Hardin and Putnam Counties, Audience: General Public, Contact: Christopher Spiese, [c-spiese.1@onu.edu](mailto:c-spiese.1@onu.edu), 419-772-2365.

Supports a one-day sampling event by ONU and Blanchard River Watershed Partnership (BRWP) volunteers, using EPA methods to test current levels of nitrogen and phosphorus. The results will be used to update a 2012 watershed Report Card, to see whether best management practices installed since then are having the desired effect. The new Report Card brochure will be distributed to at least 500 residents at county fairs and other events in the four counties (Hardin, Allen, Putnam, and Hancock), to help them understand that the Blanchard River faces many of the same issues as Lake Erie: high nutrient levels, reduced biodiversity, and excess sediment loads. The brochure will also be mailed to elected officials and policymakers.

**Eastgate Regional Council of Governments**, “You are Here – A Snapshot of the Yellow Creek Watershed,” F-17M-004, \$5,000, Mahoning County, Audience: Pre-School to University (grades 3-12), Contact: Stephanie Dyer, [sdyer@eastgatecog.org](mailto:sdyer@eastgatecog.org), 234-254-1520.

Provides permanent, educational watershed signage at strategic locations within the Phase II urbanized areas of the Yellow Creek watershed, Mahoning County. Information displayed on each sign will provide target audiences with 1) a sense of understanding and place by identifying what a watershed is and where they are located at that point within the Yellow Creek watershed, 2) a sense of responsibility in order to protect surface waters, especially the watershed's surface drinking water lakes, from nonpoint sources of pollution and 3) simple solutions ("good housekeeping measures") to help improve the watershed's water quality and protect the surface drinking water sources. This project is an educational component of the 2015 state endorsed Yellow Creek Watershed Action Plan and will target the Phase II regulated communities of Poland Village and Poland township, as well as Mill Creek MetroParks. Project has the potential to reach over 1,966 students and 35,000 visitors to the municipal forest and Yellow Creek Park. A number of local jurisdictions, park and school districts are collaborating to install the signs and distribute the brochures.

**Toledo Botanical Garden**, "Water Pollution & Runoff Training," F-17M-005, \$1,282, Lucas County, Audience: Pre-School to University (grades 2-9), Contact: Hannah Halfhill, [hannah.halfhill@toledogarden.org](mailto:hannah.halfhill@toledogarden.org), 419-720-8714.

Toledo Botanical Garden (TBG) will host a one day, six-hour training for 25 elementary school teachers from grades 2-9 that will provide hands-on lessons about pollution in waterways, and how to manage runoff in an urban environment. These lessons will utilize key aspects from Project WET as well as resources at TBG, and teachers will be given curriculum materials to take back to their classrooms in order to effectively teach water management and best practices for keeping the local watershed clean. A rain garden demonstration and a "take action" project are planned for each classroom.

**Kamm's Corners Development Corporation**, "Kamm's Corners Public Parking Lot Green Infrastructure Retrofit," F-17M-006, \$5,000, Cuyahoga County, Audience: General Public, Contact: Ben Cambell, [ben.cambell@kammscorners.com](mailto:ben.cambell@kammscorners.com), 216-252-6559.

Kamm's Corners Development Corporation (KCDC), a nonprofit dedicated to the betterment of the Kamm's Corners neighborhood in urban Cleveland, will modify their existing neighborhood public parking lot located behind their popular "town center" at Lorain Avenue and Rocky River Drive with 2,700 square feet of bio-retention areas. These will be installed within existing low spots of the 1.26 acre lot. KCDC will perform long term maintenance/education during and after construction. KCDC will train local businesses & residents on the potential installation of similar cost-effective stormwater Best Management Practices (BMPs) on their properties, and how to benefit from the Northeast Ohio Regional Sewer District's stormwater fee credit program. Project includes design, printing and installation of 2 interpretive signs, fact sheets, infiltration testing and "bioretention bags" containing plants/seeds and copies of residential raingarden guides, for distribution to residents at the local farmers' market.

**Ohio University, Department of Geography**, "Stormwater to Smartphone: Digital Rain Garden Monitoring for Stormwater Education," F-17M-009, \$4,948, Athens County, Audience: General Public, Contact: Amy J. Lynch, [lyncha@ohio.edu](mailto:lyncha@ohio.edu), 740-593-1100.

This project will provide the general public, local government agencies, university students, and property owners and developers with unique and valuable information on the impact of rain garden installations as stormwater management strategies. It uses the first low-cost digital sensors designed for rain garden monitoring to make real time water quality and quantity information available to the public on an associated website, along with information on its interpretation and importance and links to Project WET EE to facilitate classroom education. The project will also include videos on stormwater, rain gardens, and the sensor design and installation process and an interpretive sign and posters that detail the function of the rain gardens and invite visitors to pull out their smartphones to

access the monitoring website and learn more. Project has the potential to reach 180 people daily who visit the rain garden and over 24,000 local residents, students, developers, property owners and local government leaders.

**Light on the Land Services, LLC**, "Using Biochar to Recover Excess Nutrients in Dairy Wastewater," F-17M-011, \$5,000, Statewide, Audience: Regulated Community, Contact: Scott Bagley, [scott@ltsathens.com](mailto:scott@ltsathens.com), 740-818-4017.

This project will introduce dairy farmers to the various ways biochar can be integrated into their farming operations in order to reduce the nutrient contents of effluents so they can be safely dispersed on local pastures and fields. We will develop case studies and a website that highlights how biochar works for manure management, as well as the ways it improves soil productivity and long-term carbon sequestration. We will engage dairy farmers through an exhibit at one of their main gatherings, the Ohio Spring Dairy Expo. Our goal would then be to use resources developed during the project as a foundation for proposing talks and presentations at additional workshops, conferences, and expos (Ohio State Fair, Manure Science Review, and Farm Science Review, for example). We would also intend to build on this to provide educational content related the role biochar can play in other animal farming operations such as poultry houses and feed lots. Project could reach all of Ohio's 2,500 plus dairy farmers.

**Washington Soil and Water Conservation District**, "Soil Simulator," S-17M-016, \$5,000, Washington County, Audience: General Public, Contact: Dean Sinclair, [dsinclair@wcgov.org](mailto:dsinclair@wcgov.org), 740-373-4857.

Provides a portable rainfall simulator and infiltration demonstration model for use at local fairs, multiple community events and school presentations, to show surface water runoff, infiltration of water, and how different types of tillage, cover crops and impervious cover affect runoff in rural and urban areas. The unit includes a folding table, display boards, hose, pressure regulator, rain gauges, shut-off valve, clean up nozzle and five soil pans. This project will reach over 61,310 county residents at 10 county events (e.g., Waterford Community Fair).

**Delaware Soil and Water Conservation District**, "Shaping Watersheds: Augmented Reality Sandbox," S-17M-017, \$4,822, Delaware County, Audience: General Public, Contact: Dona Rhea, [dona-rhea@delawareswcd.org](mailto:dona-rhea@delawareswcd.org), 740-368-1921.

"Shaping Watersheds" is an interactive augmented reality 3D exhibit. It uses a computer generated sensory input to project topographic maps of landforms onto a sand basin. Visitors interact with the exhibit by shaping landforms in kinetic sand. After the colored elevation map is drawn over the landform, virtual rain water flows down slopes, to lower surfaces, purposefully showing the distribution of water into watersheds. This grant will purchase supplies to build a portable, durable augmented 3D exhibit for use in programs that will reach over 10,000 residents over the life-time of the project. Preservation Parks of Delaware

County, Franklin County Metro Parks, the Community Library, Big Walnut and Olentangy Local Schools are collaborating.

**Paulding Soil and Water Conservation District**, “Protecting our Water Resources,” S-17M-018, \$2,792, Paulding County, Audience: Pre-School – University, Contact: Patrick J. Troyer, [patrick.troyer@pauldingswcd.org](mailto:patrick.troyer@pauldingswcd.org), 419-399-4771.

Provides three-dimensional EnviroScape® table top models and supplies to demonstrate beneficial wetland functions, drinking and wastewater treatment processes, and the flow of precipitation and nonpoint source pollutants through watersheds. These will be used in programs reaching more than 2,600 students and adults each year. Classroom presentations utilizing these models are aligned with Ohio’s science education standards at multiple grade levels.

**Licking County Health Department**, “Health and Habitats at the Licking County Health Department,” S-17M-019, \$5,000, Licking County, Audience: General Public, Contact: Hilary Requejo, [hrequejo@lickingcohealth.org](mailto:hrequejo@lickingcohealth.org), 740-349-6477.

The Licking County Health Department (LCHD) is currently undertaking a long-term habitat restoration and education project at its 20-acre campus. In 2015, LCHD planted 5 acres with 350 native Ohio trees as well as several wildflower plots for monarch butterfly conservation. These areas can be accessed by the public on a half mile paved walking path. The goal of the Health and Habitat project is to create a 1500-square-foot wildflower garden where young children and adults can view native wildflowers, butterflies, and birds in a safe outdoor setting. The garden area will be designed to attract butterflies and birds utilizing native wildflowers and grasses. The garden, along with the larger campus, will include signage for permanent environmental education. Additionally, LCHD Health Educators will host 2 public workshops using curriculum adapted from Project Learning Tree's School Site Investigation for youth and educate about the positive health benefits of outdoor activities. Project could reach over 1,100 WIC Clients who use the Health Department for other programs.

**Melissa Schultz Nature Preserve**, “Environmental Education in the Melissa Schultz Nature Preserve,” S-17M-021, \$5,000, Wayne County, Audience: Pre-School – University, Contact: Gregory Shaya, [greg@shaya.us](mailto:greg@shaya.us), 330-464-3736.

More than three hundred fifty kindergarten through middle school students and local residents will learn the importance of habitat restoration in the newly created Melissa Schultz Nature Preserve, operated by the Montessori School of Wooster. Weekly nature classes for students at the School, and summer day camps for students from four Wayne County summer programs and preschools will include plant and animal identification, weather, site history, water and soil testing. Additional activities will be offered for students in an after-school outdoor education club. Student learning activities will be featured from Project WET and Project WILD, aligned with state science standards, following two half-day

workshops for 20 Wooster teachers. Families and community members will be invited to participate in self-guided walks, with educational materials including bulletin boards, maps, interpretive signs, and identification guides. The City of Wooster is collaborating, linking trails in the neighboring Gerstenslager-Martin Park with those in the Nature Preserve. Faculty and students from the College of Wooster and Ashland University will be providing expertise, volunteering and using the Preserve in various ways.

**Catholic Charities of Summit County**, “Camp Christopher Wetland and Pollinator Species Initiative,” S-17M-023, \$5,000, Cuyahoga, Loraine, Medina, Portage and Summit Counties, Audience: Pre-School to University, Contact: Holly Bollin, [habollin@ccdacle.org](mailto:habollin@ccdacle.org), 216-392-9024.

Project will provide seeds for a wet meadow and native plant restoration to improve habitat for pollinator species, for day camp and residential programs serving nearly 2,000 students annually. To facilitate on-going education and community outreach, the applicant is using other grant funds to build an educational observation area with a boardwalk and displays for school groups, diocesan leaders, and members of the community to observe a healthy, established wet meadow area and learn the importance of managing such habitats in our communities for pollinator species survival. Smaller pollinator gardens will be established on site with replicable design plans for schools and organizations to take back to their own facilities for installation. These smaller gardens will add to the network of "way stations" for pollinators to rebuild and sustain their populations locally. The Ohio Prairie Nursery, Summit Metro Parks and Geauga Park District are providing expertise on local soil types, native plant species, removal of invasive species, and revitalization of the existing seed bank.

**Bike Miami Valley**, “Bike Valet Parking,” S-17M-028, \$5,000, Clark, Greene, Miami and Montgomery Counties, Audience: General Public, Contact: Emmy Fabich, [emmy@bikemiamivalley.org](mailto:emmy@bikemiamivalley.org), 937-496-3827.

More than 70% of trips made by car in the U.S. are less than 4 miles, and while many bike programs encourage people to ride to work, this is often the trip with the most barriers to choosing an alternative mode. Bike Miami Valley seeks to focus on those trips with fewer barriers by working with event organizers across the Miami Valley to provide complimentary bike valet parking at 24 local events in 2017 that could each attract an estimated 100-250 bike riders. Event organizers will receive a report of environmental impact based on all modes traveled to the event, and event attendees will use a trip calculator to demonstrate their environmental impact. The Greater Dayton Regional Transit Authority and Miami Valley Regional Planning Commission are collaborating.

**Hancock Historical Museum**, “Agriculture Building Interactive Exhibit Center,” S-17M-030, \$3,000, Hancock County, Audience: Pre-School to University, Contact: Sarah Sisser, [ssisser@hancockhistoricalmuseum.org](mailto:ssisser@hancockhistoricalmuseum.org), 419-423-4433.

The Museum's preexisting Agriculture Building has become an important part of the general visitor experience and educational programming for local students. The building is in great need of new exhibits to accurately convey the story of the county's agricultural heritage and the evolution of agricultural practices in the region. Agriculture remains the largest industry in the county, however most residents are several generations removed from the farm. The disconnect between farming and non-farming populations in the county has become particularly apparent in the last two years with the discussion of potential flood mitigation efforts for the Blanchard River, and the effects of farming on the Blanchard River watershed. By conveying the history of these practices and the historical significance of the Blanchard River through exhibits and programming, the Museum will educate the general public, generate conversation, and raise the level of understanding between all sides of the debate. The museum reaches 20,000 people annually. Collaborators include Hancock Park District, Hancock Soil and Water Conservation District, and the University of Findlay College of Education.

For more information, contact:



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