WATER...
Our Land Depends on it

PHOTO CREDIT: Corinne Stagen Photography
What Happens on the Land, Happens in the Water
By John Sentell, President, Lake Forest Open Lands

While Lake Forest Open Lands is in the business of saving land, there is an axiom among conservation land trusts that “what happens on the land, happens in the water.” Nothing could be truer than where we live.

The health of our community’s land and water are interdependent. Lake Forest Open Lands’ nature preserves, which ultimately drain into the Lake Michigan and Illinois River Basin watersheds, include wetlands, ponds, streams and now, with the acquisition of McCormick ravine and lakeshore, a direct connection to Lake Michigan. Through our consistent restoration and land management efforts, monitoring, school and camp programs, and our Center for Conservation Leadership (CCL) program, we engage and educate citizens, young and old, about this essential water resource. Students of all ages are increasingly involved in water quality monitoring as they learn about the importance of our preserves as habitat for aquatic life, amphibians and birds, as well as for the full range of plant life.

Protection of our water resources depends upon action at a local level. As Lake Forest Open Lands has focused increasingly on the role of water in our conservation mission, we are proud of our collaboration with the Illinois Department of Natural Resources’ Coastal Management Program (ICMP). Over the last several years, the ICMP has supported Lake Forest Open Lands with grants and other resources that have helped us restore, raise awareness, and advocate for our unique ravine eco-systems, expand the great lakes content in the CCL program curriculum and, most recently, establish a regional effort to understand and advocate for our watershed, the coastal zones and the Great Lakes. Along with these efforts, Lake Forest Open Lands is also pleased to participate in ICMP’s Regional Sand Management working group to jointly address the dynamic impacts to our beaches and shoreline. Through these and other local activities, Lake Forest Open Lands is playing an increasingly significant role in building a stewardship ethic within our shared coastal community.

The next element of our outreach and collaboration is a three-lecture series, Great Lakes, Great Issues, which will be held this fall. Sponsored by Lake Forest Open Lands, with the support of ICMP and in collaboration with Gorton Community Center and Lake Forest College, these lectures, films and discussions will explore pressing environmental developments affecting Lake Michigan. We hope you will join us for this engaging and educational series.

Left, Top to Bottom: Amphibians are good indicators of water quality. Lake Forest Open Lands consistently monitors frog populations in all of our preserves; the water from McCormick Ravine gently flows into Lake Michigan; CCL students and interns working with ICMP to map coastal erosion.

Students in Lake Forest Open Lands’ school programs, Eco-camps, Center for Conservation Leadership and Restoration Ecology programs learn about the importance of water in managing our land. Through hands-on experiences that introduce them to measurement techniques and scientific methods, young people evaluate the health of our water, monitor the ever-changing lake shorelines, learn about aquatic biology and restore the wetlands habitat on our preserves. They learn about the many roles of water in distinct ecosystems on the upland and wetland prairies, the streams that cross them, the unique ravine transition zones and Lake Michigan itself. Beyond our own community, students in Lake Forest Open Lands’ programs learn about the role of waterways in the commercial and cultural development of our region and participate in recreational activities that connect them to water, from fishing to canoeing and kayaking. Through the CCL program, our students also serve as ambassadors to our extended regional community, often engaging family and friends to participate in water-based citizen science and stewardship projects. It is eye-opening for learners of all ages to understand how we affect our watershed and to learn how to care for it going forward.

Below (Left to Right): Happy to be “keeping it fresh” on the shores of Lake Michigan, Eco-camp students evaluate the water in Lake Forest Open Lands’ Jens Jensen pond aboard our new raft built by a local Eagle Scout.

Above (Left to Right): CCL students working with the Van Dorn water sampler aboard the research vessel WG Jackson; testing for macroinvertebrates and measuring invasive mussels.

Left: CCL students canoe the Manitowish River in northern Wisconsin with river biologist John Bates.
Lake Michigan: More than Meets the Eye
By Diane Tecic, Director of Illinois Department of Natural Resources’ Coastal Management Program

Lake Michigan: More than Meets the Eye

Lake Michigan is our freshwater inland sea. Like all great bodies of water it provides us with immense value, but the lake also faces consequential threats and challenges. We only see glimpses of its complexity just as we only see certain aspects of people we meet and know. The depth and breadth of its existence hide in plain sight. So much remains unseen and unknown beneath the surface unless we make the effort to contemplate and understand the totality of our connections to the lake.

Think for a moment about the many benefits we gain from our Great Lake. We swim, fish, dive and frolic in its often chilly waters. We dance across its surface in sailboats, kayaks and kiteboards. Over 6 million people in Illinois depend on Lake Michigan for clean drinking water. The lake drives our regional economy by carrying commodities, connecting communities and ferrying people. Its river tendrils carry away our wastewater – an unacknowledged but critical function. The recreational value is unparalleled: people flock to the shore, driving tourism, development and commerce. The coast of Lake Michigan creates a meeting place where land meets water, and where families meet friends to escape the heat of the summer.

Meanwhile, our Great Lake sustains an unseen ecosystem for myriad life forms. Under the surface there are communities of organisms in the nearshore and offshore waters. Under the rocks, in the reefs and swimming above, life abounds and permeates the waters. There is a delicate balance of predators and prey. There is an interconnected and interdependent web of plants and animals from the microscopic to trophy-worthy trout and salmon.

On the coast, there are specialized natural communities and species that depend on the interplay and dynamics of water and land. The water levels, wave action and wind currents create a zone of change, renewal and physical power. There are growing threats from plastics, chemicals, polluted stormwater, pharmaceutical products, invasive species, and strengthening bacteria and viruses. As people are more susceptible to illness when under stress so our Great Lakes and the creatures that depend upon them are under stress from these many chronic and acute perturbations.

As the Director of Illinois’ Coastal Management Program, I constantly try to understand the values and challenges of our coastal water. I want to find ways that our program can move our communities towards a sustainable balance in how we all share this great body of water. Our program is one of many players in a team of champions for the Great Lakes. Like any player, we have to know the field and our own strengths and weaknesses on the team. How can this team work together to balance our demands as a society with the needs of the natural systems that sustain us? We each have our unique roles in protecting the generous gifts of the Great Lakes that we cherish.

One of our dedicated partners in this collective effort is Lake Forest Open Lands Association. We are excited to be working with Lake Forest Open Lands Association and its Center for Conservation Leadership to support the upcoming Great Lakes, Great Issues lecture series, among many other initiatives. These seminars offer an opportunity to gain greater understanding of the challenges facing our Great Lakes, as well as exposure to the technical issues behind the challenges and potential solutions.

I have an invitation for you: Join our team of Great Lakes Champions. You can start by considering how you perceive our Great Lake. Take the time to contemplate this source of beauty, awe, inspiration and boundless gifts. How can you see Lake Michigan differently...more fully and holistically? What fascinates and intrigues you as you stand on the shoreline?

Let the reflections of the sunrise and moonrise over its waters inspire you. Consider how you may be contributing to the lake’s health or stress. See if it all that it is. Love it. Understand its complexity. Appreciate it for all its gifts. Protect it in whatever ways you can. Become informed and be its advocate. Then you are ready to be a Champion for Lake Michigan!
Join us for fall fun and celebrate the season! Learn about water and restoration.

WATER: YOUR HOME, YOUR COMMUNITY
Wednesday, September 26
7:00 p.m.
Gorton Community Center
400 E. Illinois Road
Lake Forest

Protecting water quality is important! Join the Lake Forest Collaborative for Environmental Leadership (LFCEL) for a community forum on water. Residents will have an opportunity to participate in discussions on water and how it relates to ravines, green infrastructure, wildlife and more. Did you know using rain barrels is an excellent way to recycle rainwater? Learn about how these topics relate to your home and property.

FREE OF CHARGE

VOLUNTEER OPPORTUNITIES
Join our staff of restoration ecologists for a community volunteer work day and learn about restoration techniques while making a real difference. Volunteers of all ages are welcome to participate by removing invasive species, cutting, hauling, and/or burning brush. Please wear appropriate clothing and footwear. Work gloves and tools will be provided. For large group registration, directions, parking, and more please contact volunteer@LFOLA.org.

BAGPIPES & BONFIRE
Sunday, September 30
4:00 - 7:00 p.m.
Middlefork Farm Nature Preserve

Join us for Bagpipes & Bonfire on Sunday, September 30, 2018. Bring the whole family for an evening of games, fun, Scottish entertainment, picnic feast, wine, beer & spirits at the beautiful Middlefork Farm Nature Preserve. The evening culminates with the landing of kilted sky divers, a dramatic bagpipe procession and the lighting of the bonfire. For questions about the event please email events@LFOLA.org or call 847.234.3880 x17.

Visit www.LFOLA.org for your tickets today:
Members: $100/adult, $35/child (ages 4-20), 3 and under are free
Non-members: $175/adult, $50/child (ages 4-20), 3 and under are free

Great Lakes, Great Issues: Understanding the Most Significant Challenges Impacting the Lakes Today

Lake Forest Open Lands presents an informative and engaging three-lecture series. Join us to explore with leading research scientists the Great Lakes’ most influential environmental, biological and geological developments and how they affect our daily lives.

Registration is required at www.LFOLA.org.

Gorton Community Center
400 E. Illinois Road
Lake Forest

This series is offered FREE OF CHARGE thanks to funding support from the Illinois DNR’s Coastal Management Program

THE PERILS OF PLASTIC
Wednesday, September 12
7:00 - 9:00 p.m.
Dr. Sherri (Sam) Mason, Professor of Chemistry, Chair, Department of Geology & Environmental Sciences, State University of New York, Fredonia

Following the film, “Toss the Plastic,” Dr. Bullerjahn, Director of the NIH/NSF Lake Erie Center for Fresh Waters and Human Health will discuss toxic nutrient pollution which pose threats to fresh water resources all over the world. This has yielded harmful algal blooms affecting drinking water for tens of millions of people. Prevention and mitigation of these bloom events require an understanding of the environmental conditions. This film and presentation will cover a range of topics ranging from algal physiology to land environmental conditions. This film and presentation will cover a range of topics ranging from algal physiology to land

TOXIC PUZZLE: OUR HEALTH AND THE HEALTH OF THE GREAT LAKES
Wednesday, October 10
7:00 - 9:00 p.m.
Dr. George Bullerjahn, Professor of Research Excellence, Biological Sciences, Bowling Green State University

Following the film, “Toxic Puzzle,” Dr. Bullerjahn, Director of the NIH/NSF Lake Erie Center for Fresh Waters and Human Health will discuss toxic nutrient pollution which pose threats to fresh water resources all over the world. This has yielded harmful algal blooms affecting drinking water for tens of millions of people. Prevention and mitigation of these bloom events require an understanding of the environmental conditions. This film and presentation will cover a range of topics ranging from algal physiology to land environmental conditions. This film and presentation will cover a range of topics ranging from algal physiology to land

DY NAMIC SHORE: WATER, WAVES, AND COASTAL CHANGE
Thursday, November 15
7:00 - 9:00 p.m.
Dr. Ethan Thuerkauf, Illinois Coastal Geologist, University of Illinois

Coastal geologic change occurs across time from minutes to millennia and is driven by a variety of processes, including waves, water levels, and ice. Dr. Thuerkauf will explore these processes and dynamics of coastal geologic change along Western Lake Michigan. The mechanisms and implications of coastal change will be discussed as well as the technology and instruments utilized in this work, such as drones, sonar, and sediment coring. The talk will culminate with a discussion of how this research is used to improve coastal management and assess climate change.
At our Annual Meeting on May 16, Charlie Bowen was recognized for his longstanding dedication to Lake Forest Open Lands by being named a Life Director. There could not be a more apt recognition, as Charlie truly grew up in the open lands of Lake Forest, shooting skeet in his family’s back yard as a young boy and roving the surrounding fields along Ridge Road to hunt pheasant. He eventually made it over the watershed divide at Green Bay Road to spend time on the local ravines and beaches, and later sailed numerous Mackinac races.

Charlie truly appreciates the connection of land to the deep waters of the Great Lakes, spending part of each summer on a small island in the North Channel, and also walking our local shoreline that reminds him “how lucky we are to have Lake Michigan and its beaches and ravines in our own backyard.” Deeply attuned to the natural environment, Charlie has long been committed to stewarding our open lands.

A board member since 1987, Charlie has been a steady ambassador for Lake Forest Open Lands, including his ongoing work on the development committee and growing the membership of Lake Forest Open Lands. Charlie has enjoyed working with Lake Forest Open Lands’ members and staff, and is “proud to be a part of Lake Forest Open Lands which has been so successful in saving open space from overdevelopment.”