

Ohio Environmental Education Fund Mini Grants Awards, Fall 2017

In the fall 2017 funding cycle, Ohio EPA awarded the following 10 mini grants, for a total of \$34,369.

Ottawa SWCD, “Augmented Reality Sandbox,” F-18M-001, \$2,145, Ottawa County, Audience: Pre-School – University, Contact: Becky Simpson, becky.simpson@ottawaswcd.com, 419-898-1595.

This grant will be used to purchase equipment to build a portable Augmented Reality Sandbox (ARS). The ARS is a 3D model that uses a hands-on approach to demonstrate different earth science concepts. This model uses a kinetic camera to project different landforms onto a sandbox. Participants can then change the landform by moving the sand to see how water flows and disperses over the watershed after a rain. We will use this as an educational tool to demonstrate soil erosion, watershed awareness, non-point source pollution, landforms, and topography. Classroom presentations will be aligned with Ohio's science education standards. We anticipate that the model will be used in programs reaching over 3,000 students and adults.

Columbus City Schools – Cedarwood Elementary, “Kindergarten Life Science Triad,” F-18M-002, \$5,000, Franklin County, Audience: Pre-School – University, Contact: Heather Allen, hallen704@columbus.k12.oh.us, 614-397-1460.

Around 180 Columbus City School kindergarteners will participate in the Kindergarten Life Science Triad, participating in hands-on activities and field trips to learn the Ohio life science standards, use science inquiry and application, and explore careers in the field of life science. The students will experience three in-class lessons led by a science specialist and three field trips to extend what the students learned during the in-class lesson. Students will complete a journal documenting the six experiences. The Columbus Zoo and Aquarium and Franklin Park Conservatory are collaborating. Columbus City Schools Spruce Run Outdoor Education Center will be the third venue of the triad.

Canal Winchester Local Schools – Canal Winchester Middle School, “How Does Runoff Affect Soil and Water Quality of a Wetland Ecosystem,” F-18M-003, \$500, Franklin County, Audience: Pre-School – University, Contact: Steven Bocock, sbocock@cwls.us, 614-833-2151.

Students will perform water and soil testing of the wetland next to our middle school. The wetland is surrounded by multiple human activities that may contribute to soil and/or water quality problems. Students will determine the health of the water and soil and develop a plan to make changes to increase biotic diversity. The nationally known curriculum The Wonders of Wetlands will be used to facilitate this project. Columbus Metro Parks and the Ohio EPA, DSW are collaborating. Project would benefit 3 seventh grade middle schools.

Graham Local Schools – Graham Elementary School, “Graham Elementary Trout in the Classroom Aquaponics Adventure,” F-18M-004, \$5,000, Champaign and Logan Counties, Audience: Pre-School – University, Contact: Emily Kay Shreve, shreeve@grahamlocalschools.org, 937-539-1521.

This project will serve as an addition to our existing successful Graham Elementary Trout in the Classroom Project funded previously by OEEF. We intend to add another tank in our building. We are in the beginning stages of researching aquaponics, and we are hoping to use this process of filtering our tank water in one of our tanks. Our elementary school will be participating in the First Lego League project for the 17-18 school year, and we are in the beginning stages of researching ways to incorporate this year's theme of hydrodynamics to our TIC project. We are excited to add another tank and a new "layer" to our project for the 17-18 school year.

Antwerp Local School District – Antwerp Local Schools, “Native Plant Prairie and Wildlife Area,” F-18M-005, \$5,000, Defiance and Paulding Counties, Audience: Pre-School – University, Contact: Linda Mabis, mabis.l@antwerpschools.org, 419-258-5421.

The Native Plant Prairie Project is located on a two-acre section of the Antwerp Local Schools complex. The Project will include native plants, shrubbery, trees, a pavilion, picnic tables, water gardens, bird and bat houses, composting, use of solar lighting and pumps, and mail box with identification books to assist visitors as they observe plants, insects, butterflies, and birds. The overarching goal of the project is to promote and spread an environmental conservation message, provide habitats for butterflies, birds, pollinators, and aquatic life, and enrich student's learning experience on this outdoor education learning lab. The project will benefit several groups of local community residents and 750 students in the district. Paulding SWCD, Toledo Metro Parks, Girls Scout Troop 20516, Paulding-Putnam Electric Co-Op, Paulding Area Foundation, Antwerp Rotary, and Paulding County Master Gardeners all are collaborating.

Slow Food Columbus, “Slow Food Columbus Low-Tunnel Environmental Project,” F-18M-007, \$5,000, Franklin County, Audience: Pre-School – University, Contact: Christina Weatherholtz, cweatherholtz3151@columbus.k12.oh.us, 614-365-5556.

Students in the Columbus City Schools district will be engaged in environmental education activities to include awareness and water conservation in an outdoor garden-based learning program. Specific Ohio State Standards in the areas of Science, Social Studies, and Reading-Language Arts will be addressed using low-tunnel plant-based learning. Low-tunnel growing allows for students to plant seeds earlier in the season with a harvest ready before the end of the school year. The Slow Food Columbus School Garden Program includes low-tunnel supplies, professional development, and plant-based learning support to CCS. As an integral element of the environmental program, Franklin Soil & Water and Franklin Park Conservatory will use established curriculums such as Project Learning Tree and Project Wet. These collaborators will visit each of the twenty-one schools where students will learn about soil, water conservation, and how to direct sow & grow real food for healthy consumption. Over *.549 students in Columbus City Schools would benefit from this project. Columbus City Schools, Franklin SWCD and Franklin Park Conservatory are all collaborating.

Holmes SWCD, “Learning About My Watershed,” F-18M-008, \$1,300, Holmes County, Audience: Pre-School – University, Contact: Michelle Wood, mwood@co.holmes.oh.us, 330-674-2811.

We are requesting an Enviroscope Watershed/Nonpoint Source Model and carrying case to provide a hands-on, interactive demonstration of the sources and effects of water pollution and the conservation practices that can be adopted to minimize them. Holmes SWCD has used an Enviroscope model extensively for 20-25 years with our current model that is cracked and been repaired many times. Holmes SWCD staff provide in-classroom presentations that meet our primary objective of promoting clean water and healthy soil. The Enviroscope easily aligns with the ODE Learning Standards. Our staff provides presentations to approximately 1000 students annually. Of that 1000 students, our objective is to demonstrate the Enviroscope to at least 200 students, or approximately 8 different classes. East and West Holes School Districts are collaborating.

Cleveland Metropolitan School District – Campus International High School, “Stream and Water Quality Analysis,” F-18M-010, \$2,035, Cuyahoga County, Audience: Pre-School – University, Contact: John Dutton, john.dutton@campusinternationalschool.org, 216-308-3940.

Biology students at Campus International High School in Cleveland metropolitan School District, an International Baccalaureate school, will participate in stream and water quality analysis activities on the Cuyahoga River and another body of water. The analysis will be a thorough biological, physical and chemical analysis to determine the overall health of the waterways including a determination of nutrient loads to use for further analysis in the classroom. Campus International High School is a new high school, starting with 125 ninth-grade students in the 2017-2018 school year, all of whom will be taking biology.

Imago, “School Yard Environmental Learning Stations,” F-18M-011, \$4,236, Hamilton County, Audience: Pre-School – University, Contact: Ellie Falk, efalk@imageearth.org, 513-921-5124.

Imago will work with Pleasant Ridge Montessori (a Cincinnati Public School) to design and implement environmental learning stations at the school's existing garden and nature scape. For the last three years, Imago has led weekly, standards-based outdoor education programs at the school. As we plan for the school's transition to greater ownership of the program, the proposed learning stations will give teachers an enhanced opportunity and ability to lead their own outdoor education lessons. Each station will be a physical space in the outdoor classroom and will also include lesson and activities for the teachers to use. Station examples include pollinator gardens, bird watching area, an arboretum and more. Not only will these stations create richer learning opportunities, they will also enhance schoolyard biodiversity. Moreover, the framework of the stations and the lessons developed can be replicated and applied to other Imago school partners. Pleasant Ridge Montessori School is collaborating.

Athens City Schools – Athens Middle School, “Inquiring Minds: Soil and Water,” F-18M-012, \$4,153, Athens County, Audience: Pre-School – University, Contact: Mary Ann Hopple, mhopple@athenscsd.org, 740-541-1898.

Inquiring Minds:Soil and Water will focus on inquiry activities and experiments for all of the 7th grade students (approximately 200 students) at Athens Middle School in Athens, Ohio. We will be using activities from Project WET, Healthy Water Healthy People, the Wonders of Wetlands, and teacher-created opportunities to engage the students in topics related to water and soil, as found in the content standards for 7th grade from the state of Ohio. The activities will also help students develop their understanding of STEM as it relates to the content. Athens SWCD is collaborating.

For more information, contact:
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