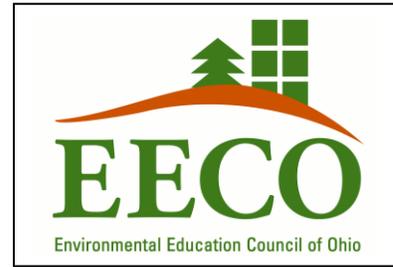


## Ohio Environmental Education Fund Statewide Partnerships in SFY 2014

Environmental Education Council of Ohio, \$98,156



In 1995, Ohio EPA's Office of Environmental Education initiated a long-term partnership with EECO to build statewide capacity for environmental education in ways that could not be accomplished within the confines of a short-term general grant. Through this nineteen-year partnership, OEEF and EECO are able to provide professional development opportunities for teachers and non-formal environmental educators, as well as quality curriculum resources aligned with the Ohio Department of Education's New Learning Standards and Model Curriculum.

### Environmental Career Ambassadors

For K-12 education, the partnership continues to focus on the STEM disciplines (science, technology, engineering and mathematics). This year the partners joined forces with The Ohio State University School of Environment and Natural Resources to launch a new statewide network of volunteer **career ambassadors in environmental science and engineering**.

This year's goal was to recruit 100, and eventually up to 500, environmental professionals who would be willing to:

- Make classroom presentations
- Participate in school Career Days
- Host field trips
- Offer internships
- Offer job shadowing opportunities
- Mentor young professionals, and
- Recruit additional career ambassadors

These volunteers sign up as career ambassadors through OSU's Environmental Professionals Network online database, at <http://epn.osu.edu>. Once the database is fully populated, educators will have a cost-free tool to search by county to identify local environmental scientists and engineers interested in working with their local schools.

**T · H · O · S · E**  
**OHIO STATE UNIVERSITY**

**ENVIRONMENTAL PROFESSIONALS NETWORK**

*Connecting our community.*  
*Online, in person, or both. You choose!*

Share • Query  
Network • Learn  
Innovate • Collaborate  
Recruit • Volunteer  
Inspire • Be inspired

**epn.osu.edu**  
*Sign up today! It's free!*

A service of the  
**SCHOOL OF ENVIRONMENT AND NATURAL RESOURCES**  
COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES

This year's recruiting effort exceeded its goal, with 156 volunteer ambassadors registered in fifty Ohio counties. The **recruiting brochure** is posted on a new ambassadors' **Web page** at <https://eeco.wildapricot.org/eca>. The partners placed **articles** recruiting ambassadors in the newsletters of 22 trade and professional associations such as the American Society of Civil Engineers, Association of Ohio Recyclers, Ohio Environmental Health Association, Ohio Parks and Recreation Association, Solid Waste Association of North America, US Green Building Council local chapters, and Water Management Association of Ohio. Ten **presentations** were given to approximately 800 environmental professionals at meetings such as the Great Lakes Ecological Research Consortium, Ohio Association of Litter Prevention and Recycling Professionals, Ohio County Sanitary Engineers Association, Ohio Environmental Service Industries, Ohio Federation of Soil and Water Conservation Districts, and Ohio Water Environment Association. Career Ambassador **exhibits** were featured to 2,385 professionals at seven events such as the Ohio Natural History Conference, Ohio Storm Water Conference, Ohio Wildlife Diversity Conference, Ohio Wildlife Rehabilitators Association, and the Mid-Ohio Regional Planning Commission's Central Ohio Sustainability Summit.

Four **online ambassador toolkits** are under development to include hands-on, age appropriate classroom activities and teaching tips in the fields of (1) drinking and wastewater treatment and storm water; (2) energy and green buildings; (3) wetlands, wildlife and habitat; and (4) waste management and recycling. Webinars are planned in the coming year to introduce these to the ambassadors.

Marketing the ambassador network to teachers and career counselors will begin in earnest during the coming year, now that ambassadors are available in more than half of Ohio counties, and recruitment efforts are continuing. A **marketing brochure** for educators explains how the ambassador network can be a tool for STEM learning and meeting the expanded career education requirements in Ohio's New Learning Standards. The Ohio Department of Education has agreed to include the ambassador network as a teaching resource in its Model Curriculum.

This year the initiative was presented to 461 educators at seven events such as Ohio Department of Education Career Development Conference and Science Education Council of Ohio annual conference. University faculty in teacher preparation programs are assisting in this effort. One professor at OSU-Lima taught 29 pre-service educators to use the network in presenting STEM environmental careers; those new teachers are now teaching approximately 600-900 students.

To reach the most important target audience of all, Ohio's school and university students, the partners provided **presentations and career fair exhibits** reaching an estimated 1,974 students events such as the "Who Works the River?" Career Fair for 200 Cincinnati-area high school students, career fairs sponsored by

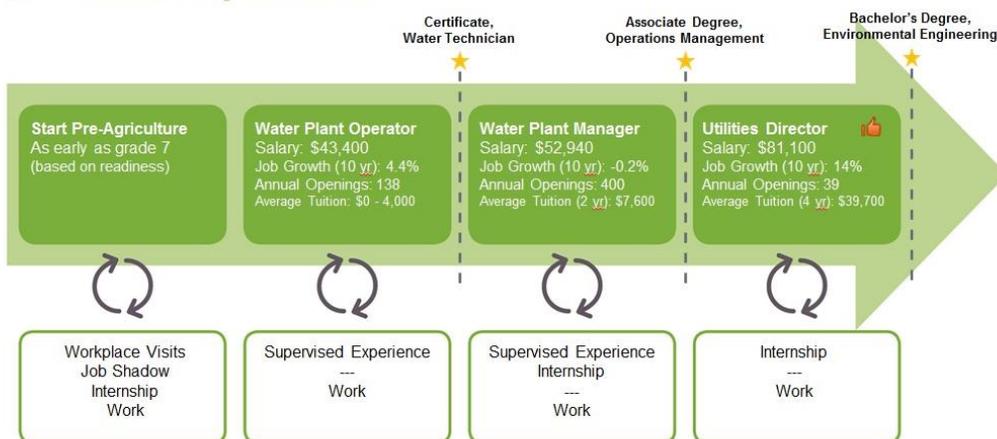
career/tech centers in Licking and Trumbull Counties, local school programs, and the Cincinnati State University Environmental Earth Jam .



*Cincinnati area high school students meet with exhibitors from the US Coast Guard and the US Army Corps of Engineers at the “Who Works the River?” career exploration fair.*

The partnership is also providing content to assist the Ohio Department of Education in creating a series of online **Career Pathways** on education and training, wage and outlook information for related occupations. These pathways offer an overview of classes and training that can begin as early as grade 7, whether a student is interested in going to college, getting a certificate or working right after high school. Sample pathways are currently posted at <https://education.ohio.gov/Topics/Career-Tech/Career-Connections/Career-Pathways> and the series will become part of the Ohio Means Jobs portal.

## Agriculture and Environmental Systems Pathway Model



Provided by middle schools, high schools, employers, Ohio Tech Centers, and colleges.

**Preparing students for multiple options after high school:**  
gainful employment and/or postsecondary study.

## Partnership Structure

A six-member **partnership steering committee** sets partnership goals in consultation with the EECO Board of Directors and the OEEF Advisory Council. The committee includes the EECO Executive Director and the Chief of Ohio EPA's Office of Environmental Education, and the chairmanship alternates between OEE and EECO representatives. The partnership supports part-time **regional directors** in each of the state's 12 education regions, who work closely with teachers and environmental educators at the local level to offer workshops and share teaching and career resources. A network of **contacts in more than 2,000 school buildings** helps to publicize and distribute the partnership's materials statewide. A **partnership insert** in the EECO newsletter goes out three times each academic year to educators statewide, promoting cross-pollination between the OEEF grant programs, the products resulting from outstanding environmental education grant projects and EECO conference and workshop opportunities.

**Ohio EPA—Environmental Education Council of Ohio  
Partnership Regions**



**Environmental Career Ambassadors Initiative**  
<http://epn.osu.edu/>

## Conferences

EECO's March, 2014 **annual conference** at Deer Creek State Park featured two full-day adult education forums and concurrent session strands on citizen science, environmental careers, natural history, outdoor classrooms, and program and learner assessment,. The forum on Wetland Mitigation and Water Quality included presentations from Ohio EPA, the Midwest Biodiversity Institute, and two OEEF-funded citizen science water quality sampling programs: the Greenacres Foundation's *Saturday Stream Snapshot* in the Little Miami Watershed, and the Ohio Lake Management Society's *Citizen Lake Awareness and Monitoring (CLAM)* network whose volunteers have been trained to identify, sample and report Harmful Algal Blooms (HABs) in ten inland lakes.



*Robert David and Betty Lyle Kaser ,  
Indian Lake, August 2013*



*Robert David and Jim Swihart,  
Choctaw Lake, August 2013*

The forum on Zero Waste featured tours of a central Ohio landfill and an anaerobic digester that turns waste from the City of Columbus into electricity, heat and compressed natural gas, as well as presentations on electronics recycling and sustainability initiatives by Xavier University and Keep Cincinnati Beautiful.



Other OEEF-funded projects presented at the conference included Five Rivers MetroParks' inquiry-based and early childhood programs; Granny's Garden school garden program, Groundwork Cincinnati's "Mill Creek Student Water Monitoring for Urban Streams"; Mohican School in the Out-of-Doors' "Natural Cache: Using GPS Technology to Learn about the Outdoors;" Project Learning Tree's "How Healthy Is Your Forest?"; and the Scioto Soil and Water Conservation District's "CSI: Shawnee" summer science camp.



### Regional Conferences

The partnership also provides financial support for three regional conferences for teachers and non-formal educators: the "**Winter Snow, Out We Go**" conference in northeast Ohio in February; the "**Black Swamp Educators' Extravaganza**" in northwest Ohio in June, sponsored by a number of soil and water conservation districts; and the "**101 Alternatives to the Chalkboard**" conference in southwest Ohio in October.

### Local Programs

This year the partners offered 16 professional development opportunities for 349 educators; and made 59 classroom presentations with 3,223 participants. To most effectively reach a wider audience and avoid duplication of effort, the partners work closely with local environmental educator collaboratives such as the Delaware Environmental Education Partnership (DEEP), Earth Day Coalition in Cleveland, Greater Cincinnati Environmental Educators (GCEE), Terrific

Resources for Environmental Education (TREE) in central Ohio and the Tri-County Environmental Educators in the Youngstown area. These collaboratives offered **regional resource fairs** for teachers, afterschool care providers and home schoolers. The partners also exhibited or presented at **nineteen special events and conferences with 8,080 participants**, including the Cincinnati Paddlefest, Children's Water Festivals in Dayton and Columbus, Ohio Wildlife Diversity Conference and local Earth Day events. Local collaborators include soil and water conservation districts, park districts, solid waste management districts, county extension offices, health departments, zoos, nature centers, botanical gardens, and recycling and litter prevention offices. The partners also work closely with the Leave No Child Inside organizations in a number of Ohio communities to promote learning about nature outside in nature.

Adult education opportunities also included four OEEF grant writing workshops offered around the state last year, reaching a total of 108 participants. EECO's assistance in hosting and publicizing these workshops has been instrumental in helping the OEEF increase the number of grants awarded in under-served counties.