



**Basil Smoothies, Water-Saving Agriculture and Outside-the Box Science
at Riverbend's Aquaponics Greenhouse**

**\$40,000 PECO Grant Grows Aquaponics Curriculum and STEM Education for
Montgomery County Middle School Students.**

News Event: October 28, 10 a.m.

Riverbend Environmental Education Center
1950 Spring Mill Road, Gladwyne, PA 19035

To reserve your spot at the news event, contact:
Lisa Matthews, Community Relations Manager
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October 21, 2015 – Montgomery County, PA **Swiss chard, wriggling tilapia, and curious middle schoolers -- It all fits with the Riverbend mission to start young minds thinking about how to build a sustainable future.** The aquaponics greenhouse at Riverbend Environmental Education Center is no ordinary greenhouse. **It uses a mere 10% of the water used by traditional agriculture.** Tilapia clamor to the surface of a 300-gallon fish tank and basil floats atop aquatic grow beds. Aquaponics is a method of sustainable agriculture in which edible plants grow from nutrient-rich wastewater provided by edible fish. The plants in turn function as bio-filters, releasing freshly cleansed water back to the fish.

Executive Director Laurie Bachman says, "Riverbend is thrilled to partner with PECO and the Norristown Area School District to launch an innovative, peer-reviewed aquaponics curriculum and education program aimed at fostering STEM (Science Technology Math Engineering) learning." The program is being delivered this fall to approximately 500 7th graders at all three middle schools. It builds on an already-successful partnership with Norristown Area School District begun in 2006 in which nearly 12,000 Norristown elementary school students have participated in hands-on science and environmental education provided by Riverbend. "We are deeply appreciative of the generous funding from PECO that makes this project possible. PECO has been a strong partner in our effort to expand environmental education to children in underserved communities in our region."

It's the young minds at work and unique approach to science education that make this greenhouse fascinating. On any given day, you can see students firing questions at Riverbend's aquaponics educator: "What happens to the plants when they don't have the fish?" "How do the nutrients get into the water?" "Why did you choose those plants to grow?"

"Aquaponics is the perfect tool for engaging inquiry into a wider range of science and environmental topics," says Norristown Area School District Superintendent Janet Samuels, who led the launch of this program in her district. **"Not only does this new and dynamic resource address PA Academic Standards, it encourages the critical thinking needed to solve the problems of the future."**

"When we expand our view globally, we see bigger problems of food and water scarcity," adds Riverbend's Laurie Bachman. "Aquaponics uses only 10% of the water required by traditional agriculture. As an environmental education center with a strong track record, we believe Riverbend is uniquely positioned to deliver the models, curriculum, and teacher training needed to drive the critical thinking, investigation, and inspiration needed to solve problems. It is our hope that this innovative education program will benefit many more students in the Greater Philadelphia region. For questions about Riverbend's Aquaponics Education Program, contact Laurie at lbachman@riverbendeec.org or 610-527-5234 x 109.

ABOUT RIVERBEND ENVIRONMENTAL EDUCATION CENTER -- Riverbend Environmental Education Center is a 501(c) (3) non-profit organization located in 1950 Spring Mill Road Gladwyne, PA. Our preserve is located on 30 acres, open 7 days a week for visitors. Riverbend offers a full menu of environmental education programs including school curriculum, teacher training, school field trips, exploration camp, public programs, weekly nature classes and special events.

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