



# LAND TO LAKE

**magazine** issue two | spring 2015

landtolake.com

## Explore!

### Begin In Your Backyard!

- **Public Projects:** what your community is doing to make a difference
- **Events:** great ways to get involved



# Q&A

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**Q** DOES WHAT WE DO HERE IN DEFIANCE REALLY HAVE MUCH IMPACT ON LAKE ERIE?

**A** **Yes!** The small streams, ditches, and drains flowing near our homes all eventually make their way to Lake Erie. **There are many things that YOU can do to help!** This issue is full of information on how we can all be better stewards of our community.

**Q** WHAT IS A WATERSHED?

**A** A watershed includes the land that drains into the waterways of the area. The Maumee River and the surrounding land are all part of the Western Lake Erie Basin watershed.



## DID YOU KNOW?

The Maumee River is the largest watershed in the entire Great Lakes System (not just Lake Erie).



**LAND TO LAKE**  
magazine

**Land to Lake magazine** is published to provide community members in our area with information on protecting the water resources of the Maumee River Watershed throughout Defiance County.

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**Want to See More?**

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or send an email to:

[jenglish@cityofdefiance.com](mailto:jenglish@cityofdefiance.com)

and let us know you would like to be added to our mailing list for future issues of

**Land to Lake magazine.**

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**Defiance**  
419-782-1794  
Soil & Water Conservation District

# LAKE ERIE Update

By Dr. Doug Kane, Associate Professor of Biology at Defiance College

No water for drinking...  
No water for bathing...  
No water for brushing teeth...  
No water for washing clothes...

That was the situation as I returned from teaching and performing research at Ohio State's F.T. Stone Laboratory to my suburban Toledo apartment in early August 2014. It was the first morning of the Toledo Water Crisis and luckily I had purchased water when I left Catawba Island. We could not use the water because several finished water samples had tested too high for microcystin, a potent liver toxin. It would be two more days before we heard that the water was again okay to drink.

In the next few days, we were told that this was a "wake up call" and something needed to be done to stop the massive algal blooms that produced the toxin that had polluted our water. As someone who had been researching algae in Lake Erie for over a decade I feared that this day was coming. A similar "do not use" warning was issued for Carroll Township (Ottawa Co., OH) during 2013. Scientists had known that the size and frequency of blue-green algal blooms (the kind that produce toxins in freshwater) had been increasing since the mid-1990's in

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*Dr. Doug Kane, Associate Professor of Biology at Defiance College, spends summers at Stone Laboratory in Put-In-Bay teaching and studying water quality.*

Lake Erie. Recently, research that I had been involved in had shown a link between increases in soluble (dissolved) reactive phosphorus coming from the Maumee River

and the amount of blue-green algae in the western portion of Lake Erie.

Fast forward to January 24, 2015, [Save Maumee](#), along with several partners, held the Upper Maumee River Management Plan Implementation Conference at Indiana Tech Law School in downtown Ft. Wayne, Indiana. As a Board Member of the Upper Maumee Watershed Partnership, a Lake Erie researcher for the last two decades, and someone directly affected by the Toledo Water Crisis I want to commend the over 50 attendees at the conference.

Although Lake Erie may seem distant to Ft. Wayne, those at the conference really understood that in order for Lake Erie to be restored efforts need to be taken throughout the Maumee River watershed. Further, anything that improves downstream water quality will also improve water quality for the citizens of Ft. Wayne. It has been said before that "we all live downstream of someone else." To me this means that we not only have to be cognizant of the water quality of bodies of water upstream of us but also insure that we afford those downstream with water that they can use for drinking, fishing, swimming, and any of its other myriad uses.

# Begin in Your Backyard

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**How can we change the way we view our yard and help contribute to a healthy space for ourselves and our neighbors?**

*Most people take great pride in keeping their homes and yards neat and tidy. Having a respectable yard has morphed into a part time job during summer months to keep up with mowing and maintenance.*

*It is time to change the way we view our yard.*

## DID YOU KNOW?

**Maintaining an acre of native plants**

over 20 years costs **\$3,000**, compared with **\$20,000** for maintaining a lawn of non-native turf grass.



## Explore Rain Gardens

Rain Gardens are a fun and beautiful way to contribute to healthy water!

### What is a Rain Garden?

Functional landscaping with deep-rooted native plants designed to capture rainwater. Rain gardens keep water on site, out of sewers and increase infiltration by allowing water to soak naturally back into the ground.

### Why are Rain Gardens

**Important?** Urban areas have increased impervious surfaces such as parking lots, streets, driveways and rooftops that create runoff. Every time it rains, pollutants—such as gas, oil, grease, litter, pet waste, fertilizer and yard waste—enter our waterways. When this runoff is filtered through the soil and plant materials in a rain garden, water pollution is reduced and ground water is recharged.

### You Can Make a Difference.

- **Plant a Rain Garden**—Any size rain garden will help.
- **Incorporate a Rain Barrel**—Save money on your water bill and conserve water.
- **Use Native Plants**—Deep rooted native plants help increase infiltration and require less maintenance.
- **Create Wildlife Habitat**—Rain gardens provide beneficial insects and pollinators with food & shelter they need to survive.





# Explore Safe Lawn Care

begin in  
your backyard



landtolake.com

Visit the [EXPLORE](#) tab on our website for links and maps.

### What is Safe Lawn Care?

It begins with an understanding that you and your lawn are part of a larger system—a watershed. Being safe involves carefully choosing inputs that promote a healthy environment for people.

### Why is Safe Lawn Care Important?

Your decisions about your lawn impact the health of your family, friends, neighbors, and people living downstream.

**You Can Make a Difference.**

- **Soil Test**— Test your lawn, garden, landscaping, and fields BEFORE adding fertilizer. Don't apply fertilizer unless your soil test shows you need it. It is a waste of money and excess fertilizer causes algal blooms in our waterways and Lake Erie. Tests available at OSU Extension offices.
- **Set your lawn mower blades at 4 inches**— Studies show that mowing your lawn to 4 inches prevents crabgrass as effectively as

a chemical herbicide. Longer grass shades the soil, prevents weed seed germination, grows deeper roots and better absorbs rainfall.

- **Mulch Clippings**— Leaving clippings on the lawn will return nutrients and organic matter back to the soil which reduces your need to add fertilizer.
- **Plant trees & replace lawn with native plants**— Benefits are endless. This provides flood control, filtering, oxygen, wildlife homes, wildlife food and beauty.

### Why Explore Your Watershed?

Why not? We live in a beautiful area rich with history and natural resources.

- **Take a kid fishing**— We all have great memories of fishing as a kid. Let's make sure future generations have this same experience!
- **Go for a paddle**— Visit our website to learn about free events and ODNR Scenic Rivers for safe local routes.
- **Take a Hike**— Visit local resources like Penney Nature Center, Independence Dam State



# Explore Your Watershed

Park, City of Defiance Municipal Reservoir or your closest local park for biking and hiking trails.

- **Take a Deep Breath**— Take time to stop and enjoy the green spaces in your own backyard.

2015

June 3-6

- **SWCD Summer Camp “Camp Underground!”**  
Open to campers in grades 3 – 8. Explore: Bats! Fossils! Sinkholes! Earthquakes, 4-H Camp Palmer, Fayette.

June 11, 9:00 am - 3:30 pm

- **Land to Lake Conference.**  
Open to anyone interested in local issues and solutions that affect the water quality of our rivers and Lake Erie.  
*See page 8.*

June 13, 10:00 am - 2:00 pm

- **Maumee River Canoe Trip.**  
Get a first-hand view of the beautiful Maumee River. No experience necessary! Canoes, life vests, and safety instructions provided by Ohio Dept. of Natural Resources.  
*See page 8.*

June 16-18

- **SWCD Teacher Workshops.** Black Swamp Educators’ Extravaganza at the 577 Foundation in Perrysburg.

**Registration Is Required For more information:**

**Contact Stephanie Singer**  
ssinger@defiance-county.com  
or 419 782-1794

NEWS



*The first place barrel was painted by Defiance High School Students, Samantha Speiser, Hannah Homier and Madison Larson.*



*The second place barrel was painted by Hicksville High School students, Abbye Shock and Cheyenne Cunningham, with art teacher Mr. Joey Stevenson.*

**Local High Schools Participate in Rain Barrel Painting Contest**

As part of the Land to Lake “Watershed Awareness Campaign”, local high school students took part in a rain barrel painting contest.

The beautifully painted barrels were on display at the Home & Garden Show in Defiance on March 13 & 14. About 250 people voted on their favorite barrel.

The first place barrel was painted by Defiance High School Students, Samantha Speiser, Hannah Homier and Madison Larson. Their art teacher is Ms. Melanie Wilson. To reward their artistic talents, they received a \$30 gift certificate along with conservation related books and posters.

**Rain Garden & Rain Barrels**

189 people have attended Land to Lake Rain Barrel & Rain Garden workshops. 80 rain garden kits & 120 rain barrels have been sold!

**Soil & Water Conservation District**

Through Defiance SWCD office, programs are available to farmers to cost share for practices that improve the water quality of our rivers and lakes. Encourage and thank your local farmers for implementing strategies for clean water.

**City Compost Site**

Located at 26273 S.R. 281 East (next to GM)

**Now Open.** Defiance City Residents Only:

Tuesday and Thursday 12:00 PM to 6:00 PM, Saturday 9 AM to 2:30 PM

Closed Saturday, July 4th & Thursday, November 26, 2015

# Auglaize Riverbank Update

The riparian restoration portion of this project is still ongoing. After removal of a few larger trees that were dead and/or unsafe, numerous invasive species such as garlic mustard, teasel, tree of heaven – were also removed – leaving roots and stumps to assist with stabilization. Installation of Envirolok™ bags was successful, providing a terraced area to accomplish the planting of hundreds of native trees and shrubs. Approximately 90 tons of soil was used to fill up nearly 2000 bags. The surface of the bags will be covered by seeding a mix of native wildflowers and grasses which will be able to establish their deep roots directly through the fabric. Over time the combination of roots and soil will hold the upper portion of the bank in place, while the massive



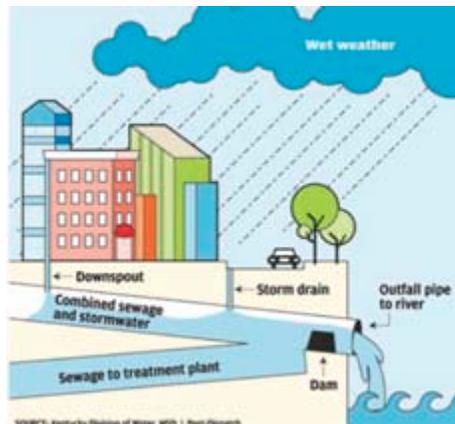
rock will continue to protect the lower portion of the bank from the strong erosive force of water.

Along the walkway on Washington Avenue, additional landscaping work was completed in

order to rejuvenate some of the existing redbud trees and lilacs, as well as planting some low-maintenance perennial plants such as native switchgrass and three new street trees.

Combined Sewer Overflows (CSOs) occur in Defiance and other communities with systems that were built to handle both storm water and household sewage in the same sewer pipe. Reducing the amount of stormwater that enters CSOs is more cost-effective than building bigger sewers. The Ohio EPA has provided funding to the City through the Surface Water Improvement Fund (SWIF) in order to use green infrastructure at Diehl Park to remove stormwater from the combined sewer system.

## Diehl Park Green Infrastructure



One of the main parking lots in Diehl Park will be reconfigured so that stormwater flows will be directed into a series of bioswales and a bioretention area. Detailed plans are currently being developed and the project will be built in the fall of 2015.

**For more information and updates on community projects see the [Public Projects](#) tab at [landtolake.com](http://landtolake.com)**

# LAND TO LAKE CONFERENCE

**Thursday, June 11th**

**9:00 a.m. – 3:30 p.m.**

**at Defiance College**



For a complete agenda, visit  
**[landtolake.com](http://landtolake.com)**

**Residents, Businesses, Nonprofits, Educators:**

...or anyone interested in local issues and solutions that affect the water quality of our rivers and Lake Erie.

***you are invited!***

**Join Our Local Leaders**

...at this event designed to help us all better understand our role in decreasing pollution to our rivers and building a stronger local economy centered on our rivers.

Space is Limited.

**Registration is Required!**

Contact: Stephanie Singer

**[ssinger@defiance-county.com](mailto:ssinger@defiance-county.com)**

**or 419 782-1794**

# CANOE TRIPS

You are invited to get a first-hand view of the beautiful Maumee River. These trips are designed to encourage more cooperation in improving our water resources.

**Local Leaders**  
**June 12, 1-5 pm**

**Join us on a FREE canoe trip on the Maumee River.** No experience necessary! Canoes, life vests, and safety instructions provided by Ohio Department of Natural Resources.

**Public**  
**June 13, 10 am-2 pm**