

## Citizens Give Loud & Clear Message to the IJC

By Bruce Kershner, GLU Field Coordinator

"Enough promises and protocol....This year will be different!"

That was one of the refrains of hundreds of citizens who converged on the International Joint Commission (IJC) Biennial Meeting this October in Hamilton, Ontario.

For years, the IJC largely excluded citizens from its reviews and policy-making procedures, despite the fact that those decisions directly affect citizens. As direct appointees of the U.S. President and Canada's Prime Minister, the IJC wields considerable influence over pollution, human health and water levels issues in the Great Lakes Basin --

where 39 million people live. As wildlife ecologist Dr. Jim Ludwig noted, "Citizens are tired of government officials doing all this jawboning -- You, the IJC, are our last hope."

In particular, the IJC oversees implementation of the U.S. - Canada Great Lakes Water Quality Agreement. This Agreement pledges that the U.S. and Canada will end the flow of toxic pollutants into the Great Lakes.

As citizens observed -- with increasing frustration -- the fact that these pledges have gone unrealized, Great Lakes United and 10 other organizations planned to make things different at the IJC's Biennial meeting. The result: the first biennial meeting of the people of the Great Lakes.

Besides GLU, the other co-sponsors included Atlantic States Legal Foundation, Canadian Environmental Law Association, Citizen Action of New York, Environment North, Erie County (PA) Environmental Coalition, Greenpeace, Lake Michigan Federation, NY Environmental Planning Lobby, Pollution Probe and Program for Zero Discharge.

To accommodate environmental groups' requests, the IJC scheduled two days of public forums at which citizens could voice their concerns about water quality and lake levels. And, indeed, they did -- with 18 hours of testimony by more than 125 citizens. The demand to speak was so great, an extra morning of testimony was added.

A major government promise that has gone unmet has been zero discharge of toxics. Citizens, such as Paul Muldoon

of the Program for Zero Discharge and a GLU board member, hammered at that theme. They said that the IJC had to shift from meekness to leadership to meet the goal of zero discharge.

Another fundamental way to change our system of discharging toxic chemicals was brought up by James MacDonald of the Hamilton RAP committee. "All products must contain the cost of waste disposal in their price."

The presenters included every possible constituency. Among the Native Nations representatives was Mohawk Akwesasne Chief Lloyd Benedict, whose reservation straddles the New York-Ontario-Quebec border on the St. Lawrence River. "When our three tribal leaders meet, we too have an 'International Joint Commission' on our

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| GREAT LAKES BASIN                                                          | BASIN GOVERNMENTS | INTERNATIONAL JOINT COMMISSION |
|----------------------------------------------------------------------------|-------------------|--------------------------------|
| IDENTIFYING THE SOURCES<br>POINT SOURCE POLLUTION<br>NON-POINT POLLUTION   | F F               | D D                            |
| LEVEL OF CONCERN WITH HEALTH EFFECTS                                       | F                 | F                              |
| PROGRESS TOWARDS DEALING WITH SOURCES AND EFFECTS<br>REMEDIAL ACTION PLANS | D F F             | C D                            |
| STANDARD SETTING                                                           | F                 | F                              |
| ZERO DISCHARGE                                                             | O                 | O                              |
| OVERALL GRADE                                                              |                   |                                |

At IJC public forum in October, citizens used a giant "report card" to grade the IJC and the governments.

## The Water Levels Debate: Living With Our Lakes

By Philip Weller, GLU Executive Director

At the International Joint Commission meeting in Hamilton, the issue of water quality was front and centre stage, but controversy and debate surrounding the issue of water quantity and the possibility and desirability of control of water levels was an important sideshow.

The governments of Canada and US provided a formal reference to the Commission in August 1986 requesting them to "examine and report on methods of alleviating the adverse consequences of fluctuating water levels in the Great Lakes-St. Lawrence River Basin." Living

With the Lakes: Challenges and Opportunities, the Phase 1 report to the IJC by the water levels reference group, was publicly released September 1, and was the focus of discussion on the last day of the IJC's biennial meeting.

The Commission conducted both a teleconference and open public hearing on the issue of water levels.

Dominating the presentations at the public meeting were members of the Great Lakes Coalition, a shoreline property owners group, who presented their view that the natural fluctuations of the Great Lakes should be controlled with weirs and dams at Niagara and

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## Spill Is Lakes Disaster Waiting to Occur

By Bruce Kershner, GLU Field Coordinator

While the world riveted its attention on the Exxon Valdez Alaska oil spill (and the less publicized, but still severe, NESTUCCA spill off Canada's Vancouver Island), many in the Great Lakes felt mixed emotions. We felt relief that such a catastrophe hasn't happened here -- and worried that we aren't prepared if it does.

Not that oil and chemical spills don't occur on the Great Lakes. They regularly do, and that is why concern about the "big one" is so real.

According to Environment Canada, 1,085 spills occurred in the Great Lakes in 1987, with as much as 90,000 gallons of petroleum and 623,000 gallons of wastes in single spills. The largest ever was an oil spill in 1976 along the St. Lawrence River's Comfort Island Shoal.

Another example occurred in October, 1988 when a barge capsized on Lake Huron, causing a 32-foot rip in its hull and leaking 100,000 gallons of calcium chloride. The barge spent the winter locked in ice before being towed away. Last July 28, 7500 litres of the carcinogenic solvent xylene spilled into a St. Lawrence River lock, closing the Seaway. Luckily, the lock contained the spill.

Even small spills can be serious. Last February, drinking water and hydropower intakes on the St. Clair River were shut down after up to 15

gallons of water containing highly toxic dioxins and furans spilled from a Sarnia, Ontario Esso plant.

Michigan came close to experiencing a serious spill last March 30. The Canadian tank barge Scurry ran aground twice on the swift-moving Detroit River, once right across from Detroit's primary drinking water intake. The Scurry carried 35,000 barrels of a material that is high in PAHs, which are extremely toxic to aquatic life and include carcinogens.

It is estimated the largest Great Lakes tankers can carry 75,000 barrels, or 5 percent of the Exxon Valdez's capacity. However, the Great Lakes are much more vulnerable to damage from a major toxic spill than the ocean. This is because:

- The Great Lakes are a closed system, without the diluting effect, tidal flushing and vastness of the oceans. Lake Superior's retention time is almost 200 years; Lake Huron's is nearly 100 years.
- The Great Lakes contain 18 percent of the world's available fresh surface water, and have nearly 11,000 miles of shoreline.
- Unlike marine waters, the Great Lakes are the region's primary source for drinking water for 24 million people. A major spill would cripple the drinking supply (as well as the fishery, wildlife, economy

and environmental health).

- Unlike the Exxon Valdez spill, a Great Lakes spill could easily become an international incident, since its waters are shared between U. S. and Canada.

There is extensive traffic of materials along the lakes and connecting channels in the Great Lakes region. Approximately 3.4 billion gallons of petroleum and hazardous materials are carried each year by U. S. and Canadian tankers alone. This does not include material carried by foreign vessels.

Great Lakes United recently expanded its policy on spills and GLU staff and board members testified before Canada's Public Review Panel on Tanker Safety and Marine Spills Response Capability. Some of our recommendations include:

- Incorporate the spill provisions of the Great Lakes Water Quality Agreement into federal legislation;
- Establish a truly binational and uniform spill prevention and response effort, including a binational Great Lakes Coast Guard;
- Set up a binational task force to evaluate Canada's and U.S.'s spill regulations and plans;
- Winter navigation should be legislatively prohibited. Ice-season shipping increases the chances of a spill because of ice-choked channels, and makes it nearly impos-

sible to clean up a spill;

- Transport of high-level nuclear waste should be prohibited;
- Spill plans should address the issue of safeguarding public water intakes;
- Impart total liability to both hazardous waste cargo shippers and owners;
- Prohibit non-Great Lakes pilots from navigating hazardous cargoes through the Great Lakes;
- Include a system of wildlife rehabilitation centers in any spill preparedness plans; and
- Commence an independent study to evaluate binational spill preparedness.

Review of spill bills and policies has sharply accelerated since the Exxon Valdez spill. Favorable oil spill bills have been passed in both the U. S. House of Representatives and the U. S. Senate. The Council of Great Lakes Governors signed a Great Lakes Oil Spill Strategy Agreement, while the State of Michigan prepared a report to the Governor on Michigan's Great Lakes emergency preparedness for spills. Canada's federal panel on oil spill policy will issue a report in the near future.

GLU would like to receive clippings or reports of oil and chemical spills in your area, for use in testimony and public presentations. Your cooperation would be greatly appreciated. □

## Workshops Sum Up Citizens' Frustrations

By Kirk J. Peters, Great Lakes United

Prior to the IJC's Biennial Meeting in Hamilton, Great Lakes United, along with Greenpeace, Lake Michigan Federation and other environmental groups, sponsored eight citizens' workshops around the Great Lakes. These workshops brought together citizens to prepare a Great Lakes agenda and voice concerns at the IJC meeting.

The overwhelming consensus was that the goals of the Great Lakes Water Quality Agreement are not being achieved. They believe that the IJC's role should be updated, as it needs stronger leadership in advocating the Agreement.

The majority of citizens believe that "zero discharge" of persistent toxic substances is the only rational approach to effectively clean up and restore the Great Lakes. They see the governments' current approach as being merely dilution and risk management.

Citizens view Remedial Action Plans as having the potential to be progressive tools for cleanup and restoration of the Great Lakes, and are encouraged by the public participation opportunity. However, they are frustrated by the high ratio of industry representatives relative

to citizen participants. Citizens emphasized that their involvement should be increased, and there is a need to appoint citizens to the IJC's boards.

At the Lake Erie workshop, citizens urged that Erie (PA) Harbor must be designated as an Area of Concern. emanating from the Lake Huron workshop's 80 participants was the frustration over governments' lack of progress in cleaning up the lakes and in preventing industry from polluting. Citizens felt their hard-earned money was not being used properly.

In Hamilton, Ont., human health is a major concern of citizens. The majority of people believe their health is threatened by living within the Great Lakes Basin. Many had personal stories documenting the toll that toxic pollution has taken on their lives.

Citizens appear to be thinking light years ahead of their governments, which are still entangled with the "end-of-pipe" pollution mentality. Citizens are ready to embrace the Great Lakes Water Quality Agreement, even if it means lifestyle changes. The overwhelming rallying cry of the people of the Great Lakes is that there is "No More Time To Waste." Now is the time for action. □

## People of Great Lakes Meet the IJC

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reservation." Because his and other reservations are especially hard hit by toxics, he pointed out the need to have a First Nation representative on the IJC and its Water Quality Board.

Each presenter had a different story to tell, whether it be personal tragedies caused by pollution; dramatic examples of industrial contaminations; comments about Remedial Action Plan inadequacies; or lack of enforcement of pollution laws.

But all had a common theme — that the delay and frustration and unfulfilled promises have gone on too long. The aim of citizens at the IJC meeting was to shake up the old pattern and foster a new one in which government steps up its commitment to protecting the environment.

"We can no longer tolerate the discharge of persistent toxic substances!" exclaimed Pat Potter, operator of *Nimbi*, a boat that travels the Great Lakes to provide environmental education.

One presenter spoke about the problems of another "great lake." He was a Soviet ecologist who is studying Lake Baikal. It is the world's deepest lake and is larger in area than Lake Erie.

Two boys from the Boy Scouts Green Team gave a moving speech that brought home how the decisions — and indecision — of today are being inherited by the next generation.

Among the many other speakers were citizen representatives of each Great Lake who presented the Citizens' Agenda for the cleanup of each lake. These agendas were devised by consensus in the eight workshops that GLU, Greenpeace and others held around the Basin in the weeks leading up to the IJC meeting (see accompanying article).

Members of the IJC Commissioners, members of the IJC's Water Quality and Science Advisory Boards also sat through the testimony. However, only one of the three U.S. IJC Commissioners has been appointed by President Bush. Patricia Canada Environment Minister Lucien Bouchard and U.S. EPA Director William Reilly were notably absent.

One of the big surprises of the meeting was that the IJC invited, with short notice, Toronto Greenpeace director Joyce McLean to be the keynote speaker. A stirring entrance scene by the other "citizens" of the Great Lakes (symbolized by people dressed up as wildlife) pointed out what gets contaminated

before the toxins reach humans. McLean, addressing the Commissioners, solemnly asked them to prove their commitment by resigning if the governments do not show enough progress in the next few years. She received a standing ovation after her speech.

The meeting wasn't all testimony. IJC and citizen buffets, lectures, workshops and harbor tours, formal ceremonies and after-hours parties made for a varied time.

But the event didn't just bring citizens to the IJC, it brought citizens together. That culminated in the Saturday morning workshop in which Great Lakes citizens laid out the next steps to take to achieve our goals (see separate article).

As many observed afterward, the drama and detail of the IJC meeting can be a new beginning, but only if citizens follow up and keep up the pressure by working together. □

(Right) Members of Boy Scouts Green Team at the Hamilton, Ont. meeting gave a moving account of their concerns about the impact of the IJC's decisions on future generations.



## IJC Hears Water Level Debate

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other connecting channels, so that the highs and lows in water levels would be eliminated.

Great Lakes United and others presented a different view.

"The question should not be 'how can we better control the Lakes?', but 'how can we (as the title of the report puts it) live with the Lakes?'" said a GLU brief to the Commission.

The brief concluded, "It is our strong belief that the best, most effective, most economical and ecologically protective measures are to ensure that people and human structures are not built within the area of natural lake level fluctuating and hazard zones."

David Newhouse of the National Audubon Society articulated a similar view in the teleconference debate. "Even with the low levels we have today, we should not be crowding the lakes," he said. "We should not be putting ourselves in harm's way like a child on the railway tracks." Keeping development away from the area of lake level fluctuations is a logical approach that protects people and property and saves money.

A recent study by the National Taxpayers Union and the National Wildlife Federation found, for example, that the U.S. federal government could save between \$317 million and \$824 million annually by placing 58,000 acres of sensitive flood-prone land under the Coastal Barrier Resource system. This would prevent federal development subsidies from being paid to develop these lands.

The IJC's lake levels report clearly delineates severe limitations on the ability to control water levels.

"Full regulation designed to reduce the range of historic fluctuations on all the lakes would further exacerbate the extreme flow variation in the connecting rivers and in the St. Lawrence River!" notes the report.

The Phase 1 report sets the stage for Phase 2 of the Commission study. The Commission is currently deciding on the emphasis of study in Phase 2. Environmental groups and shoreline owners

differ significantly in their view of where the emphasis should be. GLU remains concerned that the Phase 2 study will spend considerable resources examining structural controls.

Dave Rebmann, co-chairman of the South Shore Coalition, and other shoreline owners, told the Commission that structural controls must be examined in Phase 2.

Fred Brown, past president of CLU, pointed out, "We are very concerned that the money that might be spent investigating structural controls will be wasted. The issue of human health requires significant financial resources and spending large amounts of money on engineering studies that are not an appropriate method of approaching the lake level question would take needed resources away from the priority issues."

Consistent within all the presentations was the need for public involvement in the study of lake level management. The Commissioners noted that they would take public comment on the report until November 30, 1989. For a copy, contact the IJC. □

### GREAT LAKES UNITED

State University College  
Buffalo, NY 14222  
215 Cassatt Hall,  
1300 Elmwood Avenue  
Buffalo, NY 14222  
(716) 886-0142  
Canadian Address:  
P.O. Box 548 Station A,  
Windsor, Ontario N9A 6M6

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## From the President

The Great Lakes were suddenly the focus of attention in mid-October as a flurry of activity occurred around the IJC meeting. Promises abounded for stronger actions and for more involvement of the public in decision-making. But most of the over 150 citizen activists who attended the IJC meeting that I would like to clear the air as soon as the meeting was completed.

The IJC and the governments of the Great Lakes Basin will be most foolhardy if they do revert to business as usual. The public spoke strongly at the IJC meeting. They made it clear they are taking action to ensure that the goals of the Great Lakes Water Quality Agreement are achieved and called upon the IJC to work with them towards these ends.

The IJC made general commitments to greater public involvement. The IJC must show the sincerity of its commitments to work with the public or the public will withdraw its support from this institution. Halfway measures that

do not fully involve the public will not satisfy us.

To do this the IJC must have regular contact with the public. The Commissioners should put the public on all its advisory committees, including setting up a citizens advisory committee. The Commissioners must meet with the public in their own communities to gain first-hand knowledge of the problems of the Great Lakes and to learn from the public. More opportunities should be provided for the public to work with the Commissioners and their advisors in informal settings so we can mutually search for solutions to the challenging problems that plague the Great Lakes.

The Great Lakes' citizens have called upon the IJC to become advocates for the Great Lakes. If the Commissioners do not take a strong leadership role now, the public will pass harsh judgement upon them two years from now.

The Commission has been given another chance to prove itself. □



## Experts Warn: Tighten Our Taps

By Laura S. Glass

After the Midwest's severe drought of Summer, 1988, attention focused on the need for water conservation. But even without a regional drought, the lack of water conservation is a special threat to the Great Lakes.

Thirty-five million people make their homes in the Great Lakes Basin, and most draw their drinking water from the Lakes. However, with a water area of more than 94,000 square miles, the Great Lakes might seem inexhaustible.

But in the midst of all that plentiful water, experts warn that industrial expansion, population growth and poorly-maintained water supply systems are creating a need for water conservation.

The need for water conservation outside of the Great Lakes is even more serious. Ambitious plans to divert Great Lakes water to the arid Southwest and New York City pop up regularly. Fostering water conservation in those areas will decrease their calls for Great Lakes water. Diversion is a serious threat to the Great Lakes because once another region becomes dependent on our water, the taps can't be turned off even when Lake levels drop. Excessively low lake levels would severely impact fish spawning grounds, wetlands, shipping channels, hydropower output, shoreline access and water quality.

Even without threats from diversion, "There are a number of factors that pose dangers to the Great Lakes Basin's water supply," says Tom Crane, a natural resource management specialist with the Great Lakes Commission. "The predicted increase in the region's population will create a higher demand for water and sewage treatment. In addition, potential climate changes stemming from global warming would require more water to be used for irrigation." Crane adds that lake levels, which have proven unstable in the past, may drop below current levels.

A 1985 report by the International Joint Commission forewarns that water consumption could double in the Great Lakes Basin by the year 2000. The IJC's theory was that population figures would increase substantially, while groundwater supplies would decrease.

While the IJC predicts a boost in long-term consumption, a 1988 study by the U.S. Geological Survey indicates that recent demands were down. The study says six of the eight Great Lakes states actually saw a decline in water use in the first half of the decade. The USGS attributes the drop to temporarily reduced agricultural and industrial needs.

But on the other hand, the N.Y. Department of Environmental Conservation (DEC) says labor-saving and

leisure devices such as dishwashers, garbage disposals and swimming pools are increasing individual water use. The DEC estimates that the average New Yorker uses 77 gallons of water per day. Lawn and garden sprinkling can add another 50 percent to that figure.

"With the Basin's population expected to grow and an increase in industry, it's easy to overuse and waste water," says Pat Brady, an analyst with

toilet dams and special shower heads. "We are in essence paying people to save water," says municipal water conservation coordinator Ben Benninger.

### Leak Detection

Millions of gallons of water are lost daily due to leaks in water mains. Rolling Meadows, IL, instituted an aggressive leak-detection program in 1983. Regular pipe surveys, repairs and main-

leak-detection tablets. The result was a 10-percent drop in daily water use.

The methods listed above are usually voluntary, but governments are also looking at tougher regulations that would raise the price of water as an incentive for conservation.

### Limits on Lawn Sprinkling

Residents of Kitchener, Ont. were not allowed to water their lawns last year. Benninger says that while the ordinance was not very popular, it saved the city five million gallons of water a day. Illinois is requiring municipalities to put strict limits on lawn sprinkling. Pat Brady says these controls will help the state stay in line with federal conservation orders. The U.S. Supreme Court has limited Chicago's diversion from Lake Michigan to 3,200 cubic feet per second.

### Water Pricing

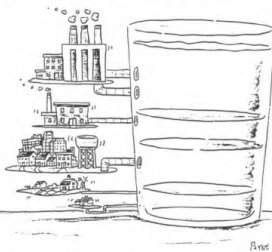
"We don't pay the value of our water, and that's partly why we have so many problems," says Tom Crane of the Great Lakes Commission. "Although I don't think it will be palatable to some to pay more for water, it has been very cheap for years. It shouldn't be that cheap."

Most residents of the U.S. and Canada obtain their water inexpensively through either a flat-rate system, where each unit of water costs the same, or a declining-block system, where consumers receive a discount for heavy use. A 1987 Environment Canada report stated that 71 percent of Canada's rate schedules "provide either no financial incentive or a decreasing incentive to conserve water."

An alternative is an increasing-block system, where the charge per unit climbs with consumption. Only 15 percent of major U.S. cities now use such a system. In Tucson, Arizona, increasing-block rates led residents to reduce water use by seven percent over a five-year period.

Ben Benninger says water conservation must continue in the Great Lakes Basin, whether through water pricing or voluntary measures. But he stresses it doesn't have to be painful.

"Conservation is not a lessening of peoples' standards of living," he says. "You can learn to use water wisely without it being a hardship."



THE CONSERVATION OF WATER BY N.Y. DEC

the Illinois Division of Water Resources. "It's more important than ever that we maintain a constant supply of clean water."

Great Lakes United has been saying the same thing for years. A 1985 resolution warned that pollution, diversion and the depletion of groundwater could have serious consequences. It stated, "Failure to heed these signs of stress, and to place water use on a sustainable basis, threatens the viability of both the resource base itself and the economic systems that depend on it." The GLU resolution supported "water conservation planning, programs and measures" for the entire region. In addition to conservation, GLU Field Coordinator Bruce Kershner notes that, while the Great Lakes Charter (signed by the Great Lakes governors) protects against diversion unless there is unanimous consent from all eight governors, there is still constant pressure to divert.

A number of Great Lakes governments have already adopted procedures to conserve their water resources. Among them:

### Plumbing Retrofitting

In the Kitchener-Waterloo region of Ontario, home builders receive a \$75 rebate for each dwelling in which they install water-efficient fixtures, such as

tenance have cost the city \$432,000 so far, but resulted in an average savings of 266,000 gallons of water a day. That translates to a six-year bonus of approximately \$1.5 million.

### Public Education Campaigns

Public awareness and cooperation are considered by experts to be the keys to successful conservation programs. New York's DEC is stirring interest with an annual Water Week. Packets of information are sent to junior high school science classes across the state to help students understand and practice water-saving measures.

The impact of a successful public education campaign can be seen outside the Great Lakes region. San Jose, Cal. distributed conservation kits that included water savings information and

## GLU Expands, Reorganizes Staff

Great Lakes United announces the appointment of Karen Murphy as a new Field Coordinator. She replaces Tim Eder, now with the National Wildlife Federation. Ms. Murphy will coordinate water quality, hazardous waste and other environmental issues throughout the Great Lakes Basin and will work with citizen groups, government and others involved in Great Lakes issues.

Ms. Murphy recently conducted research on water resource, pesticide and hazardous waste issues for the Syracuse-based Atlantic States Legal Foundation, a national public interest organization involved in environmental litigation. Previously, she served for three and one half years as director of the Washington (state) Toxics Coalition, which succeeded in getting the State of Washington to reduce its use of toxic pesticides on more than two million acres of public forest lands. Prior to that, she was director of the Regional Tenth Association, a six-state organization devoted to promotion of sustainable agriculture, an environmentally-sound approach to food production.

Karen currently sits on the Steering Committee of the New York Coalition Against the Misuse of Pesticides and has served on the Board of the Washington Environmental Council. She received her education from the University of



Karen Murphy

Oregon-Eugene.

Karen will work closely on citizen organizing with Bruce Kershner, who was previously Lake Erie Coordinator/Editor. Bruce will continue to work on Lake Erie projects but will add a variety of Basin-wide activities to his responsibilities in the renamed Field Coordinator/Editor position.

Editorial/Administrative Assistant Kirk Peters will have expanded duties for production of the newsletter.

## "The Sediment Solution" Proceedings Released

by Jim Ahl, GLU Technical Analyst

Great Lakes United announces the release of the conference proceedings for "The Sediment Solution," held in Merrillville, Indiana last December. Co-sponsored by GLU and the Lake Michigan Federation, this conference was the first of its kind to bring together the key players involved in contaminated sediments issues.

"The Sediment Solution" proceedings summarize the binational contaminated sediments agenda, recommendations, goals and needs outlined by participants on the last day of the conference, as well as the presentations by all of the conference speakers. Nearly 200 participants from the Great Lakes Basin and North American marine coastal areas attended.

Recognizing sediments are a major source of contaminants to the ecosystem—marine and fresh water—participants identified the following needs:

- source reduction with a goal of zero discharge
- coordination of elected officials and government agencies on all issues;
- that governmental agencies need to adopt an ecosystem approach;
- programmatic needs and funding mechanisms;
- solid standards and criteria that account for bioaccumulation and bioavailability;
- application of best available new treatment technologies;
- involvement of citizens in all phases of sediment remediation activities; and,
- Copies are limited. To receive one, contact Great Lakes United.



# Michigan DNR Fish Stocking: An Exercise in Contradiction

By Gayle Coyer, President, Upper Peninsula Environmental Coalition

The Michigan Department of Natural Resources (MDNR) continues to stock walleye in Deer Lake and Torch Lake, two International Joint Commission Areas of Concern in Michigan's Upper Peninsula, despite the fact that both lakes have unacceptably high levels of toxic contamination. At Deer Lake, where the major pollution problem is mercury contamination, the Remedial Action Plan called for the lake to be drained and left in that state

for two years, along with killing off 90 percent of the fish population in the lake system. The assumption behind this action was that some portion of the mercury would vaporize and other amounts in the lake bottom sediments would be covered due to wind erosion.

However, the result of the "remedial" action was that mercury levels in fish are now higher than before the action was carried out. Of 27 fish tested in 1987, 26 exceed the Michigan acceptable level of 0.5 parts per million (ppm), with the highest level being 5.2 ppm and the

average being 2.8 ppm. Apparently, the higher mercury levels were caused by agitation due to the raising and lowering of the lake levels. This transformed elemental mercury — which is unavailable for uptake by fish — into methyl mercury, which is the form toxic to fish, wildlife and humans.

MDNR justifies its walleye stocking program by stating that the Public Health Advisory in the Fishing Guide provides ample warning to fishermen. They apparently ignore the fact that fishermen frequently do not always read signs and really endanger themselves and their families by eating the fish. It is also absurd that public taxes be used to pay for creation of a population of toxic fish. They also ignore the significant number of waterfowl and animals which use the lake as a food source and are not able to read the warning signs. These fish-eating wildlife will just spread the mercury into the food chain and into Lake Superior, where there will be no warning signs for humans. Bernie Yakuska, MDNR Regional Fisheries Biologist, recently stated that it may be ten years before the fish are safe to eat.

At Torch Lake, 100 percent of the saugers had tumors, and some age classes of the species were completely missing from the lake. The Area of Concern (AOC) remedial investigation showed high concentrations of heavy metals in

the sediment, as well as mercury and other by-products of 100 years of mining and milling waste from the copper mining industry. However, the remedial investigation failed to discover any definitive cause for the tumors.

The Torch Lake area is also a federal Superfund site. The area designated for the Superfund site is geographically one of the largest sites in the country. It includes all waterways and shores impacted by the copper mining industry. After conducting its own remedial investigation and feasibility study of alternatives, the EPA will choose a clean-up plan for the area.

It is into this setting that the MDNR sees fit to stock walleye in Torch Lake and the associated waterways. The MDNR has stated this stocking shouldn't be of concern because the fish will not spend their entire life in the polluted water bodies but will spend a part of their life in Keweenaw Bay in Lake Superior.

The Upper Peninsula Environmental Coalition, a member of Great Lakes United, is working to have the stocking stopped, because they find that the stocking is environmentally unsound and a misuse of public funds. Their position is that no fish should be stocked in these lakes until the fish already living in the lakes test below state advisory levels.



"THAT'S ODD... IT'S ALREADY COOKED...!"

## Proposed Diversion Draws Fire

By Phil Neuhaus, United Auto Workers, Racine-Nearshore, WI CAP Council

A proposed diversion of Lake Michigan water has drawn fire from Great Lakes United. The Village of Pleasant Prairie, WI proposes to pump 3.2 million gallons per day from Lake Michigan. After its use by residents and industry, the water would be discharged into a river that is part of the Mississippi River Basin, instead of being returned to Lake Michigan.

Pleasant Prairie is located between Milwaukee and Chicago, just north of the Wisconsin-Illinois line near Lake Michigan's west shore. The Great Lakes watershed boundary is very narrow there, extending only a couple of miles from the lakeshore.

Pleasant Prairie justified its proposal as an emergency move because its municipal wells are contaminated with radium at 10.2 picocuries per liter. The village is diverting the water with State approval to 4,000 users in three subdivisions, a mobile home park and one factory.

GLU is not opposed to the emergency hookup. We are opposed to a permanent diversion; our concern is that the water would not be returned back to the lake. "It would set a dangerous precedent that could lead to many other unacceptable diversions in the future," states GLU President John Jackson. GLU would not be opposed to a temporary diversion if guarantees are given by Wisconsin that it would in-

deed be temporary.

Diversion of Great Lakes water to outside of its Basin has grave implications for the Lakes. For example, the arid Southwest and New York City previously applied pressure to permanently divert Great Lakes water for their use. Once another region becomes dependent on Great Lakes water, it cannot be turned off, even when Great Lakes levels plummet due to drought. Lakeshore property owners also want lake-level manipulation. Such large scale manipulation would turn the Lakes into just artificial holding tanks, and severely impact wetlands, fish spawning areas and water quality, as well as shoreline access, shipping channels and hydropower output.

While finding a substitute for contaminated drinking water is justified, GLU is concerned that the diversion is not just for existing residents but also for "projected future development within the Village." This makes it much more than just an emergency measure. "It raises the spectre of endless growth and demands for even greater diversions in the future," GLU President John Jackson points out in the letter.

The Village rejected the idea of returning the water to the Lake because its new treatment plant now discharges into the other watershed and would need major funding to pay for a return pipeline back to the lake.

Since the proposed diversion falls below the Great Lakes Charter threshold of five million gallons per day, it does not require approval of the eight Great Lakes Governors. However, Wisconsin requested the other governors' approval as a courtesy. All but Michigan's and New York's governors have given that approval. Ontario's premier formally opposed it.

## Does Superior Need Another Paper Mill?

Eleven environmental groups included in Great Lakes United have formed a steering committee to review the environmental impacts of a major new pulp and paper mill proposed by the James River Corporation for the Lake Superior shore near Baraga, Michigan.

"We should seize the initiative by creating an interstate 'environmentalists' steering committee for this project," proposed Mark Van Putten of the National Wildlife Federation's Great Lakes Natural Resource Center.

According to the groups, "The construction and operation of a major pulp or paper mill anywhere on the shores of Lake Superior may have serious consequences for Lake Superior water quality and the aquatic ecosystem, for air quality, for forest management and for the tourist-based economy of the region. There are many hard questions about these impacts that must be answered before a major new pulp or paper mill is built at Baraga or anywhere on the shores of Lake Superior. Given the international and interstate significance of major new pollution sources near Lake Superior, we have organized this steering committee to make sure that all the

questions about the environmental impacts of this facility are answered based on a careful, objective analysis."

The steering committee released a letter to the president of the James River Corporation, in which the groups:

1) Requested that James River Corporation work with the committee to identify the environmental issues associated with the proposed mill and that James River agree to hire independent consultants to study those issues;

2) Requested that James River officials meet with the steering committee and state officials to discuss the environmental permitting process that will be used to evaluate the proposal.

Besides Great Lakes United, the environmental groups participating in the steering committee include American Lung Association, Citizens for a Better Environment, Public Interest Research Group of Michigan, Michigan United Conservation Clubs, Minnesota Conservation Federation, National Wildlife Federation, Sierra Club, Sierra Club Mackinac Chapter, Upper Peninsula Environmental Decade, Wisconsin's Environmental Decade and Wisconsin Wildlife Federation.

## Great Lakes Wetlands Consortium Formed

"Protecting the remaining wetlands of the Great Lakes is vital to maintaining a healthy Great Lakes ecosystem."

With this premise to guide them, a collection of Great Lakes environmental and conservation groups have been meeting since August to develop a Great Lakes wetlands policy. Brought together by Michigan's Tip of the Mitt Watershed Council, over 20 groups, including Great Lakes United, Michigan United Conservation Clubs, the Federation of Ontario Naturalists, Ducks Unlimited Canada and Isaac Walton League, have been comparing policies and strategies to address wetland loss.

"Wetland habitats are critical to fish and wildlife populations, and it is abundantly evident that a united campaign to protect this dwindling resource is necessary," says group coordinator Steven Brown of the Watershed Council. The group plans to prepare a wetlands protection policy and strategy program for conservation groups by early summer 1990. Ways to embody wetlands protection into international agreements such as the Great Lakes Water Quality Agreement, model wetland ordinances and wetland education programs are among topics addressed by the group.

Anyone interested in this activity should contact Phil Weller at Great Lakes United.

# GLU Granted Party Status in Massena

By Jim Ahi, GLU Technical Analyst

Great Lakes United has been granted party status concerning the discharge permits for both Reynolds Metals Company and ALCOA, located in Massena, NY. The New York State Department of Environmental Conservation (DEC) has proposed modifications to these facilities' existing permits, concerning PCB discharges into the Grasse and St. Lawrence Rivers. The proposed new permits have set allowable discharge limits for PCBs at a detection limit of 65 parts per trillion (ppt) by individual Aroclors only, not total PCBs.

This is the first time GLU has entered the permitting process under the state's program, the State Pollutant Discharge Elimination System (SPDES). SPDES is New York's program under the National Pollutant Discharge Elimination System (NPDES).

GLU's action is based on the Clean Water Act and the Great Lakes Water Quality Agreement, whose goal is to eliminate pollutants discharged into our

waters. The Act requires that all point source dischargers have a permit (i.e. SPDES) with effluent limits for toxic and conventional pollutants. The Agreement, which calls for "the virtual elimination of any or all persistent toxic substances," embodies the concept of zero discharge.

Charles Tebbutt, legal counsel for Atlantic States Legal Foundation, sums up this action by saying, "These two discharge permits provide the first opportunities to test the concept of zero discharge. It is up to environmental groups such as GLU to make this a reality."

GLU's request for party status was made on behalf of member organizations and individual members. We also demonstrated our direct interest through our *Citizens' Guide to Reynolds Metals Company*, issued last year.

GLU has now joined with two other intervenors — the St. Regis Mohawk Tribe and Atlantic States Legal Foundation (ASLF). The Mohawks and ASLF have been actively involved in a variety of environmental issues — for both facilities — for several years.

The issues raised include:

- DEC has the authority to prohibit discharge of PCBs into the Grasse and St. Lawrence Rivers;
- Will a PCB effluent discharge level of 65 ppt preclude the bioaccumulation of PCBs in the ecosystem of both rivers, or should there be mass loading limitations?
- Is the analytical detectability for PCBs at the 65 ppt detection level the lowest analytical detection limit scientifically achievable, or is there a lower limit?
- Permits must include measurement and limitations of both total PCBs and individual Aroclor measurements and limitations to preclude exceedance of 65 ppt; and,
- Require biological monitoring for each permit to demonstrate if the 65 ppt limit, especially for PCB congeners shown to exhibit dioxin-like activities, is protective of the ecosystem and human health. ALCOA and Reynolds Metals are ob-

jecting to the 65 ppt detection limit and the issues raised by the intervenors.

DEC is currently proposing to modify all SPDES permits that identify PCB discharges. Reynolds and ALCOA are the first facilities to contest the DEC's proposed new discharge limits of 65 ppt. It is interesting that GM's Foundry facility, located just east of Reynolds Metals, has accepted the 65 ppt detection limit for their SPDES permit.

Briefly, the ALCOA facility's existing SPDES permit allows PCB discharges into the Grasse River at a concentration rate of 1 part per-billion (ppb) daily average and a 2 ppb daily maximum level. The current Reynolds Metals SPDES permit does not include discharge levels of PCBs. However, DEC investigations clearly demonstrated that PCBs are discharged into the St. Lawrence River from point sources and runoff from contaminated soils surrounding Reynolds. ALCOA's discharges to the Grasse River exceed the proposed 65 ppt level. GLU is now waiting for a determination of these issues.

# Save the River! It's Not A Sewer!

By Laurie Marr, Save the River

It started out as a simple enough idea — let's get people to stop discharging their sewage into the St. Lawrence River. It developed into a campaign — "Save The River! It's Not A Sewer!" It ended up as an all-out effort to literally assist riverfront property owners in correcting faulty sewage disposal systems that have been polluting the river for years.

It started out as a small, grassroots effort by the Clayton, N.Y.-based environmental group, Save the River, to help clean up sewage in the Thousand Islands area of the St. Lawrence River. It has snowballed into a successful major project now being recognized by many other environmental groups and even state agencies. Most importantly, it has been very well-received by the public.

The Kingsfisher Alternative Sewage Project was undertaken by Save the River in 1988 when the non-profit group was awarded a \$200,000 grant by the New York State Department of State's Coastal Management Program. The program went into full swing this past summer.

The purpose of the project is to eliminate the many sewage discharge pipes that empty directly into the river, causing a health hazard, especially in some of the smaller, shallow bays where swimming areas are adjacent to sewage outflow pipes. Many of the residences in this area are summer homes or cottages located on islands which have little or no soil, steep slopes and are often not even large enough to support a proper beach field. It was these private homeowners that we targeted with our campaign.

Using the grant funds, Save the River developed a four-color brochure called "Save the River — It's Not A Sewer!" to inform the public about our project. It was directly mailed to over 3,000 waterfront property owners in our area.

We used the brochure to promote our "sewage hotline," which people could call for information about laws pertaining to sewage disposal or to receive information on alternative systems, such as aerobic tanks, low-flush, composting and incinerating toilets. Most importantly, we offered free, on-site sewage disposal system surveys to riverfront property owners. We stressed that these surveys were strictly voluntary, designed to assist the property owner, not to bring enforcement action against someone who was found to be not in compliance with the law. In fact, that is the theme of our entire project — education first, not enforcement.

The original concept of the program was to pay \$100 per completed survey. However, we were fortunate enough to develop a nucleus of enthusiastic, dedicated volunteers who donated their time for much of this summer.

We developed a four-page survey form that was used in each instance. The survey includes an interview with the homeowners about their current system, usage, etc., the flushing of tracer dye down the toilet and sinks, and an inspection of the septic tank. We ask people to dig up the access hole to their septic tank, but if they don't, we do it ourselves. The survey teams walk the river and surrounding land for signs of the tracer dye appearance, an obvious signal the system is not working properly.

The survey team checks the septic tank to make sure it isn't rusted out, leaking or clogged. The team also checks to make sure the waste is flowing in and out of the tank properly. The survey team then details the system's deficiencies with the homeowner. The Save the River volunteers make on-the-spot recommendations on possible and practical corrective actions the homeowner can take. This is followed up by written recommendations on the survey form and a copy of a qualified contractor list, which we developed after extensive interviews with local contractors on what services they perform.

The homeowner "passes" the survey if Save the River determines: 1) no sewage or greywater is entering the river; 2) sewage is not seeping to the ground's surface; 3) sewage is not backing up into the home; and 4) there are no apparent health hazards. If all these conditions are met, the homeowner receives the Save the River Clean Water Award, a 12-inch hand-crafted Great Blue Heron, which we devised as an incentive to sign up for a survey. (And it was good incentive! Some who failed the survey took immediate corrective action so they could get their heron!)

To date, we have done 120 surveys, and we have a waiting list of 45, with calls coming in almost every day. As it turned out, people were very receptive to Save the River volunteers coming on their property and often assisted them in figuring out what was wrong with the sewage disposal system.

Because of the immense popularity of the program, especially the sewage surveys, we are seeking funding to continue the program next summer. We would like to expand our target area to include more of the Thousand Islands, and we would like to institute a

monitoring program to analyze how many people actually do upgrade their systems due to our assistance.



Detritated sewage disposal systems like this are common along the St. Lawrence River.

## Gov't Responds to GLU on Lake Ont. Plan

We appreciated the coverage of the Lake Ontario Toxics Management Plan in your Spring 1989 issue, but it raised some points that require clarification.

The article refers to the Plan as the first lakewide "management plan that is required by Annex 2 of the Great Lakes Water Quality Agreement." In fact, we initiated preparation of the Plan before the concept of the lakewide management plan was introduced in the 1987 amending Protocol to the Great Lakes Agreement. While the Plan is generally consistent with the requirements for such lakewide plans, the matter is subject to evaluation by the Parties (Canada and U.S.) to the Agreement.

The authors refer to the plan's "failure...to adequately address the impact of toxic contaminants upon human health." The authors question the adequacy of the coverage of drinking water and note an apparent contradiction between two statements in the Plan, i.e. "no toxics, however, are found in drinking water at levels above standards designed to protect human health," and "hexachlorobenzene, DDT and its metabolites, and dieldrin are also found in the ambient water column at levels above standards designed to protect human health." As noted in the Plan's Appendix II, these contaminants exceeded U.S. EPA recommendations for human health criteria which are based on both fish flesh and human consumption. The criteria are derived from a risk

assessment and exposure analysis, with fish consumption being the primary exposure route. Back calculations using fish tissue data and bioaccumulation factors are also used to derive a water quality criterion. These criteria were used to assess water quality data from the open waters of Lake Ontario, not water passing through municipal treatment plants.

The authors also claim that the Plan failed to clearly identify whether "all of the Parties are truly going to develop, coordinate, accept and implement similar criteria, standards and programs." During the problem definition phase, the most stringent of available standards and criteria were considered regardless of differences amongst the jurisdictions.

We will propose ways to resolve these differences. The Plan establishes a binational framework to assist agencies in setting priorities and coordinating their efforts to achieve common goals and objectives.

Through the Plan, our agencies will continue a public dialog to ensure the toxics problem and its solutions are accurately presented. The support of GLU in this dialog is appreciated.

Signed,

Lake Ontario Secretariat  
\*Environment Canada, U.S. Environmental Protection Agency, Ontario Ministry of the Environment, NY State Dept. of Environmental Conservation  
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# A 25-Year Plan for NY's Great Lakes?

By Jack Manno, Great Lakes Research Consortium

In 1986, Governor Mario Cuomo directed the New York Department of Environmental Conservation (DEC) to produce a Great Lakes management agenda laying out the major problems facing the Lakes and recommending action to address them. The Governor requested that the a comprehensive 25-Year Plan for New York's Great Lakes region be developed.

Great Lakes United applauds the idea of developing a 25-Year Plan for New York's Great Lakes. It provides a real opportunity to integrate New York's programs and aim toward a future that is both ecologically and economically sustainable.

The draft Agenda represents a good first step. In revising the draft, what is needed is to more efficiently articulate a

clear vision and sense of direction for the next 25 years for New York Great Lakes policies and programs. In particular, it does not specify priorities and activities to achieve its goals.

The draft agenda also needs to incorporate a variety of vital issues that are fundamental to any Great Lakes agenda. The most serious omission: it makes only passing reference to the Great Lakes Water Quality Agreement. Other areas that are poorly addressed:

- It does not commit to the goal of "virtual elimination of persistent toxic substances" or how it will be achieved;
- It does not adopt the "ecosystem approach" as a unifying, conceptual framework for long-term planning and problem-solving;
- It does not show a commitment to preventing the diversion of Great

Lakes water out of the Basin, nor does it mention the IJC's water level reference study;

- It does not support federal initiatives to devise uniform water quality standards;
- It does not mention the need to protect the Great Lakes by inclusion in the federal Coastal Barriers Resources System, or ways to prevent state subsidizing of flood-zone development;
- Other serious Great Lakes threats, e.g. contaminated sediments, air toxics, non-point pollution and loss of habitat, wetlands and natural areas, are poorly addressed.

Furthermore, it does not refer to the political ways it will achieve its goals, such as securing federal funding or gaining public support for its programs.

To produce a truly visionary 25-Year Plan, it should map a path to a vibrant, self-sustaining, diverse pollution-free Great Lakes ecosystem. It must address all serious Basin issues and must state its commitment to the goals established in the Water Quality Agreement.

The agenda also needs:

- Programs of management, regulation and enforcement that protect the ecosystem from harm. We need aggressive action to control toxic chemicals, and work toward the goal of zero discharge of persistent toxics. The scope should include toxics deriving from sediments, non-point and air, as well as end-of-pipe. Other priorities should be protection of natural areas and fish and wildlife habitat, including use of land acquisition, and also protection from diversion.

- Programs of rehabilitation to restore health to the ecosystem, including implementation of Remedial Action Plans. Restoration of species lost from the ecosystem and restoration of a self-sustaining fishery are vital.

- A 25-Year development and management strategy that is ecologically and economically sustainable and that obtains public support for adequate funding.

There is much visionary and scientific soundness in thinking going on around the Great Lakes. It's extremely exciting to consider the possibilities for the year 2014. The Great Lakes community may be leading the way for the rest of the world with its successes, including the binational agreement for the Great Lakes.

As the state with the second longest Great Lakes coast, and as the recipient of much of the upstream and upwind Great Lakes pollutant load, New York has the opportunity to take the lead in implementing a far-sighted 25-Year Great Lakes Agenda. □

## Strawberry Island Campaign Bears Fruit

By Kirk J. Peters, Great Lakes United

Once an island some 200 acres in size, Strawberry Island now lies in the midst of the mighty Niagara River, a mere 20-acre remnant of the agents of erosion and humankind.

But after local groups and Great Lakes United campaigned to gain protection for the island, NY Governor Mario Cuomo in September finally placed the island under the protection

of the State Office of Parks, Recreation & Historic Preservation.

For thousands of boaters, anglers, campers, hunters and naturalists, this news comes with a great sigh of relief.

"We're elated that the Governor has finally taken positive action," responded Ron Gardner, UAW Local 774 Conservation Committee Chairman and Strawberry Island Preservation Group member.

Strawberry Island, located just north of Buffalo, has been threatened with disappearing due to rapid erosion, started by past gravel mining operations that removed sizeable portions of the land.

Great Lakes United resolved in 1986 to push for state and federal assistance in protecting the island.

Governor Cuomo's move should provide the funding necessary for preservation and maintenance of this precious landmark, which is a major fish spawning area, wildlife habitat and popular boating destination.

Other positive news for the Buffalo-area waterfront includes a recent plan to turn 90 acres of prime lakefront land along Lake Erie into a state park. Public access advocacy groups unveiled the plan in the midst of a recent rush of development along the Buffalo waterfront. Great Lakes United will have its watchful eyes on these issues as they develop. □

## Sick Lakes, Sick People

By Barry Boyer, Ph.D., State University of NY at Buffalo

We've poisoned our home, and it's making us sick," said Dr. Jack Valentine, Senior Scientist at the Canada Centre for Inland Waters.

His statement summarized the results of a four-day interdisciplinary conference on health effects of toxic chemical pollution in the Great Lakes Basin, held in Buffalo in early October. Following the conference's direction to avoid technical jargon when talking to non-specialists, Valentine told reporters that the basic point of the scientific research on human health effects was clear and simple enough to explain to young children.

Poisons released in the environment will come "full circle" back to our own bodies. If they are persistent toxics, like PCBs, that accumulate in the food chain and are passed from mother to child, they may be with us for generations. As Dr. Wayland Swain pointed out, a mother giving birth to a daughter today in the Great Lakes Basin could bequeath a toxic legacy to five generations of daughters yet unborn — even if those daughters could be totally isolated from the PCBs now circulating in the environment. There is a clear, present threat to human health from toxic chemicals in the Great Lakes. What to do about it is a more difficult question, however.

To begin seeking an answer, more than 60 research scientists, government officials and representatives of industry and public interest organizations divided into task groups exploring possible solutions in three broad areas: public policy, research and education. They produced dozens of recommendations, ranging from short-term changes in existing programs to long-range alterations of lifestyles and economic activity. Some of the more immediate recommendations included:

- A ten-year limit for reaching the goal of zero discharge for persistent toxic chemicals;
- Strict enforcement of existing laws and regulations governing toxic discharges;

- Immediate development of sediment criteria that are based on the protection of both human health and the ecosystem;

- Cleanup of all inactive waste sites underway by the year 2000;

- Fish advisories based only on health considerations rather than balancing health against economics, and issued by agencies that are not involved in promoting the industry;

- Revamping educational programs from kindergarten to professional schools to embrace ecological principles and interdisciplinary approaches.

The conference, organized by Dr. Warren Flint of the Great Lakes Program at the University at Buffalo, was a unique experience for most of the participants. It was a technical colloquium that began with the reading of a lament from an Ojibway tribal elder, and ended with a prayer of thanksgiving by a Mohawk biologist. Instead of the leisurely pace of most academic seminars, the delegates labored for 14 hours a day or more, hammering out recommendations and reports. Moreover, each of the task groups was designed to mix participants with different technical backgrounds and national and institutional affiliations. Epidemiologists quibbled with wildlife biologists, academic philosophers disputed industrial risk assessors, and Americans and Canadians demonstrated their misunderstandings of each others' systems of government.

In the end, there was a surprising degree of consensus: we must get serious about implementing the Water Quality Agreement's goals of zero discharge and virtual elimination of persistent toxics from the ecosystem.

Planning is underway for a series of follow-up activities designed to involve members of the public in reviewing the scientific evidence on human health threats and developing a policy agenda for healthy Great Lakes. For information, contact Dr. Warren Flint, Great Lakes Program, 207 Jarvis Hall, SUNY at Buffalo, Buffalo, NY 14260. □

## Niagara Falls Has Toxic Foam

By Bruce Kershner, GLI Field Coordinator

The foam below Niagara Falls is laced with heavy metals, and possibly toxic organics, a Canadian research team has discovered. Levels of cadmium, zinc and copper were present at levels 200 to 1300 times higher in the foam than in the water above the falls. Lipid concentrations, which could include PCBs and dioxins, were in amounts 25 times greater than above the falls.

The Niagara River was designated as an Area of Concern by the IJC because of its contamination from nearby chemical industry and leaking toxic wastes, as well as pollution upstream from the other Great Lakes. The Dalhousie University team noted that water birds may be chronically exposed to the surface toxic chemicals as they float on the water.

In 1987, a researcher predicted that Niagara Falls mist would be contaminated with PCBs, chloroform and other chemicals, thus posing a hazard to residents and tourists who visit the falls. But actual sampling of the mist failed to show elevated levels.

The high levels in the foam may explain why — instead of entering the air as mist — the toxics enter the foam. They are ap-

parently removed from the water by air bubbling through it during the thunderous plunge, and the contaminants are trapped in the bubbles. They later sink back into the river as the foam moves downstream.

This indicates that the Great Falls do not aerosol their toxics to float across the landscape. Instead, Lake Ontario still gets the full load of contaminants sent downstream by the other Great Lakes.

The foam below Niagara Falls is laced with toxic chemicals.



## Clean Air Amendment Goes Up in Smoke

By Brett Hulsey, Sierra Club

Environmentalists expressed disappointment when the U.S. Congressional House Health & Environment Committee voted on October 4th to reject a proposal to strengthen protection for the Great Lakes from toxic air pollution. The vote came during the subcommittee's consideration of pending Clean Air Act amendments. Rep. Gerry Sikorski (D-MN) offered an amendment to ensure that the most critical toxic pollutants in the Great Lakes be controlled by the revised Clean Air Act.

Sikorski told the subcommittee that a high percentage of these very toxic contaminants come directly from the air and build up in the food chain. "The subcommittee had the opportunity to protect the citizens of the Great Lakes from poisons building up in our fish supply, but chose to leave it to chance," said Anne Woiwode, Sierra Club's Michigan Chapter Director.

The environmental administrators of all eight Great Lakes states had asked Rep. Sikorski to offer the amendment, which would have specifically required the Environmental Protection Agency Administrator to ensure that the seven most critical contaminants in the Lakes (as identified by the International Joint Commission) were listed for regulation. Under the current language being considered by the subcommittee, the EPA Administrator could decide to control these toxics, but is not required to do so.

"The Sikorski amendment would have ensured that these deadly poisons are considered for control in a timely manner," said Woiwode. "We are disappointed in Committee Chairman John Dingell's (D-MI) vote against this health-protective amendment. After his support for effective national motor vehicle standards earlier this week, we

had hoped that he would also play a key role in protecting the Lakes from toxics," she said.

Over 1,000 chemicals have been identified in the Great Lakes ecosystem, and many of these travel through the air. In the 19 years since the Clean Air Act gave EPA the authority to regulate toxic air pollutants, only seven pollutants have been controlled. Voting for the Great Lakes amendment in subcommittee were: Sikorski, Richardson (D-NM), Synar (D-OK), Waxman (D-CA) and Wyden (D-OR). Against were: Bilirakis (R-FL), Dingell, Hall (D-TX), Lent (R-NY), Madigan (R-IL), Rowland (D-GA) and Whittaker (R-KS).

Congressman Richardson led a charge to strengthen the chemical accidents section, but Congressman Dingell spoke at length against the amendment, as did Lent (R-NY) and others. The amendment would have toxic handlers prepare hazard assessments and emergency plans. The amendment failed on a 12-9 vote with Congressman Bruce (D-IL) absent.

The prospects for improving the Air Toxics section seem bleak in the Energy & Commerce Committee, so the focus now becomes the House itself. "The most important thing Great Lakes activists can do," according to Jane Elder, Sierra Club's Midwest Representative, "is to urge their representatives to co-sponsor the Leland-Molinari Air Toxics Bill, H.R. 2585. This sends a strong message that air toxics controls are critical to the Great Lakes."

Current bill co-sponsors in the Great Lakes Basin are: Reps. Vento, Sabo, Sikorski, Oberstar (D-MN), Yates, Hayes, Collins (D-IL), Kostmeyer (D-PA), Molinari (R-NY), Scheuer, Nowak (D-NY), and Obey (D-WI).

### PROTECTION FUND UPDATE

Michigan just appropriated \$25 million and Illinois \$5 million for the Great Lakes Protection Fund for this year. So far, 6 of 8 states have appropriated \$44.4 million of the \$100 million committed. Indiana's governor still needs to sign the Protection Fund, and New York will try to legislate it again next year. The Fund's board invites the public to recommend priorities and grant guidelines by January. Write N. McLawhorn, Council of Great Lake Governors, 310 S. Michigan Av., 10th floor, Chicago, IL 60604.

### LAKE LEVEL UPDATE

Water levels of three Great Lakes rose due to high precipitation. October 20, 1989 levels recorded by the Department of the Army were:

|                 | Change from record Oct. high | Since last Oct. 20, 1988 |
|-----------------|------------------------------|--------------------------|
| Lake Superior   | -22 in. (1985)               | -1 in.                   |
| Lake Mich.-Hur. | -46 (1986)                   | -3                       |
| Lake St. Clair  | -35 (1986)                   | +2                       |
| Lake Erie       | -31 (1986)                   | +3                       |
| Lake Ontario    | -22 (1945)                   | +5                       |

## Join Us!

**United! Together we can protect and promote our common treasure -- the Great Lakes Basin.**

Name: \_\_\_\_\_  
 Organization: \_\_\_\_\_  
 Street Address: \_\_\_\_\_  
 City: \_\_\_\_\_ State/Province: \_\_\_\_\_  
 Phone: ( ) \_\_\_\_\_ Zip/Postal Code: \_\_\_\_\_

- ☐ Individual Membership (\$20.00)  
☐ Organizational Membership (\$100.00)

Information Request:

- ☐ By-Laws ☐ Member Organizations  
☐ Resolutions ☐ Other (Please specify)

Would you be interested in volunteering for Great Lakes United?

☐ Yes ☐ No

Time Available? \_\_\_\_\_

Please return this form with checks payable to:

Great Lakes United  
 Cassety Hall  
 1300 Elmwood Avenue  
 Buffalo, NY 14222

For more information, write to the above address or call (716) 886-0142

## In the Public Interest

By Paul Muldoon and Richard Lippes

**Q** I heard that a company located near my house is going to have its water discharge permit reviewed. I do not think the present permit is very stringent, especially in light of the already degraded condition of the nearby river. What can I do?

**A** Pollution permits provide a potentially useful mechanism to protect the environment. For environmentally-concerned groups and individuals, therefore, it is important to take an interest in their issuance and review.

In Canada, it is the provincial government that has the primary responsibility over the issuance of pollution permits. In Ontario, unfortunately, citizens have very limited rights with respect to having input into the issuance of new permits or challenging the adequacy of existing water discharge permits (more technically called "certificates of approval"). First, by and large, there is no requirement in law on part of the government or the industry to give notice to anyone that a permit is going to be issued or reviewed or to hold hearings if someone wants to challenge the proposed permit. There are some very limited exceptions found in the Ontario Water Resources Act.

Essentially, permits are negotiated between industry and Ministry of the Environment. Where the permit is a controversial one, the Ministry may open its process by informing the community of the permit and holding a public meeting. Such notices and public involvement mechanisms remain discretionary in the sense the Ministry is under no obligation to respond to the input from the public. Where comments are received, there is no obligation by the Ministry to consider them.

In recent years, environmentalists have asked for a more participatory permitting system, such as that proposed under an "environmental bill of rights." Until such reforms are realized, citizens will have to seek out the permitting information and then urge the Ministry to revise the permit in an appropriate way through available

channels.

The public has no right to appeal the issuance of a permit.

In the U.S., the situation is quite different. Citizens have various rights to notice, comment, and in some situations, the opportunity to participate in a public hearing to challenge permit issuances or renewals. The Clean Water Act establishes the National Pollution Discharge Elimination System (NPDES) which is mostly delegated to state agencies to implement through a State Pollution Discharge Elimination System (SPDES). Although the precise details differ from state to state, there are most often a number of important opportunities for public input in the issuance and renewal of permits.

In New York, for example, when a new permit is requested or a renewal is applied for, the Department of Environmental Conservation issues a public notice in the Environmental Notice Bulletin, to those who have expressed interest in writing to receive such notices and often in local newspapers. The DEC will then issue a draft permit. The draft permit is available for public review and citizens have 30 days to comment on the permit. As a rule, all public comments must be taken into consideration before a final permit can be issued. Although the matter is discretionary, a public hearing may be requested. A hearing may be granted where there are important issues raised or where the permit issuance or renewal has generated considerable public interest. At the hearing, citizens may argue for revisions to the draft permit, such as including terms and conditions. There is also the potential for citizens to challenge a final permit in certain situations in State Supreme Court. Once a permit has been issued, it generally has to be renewed every five years.

It is important, therefore, for environmentally-concerned persons to understand the permit processes in their state or province. Knowledge of other state and provincial processes is also necessary, since there are few limitations for residents of one jurisdiction to use the permit processes in another jurisdiction to protect against transboundary pollution.

## Report Criticizes U.S. Great Lakes Efforts

Senator John Glenn (D-OH) released a U. S. General Accounting Office report criticizing U. S. responsiveness to Great Lakes programs that the IJC oversees. The report cites the U.S.' failure to respond to more than a third of the IJC's recommendations made to the two federal governments. It notes that U.S. officials often do not notify the IJC in writing as to what actions, if any, they are taking in response to IJC recommendations and that this hampers the IJC's effectiveness.

The report states "that the IJC is only as effective as the U.S. and Canadian governments are willing to allow," but funding and staffing levels are the same now as in 1982. It reports that one of the reasons why the U.S. government has not implemented IJC recommendations is that it decided that certain IJC recommendations should not be carried out. Budgetary constraints, and the decision to fund their own agency projects instead of the IJC's, are among the other reasons.

"The IJC Co-chairmen have generally opposed increasing public participation or representation because they believe that the level of public participation is sufficient already," the report says. Public access to IJC activities is minor but has increased somewhat in recent years. It refers to GLU's 1986 water

quality hearings as "an unprecedented series of public meetings around the Lakes" and points out that many of the changes that GLU's public advisors recommended were adopted during the negotiation of the 1987 protocols to the Agreement.

It adds that some IJC officials believe public representation on the IJC Water Quality Board would improve effectiveness of U.S. responsiveness. Members of the current Board, the report emphasizes, face an inherent conflict of interest because they also represent the agency that employs them. Public members on the Board would prevent "Board members from recommending...only those actions compatible with their respective agencies' agendas."

The report recommends that the U.S. should review its participation in the IJC, something not done in 17 years. It says the U.S. should assess whether U.S. Commissioners should have technical expertise and how a greater public role could help achieve the IJC's goals. It also says the U.S. should devise a formal method to provide prompt U.S. responses to IJC recommendations.

For a copy of *Need to Reassess U.S. Participation in the IJC* (GAO/NSIAD-89-164), write the U.S. General Accounting Office, Box 6015, Gaithersburg, MD, 20877, or call (202) 275-6241. ☐ page 7

# THE GREAT LAKES UNITED

## A Sustainable Future for the Great Lakes

Communities of people throughout the world are rapidly arriving at the same conclusion: we must manage growth in a way that is both economically and ecologically sustainable.

In its final report, *Our Common Future*, the World Commission on Environment & Development asked us to consider future generations in our decision making. To carry these ideas further, the Canadian government has established an independent Round Table on the Environment and Economy to act as a catalyst and consensus-builder for environmentally-sustainable economic development. I would like to share my views on sustainability for the Great Lakes.

### Legacy

The two centuries of development in

the Great Lakes Basin have not been without their ecological costs. While the region still boasts a resilient economy, 35 million Canadians and Americans live in an environment that has been extensively and often drastically transformed from the state that existed before European settlement. Without adjustment, it is not likely that this trajectory is sustainable. For many, the crisis in the Great Lakes is equated with pollution. To meet this we have been waging through the Great Lakes Water Quality Agreement toward a goal of zero discharge of persistent toxics.

In October, Canada committed \$125 million to combat Great Lakes pollution problems. Over the next five years, funds will be directed toward clean-up activities, a preservation program to address widespread contamination and a human health effects program.

The problems in the Great Lakes are fundamental. We are witnessing the exploitation, alteration and deterioration of a natural ecosystem upon which many of our goods and services, and possibly our well-being, depend.

### Sustainability

"If the goals of sustainable development describe the type of planet people want, the question remains: What kind of planet can we actually get? When we address this question, the focus shifts from what we value to what we know."

- William C. Clark, *Managing Planet Earth*

Sustainable development carries with it the notions of a shared ethic, coupled with a knowledge about the ecological consequences of ongoing change. It is no longer sufficient for government to regulate the most blatant polluters. Full involvement of all interests of society and a more complete consideration of the effects of activities are necessary.

The Great Lakes Water Quality Agreement of 1978 enshrines the ecosystem approach. It provides a meaningful way of understanding the natural and cultural whole of the Great Lakes. To scientists and managers it means an inter-disciplinary approach to restoring and maintaining the biological, physical and chemical integrity of the system.

For example, renewable resource systems that are carefully managed for the sustainable production of crops and harvests will have an ecological integrity while supporting viable human communities. On the other hand, an ecosystem strongly affected by uncaring human actions will likely become disintegrated from both scientific and social perspectives. While these are extreme illustrations, what is urgently needed is an information system that will provide a set of ecological, economic and social criteria that enable us to make judgments about integrity and thus allow us to measure sustainability. Without

these, it is unlikely that we would be able to prevent renewable resource collapses or avoid the cumulative effects of exposure to toxic chemicals. We also will be unable to chronicle our progress or assert that we have made sound decisions.

### Remedial Action Plans (RAPs)

We are in the process of making the theoretical become real through Remedial Action Plans. RAPs are an experiment in decision-making that embodies the principles of sustainability at the local level. The goal is to restore, to the extent possible, beneficial uses of 42 Areas of Concern in the Basin through the cooperation of citizens groups, industries and governments. There are conflicting interests and consensus, which will require "compromise" by all stakeholders and the removal of internal barriers within the community. Governments are not neutral in this process. Canada and the U.S. have committed themselves to RAPs under the Great Lakes Water Quality Agreement.

For the RAP process to be successful there must be a willingness to give and take to be realistic as to what is in fact environmentally and economically feasible. Approached in this manner, the process offers the challenge of integrating environmental benefits, economic cost, environmental values and socio-economic impacts.

I believe RAPs give us an opportunity to illustrate how local economic well-being can be compatible with improving environmental quality. The Great Lakes Water Quality Agreement has been referred to as a model of binational arrangements. Let us strive to make it the paradigm for a sustainable biosphere.

*Lucien Bouchard*  
Honourable Lucien Bouchard, Minister of the Environment, Canada

## Citizens Map Strategy After IJC Meeting

By Karen Murphy, GLU Field Coordinator

Citizens clearly made an impact at the International Joint Commission's (IJC) Biennial Meeting (see article on page 1). The question is, what do citizens do next, and how can the public sentiment expressed in Hamilton be translated into action?

At the conclusion of the IJC's formal meetings and workshops, more than 100 citizens from around the Basin met for half a day to evaluate the weekend and develop strategies for the future. By consensus, they agreed to follow up on these issues:

### Remedial Action Plans

Frustration and concern was expressed regarding the RAP process. Citizens felt that Basin-wide and regional meetings on RAPs should be organized in order to facilitate networking and skills sharing. Participants felt that a survey to determine RAP compatibility with the Great Lakes Water Quality Agreement should be conducted. The need for citizen review of RAPs was also expressed. Great Lakes United committed itself to organize RAP activities in cooperation with RAP steering committee.

### Health

Citizens developed the idea of mounting a Toxic Victims Solidarity Campaign. The campaign would focus on the Great Lakes with the goal of using the issue of exposure to toxics to push for their reduction and abolition. They identified three components of the campaign: high profile public activities (such as toxics tribunals), legislation to develop comprehensive source reduction laws, and regulations to achieve

source reduction.

### Zero Discharge

Participants identified the need to: 1) define zero discharge; 2) ensure that zero discharge is implemented within individual permits; 3) incorporate zero discharge in regulations and laws; 4) develop and disseminate information on pollution prevention and its economic impacts. Participants expressed the need to mobilize citizens to undertake these areas of work and to build consensus and support for the definition of zero discharge.

### Public Involvement

Citizens agreed to focus on two areas: developing recommendations for increased public involvement to bring to the IJC, and identifying ways for citizens to work together in the future. Follow-up actions to the IJC conference include: developing a summary of the meeting for absent commissioners; pressing for a separate citizens' advisory committee; and supporting the appointment of a Native American commissioner. Initially a letter would be sent to the Commissioners outlining these concerns and needs.

Citizens of the Basin set a clear agenda for future action and reached a new milestone in efforts to clean up the Great Lakes. "As citizens, we have pushed for, and had adopted, a document which is truly visionary in its plan for our Great Lakes environment," declared Charlie Tebbutt, legal counsel for the Atlantic States Legal Foundation. "Our challenge for the future is to make the Great Lakes Basin a pollution-free zone. We can do this by mobilizing citizens throughout the Basin and expanding our existing networks."



Citizens from around the Great Lakes converged in Hamilton for the IJC meeting. Discussing issues are (L to R) Joe Bette of Lake Michigan Federation, GLU director Phil Wilner and GLU president John Jackson.

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### GREAT LAKES UNITED

State University College at Buffalo, Chester Hall  
1000 Elmwood Avenue  
Buffalo, New York 14222  
(716) 886-0042

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