



# Reconnect with your environment

Learn about environmental issues, their affect on your community and actions for your involvement.



ANNA McCARTNEY/Contributed photo

Woodrow Wilson Middle School students will be among 100 students sharing their watershed knowledge.

## Students will unveil watershed projects

By ANNA McCARTNEY  
Contributing writer

"We do not inherit the Earth from our ancestors, we borrow it from our children," one familiar saying claims.

Join Destination Erie, Pennsylvania Sea Grant and students from five Erie County school districts for a Great Lakes and Erie County Watershed Awareness Day on Wednesday where students will share their ideas for a sustainable future.

These students and their teachers have been involved in Pennsylvania Sea Grant's B-WET program to promote locally relevant, experiential learning for K-12 school students and teachers by fostering watershed education and encouraging partnerships among other environmental organizations.

The B-WET project led to a partnership with Destination Erie, northwestern Pennsylvania's regional plan for sustainable development, to involve youth, a group often left out of decision-making and planning efforts for the future.

Funding from the National Oceanic and Atmospheric Administration has provided resources to

promote "meaningful watershed education experiences." With funding and assistance from Destination Erie and assistance from PA Sea Grant and Doreen Petri, a science teacher at Collegiate Academy, students and teachers also created watershed map games of their local watersheds.

Area elected officials, business leaders and the general public are invited to attend. For a schedule of events, visit [www.paseagrant.org](http://www.paseagrant.org). To RSVP, visit [www.planerieregion.com/destination-erie-events](http://www.planerieregion.com/destination-erie-events) or contact Michael Fuhrman at [mfuhrman@eriecounty.gov](mailto:mfuhrman@eriecounty.gov).

**When:** May 14

**11 a.m.-1 p.m.:** Keynote talk by Mike Campbell, Ph.D., of Mercyhurst University, on "Climate Change and Our Water Future."

**7-8:15 p.m.:** Visit the region's environmental agencies' education displays.

**Where:** Penn State Behrend, Reed Union Building, 4701 College Drive, Harborcreek Township

**ANNA McCARTNEY**, a communications and education specialist for Pennsylvania Sea Grant, can be reached by e-mail at [axm40@psu.edu](mailto:axm40@psu.edu).

## Find art, hear lectures at Beach Glass Festival

By ANNA McCARTNEY  
Contributing writer

Relish Jewelers will host the second Great Lakes Beach Glass and Coastal Arts Festival May 24-May 25 from 10 a.m. to 5 p.m. at the Erie Bayfront Convention Center. Admission is \$5 for one day or \$8 for a two-day pass. Kids 6 and under are free.

In addition to dozens of fantastic vendors, including sea glass artists, coastal artists and authors from around the globe, the festival will feature a lecture series on lake and beach-related topics, a collector's area, an auction with terrific gift baskets and live music by Erie's own Mark Beery on Saturday and the Salmon Frank Band on Sunday. The Best Beach Glass Find Contest returns along with wine-tasting from Courtyard Wineries.

So bring your friends and family. Fill your gift drawer with affordable art and gifts.

A percentage of the festival's proceeds will be donated to support veterans and Lake Erie-related scientific research and education through Pennsylvania Sea Grant. The



lecture schedule includes these topics:

**When:** Saturday, May 24  
**11:30 a.m.-12:30 p.m.:**

"Keepers of the Lake," Anna McCartney, communication and education specialist, Pennsylvania Sea Grant.

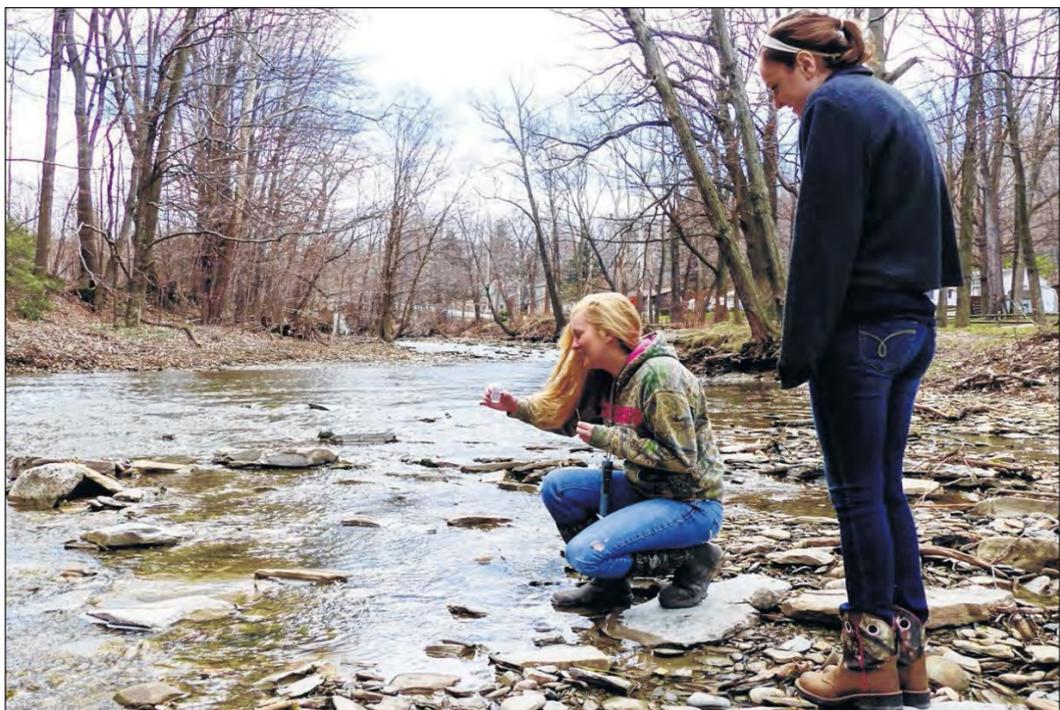
**1:30-2:30 p.m.:** "Beach Glass, Bones and Stones," by Scott McKenzie, professor and paleontology director, Mercyhurst University.

**3:30 -4:30 p.m.:** "I'm not 'Bluffing!'" by Julia Donahue, Erie County Department of Planning.

**When:** Sunday, May 25  
**10:30-11:30 a.m.:** "Beachcombing: A Spiraling Journey," by Lisl Armstrong.

For more information visit [www.relishinc.com/](http://www.relishinc.com/)

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ANNA McCARTNEY/Contributed photo

Carla Martz, left, and Emma Hecker, juniors at General McLane High School, take a water sample near the mouth of Twelve Mile Creek. Regular sampling by the Pennsylvania Department of Environmental Protection was discontinued in 2004 for budgetary reasons. Without a source of funding, testing on Lake Erie tributaries only occurs sporadically. Find out what your community is doing to protect the chemistry, physical habitat and biology of your local stream.

# Cheaper by the dozen

## Conservation benefits Twelve Mile Creek

By ANNA McCARTNEY  
Contributing writer

We must reduce runoff and keep pollutants from reaching the waters of Lake Erie to keep our drinking water safe. These steps are also critical for protecting fish that migrate up Lake Erie tributaries.

Runoff from vineyards, farms, roads and parking lots causes erosion and carries chemicals, nutrients and sediment directly into local streams, which empty into Lake Erie. Once these pollutants are in the water, removing them is cost-prohibitive and nearly impossible. And the cost associated with fixing the damage caused by pollution and flooding is a mammoth economic challenge to communities. Therefore conservation practices that prevent runoff and pollution at the source are the best and least costly way to avert these expensive problems.

Stormwater management is the focus of this week's coverage of the lands and streams that drain the Twelve Mile Creek watershed, which encompasses 33.44 square kilometers or 12.91 square miles from sections of Greenfield, Harborcreek, and North East townships.

Twelve Mile Creek is a steelhead fishery that is protected under the Pennsylvania Department of Environmental Protection's Water Quality Standards as a high quality stream for use by cold-water migratory fish such as steelhead. A cold-water fishery supports fish, plants and animals that best live and reproduce in colder temperatures. High quality waters are defined as having long-term water quality that exceeds the levels necessary to support the propagation of fish, shellfish, wildlife and recreation. Of Pennsylvania's 83,000 miles of streams, only about 25 percent are designated as high quality cold-water fisheries.

According to DEP Great Lakes Biologist Jim Grazio,



PA CRMP

While Twelve Mile Creek empties into Lake Erie in Harborcreek Township, the water does not recognize political boundaries. Water quality depends on land use and activities in Harborcreek, Greenfield and North East Townships.



USDA

The Natural Resources Conservation Service provides technical and financial assistance to farmers for conservation practices that reduce runoff and pollution. For more information, visit [www.pa.nrcs.usda.gov](http://www.pa.nrcs.usda.gov).



ANNA McCARTNEY/Contributed photo

Twelve Mile Creek is protected as a high quality (HQ) cold-water fishery (CWF) stream for use by cold-water migratory fish (MF) such as steelhead. Of Pennsylvania's 83,000 miles of streams, only about 25 percent are designated as HQ CWF.

the water quality is generally good but Twelve Mile is highly reactive to stormwater runoff. A stream habitat evaluation in 2010 led by Pennsylvania Sea Grant surveyed 14 sites along Twelve Mile and found the vegetative riparian zone, which serves to control runoff from entering a stream, to be marginal. Scouring

of the stream channel occurs on a regular basis and sediment from bank erosion and stormwater inputs tend to clog available macroinvertebrate (insect) habitat and also impacts fish habitat.

Managing runoff and pollutants from the land is essential for protecting the chemistry, physical

habitat and biology of this stream. And that's exactly what North East grape farmer Randy Graham, the owner and operator of South Shore Farms and Courtyard Wineries, has done. Working through the Environmental Quality Incentives Program administered by the Natural Resources Conservation Service and with funding from the Great Lakes Restoration Initiative, he reduced runoff and the contaminants and sedimentation it carries from entering Twelve Mile Creek.

Graham uses conservation practices that minimize soil disturbance and increase the soil's ability to hold water, which in turn reduces runoff, erosion and flooding. By reducing his use of sprays and chemicals and better managing the amounts and placement of nutrients, he avoids nutrient overload and prevents pollutants from being carried by runoff into the stream.

You, too, can protect the water that humans, fish and other wildlife need to survive and thrive. Help protect existing natural, undeveloped spaces along streams, lakes and reservoirs, and restore others that have been removed. Evaluate your use of lawn and other chemicals. Plant native plants, which don't need added chemicals to keep these toxins out of local waterways.

Finally, learn more about monitoring your watershed by getting involved in a local watershed group. The Pennsylvania Lake Erie Watershed Association needs a representative for the Twelve Mile Creek watershed. For more information, contact Sarah Galloway at [sgalloway@erie.pa.us](mailto:sgalloway@erie.pa.us) or Pat Lupo at [plupo@neighborhoodarhouse.org](mailto:plupo@neighborhoodarhouse.org).

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[www.paseagrant.org](http://www.paseagrant.org)

Find articles about what local people are doing to ensure a sustainable future. Are they including young people in their planning? Write a letter to community leaders to tell them why you should have a voice in the future of this region and why watershed restoration and protection is important. Send them to [axm40@psu.edu](mailto:axm40@psu.edu) for possible publication in the "Your Space" feature.

