



Reconnect with your environment

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



ANNA McCARTNEY/Contributed photo

Harmful algae bloomed in Presque Isle Bay in 2013.

Journalist to speak about algae blooms

By ANNA McCARTNEY
Contributing writer

If above-average precipitation continues this spring, most lake experts agree that we could see more harmful algae blooms on Lake Erie.

To learn more about these toxic cyanobacteria blooms, where they come from and how to stop them, you don't want to miss a lecture on May 6 at 7 p.m. at the Unitarian Universalist Church of Erie. Todd Pignataro, environment reporter for the Buffalo News, will present a lecture about his extensive research about the freshwater blue-green algae blooms that have contaminated western Lake Erie waters.

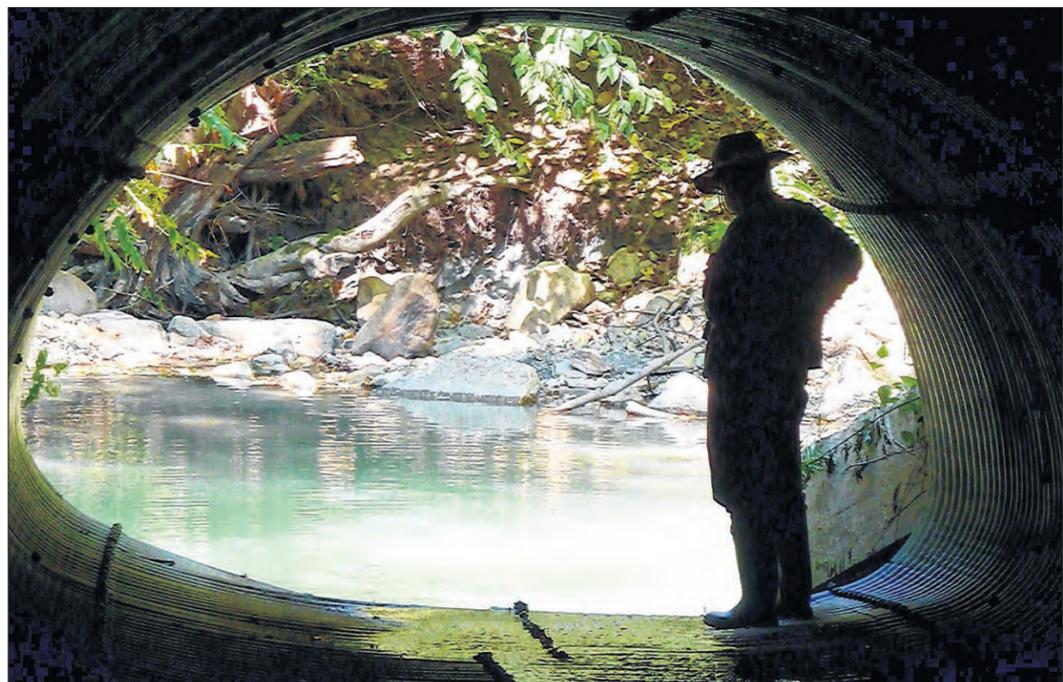
He will share information about the threats they pose to people and wildlife, how this toxic tide can be stemmed and how to reduce the high concentrations of phosphates that fuel their growth, including those contributed by

agricultural fertilizers and household cleaning products. Ample time will be allotted for questions and comments from the audience.

The Lake Erie Group of the Pennsylvania Sierra Club Chapter is sponsoring this free educational program. The Unitarian Universalist Church is at 7180 Perry Highway (Pennsylvania Route 97), 0.5 miles north of Interstate 90, exit 27, and two miles south of the Erie Zoo.

For more information about harmful algae blooms, find a brochure, fact sheet and workshop presentation at www.paseagrant.org/projects/habs-stakeholder-workshop-81413/ and www.paseagrant.org/fact_sheet_group/water-quality/.

ANNA McCARTNEY, a communications and education specialist for Pennsylvania Sea Grant, can be reached by e-mail at axm40@psu.edu.



ANNA McCARTNEY/Contributed photo

Being in the dark about your watershed can lead to serious water problems. Rain or snow drains from the land into one location such as this stream, an unnamed tributary that empties into Six Mile Creek, which flows into Lake Erie. Bad decisions upstream undermine the safety and quantity of water for drinking, agriculture, manufacturing and recreation and for plants and animals downstream.

Be a trailblazer

Follow runoff path to see what flows into your stream

By ANNA McCARTNEY
Contributing writer

Impact on water resources should be the bottom line for everything we do.

Water is affected by industrial and personal wastes, pesticide/herbicide use, farming methods, forest management, oil and gas exploration, mining practices, urban development, energy production and stormwater runoff. So it's up to us to ensure we don't destroy water in the process.

It's also an indisputable watershed fact that water flows downhill and that it doesn't recognize political boundaries, so knowing more about your watershed is important for protecting water. You should know if your watershed is shared with other municipalities; the location of any industrial activities; the percentage of impervious areas; whether development forces auto dependence and uses more land than necessary; the condition of the streams; which green areas need to be conserved; and if regulations are adequate to protect the safety of water for people and wildlife.

Following the path of runoff from your roof or garden or from a farm or industrial site could help you realize that any fertilizers and chemicals used can eventually reach the closest stream. Faulty septic systems, gas wells and increased runoff can also affect water quality. And these problems don't stay in local streams; they flow downhill and cause health, environmental and economic problems downstream.

This week we will follow the path of water from the Six Mile Creek watershed, which drains 48.99 square kilometers or 18.92 square miles of farmland, undeveloped land and urban areas in portions of Venango, Greenfield, Greene and Harborcreek townships.

Just near the headwaters that drain to Six Mile Creek in Greenfield Township is the 7,200-foot Adameck #1 gas well that was drilled



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Watersheds sustain life, in more ways than one. Green spaces such as the 450-acre Six Mile Creek Park in Harborcreek Township provide plenty of recreational opportunities for local residents and tourists who spend money in the region.



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This well in Greenfield Township in the Six Mile Creek watershed was drilled 7,200 feet into the ground. It is the first of many that are proposed for the area.



PA CRMP

Six Mile Creek carries water and pollutants from 48.99 square kilometers or 18.92 square miles of farmland, undeveloped land and urban areas in portions of Venango, Greenfield and Greene and Harborcreek Townships into Lake Erie.

in 2013. SLC Energy, a gas and oil company from Nevada, lists more projects in Greenfield, Venango and Green townships on its website, including Adameck #2, 3, 4, 5, Afton 1,2,3, Chylinski 2,3,4, May 1, Hinkler 1 and Turner 1, which have not yet been permitted.

While the impacts of the new gas-drilling boom have not touched this area, environmental, health and economic problems associated with it are affecting water and millions of people elsewhere in the country. The process used to extract natural shale gas takes millions of gal-

lons of water, often taken from streams, lakes and rivers, adds chemicals, and injects them deep into the shale to release the gas. Wastewater produced in the process can become a problem since it contains chemicals and radioactive materials that cannot be removed by wastewater treatment plants. Surface and groundwater have been impacted. And because wastewater is often trucked to injection wells far from the well, water is also removed from the watershed.

It is likely the Six Mile Creek watershed will also be the focus of much future land development. One of the great concerns about water in Harborcreek Township is the problem of stormwater runoff. Replacing natural areas with buildings, roads and other pavement changes the amount of water that is absorbed into soil.

Instead of recharging groundwater, it becomes runoff and creates localized flooding. It also causes pollution as it carries oil and antifreeze from leaking cars, fertilizers, pesticides and sediment into nearby streams. Therefore, according to the 2010 Harborcreek Township Comprehensive Plan, the township is committed to smart growth principles as a means to properly steward its remaining land and water resources.

What about you? Learn more and become involved in protecting the Six Mile Creek watershed by joining David Beals, the PLEWA Six Mile Creek watershed representative, as he walks up Six Mile to its headwaters. Contact him at david.beals@manheim.com.

For information about other Lake Erie subwatersheds, e-mail Pat Lupo, plupo@neighborhoodart.org or Sarah Galloway, sgalloway@erie.pa.us.

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ANNA McCARTNEY/Contributed photo

Weed Warriors remove invasive plants at Presque Isle State Park.

Presque Isle State Park seeks Weed Warriors

By ANNA McCARTNEY
Contributing writer

The war on invaders attacking Presque Isle State Park is very real.

Become a Weed Warrior to help protect the native species by helping to remove invasive plants. This is a perfect volunteer opportunity for college students seeking experience in resource conservation or park management; for high school students doing senior projects or community service hours; for church or school groups seeking an opportunity to volunteer for a good cause; and for concerned citizens.

Weed Warriors is a component of the larger Presque Isle Invasive Vegetation Control Project. Volunteers augment the heavy removal work done by maintenance staff from the Pennsylvania Department of Conservation and Natural Resources. Work on the project is also done by DCNR scientific and

technical interns and experts from the Cleveland Museum of Natural History and the Pennsylvania State University College of Ag Sciences. Volunteers will focus on hand work in areas that can't be accessed by heavy equipment or where native and non-native plants are intermingled.

You can also become a lead steward. Lead stewards coordinate and monitor volunteer groups on Presque Isle State Park while assisting in removal activities. The position of lead steward offers supplementary training and/or field trip opportunities.

Check out the Weed Warriors at www.facebook.com/WeedWarriorsPI for photos and more information or contact Matt Pluta at mpluta@environmenterie.org.

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Check out these websites to learn more:

- www.psehealthyenergy.org/
- LIBRARY
- www.cwp.org/
- www.harborcreektownship.org
- www.paseagrant.org

How familiar are you with your neighborhood, your community and your watershed? Do you know where possible problems exist that could be fixed to make it a better place for you and for wildlife?

Share what you are doing at home, school or where you work or any volunteer projects you have done to protect water quality. Be sure to include photos for possible publication in the weekly "your space" feature. Send them to axm40@psu.edu.

