

**Ohio Environmental Education Fund
Awarded Mini Grants, SFY 2015**

For the fall 2014 and spring 2015 funding cycles, Ohio EPA awarding the following 15 mini grants for a total of \$63,366.

Medina County Park District, “Demonstration and Interpretation of a Vegetated Stormwater Buffer Strip,” #F-15M-005, \$2,500, Medina County, Audience: General Public, James C. Spetz, jspetz@medinaco.org, 330-722-9375.

The project site is a newly-developed park located directly on the divide that separates the headwaters of the Rocky River watershed (Lake Erie Basin) and Wolf Creek watershed (Ohio River Basin). A strip of native vegetation will be planted in a high-visibility area to intercept stormwater running off a slope before it enters a recreational fishing area. The project will involve a series of interpretive signs along approximately 425 feet of trail that will cover topics of watershed function and stormwater management, native vs. nonnative species, the importance of pollinators and host plants, and the role of vegetation in stabilizing soils and absorbing nutrients.

Graham Local Schools, “Graham Local Schools Trout in the Classroom (TIC),” #F-15M-006, \$2,500, Champaign County, Audience: Pre-School – University (Elementary and Middle School), Contact: Emily Kay Shreve, shreeve@grahamlocalschools.org, 937-663-4449.

Expands the successful Trout in the Classroom program previously funded by the OEEF to more grades, to include more than 400 students in grades 2-12. Students will focus on the relationship between water quality of the Mad River and the conditions required by trout. Students will be responsible for daily chemical testing and observations of the trout to ensure they are in a suitable environment until they are large enough to release to the Onion Creek tributary of the Mad River. Students will present their monitoring data through a community event and presentations to the school board and local organizations. Elementary students will use Nexus Tablets and iPads to photograph the stages of the project and create YouTube videos. The Madmen Chapter of Trout Unlimited is collaborating.

Williams Soil and Water Conservation District, “Rivers Around Us,” #F-15M-007, \$3,367, Williams County, Audience: General Public, Contact: Loretta Hayek, lhayek@williamsswcd.org, 419-636-2349.

Provides equipment and supplies to train a network of up to 15 citizen volunteers and local school classes to regularly monitor water quality in the Tiffin River. Workshops will introduce teachers to the Project WET and Healthy Water, Healthy People curricula and testing methodologies, and how to post their students' data to an online database for comparison over time. Teachers and

citizen volunteer monitors will have the opportunity to receive certification as Level One Credible Data Collectors. The Ohio State University Extension Office in Williams County is collaborating.

Carroll-Columbiana-Harrison (CCH) Environmental Group/Solid Waste District, “Environmental Teachers Academy,” #F-15M-009, \$5,000, Carroll, Columbiana and Harrison Counties, Audience: Pre-School – University (Elementary School), Contact: Eric Matthews, mathesonman@gmail.com, 330-627-7311.

Provides three educator workshops and supplies to expand a previously funded Environmental Teachers Academy for middle school to include 20 teachers of grades K-3. Workshops will feature two national curricula (Project Wild-Aquatic, Wonders of Wetlands) to teach watersheds and water quality, and weather and climate change education resources being developed by NASA. Participating teachers will receive Earth Grow Boxes for their students to investigate soil types, decomposition rates, nutrient content, percolation and filtration, leaching of fertilizers and pollutants, and plant productivity. Topics include the use of rain barrels and rain gardens to conserve water and reduce runoff, and the use of remote sensing technology to monitor algal blooms.

City of Canton Parks Department, “Conservation Area Signage,” #F-15M-010, \$5,000, Stark County, Audience: General Public, Contact: Theresa Gang, Theresa.gang@cantonohio.gov, 330-438-4691.

The City of Canton Parks Department plans to cease mowing to improve water quality and restore habitat in areas of seven parks and the Nimishillen Creek Watershed. The mini grant will support interpretive signs to help park visitors understand the water quality, cost saving, and ecological benefits of the no-mow areas. Benefits include: natural infiltration; slowing down and cleaning storm water runoff before it enters a creek; reducing stream bank erosion and sediment; less use of fertilizer, water and weed killer; increasing biodiversity by providing food and habitat for native animals and plants; and providing shade and cooler temperatures for fish and aquatic insects.

Village of Lowellville, “The Mahoning River on Display,” #F-15M-011, \$5,000, Mahoning County, Audience: General Public, Contact: Joann Esenwein, Lowellville.dam@yahoo.com, 330-717-5441.

Funding will provide an interpretive sign and informational flyers about the environmental benefits of the Mahoning River Water Resource Restoration Sponsor Program (WRRSP) dam removal project in the Village of Lowellville. Benefits include removal of sediment, restoration of natural stream flow and improvement of water quality and warm water aquatic habitat. The sign will include the dam site history, and flyers will be distributed by the Village, local businesses and schools. The Eastgate Regional Council of Governments and Lowellville Board of Education are collaborating.

JB Green Team/Jefferson Belmont Regional Solid Waste Authority, “Enviroscape Waste Water Treatment Model for Land Labs and Education,” #F-15M-014, \$3,280, Belmont and Jefferson Counties, Audience: Pre-School – University (Middle and High School), Contact: Tammy Ann Shepherd, tshepherd@jbgreenteam.org 740-296-5376.

Provides two EnviroScape© Drinking Water and Wastewater Treatment Models with carrying cases and curriculum to be used for classroom presentations, library programs, after-school, 4-H and scouting club presentations and outdoor events in Belmont and Jefferson Counties. These models will be used in conjunction with EnviroScape© Landfill and Recycling Models to emphasize the importance of recycling, litter prevention and proper disposal of waste to protect drinking water supplies. Collaborators include the Epworth Center, High Meadows 4-H Club, Jefferson Soil and Water Conservation District, Ohio River Valley Council Boy Scouts of America, and St. Clairsville Public Library.

The Wilderness Center, “Sugar Creek Watershed Environmental Education Project,” #F-15M-015, \$4,982, Holmes, Stark and Wayne Counties, Audience: Pre-School – University (Middle and High School), Contact: Lynda Marie Price, lynda@wildernesscenter.org, 330-359-5235.

The purpose of this project is to implement site-specific watershed science lessons targeted to 7th-12th grade groups. The project involves reestablishment of an educational outdoor space with accessible headwater streams in an area recently subjected to storm damage. This space offers a prime demonstration of the impact of natural and human disturbance on watershed ecosystems. Multiple lesson plans will be tailored to give students effective environmental problem solving experiences including hands-on learning activities, evidence-based decision making, and multidisciplinary approaches. Provides macroinvertebrate sampling supplies and supports the cost of transportation and substitute teachers to enable 200 students to identify how natural disturbance, local land use and community decisions affect the quality of the environment. The mini grant will also replace storm-damaged trail markers utilized with a Wilderness Walk podcast used by thousands of hikers. Collaborators include the Ohio State University School of Environment and Natural Resources and the Dalton Local, East Holmes Local, Green Local and Orrville City School Districts.

Cuyahoga River Community Planning, “Woods for Waters: A Guide to Planting Riparian Buffers for Stream Health,” #F-15M-019, \$4,960, Cuyahoga and Summit Counties, Audience: General Public, Contact: Jane Goodman, goodmani@crcpo.org, 216-241-2414.

Provides funding for the printing and distribution of 4,000 copies of the "Woods for Waters" guide to planting riparian buffers, a step-by-step manual for homeowners and other property owners. The guide was created to help people with streams on their properties to a.) understand how vegetated buffers create

habitat, prevent polluted runoff and soil erosion, and increase biological diversity, and b.) design, lay out, choose appropriate trees and plants, and plant and maintain their riparian buffer. Collaborators include Cleveland Metroparks, Cuyahoga County Board of Health and Ohio Department of Natural Resources Division of Forestry.

City of Delaware, “Water Treatment Plant Educational Center,” #S-15M-023, \$5,000, Delaware County, Audience: Pre-School – University (Middle School and Undergraduate), Contact: Brad Stanton bstanton@delawareohio.net, 740-203-1903.

The City of Delaware Water Treatment Plant is one of a few in the U.S. using ultrafiltration and nanofiltration. New exhibits for visitors touring the plant will illustrate water conservation, water and wastewater treatment, the lack of treatment of storm water, and regional water supplies and history. An exhibit on the hydrological cycle is aligned with seventh grade science standards to illustrate the changing states of water moving through the lithosphere, biosphere, hydrosphere and atmosphere. This center will also be used with Ohio Wesleyan University's environmental studies program. Collaborators providing suggestions on the design include Buckeye Valley Local Schools, Delaware Area Career Center, Delaware City Schools, Delaware Soil and Water Conservation District, and Ohio Wesleyan.

Belmont Soil and Water Conservation District, “Captina Creek Watershed Streambank Stabilization and Riparian Enhancement Educational Initiative,” #S-15M-025, \$1,850, Belmont County, Audience: General Public, Contact: Kimberly Brewster, kb.belmontswcd@att.net, 740-526-0027.

Supports a workshop to increase the awareness and knowledge of proper streambank stabilization techniques among 50 local officials and operators in the Captina Creek Watershed, including county commissioners, township trustees, floodplain managers, stream cleanup crews employed by the county, local Ohio Department of Transportation employees, and industries operating within the watershed. Streambank erosion and sedimentation constitute one of the top threats to this high quality Creek, and improper stabilization methods can exacerbate the problem. A workshop on riparian zone protection will be led by an experienced stream restoration expert. Topics will include stream physical forms and functions, how they can degrade, and how to develop restoration and enhancement projects to benefit watersheds and communities. Examples of successful solutions will focus on cost, permit and monitoring requirements and lessons learned. Captina Conservancy and Olney Friends School Stillwater Science Center are collaborating.

Northwood Local Schools – Northwood High School, “Northwood Outdoor Environmental Science Lab,” #S-15M-027, \$4,997, Wood County, Audience: Pre-School – University (Middle and High School), Contact: Lara Michele Fish, lfish@northwoodschoools.org, 419-691-4651.

Students will monitor water quality impacts from twenty acres of land owned by the school district that was previously a farm field and borders Dry Creek, which empties into Lake Erie. The goal of this project is to restore this land to its natural habitat with the help of students and community volunteers, while providing 150 seventh grade and high school environmental science students with access to outdoor water quality testing in a hands-on inquiry setting. Students will combine classroom and field activities from the Healthy Water, Healthy People curriculum, collect and identify macro-invertebrates as an indicator of stream health, and sample dissolved oxygen, turbidity, pH and flow rate. They will also study phosphorus and nitrate loads that contribute to harmful algal blooms in Lake Erie, and share their research results at TMACOG’s annual Student Watershed Watch congress. Seventh grade students will also participate in a field trip to the Ottawa National Wildlife Refuge for wetland education activities developed with funding from a previous OEEF grant. Collaborators include Northwestern Water and Sewer District, Ottawa National Wildlife Refuge and Toledo Metropolitan Council of Governments.

Southwest Air Quality Agency, “Idle-Free Campaign,” #S-15M-029, \$4,930, Butler, Clermont, Hamilton and Warren Counties, Audience: General Public, Contact: Joy Landry, joy.landry@hamilton-co.org, 513-946-7754.

Southwest Ohio Air Quality Agency proposes to expand its existing Idle-Free initiative to 190 area schools, day care centers, parks, sports complexes, YMCAs, recreation centers and other facilities where children are dropped off and picked up for their sports and extracurricular activities by parents who idle their vehicles. The mini grant will provide 190 Idle-free zone signs and posts at these locations. The message about the health and environmental benefits of reduced emissions will be reinforced through the ongoing four-county public awareness campaign incorporating social media, television, Web links, electronic newsletters and school programs.

Preservation Parks of Delaware County, “Planting for Pollinators,” #S-15M-032, \$5,000, Delaware County, Audience: General Public, Contact: Richard E. Niccum, Jr., rniccum@preservationparks.com, 740-524-8600, Ext. 3.

The primary purpose of the project is to educate visitors about how to enhance insect biodiversity and provide habitat to native pollinator species such as honeybees, solitary bees, butterflies, moths and hummingbirds. These species are facing declines in Ohio and globally, and are responsible for pollinating more than 75% of flowering plants. A nearly half-acre demonstration garden and interpretive signs at Deer Haven Preserve will educate visitors on the benefits of

planting native species, limiting chemical use, and providing food (pollen, nectar), water (water feature, sunning puddle) and shelter for overwintering and reproduction of native insects, birds and other wildlife species. In addition to the signs, education staff will conduct programs throughout the year related to pollinators and utilizing the garden. These educators also host a number of school field trips at Deer Haven Preserve each year and will incorporate the garden and pollinator topics into field trip sessions that meet Ohio's academic content standards in science, social studies, language arts, fine arts, and math. An accompanying media campaign will include the creation of short videos on Youtube, Facebook and the Park District Website to promote the project and highlight what residents can do in their own yards. Liberty Township, Olentangy Local Schools and Sustainable Delaware are collaborating.

The Ohio State University Extension - Darke County, "Manure Science Review: Nutrient Stewardship Education for Farmers," #S-15M-033, \$5,000, Darke County, Audience: Regulated Community, Contact: Amanda Douridas, douridas.9@osu.edu, 937-484-1526.

The Manure Science Review, an educational field day that provides science-based information on best practices for manure nutrient management, will be held in Darke County, Ohio in August 2015, reaching an estimated 175-200 farmers. The program will include presentations that provide information on relevant issues, including feeding strategies to reduce phosphorus (P) in manure, methods for reducing nutrient runoff from cropland, and technologies to utilize manure. Field demonstrations, which will illustrate practices and equipment that can reduce the risk of manure nutrient runoff, will include field trials for cover crops and manure side-dressing, technologies for injecting liquid and solid manures, smoking drainage tile to illustrate preferential flow, and manure application equipment calibration. The MSR site is rotated to different regions of the state each year to reach new livestock producer audiences. The Grand Lake/Wabash Watershed Alliance, Ohio Farm Bureau, and Soil and Water Conservation Districts in Auglaize, Darke, Mercer and Shelby Counties are helping to plan and publicize the event, and the Ohio Department of Agriculture's Certified Livestock Manager program is providing continuing education hours for attendees.

For more information, contact:



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