

# 4th Binational Lake St. Clair Conference: Implementing Restoration and Protection Efforts for the Heart of the Great Lakes

March 19-20, 2008 • MacRay Harbor • Harrison Township, Michigan



## *Conference Proceedings*

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# 4th Binational Lake St. Clair Conference Implementing Restoration and Protection Efforts for the Heart of the Great Lakes

March 19-20, 2008 ✧ MacRay Harbor ✧ Harrison Township, Michigan

## Conference Overview

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The conference will review the status of environmental management efforts in the U.S. and Canadian Lake St. Clair watershed. The focus of this year's conference is implementing restoration and protection efforts for Lake St. Clair. The program includes plenary presentations on the status of major initiatives and smaller breakout sessions focused on specific restoration and protection initiatives. Separate sessions are dedicated to key initiatives in the U.S. and Canadian sides of Lake St. Clair. The conference is intended for resource managers, local officials, elected representatives, citizens' organizations, business/industry representatives, local residents and the media with an interest in the Lake St. Clair watershed.

## Conference Agenda

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### Day One: Wednesday, March 19

- 9:00 a.m. Welcoming Remarks, Review of Four Agency Agreement and Purpose of the Binational Lake St. Clair Conference** (*Anchor Bay Room, Upper Level*)
- Hon. William Crouchman, Chair, Macomb County Board of Commissioners  
Hon. Wally Evans, Chair, St. Clair County Board of Commissioners  
Ken DeBeaussaert, Director, Michigan Office of the Great Lakes  
Jennifer Vincent, Environment Canada  
Hon. Sander Levin, Member of Congress  
Video Statements from Senator Carl Levin and Congresswoman Candice Miller
- 9:15 a.m. Reports on Major Initiatives and Environmental and Water Quality Status Report**
- Moderator: Rose Ellison, U.S. Environmental Protection Agency*
- Implementation of the Lake St. Clair/St. Clair River Comprehensive Management Plan*  
Chuck Hersey, Southeast Michigan Council of Governments
- Implementation of the Lake St. Clair Canadian Watershed Management Plan*  
Jennifer Vincent, Environment Canada
- Implementation and Key Findings of the Lake St. Clair Regional Monitoring Project*  
Gary White, R.S., M.S., Director, Environmental Health Services Div., Macomb County Health Department
- St. Clair-Detroit Drinking Water Monitoring Project*  
Steven C. Gold, MPH, Deputy Health Officer, Macomb County Health Department
- 10:30 a.m. Break**
- 10:45 a.m. Breakout Sessions to Review Key Initiatives in the Lake St. Clair Watershed**  
Six breakout sessions will be held in three groupings. Conference participants may attend one session in each of the three groupings.
- 10:45 a.m. Breakout Group One**
- Option 1: Managing Phragmites: Lessons from the Great Lakes & Beyond* (*Commodore Rm., Lower Level*)  
This session will review approaches for managing phragmites, an invasive reed that is invading coastal areas on Lake St. Clair and around the Great Lakes. The session will review government programs in Michigan and Ontario, permit requirements, control methods, and resources available to help land owners and resource managers. Research on long-term control strategies will also be discussed.
- Moderator: Emily Finnell, Michigan Office of the Great Lakes*
- 1) Control Efforts and Research Around Lake St. Clair**  
Ernie Kafcas, Michigan Department of Natural Resources
- 2) Michigan Programs, Requirements and Resources for Controlling Phragmites**  
Tracy Collin, Michigan Department of Environmental Quality
- 3) Phragmites Management: The Ontario Experience**  
Donald Craig, Water Operations Manager/Forester, St. Clair Region Conservation Authority

**Option 2: Protecting Drinking Water from Lake St. Clair and the St. Clair River** (Anchor Bay Room, Upper Level)

This session will discuss the operations and future direction of drinking water protection efforts on Lake St. Clair and the St. Clair River, including how the drinking water monitoring system will be maintained and funded

**Moderator: Pamela Turner, Detroit Water and Sewerage Department**

**1) Operations, Capabilities and Management of the St. Clair River-Lake St. Clair Drinking Water Protection Network**

Annette DeMaria, Environmental Consulting and Technology

**2) Overview of the Sarnia-Lambton Water Monitoring System**

Dean Edwardson, Sarnia-Lambton Environmental Association

**3) Institutional Options for Maintaining Drinking Water Monitoring Systems**

Thomas Kalkofen, Director, Macomb County Health Department

**12:15 p.m. Lunch and Keynote Speaker** (St. Clair Room, Upper Level)

**Advancing Restoration of the Great Lakes: A Perspective from the United States Senate**

Hon. Debbie Stabenow, United States Senator

**1:30 p.m. Breakout Group Two**

**Option 1: Monitoring for Bacterial Contamination in the Lake St. Clair Watershed: Current Efforts and Future Directions** (Anchor Bay Room, Upper Level)

This session will review current programs to monitor for bacterial contamination in the Lake St. Clair watershed, and future options to improve monitoring, detection and control programs.

**Moderator: Steve Lichota, Assoc. Director, Environmental Health, Macomb County Health Department**

**1) Bacterial Monitoring Programs in Macomb and St. Clair Counties**

Jim Buzonik, Macomb County Health Department

Ron Miller, St. Clair County Health Department

**2) Strengths and Weaknesses of E. Coli as an Indicator of Bacterial Contamination**

Sheridan Haack, U.S. Geological Survey

**Option 2: Options for Preventing Nutrient Enrichment in Lake St. Clair** (Commodore Room, Lower Level)

This session will review sources of nutrients that cause excessive algae and plant growth in Lake St. Clair, and options for controlling them.

**Moderator: Roy Schrameck, Environmental Consulting and Technology, Inc.**

**1) Point Source and Non-Point Source Phosphorus Loading to Lake St. Clair from the Clinton River**

Dr. John Lehman, Professor of Biology, University of Michigan College of Literature, Science, and Arts

**2) Options for Controlling Phosphorus from Wastewater Treatment Plants**

Cory Lancaster, CDM

**3) Public Education to Encourage Environmentally-Friendly Lawn and Garden Care**

Lillian Dean, FAICP, Coordinator, Healthy Lawns & Gardens, Southeastern Oakland County Water Authority

**4) Using Public Ordinances to Minimize Nutrient Enrichment in Local Water Bodies**

Anne Vaara, Executive Director, Clinton River Watershed Council

**3:00 p.m. Break**

**3:30 p.m. Breakout Group Three**

**Option 1: Lake Levels and Flows Affecting Lake St. Clair** (Anchor Bay Room, Upper Level)

This session will review how changes in lake levels and circulation patterns are impacting Lake St. Clair, and prospects for mitigating and adapting to these impacts.

**Moderator: Roger Gauthier, Program Manager, Great Lakes Commission**

**1) Recent Water Level Changes and Near-Term Forecasts**

Keith Kompoltowicz, Meteorologist, U.S. Army Corps of Engineers, Detroit District

**2) Investigations of St. Clair River Flows**

Dr. Rob Nairn, P. Eng, Principal, Baird & Associates

**3) St. Clair River Task Team Investigations under the International Upper Great Lakes Study**

James R. Nicholas, Director, Michigan Water Science Center, U.S. Geological Survey

**Option 2: Why Monitoring Matters: Outcomes from Regional Monitoring Programs and Implications for the Future** (Commodore Room, Lower Level)

This session will review results from U.S. and Canadian regional monitoring efforts for Lake St. Clair and implications for future policies, funding and management activities.

**Moderator: Kristen O. Jurs, Storm Water Coordinator, St. Clair County Health Department**

**1) Outcomes and Potential Responses from the Lake St. Clair Regional Monitoring Project**  
Gary White, Macomb County Health Department

**2) Monitoring in the Canadian Lake St. Clair Watershed: Turning Information into Action**  
Chris Harrington, Upper Thames River Conservation Authority

**3) Water Quality Monitoring: Implications for Future Policy and Funding in the Lake St. Clair Watershed**  
Jim Ridgway, Vice President, Environmental Consulting and Technology, Inc.

**5:00 p.m. Reception** (St. Clair Room, Upper Level)

**Day Two: Thursday, March 20**

**8:30 a.m. Opening Remarks** (Anchor Bay Room, Upper Level)

**9:00 a.m. Concurrent U.S. and Canadian Breakout Sessions**

**U.S. Breakout Session: Key Initiatives for Advancing Implementation of Restoration and Protection Efforts in the U.S. Lake St. Clair Watershed** (Anchor Bay Room, Upper Level)

**Moderator: Ken DeBeaussaert, Director, Michigan Office of the Great Lakes**

**Preliminary Findings and Recommendations from the Blue Ribbon Commission on Lake St. Clair**  
J. Russell LaBarge, Jr., Chairman, Macomb County Blue Ribbon Commission on Lake St. Clair

**U.S. Army Corps of Engineers Authority for Leading a Partnership to Implement the Lake St. Clair Management Plan**

LTC. William Leady, Commander, Detroit District, U.S. Army Corps of Engineers

**Options for Generating Local Funding for Lake St. Clair Restoration and Protection Projects**  
Bill Parkus, Southeast Michigan Council of Governments

**Canadian Breakout Session: Moving Forward on the Implementation of Canada's Lake St. Clair Management Plan** (Commodore Room, Lower Level)

**Overview of Lake St. Clair Canadian Management Plan Issues and Recommendations**  
Jennifer Vincent, Environment Canada

**What Programs and Outreach Activities are Already in Place to Support Management Recommendations?**

Brian McDougall, St. Clair Region Conservation Authority

Jake Lozon, Rural Lambton Stewardship Network

Lindsay Anderson, Rural Lambton Stewardship Network

Peter Roberts, Ontario Ministry of Agriculture, Food and Rural Affairs

**Discussion: Moving Forward on Implementation**

What do we need to move forward? What programs or activities still need to be implemented to achieve the goals and objectives of the Management Plan? Where are the priority areas in the Lake St. Clair Watershed?

**10:30 a.m. Break**

**10:45 a.m. Report Out from Breakout Sessions** (Anchor Bay Room, Upper Level)

Moderators will review outcomes from their sessions and proposed next steps. Open discussion will follow.

**11:30 a.m. Closing Plenary Session** (Anchor Bay Room, Upper Level)

**12:00 Noon Wrap Up and Adjourn**

Dave Cowgill, U.S. Environmental Protection Agency, Great Lakes National Program Office



# Statements from Members of Congress

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## **Keynote Address: Advancing Restoration of the Great Lakes: A Perspective from the United States Senate**

***Hon. Debbie Stabenow, United States Senator***

The Great Lakes are the backbone of our culture and our economy. The earliest European settlers saw something special in this region when they first arrived in the 1600s. By the 1700s, the fledgling United States, the European Powers, and Native American tribes saw so much value in the Great Lakes that they fought a series of wars spanning 60 years to decide who would control this area. They realized, even then, that the Great Lakes were a resource worth fighting for.

In their 10,000 year history, the Great Lakes have never been in so much peril as they are right now. Today, we need to decide, once again, if our Great Waters are a resource worth fighting for. Our enemies are invasive species, low water levels, global climate change, toxic sediments, and declining fish populations. In short, the enemy is us. We need to act now to save our waters for our children and their children. This is a fight for our very identity and our way of life.

We need to make some decisions right now about the future of our region. Do we want a future where we can take our children to the beach, go tubing, or just swim in the lakes? Do we want a future where our children have good jobs in the new knowledge economy, supported by a strong industrial and agricultural economy? Do we want a future where the Great Lakes region is a beacon of tourism and recreation?

This is a critical time for us. All the cards are laid out on the table. We know the problems we're facing. We know the solutions to those problems. We know the pricetag – upwards of \$26 billion. We know the stakes – the Great Lakes are critical to our economy and to our very identity as a region. And we know that the time to act is now.

Since I came to the Senate in 2001, I've been fighting for the Great Lakes. One of my first acts as Michigan's U.S. Senator was to pass a bill that bans oil and gas drilling in the Great Lakes. This legislation was signed into law in 2001, and the ban was made permanent in 2005.

In 2006, President Bush signed my Michigan Lighthouse and Maritime Heritage Act into law, which creates a federal, state, and local partnership to restore Michigan lighthouses and promote the maritime culture of the Great Lakes. Michigan is home to more lighthouses than any other state – more than 120 – and they are important cultural landmarks and tourist destinations. Now, I'm working with the National Parks Service to implement this bill.

We passed the Water Resources Development Act, which authorizes ecological restoration in Lake St. Clair. It's called the "Heart of the Great Lakes" for a reason – not only is it a hub of commerce and industrial activity, but it's also home to some of the most precious wetlands in the region. And I am continuing to press the Army Corps of Engineers about the cause of lower water levels in the St. Clair River. Protecting Lake St. Clair is a vital part of our strategy to protect the Great Lakes as a whole.

We passed an omnibus appropriations bill that includes \$9 million to create a barrier to keep Asian carp out of Lake Michigan, and includes \$97 million for Great Lakes-specific programs.

However, I know that, despite our progress, the U.S. government still hasn't stepped up to the plate. Unfortunately, over the last several years, state and local governments have been assuming more and more of the burden of cleaning up the Great Lakes at a cost of up to \$15 billion per year.

It is long past time for the federal government to make a serious investment in the future of the Great Lakes. We're starting to take those steps. Just last week, the Senate passed a budget that includes \$77 million more than the President requested to make investments in the Great Lakes. Our budget lays the groundwork as we begin the process of hashing out the annual appropriations bills, and calls for investments in fisheries, toxic sediment removal, water quality programs, and programs to fight invasive species.

I am continuing to make water quality issues and the real-time monitoring of the Clinton River and Lake St. Clair a priority. We're also working on a farm bill that I hope will include \$4 billion investment in conservation programs. We amended the Great Lakes Basin Program in the farm bill to include the Great Lakes Regional Collaborative Strategy – the first time the Strategy has been referenced in the law.

The Great Lakes Basin Program's money goes to the Great Lakes Commission to distribute for erosion control activities, keeping sediment out of the water and making our lakes cleaner. It helps landowners prevent sediment and erosion into waterways and is a first line of defense for the Great Lakes in many ways.

Unfortunately, this program has been shamefully underfunded. Nevertheless, since this program was started, 389 programs have been funded that have prevented over one million tons of soil and over 5 million pounds of phosphorus from reaching the Great Lakes or their tributaries. We know this program works – now we need to step up and make sure it has the money it needs to get the job done. Last year, \$5 million in grants and \$7 million in matching funds were left on the table because this program didn't have the funding it needed. I'm committed to getting as much funding as I can to make this program work to its full potential.

I am also working to pass strong ballast water legislation to keep invasive species out of the Great Lakes. Our bill would require ships to use the best science available to treat their ballast water before discharging it. The House of Representatives may include this as part of their Coast Guard legislation, and we need to stay united and keep up the pressure to pass this common-sense legislation by the end of the year.

I'm also very involved in efforts to combat Phragmites in our wetlands. This reed is destroying wetland habitats, jeopardizing fish and bird populations, and ruining lake access for our citizens. In the short-term, we need to stop the spread of Phragmites and get rid of it where we can. But in the long-term, I'm focused on handling this in much the same way that we got rid of the purple loosestrife which was a problem in the 80s and 90s – by using the latest scientific research to control this plant once and for all.

In Michigan especially, we are facing serious economic challenges. This is a tough time for us, but the Great Lakes give us hope and optimism for the future. Restoring the Great Lakes presents us with real economic opportunities. We need to start thinking of the Regional Collaborative Strategy as a blueprint for our economic turnaround.

As we transition to a global knowledge economy, we need to attract and keep bright minds and innovative businesses. All of us in this room have experienced the beauty and majesty of the Great Lakes, whether it's out on a boat, enjoying an afternoon at the beach, or watching one of our incredible sunsets. We need to be able to brag about the Great Lakes as a "fringe benefit" that other regions of the country just can't compete with. Who wants to live in a desert when you can be surrounded by the natural beauty of the Great Lakes?!

These investments pay for themselves. According to the Brookings Institution, implementing the Collaborative Strategy will create a net gain of at least \$24 billion in long-term economic benefits for our region. Cleaning up toxic sediments can yield dividends up to \$11 billion from fishing, tourism, and recreation. Implementing the Strategy will reduce cleanup costs for state and local governments by up to \$125 million. Sediment management can reduce drinking water treatment costs by as much as \$12 million per year. Cleaner water and safer beaches mean property values in coastal areas can soar by up to almost \$20 billion. Fish populations are predicted to continue their decline by between 25 and 50 percent. Fixing this problem could yield dividends of up to \$5 billion. By implementing the Strategy, we can reduce beach closures – a real problem for Lake St. Clair especially – and see dividends of \$2 to \$3 billion.

We have our work cut out for us. This fight isn't going to be easy. But this is a fight not only for our future, but for our very identity. And the longer we wait, the more it's going to cost us.

This battle for our beautiful waters is about our future and economic well-being. By being here today, you've already decided that the Great Lakes are a resource worth fighting for. You are on the front lines every single day, and I commend you for your dedication. I'm honored to be your partner in this endeavor, and I'm committed to doing everything I can in Washington to get the resources we need to get the job done.

For me, fighting for the Great Lakes doesn't just make economic sense, it's a moral imperative. I'm reminded of an ancient Native American proverb: "Treat the earth well. We do not inherit the Earth from our Ancestors, we borrow it from our Children." Thank you.

## **Statement from Hon. Candice Miller, Member of Congress**

Hello, I'm Congresswoman Candice Miller and thank you all for being here today at this 4th Binational Conference on Lake St. Clair. I wish I could be with you in person to discuss the important issues facing Lake St. Clair. Regrettably, some scheduling conflicts have prevented that from happening, so I appreciate the opportunity to address you all through this medium.

I want to thank the Great Lakes Commission for putting this conference together and all of you for participating. As we all know, there are literally hundreds of players in Great Lakes restoration, and I want to thank all of you for your efforts to improve Lake St. Clair. Working together and harnessing our resources is crucial to making a positive impact and all of you should be commended for your dedication and your cooperation.

The Great Lakes in general and Lake St. Clair in particular are so important to Southeast Michigan and to me personally. As someone who has lived on Lake St. Clair for all my life, I have a deep appreciation for its beauty and its importance to our community. In fact, working to promote and protect the Great Lakes is one of the primary reasons I ran for Congress back in 2002.

And one of my biggest accomplishments in that time stems from the \$1 million I was able to secure to establish the Macomb- St. Clair Drinking Water Monitoring Program back in 2004. Before this program was launched, we had little information on chemical spills into the St. Clair River and Lake St. Clair, other than what the officials on the Canadian side disclosed to us. We were forced to rely on information that was often incomplete and too late to be actionable. Let anyone think that these were rare occurrences, we know there were over 1,000 chemical spills from Chemical Valley into the St. Clair River over the years. And many of those chemicals may have been sucked into the water intakes that feed our drinking water systems in Southeast Michigan.

But all this has changed in recent years. Macomb County, working with their counterparts in St. Clair County, placed real-time monitors in the St. Clair River to detect hazardous chemicals in the water. When these chemicals are detected, water plant operators are warned about them, before they reach the drinking water intakes. The operators can then shut off certain intakes until the water quality has improved to an acceptable level. And guess what happened? Right around the time this system began operations, the number of spills into the St. Clair River began to decline.

Water quality monitoring is an important part of efforts to protect Lake St. Clair and we should work together to take full advantage of this technology in Southeast Michigan. I hope your discussions today will explore this issue and what further benefits we can achieve through real time monitoring of our water.

Of course, water quality is not the only challenge facing Lake St. Clair. There are many fronts that we have to engage. We are dealing with numerous invasive species – including phragmites – which are taking over the Lake and our shores. We are still confronting problems with illicit sewer discharges and overflows which put untreated pollutants into our water. And we need to restore the habitats which have been damaged by years of pollution and neglect.

So I was extremely pleased that last November Congress enacted the Water Resources Development Act. This is legislation we have been fighting for since I got elected to Congress, so it was long overdue. The reason this legislation is so important to us is that it authorized up to \$20 million to implement the recommendations of the Lake St. Clair Management Plan.

This authorization provides a great opportunity for us to perform some significant projects which will be very beneficial to Lake St. Clair. This of course is subject to subsequent appropriations, and I pledge to work to secure as much funding as possible so that this very important work can proceed.

Another noteworthy event is a recent \$380,000 grant that was awarded by the U.S. Fish and Wildlife to deal with phragmites in and around Lake St. Clair. The Michigan Department of Natural Resources in partnership with Ducks Unlimited, SEMCOG, the Huron-Clinton Metropolitan Authority, and Harrison Township will be restoring over 800 acres of vital wetlands habitat. This funding is just a small step to help deal with these reeds that have just taken over our shores and are causing tremendous problems, and it provides a wonderful illustration of cooperation among vari-

ous governmental and private entities.

One other issue of concern is the algal blooms which we have recently seen starting to flare up in Lake St. Clair. These blooms negatively impact fisheries, boating, tourism, and property values. The blooms may also produce toxins which can be fatal to humans in certain cases, and are causing botulism which is creating a tremendous number of bird deaths, particularly in the Lake Michigan area. In the water, these blooms can produce “dead zones” resulting in the demise of aquatic life. These blooms are currently having a significant impact on Saginaw Bay and now we are seeing them in Lake St. Clair.

It seems that a confluence of events has occurred to allow these algal blooms to flourish. We have low lake levels which is creating warmer water and allowing sunlight to penetrate to the bottom of the Lake. Zebra mussels which actually create very clear water have exacerbated this affect. An abundant supply of nutrients- such as phosphorus – creates the perfect conditions for these blooms to flourish. One of the key ways to prevent algal blooms is to reduce phosphorus pollution.

Phosphorus pollution can come from many different sources like wastewater treatment plants, agricultural waste and runoff, and more common products like automatic dishwash detergent and over-application of residential fertilizer. States like Minnesota and Florida have already taken action on measures to reduce phosphorus pollution and I believe Michigan should seriously examine whether they should do the same. Municipalities across Michigan are already doing this on their own initiative.

While we have made many accomplishments over the years, there is still much to be done. I trust that your discussions will be fruitful and provide a road map moving us forward. Thank you all so much for being here, and I regret not being able to be there with you. I look forward to working with all of you in the future to preserve, improve, and restore Lake St. Clair – the heart of the Great Lakes.

## **Statement from Senator Carl Levin**

Good morning everyone. I want to take just a moment to welcome you and thank you for your efforts on behalf of Lake St. Clair. My regional representative, Vicki Selva, tells me that right outside of the room in which you are meeting you can see the beautiful lake. It’s a reminder of the upcoming Michigan summer and all the wonderful things the ‘Heart of the Great Lakes’ offers. And, it adds another reason I wish I were there with you in person.

For generations the waters of the Great Lakes have defined our region and helped our people thrive. We’ve depended on our waterways for navigation and agriculture, for drinking water and as a recreational hub for boating, swimming, fishing and more.

You come together today because of your commitment to making sure that the 5 million people who depend on Lake St. Clair and its watershed can be confident that it is clean and free of chemicals and bacteria. But you know and I know that the future of Lake St. Clair and the Great Lakes is not assured unless we – the people who love it and need it – make sure to protect it.

Invasive species are one of the greatest threats – there are now 185 unwanted non-native species, costing a staggering \$5 billion a year in damage and control costs throughout the Great Lakes region.

Aquatic nuisance plants choke our shorelines and have crept into canals and drains and inland wetlands. Zebra mussels clog our water pipes and damage boats. Asian carp threaten to severely damage the food chain and throw fragile ecosystems out of balance.

Last year I introduced the National Aquatic Invasive Species Act. It would regulate how and where ships from foreign waters treat and release their ballast water. It would ensure a comprehensive approach towards addressing invasive species and act to prevent further species introductions.

## **Statement from Senator Carl Levin continued**

We made progress last year on infrastructure improvements with the Water Resources Development Act, which we adopted despite a veto from President Bush. Up to \$20 million may be spent on the environmental restoration of the St. Clair River and Lake St. Clair.

Many of us joined the battle decades ago to restore, conserve and preserve our most valued treasure. We have made some gains, but much work lies ahead and new problems arise annually.

Our efforts must be focused, coordinated and funded. I've supported the Lake St. Clair Management Plan that's been developed by the Army Corp of Engineers. In fact, the Water Resources Development Act includes authorization for funding for the projects included in the Plan. The battle for the actual funding still lies ahead of us, as does the effort to get the Army Corp to quickly and efficiently put together the implementation partnership needed to move forward on the projects being identified by local stakeholders.

A condition for progress is that the priorities be developed locally, by those of you who know this Lake better than anyone. So we need you again to come together to clarify the needs and projects that will best restore and preserve Lake St. Clair.

And one other thing: I urge you to act in every way you can to make Great Lakes protection an issue in the Presidential Campaign, whichever candidate you support.

Thank you and I wish you the best as we move forward together in this great cause.

## **Statement from Hon. Sander Levin, Member of Congress**

Good Morning. I was here yesterday and it was completely foggy, so the weather is improving. Judy Hartwell, our district director, is also here with me today.

Let me say just a few words. This is such an important meeting and I believe you gather with a note of optimism because progress has been made.

When we were growing up with our kids in Oakland County we used to come here. That was some time ago. I don't remember beach closings. We were worried about how many cars were in the parking lot and whether we would be able to find a parking spot if we came to Metro Beach. And then problems began to grow and began to escalate. I think there was a lot of concern about the Great Lake and Lake St. Clair and whether or not we were going to be able to turn around a truly dangerous threat to this unique watershed, unique in the world in many respects. When I began serving in Congress I did not represent an area that was very close to here, but the districts moved and I was happy that I could move with it. Now Representative Candice Miller and I share the territory along Lake St. Clair. As I look about, some of us are old friends. We got to know each other, and the plea that came from both U.S. and Canadian areas that bordered on this lake and the other lakes was that there needed to be some attention to their problems. We needed to recapture the spirit that any damage being done could be turned around. As a result, using hundreds of millions of dollars through the revolving fund, efforts began in Oakland and Macomb counties.

I don't think that most people realize that these two counties, in terms of water, are completely bound. The water runs through these places and it really doesn't matter whether it is one county or another – we have a common stake. And so the revolving fund was an exceptional tool. But there have been efforts to cut the fund and one reason I wanted very much to come today was to urge you to help us to thwart efforts to reduce revolving fund monies. The new budget proposal from the administration suggests some further cuts. It is really inexcusable. What we should be doing is doubling or tripling the amount of money available to communities and counties through the revolving fund. So I've come here today, in a sense to lobby you to lobby us and to join together to try to help in Washington.

You can also reference the management plan, and Dave Bonier before me began to work on this. As mentioned, we were able to provide an authorization in the recent Water Resources Development Act legislation. We had to pass

this over the President's veto. It is interesting that this is the only time this has happened related to the environment. We crossed party lines and were able to pass legislation and now we need an appropriation. So again I urge all of you who are in the United States to join together. The four of us, Senator Debbie Stabenow; my brother, Senator Carl Levin; Representative Candice Miller and I have been working to see if we can now have an appropriation to carry out the authorization. It is absolutely critical because otherwise the management plan is not going to fulfill its dream, right? There is a hard fought battle to make it happen but we have to make it more than a piece of paper, it has to drip with money for water.

Also, as you know, a few years ago the Great Lakes Regional Collaboration effort was started and now a few years later we're fighting for an authorization. And, again, on a bipartisan basis, Congressman Vern Ehlers, from the other side of the state, and my brother are lead sponsors on bills to have an authorization so that the federal role will be carried out.

Let me just say a few parting words. I remember the battle over the Everglades. I remember it vividly. And the appeal was that it was a national, indeed in a sense, an international treasure. The Everglades were more than "threatened," they were beginning to disappear. And the appeal from those from Florida was that federal action was required because it was a national treasure. And we joined together and we overcame regionalism and we forgot about party affiliation and what we said was "yes, there had to be federal attention in order to reverse a trend of many years." If we can do that for the Everglades, with this national, international treasure, we ought to be able to marshal all of the resources to bring attention in Washington—as well as Lansing, but surely Washington—and say to everybody "Forget where you live, forget any political affiliation. These Great Lakes and Lake St. Clair need to be sustained and in their original form."

Some of you have heard me say this. My beloved mother, born in Birmingham, Michigan, used to swim in the Rouge River. That is where they swam - in the Rouge River. It was clean. And as industrial Michigan grew we began to ruin it. And so what happened here was this industrial growth that took place in this beloved place, these waters began to be overtaken by what we call progress. But to the lakes it was retrogression. And so I wanted to come very personally with, not a plea, you don't need this; but with a message of both urgency and hope. Because with your help at the local level, with all of your efforts, channeling them here and also to Washington, we are going to fully restore these waters to their pristine form. There is no environmental mission more urgent, and with your help we are going to succeed. Good luck.



## Reports on Major Initiatives and Environmental and Water Quality Status Report

### Implementation of the Lake St. Clair/St. Clair River Comprehensive Management Plan

Chuck Hersey, Southeast Michigan Council of Governments  
Phone: 313-324-3346 | Email: hersey@semcog.org

The St. Clair River and Lake St. Clair Comprehensive Management Plan was released in 2004. The Management Plan contains 100+ recommendations for restoring, protecting and conserving Lake St. Clair. The recommendations have been prioritized and priority projects have been developed. Implementation has begun on those projects with asterisks:

- Phragmites control\*,
- Habitat protection,
- Establishing a real-time monitoring system\*,
- Integrating modeling with monitoring\*,
- Eliminating illicit discharges from Lake St. Clair,
- Lake St. Clair Watershed Information Management System.

The strategy for implementation has been to seek a combination of federal grants, earmarks and to support the reauthorization of the Water Resources Development Act – which occurred in November 2007. The Water Resources Development Act of 2007 authorizes \$20 million for implementation of projects consistent with the Lake St. Clair Management Plan.

### Implementation of the Lake St. Clair Canadian Watershed Management Plan

Jennifer Vincent, Environment Canada  
Phone: 905-336-4477 | Email: Jenn.Vincent@ec.gc.ca

Lake St. Clair forms part of the international boundary water between Canada and the United States. Its management is complex with responsibilities lying with Canadian and U.S. federal governments, the Province of Ontario, the State of Michigan, First Nations, and local governments. The efforts of many government programs over the last 30 years have improved the environmental health of Lake St. Clair and its adjacent watersheds. However, management programs typically have focused on specific pollution sources and habitat conservation issues, rather than the entire Lake St. Clair ecosystem. An important goal of the management plan is to provide a focus on Lake St. Clair and its adjacent lands as a whole rather than a sum of its parts.

In 2002, using the Four Agency Letter of Commitment as a conduit into the Canadian agencies, the Lake St. Clair Canadian Watershed Coordination Council, led by Environment Canada, contributed summarized technical information to the U.S. ACE for inclusion in the Lake St. Clair and St. Clair River Comprehensive Management Plan. The Lake St. Clair Canadian Watershed Coordination Council is comprised of agencies with a responsibility for the environmental health of the Canadian portion of the Lake St. Clair watershed.

The Lake St. Clair Canadian Watershed Coordination Council recognized that while the effects of management actions can impact the entire Lake St. Clair ecosystem, Canadians can only manage actions within the Canadian watershed. In order to determine what remedial or program actions were needed, the Lake St. Clair Canadian Watershed Coordination Council first needed to document the current state of the Canadian watershed. Only after the current state of the watershed was described could management issues be identified and recommendations developed.

The approach for the Canadian watershed management plan involved three steps:

1. Determine the state of the ecosystem in the Canadian portion of the Lake St. Clair watershed and identify management issues (completed in 2004)
2. Complete a comprehensive consultation of responsible government agencies, First Nations, landowners, and interested non-government organizations to solicit comments on the management issues identified and on possible management recommendations, (completed in 2005) and
3. Develop a Canadian watershed management plan including an implementation plan (completed in 2007).

While this approach focused on the needs of the Canadian Lake St. Clair watershed, the Council recognizes that communication and partnerships with the U.S. Lake St. Clair Watershed Coordination Council will be needed to ensure that the entire Lake St. Clair ecosystem is managed cooperatively.

With the completion of the Canadian Watershed Management Plan, the next step is to begin identifying the mechanisms by which the Plan will be implemented and identifying key partners for each recommendation in the Management Plan.

### **Implementation and Key Findings of the Lake St. Clair Regional Monitoring Project**

*Gary White, Macomb County Health Department*

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The Lake St. Clair Regional Monitoring Project (LSCRMP) conducted extensive water quality monitoring of tributaries to Lake St. Clair and assessed their impacts on the Lake. A comprehensive water quality database for the Lake and tributaries was developed, providing public access to water quality data through an interactive project website. Key findings were identified that are intended to inform policy decisions and stimulate preventive and remedial actions. Findings include: a) the adverse impacts of pollutant flows from tributary rivers and streams to Lake St. Clair; b) the several-fold increase of *E. coli* concentrations throughout much of the study area during and after rain events; c) nutrient concentrations which still exceed federal standards or criteria despite decades-long decline of their concentrations; and d) chloride concentration trends that continue to increase, especially in more urbanized areas.

### **St. Clair-Detroit Drinking Water Monitoring Project**

*Steven C. Gold, Macomb County Health Department*

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The "St. Clair-Detroit Drinking Water Monitoring Project" - more accurately titled "The Huron-to-Erie Real-Time Drinking Water Protection Network" - is a network operating in real time of water monitoring and data communications equipment in drinking water treatment plants from Lake Huron to Lake Erie so that WTP operators, regulators, and other authorities will know immediately if pollutants and contaminants threaten the water supply, and so that interested members of the public will know promptly what substances are in the source water. The Network has its origins in the converging interests of the public health, environmental protection, national defense, technology, and citizen advocacy communities. Following the issuance of the Blue Ribbon Commission Report in 1997, efforts began at the local level to characterize the technological and organizational arrangements needed for a regional approach to monitoring, and at the local and state levels to design an innovative monitoring/notification network. During this time period the greater-than-anticipated extent not just of sewage spills but also of chemical pollution in Lake St. Clair and the St. Clair River became increasingly obvious. With an unusual degree of both intergovernmental cooperation and vigorous citizen advocacy, the 2004-2007 period saw several million dollars in combined Federal, State, and local resources put in place to create the Drinking Water Protection Network.

# Breakout Session 1: Managing Phragmites: Lessons from the Great Lakes & Beyond

## Phragmites Control in the St. Clair River Delta: Study Overview and a Guide for Landowners

Ernie Kafcas, Michigan Department of Natural Resources

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To better control and manage phragmites *Phragmites australis*, it is helpful to understand the physical characteristics of the plant, as well as how and when it reproduces and spreads. The aggressive non native variety of Phragmites, or common reed, threatens the biological diversity and productivity of our wetlands, impacts property values and poses a potential serious fire hazard to structures. Recent local research efforts looked at developing control techniques using specific herbicide applications, prescribed burning techniques, mowing and flooding. The use of herbicide treatment(s) (initial and spot treatments) is recommended as the primary control method and the first step toward effective control. Two broad-spectrum herbicides, glyphosate and imazapyr, are commercially available and have been used effectively to control phragmites. Three management strategies have been developed based on past efforts to control phragmites and provide information and steps to follow under certain conditions. Control programs can result in significant reduction of phragmites, but this requires commitment to an integrated approach and a long term management strategy.

## Michigan Programs, Requirements and Resources for Controlling Phragmites

Tracy Collin, Michigan Department of Environmental Quality

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The primary purpose of this presentation was to discuss Michigan's regulatory requirements for phragmites control projects. Typically, phragmites control requires an initial herbicide application to ensure the adequate damage to root structures. Application of herbicides in areas with standing water and below the ordinary high watermark (OHWM) of the Great Lakes requires a permit from the Michigan Department of Environmental Quality's (MDEQ) Aquatic Nuisance Control Program. Herbicide applications are often followed up with mechanical mowing treatments. When mowing is conducted below the OHWM of the Great Lakes, a permit from the MDEQ's Land and Water Management Division is required. After being involved in a number of phragmites control projects- including the phragmites control demonstration project in Hampton Township, Bay County- the MDEQ and the Michigan Department of Natural Resources were able to compile some practical advice for landowners planning to conduct these projects. Advice on choosing the right equipment, coordinating with neighbors, and considering costs was presented.

## Phragmites Management: The Ontario Experience

Donald Craig, St. Clair Region Conservation Authority

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All pesticides in Canada must be registered under the federal Pesticides Control Act. There is no pesticide registered for controlling phragmites over water. Therefore all applications are done after any water has been drained off the site. All applications have been completed using a hand held nozzle using 60-80 PSI. This has limited the width of treated area to about 30- 50 feet on either side of the machine. It is absolutely essential that the area be spot treated the year following initial treatment to kill any escapes. If this is not done the phragmites will re-colonize the entire area in 2-5 years. Some areas treated as early as 1997 still have no phragmites re-growth. The time for treatment is after the seed has set in mid August until it starts to turn yellow in late October or early November. The authority uses a 2% solution of glyphosate.

## Breakout Session 2: Protecting Drinking Water from Lake St. Clair and the St. Clair River

### Operations, Capabilities and Management of the St. Clair River-Lake St. Clair Drinking Water Protection Network

Annette DeMaria, Environmental Consulting and Technology

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the past 15 years. These spills are exposing water treatment systems and their customers to public health risks. The source water quality monitoring system currently in place to minimize these risks is inadequate and needs to be upgraded with a contaminant detection and alert system that can give water treatment plant (WTP) operators adequate information for timely warnings to the drinking water customers they serve.

The overall goal of this project is to protect drinking water from chemical releases and other threats to public health along the St. Clair River – Detroit River corridor. This corridor is the international waterway that runs between Canada and the State of Michigan and connects Lake Huron to Lake Erie.

The two main project tasks are:

1. Installing, operating and maintaining water quality monitoring instrumentation at nine water treatment plants along the St. Clair River and Lake St. Clair; and
2. Implementing a data management and communication system which will store and display the project monitoring data (on a real-time basis) and notify WTP operators when serious threats to water quality are present.

Implementation of the project will lead to quicker identification of pollutants, more prompt notification of partners regarding the presence and identity of water contaminants, and faster implementation of actions to protect the public from exposure to chemicals. The placement of monitoring equipment is based on knowledge of flow characteristics and potential hazards in the St. Clair River and Lake St. Clair. The selected instruments and sensors will allow the quick detection and/or identification of contaminants and will provide the data needed for notification and decision-making to protect the WTPs and public health.

The water quality monitoring equipment has been installed at 13 water treatment plants during 2007. A total of 32 instruments have been installed at each plant. Nine of the 13 plants have access to a password protection website, so they can not only see the quality of water coming into their plant, but also what is headed their way (from upstream). Website access is available to the remaining 4 plants.

### Overview of the Sarnia-Lambton Water Monitoring System

Dean Edwardson, Sarnia-Lambton Environmental Association

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The Sarnia-Lambton Environmental Association, an environmental cooperative of 24 petrochemical, refinery and associated industries has been funding and conducting real time monitoring of the St. Clair River water quality since 1987. The monitor located on the Canadian side of the St. Clair River south of Courtright, Ontario has a reliability factor of 99.8% and in 2007, 8,677 samples were taken resulting in 173,540 analyses. The results of the analyses have shown a seasonal Toluene response due to recreational water craft on summer weekends. Overall the water quality of the St. Clair River is excellent. Additional information about the Association can be found on its website at [www.sarniaenvironment.com](http://www.sarniaenvironment.com).

### Institutional Options for Maintaining Drinking Water Monitoring Systems

Thomas Kalkofen, Director, Macomb County Health Department

Phone: 586-469-5512 | Email: Tom.Kalkofen@macombcountymi.gov

A report presented to the Macomb County Water Quality Board by Native Americans from Walpole Island highlighting hundreds of spills in the St. Clair River prompted a call for action. Federal, State and local officials

answered the call by providing funding and support for a “Huron-to-Erie Real Time Drinking Water Protection Network.”

Macomb County Health Department is acting as fiduciary and coordinating agency for the project. The future of the project depends on local funding and a local governance structure. Discussions are ongoing at the local level and in the Blue Ribbon Commission to define and recommend the structure and funding options.

### ***Breakout Session 3: Monitoring for Bacterial Contamination in the Lake St. Clair Watershed: Current Efforts and Future Directions***

#### **Bacterial Monitoring Programs in Macomb and St. Clair Counties**

*Jim Buzonik, Macomb County Health Department*

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Data from the Macomb County Water Sampling Database was presented. It showed the lowest number of annual beach closures in the last eight years, and it also demonstrated significant correlations between beach E. coli counts and temperature, rainfall, dissolved oxygen, and water levels. The data also showed a correlation between E. coli levels at Tebo and Mulso-Lipke Drains and Memorial Park Beach. Successful engineering projects to reduce E. coli levels in Lorraine Drain and East Pond Creek were discussed, and a short summary of Macomb County’s Illicit Discharge Elimination Project was presented.

#### **Improved Water Quality - the Illicit Discharge Elimination Program**

*Ron Miller, St. Clair County Health Department*

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In 2002, the St. Clair County (SCC) Health Department and Drain Commissioner’s Office initiated an Illicit Discharge Elimination Program that was very successful in reducing bacteria levels in waterways and at local beaches.

Since 2002, the SCC IDEP program has surveyed 3,087 miles, located 6,170 outfalls, performed extensive educational outreach, identified 585 illicit discharges, and identified several small communities in need of sanitary sewer systems. To date, 448 of the illicit discharges have been corrected, reducing the amount of sewage discharged in local waterways by 32 million gallons per year. Two of the small communities are also currently installing treatment systems to address their sewage problems.

When one compares statistics from the last five years of SCC’s Beach Monitoring Program with the previous 5 years, E coli levels and beach closure statistics show marked improvements. From 1998- 2002, there were 62 beach closures and 300 days when the E coli limit was exceeded. From 2003 – 2007, there were 31 beach closures and 62 when the E coli limit was exceeded.

With the knowledge and expertise gained from this project, and the success of IDEP apparent, SCC expects to continue IDEP

### ***Breakout Session 4: Options for Preventing Nutrient Enrichment in Lake St. Clair***

#### **Point Source and Non-Point Source Phosphorus Loading to Lake St. Clair from the Clinton River**

*Dr. John Lehman, University of Michigan College of Literature, Science, and Arts*

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Two alternative methods were used to assess the relative contribution of point sources and non-point sources of total phosphorus (TP) to the Clinton River, a tributary to Lake St. Clair that is a source of nutrient pollution. One method involved a phosphorus budget constructed from measured river discharge volumes and TP concentrations in the river

in comparison with documented daily discharges of TP from municipal wastewater treatment facilities along the river. The second method involved analysis of covariance for TP loading in the Clinton River compared with nearby drainages that lack large WWTP discharges. Both methods relied on a water quality data set constructed in 2004 and 2005 as part of a regional assessment of Lake St. Clair. The methods support the conclusion that point sources contribute about 48 to 58 percent of the TP loading so that point sources and non-point sources are virtually identical in magnitude. However, areal export coefficients for TP measured for river basins that receive mainly non-point source loading are less than one-half of estimates generated in a 2006 published report that relied on land-use categories inferred from GIS data and phosphorus export coefficients based on land-use type. The disparities trace to higher stream discharge and higher non-point source loading during the winter than during the summer and fall when the water quality data of 2004 and 2005 were collected. Data quality proved to be a concern for the rivers, and 14 percent of the TP concentration data had to be discarded because of internal inconsistencies indicative of analytical error. The remaining data were sufficiently robust, however, to characterize the magnitudes of TP loading. If management strategy focuses only on the presumed growing season months, a cost-effectiveness analysis should be conducted to assess whether controls on point sources, few in number and easily identified, could reduce TP discharge more efficiently than controls on diffuse and poorly defined non-point sources, which include “natural” chemical and physical weathering.

### **Options for Controlling Phosphorus from Wastewater Treatment Plants**

*Cory Lancaster, CDM*

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Phosphorus removal at wastewater treatment plants is accomplished by converting the orthophosphate fraction to either a biological or chemical solid, which is then targeted for removal. Enhanced biological phosphorus removal and conventional coagulation chemistry can be incorporated within existing secondary processes. If necessary, secondary treatment can be followed by a tertiary process that enhances the removal of chemically precipitated phosphorus solids. Tertiary processes include filtration, high-rate clarification, dissolved-air flotation, solids-contact clarification, and membrane technologies. Stakeholders should carefully consider the impacts of increased chemical use, sludge production, power consumption, greenhouse gas emissions and truck traffic at wastewater treatment plants required to meet very low effluent concentrations of phosphorus.

### **Public Education to Encourage Environmentally-Friendly Lawn and Garden Care**

*Lillian Dean, Southeastern Oakland County Water Authority*

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Goals for SOCWA Healthy Lawns and Gardens Program (1995 – to the present)

- Change homeowner attitudes and practices through grassroots programs
- Reduce yard waste; protect water quality; encourage biodiversity (native plants/healthy soils)
- Build partnership with the private sector – through the Healthy Lawns and

Gardens Technical Advisory Committee (with Michigan Green Industry Association)

Program Initiatives for 2008:

- Master Composter classes, Red Run Subwatershed, Clinton River Watershed (citizen “grassroots outreach”; 20 events in spring ‘08)
- Healthy lawn care seminars for the public (3 scheduled for March-April)
- Earth-friendly fertilizer stickers: at participating retailers, 3 counties
- “Don’t Guess...Soil Test!” program support for MSU Extension
- Healthy Lawns and Gardens Technical Advisory Committee: 3 county focus
- Promote “Healthy Lawn Program for Watershed Protection” – 13 endorsed companies
- Rain garden planning and installation assistance, Rouge River watershed

Technical Background – Healthy Lawn Care Education in ‘08

- Benefits of a healthy lawn for water quality
- Lawn soils with phosphorus believed to be more of a concern than fertilizers

- Research results point to the importance of soil texture and irrigation practices
- Criteria for earth-friendly fertilizers:
- Recommended practices for soil health: core aeration; mow leaves; use compost

#### Point-of-Sale Connections for Healthy Lawn Care – Case Study

- Earth-friendly fertilizer stickers at 50 hardware stores and garden centers;
- Low-cost, point-of-sale education; invites retailers to be “part of the solution.”
- Now in its 8th year; positive feedback from retailers; SE Oakland; Macomb; Wayne Co.

## ***Breakout Session 5: Lake Levels and Flows Affecting Lake St. Clair***

### **Recent Water Level Changes and Near-Term Forecasts**

*Keith Kompoltowicz, U.S. Army Corps of Engineers, Detroit District*  
 Phone: 313-226-6442 | Email: keith.w.kompoltowicz@usace.army.mil

The water levels of the Great Lakes are largely driven by natural factors like precipitation, runoff and evaporation. An active winter storm track allowed several systems to bring abundant moisture to the Great Lakes basin. The presentation discusses both current water level conditions and forecasts for the Great Lakes.

### **Investigations of St. Clair River Flows**

*Dr. Rob Nairn, Baird & Associates*  
 Phone: 905-845-5385 | Email: rnairn@baird.com

This presentation provided a brief summary of Baird's work on evaluating the causes for the decline in head difference between Lakes Michigan-Huron and Lake Erie. The three leading explanations were reviewed including: erosion of the upper St. Clair River, regional shifts in Net Basin Supply and glacial rebound effects. It was shown that the upper St. Clair River has changed dramatically over the last 140 years and particularly since 1970. Independent numerical modeling and hydraulic analysis techniques both show that the erosion of the St. Clair River since 1970, and the associated increase in conveyance capacity of the river, explains almost all of the observed change in the difference between the Lake Michigan-Huron and Erie water levels. Over the last 35 years this has resulted in a drop of more than 30 cm or 1 ft on Lakes Michigan-Huron and Erie. In addition to the step-wise decline of Lakes Michigan-Huron over the last 140 years there is a fluctuating influence on conveyance capacity related to large sand waves that move down the river at a speed of approximately 5 to 10 m/year. There are two prominent sand wave features currently in the upper river with a height of 3 to 4 m and length of 200 to 300 m.

### **St. Clair River Task Team Investigations under the International Upper Great Lakes Study**

*James R. Nicholas, U.S. Geological Survey*  
 Phone: 517-887-8906 | Email: jrnichol@usgs.gov

The International Joint Commission appointed the International Upper Great Lakes Study Board in February 2007 to examine whether the regulation of Lake Superior outflows can be improved to address the evolving needs of the upper Great Lakes. Major topics for investigation include determining the factors that affect water levels and flows, developing and testing potential new regulation plans and assessing the impacts of these potential plans on the ecosystem and human interests. Physical changes in the St. Clair River will be investigated early in the study as one factor that might be affecting water levels and flows. Investigations are being carried out under several technical working groups. Information is available at [www.iugls.org](http://www.iugls.org)

## **Breakout Session 6: Why Monitoring Matters: Outcomes from Regional Monitoring Programs and Implications for the Future**

### **Outcomes and Potential Responses from the Lake St. Clair Regional Monitoring Project**

*Gary White, Macomb County Health Department*

Phone: 586-469-5236 | Email: gary.white@macombcountymi.gov

The Lake St. Clair Regional Monitoring Project (LSCRMP) conducted extensive water quality monitoring of tributaries to Lake St. Clair and assessed their impacts on the Lake. Key findings were identified that are intended to inform policy decisions and stimulate preventive and remedial actions. Numerous recommendations are made based on the findings that include the need to continue and enhance monitoring efforts to further refine the range of pollution sources and to eliminate data gaps that hamper the understanding of the Lake ecosystem and its vulnerabilities. Recommendations also include the need to continue the regional watershed approach to managing Lake St. Clair and its watersheds, including the establishment of a regional financing mechanism for priority monitoring and implementation of other recommendations.

### **Monitoring in the Canadian Lake St. Clair Watershed: Turning Information into Action**

*Chris Harrington, Upper Thames River Conservation Authority*

Phone: 519-451-2800 x 229 | harringtonc@thamesriver.on.ca

*The Upper Thames River Conservation Authority (UTRCA) recently completed the 2007 Upper Thames River Watershed Report Cards. The report cards summarize an enormous amount of environmental information, with the goal of turning that information into local environmental action. A report card was developed for each of the 28 watersheds within the Upper Thames River watershed. Each report card assesses environmental conditions within that particular watershed, grades the surface water quality and forest conditions, summarizes watershed features, and provides an action plan. UTRCA monitoring and research programs were highlighted in the presentation along with the multi-agency partnerships that make this monitoring work possible.*

[http://www.thamesriver.on.ca/Watershed\\_Report\\_Cards/Watershed\\_Report\\_Cards-2007.htm](http://www.thamesriver.on.ca/Watershed_Report_Cards/Watershed_Report_Cards-2007.htm)

## **Key Initiatives for Advancing Implementation of Restoration and Protection Efforts in the U.S. Lake St. Clair Watershed**

### **Preliminary Findings and Recommendations from the Blue Ribbon Commission on Lake St. Clair**

*J. Russell LaBarge, Macomb County Blue Ribbon Commission on Lake St. Clair*

Phone: 586-777-3377 | Email: rlabarge@jrlaf.com

The preliminary report and recommendations of the Blue Ribbon Commission presently under review and comment include a focus on regional alliances, securing a long time funding source for drinking water monitoring, coordination of international efforts for sharing of information and suggestions how the alliances can be created and operated and the means to obtain funding to accomplish these recommendations.

### **U.S. Army Corps of Engineers Authority for Leading a Partnership to Implement the Lake St. Clair Management Plan**

*LTC. William Leady, Detroit District, U.S. Army Corps of Engineers*

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Section 3089 of the Water Resources Development Act of 2007 authorizes the Corps to re-establish and lead a partnership of U.S. and Canadian Federal agencies, including local and State governments, that was developed during the creation of the St. Clair River and Lake St. Clair Comprehensive Management Plan. The Management Plan contains 110 recommendations for actions to protect and restore the St. Clair River and Lake St. Clair watershed. The partnership will prioritize and implement projects consistent with the Plan, and expedite

implementation. The Plan addresses issues such as the environmental health of the watershed, human health in the region, habitat diversity, commercial navigation, fisheries and recreational boating. Successful implementation of the Plan's recommendations requires action by all levels of government, so the strategy is develop and coordinate a unified and comprehensive approach to implement the Plan. This would help ensure that actions proceed in a logical manner, and that regional priorities are identified while promoting efficient use of limited resources. Once appropriation is provided, WRDA 2007 authorizes the Corps to move directly into implementing (constructing) the identified priorities, without further study or analysis.

## **Options for Generating Local Funding for Lake St. Clair Restoration and Protection Projects**

*Bill Parkus, Southeast Michigan Council of Governments*

Phone: 313-324-3351 | Phone: 313-324-3351

The St. Clair River and Lake St. Clair Comprehensive Management Plan contains 100+ recommendations for restoring, protecting and conserving Lake St. Clair. Priority recommendations have been identified and implementation projects developed.

While federal funds are being sought for short-term implementation projects, it is important to realize that funding long-term projects will have to be done by local stakeholders. Some type of fiduciary management structure – perhaps a partnership or a basin alliance – will be needed to raise funds as cost share for federal grants or to fund continuing projects such as the Huron to Erie Corridor real-time monitoring and notification system.

A number of funding options have been developed in an effort to start the discussion. A proportional formula could be used that would base calculations on any of the following options, or an alternative:

- Population
- Land area
- Taxable value
- Taxable value with benefit
- Taxable value and land area
- Land area and population.

## **Moving Forward on the Implementation of Canada's Lake St. Clair Management Plan**

### **Overview of Lake St. Clair Canadian Management Plan Issues and Recommendations**

*Jennifer Vincent, Environment Canada*

Phone: 905-336-4477 | Email: Jenn.Vincent@ec.gc.ca

The Lake St. Clair Canadian Watershed Coordination Council approach to identifying issues and developing recommendations required the completion of a technical report followed by an extensive stakeholder consultation process to obtain input into the development of the Canadian watershed recommendations. The consultation with stakeholders and the development of the recommendations was completed in December 2006. The final product is a Lake St. Clair Canadian Watershed Management Plan that complements efforts in the United States portion of the Lake St. Clair watershed.

Many of the recommendations presented are not new, but reflect support for ongoing programs and/or policies whose implementation also benefits the Lake St. Clair watershed. By including recommendations that encompass programs/policies already being implemented, the Council hoped to show that the implementation of these programs/policies will also address the management issues identified through the Lake St. Clair Canadian Watershed Technical Report, even if they were not originally designed or imagined to do so. It is the hope of the Council that by demonstrating these added benefits support for the continuation of these programs will be increased.

The recommendations are organized using the same categories as the technical report (Land Use Management, Commercial Navigation and Recreational Boating, Sources and Loads, Human Health, Habitat Biodiversity, Fishing

and Hunting, Monitoring, Scientific Studies and Data Management) with the addition of a Governance category for those recommendations that relate to coordination, communication, government funding, and enforcement of regulations. This arbitrary approach was chosen as it provides a continuum from the technical report to the management plan. Some of the management recommendations apply to more than one category and some are common to all categories. This reflects the inter-connectedness of both the Lake St. Clair watershed and our human impact on it; the implementation of one recommendation can affect many different issues within the Lake St. Clair system.

## **Programs and Outreach Activities are Already in Place to Support Management Recommendations:**

### **St. Clair Region Conservation Authority**

*Brian McDougall, St. Clair Region Conservation Authority*

Phone: 519 - 245 - 3710 | E-mail: [bjmcdougall@scrca.on.ca](mailto:bjmcdougall@scrca.on.ca)

**Abstract** – The Conservation Authority is involved in a large number of programs and projects which both support the watershed management objectives of the Authority as well as support the recommendations of the Lake St. Clair Management Plan. The Conservation Authority has long recognized the importance of working in partnership to achieve measurable results in improving watershed conditions. We work in partnership with private, corporate and municipal landowners to undertake a variety of conservation projects and programs with funding assistance from federal, provincial, intergovernmental organizations, business and individuals. This presentation will provide an overview of our conservation programs highlighting those which directly impact issues related to the Lake St. Clair Management Plan.

**Biography** - Brian has been with St. Clair Region Conservation Authority for over 15 years. Beginning in environmental planning, he provided input to municipal planning and development issues. After moving into water management, Brian managed several erosion control projects on shorelines of the St. Clair River and the Lake Huron. In 2001, he became Director of Watershed Services, where he continues to coordinate flood forecasting, manage flood & erosion control projects as well as administering conservation services, woodlot management and grant programs.

## **Programs and Outreach Activities are Already in Place to Support Management Recommendations:**

### **Ontario Agriculture Supporting Lake St. Clair Management Plan Recommendations**

*Peter Roberts, Ontario Ministry of Agriculture, Food and Rural Affairs*

Phone: 519-826-3578 | [peter.roberts@ontario.ca](mailto:peter.roberts@ontario.ca)

Farmers in the Ontario Lake St. Clair Basin have accessed \$6 million of Canada-Ontario Environmental Farm Plan (EFP) cost-share funds to date for on-farm projects under “best management practice” (BMP) categories that directly address aspects of several of the key “environmental stressors” identified in the “Draft Technical Report” for this Basin. This investment amount is actually doubled (\$12 million) when farmers’ contributions are considered. As of January 2008, 39% (almost 2/5) of all of Ontario’s projects for the “improved pest management” BMP category were undertaken in this Basin. This work addresses the “storage and handling of chemicals: pesticides/herbicides” environmental stressor. Furthermore, 31% (about 1/3) of all of Ontario’s “shelterbelt establishment” EFP-BMP category projects were undertaken to address the “loss of habitat/fragmentation: forest fragmentation/shelterbelt establishment” environmental stressor. Additionally, this Basin had 21% (over 1/5) of Ontario’s “improved manure storage and handling” BMP category projects. These actions help to mitigate the “bacterial – manure (handling/storage/spreading)” environmental stressor of the “non-point source pollution (runoff)” grouping. This Basin has also had 115 (12% of Ontario’s total) “farmyard and horticultural facilities runoff control” BMP category projects. These projects address the “runoff (farmyard/ runoff control): environmental stressor of the “non-point source pollution (runoff)” grouping. This Basin has had about 8% of all of Ontario’s “riparian area management” BMP category projects. They address the “riparian buffer loss” environmental stressor in the “loss of habitat/fragmentation” grouping. Recently, the Ontario government has provided funds for OMAFRA’s Ontario Great Lakes Program (OGLP) under the Canada-Ontario Agreement Respecting the Great Lakes Ecosystem (COA; 2007-2010). Some OGLP projects will directly address identified Lake St. Clair Basin environmental stressors. These include support for an Ontario Pesticide Education Program (OPEP) project and an AgCare (Agricultural Groups

Concerned About Resources and the Environment) and partners project to implement the first-ever combined “Clean Sweep” of both agricultural pesticides & farm medicines/sharps from Ontario farms. These projects will address the “non-point source pollution” stressor. Lastly, OGLP funds are supporting OMAFRA’s Agricultural Resource Inventory (ARI) GIS database project to map all landscape features and inventory all cropping system, tillage system and nutrient application (where observed) information for each cropping season on farm fields through direct field observations. These ARI results, when combined with other database information, lead to environmental modelling results that illustrate both stewardship and environmental quality trends relevant to the “Draft Technical Report’s” Environmental Stressors in the Lake St. Clair Watershed.