

# TLA Quarterly

APRIL 2013

## President's Letter

Greetings to all,

Three major philosophical themes are spurring the actions of TLA, this year: collaboration, education, and reflection.

**Collaboration:** How do you get things done? By working collaboratively with others. We can all name individuals whose lifelong efforts have made a significant difference in the environmental health of our region and its waters. But, the fact remains that much of what needs doing takes the efforts and energies of many individuals working in concert with one another. So, where there is overlap of interest and mission, it makes sense for organizations to work together. The Grass River Natural Area and the Three Lakes Association find such an overlap when it comes to the health of the Grass River, which flows from Lake Bellaire to Clam Lake. Over time, this river has been filling with sediment, making it shallower and wider, slowing its flow and making it difficult to navigate, as well as interfering with what was once excellent fishing. We all know that part of why we love living here lies in our enjoyment of our precious water resources. We also know that the recreational uses of our waters are a large part of our economic vitality. Thus, the damage to Grass River has environmental and economic implications for our region that truly need to be addressed. Enter the GRNA-TLA Water Working Group, an ad-hoc committee formed for the purpose of sharing information and resources and avoiding wasteful duplication of efforts. Look for future updates from this group as we find strategies to improve the health of Grass River, as well as develop an accessible database to share the results of our ongoing tests of the many measures of watercourse health.

**Education:** How do you promote community-wide environmental stewardship? By educating the children. Just as the American form of government, "of the people, by the people, and for the people," as Abraham Lincoln so eloquently put it in his speech at Gettysburg in 1863, can succeed only if the people are educated and actively participate in it – so, too, stewardship of the environment can carry forward only if the people are educated to its importance and actively participate in it. For that reason, for the past five years, TLA has focused some of its energies and financial resources on assisting the science education programs in the four school districts that encompass our three lakes (Bellaire, Clam, and Torch). The TLA Science Education Outreach Program has received an exciting matching grant challenge from Gordy Shafer, owner of the Dockside Restaurant, located at the mouth of Clam River where it flows into Torch Lake. Gordy is offering up to \$3,000 per year for the next three years, against TLA's matching fund-raising efforts for this vital educational program. The intent is to secure an ongoing funding source to make the program self-sustaining. This will be quite a challenge for TLA, but we are confident our membership and friends will help us to meet it. If this Science Education Outreach Program speaks to your passion for educating children, to become responsible stewards of the environment they will inherit and later pass along to succeeding generations, we welcome your support.

**Reflection:** Every so often, it is wise to step back from the busyness of everyday life and work – whether as an individual or as an organization – and review the mission and purpose behind that life and work. TLA's Board of Directors is preparing to do just that with a day-long planning retreat scheduled for April 13, 2013. During that day, we expect to examine our mission, compare it to our ongoing work, and reflect on what our future should look like. If you have ideas to share, we would welcome them.

Best,  
Tina

## In this issue

**With his passing, longtime TLA member helps to ensure the future**  
Page 2

**TLA Science Education Outreach Program Looking to the Future**  
Page 3

**What ??? You're kidding!**  
Page 3

**Managing Grass River Sedimentation: Proposed Pilot Project**  
Page 4

**Natural Shoreline Lakescaping & Restoration, Part 1**  
Page 5

**TCE Plume**  
Page 5

**Efforts of Marine Patrol Contribute to a Safer and More Family Friendly Lake**  
Page 6

**Low Water Level in Lakes Michigan & Huron: TLA Advocating for Action**  
Page 7

The Mission of the Three Lakes Association is to provide leadership to preserve, protect, and improve the environmental quality of the Elk River Chain of Lakes, especially Torch Lake, Clam Lake, and Lake Bellaire, for all generations



*Founded 1966*

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## *With his passing, longtime TLA member helps to ensure the future*

*By Linda Gallagher*

Longtime Three Lakes Association member Bob Hildorf, who passed away in March of 2012, is fondly remembered by many in the group for standing up during a meeting a number of years ago and saying vehemently, "We need more money!"



**Bob Hildorf**

In reality, chuckled Hildorf's good friend Jack Norris, also a longtime member of the Association, "Bob said that all the time, on and off for years. That was pretty much a constant concern of his."

Treasurer of TLA from 1987 until 1995, Bob Hildorf knew the value of money.

Forced to help support his family after his father passed away when young Bob was just 11 years old, he taught piano lessons, worked at J.W. Knapp's in his hometown of Lansing and played in a dance band after school during his teenage years while striving to graduate in the top five in his class at Central High School.

That work ethic continued for Hildorf during his college years after the interruption of World War II and six months as a prisoner of war in a German prison camp, despite the demands of a growing young family, when he founded the accounting firm RKL, Inc., which owned and operated H & R Block franchises in Michigan and Indiana.

But Hildorf also knew to take the time to smell the roses, often saying, "Always admire the sunrise, sunset and the moon in the early evening sky...these are perfection."

And he did that from the shores of Torch Lake at his summer home in Alden.

Always concerned about the environmental health of Torch Lake, Bob and his wife Carol were always generous with financial assistance for TLA, completely underwriting the costs of the Association's "First Thirty Years" publication about the history of the group.

"Bob was quick to step up when he felt he could help," Norris said. "During one of our shoreline improvement projects, I called him to come out and look at it with me. As usual, we were trying to figure out how to come up with the funding to do the project. Bob simply said, 'I'll pay for it'."

Hildorf made sure that both the Three Lakes Association and the Grass River Natural Area had more of his backing when the two organizations recently each received \$30,000 in memorial donations made in his honor.

Asked what he thought the philanthropist would have liked TLA to do with their share of the gift, Norris recalled Hildorf's affection for the little Torch Lake bay near Lake Street in Alden he had lived on.

"During the lumbering era, that bay was used by the timbermen to load slabwood onto steamers," Norris said. "Of course, there were accidents due to weather and other problems, and as a result, the bottom of that bay is filled with old slabwood that has deteriorated over the years. I think he would be delighted if we could get that out of there and return the bay to what it should be."

With his caring gift, the man who often declared "We need more money!" is now helping to ensure the future.

# TLA Science Education Outreach Program

## Looking to the Future

By Patricia Roush

From a watershed field kit and trunks full of wetlands centered activities, to owl pellet dissection kits, and interactive hardware that converts a whiteboard to a smart board that is portable and can be shared by several teachers, the TLA Science Education Outreach Program (SEOP) grants will again help enhance our area students' science knowledge and experience. All of the selected awards to local science teachers for the 2012-2013 school year are in the districts' hands.

Over the previous four years of SEOP, TLA has been able to award over \$40,000 to teacher applicants from Bellaire, Central Lake, Kalkaska and Mancelona Public Schools. This average of \$10,000 per year was supported primarily by proceeds from the Grass River Natural Area/Three Lakes Association joint annual golf outing and earmarked donations from members. Last summer, the golf outing did not generate as much income thus there was less in the budget for SEOP.

Our total granted this year was \$4,417 for equipment and experiences plus \$1,600 to co-fund the annual Inland Seas Education Association (ISEA) schoolship excursions. We annually pledge to

send one classroom from each of our four districts on a schoolship excursion. ISEA offered to split the \$800 cost of each excursion with us starting this academic year. We gave the saved \$1,600 to the science outreach program.

The TLA membership and board are pleased to be able to assist the schools, regardless of the dollar amount. Looking to the future, the board has created a funding search committee to address ways of securing new funding opportunities. Additionally, and at the perfect time, Gordy Shafer, owner of The Dockside, has generously offered to match up to \$9,000 over the next three years in support of the science education outreach program. His offer, for which there are no adequate words of thanks, when matched, will give us the funding needed to continue the SEOP and work toward a self-sustaining program.

Here's the pitch: TLA is asking you to support this program with donations. Our science education outreach program raises student awareness of the value of the lakes and land around them, and helps to encourage their future stewardship of these irreplaceable environmental assets. Please consider giving a three year commitment, or – if you are able – an ongoing annual commitment. We have an opportunity right now to build a solid financial footing for the continuation of TLA's science education outreach program – a program of extraordinary importance to the wellbeing of our region, our water resources, and our very future! Please help! Please contribute! Please let us hear from you.

*Editor's Note:*

*You will be receiving an appeal letter shortly from us.*

## What ??? You're kidding!

By Jack Norris

Remember the fresh water sponges in Lake Bellaire two years ago?

The unusual blue-green algae blooms the year before? Both were triggered by the slight warming of the bottom waters during this climate change. Well, here's a new one brought on by the same effect – freshwater jellyfish. I'll wager your best friend didn't even know there were such things.

Here's a picture of one of the common forms that you may be seeing locally this coming summer.

Please call in if you see any. We'd all like to know.

Here's a recent news item on the topic.11/12/2012 (From Silobreaker.com)

They're down there, beneath the surface, pulsating gently like so many translucent hearts. Only they have tentacles. And toxic barbs. Freshwater jellyfish — forms of hydrozoa called *Craspedacusta sowerbyi* — are surprising swimmers and fishers in lakes and rivers across Ontario and beyond.

"I have several hundred reports from 2012" alone, says Terry Peard, a retired biology professor in Harrisburg, Pa., who keeps tabs on sightings of the quarter-sized invertebrates on his website, freshwaterjellyfish.org. "I'm getting so many (reports) every day, by the time I respond to all of them, the day's gone."

His site lists dozens of reported sightings from across Canada, mostly in Ontario, B.C., and Quebec, as well as encounters throughout the U.S. and around the world. He says freshwater jellyfish aren't as rare as you might think. The undulating invertebrate

can be found on every continent except Antarctica.

On Monday, 43-year-old Graham Chivers was fishing with his girlfriend on Munn Bay in Belmont Lake, about 60 km north of Trenton. They caught a pike and were about to pack it in when they noticed a "tiny blotch" next to the boat. To their surprise, it was a jellyfish. "I grabbed my bail bucket and scooped it up," says Chivers, who spotted about 50 more as he drifted in his boat.

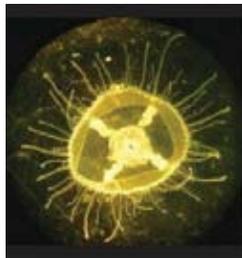
Michelle Wolfson, a Toronto mother and avid sailor, has twice come across clusters of the squishy creatures, once in 2010 in the Bay of Quinte, and again in Go Home Lake near Georgian Bay. "People don't believe you at first," she says. "There were hundreds of them."

The small, umbrella-shaped jellyfish is an invasive species thought to have originated in China's Yangtze River, says Peard. They were first documented in the late 19th century, and are thought to have spread from China attached to plants and the bottoms of boats.

Because they are typically found drifting in warm water, global warming is often cited as an explanation for the seeming spike in sightings. But Peard thinks the Internet is also helping people more easily identify them, and report their encounters. "I think it's a combination," he says.

Freshwater jellyfish feed on whatever small food they get their tentacles on — mostly plankton, insect larvae and small worms, Peard says. They use toxic barbs on the ends of their tentacles, which protrude from the rim of their round bodies, to sting and pull in prey. And no, they're not harmful to humans.

"I don't think it can penetrate human skin," he says, citing more than 20 years of experience studying the creatures at the Indiana University of Pennsylvania. "We've handled them bare-handed for years, and we've never felt anything."



# Managing Grass River Sedimentation: Proposed Pilot Project

By Dean Branson, Gary Knapp, Fred Sittel, and Mark Stone

One of the findings from our 2012 study of the sedimentation of Grass River is that the accumulation of sediment in some areas has resulted in the River becoming alarmingly shallow. In some areas due to the accumulation of sediment, the future of boat navigation would be expected to become progressively more challenging. The typically slow current of the river results in this accumulation of sediment. This accumulation of sediment has been the subject of complaints and concerns for several years, which was part of the driving force and focus of several TLA research projects in 2011 and 2012, including a co-sponsored project with stream experts from MSU, Tribe of Ottawa & Chippewa Indians, and Tip of the Mitt Watershed Council.

Serendipitously, Mark Stone, Antrim County's Drain Commissioner and Operator of Dams was considering remedies to the same problem. He has been fielding an increasing number of complaints from people having navigation problems in different connecting rivers in the Antrim Chain. Many believed the underlying cause was "low water levels" due to the operation of the dams. In actuality, the underlying cause was sedimentation. Years ago, Stone had managed a large woody debris project on the Thunder Bay River and was struck by how much sand was moved down the stream by the structures. In conversations with Dean Branson and others, he suggested that the large woody debris technique might accomplish a similar effect in Grass River—and avoid the impulse to dredge.

Large woody debris had come up in discussions during the TLA research projects as well. The method is to strategically install full-size trees and logs along the stream banks, which deflect the force of the existing current back into the channel and concentrate the water flow. The channelized current increases the river's capability to scour the sediment from the channel and deepen the channel. The installation of large woody debris has the added benefit of dramatically increasing the habitat for aquatic insects (macroinvertebrates) that form the base of the food chain and it provides shelter for fish species. So there are multiple benefits from installing these structures including improved navigation for boaters, better fishing for anglers, and a healthier aquatic ecosystem.

On March 14th, the Antrim County Board of Commissioners authorized the installation of a woody-debris pilot project and allocated \$1,500 of an estimated \$3,500 to complete the project. The remaining funds are to be obtained from donations and grants. If a

DEQ permit can be obtained this summer, then it may be possible to start installing this large woody debris later in the year. The conditions of the River channel, including depth, flow, and biological health, will be documented before and after the installation of the woody debris.

Mark Stone is now in the process of forming a Waterways Work Group. The Work Group will help plan the details of this pilot project, conduct community engagement and informational meetings,

and obtain cooperation from the private owners of property on Grass River. Participants in the Work Group already include County Commissioner Gene Dawson, County Erosion Control Officer Heidi Shaffer, Grass River Natural Area Executive Director Rich Hannon, and representatives from Three Lakes Association, Elk-Skegemog Lakes Association, and Friends of Clam Lake. The first meeting of Waterways Work Group is tentatively scheduled for 3:00 PM on April 17th at a location to be determined. It will also



**Example of large woody debris project**

be an opportunity for the Work Group to meet Ken Reed, a stream restoration specialist who will be running the project. Ken has over 20 years of experience building trout habitat for the US Forest Service and MDNR in northern Michigan rivers, including major projects on the AuSable River utilizing heavy-lift helicopters to place entire trees along the river banks.

The project offers many volunteer opportunities. We will be recruiting the able-bodied who enjoy getting wet and dirty to help with the installation process. For those who enjoy study opportunities, we'll need individuals to take measurements, compile data and track the effect of large woody debris on the river.

For additional information about this project, or if you would like to express interest in volunteering to help with this project, please contact Gary Knapp (231-533-9056), Fred Sittel (231-377-7818), Dean Branson (231-544-2700), or contact Mark Stone ([mail@michiganmapsonline.com](mailto:michiganmapsonline.com)).

*Editors note: The TLA Board of Directors pledged \$500 toward the project at their March 26 meeting. They further authorized the creation of a fund to collect donations for the project. Interested in making a tax donation toward the project? Send your donation to TLA, with Grass River Restoration Fund indicated in your memo file.*

# Natural Shoreline Lakescaping & Restoration, Part 1

By *Bloomin' Buddies, Lakeshore Restoration and Natural Landscapes; Diane Crandall, Principal*

This will be the first of five articles describing and educating everyone on the process and steps used to restore your shoreline from erosion, stormwater runoff while providing filtration by incorporating Michigan Native plants into the beltways along the shoreline.

Step one in this process is determine your concerns and issues with your property. An owner interview questionnaire will be completed to get to know you better, helping us to determine all concerns and desires for the overall outcome of the project. After addressing your concerns, we walk the whole property with the owner to view the structures, home, landscape, angle of property, pervious pavements, erosion and shoreline condition which



includes an inventory of any vegetation, bushes, trees, docks, and rip rap. A base map is then drawn up with these items along with property measurements.

Next a two page checklist is used to determine many factors about the property. Some of the most important include soil contents, existing lawn, bare areas, septic, drain field, pump-out location, standing water and erosion on the upper part of the property. At the shoreline; neighboring seawalls, slope (steep, gradual or flat), receding (quick or slow), ice push (ridges), water level (gradual or drop off) at the shoreline, lake levels, wind and location on the lake and fetch.

Once the survey and checklist are completed, calculations are made to address energy, fetch, and wave heights. Fetch is the maximum distance across the lake from your location, a big factor in determining your renovation requirements. This helps assess the biodegradable materials required on the shoreline for restoration

and erosion control. All materials are reviewed with you. This way you are well informed on the process, purpose, contents and how each component contributes to the end project. All concerns are then reviewed so that a consensus that blends your concerns with the shoreline restoration can be addressed.

The second step is to develop a planting design together that will satisfy your desires for the visual aesthetics which will include color, texture and scents. We can also address the wildlife that certain native plants will attract. I look forward to helping bring awareness on this wonderful, natural process that benefits the water, homeowner, children, grandchildren, and our habitat. An important part of the waters ecosystem. I look forward to discussing this with you in the July Quarterly. Can't wait? Check out

[www.bloominbuddy.com](http://www.bloominbuddy.com) for more.

In the meantime, take this simple assessment and rate your shoreline health.

	<b>1. Low Risk/ recommended</b>	<b>2. Medium risk/ potential hazard</b>	<b>3. High risk/ unsafe situation</b>	<b>Your risk</b>
<b>Vegetative buffer strip or zone</b>	Buffer strip 30' wide or grater of native plants and shrubs. Unfertilized.	Buffer strip of unmowed grass, 10 feet wide. Unfertilized.	No buffer strip or, lawn mowed to shoreline. Fertilized	
<b>Shoreline or riparian zone</b>	Small plant-free swim area; rest of beach contains natural shoreline vegetation, including emergent plants.	N/A	Shoreline entirely free of aquatic vegetation	
<b>Seawalls</b>	Shoreline with original slope and native vegetation to water's edge.	Shoreline stabilized with rock rip rap following natural contours	Abrupt concrete, metal or wood seawall	
<b>Fertilizer type</b>	Soil is tested prior to fertilization. Fertilizer contains phosphorus only if indicated by soil test. So fertilizer applied within 10 feet of shore.	Soil is not tested prior to fertilization. Fertilizer contains low or no phosphorus and/or no pesticides. N fertilizer applied within 10 feet of shore.	Soil is not tested prior to fertilization. Fertilizer containing phosphorus and/or pesticides applied near shore.	
<b>Fall cleanup</b>	Raking leaves and yard waste at least 30' away from the lake and composting them.	Composting leaves and yard waste at least 10 feet from shore.	Burning leaves and other yard waste along shore and washing ashes into the water.	

## TCE Plume

March 15th was another major turning point in assuring the people on the Mancelona area public water system that their drinking water will not be contaminated with traces of trichloroethylene (TCE). Last year at this time, TLA and property owners in the Schuss Mountain-Shanty Creek area were advocating for the State legislators to add \$300,000 in a special appropriation in the State's FY2013 budget for a preliminary engineering project to develop an alternative water supply for the Mancelona area public water system because one of the major sources of water is directly in the path of a major migrating groundwater plume of TCE-contaminated water.

In November 2012, Gourdie-Fraser Engineering met with a large group of stakeholders to develop a project work plan that included a comparison of two options; build a new well field or build an aeration facility to remove the TCE from the contaminated well water. The stakeholders included representatives from several DEQ departments, Mancelona Water & Sewer Authority, Public Health, County government, TLA, Shanty Creek Resort and Rep. Greg MacMaster.

On March 15th, Gourdie-Fraser provided a progress report with sufficient information for the group to develop a consensus on a single course of action; build a new well field on the east side of Mancelona, which is upgradient from the TCE plume.

Gourdie-Fraser is now providing Rep. MacMaster with a project budget (about \$2.4 MM) and timeline for the construction of the new well field in an effort to include appropriations for this project in the State's FY2014 Budget. The group also expressed interest in formally re-activating the ACUTE Group (Antrim County United Through Ecology) to engage the community in educational aspects of the new well field, and the migration of the TCE plume, and to further investigate promising technologies for reducing the size of this TCE plume.

For further information about the TCE plume, please contact either Gary Knapp (231-533-9056) or Dean Branson (231-544-2700).

# Efforts of Marine Patrol Contribute to a Safer and More Family Friendly Lake

By Sue Reck, Water Safety Chair

Torch Lake is not just a playground for tourists, resorters, and residents. It also provides a paycheck for area business owners and employees, who contribute goods and services to make the chain of lakes a vacation paradise. All of us are in this together.

However, a concern began to grow fifteen or twenty years ago that the bad conduct of a few was beginning to ruin it for everybody. Instances of public drunkenness and other gross and indecent behavior out on the water, not only at the sandbar but also elsewhere on the lake, had become alarming. Exceedingly noisy boats were a problem. Often associated with the noisy boats was the excessive speed at which some were operated.

In recent years, much has improved. This is in part because of citizen involvement. In 2008 members of TLPA started working with the marine patrol in order to see if something could be done about the loud boats and speeding on the lake. Since 2009 dozens of citizens have volunteered for the Lake-Watch program of the Antrim County Sheriff's Office. These volunteers have received several hours of classroom training and also orientation at central dispatch thus gaining specialized knowledge in how to assist law enforcement for the safety of all who are enjoying the recreational benefits of our wonderful area.

Enforcement of noise regulations is now ongoing. Michigan has a law that boats may not operate on inland lakes if engine noise exceeds 90 decibels pursuant to a standard scientific test. Starting in 2009, some boats were tested and some did not pass. As a result, there are fewer such boats around, and the ones that remain have taken steps to comply with the law.

The enforcement of the noise statute with the consequent reduction in the number of noisy boats has also helped reduce the number of boats exceeding the legal limit of 55 miles per hour on the lake because the boats that make a lot of noise are the ones which can most likely exceed this limit.

Alcohol enforcement has reduced the number of underage drinkers and the number of operators under the influence. In 2010 some operators were arrested whose blood alcohol level was above 0.20% (the statutory requirement is that nobody, whose blood alcohol is 0.10% or greater, may be the operator of a boat). Minors (those under 21) were taken into custody who were unconscious and required immediate medical attention. Happily, by the Fourth of July in 2012 there were many fewer minors in possession of alcohol than in the previous years. And more of the boaters who enjoy the pleasures of alcoholic beverages were careful to make sure there was a "designated captain" on board.

Changes in the marine patrols have also helped. We now have a

more stable marine patrol officer corps, people with experience and training who return each summer. Many are community members who hold responsible positions, but have time during the summer to provide this service. In years past, most marine patrol officers were here for only one season. Usually they had just graduated from police education programs and were in their first law enforcement job and would move on to more permanent positions after the summer season.

Marine patrols now start at different times on different days and occasionally continue late into the night. In the past, the pa-



**Torch Lake Sandbar**

trols were on a predictable schedule, thus allowing some boaters to break the law outside of the known hours. Boats also now frequently have two officers on board and there will always be a second officer after dark for safety. More coverage is being provided without adding resources.

All of these changes are for the better. We applaud the law enforcement community for meeting its obligations to making our area safer.

## New Members

RuthAnn Silvermail  
Charlie Lundstrom  
Diane Crandall - Bloomin Buddies  
Chris and Cindy Coble  
Trent and Julie Schmidt  
Village Market

Pine Hill Nursery  
Shorts Brewing  
Paul G. Brennan  
Guy Dean Insurance  
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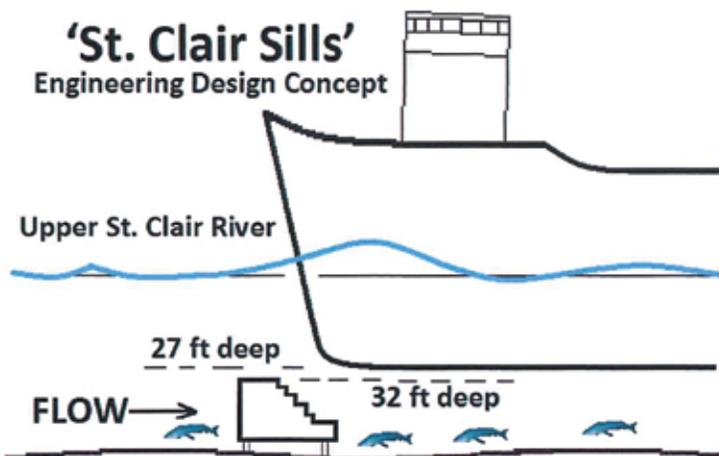
# Low Water Level in Lakes Michigan & Huron: TLA Advocating for Action

Restore Our Water-International (ROW-I) is a new umbrella organization advocating for the installation of structures in the St. Clair River to slightly reduce the flow of water out of Lakes Michigan & Huron. On February 26th, TLA's board decided to add our voice to the growing number of Canadian and US environmental conservation organizations who would like to see the Army Corps of Engineers urgently pursue their 30-year old plan to install restorative structures in the St. Clair River, as shown in the diagram.

The rationale for urgent action is based on the fact that the water level of Lakes Michigan and Huron is currently 27 inches below its long-term average level, compared to Lake Superior's 12 inches, and Lake Erie's 9 inches below their respective long-term average water levels. A small reduction in the current flow rate of water out of Lakes Michigan & Huron (186,000 cubic feet per second) would still allow large freighters to navigate the St. Clair River while slowly restoring some of the water level in Lakes Michigan & Huron. Although there is uncertainty among climate scientists regarding future forecasts of precipitation into the watershed, there is growing doubt about whether this watershed will receive historical amounts of water. There is also concern over whether these lakes will freeze, as they have in the past, which significantly reduces the amount of evaporative loss from the lakes.

Gary will keep TLA's board and membership apprised of developments toward ROW-I objectives. For further information about ROW-I, please check out their Website: [www.restoreourwater.com](http://www.restoreourwater.com), or contact Gary Knapp (231-533-9056; email:knappbuth@gmail.com).

## St. Clair Sills - Concept



SC Sills are designed to sit on legs 3 ft off the bottom and leave the fish habitat undisturbed. In the unlikely event of a future high water crisis, they can be rotated 90° to lie with the flow, or be completely removed.

*membership counts!*

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Three Lakes Association is a 501(c)(3) corporation. Your dues and other contributions are tax deductible. Call for further information.

\* \* \* \* \*

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5:00 pm  
Thurston Park,  
Central Lake**



Eurasian Water Milfoil is an invasive plant that has staked its claim in many inland lakes. Our experienced panel will discuss what it is, where it is and why it matters to riparian property owners, boaters, anglers and everyone else that enjoys using the Elk River Chain of Lakes. Panelists: Mark Brederland, Michigan Sea Grant Extension Educator; Kevin Cronk, Tip of the Mitt Watershed Council Monitoring and Research Coordinator; Bill Derenzy, Echo Township Supervisor and Craig Schmidt, Six Mile Lake Association. A wine and cheese reception will follow the program.

Co-sponsored by GRNA, Three Lakes Association, Torch Lake Protection Alliance, Friends of Clam Lake and Intermediate Lake Association, in partnership with Antrim Conservation District and Tip of the Mitt Watershed Council.

**“Eurasian Milfoil:  
How it can impact boating,  
fishing and your wallet.”**