
GREAT LAKES UNITED

CITIZENS SPEAK



GREAT LAKES UNITED'S 1998 HEARINGS ON THE STATE OF THE GREAT LAKES

Hearings Background

Our Partners

For each of the ten cities in which we held a hearing, Great Lakes United partnered with a prominent local member group. These groups are excellent resources on the issues raised in their hearing, and encourage citizens to contact them for more information.

- ◆ **Green Bay**, June 23, Clean Water Action Council of Northeast Wisconsin, (920) 437-7304, cwac@execpc.com
- ◆ **Detroit/Windsor**, July 7, Citizens Environmental Alliance, (519) 973-1116, riccawu@mnsi.net
- ◆ **Hamilton**, July 11, Community Action Parkdale East, (905) 545-9856
- ◆ **Sault Ste. Marie**, September 12, Clean North, (705) 945-1573, deemaki@ssm.ca
- ◆ **Duluth**, September 19, Environmental Association for Great Lakes Education, (218) 726-1828, lakes@cp.duluth.mn.us
- ◆ **Gary**, September 24, Grand Calumet Task Force, September 24, (219) 473-4246, gctf@igc.org; and Save the Dunes Council
- ◆ **Chicago**, September 27, Lake Michigan Federation, (312) 939-0838, LMF002@aol.com; and Sierra Club, Illinois Chapter
- ◆ **Toronto**, September 28, Toronto Environmental Alliance, (416) 596-0660, tea@web.net; and Waterfront Regeneration Trust
- ◆ **Buffalo**, October 6, Citizens' Environmental Coalition, (716) 798-0111, cecwny@eznet.net
- ◆ **Montréal**, October 8, Société pour Vaincre la Pollution, (514) 844-477, greentox@total.net; and Great Lakes United Montréal office, (514) 396-3333, sgingras@glu.org.

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- ◆ Charles Stewart Mott Foundation
- ◆ The Joyce Foundation
- ◆ The Margaret Motz Foundation
- ◆ Community Foundation for Great Buffalo
- ◆ The Strauss Family Fund

Hearing events

Great Lakes United's 1998 hearings on Great Lakes water quality sometimes attracted renowned speakers or sparked related special events. In **Green Bay**, a community hearing was held the day before our hearing on whether the Fox River should be included on the U.S. Environmental Protection Agency's "Superfund" list. Perhaps for that reason, the hearing received front page coverage in *Green Bay Press Gazette*. Lieutenant governor candidate Barbara Lawton testified at the hearing. In **Detroit** activists from all parts of Michigan and southern Ontario came to voice strong criticism to the possible reopening of the highly polluting Conners Creek coal-fired power plant. We presented seventeen hearing recommendations at the Great Lakes Mayor's Conference held in **Windsor** the next day. The **Hamilton** hearing fell on the first anniversary of the Plastimet plastics fire. Activists told of the environmental devastation caused by the four-day inferno. They also decried government plans to build an expressway through the city's largest park, site of significant wildlife habitat. After the mayor and several Members of Provincial Parliament testified at the **Sault Ste. Marie** hearing, participants

were treated to a ride in an eighteen-person canoe that almost became a ride in the St. Marys River. In **Duluth**, our message went right to the top, with an aide to Congressman James Oberstar and Wisconsin state representative Frank Boyle sitting on our panel. In **Gary**, panel members and journalists toured the site of a proposed "confined disposal facility" for holding contaminated sediment from the Grand Calumet River. Citizens spoke out about their exclusion from the CDF planning process and fear of the health effects from chemicals off-gassing into nearby neighborhoods. A week before the **Chicago** hearing, WBEZ aired a one-hour radio discussion on Great Lakes water quality issues that included hearing organizers and the director of the U.S. Environmental Protection Agency's Great Lakes National Program Office. In **Toronto**, a televised press conference was held before the hearing. Several members of provincial and federal Parliament spoke at the hearing. **Buffalo** was privileged to host a fundraising luncheon starring internationally renowned Great Lakes researcher Theo Colborn, who also testified at the hearing. Panelists included a member and the president of the **Buffalo** Common Council, which passed a resolution calling for implementation of the Great Lakes Water Quality Agreement. In **Montréal**, former International Joint Commission member Pierre Béland appeared and criticized government for cuts in environmental research. Invited federal and provincial environment officials failed to show, so we left labeled empty chairs occupied by plastic chickens, much to the amusement of the *Montréal Gazette*.

Cover: Fifth-grade students of École Aquarelle testifying in Montréal; Carl Hujet testifying in Green Bay.

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This document is a snapshot of citizens' views of Great Lakes waters at the end of the twentieth century. Great Lakes United held public hearings in ten Great Lakes communities in 1998 to assess the health of this vast freshwater ecosystem from the point of view of people living here. We heard from young and old, amateurs and experts, mothers, fathers, doctors, lawyers, and Native chiefs. We heard poems and songs, recommendations and testimony. The voices are here in your hands.

Background

In 1972, public outcry for clean water created the Great Lakes Water Quality Agreement, a joint promise by Canada and the United States to clean up and protect the Great Lakes. This strong agreement has helped restore the Great Lakes basin ecosystem, but lately progress has stalled. Now, in 1999, the two governments are scheduled to review the Agreement with the possibility of renegotiating its terms. Providing context for this decision, Great Lakes

United organized the hearings to gather citizen testimony on progress and needs.

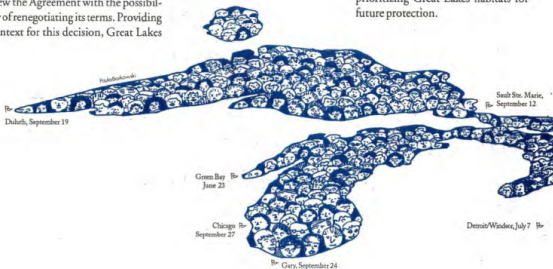
Expert panels of local leaders, scientists, academics and members of Great Lakes United listened to three hundred people deliver their stories and recommendations. We took notes, gathered submissions, and made tapes to compile this report.

We have designed the report to quote the participants themselves, with minimal commentary. It is organized into six general subject areas, each closing with a series of recommendations. Like the quotes from which they arise, the recommendations may not always accord with the opinions of Great Lakes United or our partners; they do represent strong currents of opinion in the grassroots Great Lakes environmental community. A summary of recommendations is listed on page 41.

Hearings Topics

Health. Scientists who spoke at the hearings discussed the ever-mounting evidence of links between Great Lakes contaminants and human health. Citizens reported on the consequences of Great Lakes pollution for them and their communities: loss of drinking water supplies, loss of edible fish and game, loss of swimming beaches, gains in respiratory illness, cancers, learning disabilities and bottle-fed babies.

Fish, Wildlife and Habitat. Although the hearings were focused on water quality, many of the speakers addressed current pressures on fish, wildlife, forests and wetlands in the Great Lakes-St. Lawrence River basin. People described the effects of sprawl, navigational dredging, wetlands draining, intentional and accidental introduction of non-native species, forest mismanagement, and toxic exposures. Several groups are working on mapping and prioritizing Great Lakes habitats for future protection.



Zero Discharge. At hearing after hearing, citizens said that pollution prevention efforts in their communities have lost sight of the mandate expressed by the Great Lakes Water Quality Agreement, that "the philosophy adopted for control of inputs of persistent toxic substances shall be zero discharge." Speakers cited poorly regulated activities such as incineration, sewage treatment, pesticide use and energy production as ongoing and, in some cases, increasing sources of pollution to the Great Lakes.

Cleanup. Twelve years after Remedial Action Plans were begun for forty-three highly contaminated "Areas of Concern" around the Great Lakes, citizens asked, "What has changed?" Many who were involved in the RAP process expressed a sense of failure: contaminated sediments remain the primary cause of contaminated fish throughout the Great Lakes, and monitoring and cleanup efforts have yet to systematically consider the presence of radioactive substances.

Water Export and Diversions. Over the past two years, threats to Great Lakes waters quantity from proposals to divert, export, privatize and otherwise

intensify withdrawals of water from the basin have proliferated in Ontario and in Great Lakes states.

General Policy. Speakers addressed the upcoming review and potential renegotiation of the Great Lakes Water Quality Agreement. They described trends towards weakening regulations, devolution and cuts to critical programs. Without exception, citizens called for implementation, not renegotiation, of the Agreement.

Ce document se veut un instantané du point de vue des citoyens vis à vis les Grands Lacs et le Saint-Laurent en cette fin de siècle. Au cours de l'été et automne 1998, l'Union Saint-Laurent, Grands Lacs a tenu une série d'audiences dans dix communautés autour des Grands Lacs. Celles-ci ont permis d'évaluer, du point de vue des citoyens riverains, l'état de santé de cet écosystème. Nous avons entendu des jeunes et des plus vieux, des amateurs et des experts, des mères et des pères, des médecins, des avocats et des chefs autochtones. Nous avons entendu des poèmes et des chansons, des recommandations et des

témoignages. Ces témoignages sont maintenant entre vos mains.

Note explicative

En 1972, un cri d'alarme public pour de l'eau propre a conduit à la signature de l'accord sur la qualité des eaux des Grands Lacs. Une promesse faite par le Canada et les États-Unis de nettoyer et de protéger les Grands Lacs. Même si cet accord a largement contribué à la restauration de cet écosystème, les progrès sont au point mort.

En 1999, les deux gouvernements devront revoir cet accord avec la possibilité de le renégocier. L'Union Saint-Laurent, Grands Lacs a organisé ces audiences afin d'amasser les témoignages des citoyens sur leurs besoins et les progrès accomplis. Et ainsi utiliser ces témoignages pour rappeler aux deux gouvernements leurs engagements.

Des panels experts composés de leaders locaux, scientifiques, universitaires et membres de l'Union Saint-Laurent Grands Lacs ont recueilli plus de 300



témoignages et recommandations. Nous les avons recueillis sous forme écrite et verbale pour les inclure dans ce rapport qui sera distribué à tous nos membres et à tous ceux qui en feront la demande.

Ce rapport utilise des citations des participants avec un minimum de commentaires. Celui-ci est organisé en six sections, chacune se terminant avec une série de recommandations. Comme les citations duquel elles sont extraites, les recommandations ne reflètent pas toujours les opinions ou les points de vue de notre organisme ou de ses membres, mais elles représentent les points de vue et les opinions de la base et de la communauté environnementale des Grands Lacs et du Saint-Laurent.

Les sujets abordés

La santé. Les scientifiques ont presque tous pointé du doigt les preuves de plus en plus accablantes entre la présence de contaminants dans l'écosystème et les effets sur la santé humaine. Les citoyens nous ont parlé des conséquences pour eux et leurs communautés de la pollution des Grands Lacs comme les problèmes d'accès à l'eau potable; l'accès à du poisson non-contaminé; l'accès à la baignade; l'augmentation des problèmes respiratoires; des cancers, des problèmes d'apprentissage chez les enfants, etc. En général, les intervenants ont recommandé des resserrements réglementaires et une application de la loi plus stricte afin de garantir que l'industrie substitue l'utilisation et la production de substances cancérigènes et imposteurs endocriniens avec des alternatives plus sécuritaires

Les poissons, les habitats et la faune. Même si les audiences étaient centrées autour de la qualité de l'eau, plusieurs intervenants se sont exprimés sur les pressions exercées sur les ressources halieutiques, les ressources fauniques et les habitats tel que les marécages ou la forêt. Les gens nous ont parlé d'étalement urbain, de dragage, de drainage de zones marécageuses, de l'introduction d'espèces exotiques, de mauvaise gestion forestière et de l'exposition aux toxiques. Plusieurs organismes travaillent à la cartographie et la priorisation de zones et d'habitats à protéger. Ces intervenants ont généralement recommandé que les gouvernements adoptent les principes de la conservation biologique et coordonnent la gestion des terres publiques et de l'eau afin d'assurer la survie des espèces endogènes des Grands Lacs et du Saint-Laurent.

Le rejet zéro. Lors de chaque audience, les citoyens nous ont dit que les efforts en matière de prévention de la pollution dans leur communauté ont perdu de vue les buts et les objectifs de l'accord sur la qualité des eaux des Grands Lacs. Pour eux, "la philosophie à adopter pour le contrôle des intrants toxiques, persistants doit être le rejet zéro". De nombreux présentateurs ont mentionné certaines activités peu et mal réglementées comme l'incinération, l'épuration des eaux usées, l'usage des pesticides et la production énergétique comme étant des sources actuelles de pollution des Grands Lacs et du Saint-Laurent. Ils ont recommandé que les gouvernements implantent des réformes réglementaires et plus de surveillance afin de s'engager davantage dans la mise en place des objectifs de l'accord.

Réhabilitation et nettoyage. Douze ans après la mise en place des Remediation Action Plans (RAP) pour les quarante trois zones contaminées autour des Grands Lacs, les citoyens tout au cours des audiences se sont demandés qu'est-ce qui a changé? Beaucoup d'entre eux qui se sont impliqués dans le processus des RAP ont exprimé un sentiment d'échec. Les sédiments contaminés continuent d'être une des causes principales de la contamination du poisson dans les Grand Lacs. De plus, les initiatives de nettoyage des poisons persistants n'ont pas encore incluses les substances radioactives. Tous les intervenants ont demandé à ce que la volonté politique soit trouvée pour que des ressources financières soient allouées au dragage et à l'enlèvement des sédiments contaminés.

L'exportation et la dérivation de l'eau. Depuis les deux dernières années, la menace de l'exportation, de la dérivation et de la privatisation de l'eau en provenance des Grands Lacs s'est faite de plus en plus présente en Ontario et ailleurs. Les intervenants ont présenté un plaidoyer en faveur d'une plus grande intervention des gouvernements fédéraux au niveau politique, par la signature d'un traité gouvernant l'exportation de l'eau et les projets de dérivation.

Politique général. Plusieurs intervenants ont dénoncé les tendances actuelles en matière de déréglementation, de désengagement et de coupures des gouvernements. Dans ce contexte, ils entrevoient le processus de révision de l'accord et sa potentielle renégociation comme une menace. Ils demandent la mise en application de l'accord et non sa renégociation.

Call to Action

We submit this report ...

to the Binational

Executive Committee

headed by the Great Lakes program directors of the U.S. Environmental Protection Agency and Environment Canada, who are currently reviewing the historic Great Lakes Water Quality Agreement to determine whether its terms need to be renegotiated. The main message from those who spoke and signed petitions at the hearings is: "Implement the Agreement, don't renegotiate it"

to Environment Canada

which proposes to remove the zero discharge component of its promises to "virtually eliminate" long-lived toxic substances under the Canadian Environmental Protection Act and

to the U.S. Environmental Protection Agency

which has dropped the term "virtual elimination" entirely from its proposed nationwide strategy for dealing with long-lived toxic substances that build up in living things. As one citizen declared about the strategy's targeted substances—mercury, dioxins, PCBs and certain pesticides—"if you can find them at all, there is a good chance there is too much of them." With the Great Lakes Water Quality Agreement as a platform, our two governments should take the lead nationally and globally to

eliminate these substances from human use and from circulation in the environment.

to Great Lakes mayors

Most pollutants found in Great Lakes waters originate on land from human activity. Much of that activity is under local control, through zoning, drain codes, sewer bylaws, pesticide use and garbage disposal practices, brownfield policies and, generally, identification and protection of environmentally sensitive and unique areas. Great Lakes mayors must begin to work together and with community groups on this shared responsibility.

to the State of the Lakes Ecosystem Conference

or SOLEC, the biennial meeting held by the United States and Canada to assess the health indicators of the Great Lakes ecosystem. The observations at the hearings were fairly straightforward: "We can no longer fish or hunt to eat." "Our whole community must now pay for bottled water." "We were advised not to eat food from our gardens." We offer SOLEC this collection of citizen indicators on ecosystem health, with the additional bonus of forty action items for policymakers.

to Great Lakes industries

Citizens and workers are demanding greater responsibility by corporate citizens to the communities and environments that host them. They are de-

manding clean production technology and process changes that eliminate, not simply reduce, the production and release of long-lived toxic substances. They are calling for an end to the blackmail that makes pollution the dues a community must pay to keep jobs. Northern European countries are far ahead of us in challenging their manufacturers to redesign consumer goods so they can be returned to their makers and their components recycled. As citizens of this continent's largest freshwater ecosystem, we challenge Great Lakes industries to clean up their contaminated sites and to "redesign with the region in mind." Cancer-free workplaces, coal- and nuclear-free energy, and recyclable cars, computers and other products are all within reach.

to all citizens of the Great Lakes basin

Great Lakes citizens are among the planet's largest consumers of water and land, and the largest producers of waste. We can make many choices to lighten our load on the ecosystem. We can choose not to use lawn chemicals, not to buy gas-guzzling vehicles and not to contribute to sprawl. We can choose to consume less. We can organize around "daylighting" a locally trashed creek, learn about surrounding wetlands, floodplains and other sensitive areas that need protection and attend public hearings to push for those protections. We can become agencies for improving the state of the Great Lakes and sowing the health benefits for future generations.



Marjorie Fisher

Health was the number one concern of participants in the citizen hearings. The testimony included presentations by scientists on new evidence of links between persistent pollutants in the Great Lakes environment and problems in human development, as well as first-hand accounts delivered by people who have witnessed or suffered the effects of Great Lakes contaminants.

"The intent of programs specified in this Annex is to virtually eliminate the input of persistent toxic substances in order to protect human health and to ensure the continued health and productivity of living aquatic resources." Great Lakes Water Quality Agreement, Annex 12

"The only way to get rid of persistent organic pollutants in your body is to have a baby." Liliane Cotnoir, Montréal hearing

"Our bodies carry such a high load of toxics already, and breast milk is high in fats, and all those chlorine-based toxins build up in fats, so that women actually should be making a choice whether or not to breast feed their children. The bonds from breast-feeding children, the psychological studies they've done, it's an important thing to do. And now we're asking women

to choose between those bonds you can create with your children and the fact that you might be giving your child a huge load of dioxin and other toxic chemicals." Sarah Welch, Green Bay hearing

Contaminated fish and wildlife

From the first hearing in Green Bay, the health risks associated with eating Great Lakes fish was an issue of

Theo Colborn



paramount concern. The Sierra Club presented a report documenting that all of the Great Lakes, all of their tributary rivers, and more than 26,000 inland lakes are sufficiently contaminated to require restrictions on fish consumption. This includes every mile of shoreline and every square mile of open waters in the Great Lakes. Fish consumption advisories vary from lake to lake, but the basic warning is the same: everybody should limit their Great Lakes fish consumption; women of childbearing age and growing children are often advised to eliminate Great Lakes fish from their diets altogether.

"PCBs have been found to interfere with what we call the thyroid economy. You do not have to eat the fish to get these effects.... Concern in the late 1970s over the findings of widespread thyroid problems in Great Lakes wildlife and the effects in laboratory animals exposed to the same chemicals as the wild animals led to a human epidemiological study to look at the outcomes in infants born of women who ate two to three meals a month of Lake Michigan fish prior to their pregnancies. At birth, scientists measured significant delays in neuromuscular and neurological development in the children whose mothers carried the highest

"Breast milk is high in fats, and all those chlorine-based toxins build up in fats, so women must choose whether or not to breast feed their children."

—Sarah Welch

body burdens of PCBs. As the infants matured, the affected children continued to show short term memory problems at age four, and a significant reduction in IQ and academic skills at age eleven. This study also highlighted the fact that at or slightly above ambient exposure to PCBs and co-contaminants, measurable neurodevelopmental delays can be detected in newborns . . . Another study that commenced twelve years later set out to replicate and embellish on the Lake Michigan study looking at youngsters of mothers who were eating Lake Ontario fish . . . these researchers too are finding the same neurodevelopmental delays in the children."

Dr. Theo Colborn, Buffalo hearing

Surveys of Great Lakes anglers show that many groups of people who fish for sustenance do not know about state and federal advisories on Great Lakes basin fish consumption. Women, Native people, and non-English speakers face the greatest risk to their health from eating fish caught in the Great Lakes basin.

"We want to be included as equal partners in cleaning up the Great Lakes. . . . We did a door-to-door survey in 1994 with the help of the LaPorte County Health Department; we found out that 19 percent of our community is eating game from the tributaries of Lake Michigan." Rhonda Lee, Minor-ity Health Coalition, Gary hearing



Lisa Johnson

Even those who are aware of fish advisories may have trouble comprehending them:

[Holding up page 55 of New York's fishing regulations] "If anybody wants to look at this chart and figure out how you can feed a family within these guidelines, good luck! I'm a lawyer and I can't figure it out . . . It's gotten to the point that the only thing I have a license to do is go out and harass wildlife, because God-forbid, don't eat it!" Valerie Knight, Buffalo hearing

"If you haven't had a kid yet but you are planning to have children, it's a good idea not to eat the fish in a lot of places around the Great Lakes, which I think is ridiculous. I will abide by it. I want the best for my children, if I have

them in the future. But this is absolutely ridiculous. We shouldn't be having this discussion. It shouldn't be an issue. I think it's unethical, I think it's immoral, and I think it needs to be addressed." Sarah Welch, Green Bay hearing

"We do need full implementation of the Great Lakes Water Quality Agreement, because the answer is not to spend money stocking fish into our waters and then telling people not to eat the fish . . . The advisories don't work as a public health measure; we need to make the fish safe to eat." Dr. John Vena, Buffalo hearing

First Nations

Pollution has fundamentally changed the way of life for First Nations and tribal bands in the Great Lakes basin.

"The Michigan Tribes would like the governments, agencies and research groups to take into consideration Tribal members' ways of life regarding subsistence living . . . for risk assessments and consumption guidelines . . . The Michigan Tribes would like to see Tribes and First Nations added as partners in the Great Lakes Water Quality Agreement." Patty O'Donnell, Sault Ste. Marie hearing

"I'm from Onondaga Nation. Right now we're an endangered species along with the Cayugas. What really disturbs

"PCBs have been found to interfere with what we call the thyroid economy. You do not have to eat the fish to get these effects." —Dr. Theodora Colborn

me is Onondaga Lake. For the time being it's a cesspool. You can go anywhere to move away from pollution but I am tied to this land here. In my community there is a bond of geography." Ron Jones, Buffalo hearing

"Our histories and territories – Chippewa, Ojibway, Odawa, Delaware, Mississauga, Algonquin and Potawatomi – are of historic and cultural importance in the Great Lakes. They serve as a basis for the Great Lakes confederacy to which the majority of 130 Ontario First Nations belong. They hunt and fish out of a basic need but have grave concerns for the future, concerns about our children, elders, families, nursing mothers. Told we must follow consumption guidelines or we put ourselves at risk. Why is this acceptable? As each day goes by our Great Lakes become more contaminated." Chief Glen Hare, Sault Ste. Marie hearing

"Walpole Island is a zero discharge community . . . we have a natural filtration system in our marsh [at the mouth of the St. Clair River], the biggest marsh on the Great Lakes. We have one-tenth of the endangered species in Canada living here with us. If we've got contaminated water coming down the river, its getting into the ducks, fish and turtles that are consumed by our people." Michael Williams, Walpole Island First Nation, Detroit/Windsor hearing

"Mohawk people have always been



Mike Williams

water people, living by and living off the St. Lawrence River . . . Chemicals coming from the Great Lakes to the Gulf of St. Lawrence are harming people, birds, whales . . . Fish used to sustain us and keep us together . . . Once the Seaway pushed through, the waters became degraded, the fish disappeared . . . Our commerce was resource based, including muskrat and beaver, now contaminated. I am in a state of shock that the natural environment cannot provide us with the basics of life for us to survive on." Eva Johnson, Montréal hearing

"Our people did not surrender the care of our plants, animals, birds, fish and water, to the Canadian and U.S. governments. We did not surrender our

rights to a healthy environment within our boundaries and our homelands. We did not surrender our rights to harvest healthy fish and wild game for our sustenance. We do not surrender our traditional way of life or the quality of our lives, our lakes, our health our future." Laura Manthey, Green Bay hearing

Drinking water

Surface and groundwater pollution is a growing problem in the Great Lakes region due to historical and continuing contamination from toxic chemicals, heavy metals and bacteria. Many communities are now buying bottled water, or are having their water piped in from distant sources. The trend is toward contamination of local sources of drinking water, often forcing communities to locate and pay for new supplies because they lack the resources or the political will to clean up existing sources.

"When you see a regime willing to trade the drinking water for 60 million people for the economic benefit of a few industries, you know something's wrong." Jack Darin, Chicago hearing

"The St. Louis River is sacred to us. It is hard to honor what you mourn. It is hard to honor something that is dying. There have been four hundred treaties signed. None of the promises have been kept. We are headed for bottled water." Esther Naugabook, Duluth hearing

"I am in a state of shock that the natural environment cannot provide us with the basics of life." –Eva Johnson

A few years ago the Walpole Island First Nation had the opportunity to tie into a new water pipeline running from Lake Huron to communities downstream from "Chemical Valley," a cluster of twenty-eight petrochemical complexes around Sarnia, Ontario. Despite having a polluted water supply, the Nation chose not to access the pipeline. Like many other native communities whose surface or groundwater supplies have been poisoned, the Walpole Island council now pays for bottled water.

"It wouldn't have served the wildlife and the people who still consume the wildlife. It would have looked like we're giving up on the river, like we were saying, 'Okay, Chemical Valley, you can have the river between Sarnia and Imperial Chemical Industries.'" Michael Williams, Walpole Island First Nation, Windsor/Detroit hearing

In the United States the 1996 amendments to the Safe Drinking Water Act now require each state to inventory all potential sources of contamination to drinking water, and to involve the public in the process. But state environmental bureaucracies have resisted public inquiry into pollution dischargers to drinking water supplies.

"Our own experience of trying to track down point source dischargers into Lake St. Clair and St. Clair River was continually delayed by having to place countless Freedom of Information Act requests, and pay for department personnel time. Shouldn't this information be the right of anyone who drinks



Rhonda Lee

the water or uses the lakes and rivers? Imagine the impact if we could begin delineating the sources of pollution—we could more accurately target trouble spots and protect our waters as drinking water sources. Imagine again if citizens and First Nations were actively involved in the delineation process . . . we could ensure a thorough inventory . . . Finally, imagine if people on both sides of the border did this simultaneously for our common waterbodies . . . Lake St. Clair [could] become a model of international cooperation on source water protection." Dan Farough, Windsor/Detroit hearing

"The city of Sault Ste. Marie's aquifer recharge area is shown on a map and designated as sensitive. There are no sewers to control runoff, and the soils

are sand, gravel and cobble. A dump was built over that aquifer with various technofixes such as leachate control mechanisms, but a few years later, residential wells in the area became polluted and the city had to bring water pipes into the area at great cost. There is now a proposal to put an industrial park [that] will involve secondary steel manufacturing . . . and will necessarily maintain numerous industrial chemicals on site. For example, a common degreaser used in these operations is TEE. California drinking water standards for this chemical are 5 parts per billion. Let's just say one night a tired forklift driver accidentally spears a 45 gallon drum of this stuff. At a percolation rate of 30–40 percent, about 3 billion gallons of water in the aquifer would be polluted. A senior official said to me, 'Mr. Thompson, what's the big deal about allowing heavy industry on top of an aquifer, we already put the dump there.'" Ian Thompson, Sault Ste. Marie hearing

Polluted Beaches

"I have never swum in the Great Lakes." Ian Cant, Youth Caucus member, Toronto hearing

"Since 1994, Northeast Illinois beach closings have doubled each year. Beaches have been closed 127 times since then, 86 times because of poor water quality." Jan Schakowsky, Chicago hearing

"When we have big rains we have

"I have never swum in the Great Lakes." —Ian Cant, Toronto Youth Caucus

the beaches closed because of *e. coli* . . . When you go down to the water all you have to do is breath and you know whether you should go in or not because the smell will tell you." Tom Serynek, Gary hearing

"Every summer, my children make Sunnyside Pool in the west end of Toronto their home away from home. When we go swimming, I think about the irony of the location of this popular city pool. A beach is all that separates Sunnyside Pool from Lake Ontario. Yet even on the hottest afternoon, no one swims in the lake; everyone is in a chlorinated pool because of the abysmal quality of the water in Lake Ontario." Janet May, Toronto hearing



Dan Emerson

and wildlife—as well as far-reaching toxins taken up into the atmosphere." Diane Meyer, Sault Ste. Marie hearing

"We are most concerned about people with asthma and chronic lung disease. But obviously there are so many high smog episodes that we experience in our region, all of us who are fortunately healthy are also at risk. . . . Health Canada has found over time young children demonstrating measurable loss in lung function because of acid air pollution drifting across from primarily Ohio. . . . Predictions by the Ministry for Ontario for the future are that we will see even higher episodes, primarily not only as a result of increased point sources, but also hotter temperatures from global warming." Brian Stocks, Windsor/Detroit hearing

"Today, the waters of the Great Lakes contribute more PCBs to the air than air pollution contributes to the waters. The source may be historically contaminated bottom sediments. Evaporation may also be greatest down-current of major urban areas." Dr. Steven Vermette, Buffalo hearing

At the Gary hearing, much testimony focused on a proposal by the Environmental Protection Agency and the Army Corps of Engineers to build a vast landfill for PCB-contaminated sediments from the Grand Calumet River in

the midst of a mainly African-American and Latino community in East Chicago. The proposed "confined disposal facility" would be less than a mile from schools, public parks and homes. Speakers feared that the landfill would be off-gassing contaminants to the neighborhood.

"Most people in East Chicago support the planned dredging. . . . They know that it is necessary for the economic vitality of their city, as well as the environmental health of the Lake Michigan basin. But the government has not proved to the people of East Chicago that the planned confined disposal facility will not affect the health of nearby residents, lower the value of their homes, or impair their quality of life. The more the government simply dismisses [these] understandable concerns,

General Exposure

"My son and I frequently drive across the International Bridge to Canada. We have had the experience many times over the years of starting over the bridge feeling fine, smelling a bad odor and exiting the bridge with irritated eyes, nose and throat and later find out our glands are swollen. Air emissions from local industry can be seen and smelled in the air and can cause immediate effects in both air and water. Without any doubt they must be causing long-term effects for locals—human, fish

"Canada has found over time young children demonstrating measurable loss in lung function because of acid air pollution." —Brian Stocks

the more it plays into the hands of those whose opposition would not stop at derailing the entire project." Bowden Quinn, Gary hearing

"People were given an opportunity to comment on taking care of the dredging after the fact. It would have been nice if people came in and said here are the options." Tom Serynek, Gary hearing

"Living in a heavily industrialized area, with a huge toxic residue from our past, we have called for a moratorium on permits for new toxic waste handling companies in our area . . . We are seeing shorter attention spans, shorter life spans. We must fight for a health registry. We have no idea of the true effects of waste disposal in our lives." Carlos Tollivar, Gary hearing

Air is not the only medium of general exposure

"In my home, the Finger Lakes Region, applying sludge and its derived products is being sold like snake oil, advertised as the recycling of 'fertilizer' and/or a liming agent. In reality, I believe this policy is one of cost avoidance and liability transfer. Liability has been passed from the original polluters to the publicly owned treatment works and eventually to the agricultural community, the farmers who grow food for all of us." Jack Ossont, Buffalo hearing

"To permit composting of toxic pulp and paper mill sludge is . . . medical



Jack Darin

experimentation on the unsuspecting public at large." Walter Sarich, Sault Ste. Marie hearing

Workplace

"Rather than ventilate a toxic somewhere else, we must reduce it in the workplace." Nick DeCarlo, Canadian Auto Workers, Toronto hearing

"Science has identified almost every known carcinogen from the death certificates of workers. The International Agency for the Research of Cancer has identified twenty-four substances that cause lung cancer in humans. Twenty-three were determined by the excess mortality of workers who were overex-

posed to these substances. The twenty-fourth, of course, is tobacco. Why do we hear so much about the dangers of tobacco, but so little about the other 23 lung carcinogens?" From the January 1998 *CAW Health, Safety and Environment Newsletter*, submitted to the Toronto hearing panel

"Whether the 'costs' are environmental regulations or health care costs is really irrelevant. There will always be someplace 'cheaper' in the short term to locate business. The question is . . . at whose cost? Underdeveloped countries may have lower labor costs, but the health of these workers is just as important as any other." Dan Emerton, Detroit/Windsor hearing

The Canadian Autoworkers have initiated a "Prevent Cancer Campaign," which encourages Canadian unions to identify carcinogens in their workplaces and to work with their companies to isolate and eventually remove them.

"We recommend:

- A comprehensive community chemical registry needs to be established. Chemicals should not be used in our communities unless they have been registered and assigned an identification number . . .
- A detailed study on reported cancer cases in relation to geographical location and possible contributing factors should be conducted in the Great Lakes basin . . .
- A Just Transition Process needs to be developed to address the eco-

"We have no idea of the true effects of waste disposal in our lives."

—Carlos Tollivar

conomic impact that would occur from the elimination of a hazardous chemical process. We suggest the development of an IJC Transition Task Force that would be charged with this task.”

Ken Bondy, Windsor Regional Environmental Council, Windsor/Detroit hearing

Recommendations

- ◆ Until fish in the lakes and rivers of the Great Lakes basin are safe to eat, government agencies should develop more effective communication with the public on the risks associated with eating contaminated Great Lakes fish. See the Sierra Club report “Something’s Fishy” for six specific recommendations
- ◆ Native nations should be represented on the International Joint Commission and in all other treaties or agreements regarding the future health of the Great Lakes environment



Carlos Tolliver

- ◆ Local communities should be more meaningfully involved in cleanup plans, including development of design and siting options for disposal facilities, and should have veto power over plan implementation
- ◆ Health agencies should initiate and coordinate registries to better track

and protect community health. For example, cancer treatment centres should record information on the occupational and locational histories of their patients; all chemicals used, produced or released in the community should be identified and registered; and health effects should be tracked in highly polluted communities such as Areas of Concern

- ◆ Regulations and tough enforcement measures should be put in place to guarantee that industries substitute the use or production of cancer-causing and hormone-disrupting substances with safe alternatives
- ◆ The International Joint Commission should facilitate planning for “just transition” to a sustainable economy. Governments, labor and industry, and community members should jointly make these plans
- ◆ Local and regional governments should inventory the sources of drinking water contamination. The public should become involved in this process

“Science has identified almost every known carcinogen from the death certificates of workers.” —Nick DeCarlo

Fish, Wildlife and Habitat

Over the past two centuries, human activities have taken a dramatic toll on the condition and function of Great Lakes natural systems. Speakers from across the basin described the impacts of exotic species, sprawl, channel modifications, logging, and pollution on Great Lakes wildlife

Loss of Habitat

Approximately 90 percent of Great Lakes coastal marshes have been lost, and roughly that percentage of streams draining into the basin are dammed at their first rapids. The resulting loss of spawning grounds has prevented the restoration of self-sustaining populations of many native fish, and the absence of coastal wetlands has impacted resident and migratory birds. Today, suburban sprawl, increased lumbering, and continued modifications to accommodate Great Lakes and St. Lawrence River shipping further threaten land and aquatic habitats.

"Eagles are now soaring and hunting over the Humbug Marsh. Ospreys are hunting in the area and screaming at boaters for intruding in their new-found territory. Black-crowned night herons routinely feed along the shoreline. These birds have not been present

in this area for years.

"But the fate of the Humbug complex of island, marsh, uplands, and open river still remains up in the air. The intensive development that is planned [for the Humbug area] will destroy the natural resource. Construction will wipe out the wooded uplands. The secondary impacts that follow, such as altered soil, vegetation, temperature, drainage, chemical runoff and normal human incursion, will finish the destruction." Bruce Jones, Detroit/Windsor hearing

Jan Schakowsky



"Because [Humbug Marsh] is the last natural area of the Detroit River, it probably supports million-dollar fisheries for walleye and bass. That never really seems to come into play when we talk about reducing and destroying natural habitat." Pat Hartig, Detroit/Windsor hearing

"The levels of the waters in [Lake Ontario] are kept at flood or near to flood levels for the advantage of shipping, hydro and recreation in the St. Lawrence Seaway. There are three hundred miles of eroding shoreline bordering New York . . . A projected three million cubic yards of soil [is] being washed into Lake Ontario to become sediment. Sediment that will impact or destroy habitats such as underwater feeding and breeding areas." Mary Lou Fischer, Buffalo hearing

Without public hearings, Québec's Lac St. Pierre has been slated to receive 200,000 cubic yards of navigation dredge spoils from the St. Lawrence River.

"The Lac St-Pierre ecosystem is a flood plain very important for fauna. The area is 90 percent natural because of regular flooding. A high proportion is marsh, hosting many species of migratory birds and a wide variety of plants and animals. Sixty tonnes of suspended [dredge] in the lake is destroying the

"Sixty tonnes of suspended dredge in the lake is destroying the health of the marsh, animals and seventy-nine species of fish." —Norman Garipey

health of the marsh, animals and seventy-nine species of fish." Norman Gariepy, Montréal hearing

In Michigan, an obsolete drain code streamlines the destruction of valuable wetlands.

"The drain code is more than a century old. It has fulfilled and outlived its original purpose, which was to make land dry enough to farm. It has become a major loophole in both environmental protection laws and the state's tax limitation laws . . .

"Developers and other construction interests like the drain code . . . It is illegal for a private interest to drain a wetland, but the county drain commissioner can drain that same wetland at public expense . . . The version of the drain code now under consideration [in the state legislature] was drafted by and for drain commissioners." Peter Foster, Windsor/Detroit hearing

In Toronto there is a movement to reverse the trend of habitat destruction by "daylighting" the buried creeks and ravines that are part of the city's storm sewer system.

"There has been a lot of public interest over the past few years in working with former rivers which now lie buried as part of the city's sewershed. In the early history of a city—pre-sewer infrastruc-



Edward Sousa

ture—creeks and streams tend to become open sewers, channelized and eventually buried. These processes have left us with legacies of continued and exacerbated water pollution and with destruction of habitat and reduction in biodiversity . . .

"The Taddle Creek Watershed Initiative supports encouraging local community history projects to map out buried streams and building a network of similar organizations on both sides of the border." Edward Sousa, Toronto hearing

Non-native Species

At least nine species of fish native to the Great Lakes are now extinct while scores of non-native aquatic fish, plants and insects, brought in by ships and canals,

are continuing to pressure and displace native species. Additionally, management of both aquatic and terrestrial systems for sport and game species is frequently at odds with preserving and restoring native natural communities.

"The sea lamprey were a major destroyer of the lake trout population, zebra mussels are not only clogging water systems, but are eliminating food for native species, and purple loosestrife is choking out natural vegetation in the streams and rivers that enter the lakes which is destroying natural habitat." Owen Sound Councillor Peter Lemon, Toronto hearing

"The impact and economic loss due to aquatic nuisance species is staggering . . . attention must be focused on preventing the entry and establishment of these species." Russell LaBarge, Windsor/Detroit hearing

"I have many concerns about the proposed new 'superlock' at the Soo. The environmental analysis should begin now, not after the funds are already appropriated, to investigate the impact of supertankers on the introduction or increase of exotic species, and the effect of increased navigation, especially winter navigation, on native species and ecosystems." Gail Coyer, Duluth hearing

"It is illegal for a private interest to drain a wetland, but the county drain commissioner can drain that same wetland at public expense."

—Peter Foster

Citizens also criticized resource managers for physically and biologically altering ecosystems to accommodate non-native sport fish at the expense of native fish and wildlife.

"Eight of the rivers and streams feeding from the Minnesota watershed into Lake Superior have undergone 'surgical' removal of waterfalls as one of the inane attempts by the Department of Natural Resources to allow steelheads to gain upstream access. Some of these rivers were visited two or three times for additional waterfall extraction. The tools used to destroy what the DNR likes to call 'barriers' are dynamite and jackhammers. The destruction is permanent . . . With the aim of opening up as many miles of the main-stream and tributaries as possible for steelheads, the DNR then went after the beaver colonies and their impounded ponds and wetlands . . . This massive destruction wiped out the habitat of countless waterbirds, nesting song birds, otter, mink, and a host of other life which depend on the environment created by beaver. With very little effort the DNR could have contacted the fisheries department in the Smoky Mountain National Park where a similar situation developed. When introduced steelheads were found to be destroying native brook trout, electro-fishing was employed to rid the streams of steelhead." Glenn Maxham, Duluth hearing



Annaliese Grieve

"Native species of fish are just written off. This includes whitefish, perch, bass, herring and trout. These are what the locals want on the table. Governments are very defensive of non-native species like salmon. Why?" Marilyn Burton, Sault Ste. Marie hearing

Forest Management

Forest cover has rebounded dramatically from its turn-of-the-century decimation, but forest composition even on public lands is now radically altered to suit industrial uses. This has left the integrity of the forest ecosystem and the species that rely on them in jeopardy. Plans are now going forward that will significantly increase logging pressures on the

Great Lakes ecosystem. Public lands in Ontario, accounting for about 30 percent of the Great Lakes watershed, will be opened to private development in the wake of the provincial "Lands for Life" process.

"The upper Midwest has been targeted by the forest products industry for a spate of deforestation. During the 1980s, because the removal of trees in Minnesota had gone from about 1.5 million cords to about 4 million cords per year, alarmed citizens asked the state of Minnesota to do an impact statement . . . the result was the infamous Generic

Environmental Impact Statement, an absolutely fraudulent document. The GEIS conceded that, at best, even at the lowest level of cutting being considered, there would be destruction of rare plant communities and loss of genetic diversity of all manner of forest species. Still, they prescribed clearcuts of over 10,000 acres, claiming that those would mimic natural catastrophe. That is a bald-faced lie.

"In 1987 the governors of Minnesota, Wisconsin and Michigan put together the group called the Lake States Forestry Alliance, an industry-dominated group set to advise the governors. Now the Michigan JobsCorp is actively recruiting out-of-state. In 1996 the JobsCorp is quoted as follows: "Michigan has lots of unused trees and wants to share the wealth. We want to

"Eight Minnesota rivers and streams going into Lake Superior have undergone 'surgical' removal of waterfalls to allow steelheads to gain upstream access."
—Glenn Maxham

make connections with the rest of the companies in other parts of the country that can use our excess timber.' " Bill Willers, Green Bay hearing

Toxics and Wildlife

The aquatic ecosystem of the Great Lakes is in an exceptionally unstable state of disarray, dependent on massive stocking efforts to maintain its apparent productivity. While the problems caused by exotic species and non-native sport fish tend to dominate the attention of state/provincial managers, the effect of toxic pollutants on native fish and wildlife reproduction was also raised by citizens throughout the hearings.

"Before Europeans arrived [lake trout] was the top predator in Lake Michigan and in all the Great Lakes. About 1950 the lake trout population crashed . . . due to overharvesting and the introduction of sea lamprey. Recently there's been a serious effort to reintroduce the lake trout back into its natural habitat. This effort has not met with the greatest success. The lake trout fry that naturally reproduce in Lake Michigan may hatch but they do not make it to the swimming stage—it's called early death syndrome. They're tracing it back to the formation of the eggs in the female . . . There's something that's affecting the production and growth of the embryos. It's starting way up the



Marilyn Burton

chain . . . Trout are something like the coal miner's canary . . . they're a gauge. They are the first thing that's going to get affected." Wally Bock, Chicago hearing

"My management authority has been testing fish since 1991 and we have a good record. We alternate between three lakes because the Tribes have rights to fish in the upper three Great Lakes, Superior, Michigan and Huron . . . We do twelve lake trout and twelve white fish in each lake on a rotating basis. We were seeing [toxics] levels come down, but now they seem to be fluctuating. . . . In Lake Huron we had dioxins that were high, in Lake Michigan, PCBs seemed to be high, and Lake Superior, toxaphene seems to be high." Mike Ripley, Sault Ste. Marie hearing

"While there were substantial decreases in fish concentrations of many of the

persistent toxic substances listed in the Agreement up to the 1980s, the changes since then have been almost imperceptible, indicating the need to address possible continuing sources of these chemicals into the system." Dr. Mike Murray, Detroit hearing

"The decline in the levels of PCBs in fish has leveled off. The effects on wildlife are still observable at these levels, meaning simply that the threshold levels for observable effects may not be reached for a long time to come. The good news reports tell you that the bald eagle is back. But the bad news is that there is evidence to show that those eagles which feed almost entirely on Great Lakes fish are not reproducing and they continue to show up with observed deformities such as crossed bills." Terry Yonker, Buffalo hearing

Regional Protection

Several speakers described their involvement in ecosystem restoration projects that have been organized as cooperative initiatives across several governmental jurisdictions that share a common resource—a watershed—and have committed to a shared vision for the larger community.

"It is our contention that the long-term ecological health and economic

"The lake trout fry that naturally reproduce in Lake Michigan may hatch but they do not make it to the swimming stage—it's called early death syndrome."

—Wally Bock

health of the Georgian Bay area can only be protected by undertaking a thorough assessment of the region's resources and their health, and planning for their protection and use as a single resource into the future. The current management framework is characterized by fragmented accountabilities that have led to, and continue to lead to, inconsistency in management, implementation, and enforcement as the federal and provincial governments, upper and lower-tier municipalities, and several First Nations try to figure out "who does what" and "what



Peter Lemon

is falling through the cracks . . . The Georgian Bay shoreline is not the only part of the Great Lakes shoreline in need of this type of integrated management and planning. Perhaps a movement towards this level of integration would go a long way to creating a sustainable future for the Great Lakes as a whole." Anneliese Grieve, Toronto hearing

"Superior Wilderness Action Network's mission is to map a proposal for a restored system of reserves across the Midwest northwoods: Minnesota, Wisconsin and the Upper Peninsula. Forest ecosystems are more than trees. Trees are the biggest guys on the block so to speak, so what they do is form this forest substrate for the other members of the forest community, which are probably 93 percent of the species there. If there are to be forest ecosystems, then there should be some that

are left in order that the management comes from within, that they be self-sustaining. This is a foundation of conservation biology, the 'core/buffer/corridor' concept, cores of natural self-sustaining forest ecosystems, surrounded by buffer zones and connected by corridors to protect the integrity of the core, so there will not be genetic isolation and inbreeding that leads to extinction. I'm not saying that is would be wrong to cut a tree here or there. Selective logging is radically different from modern industrial forestry. Modern industrial forestry is a shame and a crime." Bill Willers, Green Bay hearing

Recommendations

- ◆ Federal, state and provincial governments should adopt principles of conservation biology to develop co-

ordinated management plans for public resources—including lakes, rivers and terrestrial areas—that ensure the survival and protect the diversity of native species

- ◆ Providing habitat and promoting the proliferation of native fish species should be the primary task in fish management
- ◆ Local municipalities should develop strategies to counter consumption of urban habitat, wildlife corridors and open land by suburban sprawl

Government at all levels should:

- ◆ Invest in coastal area and riverine restoration projects to provide the foundation to rebuild a self-sustaining aquatic ecosystem
- ◆ Invest in additional sensitive lands acquisition and foster the development of an open process of multi-jurisdictional watershed planning
- ◆ Improve biological regulations at all levels, including:
 - Enact a strong Canadian endangered species law
 - Strengthen wetlands protections
 - Revise state drain codes
- ◆ Better control exotic species:
 - Create incentives and enforce regulations preventing entry of new exotic species into the Great Lakes basin
 - Fund programs to control existing exotic species and to research new, nontoxic control methods

"Modern industrial forestry is a shame and a crime." —Bill Willers

Zero Discharge

“**T**he philosophy adopted for control of inputs of persistent toxic substances shall be zero discharge.” *Great Lakes Water Quality Agreement, Annex 12*

“We support the goal of zero discharge of persistent toxic substances into the Great Lakes. These substances are simply too dangerous to permit their use or release in any quantity . . . one-seventieth of a teaspoon of mercury is enough to contaminate a twenty-five-acre lake to the point where the fish are unsafe to eat.” Darren Speece, Chicago hearing

“Water polluted by sewage effluent looks polluted. It is discolored and opaque; there are things in it. The trouble with the other common forms of pollutants is they often exhibit none of these clues. Water may be grossly polluted and yet so clear and sparkling that it seems not only harmless but healthy. This type of contamination involves the presence of chemicals that might be present in microscopically small amounts but so extremely dangerous that even amounts so small they can barely be quantified—a few drops of the chemical mixed into a billion drops of water—may be unsafe. If you can find them at all, there is good chance there is too much of them.” Ellen Partridge, quoting from *The Late*

Great Lakes by William Ashworth, Chicago hearing

“Although there is a great deal of skepticism that zero discharge of persistent contaminants is achievable, nothing short of zero discharge should be tolerated by those who profess to be interested and concerned about the health and wellbeing of the Great Lakes.” Ron Scrudato, Buffalo hearing

“Sometimes regulated interests scoff at us when we talk about zero discharge. And we tend to shy away from the term because, let’s face it, no one likes

Gordon Edwards



to be laughed at. But we should be talking about zero discharge. They say the technology is not available. But they are wrong. . . . In Saudi Arabia, where water is scarce and precious, they have been using zero discharge technology for twenty years. They remove and recover pollutants and they recycle and reuse the water. . . . I’m afraid that so long as we have a political system dominated by corporate campaign contributions, we will continue to see policies that coddle polluters.” Rae Schnapp, Gary hearing

In the Great Lakes community, we have two stories on pollution from toxic substances. The first story runs like this:

“Releases of targeted substances from specific dischargers are no longer measurable. They have, in fact, been virtually eliminated. . . . We should not continue to force a policy direction which places primary emphasis on chemical integrity and which will, most likely, result in no further measurable or significant reductions, or ecosystem response.” Council of Great Lakes Industries

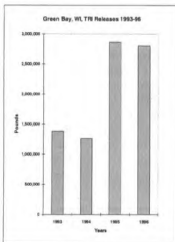
The second story is far less widely told. It runs like this:

“We argue over parts per million, billion, trillion, even quadrillion while still allowing hundreds of tonnes of

“Water may be grossly polluted and yet so clear and sparkling that it seems not only harmless but healthy.” —William Ashworth, *The Late Great Lakes*

persistent, mutagenic, bioaccumulative toxins and combinations thereof to slide into the lakes every day" Joyce McLean, Toronto hearing

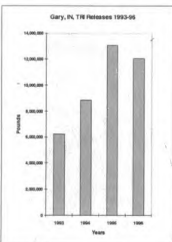
At hearing after hearing, citizens came forward to tell our panels that pollution prevention efforts in their communities have faltered or completely lost sight of the goal of ending the release of long-lived pollutants that are dangerous to life. Yes, we have made progress, many said, but the U.S. and Canadian release inventories still report very large amounts of toxic substances released by industries in the Great Lakes basin—a staggering 321 million pounds (146 million kilograms) in 1996. And that large quantity may be only 5 percent of the toxic pollutants entering the ecosystem, according to the U.S. General Accounting Office.



How can this still be the case? Speakers cited poorly regulated activities such as incineration, sewage treatment, pesticide use, and electricity production as well as accidental spills, leaks, fires and long-range air transport of persistent toxic substances into the basin.

Toxic releases

In some communities, locally permitted toxic releases are actually increasing, sometimes by very substantial amounts. Great Lakes United analyzed toxic release data from 1993 to 1996 as reported to the U.S. Toxic Release Inventory and Canada's National Pollutant Release Inventory in six of our hearings communities. In Gary and in Green Bay, total toxic releases have more



Toxic release trends, 1993 to 1996, in two Great Lakes cities.

than doubled over this time.

"At one time there was a decrease of the rate of pollution of the Detroit River. However, for the past four years there was no monitoring of the Detroit River by the state of Michigan. The federal TRIs show that toxic release is dramatically increasing in Michigan. Hence one may conclude that now the Detroit River pollution is increasing. Michigan's environmental permitting process is in shambles." Cheryl Minniefield, Windsor/Detroit hearing

"All I heard was how this [Guardian Glass] plant would be our economic savior. But, when I looked at the permit I saw huge numbers of pollutants that would be allowed into our air and thought surely the Department of Environmental Conservation would make them do better in controlling these pollutants. This is where I learned the DEC is not looking out for our best interests... This was a state-of-the-art, newly automated plant—where were the state-of-the-art pollution controls? The DEC didn't feel it necessary to make this plant operate at the cleanest possible level." Linda Ochs, Buffalo hearing

Incineration

In both Canada and the United States incineration is a prevailing solution for disposing of waste. Because of the abundance of chlorinated materials such as PVC plastics present in these wastes,

"One may conclude that now the Detroit River pollution is increasing. Michigan's environmental permitting process is in shambles." —Cheryl Minniefield

incineration results in the production and wide dispersal of cancer-causing dioxins and related chemicals. In fact, incinerators are the largest industrial source of dioxin and furans released into the Great Lakes basin. High levels of benzene, mercury, cadmium and other toxic substances are also released from incinerator stacks or left to be controlled in the ash. The U.S. Toxic Release Inventory and Canada's National Pollutant Release Inventory require reporting from only some waste incinerators.



Dan McDermott

"The two largest contributors of dioxins to all five Great Lakes are here in the Detroit area: The Grosse Pointe Clinton incinerator in Mt. Clemens and the Central Wayne . . . These same two incinerators are tagged by Governor Engler's Task Force on mercury as being the largest point sources of mercury in Michigan . . . The Central Wayne received its permit to expand from burning its present 150 tons per day to a projected 800 tons per day and will install newer pollution controls which will reduce some pollutants and increase others. However, the controls will capture more toxins in the ash and the operators are determined to market the ash for roadbuilding and construc-

tion uses. Ash containing heavy metals, dioxins and organics will then be distributed back into the environment. Does this make sense?" Ed McArdle, Windsor/Detroit hearing

"We need to stop all incineration of sewage sludge and stop new attempts to use incineration as a waste management option. If we don't, we will continue to pump persistent toxic substances into the air, which will poison our air, land and water." Jack Layton, Toronto hearing

"Put a moratorium on sewage incinerators in the Great Lakes basin and set a date of 2010 to have it stopped." Karey Shinn, Toronto hearing

"Living in a heavily industrialized area with a huge toxic residue from our

past, we have called for a moratorium on permits for new toxic waste handling companies in our area." Jesse Garcia, Gary hearing

Sewage treatment plants

When Great Lakes sewage treatment plants were built or upgraded in the 1970s, they were designed to cleanse wastewater of bacteria and excess nutrients, not industrial wastes. Nonetheless, industries around the basin discharge large volumes of toxic wastes to sewage treatment plants, which need not report to federal toxic release inventories.

"This can create a safe haven for wastes from companies that don't want to deal with EPA and can hide behind the

Silent Sperm

Sung by the Raging Grannies quartet at the Toronto hearing to the melody of "Silent Night"

Silent sperm, vanishing sperm,
Round the world, see men squirm.
Get the corporate ball so large
Rollin' along towards zero discharge!
Sleep in peace no more,
Sleep in peace no more.

Silent sperm, vanishing sperm,
What's to blame for this shame?
Synthetic hormones, dioxin,
PVC, pesticides, dry cleanin',
Phase out chlorine now,
Phase out chlorine now.


"Put a moratorium on sewage incinerators in the Great Lakes basin and set a date of 2010 to have it stopped." —Karey Shinn

WHAT YOU CAN'T SEE CAN HURT YOU !

Reported Toxic Releasers, Great Lakes Basin and St. Lawrence River, 1996

Total Releases (pounds)

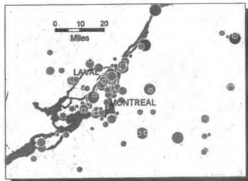
- 1 to 9 999
- 1 000 to 99 999
- 100 000 to 499 999
- 500 000 to 999 999
- 1 000 000 to 15 000 000

 Great Lakes Drainage Basin
 State and Provincial Boundaries

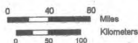
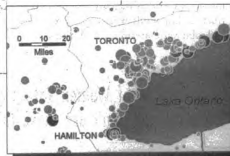
TOTAL RELEASES
321 MILLIONS POUNDS
146 MILLIONS KILOS
 United States: 177 millions pounds
 80 millions kilos
 Canada: 144 millions pounds
 66 millions kilos

TOTAL FACILITIES
3 736
 United States: 2 616
 Canada: 1 120

According to the U.S. General Accounting Office, the quantity of toxic emissions not reflected in the TRI "is unknown but could be substantial— as much as 95% of total emissions"



GREAT LAKES UNITED



Sources: Digital Chart of the World,
 USGS Hydrological Units,
 TRI 1996,
 CNPR inventory 1996.

Funding was provided by the
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Cartographic production and realization:
 Map Systems, GIS Analyst
 Email: m350414@er.usgs.ca

Pesticides

"In the Great Lakes basin, approximately 58 million pounds of pesticides are used annually for agriculture." Heather Reichmuth, Buffalo hearing

"Scientists measuring the Great Lakes storm-water basins found high levels of 2,4-D in 53 percent of the samples they tested. High levels of diazinon, which is toxic to a number of fish, bird and aquatic

species were also found in 47 percent of the samples." Russell Marchese, Buffalo hearing

"The League of Women Voters has a position on pesticides: zero use. . . . Tell industry; just don't use these things. And, I mean, there are alternatives. The word pesticide was not in the English language before the Second World War. They would often use insects to find out what would kill people." Marjorie Fisher, Chicago hearing

"My story began six and a half years ago when my son was born. I volunteered to research a less toxic mosquito control program for the Town of Amherst, New York. The town was using methoxychlor and malathion, sometimes mixing the two for a stronger brew. Both are reported endocrine dis-



The Raging Grannies: Fran Johns, Phyllis Creighton, Daphne Stapleton, Elaine Hall

municipal plant." Elizabeth Kaszubski, Buffalo hearing

"The Montréal Urban Community sewage treatment plant is one of the only STPs in Québec to monitor toxics. The rate of removal of toxic compounds such as chromium is around 50 percent . . . [the sewage sludge] is burned in an incinerator and the ashes are buried. There is a mercury problem." Guy Deschamps and Luc Lefebvre, Montréal hearing

"The Western Lake Superior Sanitary District has continued to act locally and adopted a philosophy of zero discharge of persistent, bioaccumulative toxics . . . As a result, the WLSSD has measurably reduced mercury and chlorinated compounds in our wastewater and solid waste streams . . . Our com-

munity has also responded to our zero discharge toxic reduction philosophy and has embraced this concept. Industrial and commercial sectors have reviewed and altered their processes and substituted raw materials that resulted in significant reductions. From our standpoint, the WLSSD and our community has responded to the Great Lakes Water Quality Agreement. However . . . it appears to us that the response by governments has not been at the same level of intensity or success. More alarming, it appears that governmental resources necessary to progress towards the goals of the Great Lakes Water Quality Agreement are diminishing or in some cases lacking altogether." Joe Stepun, Duluth hearing

"The League of Women Voters has a position on pesticides: zero use. . . . Tell industry: just don't use these things." —Marjorie Fisher

rupters . . . Both pesticides caused the demise of dragonflies, frogs and bees in and around the wetlands . . . These issues are not political issues, they are health issues. This should be the job of my government, not me." Regina Fidele, Buffalo hearing

"The City of Waterloo embarked on a pesticide reduction program for municipal green space in 1991. In 1996, Waterloo sprayed only 0.06 percent of an acre of 1,100 acres of parkland and that was for poison ivy. Since implementing this program, Waterloo has increased public greenspace by 48 percent and reduced the park department's budget by 47 percent." Janet May, Toronto hearing

Utilities

"The airshed of Eastern North America is steadily becoming dirtier. The culprits are found on both sides of the border . . . Detroit Edison's proposal to bring the antiquated and inefficient Conners Creek plant back on line is a perfect example of the progress in reverse we are experiencing in our collective fight for clean air . . . I would like to tell you that the Province of Ontario will lead the way in the struggle to head off the Conners Creek plan, but I can't. The government of Ontario has been silent . . . Ontario Hydro is forecasting a 40 percent increase in coal-generated electricity." Dan McDermott, Windsor/Detroit hearing



Peter Orris

"Competitive electricity marketing is arriving in the Great Lakes basin. As a result, mercury emissions are expected to increase as these relatively low-cost Midwestern coal plants are run longer and harder by utilities seeking to serve larger markets. Minnesota's coal plants will be ramped up to provide less expensive electricity to Chicago . . . Coal-fired electrical power plants account for at least one third of the mercury emissions in the Great Lakes region. They are the largest single source of mercury emissions . . . In other words, your local power plant is contributing to the mercury in the fish you catch from your local lake . . . There are no mercury emission regulations for power plants." Nancy Lange, Duluth hearing

"Seven hundred and forty-three lakes in Minnesota have fish consumption advisories due to mercury pollution. That is 94 percent of the lakes tested by the Department of Natural Resources. We need to make choices." Diana McKeown, Duluth hearing

Long-range air transport

"Continued diligence to meet the Agreement's goals becomes even more crucial as the evidence of damage to fish, wildlife and humans from exposure to persistent toxic substances continues to mount . . . While the majority of past efforts have been aimed at controlling discharges of contaminants to the water, growing evidence supports the need for increased focus on controlling sources of air pollution, both locally and from sources outside the basin that contribute contaminants by the atmospheric pathway." Dr. Peter Orris, Chicago hearing

"It is now commonly accepted by scientists working for the Canadian government that not only do we produce our own fair share of POPs [persistent organic pollutants], but also, because of the way these chemicals behave when they are released, Canada is a net recipient of POPs from other parts of the world . . . It has taken nearly ten years for the governments of the world to heed the pressure from citizens and negotiate a treaty that will target the

"Minnesota has 743 lakes with fish consumption advisories due to mercury pollution. That is 94 percent of the lakes tested." —Diana McKeown

twelve worst chemicals on the planet. But it will also take a Herculean effort from all of us to ensure we actually eliminate these chemicals from the planet. Because while [we] demand the elimination of these chemicals, others with a vested interest in their continued production continue to talk of 'risk management.' " Morag Simpson, Hamilton hearing

Accidents

Spills, fires and "fugitive emissions" add to the toxic burden in the Great Lakes ecosystem. In Hamilton, a warehouse filled with car interiors and other polyvinyl-chloride-filled objects caught on fire in 1997, releasing 100 million litres of dioxin-contaminated wastewater to Lake Ontario and causing dioxin levels in the air 10,000 times higher than normal concentrations found in Hamilton.

"Exactly a year ago today, the fire at Plastimet was into its fourth and final day. Local residents had been 'recommended to evacuate' the previous day. Most had done so earlier . . . The Plastimet site [was] an environmental disaster waiting to happen." Clive Jones, Hamilton hearing

"The recent growth in the trade of chemicals between our two countries is a natural outgrowth of the move to an integrated North American and world economy . . . On one day in 1996, 12



Joyce McLean

percent of the 3,260 average daily trucks using the Blue Water Bridge carried hazardous materials . . . A hazardous materials spill on the Blue Water Bridge would have a direct impact on the water quality of the St. Clair River." Grant Bauman, Windsor/Detroit hearing

"In 1995, for nearly seven months, Kodak failed to discover and correct a faulty vent that released about 30 tons of solvents into the environment, many of which are linked to cancer . . . Why hasn't Kodak paid for these violations? Is the New York Department of Environmental Conservation more interested in protecting the image of an industry giant than protecting the well-being of the people of western New York?" Judy Robinson, Buffalo hearing

Nuclear

"Canada's nuclear industry was born in secrecy, during wartime, over fifty years ago. Yet the associated technologies and their consequences remain practically invisible to most Canadians. For example, every year tonnes of Canadian uranium hexafluoride is transiting throughout Canada. It is moving on trains or on container ships on the St. Lawrence River away on its way to the United States, the United Kingdom, France and Russia for enrichment. That transportation of hex constitutes in itself a threat to the Great

Lakes and St. Lawrence River ecosystem." Gordon Edwards, Montréal hearing

"The nuclear fuel cycle is currently the main source of man-made radioactivity released into the Great Lakes ecosystem, contributing to 86 percent of the radioactivity emitted into the basin. Tritium and carbon 14, among others [are] radioactive substances of concern. Ontario's heavy water reactors release two to three times the amount of these lethal substances as reactors in the United States. But to virtually eliminate continuing radioactive pollution is a goal that is attainable . . . first let's go for reestablishing the energy efficiency programs that Ontario Hydro canceled only three years ago which could, for a compar-

**"Every year tonnes of uranium hexafluoride transit throughout Canada."
—Gordon Edwards**

tively small investment, have saved the equivalent of 4,000 megawatts of nuclear output by the year 2000." Ziggy Kleinau, Hamilton hearing

Zero for Lake Superior

"Lake Superior, because it's far more pristine and hasn't suffered the pollution of the lower Great Lakes, is the ultimate pollution prevention challenge, a place where we ought to make good on the promise of the Great Lakes Water Quality Agreement to achieve zero discharge. We believe if you can't do it on Lake Superior, then where can we do it? And if we can't do it now, then when can we do it?" Tim Eder, Windsor/Detroit hearing



Rae Schnapp

Recommendations

- ◆ Governments must reaffirm and fulfill their commitment under the Great Lakes Water Quality Agreement to virtual elimination and the philosophy of zero discharge of long-lived toxic substances
- ◆ Toxic release inventories should include waste incinerator, sewage treatment plant, power plant and other major sources of persistent toxic substances to the Great Lakes basin
- ◆ Toxic release inventory reporting thresholds should be lowered to capture releases of highly toxic micro-

pollutants like dioxin

- ◆ Canada and the United States should lead the way in negotiating an international treaty to eliminate the production, use, and emission of persistent organic pollutants
- ◆ Ontario should reinstitute its moratorium on new municipal waste incinerators and aggressively pursue producer- and consumer-targeted programs to cut waste. Great Lakes states should institute bans on new municipal waste incinerators
- ◆ Federal, provincial, and state governments should provide funds and common standards to help municipalities upgrade aging sewage treatment systems to deal with long-lived toxic substances

- ◆ Local governments should phase out pesticide use on publicly owned land. Private use of long-lived pesticides should be phased out next
- ◆ Government and industry should require that PVC plastics be separated from incinerator waste streams and establish sunset timetables for the use of PVC in all materials
- ◆ Fossil fuel and nuclear power plants should be phased out and replaced with plants using cleaner fuels such as natural gas and renewable energy sources, in combination with the creation of strong energy conservation programs
- ◆ As an interim measure, all coal-burning power plants should be subject to the best available pollution controls. Coal plant mercury emissions should be drastically reduced. Ontario should reestablish the energy efficiency programs canceled three years ago by Ontario Hydro
- ◆ All power generators should be subject to emission and environmental performance standards as a condition of licensing. Energy sources and the air emissions associated with them should be independently monitored and audited and fully disclosed to the consumer
- ◆ Radionuclides should be considered persistent toxic substances as defined in the Great Lakes Water Quality Agreement

"The least expensive way to keep our water clean is to prevent pollution at its sources. We have to plan for this to happen." —Karen Buck

Cleanup

“ ‘Areas of Concern’ means a geographic area that fails to meet the General or Specific Objectives of the Agreement where such failure has caused or is likely to cause impairment of beneficial use or of the area’s ability to support aquatic life.” *Great Lakes Water Quality Agreement, Annex 2*

Great Lakes United conducted its first round of citizen hearings in 1986. One of the primary purposes of that effort was to help bring the public into the “Remedial Action Plans,” the proposed multi-stakeholder process for cleaning up the forty-three Areas of Concern. At our second round of hearings twelve years later, citizens asked, “What has changed?”

“We are starting to consider the RAP process a failure. We urge the governments of the United States and Canada to prove us wrong.” Carl Huget, Green Bay hearing

“In terms of the process of the RAPs, I would have to say the word ‘stalled’ is pretty accurate.” Rod Stewart, Canadian Ministry of Environment, Sault Ste. Marie hearing

“The public threw themselves into the RAPs with the trust that at last we had found the mechanism to restore a clean Great Lakes. I am but one of hundreds of people across the basin who gave over a decade of volunteer time to those plans. Eleven years later, I find myself with greatly diminished hope for the Great Lakes and for the legacy we will be leaving to future generations of Great Lakes residents.” Sarah Miller, Toronto hearing

Citizens questioned the governments’ focus on paperwork milestones, such as New York State’s triumphal 1998 announcement that it had completed the second of three planning stages for its six Areas of Concern.

Curt Anderson



“If this were true, we would now have a comprehensive plan identifying the remedial actions necessary to restore the impaired uses and providing detailed work plans, schedules and benchmarks to initiate and complete remediation. It is our position that after ten years of gathering data, we have still not answered the basic questions.” Chris Walbrecht, Buffalo hearing

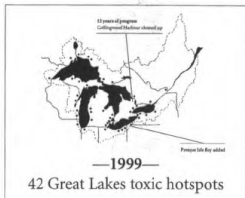
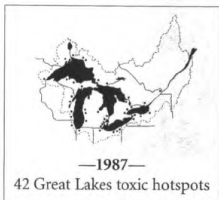
Contaminated sediments

In every Area of Concern, contaminated sediments are a source of continuing toxic pollution. Speakers expressed concern that current cleanup practices are not working. They insisted that cleanup means permanent isolation of toxins from the living environment for eventual destruction.

“More than 90,000 pounds of PCBs from past dischargers linger in the Fox River sediments. More than twice that amount has already moved into Green Bay, where it is virtually impossible to recover. Every year we wait on cleanup means

“More than 90,000 pounds of PCBs from past dischargers linger in the Fox River sediments.” —James Hodgson

What Has Changed in 12 Years?



Very little

One hotspot has been cleaned up—Canada's Collingwood Harbour, Ontario

One hotspot has been added—Presque Isle Bay at Erie, Pennsylvania

more PCBs lost to the bay." James Hodgson, Green Bay hearing

"Sometimes multistakeholder groups function best as a delay tactic for industry." Robin McClellan, Buffalo hearing

"The argument for natural attenuation, the process of clean sediment being allowed to cover contaminated sediment, has at least two major pitfalls. First, it does nothing to reduce immediate health threats to the public and the environment. Second, it does not recognize the need for healthy or-

ganisms that live in Great Lakes sediments—the building blocks to aquatic life. Simply covering them with clean sediment is akin to sweeping the problem under the rug." Lee Botts, Gary hearing

"Mills are telling people in the Upper Fox we should let PCBs attenuate . . . Big companies like to privatize profits and socialize losses. In bad economic times industry abandons communities, taking jobs but leaving behind their wastes. All of these mills are saying, 'Superfund and we leave.' Hey,

they're going to leave anyhow. These are old mills. They are building new mills all over the planet so we had better get them to clean up their mess now or they're gone." Curt Anderson, Green Bay hearing

"We have not made quick enough progress on well documented contaminated sediment removal and treatment. Canada needs a 'Superfund' to address this issue without all the obstacles involved in trying to get federal/provincial/industrial/municipal coordinated efforts. Efforts to date are very discour-

"All the mills are saying, 'Superfund and we leave.' Hey, they're going to leave anyhow." —Curt Anderson

aging. In-situ treatment isn't working. One area already dredged has been recontaminated. The most serious area hasn't been touched significantly at all." G. K. Rodgers, Hamilton hearing

"We cannot afford to simply displace persistent organic pollutants during the remediation of Great Lakes basin inactive hazardous waste sites and during the decontamination of water bodies such as those included in the Areas of Concern. . . . These contaminants must be isolated from the aquatic community and treated, not contained, to guard against continuing impacts. . . . Inhalation of PCBs is far more damaging than previously believed." Ron Scudato, Buffalo hearing



Lee Botts

145 million tonnes of radioactive waste ore, also called "tailings."

"The Serpent River basin is the largest source of radium in the Great Lakes. Studies show that levels of radium 226 in animals [there] is ten times those outside the basin. Five of the contaminated tailings areas have been decommissioned by what local citizens call a 'flood and flee management approach.' Under this scenario tailings are contained with a shallow cover of water. Citizens object to this method as inadequate. Decreases in precipitation could potentially re-expose radioactivity in the future. Worse yet, other management areas are following this lead and the North Shore of Lake Huron is now under consideration as a repository for high-level nuclear fuel waste." Brennain Lloyd, Sault Ste. Marie hearing

In Port Hope citizens are fighting continuous radioactive discharge from waste buried in caverns near a Lake Ontario beach.

"Uranium 238 has a half-life of about four billion years and we consider this pollution that has gone into our lake as permanent. In 1983 the government licensed a new mega-facility on the lake to handle the waste. [Fighting] this has chewed up my life. I'm getting nowhere." Pat Lawson, Toronto hearing

"I believe no one has mentioned the trouble we have had with the nuclear dry cask storage on the shores of Lake Michigan. We've always thought that they were cheap, badly designed casks, unproven, badly located and badly protected. Now that they are there, they will be there for generations." Vicky Mayer, Green Bay hearing

"The Nuclear Regulatory Commission has now decided that it will issue a special set of standards for the West Valley [nuclear waste] site. Some of us are concerned that the NRC will issue decommissioning standards for West Valley that are less protective than the standards they issued last year for the rest of the country. If this happens, it would mean that West Valley and

Radionuclides

The waste created by the extraction, use and disposal of radioactive materials remains highly toxic for up to billions of years. Uranium has been mined in the Great Lakes basin for fifty years to feed nuclear industries. Twelve active and inactive uranium mines are found in the Serpent River basin, on the north shore of Lake Huron. The mines left behind

"Studies show that levels of radium 226 in animals in the Serpent River Basin is ten times those outside the basin." —Brennain Lloyd

downstream locations such as Buffalo, Lake Erie, and Lake Ontario, are getting less protection from future radioactive pollution than the rest of the country has been given." Ray Vaughan, Buffalo hearing

Recommendations

- ◆ The governments should implement the recommendation by the International Joint Commission that "The political will should be found and financial resources allocated to dredge and remove contaminated sediments"
- ◆ Governments should support research and demonstration projects for permanent alternatives to incineration, land spreading or



Rod Stewart

burial of hazardous wastes, including volume reduction technologies to reduce decontamination costs,

the use of retrievable storage facilities on industrial property until safe destruction can be assured, and technologies for complete destruction of hazardous waste stockpiles with no resultant emissions

- ◆ Governments should fund Remedial Action Plan Public Advisory Committees to involve citizens in all cleanup implementation decisions until final goals are met in the Areas of Concern
- ◆ The International Joint Commission should recommend that the federal governments designate the Serpent River basin as an Area of Concern. The Canadian federal government should develop and fully fund a cleanup plan for the area.

"These contaminants must be isolated from the aquatic community and treated, not contained, to guard against continuing impacts." —Ron Scrudato

Water Export and Diversion

Over the past two years, threats to Great Lakes waters quantity from proposals to divert, export, privatize and otherwise intensify withdrawals of water from the basin have proliferated in Ontario and in Great Lakes states.

"The Great Lakes are 20 percent of the world's fresh water. The volume is 550 cubic miles. Where does it come from? It doesn't come from large rivers that feed into the basin . . . it doesn't come from any big fresh water springs . . . only 1 percent is renewed every year . . . approximately the top thirty inches . . . The other 99 percent was deposited here by the glaciers that formed the lakes twenty thousand years ago. So what we see out there in water quantity is what we've got. There is no more. It's not being made again . . . it's essentially a closed system, which makes it very fragile." Wally Bock, Chicago hearing

"I would like to urge the International Joint Commission, the governments of the United States and Canada, and state and provincial governments bordering the Great Lakes to address the issue of water diversion. Last summer, a plan was proposed that would have allowed the export of water from Lake Superior to Asia. Although the amount

of water proposed for export was small relative to the volume of Lakes Superior, the precedent that could be set by allowing any water exports is a serious concern. . . . Lake Superior is an international resource, and we must act as responsible custodians of that resource. We should not give it away." John Rebers, Duluth hearing

"Over the past two years, the Canadian side of the Great Lakes has seen an explosion of interest in privatizing public water resources. There has been a proliferation of public-private partner-

Sarah Miller



ships for the operation, building and management of drinking water and wastewater plants, and infrastructure. Groundwater in the basin is being depleted by intensified bottling operations. Proposals to export Great Lakes water in bulk by oceangoing tanker threaten to set trade precedents . . . It is no coincidence that all this activity is occurring here in Ontario. It is the lack of environmental controls and regulations which is making this province the door to exploiting the waters of the Great Lakes for private profit." Sarah Miller, Toronto hearing

"I wish to remind you that the Aral Sea in Russia was a lake larger than Lake Superior. It took only ten years for this huge lake to be reduced to a puddle through irrigation usage. Now it is gone." Karey Shinn, Toronto hearing

"I am really concerned about the permit that was issued by the Ontario Ministry of the Environment to allow the export of Lake Superior water to an Ontario company. . . . I don't even understand how the ministry had the statutory authority to issue a permit like that in the first place. . . . This kind of a permit needs to really be looked at and be taken seriously right now because it's just the tip of the iceberg. Even if one of those permits

"It took only ten years for Russia's huge Aral Sea to be reduced to a puddle through irrigation usage." —Karey Shinn

were to pass, it could have NAFTA implications, it could have all kinds of international ramifications." Gayle Coyer, Duluth hearing

"My clear understanding is that the federal government will not permit [the export of water] to happen. It's made itself clear in a number of press releases. I have communicated that at a Standing Committee Hearing here in Sault Ste. Marie a number of months ago, that this was just not going to happen. The federal government has jurisdiction over the Great Lakes and would be a necessary party to any permit issued to allow the export of that resource. I don't know how much more emphatic I can be. It's just not going to happen." Carmen Propensano, Member of Parliament, Sault Ste. Marie hearing

"We have the same thing that is about to happen in northern Wisconsin. It started with the Exxon company, but they bowed out because we made things a little hot for them. Rio Algom still intends to take water from the Wolf River and then contaminate it and then . . . pump it out of this system over to the Mississippi. This has to be stopped." Robert Schmitz, Green Bay hearing

"King Township is sometimes known as a rural and environmental jewel just to the north of Toronto and at other times as the new frontier for growing urban sprawl in the greater Toronto area. It is also home to the environ-



Bruce Craig

mentally significant Oak Ridge Moraine and the headwaters to several important rivers that flow into the Great Lakes basin [and into] big pipe sewer technology . . . The precious aquifers that supply pure drinking water to tens of thousands of people are being drained and sent to Lake Ontario via the sewer pipe . . . Plans to drain the aquifers through big sewer pipes and conversely considerations of pumping Lake Ontario water directly back into the pure aquifers must be vigorously opposed. Small-scale sewage alternatives will return ground water close to source and a sizable portion of this water will return to replenish aquifers." J. Bruce Craig, Toronto hearing

"York region is planning to ship water up to its area from Lake Ontario . . . At

this time a location around Pickering called Frenchman's Bay is being investigated for the intake pipe. This water arrives at Frenchman's Bay after passing by a sewage treatment plant outfall pipe, then the Pickering nuclear station. This highly polluted water is to be shipped up in yet another big pipe . . . to be chlorinated and put into the aquifer. It is impossible to imagine a more expensive system to build and to operate . . . and with such disregard for the environment." Debra Kyles, Toronto hearing

Recommendations

- ◆ Canada and the United States should develop an enforceable treaty preventing bulk export of water from the Great Lakes basin
- ◆ Canada and the United States need stronger federal policies on water diversions, groundwater diversions, and water use conservation
- ◆ Federal, provincial, state and local governments should engage alternatives to "big pipe" sewerage infrastructure by supporting small-scale, up-to-date technology to meet identified sewage needs
- ◆ Federal, provincial, state and especially local governments need to create and implement stronger policies for protecting local groundwater and aquifers that supply high-quality drinking water

"It is the lack of environmental controls and regulations which is making this province the door to exploiting the waters of the Great Lakes for private profit."—Sarah Miller

General Policy

"The ability of governments at all levels to deliver . . . is being stressed, and programs to restore and protect the Great Lakes have drastically slowed or halted, especially initiatives for Areas of Concern and those directed toward persistent toxic substances." *International Joint Commission, Ninth Biennial Report, 1998.*

"The Canadian Institute for Environmental Law and Policy has been charting in detail what has changed, and most of it is likely to have negative impacts on water quality in Ontario, including the water quality of the Great Lakes. Changes over the past three years include eliminating beach cleanup and restoration funds; the termination of drinking water testing programs; eliminating funds for Great Lakes cleanup; reducing Great Lakes science research capacity; reduced oversight of septic systems; elevating the permissible levels for some facilities; terminating the ban on incineration; and approval of large water takings with minimal review of impact." Anne Mitchell, Toronto hearing

Great Lakes Water Quality Agreement

Many of the more than three hundred speakers who testified at the hearings addressed the upcoming review and potential renegotiation of the Great Lakes Water Quality Agreement. Without exception, they called for implementation, not renegotiation of the Agreement.

"Twenty-six years ago, the governments of Canada and the United States had the foresight to sign the first Great

Charlotte Road



Lakes Water Quality Agreement in response to the visible effects of pollution throughout the basin. Renewed in 1978 and 1987, the Agreement has provided the basis for significant advancements in pollution prevention and control in both countries and has been updated to include issues such as persistent toxic substances. . . . The Agreement is sound, effective and flexible. Further review and renegotiation are not necessary, and that is the position of the International Joint Commission." Dr. Peter Orris, Chicago hearing

"This tool, the Great Lakes Water Quality Agreement, represents the best thinking of an entire generation of activists, citizens, scientists, open-minded agency people and politicians who actually listened to their constituencies . . . It is a philosophical benchmark, a shift in approach away from the chemical-by-chemical approach that hadn't managed to protect the resource, to an ecosystem approach that sought to actually preserve those frail systems." Sue Mihalyi, Buffalo hearing

"The Agreement is a wonderful document as it is. We strongly support it in its current condition and want it to be reauthorized. We are concerned that it not be opened for negotiation at the

"The Agreement is sound, effective and flexible. Further review and renegotiation are not necessary, and that is the position of the International Joint Commission." —Peter Orris

time because of obvious problems with our political climate.” Rebecca Katers, Green Bay hearing

“The number one message I want to send today is that the Great Lakes Water Quality Agreement—specifically its focus on the virtual elimination and zero discharge of persistent toxic substances—should not be renegotiated or changed in any way. Rather, it needs to be implemented.” Jack Layton, Toronto hearing

“We have seen governments cutting back in their environmental programs and we’ve seen international trade agreements such as NAFTA overriding efforts to protect human health and our environment. In that context, I’m very worried about the Great Lakes Water Quality Agreement being reviewed. Since it was signed in 1972 it has been strengthened in 1978 and 1987. But what will happen this year?” Jan Schakowsky, Chicago hearing

“With the political climate of today perhaps the Agreement is better left alone; we have seen attacks on other environmental regulations.” Judy Pratt-Shelley, Duluth hearing

Weakening Regulations

Citizens widely believe that the political



Sue Mihalski

will for implementing the farseeing policies outlined in the Agreement is lacking, that instead of stepping up to the challenges of the twenty-first century, our political leaders are retreating, and that the fragile structures for ecosystem protection developed over the past twenty-five years are being weakened or destroyed.

“Our experience has always been if we rely on goodwill to solve health and safety issues it is not going to happen. It requires enforcement, legislation, regulation, and government action.” Nick DeCarlo, Canadian Autoworkers, Toronto hearing

“We are not convinced at this point that Ontario is doing a good job of pollution reduction. We’ve adopted a more deregulatory approach and the

health and environmental communities are really concerned, trying to push the government back the other way. The more you deregulate, you can do it in a year and undo what has taken ten or fifteen years to put in place and it would take another ten or fifteen years to put it back. We just can’t wait that long.” Brian Stocks, Windsor/Detroit hearing

“Changes to water permitting in Wisconsin and other Great Lake states are institutionalizing the pollution of water

bodies as long as minimum levels of water quality are maintained. Through wasteload allocations industries have the right to pollute water bodies up to a certain level, including persistent toxic chemicals. The permitting does not take into account the bioaccumulation of persistent substances. The Fox River in Green Bay is the number one polluted body in the state and Great Lakes basin. Over 1,484,000 pounds of toxic chemicals are released into the area every year—this is now institutionalized under permits of zones of initial discharge. Great Lakes rivers are being used as dilution zones.” Rebecca Katers, Green Bay hearing

“The Great Lakes Initiative was looking at higher water quality standards to protect the Great Lakes. The U.S. Environmental Protection Agency is

“With today’s political climate perhaps the Agreement is better left alone; we have seen attacks on other environmental regulations.” —Judy Pratt-Shelley

sued "the Guidance" setting down standards the states would be expected to follow in setting their own water quality standards that would be used mainly to govern water pollution permits . . . But the Illinois Environmental Protection Agency wrote the monitoring rules in such a way that there are going to be only 750 chemicals with tests for them out of the 50,000 or so that should be regulated under GLI . . . by creative draftsmanship, they deregulated potentially thousands of chemicals." Albert Ettinger, Chicago hearing

"We must reverse the policy that assumes that chemicals are innocent until proven guilty." Regina Fidele, Buffalo hearing

"Indiana has had a rule on the books that said there should be no mixing zones in lakes, so that polluters have to meet water quality standards at the end of the discharge pipe. But Indiana has turned its back on this sensible policy. Our state legislature buckled under pressure from Amoco Corporation and ordered the Department of Environmental Management to allow Amoco and other companies to dilute their wastes in Lake Michigan water before meeting water quality standards." Rae Schnapp, Gary hearing

"Regulators cannot put their bottles or jars directly to the pipe. They have to keep bottles 300 to 500 feet away. You have got to be kidding me. People just do not know this. We shouldn't settle for anything less than zero discharge."



Albert Ettinger

Jim Sweeney, Gary hearing

"But to better protect all the Great Lakes, we need to complement the chemical water quality criteria with development of physical and biological criteria as well as numeric sediment criteria, nonpoint source reduction policies and strategies, a binational attack on air deposition, and a commitment to stopping or reducing pollution at the source instead of continuing to rely on limiting it at the end of the pipe." Charlotte Read, Gary hearing

Devolution

"We've seen incredible devolution, the movement: to dump responsibility

down to lower levels of government, who in turn dump it onto the public to the point where many of the so-called regulatory agencies basically say to the public, 'Here's a pile of data, I hope you can do something with it, figure out what it means, our job is done.'" Barry Boyer, Buffalo hearing

"The general devolution of responsibility for environmental issues to the provinces means provinces have the option to do nothing. For example, the Harmonization Agreement signed by the federal minister of the environment and her provincial counterparts allows the federal government to opt out of taking any leadership role in the Great Lakes Water Quality Agreement." Jack Layton, Toronto hearing

"Bill 107 downloads to municipalities the responsibility for 230 water and sewer plants now owned and operated by the province. . . . Cash-strapped municipalities may be forced to sell off these facilities to the highest bidder." Dominic Agostino, Member of Provincial Parliament, Toronto hearing

Downsizing

"The Harris government has so reduced the number of inspectors and inspections that effective control emissions of organochlorines into the Great Lakes from the Canadian side is now badly compromised. It is not enough to comfortably assure us that Lake Ontario is a very deep and that it does

"We must reverse the policy that assumes that chemicals are innocent until proven guilty." —Regina Fidele

not matter if the pollutants sink to the bottom." Joan Kent-Young, Toronto hearing

"At our [St. Mary's River] binational public advisory committee meeting on Wednesday we were told that staff had been cut at the at the Lake Superior Programs Office in Thunder Bay . . . We are not being funded to collect

data and monitor the Great Lakes. What we really need now is to fully articulate to the governments of Canada and the United States that we need to fully fund the agencies and programs that are vital to our management of the Great Lakes." William Bowerman, Sault Ste. Marie hearing

"[I] called an emergency pollution number about a spill in my area and it was closed because the governor [of Michigan] was saving money." Elaine Curtis, Gary hearing

"Governments are becoming more and more uninterested in the environment . . . Knowledge of the health of the Beluga in the St. Lawrence River is now uncertain. There is no 1998 data because there is no money to analyze and research." Dr. Pierre Beland, Montréal hearing

"The backlog of expired permits has



Dan Farough and the Detroit hearing panel: Mike Williams, Pat Hartig, Cheryl Minnsfield, Jim Mahon, Tim Elder

been estimated at around 700 state-wide, operating with requirements that existed before 1990. Many are for major industries discharging into basin waters. Only a handful of permits for major dischargers has been issued incorporating the criteria and standards set in 1990. To our knowledge, no major permit has been issued reflecting the [1997] GLI requirements." Charlotte Read, Gary hearing

"Many of Lake St. Clair's recent problems could have been avoided or minimized had existing laws been enforced. Because the EPA has delegated its enforcement authority to the state, the Michigan Department of Environmental Quality has the major enforcement obligation. The number of monitoring stations has been reduced by more than 70 percent, thus decreasing the information base. The federal, state and local governments have failed to enforce environmental laws, permits

and obligations or to fine those violators with a long history of compliance failures. For approximately twenty years, lack of enforcement and lenient permit compliance schedules on the part of all regulators has transformed the National Pollutant Discharge Elimination System permits from a device to limit pollution into a permit to pollute." Russell LaBarge, Windsor/Detroit hearing

"In the face of mass noncompliance, polluters are not charged a fee for the privilege to pollute our waters . . . Inspections are down by 40 percent . . . Between 1992 and 1996 enforcement actions dropped by 66 percent . . . By the Department of Environmental Quality's own admission we face a water quality monitoring shortfall of \$2.7 million." Dan Farough, Windsor/Detroit hearing

"The number of Michigan monitoring stations has been reduced by more than 70 percent." —Russell LaBarge

Clean Production

"Our state . . . mandated cleaner energy from our largest utility . . . Next week we will see the dedication of . . . the largest wind farm in the world in southwest Minnesota. We have the resources. We can do it!" Diana McKeown, Duluth hearing

"Since a 1996 survey, we have found that for every dollar that the Clean Manufacturing, Technology and Safe Material Institute at the University of Purdue spent, industry invested four dollars for clean manufacturing. For every dollar the state spent, over a five year period, a little over two dollars of state revenue was generated, because it included the bottom line of the company." Grant Smith, Gary hearing

"Introduce and market detergents, cleaning products, pesticides and herbicides throughout the basin that do not contain endocrine disrupters or nonylphenols and then ban the problem products. Many European coun-



Pierre Béland

tries have already done or begun this switch." Karey Shinn, Toronto hearing

Recommendations

- ◆ Do not renegotiate the Great Lakes Water Quality Agreement; implement it
- ◆ State and provincial agencies should comply with existing laws to review and enforce permit restrictions on

polluters. They should keep up with existing timetables to tighten permit limits to reduce air and water pollution discharges over time

- ◆ The use of mixing zones to dilute pollution released into public water should be stopped
- ◆ Federal governments should set clear timetables for phasing out and banning persistent toxic substances, and support clean production technology and process changes
- ◆ Federal, state and provincial environmental

program responsibilities should not be downloaded to smaller units of government without commensurate technical and financial support

- ◆ Federal funding should be restored and increased to Great Lakes water quality monitoring and research programs
- ◆ Great Lakes industries should begin the necessary investments to accomplish the transition from pollution reduction to clean production

"I called an emergency pollution number about a spill in my area and it was closed because the governor was saving money." —Elaine Curtis

Citizen Recommendations

Health

- ◆ Until fish in the lakes and rivers of the Great Lakes basin are safe to eat, government agencies should develop more effective communication with the public on the risks associated with eating contaminated Great Lakes fish. See the Sierra Club report "Something's Fishy" for six specific recommendations
- ◆ Native nations should be represented on the International Joint Commission and in all other treaties or agreements regarding the future health of the Great Lakes environment
- ◆ Local communities should be more meaningfully involved in cleanup plans, including development of design and siting options for disposal facilities, and should have veto power over plan implementation
- ◆ Health agencies should initiate and coordinate registries to better track and protect community health. For example, cancer treatment centres should record information on the occupational and locational histories of their patients; all chemicals used, produced or released in the community should be identified and registered; and health effects should be tracked in highly polluted communities such as Areas of Concern
- ◆ Regulations and tough enforcement

measures should be put in place to guarantee that industries substitute the use or production of cancer-causing and hormone-disrupting substances with safe alternatives

- ◆ The International Joint Commission should facilitate planning for "just transition" to a sustainable economy. Governments, labor and industry, and community members should jointly make these plans
- ◆ Local and regional governments should inventory the sources of drinking water contamination. The public should become involved in this process

Fish, Wildlife and Habitat

- ◆ Federal, state and provincial governments should adopt principles of

Sue Schreiber, Chicago hearing



conservation biology to develop coordinated management plans for public resources—including lakes, rivers and terrestrial areas—that ensure the survival and protect the diversity of native species

- ◆ Providing habitat and promoting the proliferation of native fish species should be the primary task in fish management
- ◆ Local municipalities should develop strategies to counter consumption of urban habitat, wildlife corridors and open land by suburban sprawl

Government at all levels should:

- ◆ Invest in coastal area and riverine restoration projects to provide the foundation to rebuild a self-sustaining aquatic ecosystem
- ◆ Invest in additional sensitive lands acquisition and foster the development of an open process of multi-jurisdictional watershed planning
- ◆ Improve biological regulations at all levels, including:
 - Enact a strong Canadian endangered species law
 - Strengthen wetlands protections
 - Revise state drain codes
- ◆ Better control exotic species:
 - Create incentives and enforce regulations preventing entry of new exotic species into the Great Lakes basin
 - Fund programs to control exist-

"To permit composting of toxic pulp and paper mill sludge is . . . medical experimentation on the unsuspecting public." —Walter Sarich

ing exotic species and to research new, nontoxic control methods

- Fund programs to control existing exotic species and to research new, nontoxic control methods



Jim Sweeney, Gary hearing

Zero Discharge

- Governments should reaffirm and fulfill their commitment under the Great Lakes Water Quality Agreement to virtual elimination and the philosophy of zero discharge of long-lived toxic substances
- Toxic release inventories should include waste incinerator, sewage treatment plant, power plant and other major sources of persistent toxic substances to the Great Lakes basin
- Toxic release inventory reporting thresholds should be lowered to capture releases of highly toxic micro-pollutants like dioxin
- Canada and the United States should lead the way in negotiating an international treaty to eliminate the production, use, and emission of persistent organic pollutants
- Ontario should reinstitute its moratorium on new municipal waste incinerators and aggressively pursue producer- and consumer-targeted programs to cut waste. Great Lakes states should institute bans on new municipal waste incinerators

- Federal, provincial, and state governments should provide funds and common standards to help municipalities upgrade aging sewage treatment systems to deal with long-lived toxic substances
- Local governments should phase out pesticide use on publicly owned land. Private use of long-lived pesticides should be phased out next
- Government and industry should require that PVC plastics be separated from incinerator waste streams and establish sunset timetables for the use of PVC in all materials
- Fossil fuel and nuclear power plants should be phased out and replaced with plants using cleaner fuels such as natural gas and renewable energy sources, in combination with the creation of strong energy conservation programs

- As an interim measure, all coal-burning power plants should be subject to the best available pollution controls. Coal plant mercury emissions should be drastically reduced. Ontario should reestablish the energy efficiency programs canceled three years ago by Ontario Hydro
- All power generators should be subject to emission and environmental performance standards as a condition of licensing. Energy sources and the air emissions associated them

should be independently monitored and audited and fully disclosed to the consumer

- Radionuclides should be considered persistent toxic substances as defined in the Great Lakes Water Quality Agreement

Cleanup

- The governments should implement the recommendation by the International Joint Commission that "The political will must be found and financial resources allocated to dredge and remove contaminated sediments"
- Governments should support research and demonstration projects for permanent alternatives to incineration, land spreading or burial of hazardous wastes, including volume reduction technologies to reduce de-

"The only way to get rid of persistent organic pollutants in your body is to have a baby." —Liliane Cotnoir

contamination costs, the use of retrievable storage facilities on industrial property until safe destruction can be assured, and technologies for complete destruction of hazardous waste stockpiles with no resultant emissions

- ◆ Governments should fund Remedial Action Plan Public Advisory Committees to involve citizens in all cleanup implementation decisions until final goals are met in the Areas of Concern
- ◆ The International Joint Commission should recommend that the federal governments designate the Serpent River basin as an Area of Concern. The Canadian federal government should develop and fully fund a cleanup plan for the area

Water export/diversions

- ◆ Canada and the United States should develop an enforceable treaty preventing bulk export of water from the Great Lakes basin
- ◆ Canada and the United States need stronger federal policies on water diversions, groundwater diversions, and water use conservation
- ◆ Federal, provincial, state and local



Alan Corbiere, Toronto hearing

governments should engage alternatives to "big pipe" sewerage infrastructure by supporting small-scale, up-to-date technology to meet identified sewage needs

- ◆ Federal, provincial, state and especially local governments need to create and implement stronger policies for protecting local groundwater and aquifers that supply high-quality drinking water

General Policy

- ◆ Do not renegotiate the Great Lakes Water Quality Agreement; implement it
- ◆ State and provincial agencies should comply with existing laws to review

and enforce permit restrictions on polluters. They should keep up with existing timetables to tighten permit limits to reduce air and water pollution discharges over time

- ◆ The use of mixing zones to dilute pollution released into public water should be stopped
- ◆ Federal governments should set clear timetables for phasing out and banning persistent toxic substances, and support clean production

technology and process changes

- ◆ Federal, state and provincial environmental program responsibilities should not be downloaded to smaller units of government without commensurate technical and financial support

Federal funding should be restored and increased to Great Lakes water quality monitoring and research programs

- ◆ Great Lakes industries should begin to make the necessary investments to accomplish the transition from pollution reduction to clean production

"The nuclear fuel cycle is currently the main source of man-made radioactivity released into the Great Lakes ecosystem—86 percent." —Ziggy Kleinau

Panelists and Speakers

Green Bay

Panelists

John Jackson, Ontario Toxic Waste Research Coalition
Robert Wagner, Justice and Peace Commission, Diocese of Green Bay
Margaret Wooster, Great Lakes United
Mark Muller, Institute for Agriculture and Trade Policy
Earl Metoxen, Oneida Tribe Environmental Resources Board

Presenters

Barbara Lawton, Candidate for Lieutenant Governor
Bill Willers, Superior Wilderness Action Network
Bob Schmitz, Clean Water Action Council
Len Pubanz
John Hermanson
Laura Manthey, Oneida Tribal Member
Dr. Jim Hodgson, Fox River Remedial Action Plan Science Advisory Committee
Annette Grunseith, Resident Poet
Kenneth Fish, Menominee Nation Treaty Rights and Mining Impact Office
Larry Gravin
Jason Isou
Bryce Larson, Pigeon River Priority Watershed Citizen Action Committee
Bruce LaMere
Charlie Frisk, Brown County Conservation Alliance, Audubon Society
Rosemary Hinkfuss
John Mutter Jr., Protect Our Wolf River
Vickie Mayer, League of Women Voters
Curt Andersen
Mitch Maricque
Matt Kittell
Rebecca Katers, Clean Water Action Council of Northeast Wisconsin
Bill Hurtle, Clean Water Action Council
Carl Hujet, Lake Michigan Federation, Wisconsin Audubon Council
Sarah Welch, Clean Water Action Council
Reed Hardy, Clean Water Action Council, Technical Advisory Board
Reg Gilbert, Great Lakes United
Emily Green, Sierra Club
Dorothy Lagerroos, Northland College

Bob Howe, University of Wisconsin
Rev. Jerry Kuehn
Kyle Strauss
Manjee Jahn

Detroit

Panelists

Mike Williams, Walpole Island First Nation
Pat Hartig, Humburg Marsh Committee
Cheryl Minniefield, Detroit River Remedial Action Plan
Mary Ginnebaugh, Detroit River Remedial Action Plan
Tim Eder, National Wildlife Federation
Jim Mahon, Canadian Auto Workers
Patricia Scotland-Lewis, Wayne State University
Diane Heminway, Citizen's Environmental Coalition

Presenters

Dan Farough, Clean Water Action
Dale Woodyard, University of Windsor
Guy Williams, National Wildlife Federation
Brian Stocks, Essex Lung Association
Bela Trebic, Binational Public Advisory Committee, St. Clair River
Sharon Bender, Binational Public Advisory

Lenore Estinger, Chicago hearing



Committee, St. Clair River
Sue Shanks, Binational Public Advisory Committee, St. Clair River
Russell LaBarge, Macomb County Blue Ribbon Commission on Lake St. Clair
Pete Foster, Michigan Nature Association
Ziggy Kleinau, Citizens for Renewable Energy
Cheryl Minniefield, Detroit River Remedial Action Plan
Tom Hendersson, Little River Enhancement Group
Pete Thomas, Canadian Auto Worker, Local 200 Environmental Rep.
Ken Bondy, Canadian Auto Workers Windsor Regional Environment Council
Dr. Mike Murray, National Wildlife Federation
Morse Brown
Wayne Lesard, Member Provincial Parliament
Lisa Tulen
Dana Bobinckek, Great Lakes United
Dan McDermott
Verma Lamach
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Doug Martz
Sally Billups, Michigan Environmental Council
Anna Holden, Sierra Club, Southeast Michigan Group
Ed McCordle, Sierra Club, Southeast Michigan Group
Saulius Simoliunas, Detroit River Remedial Action Council
Grant Bauman, St. Clair County Transportation Study
Mike Williams, Walpole Island First Nation
Tim Goldtooth, Walpole Island First Nation

Hamilton

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John Jackson, Ontario Toxic Waste Research Coalition
Clynt King, Six Nations Council
Diane Heminway, Citizen's Environmental Coalition

Ann Reddish, Past-President of Bay Area Restoration Council
Dr. Mark Spoule-Jones, McMaster University
Burke Austin, Community Action Parkdale East

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George Sorger, Professor of Biology, McMaster University
Clive Jones, Community Action North End
Morag Simpson, Greenpeace Canada
Brian McHattie, Hamilton Naturalists' Club
Ziggy Kleinau, Bruce Peninsula Environment Group
Keith Rodgers, Binational Public Advisory Committee, Hamilton Harbour
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Julius Tozzi
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G. K. Rodgers, Hamilton Harbour Remedial Action Plan

Sault Ste. Marie

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John Jackson, Ontario Toxic Waste Research Coalition
Cecilia Fernandez, Ontario Environment Network
Clynt King, Six Nations Council
David Trowbridge, Professor, Sault College

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Carmen Propensano, Member of Provincial Parliament
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Mike Ripley, Chippewa-Ottawa Fisheries Management Authority and Binational



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Duluth

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Oberstar

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Kira Henschel, Mining Impact Coalition
Arlene Hirsch
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Irene Gregory
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Toronto

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Valerie Pawlak
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Heather Reichmuth, New York Public Interest Research Group
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Kira Henschel, Mining Impact Coalition

Joanne Filion, Greenpeace Canada
Dr. Louise Vandelay, Université du Québec à Montréal

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André Stainer, Les Amis de la vallée du Saint-Laurent
Shelley Kath, Sierra Club
Bruce Walker, STOP
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