

2022 Environmental Education Program Grants Awarded

The Pennsylvania Department of Environmental Protection (DEP) awarded a total of \$632,897 in environmental grant funds to 63 projects addressing environmental justice, climate change, and/or water quality. Fifty of the projects will engage youth and adults living and/or working within environmental justice areas.

Thirty-four local projects received mini grants of up to \$3,000; twenty-eight projects with a broad or statewide reach received general grants of up to \$20,000; and one project, designed to engage students and teachers at the local, state, and national levels, received a grant of \$65,710.

"These grants help provide the foundation for environmental education for people of all ages," said DEP Secretary Patrick McDonnell. "This year's Earth Day theme is 'Invest In Our Planet' and each of these projects represents an investment into furthering the environmental education of Pennsylvanians."

The <u>Environmental Education Grants Program</u> was established by the Environmental Education Act of 1993, which mandates setting aside five percent of the pollution fines and penalties DEP collects annually for environmental education in Pennsylvania. Since its inception, the DEP has awarded \$12.3 million in environmental education grant funding to support 2,134 projects.

Grants were awarded to schools, institutions, conservation districts, and environmental and community organizations. The 2022 program selected applications for the development of innovative formal and non-formal education projects that:

- Address grant program priorities of water, climate change, and/or environmental justice;
- Provide opportunities to expand the public's understanding of Pennsylvania's environmental issues; and
- Develop skills required to make informed decisions.

Projects Awarded by County:

Allegheny

- Bloomfield-Garfield Corporation: Host public workshops and green-industry training programs. Participants and volunteers will install a demonstration native plant habitat garden. (\$3,000)
- •Venture Outdoors: Engage 50-60 City of Pittsburgh elementary and middle school students in water quality lessons and field studies. (\$8,380)

Armstrong

- •Armstrong Center for Community Learning: Launch a year-long project for high school students addressing clean water and engaging them in several activities throughout the region such as tree plantings, tours, storm drain stenciling and water testing. (\$13,529) Bradford
- Bradford County Conservation District: Conduct two (2) Forestry education symposiums for private landowners and forestry logging professionals on topics such as sustainable forestry practices and Erosion & Sedimentation plans. (\$11,996)

Butler

•Seneca Valley School District: Using a Flex Farm-Generation 4 technology system, 5th grade environmental curriculum will address the food chain, photosynthesis, the water cycle, and sustainability concepts. (\$3,000)

Cameron

•Cameron County Conservation District: Hold multiple education programs for all ages that address effective ways of reducing nonpoint source and source point water pollution. (\$1,553)

Centre

- Penns Valley Conservation Association: Expand its 5th to 7th grade Meaningful Climate Change and Watershed Education Toolkits (MC2WET) to meet the needs of all 3rd grade level students in the Penns Valley Area School District. (\$2,921)
- •The Pennsylvania State University: Hold a hands-on professional development workshop for PreK-12 educators on the key roles pollinators and pollinator landscapes play in ecological resiliency. (\$2,061)

Chester

•The Land Conservancy for Southern Chester County: Expand the New Leaf Sensory Garden by installing two (2) new stations, with the assistance of summer interns. Conduct Pre-school and summer camp field experiences, including lessons and activities. (\$3,000)

Clinton

•Clinton County Conservation District (2 projects): Spark the interest of girls (grades 8-10) in STEM studies by hosting a "She Can" weekend workshop led by professional women (\$1,949); and Create a farmer education program promoting the Resource Enhancement and Protection (REAP) program. (\$850)

Clarion

•Clarion County Conservation District: Install 2 interpretive signs at an AMD passive treatment system and organize 3 field tours for high school and university teachers, agency partners and the community. (\$3,000)

Columbia

• Columbia County Conservation District: Host multiple events for farmers, landowners, K-12 students and the public utilizing rainfall simulator kits and a slake demonstration kit to promote water quality protection through proper soil management. (\$2,833)

Crawford

• Allegheny College: Create an education program for campus educators, K-12 classes and the community involving the new permaculture food forest to address climate change and promote sustainable local food systems. (\$3,000)

Cumberland

- •Cumberland County Conservation District: Hold a three (3) night program (grades 4-6), including hands-on activities, that addresses watershed management, nonpoint source water pollution, climate change, wildlife habitats and environmentally themed careers. (\$3,000)
- •Shippensburg University: Provide a summer learning program for youth (grades 1-12) which engages them in three (3) water and climate change experiential opportunities. (\$2,989)

Dauphin

- •Dauphin County Conservation District: Conduct three (3) Stormwater for Homeowners workshops for residents in multiple municipalities. Rain barrels will be distributed and attendee follow-up will be conducted. (\$3,000)
- Girl Scouts in the Heart of Pennsylvania: Install learning stations addressing water, climate change, and food insecurity. Provide hands-on activities, creek investigations and opportunities to implement the Meaningful Watershed Educational Experience framework. (\$18,323)

Erie

- Regional Science Consortium: Beginning with teacher trainings, schools will implement an Adopt-a-Stream water monitoring program involving environmental audits and implementation of stewardship action projects. (\$19,997)
- School District of the City of Erie (2 projects): Expand the existing 'Residential Garden Program-Paying It Forward.' Former participants will mentor new students and families. (\$3,000); and Establish a school garden for student field studies and guest presentations on topics such as climate change, environmental justice and food sovereignty. (\$2,993)

Fayette

•Mountain Watershed Association: Host an afterschool program for 4th and 5th graders. During classroom and field experiences students will delve into environmental issues and be introduced to ecologically themed careers. (\$18,600)

Franklin

• Greencastle-Antrim School District: Create an on-site science lab to enhance existing K-12 curriculum, that provides hands-on learning opportunities and guides student-driven actions addressing water quality and climate change. (\$12,368)

Juniata

• Juniata County Conservation District (2 projects): Provide 9th-12th grade students with formal classroom education in raising American eels for release into local waters. (\$2,745); and Establish an outdoor classroom for studying climate resilience, including hands-on STEM activities, where students will explore and test their climate change ideas and solutions. (\$3,000)

Lackawanna

•Marywood University: Host an Environmental Stewardship camp for youth (ages 10-14) to help raise awareness on topics such as climate change and watershed conservation, and introduce potential environmentally themed career opportunities. (\$2,921)

Lehigh

•Lehigh County Conservation District: Incorporate use of an outdoor living laboratory, including weekly hand-on lessons, into a new high school Environmental Science course. (\$3,000)

Luzerne

- Eastern Pennsylvania Coalition for Abandoned Mine Reclamation (EPCAMR): Create a virtual reality curriculum involving a tour of the Askam Abandoned Mine Drainage Treatment System. (\$13,879)
- •Wyoming Seminary College Preparatory School: Establish pollinator and birding gardens to serve as outdoor learning sites. Deliver tours, speaking engagements and workshops to students, teachers and the public. (\$20,000)

McKean

• The Pennsylvania State University: Implement a hands-on environmental education series, supporting STEM studies, for elementary students and educators addressing water, watersheds and climate change. (\$3,000)

Monroe

• Monroe County Conservation District: Host multiple interactive educational field days for 10th grade students and water resource workshops for Master Watershed Stewards and local Envirothon teams. Develop an educational video for local municipalities and developers. (\$10,589)

Montgomery

•The Friends of Briar Bush: Provide a two-part, hands-on watershed education program to approximately 180 fourth grade students to help them connect watershed and stormwater management concepts with their school sites. (\$2,357)

Northumberland

•Shamokin Creek Restoration Alliance: Host a field day for high school students focused on native plants and green building design. Students will plant a rain garden. (\$2,995)

Philadelphia

- Awbury Arboretum Association, Inc.: Conduct native wildlife field studies and experiential lessons, including at least one STEM activity, for PreK-5th grade children. Teacher surveys will address integration of topics with classroom teaching. (\$3,000)
- •Philadelphia Solar Energy Association: Develop a 6th grade curriculum addressing solar energy and climate change that includes lesson plans, teacher trainings and interactive materials. (\$18,739)
- Villanova University: Host climate change workshops that engage high school students in hands-on STEM activities and field experiences to observe sustainability initiatives adopted by academic institutions. (\$19,425)

Pike

• Pike County Conservation District (2 projects): Host multiple Leaf Pack Network workshops addressing nonpoint source water pollution for educators, high school students and the public. (\$2,562); and Install two native plant gardens and conduct pollinator workshops. (\$2,908)

Potter

•Potter County Conservation District: Host two (2) pond workshops, including PSU surface water testing and follow-up, for landowners and contractors. (\$1,658).

Snyder

• Snyder County Conservation District: Provide a hands-on camp experience for 1st-4th graders involving rotating environmental stations. Friends and family members will help install conservation practices. (\$2,580)

Washington

•California Area School District: Using a multi-tiered system, coordinate district programs to develop green, sustainable K-12 schools that reduce energy, food waste, conserve water, introduce environmentally friendly transportation and increase recycling. (\$20,000)

Wayne

• Lacawac Sanctuary Foundation: Hold a 2-day Lake School, providing hands-on field-based education and training in lake water quality monitoring for private homeowner association members. (\$19,983)

Westmoreland

• Brandywine Conservancy: Train volunteer Pennsylvania Master Naturalist leaders that includes providing 30 service hours to conservation organizations, schools and municipalities. (\$3,000)

Wyoming

•Wyoming County Conservation District: Hold two (2) field experiences for students (grades 4-6). Rotational stations will address a variety of topics including Pa agriculture, soils, water quality, wildlife, forestry and climate change. (\$2,148)

York

• York County Libraries: Provide hands-on activities and resources, including books and STEAM kits, for youth (ages 10-15) addressing climate change and alternative forms of energy. (\$2,997)

Multiple Counties

- BLaST IU 17: Launch an Environmental Explorer Program (grades K-8) in Bradford, Lycoming, Sullivan, and Tioga counties. (20,000)
- •Discovery Pathways: Train up to 20 youth steward community leaders from South Philadelphia immigrant and refugee communities. Youth will lead programs, in Philadelphia and Bucks counties, and develop materials for non-English speaking families, encouraging them to access local parks and outdoor recreation areas. (\$3,000)
- •Group Against Smog & Pollution, Inc.: Develop an air quality primer and host workshops for elected leaders and staff in Allegheny, Armstrong, Beaver, Butler, Fayette, Greene, Washington and Westmoreland counties. (\$19,922)
- •Jacobs Creek Watershed Association: Hold four (4) quarterly Macro Monday events when PreK-12 children and their guardians from Fayette and Westmoreland counties will perform hands-on stream activities to learn about macroinvertebrates and water quality. (\$2,989)
- LEAF Project Inc.: Engage diverse youth (ages 14-18) from Cumberland, Dauphin and Perry counties, in hands-on learning addressing agricultural, food systems and consumer practices. Youth leaders will facilitate public education campaigns addressing food choices and climate change. (\$20,000)
- •Lower Merion Conservancy: Develop a hands-on program for students (grades 4-8) in Montgomery and Philadelphia counties that addresses solutions for nonpoint source water pollution, excess stormwater runoff and climate change environmental impacts. Create environmental clubs and install small-scale, low cost Green Stormwater Infrastructure on school properties and public lands. (\$20,000)
- •Nurture Nature Center: Expand the Watershed-Friendly Property certification and education program, including handouts, outreach kits and promotional materials, to reach large urban properties/institutions. Pilot the program in York, Philadelphia and Delaware counties for future statewide implementation. (\$20,000)

- •Pennsylvania Envirothon: Implement a statewide project that encourages high school students' exploration of environmental issues and provides them with tools for creating healthy communities through stewardship actions. Students and teachers interact at the county state and national levels. Analyze the existing program to determine ways of expanding engagement of teachers and youth in environmental justice areas. (\$65,710)
- Pennsylvania Interfaith Power & Light (2 projects): Hold seven (7) recorded climate change education sessions and three (3) celebrations at Philadelphia locations. Programs will include listening sessions and hands-on experiences. (\$20,000); and Hold seven (7) recorded climate change education sessions and three (3) celebrations at SW PA Urban farms. Programs will include listening sessions and hand-on experiences. (\$20,000)
- •Pennsylvania Resources Council: Conduct eight (8) watershed protection and stormwater management workshops for residents in Delaware, Allegheny, Beaver and Fayette counties. Participants will receive a 'Watershed Wisdom' booklet and instructions for setting up, using and maintaining rain barrels. (\$18,950)
- Riverbend Environmental Education Center: Host a replicable summer Institute for teachers (grades 3-5) from Delaware, Montgomery, and Philadelphia counties that promotes the MWEE framework and builds teacher capacity to support student learning across multiple disciplines. Hold monthly virtual meetings with attendees to plan EE classroom implementation. (\$20,000)
- Spirit and Truth Fellowship: Conduct a four (4) season workshop series for residents in Philadelphia and Delaware counties that: Teaches home energy efficiency strategies; Expands student participation in the solar installation vocational education program; Increases awareness of climate change challenges; and Facilitates consensus building to implement climate solutions. (\$14,741)
- Stroud Water Research Center (two projects): Create innovative macroinvertebrate touch tanks to deliver programs for K-12 students, families and the public in Chester county (\$3,000); and Implement a collaborate model for establishing six (6) outdoor spaces in Chester and Lancaster counties, that support watershed education involving K-12 teachers and students and promotes community interactions with schools. (\$20,000)
- The Pennsylvania State University: Hold a 5-day residential camp program for students (grades 9-12) from Centre, Huntingdon and Chester counties, focusing on local water quality issues, climate change and social/leadership experiences. (\$5,500)
- The Pennsylvania State University: Host a 20-hour Environmental Stewardship Program creating a total of 16 trainees in Blair, Chester, Lackawanna and Susquehanna counties. Participants will train an additional 80 people, lead workshops, and implement group projects. (\$19,525)
- •Tioga County Conservation District: Provide education to landowners and farmers in Toga and Potter counties on how soil health can lead to profitable land management, protect water quality and combat climate change. (\$10,732)