Learn about environmental issues, in your community and how you can get involved.





Extreme weather and emergency preparedness are topics to be covered at the October summit.

Summit prepares Erie for extreme weather

By ANNA McCARTNEY Contributing writer

More frequent and intense storms and flooding events are happening and they are expected to continue threatening local homes, businesses and critical infrastructure into the future.

Because it's more important than ever to prepare our communities to be ready to adapt and recover from such disastrous events, Environment Erie, Pennsylvania Sea Grant, Mercyhurst University and NWPAGE and their partners are bringing extreme weather and emergency preparedness to the Erie community.

Together with the American Red Cross, Erie Insurance and others, these groups will hold a summit to discuss the actions needed to help create a hazardresilient and emergencyprepared coastal community.

The summit, Oct. 8-10 at the Tom Ridge Environmental Center, is intended for all audiences. It kicks off on Oct. 8 with a free social hour and movie screening of "Extreme Realities" narrated by Matt

workshop on Thursday evening is \$10 per household (limit of 2 people) and Pennsylvania Sea Grant, refreshments. The first 45 registered for

this workshop will also receive a free emergency preparedness "Go-Bag" sponsored by Erie Insurance and the American Red Cross. This workshop has been tailored for all audiences, including families, homeowners and professionals, and includes the movie "Green City, Clean Waters" about what Philadelphia has done to become more resilient to larger storms and flooding.

The Oct. 10 workshop, on Friday, is focused toward professionals, business owners and municipalities. The cost is \$15 and includes lunch. The summit closes with a bang that evening for anyone wanting to attend the Friday Night Live Dinner Theatre with comedy group In All Seriousness. The cost is \$40 per person or \$75 per couple.

Registration is required. You can register for any or all events, view the agenda and find more information about the summit by visiting www.environmenterie. org/events/public-workshops.

Exhibitor space and sponsorship opportunities are also available. Contact mpluta@environmenterie. org with questions.

The cost for the Oct. 9 ANNA McCARTNEY, acommunications and education specialist for can be reached by e-mail at axm40@psu.edu.





CONTRIBUTED PHOTO

Perseus House Charter School of Excellence students helped clean up their surrounding neighborhood.

We can help schools clean up their grounds

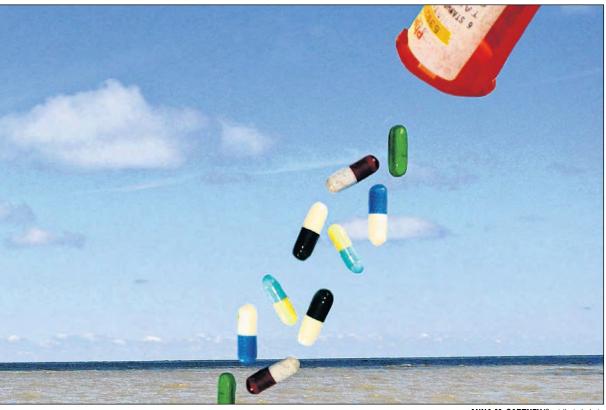
programs join the effort school cleanup. What about each year to collect trash and data for the International Coastal Cleanup on Elementary, Perry Eletheir school grounds and in their surrounding neighborhoods. They prevent the trash they collect from traveling to area streams and Lake Erie. Their data is combined with the Lake Erie ICC results and sent to the Ocean Conservancy to be added to international results and then used to find solutions to this preventable pollution.

Ten area schools have

Students in local K-12 signed up to conduct a your school? This year's schools include: Harding mentary, Pfeiffer-Burleigh Elementary, North East Middle School, Union City High School, Fairview High School, Northwestern High School, Perseus Charter School, Our Lady's Christian School and the Neighborhood Art House.

Contact Anna McCartney at axm40@psu.edu to register your school today.

— Anna McCartney



ANNA McCARTNEY/Contributed photo

Pharmaceuticals and chemicals in personal care products (PPCPs) enter our waterways several ways including after they are passed through our bodies, runoff from agricultural areas and from direct introduction into our environment by flushing them or pouring them down the drain. Researchers agree that their presence in the water is causing some of the problems affecting aquatic wildlife.

Something's fishy

Marine life shows signs of troubled ecosystem

By ANNA McCARTNEY Contributing writer

Something is very out of sync in aquatic ecosystems around the world.

Evidence can be found in the unusually widespread frequency of fish lesions, excessive mortality and intersex fish. Male fish containing eggs in their testes have been found nationwide, including Pennsylvania's major watersheds, according to U.S. Geological Survey research. These problems plaguing fish and other aquatic life should be signs the water we rely on for drinking is also in trouble.

The likely culprits are endocrine disrupting chemicals (EDCs) that upset the endocrine system, which regulates hormones and the reproductive system. The sources of these chemicals are complex mixtures from agricultural animal wastes, pesticides and herbicides, and human sources from wastewater treatment plant effluent and other sewage discharges, according to Vicki Blazer, fish biologist and lead Pennsylvania study author. Low-dose exposure to EDCs at sensitive life stages can have long-term effects, including reproductive impairment, reduced disease resistance

and early mortality. These chemicals found in pharmaceuticals (human and veterinary) and personal care products (PPCPs), flame retardants, antibacterial products, plastics, pesticides and fertilizers are not currently regulated or commonly monitored. Since exposure to these EDCs has also been linked to conditions such as low sperm counts and testicular cancer in men, as well as breast cancer, obesity and autism, what's happening to aquatic animals should alert us to keep these chemicals out of the environment.

In 2008, Pennsylvania Sea Grant began tackling the problem of disposal and education. Before its first PPCP collection, funded



PA FISH AND BOAT COMMISSION

The unusually widespread incidence of fish lesions, excessive mortality and intersex fish in aquatic ecosystems around the world and in Pennsylvania indicates that something is very out of sync.



Municipal wastewater treatment and drinking water plants were not designed to remove PPCPs and other EDCs. Currently the EPA does not require testing for them or for removal of these chemical compounds.



Before PA Sea Grant's first PPCP collection in 2008, the only choices locally for dealing with unused meds was to flush them, put them in the trash or keep them indefinitely in home medicine chests.

by the U.S. Environmental Protection Agency in April 2008, the only choices locally were to flush unused meds, put them in the trash or keep them indefinitely in home medicine chests. All these options create serious public health issues, from drug abuse to water contamination.

In 2010, with an EPA Great Lakes Restoration grant and with Great Lakes Sea Grant partners in New York, Ohio, Indiana and Illinois, Pennsylvania Sea Grant expanded its campaign to prevent unnecessary PPCPs from entering the environment. Sea Grant has educated and involved the public, elected officials, health-care professionals and others in solutions. Its campaign has reached 1,227,057 people and safely disposed of 21,765 pounds

of unused meds.

Pa Sea Grant's collection events, data and the partnerships formed with groups locally, throughout the Great Lakes and nationally picked up the steam needed to address PPCP use and disposal. Groups include the Lake Erie College of Osteopathic Medicine School of Pharmacy and UPMC Hamot, health departments, police departments, the American Veterinary Medical Association, universities and others. Sea Grant staff members are currently working with the National Sea Grant Network to reach and teach more people nationwide.

Pennsylvania and other states now have collection boxes at police departments that accept prescription and over-the-counter and pet medications. And upward of 4 million pounds have been collected in just 32 hours during eight National Prescription Drug Take-Back days sponsored by the U.S. Drug Enforcement Administration and law enforcement agencies.

However, even these are not enough to keep drugs from every home, hospital, doctor's office, and longterm care facility out of the environment or the hands of abusers. The U.S. Department of Justice recently announced plans to authorize pharmacies and hospitals to serve as drop-off sites for unused meds and an option to mail them directly to an authorized collector. Until these rules go into effect, you can use the collection boxes or participate in the next National Prescription Drug Take Back Day this Saturday from 10 a.m. to 2 p.m. Visit www.paseagrant. org for sites or call (800) 882-

Join us next week to learn more about PPCP problems and solutions.

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

This page brought to you by:









Check out these websites to learn more:

www.usgs.gov/newsroom www.paseagrant.org/toxins www.unwantedmeds.org www.storyofcosmetics.org

Investigative reporting by the Associated Press informed the public about chemicals in pharmaceuticals and personal care products in drinking water in 2008. Keep track of articles that show the importance of investigative reporting. Why is this type of reporting important?

Send your thought to axm40@psu.edu for possible publication in Your Space.

