



# Reconnect with your environment

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



MONTANA STATE UNIVERSITY

To protect water resources in your watershed from farm waste attend an ECCD nutrient management workshop.

## Workshops help farmers draw up nutrient plans

By ANNA McCARTNEY  
Contributing writer

Did you know that all farms generating/using manure, even those with as little as one cow horse or sheep, must have a manure management plan to protect water resources?

If you are unsure how to develop and implement your plan, the Erie County Conservation District has scheduled a "Nutrient Management Workshop" to help you. All attendees will receive a copy of the Manure Management Manual and a free soil sample test from Penn State.

You can choose from one

of the following dates: Saturday, March 15, 9 a.m. to noon; Wednesday March 26, 6 to 9 p.m.; Tuesday, April 1, 10 a.m. to 4 p.m.; and Thursday, April 10, from 1 to 4 p.m. Reservations are required one week prior to the event you are attending.

For more information, contact Bethany Fritz at the Erie County Conservation District 825-6403 or bfritz@erieconservation.com

**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).



CONTRIBUTED PHOTO

The future of the Great Lakes depends on these students at Rice Avenue Middle School and others who understand how human activities impact freshwater.

## Elk Creek becomes classroom for science

By ANNA McCARTNEY  
Contributing writer

Before eighth-grade students at Rice Avenue Middle School became involved in testing the stream near their school, many of them couldn't name Elk Creek or their source of drinking water.

But all that has changed with a Coastal Zone Management Grant and the support of the Erie County Conservation District, which is helping local teachers connect students to their watershed. The ECCD is providing the materials and training so students can visit their adopted stream twice per school year, once in the fall and again in the spring. Each time students test the water for levels of phosphates, nitrates, pH, dissolved oxygen and turbidity. They also search for and tally macroinvertebrates and other living things within the stream.

Teacher Amanda Cham-

berlain thinks it's a great opportunity for her students to use science in the community to test what they learn in the classroom. "The students especially enjoy being out in nature and using macroinvertebrate identification to track the ecological indicators that demonstrate the health of their watershed," she said.

The students will summarize their information and conclusions and share them with their school districts and municipalities. You can view their data and the data of other schools participating in stream studies at the ECCD website <http://www.erieconservation.com/education/middle-school-stream-study-data/>.

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DAVE SKELLIE, PA SEA GRANT

Conserving generous undisturbed forested buffers near streams is one of the most effective methods of keeping streams healthy for fishing, protecting drinking water and recharging groundwater. The property above is one of 13 projects along Elk Creek that is protected for present and future generations. Contact PA Sea Grant Coastal Land Use Specialist Dave Skellie at 217-9011 or email [dus18@psu.edu](mailto:dus18@psu.edu) to conserve your property.

# Elk Creek peek

Why conservationists angle to protect this subwatershed

By ANNA McCARTNEY  
Contributing writer

If you're not worried about water pollution, you should be.

Failing to clean up and protect water resources leads to drinking water contamination, habitat degradation and beach closures. It affects the quality and quantity of wildlife and it also forces communities to pay huge amounts to make contaminated water drinkable.

In order to protect fisheries, groundwater and surface water quality and quantity, the highest priority should be protecting and restoring forested wetlands and riparian buffers.

Knowing more about your local water sources and participating in municipal, county, state, and federal land-use decisions within your watershed are ways you can help. Understanding how water is captured, stored and released, what condition it's in, and where you are located within your watershed can unlock many mysteries of stream flows, runoff, water quality and habitat conditions.

This week's watershed exploration takes us to Elk Creek. According to the Pennsylvania Fish and Boat Commission, Elk Creek is the most popular steelhead tributary in Pennsylvania's Lake Erie watershed. It is stocked with steelhead and brown trout and is an approved trout water stream that is heavily fished early in the regular trout season. During the summer and fall, the lower reaches of Elk hold bass, panfish and catfish. By June, most parts of the creek are low and too warm for trout.

Elk Creek and the smaller tributaries that feed it drain water from 99.4 square miles of land shared by the municipalities of Elk Creek, Fairview, Franklin, Girard, Lake City, McKean, Platea, Summit, Washington and Waterford. This water empties into Lake Erie just west of Lake City in Girard Township.

Its exceptional size, its biotic diversity and value,



BRITTANY PRISCHAK/Contributed photo

Mercyhurst University students are helping the Girard and Lake City communities' joint effort to connect and improve existing trails and parks by making improvements on the Elk Creek Trail and the Yellow House Trail.



SEAN RAFFERTY, PA SEA GRANT

Paved roads, parking lots and buildings contribute to more rapid runoff that is more likely to contain silt, oils, and other pollutants that impact water quality and quantity.



SEAN RAFFERTY, PA SEA GRANT

Lack of riparian buffers and cattle in this stream make Elk Creek vulnerable to a variety of pollutants including bacteria and nutrients, pesticide and fertilizer run-off and erosion and sedimentation.

Its exceptional size, its biotic diversity and value,

recreational resources. The very large number of unpaved roads and poten-

tial nonmotorized trails offer excellent potential for low risk recreational access to some of the region's most scenic and naturally rich areas.

Stream surveys conducted at 56 sites in the watershed by Pennsylvania Sea Grant gave Elk Creek an overall score of 10 on a scale of 1 to 36 (lower numbers equal better scores). However, this watershed is vulnerable to commercial and residential development that could compromise the quality and quantity of surface and groundwater resources.

Many of the nation's rivers, streams, lakes and groundwater are severely polluted by human activities. Contaminants come from a variety of sources, including factory-farm waste such as pesticides, fertilizer and sediment; sewage and urban runoff; industrial chemicals; energy extraction and production; water treatment and distribution byproducts; pharmaceuticals and personal care products, and natural processes that produce more contamination as a result of development and deforestation.

Many of our water resources lack basic protections against this pollution. Each year 1.2 trillion gallons of untreated sewage, stormwater and industrial waste are dumped into U.S. waters, but no one is keeping track of many of the contaminants.

So get involved. Attend your local zoning board and municipal meetings to find out about any plans for future land use. Be sure your municipality has plans to collaborate on protecting and restoring your watershed before it suffers the same fate as other Lake Erie tributaries. After all, water protection is a shared effort.

For more information on fish and habitat evaluations on this and other Lake Erie tributaries, visit <http://pib.psu.edu/>.

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Check out these websites to learn more:

[www.ewg.org/tap-water/](http://www.ewg.org/tap-water/)  
[www.nrcs.usda.gov](http://www.nrcs.usda.gov)  
[www.rivernetwork.org](http://www.rivernetwork.org)  
[www.paseagrant.org](http://www.paseagrant.org)

Do you live near any protected green spaces or is the closest tree or plant nowhere to be seen?

Write a letter and tell elected officials and other adults why they should do more to restore, protect and create green space in the Erie region. Send your letters to [axm40@psu.edu](mailto:axm40@psu.edu).

