

# GREAT LAKES NEWS

Great Lakes United—an international coalition to protect and restore the Great Lakes / St. Lawrence River ecosystem

## A master strategy for restoring the Great Lakes

by Margaret Wooster

What do you see as the major elements of a long-term plan for restoring the Great Lakes-St. Lawrence River ecosystem? It may be time for Great Lakes citizens to think about this big picture.

In a precedent-setting move in the summer of 2000, at a cost of \$1 billion this year and nearly \$8 billion over the coming decade, the U.S. Congress decided to move beyond small fixes and embark on a large-scale effort to restore the legendary Florida Everglades.

Since then, Great Lakes members of Congress have started thinking: why not something similar for the Great Lakes? And basin activists have been wondering, why not a similar federal-provincial commitment in Canada?

### A serious opportunity

This is not pie in the sky. In March Great Lakes congressional staffers told a delegation of regional representatives looking for 2002 budget allocations for the Great Lakes to start thinking bigger. Last month U.S. Sen. Mike Dewine of Ohio delivered a rousing pep talk on comprehensive Great Lakes restoration to a confer-

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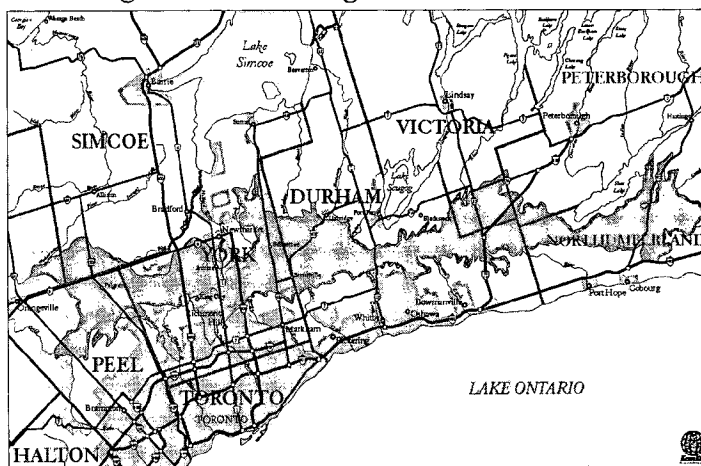
### Path-breaking large-scale land-use planning

## Ontario's Oak Ridges Moraine to get provincial protection

by Debbe Day Crandall

*Executive director, Save the Oak Ridges Moraine*

After six years of harmful indifference to the fate of the Oak Ridges Moraine, the government of Ontario has



*Lighter gray represent Toronto, its suburbs, outlying towns, and areas currently slated for development. Darker gray represents the moraine. Proposed legislation would restrict development in most of the moraine.*

shown environmental and political smarts—and potentially set an example for the Great Lakes basin—by pushing forward with a legislated land use plan for this significant landform: 195,000 hectares (250,000 acres) stretching across the top of the Greater Toronto Area, the most populous and fastest growing region in Canada.

The draft Oak Ridges Moraine Conservation Act is in second reading debate and is being fast-tracked through the provincial legislative approvals process. While the rapid movement is gratifying, it does present challenges to the conservation community in effectively commenting on the draft material.

*continued page 20*

### Great Lakes United's 2002 Annual Meeting

#### Bringing Everglades-Scale Restoration to the Great Lakes

Chicago, Illinois, June 7-9

National speakers, presentation of draft restoration  
plans by issue, plenary discussion, deciding next steps

## ... restoration strategy

*continued from the cover page*

ence that included most of the state's leading water quality officials. The key, according to Dewine: consensus among the region's governments and citizens about an overall plan.

Unfortunately, state, provincial and local governments currently lack anything like a collective agenda for the Great Lakes

### **We need a citizens' restoration plan**

Should Great Lakes governments start thinking about such an agenda, Great Lakes citizens and activists have a problem – we have never really outlined our idea of a comprehensive plan to restore the lakes as a whole. Great Lakes United would like to help solve this problem. We hope to facilitate the creation of a such a plan with basinwide grassroots ownership and support.

Basin citizens need not start from scratch in this effort. Since the signing of the Great Lakes Water Quality Agreement in 1972, our region has gained many years' worth of data, modeling, planning and action to protect and restore this basin ecosystem. We have a number of cross-border, ecosystem-based institutions. And limited cleanup and other restoration activities have taken place. For their part, Great Lakes citizen groups have also been working for years on new strategies for cleanup, pollution prevention, and protection of the natural function of rivers, wetlands and other ecosystem components.

However, as the recent report by Canada's commissioner of the environment points out, in recent years the governments' momentum has been lost. We need to put our years of experience and planning together into a collective strategy that includes both the social change and the investment elements that will be needed over the long term to protect and restore the world's largest supply of fresh surface water.

### **Great Lakes United's role**

Great Lakes United sees its role as supporting concerned activists from the basin's environmental community to, first, outline major elements of a comprehensive restoration strategy, and second, to plan a campaign among state, provincial, and federal officials to enact a comprehensive Great Lakes restoration plan into law.

We would like to support basin activists in constructing the draft elements of a plan this winter, and then encourage them to present their handiwork by conventional and electronic mail for wider discussion with the Great Lakes activist community during the spring. Finally, we would like to offer a forum for live presentation of revised elements of this draft strategy to the basin community at our annual meeting in Chicago this coming June.

The objectives of this effort are first, to support significant unity among the Great Lakes environmental community on a Great Lakes restoration plan, and second, to assure inclusion of plan elements in any proposed government programs and funding for Great Lakes ecosystem restoration.

### **The draft strategy**

The idea here is not a laundry-list strategy of every good thing that could be done to restore the Great Lakes ecosystem, but instead a focused strategy of a few elements with the following characteristics:

- ◆ *Would benefit the Great Lakes region as a whole.* For example, funding for effective, environmentally benign ballast water treatment technologies could have immediate benefits to all Great Lakes communities by preventing exotic species invasion that eventually spread throughout the lakes.
- ◆ *Points of funding impact are available.* For example, current proposed U.S. legislation, the "Great Lakes Legacy Fund," would appropriate \$50 million per year for the next few years to clean up U.S. contaminated sediment sites. An action plan for the toxics cleanup issue area could build on this initiative to make sure all toxic hotspots in Great Lakes rivers and harbors are finally and safely cleaned up.
- ◆ *Points of political impact are available.* For example, a group of partner organizations including Great Lakes United have worked successfully with the ten Great Lakes states and provinces in the ongoing Annex 2001 process for developing a common, ecosystem protective framework for regulating future water use.
- ◆ *One or more basin groups is already well enough advanced in work on the issue to credibly coordinate an action plan for the region.* For example, groups in Illinois, Minnesota, Michigan, and Ontario are already working on energy policies with fairly consis-

*continued page 27*

# Fox River cleanup plan does half the job

by Rebecca Katers

*Clean Water Action Council of Northeastern Wisconsin*

Thirty years after the Wisconsin Department of Natural Resources first started studying the severe PCB contamination of the Fox River and Green Bay, the government is finally proposing a cleanup.

Unfortunately, and potentially tragically, the federal Bush administration has weakened the state of Wisconsin's cleanup standard four-fold and backed away from the Clinton administration's interest in cleaning up the equally contaminated bay.

For the health of the Fox River ecosystem and its inhabitants as well as for the example it will set for future large-scale toxic cleanups in the Great Lakes, this plan must be dramatically improved after the public comment period ends January 21.

## The plan

The DNR and the U.S. Environmental Protection Agency propose to hydraulically dredge PCB hotspots in 19 of the 39 miles of river, to an average level of 1 part per million. PCBs—polychlorinated biphenyls—are extremely long-lived toxic chemicals that accumulate to high levels in fish, are present in quantities that are suspected to affect prenatal and newborn health in most human blood and breast milk, and are considered likely to cause fetal brain damage, and impact heart disease, diabetes, thyroid and reproductive organic disease among other ailments in adults.

Water would be removed from the sediment either passively (in settling lagoons) or mechanically (with presses). Wastewater would be treated before discharging it back to the river, then the sediment would be landfilled, transported by either truck or pipeline. Different

combinations of these techniques may be used in different sections of the river. Specific landfill disposal sites have not been selected.

Work would start in the summer of 2003, to be completed in seven years. Costs would be \$258.1 million for dredging and landfiling, and another \$49.5

million for monitoring, to be paid by eight paper companies who dumped PCBs in the Fox River from 1954 to about 1990.

## Slow results

The cleanup would be slow to improve the environment. On the upper reaches of the river, it would take fourteen years to protect high-intake human fish-eaters, according to the

agencies. But it will take twenty-nine years before fish-eating mammals are protected in the upper river. Projected improvements slow down considerably as you go down the river toward the bay. In the last stretch of the river and in the bay, where cleanup is not proposed, the agencies admit that it may take a hundred years of "natural recovery" (that is, dispersal of PCBs) before sport fish consumption warnings could be lifted.

## Polluters over health

The agencies claim the plan is driven by health concerns and to meet government health standards, but it utterly fails in this regard. It is clear that the plan is written first and foremost to keep costs down. For years cleanup of the Fox River has widely been expected cost around \$1 billion, but this plan scales that back to less than a third of the required amount. It does this primarily by deciding not clean up certain highly contaminated areas at all.

The public currently faces significant health risks, especially in the river downstream from the DePere Dam and in lower Green Bay. The cancer risks alone are



*Slightly downstream from DePere Dam, a view from Voyageur Park, next to the largest PCB deposit in the Fox River. According to toxicologist Jeffrey Foran, "Those who eat fish from the lower bay and below the DePere Dam face a cancer risk equal to smoking 2 to 3 packs of cigarettes a day."*

P.J. Ryan

roughly equal to smoking 2 to 3 packs of cigarettes a day. Then there are the many other risks, from Parkinson's disease to endometriosis. Waiting one hundred years for relief from these risks, the estimates for some sections of the river after the proposed cleanup, is simply unacceptable.

We believe the polluting corporations can afford the full \$1 billion cleanup. The responsible parties have \$27 billion in total assets and \$107 billion in total annual sales. Six of the eight responsible parties are large multinational corporations who can share the costs and spread them over decades, just like a home mortgage. Of the two small responsible parties, Appleton Papers, has already been determined to be responsible for only 1 percent of the cleanup costs (\$10 million if the full cleanup is carried out). With annual sales of \$110 million, that company could afford to shoulder its share of the blame over a thirty year period. The other small company, a spin-off of Appleton Papers recently founded by former Appleton employees, had its river cleanup liability capped at \$25 million, and the company has already put the money away for the purpose.

There is no economic downside to a full cleanup. No company will go out of business by paying its fair share, and none of the companies will reduce their payments by shutting down local mills.

### No action on the bay

The plan includes no remediation in Green Bay, which is in fact a large portion of Lake



*The paper companies responsible for the cleanup. Appleton Paper recently split into two smaller companies.*

Michigan. Cleanup dredging would stop at an imaginary line at the mouth of the river, though significant PCB contamination can be found in sediments just beyond the mouth and along the east shore of the bay, following the bay's counterclockwise currents.

The proposed lack of bay cleanup is ironic, given that Green Bay citizens waited two extra years for the proposal to be rewritten by the state at the insistence of U.S. EPA to include bay cleanup data and options—only to have the Bush Administration reverse course and ignore the data now provided.

The governments propose to remove a large percentage of the 66,000 lbs of PCBs in the river, but would take no action to remove any of the 69,000 lbs of PCBs at the extreme southern end of the Bay. Our analysis shows the bay PCBs could be removed for roughly the same cost per pound of PCBs in the river. The agencies have tried to discount the feasibility of a bay cleanup by implying that the area is too huge and PCBs are too dispersed, but their data say otherwise. The motivation for the decision to exclude bay cleanup seems to be solely to limit the total cost to the responsible parties.

Removal of the bay PCB hotspots could greatly speed the recovery in the Fox River below the last dam as well as in the lower bay. If the lower bay is not addressed, the bay PCB sediments will wash back up the Fox River with storm surges and seiches (tide-like sloshing in the bay). The fish in the last river section also move freely between the river and bay, raising questions about the plan's claim that it will take fifty-nine years for the fish to be safe to eat in this section of the river, but over a hundred years for the fish in the bay to be safe to eat.

Removal of the lower bay hotspots would also prevent PCB migration up the east shore of the Bay along Door County and out into Lake Michigan. Currently, up to 70 percent of the waterborne PCBs entering all of Lake Michigan are coming ultimately from the Fox River and Green Bay. Thousands of pounds of PCBs also rise off the river and bay surface annually to contaminate regions downwind.



## Weakened standard

Beyond failing to clean up significant highly contaminated areas, the standard for the entire cleanup project have been dramatically weakened in the proposed plan compared to earlier drafts. The 1 part per million PCB sediment cleanup standard in the plan is four times weaker than the .25 ppm proposal by Wisconsin of just two years ago. The state claims the Bush administration required this change.

The weakening represents a major retreat from health protection. For comparison purposes, anglers are warned to limit their intake of fish with over .05 ppm PCBs in their bodies. Given the nature of PCBs to accumulate in fish, the cleanup standard should be significantly lower than for fish consumption advisories.

Furthermore, the 1 ppm standard is actually misleading because it will not be applied known PCB hotspots which are well over 1 ppm in the river and bay that are not scheduled for any cleanup.

## Unrealistic fish consumption estimates

There are a number of methods used by the government to assess the risk of environmental contamination to human health. Since the cleanup is aimed at reducing health risk to some defined acceptable level, different methods for assessing human health risk yield different cleanup requirements.

Average rates of fish consumption by individual anglers is an important factor in the calculation of human health risk. The more fish caught in the river or bay that people eat on average, the greater the cleanup would have to be to make that consumption safe.

The agencies designing the proposed Green Bay cleanup used a fish consumption rate that is only half the rate identified in scientific literature for highly exposed populations, that is, native people, minorities, and those who rely on fish for subsistence. In addition, the agencies used a "reduction factor" that assumes that cooking and cleaning reduces contaminants, but, of course, this protection factor does not exist for those individuals who don't cook and clean following state guidelines. Our river and bay is used as a subsistence food source by several Native American tribes, Hmong and Laotian refugees, minorities and low income residents.

Wisconsin DNR has estimated that there are 14,000 subsistence anglers in the Fox River / lower Green Bay region.

This is an environmental justice issue. Their health is being risked in order to reduce liabilities for seven corporations who can definitely afford the responsibility all agree they have the damage they have done to the waters of the Green Bay area.

## Treatment and disposal

Finally, the proposal's disposal plans for the dredged material are not adequate. The sediments with higher PCB concentrations need to be detoxified before they are landfilled, and the process used should not make matters worse by creating other toxic chemicals, like dioxins, as a byproduct. Incineration of PCBs releases these byproducts, so other, non-burning methods should be employed.

Furthermore, the standards for operating the landfill that will receive the sediment should be stricter than

*Fox River fish PCB contamination concentrations rise dramatically downstream (north) of DePere Dam.*



Eric J. Kormanick

normal, to prevent significant PCB volatilization (evaporation) into the air and to make sure leaking wastewater does not re-enter the environment. Certainly that wastewater should not be sent through regular sewage treatment plants. So far, the plan contains none of these safeguards.

### Please comment

The proposed plan's problems are serious and must be remedied before the plan is implemented. Please write DNR and EPA to tell them what you think by January 21 at: Ed Lynch, PE-RR/3, WDNR, Fox River Proposed Plan, 101 S. Webster St., P.O. Box 7921, Madison, Wisconsin, 53707 or send to [FOXRIFFS@dnr.state.wi.us](mailto:FOXRIFFS@dnr.state.wi.us).

To learn more, please visit [www.FoxRiverWatch.com](http://www.FoxRiverWatch.com).

## Michigan keeps destroying its irreplaceable dunes

by Tanya Cabala, Lake Michigan Federation

Lake Michigan's coastal sand dune system is a magnificent natural feature that despite limited state protection continues to be destroyed by commercial mining.

The largest assemblage of freshwater dunes in the world, the uniqueness of the Michigan dune system comes from the important plant and wildlife species that live in them, their closeness to freshwater, and their diverse settings - beaches, foredunes, interdunal wetlands and mature forests. Once destroyed, the sand dunes cannot be re-created by humans.

The dunes are a significant international attraction that helps to maintain Michigan's tourism economy. Sleeping Bear Dunes National Lakeshore has attracted over a million visitors each year for the last five years. More than a half a million people visited the state lakeshore dunes park, P.J. Hoffmaster State Park, in 1998.

Since the mid-1800s, Michigan's coastal dunes have been mined for sand for use in foundries to make molds for metal car parts. Mining companies and some foundries contend other types of sand require more processing and are more expensive. Ford Motor Company, however, has had a corporate policy since the early 1970s not to use dune sand in their castings division, and has used sand from inland sources without a change in the cost or



For View Lake Michigan Federation

quality of castings.

State protection for the dunes was initiated in the 1976 with the passage of the Sand Dune Protection and Management Act, which regulated mining by requiring permits, environmental impact statements, mining plans and surveillance fees. It also had a strong emphasis on protection, as evidenced by a specific clause for denial of permits if mining activities were "likely to pollute, impair, or destroy the air, water, or other natural resources or the public trust in those resources."

With the new law, the public believed the dunes were finally being protected, but mining away of the dunes continued at a steady rate.

In 1999, the Lake Michigan Federation published a report detailing the status of mining in the dunes since passage of the law. The report, *Lake Michigan Sand Dunes: Threats From Mining*, showed that, since 1976, permitted mining areas jumped from 3,228 to 4,884 acres, over 50 million tons of sand had been mined from the coastal dunes at a current rate of about 2.8 million

tons of sand per year, and new dune areas were still at risk. The report pointed out that the Michigan Department of Environmental Quality had denied only two mining permits and there were numerous incidents of lax and ineffective oversight of the state law.

Since the report release, the federation has also found new examples of poor regulatory oversight by DEQ:

- ❖ In August 2000, DEQ was poised to grant a permit to mine in the Knauf Property, a 73-acre dune property surrounded in part by the pristine Ross Nature Preserve in Allegan County. The mining company planned to fill in a wetland on the preserve for trucks to access the dune property. Protests organized by a southwest Michigan dunes protection group, Preserve the Dunes, and the federation halted the permit application process.
- ❖ This past summer, DEQ planned to approve a permit amendment for a company that was mining a 20-acre dune site for a residential home and pond to increase its mining to another 115 acres to prepare for more homes on the site. The federation objected and the company withdrew its application.

Protecting sand dunes is a top priority of the Lake Michigan Federation. With funding from the U.S. Environmental Protection Agency and the C.S. Mott Foundation, the federation has established a citizen sand dune task force, held public meetings on the coast, produced educational materials, called for and testified at sand mining permit hearings, and worked to begin sand dune preservation efforts in coastal communities.

### Educational materials

The Federation now has a comprehensive sand dune education packet, containing fact sheets on dune literature and Web resources, a dune ecology brochure, a summary of state regulation of mining and development in sand dunes, a state contact list and explanation of how the state implements the statute, and a "tools booklet" including case studies for use by local coastal governments interested in increasing dune protection.

### Dune web pages

Considerable new information has recently been added to the federation Web site, [www.lakemichigan.org](http://www.lakemichigan.org), which now hosts one of the most informative sets of pages on Lake Michigan dunes in the region.

### Student art and poetry project

Work with shoreline schools in West Michigan resulted in a unique and inspiring collection of visual arts and poetry by K-12 school students.

Seventeen artworks were framed for an exhibit and displayed in shoreline communities for the past year.

One piece of artwork was used to create a poster, with full color artwork on one side and historical dune information written by Dave Dempsey, policy advisor for the Michigan Environmental Council, on the other side. This poster is distributed for free to schools and libraries.



*"Pioneer Dune Grass and Lake Michigan," by Amy Vance, grade five, Shelby, Michigan*

A large selection of the art and poetry has also been included in a full color undated daily planner, that also includes interesting facts about Lake Michigan dunes. An example of the poetry written by the students:

### Up and Down the Dunes

*Dunes  
sandy, warm  
sitting, growing, collapsing  
made by different rocks  
sandy hills*

Ryan Kanola, grade four, Muskegon, Michigan

### Citizen meetings

The Federation has hosted numerous community meetings along the lakeshore to inform citizens about the value of the dunes, history of their protection, state

regulation, and mechanisms for protection and preservation.

Community sand dune protection workshops  
The Federation sponsored workshops for local government officials, planning commissioners, and interested members of the public in order to increase awareness of tools for local sand dune protection. With assistance from the Federation citizens who attended one workshop formed a local group, which is fighting illegal off road vehicle use on the state owned dunes in their community

### More protective legislation

In response to the Federation's report, in both 2000 and 2001, State Representative Julie Dennis (D-92<sup>nd</sup>) and Senator Gary Peters (D-14th) have introduced state legislation calling for a phase-out of mining in the dunes.

Public support for increased state protection of the dunes continues to grow, but the DEQ continues to regularly grant permit renewals for mining in the dunes and also refuses to encourage coastal dune mining operations to pursue inland sand substitutes or the use of non-sand molds.

For more information, or to obtain the educational materials described in this article, please contact the Federation at [michigan@lakemichigan.org](mailto:michigan@lakemichigan.org) or 616-850-0745.

## U.S. state attorneys general urge mercury switchout

by Margaret Wooster

At the urging of New York State Attorney General Elliot Spitzer, twenty-six state attorneys general have signed a letter asking Ford Motor Co. to voluntarily remove mercury switches from recalled cars at the same time it replaces Firestone tires prone to blowouts.

The letter built upon the findings in *Toxics in Vehicles: Mercury*, a report released earlier this year by Great Lakes United, Ecology Center, and the Center for Clean Products and Clean Technologies at the University of Tennessee. Our report documents how vehicles currently operating in North America could release as

much as 200 tons of mercury into the environment through the scrapping, shredding and metal recycling operations currently in place for dealing with vehicles at the end of their lives.

### Mercury's health effects

Mercury's effects on human health—internal organ damage, harm to reproduction and fetal development and impairment of brain and nerve function—have long been established, and mercury has been identified as a Great Lakes "critical pollutant" since 1985. A majority of fish consumption advisories in the basin are related to mercury and advances in scientific research have increased previous concerns about human exposure to mercury, particularly to developing infants. The International Joint Commission has recently identified mercury as its priority issue for 2001-2003.

### The AGs' letter

Excerpts from the attorneys generals' letter to Ford Motor Co.:

"Ford presently uses mercury switches for convenience lighting in the hoods and trunks of many of its vehicles, and installs mercury switches in certain anti-lock brake systems and other applications. The new Ford vehicles that contain mercury switches, and the tens of millions of existing Ford vehicles on the road and in junkyards that contain mercury switches, represent an enormous potential for release of mercury to the environment.

"As no effective national program exists to remove mercury switches from vehicles at the end of their use, these switches remain in the vehicles during junk car scrapage and then are melted in steel furnaces where the mercury vaporizes into the air. Such furnaces, which receive the bulk of their mercury from junked vehicles, are the fourth largest source of airborne mercury emissions nationwide, after utility and industrial boilers and



*A mercury lighting switch, the barrel-like object with a small protrusion at bottom center. The non-mercury-containing replacement looks the same.*





*A New York State Department of Environmental Conservation official removes a mercury hood light switch from a Buffalo Police Department vehicle at an April press conference.*

incinerators.

"The release of mercury endangers human beings, fish and wildlife and the environment. After mercury is released into the air, it falls to the land and water through precipitation and dry deposition. Once in aquatic ecosystems, a few grams of mercury can contaminate life in a large water body. Through biological processes, the mercury is transformed to the more toxic methylmercury, and in that form it increases in concentrations in fish and wildlife further up the food chain. Thus, larger predatory fish that anglers enthusiastically seek contain very high concentrations.

"The consumption of mercury-contaminated fish poses a considerable threat to public health. Concern about the risk to the developing fetus led the Center for Disease Control and many state and federal health agencies to recommend that women of child-bearing age reduce or eliminate their consumption of fish.

"Several years ago, Ford recognized the dangers that its use of mercury poses to public health and the environment and pledged to eliminate its use of mercury switches. However, Ford has not followed through on this pledge. At the same time, many of Ford's competitors already have phased out installation of mercury switches in convenience lighting and braking applications in most models. Moreover, Ford has not addressed the threat posed by its past use of mercury switches.

"Ford's decision to recall vehicles to replace 13 million Firestone Wilderness tires presents a unique opportunity to eliminate future mercury releases in an effec-

tive, inexpensive and timely manner if Ford institutes a switch replacement program along with its tire replacement program.

"Non-mercury switches are inexpensive and reliable and can be quickly installed. Such alternatives perform equally well, as is demonstrated by their long use in other cars. Since Ford's tire recall will affect as many as three million vehicles, most of which contain at least one switch containing about a gram of mercury, a switch replacement program could potentially prevent over three million grams of toxic mercury from being released into the environment.

"This recall effort offers an excellent way to jumpstart a broader program to phase out all mercury switches from new vehicles and develop programs to replace them in existing vehicles whenever they are brought in for service or recalls. Given the hazards of mercury, the availability of acceptable alternatives, and the ease of replacement or removal, the continued use of mercury switches and the failure to remove them poses an unnecessary environmental and health threat that greatly outweighs any possible benefit. This recall offers Ford an opportunity to move the industry onto a safer path."

### **Jump starting Ford**

This November Great Lakes United and the U.S. national Clean Car Campaign kicked off a nationwide "Switch the Switch" pilot program to replace convenience lighting mercury switches in customer vehicles with mercury-free alternatives. Car dealerships across the country offered the switch exchange as an added service or a limited amount of switches. For more information on the Clean Car Campaign, visit the Web site at [www.cleancarcampaign.org](http://www.cleancarcampaign.org).

Of course the ultimate solution is for the industry to take responsibility for mercury recovery, through initiatives such as the one proposed by state attorneys general, and through establishment of an infrastructure in each state for recovering mercury from cars and removing it from circulation. This is an example of the burgeoning movement toward requiring "product stewardship" by manufacturers.

### **Mercury levels up in inland lakes**

For those hoping that, however bad they may be, our mercury problems are at least improving, might want to look at the situation in eastern New York state.

Recent trends indicate increasing mercury concentrations in inland lake populations of birds and fish. The state recently reported five more large Adirondack lakes to be polluted with mercury, bringing the total to twenty in this largest state wilderness park in the nation.

High mercury levels are found in waters that are also tainted by acid rain, as acidic waters break down the chemical bonds that encapsulate mercury in other compounds, allowing it to become more readily bioavailable.

The twenty affected lakes are: Lake Champlain; Cranberry, Schroon, Indian, and Beaver Lakes; Carry Falls Reservoir; Ferris, Fourth, Francis, Halfmoon, and Meacham Lakes; Moshier Reservoir; Round Pond; Stillwater Reservoir; Sunday Lake; and newly added Upper and Lower Sister Lakes, Dart Lake, Big Moose Lake, and Soft Maple Reservoir.

## Canada's oldest nuclear reactors poised for restart

*by Irene Kock, Sierra Club Nuclear Campaign*

Ontario Power Generation has received government permission to reopen four of the Canadian Great Lakes nuclear reactors mothballed in 1997 and originally scheduled to reopened no earlier than 2005 if ever.

The province of Ontario has five nuclear stations at three sites, each station consisting of a set of four reactors. At Ontario's Bruce "A" station, reactors 1, 3 and 4 were closed in March 1998 by what was then called Ontario Hydro. Bruce reactor 2 was closed in 1995 because of irreparable damage to its steam generators.

The four Pickering "A" reactors were closed under the same program on December 31, 1997, coinciding with the un-met regulatory deadline for upgrading its single fast shutdown system.

At the time of the stunning nuclear shutdown announcement in August 1997, Ontario Hydro declared that the closures were due to management problems across its entire twenty-reactor fleet, as well as abysmal performance at the older "A" stations. The utility stated that operations would have to be world-class at the remaining twelve reactors at the Bruce B, Pickering B, and Darlington stations before the reactors at the older Bruce and Pickering "A" stations would be restarted.

The utility developed a program to reach that goal, but its expected completion date is the end of 2004. Nevertheless, one of Ontario Hydro's successors, Ontario Power Generation, has just received regulatory approval to restart Pickering A later this year.

### Pickering A—a whitewash

In February 2001 the Canadian Nuclear Safety Commission (formerly the Atomic Energy Control Board) announced that it had approved a "screening level" environmental assessment report on the proposed restart of Pickering A. The CNSC-controlled assessment process lacked independence, and the scope of the review was limited to exclude consideration of both the cost of and the need to restart Pickering A.

The report did also not include a review of the environmental, human health or economic effects of a severe nuclear accident where the containment system fails to work. Various safety systems, including containment, are not fail safe and have on occasion been found in states where they would have failed to operate as designed if needed during an accident. The reactor shutdown system at Pickering A is sub-standard, even with the planned upgrades, compared to other nuclear plants in Ontario.

Public intervenors in the CNSC hearing process argued that the need for restarting the Pickering A reactors should be assessed in order to determine whether the risks involved are justified.

OPG intends to restart the first of the four Pickering A reactors within months, for connection to the electricity grid by spring 2002. The publicly owned utility intends to operate Pickering A for at least another decade.

### Bruce A and B—private operator

In May 2001 OPG handed the keys to the Bruce A and B nuclear stations over to a new company, Bruce Nuclear Power Development, under an eighteen-year lease agreement. Bruce Power is the first private operator of nuclear stations in Canada.

The Saskatchewan-based uranium mining and processing company CANEXCO is a 15 percent partner with British Energy in Bruce Power. Two unions with members employed at the Bruce site own a combined 5 percent interest of the company. British Energy, a formerly public company privatized in 1996, operates fif-



Courtesy: Bruce Generation

*The Bruce nuclear power facility, located on the Bruce Peninsula on Lake Huron*

teen nuclear reactors in the United Kingdom. British Energy and Exelon own three nuclear stations in the United States (at the Three Mile Island, Clinton, and Oyster Creek stations) under the company name Amergen.

### **Bruce 3 and 4 restart planned**

Bruce Power has initiated a CNSC environmental assessment process to restart Bruce A reactors 3 and 4. Restart would take about a year and require a separate CNSC licensing hearing.

Inspection of about 8 percent of the fuel channels at the two twenty-two-year-old reactors has reportedly taken place, under a contract with Atomic Energy of Canada Limited. The hundreds of horizontal fuel channels in CANDU reactor cores are prone to age-related problems including "creep" and "sag," where the metal thins out over time and the pressure tubes become wider and longer, bending under the strain. This increases the chance of rupture in the reactor that can cause disastrous loss of coolant.

Various design changes were made in later stations to try to accommodate this problem, but eventual tube replacement ("retubing") is probably required. While Bruce 3 and 4 could conceivably be run for a period of years prior to costly retubing, Bruce 1 and 2 could not.

The nuclear industry theorizes that damaged pressure tubes will always leak before rupturing, allowing time to shut the reactor down before a loss of coolant accident occurs, an assumption they call "leak before break." However, there have been at least two cases of pressure tube rupture in Ontario reactors: at Pickering 2 in August 1983 and at Bruce 2 in March 1986. All fuel channels at the Pickering A station reactors were subsequently replaced.

### **MOx plutonium fuel concerns**

Bruce Power has not ruled out the possibility that it may use mixed oxide (MOx) plutonium fuel at the Bruce nuclear stations in future. This fuel, the product of a program to recycle the explosive material from decommissioned U.S. and Russian nuclear warheads, may not be used in Canadian reactors for a number of years, if ever, but a controversial testing program is presently underway at Atomic Energy of Canada Limited's Chalk River Nuclear Laboratories. The Canadian government avidly supports the use of mixed oxide plutonium fuel. There are a number of outstanding concerns regarding the MOx-plutonium fuel import plan, including transportation and reactor hazards, as well as civil liberty and international security issues.

For further information, contact Irene Kock at 905-852-0571 or [nucaware@web.ca](mailto:nucaware@web.ca).

## **Building a long-term Great Lakes energy plan**

*by Irene Kock, Sierra Club Nuclear Campaign*

In a preliminary effort to contribute to the energy component of an overall Great Lakes restoration strategy, Great Lakes United's Nuclear Free Green Energy Task Force has begun to coordinate a "green energy" policy document.

Over the next few months we hope to collaborate with

a number of basin groups who have been doing related work and to present a joint draft document to the basin public for review in the spring. We would like to cap all this work by release of a revised draft and live discussion at Great Lakes United's annual meeting in Chicago next June, followed by debate over next steps to ultimately get the plan implemented.

The document will feature sections on energy efficiency and conservation measures, renewable supply options, market mechanisms to support green power, a standard definition for certification and labeling of green power products, policies to accelerate the phaseout of nuclear and coal power stations, and "just transition" options to assure worker and community security.

The help of all concerned basin citizens is needed to make this document and followup work as strong as possible.

For further information or to get involved, contact one of the task force co-chairs: Alice Hirt, West Michigan Environmental Action Network, 616-335-3405 or [aliceh777@aol.com](mailto:aliceh777@aol.com); or Ziggy Kleinau, Citizens for Renewable Energy in Lion's Head, Ontario, 519-795-7725 or [cfr@web.ca](mailto:cfr@web.ca).

## Rescheduled IJC biennial sobering, provocative

*by Margaret Wooster*

Approximately 400 citizens, scientists, and policymakers attended the IJC Public Forum on October 19 and 20 in Montreal. Postponed from its originally scheduled date due to the events of September 11th, the meeting was scaled down considerably from what was originally planned, as well as from past Public Forums, which once attracted thousands of people.

The commission is a Canada-U.S. treaty body that referees border disputes and is the watchdog of the 1972 Great Lakes Water Quality Agreement. Of the six commissioners (three Canadian, three U.S.), only four are currently in place: on the Canadian side Mary Gusella (chair), Robert Gourd and Jack Blaney; on the U.S. side, outgoing U.S. chair Tom Baldini. Background on the commissioners can be found at [www.ijc.org](http://www.ijc.org).

### RAPs, LaMPs, ZIPs and Community Health



### Workshop

David Carpenter, a doctor with the State University of New York at Albany, presented health data on New York state communities within 15 miles of sites contaminated with "persistent organic pollutants" or POPs. Carpenter found significant associations between living near the sites and the incidence of ischemic (blockage-related) heart disease and diabetes diseases not traditionally associated with POPs chemical exposures. He found even more significant association with thyroid disease

and endometriosis.

Carpenter compared the hospital admissions information for three groups of people: those living near sites containing POPs, those living near hazardous sites *not* containing POPs, and the full population in the state. Carpenter's conclusion: Don't live near a hazardous waste site. The presentation showed that many more people than just people who eat Great Lakes fish are affected by living near contaminated sites.

Great Lakes United board member John Jackson presented information based on studies by Health Canada of people living near Canada's toxic hotspots. Jackson noted a higher incidence of cerebral palsy in three communities that hosted chloralkali plants using a mercury process that results in very significant mercury emissions. Mercury is known to be a causal agent for cerebral palsy.

Elena Kuzevanova of the Baikal Ecological Network discussed environmental problems and progress at Russia's Lake Baikal, the largest freshwater lake in the world. The challenges for Lake Baikal's ecosystem are similar in many ways to those facing Lake Superior. The lake's remoteness sheltered it from significant industrial development during the Soviet era. However, the environmental devastation caused by recent Japanese logging operations in the area sparked a local protection movement that has resulted in national legislation banning further industrial development along the lake.

## Government reports

*EPA Assistant Administrator for Water Tracey Mehan*, formerly the director of Michigan's Office of the Great Lakes, focused his comments on EPA efforts to secure Great Lakes drinking water from terrorist attack, but then went on to frame EPA's general work in the Great Lakes in terms of four questions:

- ❖ Are the fish safe to eat?
- ❖ Are the beaches safe for swimming?
- ❖ Do the lakes provide a healthy natural environment for people and wildlife?
- ❖ Do the lakes continue to provide a safe source of drinking water?

Regarding fish contamination, Mehan cited the reductions in inputs of the major pollutants that concentrate in fish, but detailed further EPA plans only with respect to mercury. Even with mercury, however, Mehan did not promise specific reduction targets, but rather Maximum Available Control Technology regulations to control mercury emissions from coal-fired utilities by 2004. However, he said EPA preferred a "multipollutant" program that would address the mercury, sulphur and nitrogen emissions by coal-fired plants in a single rule. This would require congressional action and Mehan said EPA was actively working with Congress to bring that about. Mehan pledged, "Either way, through a MACT regulation for coal-fired power plant mercury emissions or a multipollutant program, the United States aims to achieve substantial additional reductions over the next decade."

Mehan was much more specific with the problem of swimmable beaches. "Key objectives we've identified for Great Lakes beaches are that by 2005, 95 percent of high-use Great Lakes beaches will have monitoring and public notification programs that comply with EPA guidance. And by 2007, we're aiming for 90 percent of these beaches to meet bacteria standards for more than 95 percent of the swimming season." It was not clear what percentage of beaches, or beach going, would ultimately be affected in the focus on "high use" beaches.

To address his question about the lakes providing a healthy natural environment, Mehan discussed exotic species and coastal wetlands. He urged public comment on EPA's draft plan, *Aquatic Nuisance Species in Ballast Water Discharges: Issues and Options*. Comments are due

by January 11, 2002, and the document can be found at [www.epa.gov/owow/invasive\\_species/ballast\\_report](http://www.epa.gov/owow/invasive_species/ballast_report).

*Environment Canada Ontario Regional Director John Mills* announced four Areas of Concern as candidates for delisting in the near future: Severn Sound (ON), Manistique River (MI), Waukegan Harbor (WI), and Presque Isle Bay (PA). Of the forty-three Great Lakes toxic hotspots designated by the IJC since 1987 as "Areas of Concern" needing special attention and a cleanup plan, only Canada's Collingwood Harbour, an AOC on Georgian Bay, has been delisted so far.

Mills also announced that the Integrated Air Deposition Network monitoring program would add mercury and additional measures for dioxins and furans and that a new Canada-U.S. Internet information site on joint Great Lakes protection efforts can be found at [www.binational.net](http://www.binational.net). The site currently contains information on the Binational Toxics Strategy and the State of the Lakes Ecosystem Conference (SOLEC) 2001 report.

*EPA Great Lakes National Program Office Director Gary Gulezian* focused on partnership as a driver of Great Lakes cleanup approvingly noting: the collaboration of 150 public and private organizations to protect 200,000 acres of wildland near Chicago; adoption of the U.S. Environmental Protection Agency's Energy Star appliance rating system in Canada; the chemical industry's "Responsible Care" program, among others.

Gulezian said the region plans three major U.S. AOC cleanups per year beginning in 2002. He noted that the basin's greatest challenges are projected basin population increases, sprawl, climate change, out-of-basin pollution, and exotic species, which currently cost the United States \$100 billion per year.

Gulezian said the next State of the Lakes Ecosystem Conference will be held in October 2002 in Cleveland.

A representative of the *Office of the Commissioner for Sustainable Environment* in Canada's Office of the Auditor General gave a scathing critique of the Canadian government's progress on environmental protection, telling the audience that federal efforts to protect and restore the environment have lost momentum, that lack of action indicates complacency and resignation within the government, and resources are out of sync with the needs of the region. The result: a waning federal role in

protection, impaired monitoring, no effective long-term strategies, and a failure to meet the commitments under the Canada-U.S. Great Lakes Water Quality Agreement. The report runs to several hundred pages and is available at [www.oag-bvg.gc.ca](http://www.oag-bvg.gc.ca).

## Public Forum

About thirty people addressed the four IJC commissioners and government representatives on Saturday morning and afternoon. Members of Great Lakes United from across the basin organized a critique of the various documents and plans currently under consideration for the Great Lakes including the IJC list of priorities for the next two years, the governments' response to the last IJC recommendations, the governments' draft five-year plans for the Great Lakes, and the 2001 report of the ongoing State of the Lakes Ecosystem Conference health indicators project.

The message overall from the public: None of these priorities and plans are truly strategic in terms of the challenges ahead for the region, including pressures for more nuclear power, more oil and gas drilling, more coal burning, along with population increases and attendant increases in consumption of land, energy, consumer goods, as well as production of wastes. What the governments tout as our "decades long success story" has more to do with de-industrialization in the region than with any real shift towards sustainability. The IJC call for more study does not answer the urgent need for restoration and pollution prevention NOW, for full clean-up of contaminated sites, and a policy, subsidy and program shift to renewable energy and clean production.

Other speakers asked the IJC for specific help in cleaning up Hamilton Harbor, Bay of Quinte and other AOCs, protecting Georgian Bay wetlands (disappearing as a result of four years of drought), assuring that Québec becomes party to the Great Lakes Water Quality Agreement, rejuvenating the Lake Superior zero discharge demonstration program, implementing currently available non-chemical ballast water treatment (ultraviolet treatment and filtration), treating radionuclides as "persistent" (long-lived) toxic substances under the Great Lakes Water Quality Agreement, and interpreting new health data in a way that is available and responsible to the public.

## Michigan AG calls Perrier bottling plan a diversion

*by Terry Swier, President*

*Michigan Citizens for Water Conservation*

The citizens of Michigan do not want the Perrier or any other private water bottling company to remove hundreds of thousands of gallons of spring water per day from the state to feed their bottled water factories.

Through an intensive letter-writing campaign initiated and executed by Michigan Citizens for Water Conservation (MCWC), three Michigan legislators were urged to ask state Attorney General Jennifer Granholm to determine if the proposed Perrier operation constitutes a diversion or export under federal law, which would require the permission of all eight Great Lakes state governors.

The legislators made that request and Granholm released her conclusions in September 2001. She concluded that the groundwater Perrier wants to remove feeds a stream that is a tributary of the Great Lakes. Therefore, Granholm said, Perrier's removal of the water for export outside the Great Lakes basin constitutes a diversion. Granholm urged Gov. John Engler to seek permission from the other Great Lakes governors to allow the Perrier project to go forward, and urged state legislators to initiate a comprehensive water use laws for the state.

Gov. John Engler immediately rejected Granholm's plea, saying that her efforts were politically motivated. Granholm is running for governor in next year's elections.

### The grassroots campaign

MCWC is working to prevent the operation of Perrier's wells in Mecosta County, which threatens to permanently damage the local watershed. MCWC's presentations to other community and environmental groups have successfully brought the Perrier issue before the public and many state legislators. Now with more than a thousand members, MCWC has embarked on a long-term fight to protect of Michigan's water and our citizens' use and enjoyment of that water for food, navigation, recreation, growth, employment, and security. Michigan must act now to ensure that this type of

plant is located in a manner that protects both local watersheds and the Great Lakes basin as a whole from harm.

### The public opposes Perrier

In February 2001 the voters of Morton Township and Mecosta County, the proposed sites of the Perrier bottling plant, were asked to sign petitions for a referendum to rezone property to prevent construction of a Perrier water bottling plant. A total of 362 percent of the needed number of township voters and 118 percent of the needed county voters signed the petitions.

MCWC has participated in three public hearings held by the Michigan Department of Environmental Quality and Michigan Department of Natural Resource to gather public input on granting permits for two Perrier wells and for a pipeline from the wells to the company's bottling plant that will cross eight streams, eighteen wetlands, and stretches of state land.

Each hearing was attended by two hundred to four hundred people, unusually high numbers at a routine state hearing. Of those present, 86 percent voiced concerns and opposition to the Perrier proposal.

### Legal action

MCWC is pursuing several major legal fronts through attorneys Jim Olson of Olson & Bzdok in Traverse City and Jim Samuels of Big Rapids.

MCWC and its plaintiffs filed a lawsuit in September 2001 to preserve the states and citizens' claims to their water rights. MCWC and its plaintiffs, who have a legal interest in the public trust and the waters of the state, are seeking to protect their rights and interest in commonly held waters—and the public trust or common interest in these waters—from unlawful use, diversion, and appropriation. The case will go to court in late spring or early summer 2002.

A brief was also filed with the Michigan Court of Appeals in August questioning the denial of citizens' referendum vote on Morton Township's zoning amendments for Perrier's project. A date has not yet been set for a court hearing on this brief.

MCWC also questions the merits of MDEQ's issuance of the Safe Drinking Water Act permit and its refusal to require Perrier to conduct an environmental impact study under the Michigan Environmental Protection Act case law.

Jim Olson explains, "This project exceeds reasonable water rights and violates the public trust in Michigan's waters. We need to resolve these issues for Michigan now, before it is too late. This is not about Perrier. If not contested, the precedent of the Perrier proposal will be devastating for Michigan and other Great Lakes states, both economically and environmentally."

MCWC's work is just beginning. MCWC cannot do it alone. It has joined with other environmental groups in Michigan and other Great Lakes states to work together to develop solutions to both short-term and long-term water issues. If a precedent is set with private companies withdrawing water from Michigan, the people of the state will be robbed of their ability to assert their ownership of the commonly owned or held water. It is our community that is under threat today; it could be any community tomorrow.

For more information, please visit our website at [www.saveMIwater.org](http://www.saveMIwater.org) or call 231-972-8856.

## Wisconsin groups remove small dams

*by Stephanie Lindloff, River Alliance of Wisconsin*

### Ten miles of the Sheboygan runs free

A ten-mile stretch of the Sheboygan River is now running free for the first time since the 1850s. The remaining sections of the Franklin Dam were removed in the beginning of May. A fifty-foot section of the dam

*The Sheboygan River's Franklin Dam before removal . . .*



Franklin Dam across the Sheboygan River Alliance of Wisconsin



... and after.

was removed in fall 2000 to drain the impoundment, stabilize sediment that had built up behind the dam and prepare the site for channel restoration. The Wisconsin Department of Natural Resources (WDNR), in part due to a generous grant that the River Alliance obtained from the Great Lakes Protection Fund, is conducting the removal and restoration work.

This restoration project is expected to benefit fish such as smallmouth bass and rock bass, freshwater mussels, and waterfowl, as well as eliminating a safety hazard and a financial burden to the dam's owner. The estimate for repair of the dam was \$350,000. Its removal cost approximately \$50,000.

### Onion River Trout On Their Way

The headwaters of the Onion River are breathing new life after the removal of the Kamrath Dam in the end of April. Built in the 1950s to assist in a now defunct fish hatchery operation, the five-foot-high dam contributed

*And the Onion River's Kamrath Dam before removal . . .*



Kamrath Dam photos: Bruce Gribble, Trout Unlimited

to the degradation of this native brook trout stream. Restoration of the site was made possible when a private company, Windway Capital Corporation, purchased the land for the purpose of restoration and future conservation.

With the support of the Great Lakes Protection Fund, Trout Unlimited and the WDNR have designated the Kamrath site a dam removal demonstration project and are working together to restore the site's natural coldwater habitat.

Restoration of headwaters areas is critical to the health of river systems. Removal of this dam and two others downstream will restore the quality of the waterway and enable the creek to once again sustain native brook trout populations.



... and after.

### Energetic Gathering of River Restoration Experts

In April more than forty-five river restoration experts from across the Great Lakes region gathered in Kohler, Wisconsin, for the "Small Dam Removal Workshop and Working Meeting." Trout Unlimited and the River Alliance of Wisconsin organized the event, which was sponsored by the Great Lakes Protection Fund. People working on dam removal in Wisconsin, Minnesota, Illinois, Ohio, Michigan, Pennsylvania, New York and Ontario participated.

A wide variety of backgrounds were represented, including agency personnel, academics, environmental and conservation organization staff, dam owners, consultants, and representatives of local interests. Collectively, the participants have worked on more than 100 dam removals.

This workshop represented the first step toward an



integrated approach to restoring rivers through selective dam removal throughout the Great Lakes region. The collective expertise of participants was tapped and a set of recommendations for future actions was drafted. For a copy of these recommendations or more information, contact River Alliance of Wisconsin at 608-257-2424 or connect to [www.wisconsinrivers.org](http://www.wisconsinrivers.org)

## Great Lakes United calls for interim ballast water standards

by Jennifer Nalbone

At the International Joint Commission's eleventh biennial public forum in Montréal in October, Great Lakes United called for interim ballast water discharge or treatment standards designed to substantially prevent new introductions of invasive species to the Great Lakes.

Those standards should be set at *least* as effective as the most effective, proven technology available today, and also at *least* as environmentally benign—that is, the standards should be free of biocides and all their unintended consequences.

The lack of a standard, a measure of performance that ballast water discharge or treatment must meet, is completely stalling further private development and investment in ballast water treatment technology, and therefore stalling the protection of the Great Lakes – St. Lawrence River aquatic ecosystem.

### Business signals

At the International Ballast Technology Investment Fair held this September in Chicago, a speaker on financial and business resources emphatically stated that without standards there will be no venture capital for ballast water management technologies.

And over two years ago, at an exotic species workshop held at the tenth biennial meeting of the International Joint Commission, representatives of the transoceanic marine industry stated that without standards, it “is unreasonable to expect the industry to take the initiative in spending money on new technologies, for either new or old vessels.”

### No serious action to date

Calls over the past eight years for reviewing the value of

the main vector of exotics introductions—the St. Lawrence Seaway—have been ignored, while at the same time there has been no progress in achieving serious protection by setting standards and implementing technology.

Enough is enough. The already catastrophic ecosystem and economic effects of exotic invasions—and the certainty that worse is to come—permit no more delay.

Final ballast water standards must eventually be set that guarantee prevention of *all* new exotic introductions, and ideally those standards should not be driven by available technology. But right now there are much better benchmark standards available than the current, ineffective exchange of ballast water on the high seas. These standards need to be implemented immediately, as we work towards the goal of zero new introductions.

Great Lakes United urges the governments of the United States and Canada to immediately “set an interim standard to this benchmark: *at least* effective as the most effective, proven technology available today and *no less* environmentally benign (biocide free).”

## Widespread opposition to Ontario “clearcut guidelines”

Halloween Day saw the close of public comment for the Ontario Ministry of Natural Resources “Forest Management Guide for Natural Disturbance Pattern Emulation,” affectionately called the “clearcut guidelines” by conservation groups.

Over 1,500 comments were submitted on this frightening proposal, which would completely remove size limits for provincial clearcuts, allegedly to better emulate natural disturbances such as massive forest fires.

Criticized by top ecologists as “obviously crafted by foresters,” the proposal failed to consider public opinion, “rather than just the wishes of logging companies” and “badly needs input from other types of ecologists.”

Only seven of the submitted comment supported the proposal, but Ontario forest activists fear the overwhelming public and scientific opposition will fall on deaf ears: perhaps in a hint of what is to come, the ministry told the Wildlands League, a chapter of the Canadian Parks and Wilderness Society, that those seven comments were “substantial.”

# U.S. lakes forests are some of the nation's most logged

by Lois Norrgard, *American Lands*

The national forests in the western United States have been overcut, and now the U.S. Forest Service is aggressively promoting increases in logging in the eastern and Great Lakes states.

Over the last two centuries, the magnificent forests of the eastern United States have been heavily logged, mined, cleared for agriculture, roaded, damaged by exotic species and subjected to development. However, today many of these forests are growing back and wildlife formerly thought to have disappeared from the eastern landscape, such as lynx, eastern cougars, and bears are returning.

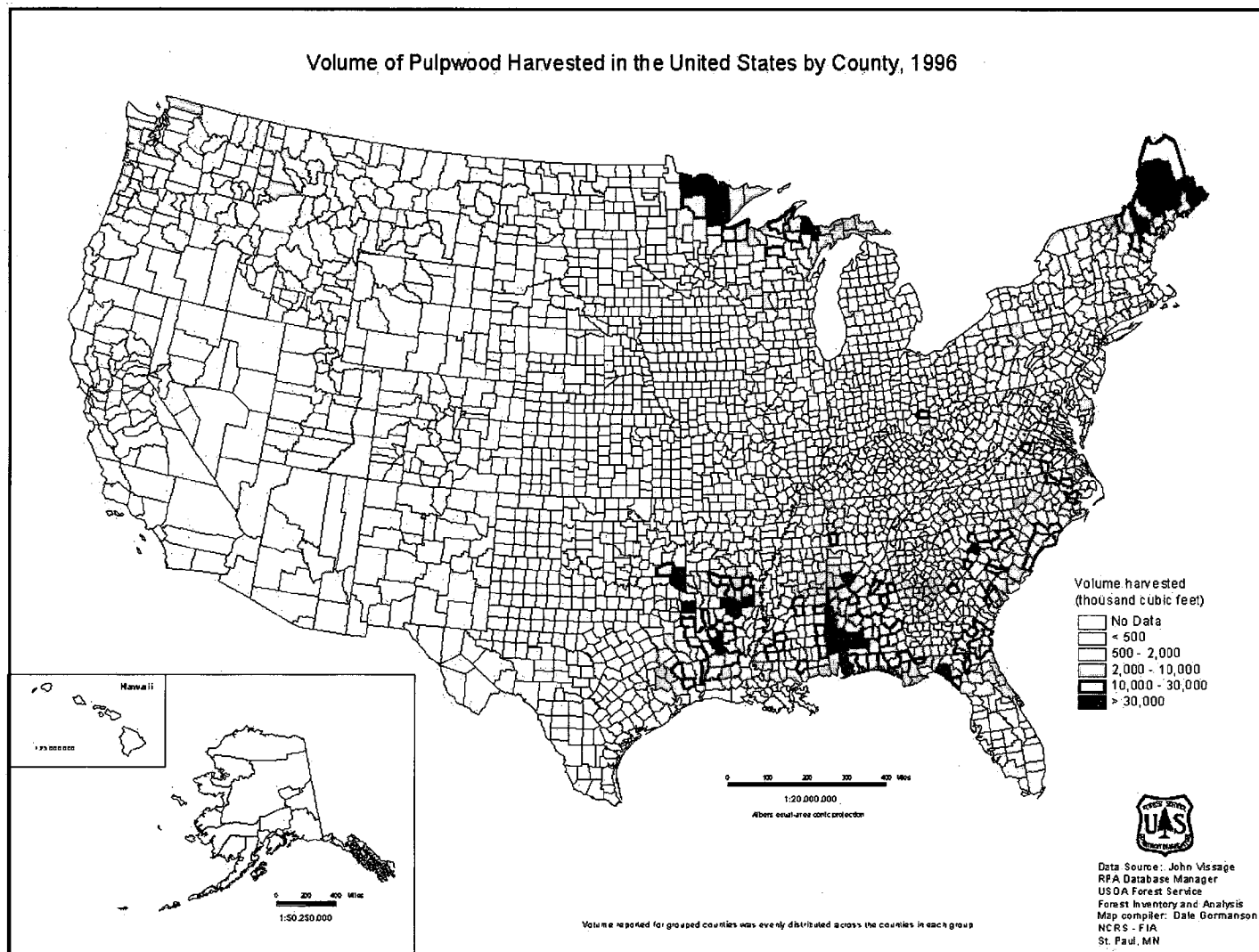
The eastern United States has unique tree species

diversity, containing more varieties of trees than any other part of the country. Just as the eastern forest has begun to recover, increased logging combined with heavy air pollution, off-road vehicle use, mining, and oil and gas drilling threaten a new round of destruction.

The adjacent map is the most recent illustration of the volume of all "pulpwood" extracted in the United States on both private and public land in 1996, in thousands of cubic feet or board feet—mostly to be used for chipping and paper mills.

Pulpwood extraction was highest in the Great Lakes Northwoods, the Maine Northwoods and the Southeast. Vast areas of the eastern forests are being cut and transplanted into pine plantations for more pulp. In the process they are losing diversity and wildlife habitat values at an alarming rate.

In addition to pulp timber extraction occurring on both public and private lands, total timber extraction on federal public lands is greatest in our region. In 2000,



more timber was sold from national forests in the Great Lakes states than in any other region in the country, according to Forest Service data.

National forests in the Great Lakes states include the Huron-Manistee, which is in the lower peninsula of Michigan; the Ottawa and Hiawatha, which are in the upper peninsula of Michigan; the Chequamegon-Nicolet, which is in Wisconsin; and the Superior and Chippewa, which are in Minnesota.

For more information contact Lois Norrgard, upper Midwest organizer for American Lands at lnorrg@uswest.net or 952-881-7282.

### U.S. National Forest Timber Sale and Cut (millions of board feet)

| Region                | Sold | Cut |
|-----------------------|------|-----|
| 1-Northern Rockies    | 189  | 258 |
| 2-Northern Rockies    | 100  | 134 |
| 3-Southwest           | 69   | 65  |
| 4-Inland West         | 59   | 124 |
| 5-California          | 214  | 389 |
| 6-Pacific Northwest   | 242  | 409 |
| 8-Southeast / South   | 382  | 469 |
| 9-Northeast / Midwest | 319  | 548 |
| 10-Alaska             | 171  | 147 |

Source: Fiscal Year 2000 National Forest System Timber Cut and Sold Summary, prepared by Rene Voss, John Muir Project. Figures rounded. Data source: U.S. Forest Service, Washington D.C.

## Millennium Pipeline project nears U.S. approval

The U.S. Federal Energy Regulatory Commission has released its "Final Environmental Impact Statement" on the Millennium Pipeline Project to transport natural gas from Canada across Lake Erie to points in downstate New York. The official decision to allow the project to go forward may be made at any time.

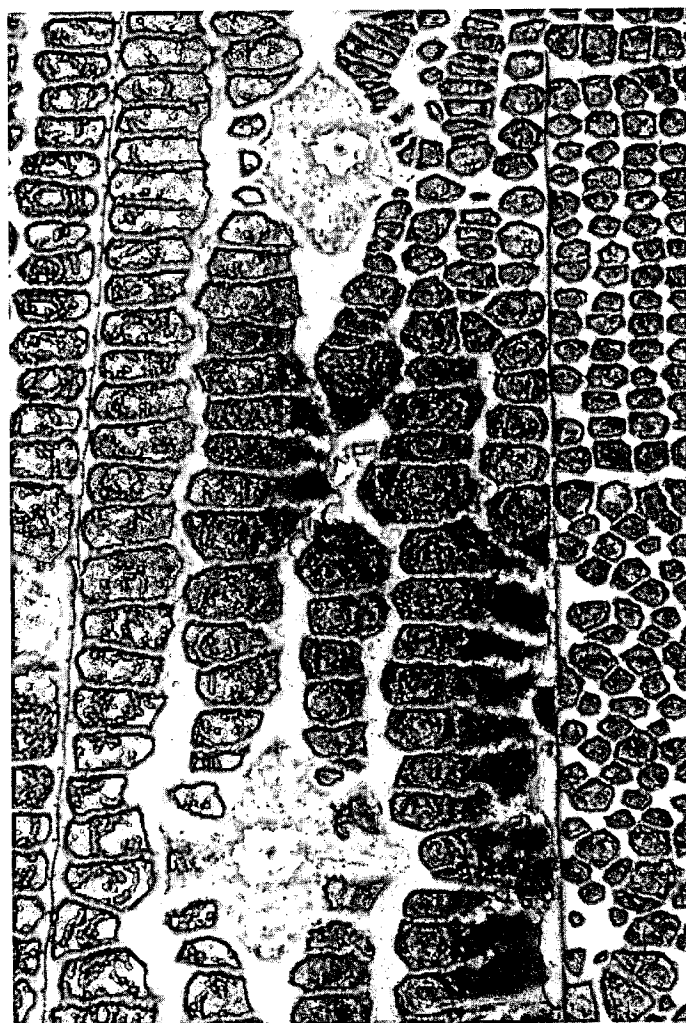
Despite serious problems with every aspect of the Lake Erie crossing, and well-organized, vocal community opposition to pipeline routing downstate, the FERC FEIS declares the all-too-familiar: with mitigation, the proposed project would have only "short-term" and "limited" adverse environmental impacts.

The project's Lake Erie crossing is precedent-set-

ting, and threatens significant damage to Lake Erie, already considered by the U.S.-Canada SOLEC process to be "deteriorating from an acceptable state."

The FEIS also includes a surprise new provision granting Millennium proponents almost 800 acres of *permanent* right-of-way under Lake Erie. This concession undercuts the proponents' use of hundred-year event assessments to reduce the risk of pipeline rupture from ice scour or seismic activity.

Approval of this project would be in direct violation to FERC policy against using cost as a basis for routing, and mandating reasonable opportunity for public input—several comment letters were not received after FERC refused mail from the U.S. Postal Service during the anthrax outbreaks.



"Pulp Ponds," by Seattle artist Mark Abrahamson. This is an unaltered aerial view of a pulp mill settling pond. Abrahamson, a dentist by trade, says that this image reminds him of slides of metastatic cancer.

## ... Oak Ridges Moraine

*continued from front page*

A preliminary review of the legislation indicate that, with key improvements, it will be one of the most comprehensive and ecologically based land use plans for a landform of this size.

### **The moraine**

The Oak Ridges Moraine is one of the largest moranic systems (landforms of glacial deposits) in Ontario and also, according to the Geological Survey of Canada, one of the nation's most significant aquifers. The aquifer directly serves over 250,000 people with drinking water and indirectly serves millions more in downstream communities, including Toronto, through its contribution to stream and groundwater flows.

As a regional surface water divide, the moraine delivers millions of cubic metres of water to Lake Ontario to the south and three large lake systems to the north. Over sixty-five river and streams start in the moraine, most of

which begin as cold water fisheries. The moraine's large forests, wetlands, kettle lakes, and bogs also provide last-refuge habitat for hundreds of species of wildlife and native plants. With close to 30 percent forest cover, for the most part the moraine is in surprisingly good shape.

### **Pressures on the moraine**

But since the early 1990s over 100,000 new people per year have been coming to, and staying in, the Greater Toronto Area, bringing the region's current population close to five million people. Coupled with a provincial ethos of hard-line fiscal policies, downloading financial and planning matters to municipal levels, and environmental deregulation across the board, the population movement has been disastrous for regional planning.

Legislative changes have allowed the development industry to become the de facto planning body against which local authorities compete or to whom they concede.

Every year for the last ten years 7,500 acres of prime agricultural lands in the GTA have been urbanized. This

*Two potential futures for the Oak Ridges Moraine: Ganaraska Forest, one of the largest on the moraine, so far relatively untouched . . .*



photos by Ian Wilson, Aerographics

has severely compromised the quality and quantity of aquifer systems and degraded rivers and streams despite best efforts of the region's conservation authorities and stewardship groups. The social impacts are evident in the clogged highways, the increasing number of smog days, the suburban fringe around small communities, and the constant state of change in the countryside.

### **The public grew concerned**

Over the last three years, however, the public has become conscious of the problems caused by uncontrolled urban sprawl north of Toronto. Municipal councils, previously railing against top-down controls, began to call for provincial leadership. Urban sprawl activists partnered to carry out joint campaigns, quietly aided by government officials. Farmers and environmentalists have found themselves sitting on the same side of boardroom tables. Downstream communities demanded to be involved in planning decisions that would impact the upper reaches of their watersheds, with the active assistance of Toronto-area media. And the political polls

have shown a change in attitude and priorities.

In May Ontario Minister of Municipal Affairs and Housing Chris Hodgson called for a freeze on development on the moraine and appointed a thirteen-member advisory panel to develop a long-term action plan. There was a good deal of cynicism about the integrity of the panel at the time, which included developers and aggregate (sand and gravel) producers alongside environmentalists, farmers, and municipal politicians. But the mix seems to have created a mostly dynamic and healthy tension.

Within a very tight timeline, the advisory panel developed a planning framework and implementation model styled after the highly successful Niagara Escarpment Plan. The government released a document for an thirty-day consultation period intensively covered by the media.

The public reacted favourably to the overall approach but was unanimous in its criticism of what it saw as half-measures: allowing rural estate development on 38 percent of the moraine, aggregate extraction on 54 percent

*... and ever-expanding new developments, here outside the Town of Maple northwest of Toronto*



of the moraine, and semi-permeable urban growth boundaries that could be changed at the whim of municipal politicians.

### The revised plan

The advisory panel seemed to take the criticism into account, returning with clearer and more prescriptive conservation and growth management policies that are for the most part reflected in the draft legislation and plan (with differences in italics) as follows:

- ❖ The moraine is to be classified into four land use designations, each with established permitted uses, identified ecological constraints and specific policies to protect 100 percent of the moraine's natural heritage and significant hydrogeological features.
- ❖ Sixty-two percent of the moraine will receive substantial protection. There will be only very limited uses permitted in fifteen "Natural Core Areas," covering 38 percent of the moraine, and "Natural Linkage Areas," covering 24 percent of the moraine.
- ❖ The plan will be reviewed in ten years
- ❖ In the legislation a *majority* of the linkage areas will be a minimum of two kilometres wide (downgraded from the plan's minimum for *all* the linkage areas of two kilometres wide). The linkage areas are intended to connect the core areas to each other and to natural systems off the moraine, and to be large enough to accommodate an unbroken hiking trail while allowing for wildlife movement along the entire length of the protected moraine.
- ❖ "Countryside Areas," covering 30 percent of the moraine, would allow for activities that service the agricultural community and aggregate industry, small-scale institutional uses, and recreational uses such as golf courses and ski hills.
- ❖ Thus the plan recommended that new residential development not be permitted on 92 percent of the moraine except for minor infilling of hamlets and villages. However, in an unfortunate change in the legislation, rural estate development will be permitted in eastern municipalities outside the pressures of the GTA.
- ❖ All new urban residential, commercial and industrial development is to be directed to the remaining 8 percent of the moraine. Furthermore, for the first ten-year review period, development will be restricted to existing settlement areas.
- ❖ The plan will be administered by the province but implemented by the municipalities—a contentious issue for the public and the environmental groups
- ❖ New aggregate mining will be forbidden in core areas but permitted under greater ecological constraints in linkage and countryside areas.
- ❖ Agriculture remains permitted across the moraine.
- ❖ Transportation, utilities and infrastructure construction will be permitted in core and linkage areas, but only if there is no reasonable alternative. Any such construction must employ more ecologically protective design criteria and ensuing road maintenance must conform to best management practices.
- ❖ The province will create an Oak Ridges Moraine Legacy Foundation for strategic land securement and stewardship programmes.



*An auto wrecking business in the moraine close to Highway 48, just north of Musselman Lake. A great number of trees were sacrificed to make way for old cars that sit on the sandy soil of the moraine release gasoline, oil, mercury and paint that is absorbed into the sand and travels to nearby streams and ponds.*



## *Preventing the moraine from being cut in two*

The integrity of the Oak Ridges moraine is threatened by development in a small area of its 160-kilometre (100-mile) length. the infamous Yonge Street corridor. Between four and twenty-seven kilometres wide all along its east-west length, the moraine has been pinched to a mere 1.8 kilometres of undeveloped land at Yonge Street.

The corridor is testimony to the powers of "big pipe" sewer planning. Land speculation since the 1970s along the fifty-five-kilometre path of the York Durham Sewer System has resulted in chock-a-block urban development from Lake Ontario to north of the moraine.

But in 2000, plans to build 8,000 new homes in the last two kilometres of undeveloped land along the Yonge Street corridor in Richmond Hill came face to face with an outraged and mobilized public.

### **Highly significant area**

For these two kilometres are critical in maintaining a continuous and uninterrupted corridor along the whole moraine. Developing these lands would cut the moraine in two.

Equally important, this small section of the moraine contains a highly disproportionate amount of significant lands—five "Areas of Natural and Scientific Interest" with a wide diversity of natural heritage features. The complete section at issue, about 1 percent of the total moraine area, includes seven—more than a fifth—of both its thirty-two kettle lakes and thirty-three kettle bogs. The section's forests and wetlands are habitat to 491 native plant species, of which 140 are significant; 81 breeding bird species, of which 43 are species of concern and 21 are Ontario's most sensitive forest birds; and 18 reptile and amphibian species including the nationally threatened Jefferson salamander. There is also significant movement of reptiles and amphibians between the five Areas of Natural and Scientific Interest.

These lands contain significant and sensitive recharge and discharge features, including the headwaters of the Rouge and Humber Rivers.

### **Opposition emerges**

In February 2000, efforts by environmental non-government organizations led by Save the Rouge Valley System, a downstream watershed-based group, rallied thousands of people to a public meeting. The sheer numbers and cries of outrage forced both the municipality to rescind its plans to urbanize the lands and the province of Ontario to take a strong protection position at the Ontario Municipal Board, a quasi-judicial appeals tribunal.

One year later, in May 2001, the OMB hearing on the matter was stayed by the government's announcement of a freeze on moraine development and mediation of the dispute. In early November the government announced a resolution to the dispute and the introduction of Oak Ridges moraine legislation.

### **The compromise**

Though far from the perfect solution, the deal would trade some of the "developable" land on the corridor site with urban lands off the moraine. The swap would put 440 hectares (1,000 acres) into public ownership and would create the first of a series of parks along the moraine under the control of a soon-to-be created foundation.

Critics say the government failed to broker the perfect deal, by pandering to powerful developers—giving them development rights on the remaining 233 hectares (560 acres) of rural lands where no urban rights exist. By allowing any development in this area, the corridor becomes only 800 metres at its narrowest, a far cry from the specified two kilometres.

Another serious problem with the deal is the mysterious appearance of a brand new settlement area near historic Gormley village, about 10 kilometres to the east. Questions about how and why this isolated 380-hectare parcel of land was inserted into the mediated solution have yet to be fully answered.



## ... lessons of Walkerton

*continued from back page*

solutions that are being suggested. This article is based on a 228-page final argument presented at the inquiry in August 2001 by the Canadian Environmental Law Association on behalf of the local grassroots organization Concerned Walkerton Citizens. The full argument is available at [www.cela.ca](http://www.cela.ca).

### What went wrong in Walkerton?

The deaths and illnesses in the small town of Walkerton, just south of the Bruce Peninsula in southwestern Ontario, resulted from contamination of the town's groundwater supply by the bacteria *E. coli* 0157:H7 and campylobacter.

The contamination occurred as a result of cattle manure containing the bacteria being spread approximately 100 metres from one of the town's groundwater wells. High rainfall during April and May 2000 caused the bacteria to move down into the groundwater aquifer and reach the wells.

People commonly assume that surface contamination does not affect groundwater, or that it would take years for it to do so. Evidence presented at the Walkerton Inquiry showed otherwise—contamination can move rapidly through interconnected networks of openings in bedrock. The inquiry found that the heavy rainfall probably moved the contamination from the farming operation into the shallow aquifer and nearby springs within days or even hours.

Also contrary to common assumptions, the evidence showed that *E. coli* 0157:H7 can survive in the soil and groundwater for prolonged periods, especially in cool, wet conditions. The evidence also showed that small amounts of bacterial contamination can infect a large water system.

### Warnings

Serious water contamination rarely occurs without warning. In the Walkerton case, documents presented at the inquiry dating back as far as the late 1970s showed that the municipal utilities commission and the

provincial Ministry of the Environment had been warned by hydrogeologists that the town's wells were susceptible to contamination from surface sources.

Contamination problems appeared in a long series of tests of the Walkerton system's water. The evidence showed that these tests should have been enough to warn the local medical officer of health and the Ministry of the Environment that the town's water chlorination system was not operating properly. But neither the municipality nor the province ever took serious corrective actions.

On May 17, 2001, the municipal water manager received the regular report on the water from a private water testing laboratory. The report showed serious *E. coli* water contamination problems. However, the water manager ignored the results and did not tell the medical officer of health or the provincial ministry of the environment about them for several days.

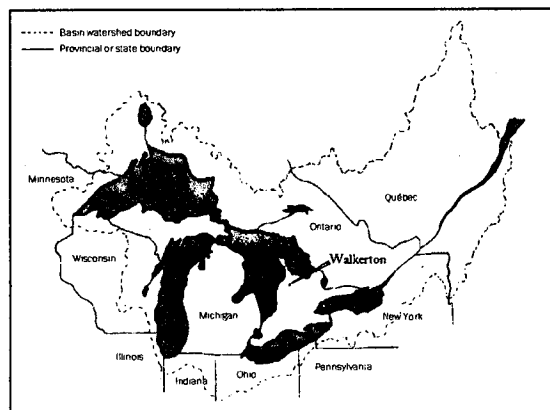
But people were beginning to fall seriously ill. When citizens asked if the water could be the source of the illnesses, the town and the medical officer of health assured them that the water was safe to drink. It took four days for officials to advise people to boil their water. By then the water system was determined to be so thoroughly contaminated that it was shut down for six and a half months.

### Responsibility

The debate about responsibility will last longer. This summer, Bruce Davidson and Ron Leavoy of Concerned Walkerton Citizens summarized the situation this way:

"A year later, coming to terms with the events of last May remains an emotionally perilous and mentally challenging task for the people of our community.

Shortly after the depth of the tragedy began to register in Walkerton and around the world, we found ourselves facing a threat that in the long run had the potential to be even more dangerous to our environment than the lethal explosion of *E. coli* bacteria in our water. Following the outbreak, the immediate response of both the municipal and provincial



governments was to engage in a choreographed dance of political denial. These two levels of government charged with ensuring the safety of Walkerton's water supply seemed far more intent on circling their respective public relations wagons around their impotent environment protocols than meeting the needs of a devastated community."

### What went wrong in the province?

The evidence from the Walkerton Inquiry clearly proves that the town's deaths and illnesses resulted from major failings beyond Walkerton—in the water approvals, monitoring efforts, and enforcement system of the province of Ontario. After studying testimony from the 114 hearing witnesses, the Canadian Environmental Law Association and Concerned Walkerton Citizens concluded, "The fragility of the regime and the complacency that pervaded institutions that had oversight responsibilities to it can be stated as general overriding causes of the tragedy."

### Loose approvals, monitoring and enforcement

Despite the fact that technical experts warned that there were problems with the location of the town's wells, the Ministry of the Environment approved their use without stringent filtration or monitoring requirements.

When Ontario's drinking water objectives were later made more stringent, the province did not review existing permits and did not impose additional conditions.

Provincial oversight of drinking water supplies was tragically deficient. In the Walkerton case, despite repeated indications from routine water testing over the past decade that there were potentially dangerous contamination problems, the ministry did not take strong action. They did sometimes ask the municipality to make corrections, but did not follow up to ensure that the corrections were made. Even when later tests showed ongoing problems, the province did not intercede. Ontario's water drinking objectives were only a guideline and could not be enforced.

When the Progressive Conservative government was elected in 1995, it emphasized reducing government expenditures. This worsened the condition of monitoring and enforcement in the province. Between 1995 and 2000, the number of staff at the Ministry of the Environment was cut by almost 40 percent. This was on top of staff reductions that had already occurred during the

first half of the 1990s. The result: monitoring and enforcement had to be reduced.

Specifically, ministry staff were instructed to focus on "point sources" of pollution, such as factories, and reduce efforts to control "non-point" sources of pollution, such as the diffuse runoff from manure-spreading operations like the one that caused the Walkerton tragedy.

At the same time the ministry shifted its focus to voluntary rather than mandatory approaches to addressing contamination problems. For example, the province did not force nine municipalities found to be out of compliance with water sampling requirements to do proper sampling to protect citizens.

### Privatisation without oversight

As part of its approach to governing, the new provincial administration closed down the Ministry of Environment's water-testing laboratories, forcing municipalities to hire private labs to test drinking water. This was done without a proper transition plan, resulting in confusion about the private labs' responsibilities, particularly their responsibility to inform not just water operator who hired them but also the local medical

### A Walkerton chronology

- ✦ May 12, 2000: Heavy rainfall washes bacteria from cattle manure into the aquifer feeding the town well
- ✦ May 17, 2000: Residents report bloody diarrhea and other symptoms of *E. coli* poisoning. Tests of water from May 15 reveal *E. coli* contamination. Water manager Stan Koebel does not notify the province, the public health office, or the public
- ✦ May 21, 2000: Public health office begins water testing, issues boil-water advisory
- ✦ May 22, 2000: First death directly linked to *E. coli*
- ✦ May 23, 2000: Health office tests show deadly *E. coli* O157:H7 contamination. Two-year-old girl dies. More than 150 people go to the hospital, 500 complain about symptoms
- ✦ May 24, 2000: Third and fourth people die
- ✦ May 26, 2000: Ontario Premier Mike Harris blames the previous New Democratic Party government for the tragedy
- ✦ May 29, 30, June 25, 2000: Fifth, sixth and seventh people die
- ✦ Aug. 26, 2000: New provincial drinking-water law takes effect
- ✦ Oct. 16, 2000: Official inquiry begins
- ✦ Dec. 5, 2000: Public health office finally lifts boil-water advisory
- ✦ Dec. 6-7, 2000: Walkerton water foreman Frank Koebel shocks inquiry by describing routine falsification of safety tests
- ✦ June 25, 2001: Former medical officer of health Richard Schabas tells inquiry he repeatedly told the province that funding cuts would endanger public health.
- ✦ June 29, 2001: Ontario Premier Mike Harris tells inquiry no one warned him of human health risks from budget cuts.

Source: Canadian Press

officer of health and the Ministry of the Environment. The confusion definitely led to additional illness and perhaps death in Walkerton because it delayed the boil water advisory and eventual system shut-down.

### **Political irresponsibility**

The Walkerton Inquiry reached its alarming climax when senior civil servants presented numerous documents they had given provincial ministers and the premier over the years in which they raised serious concerns about the consequences of the government's approach to provincial drinking water protection.

For example, in September 1995, a memorandum to the provincial cabinet signed by the minister of the environment declared, "These reductions will have an adverse impact on the delivery of environmental protection service levels, which in turn will increase public health and safety risks."

Despite repeated warnings, the provincial government proceeded to devastate the capacity of the ministry of the environment to protect human health without assessing the possible consequences for human health and without developing a risk reduction plan.

### **What must be done?**

The Walkerton tragedy contains lessons for all of us. Some of the most important:

- ✦ Strict controls must be imposed on the siting of municipal wells and strong actions must be taken to protect the sources of water for those wells. Enforceable regulations must be in place to restrict potentially contaminating land uses in the areas from which drinking water supplies are derived. These restrictions should take priority over all other land use planning factors
- ✦ All water testing laboratories should be obligated to immediately report adverse test results to the responsible government oversight agency in addition to the water system operator
- ✦ The agencies responsible for overseeing drinking water quality should be required to *proactively* monitor the operations and water test results of water suppliers for signs of future problems
- ✦ The provincial government should require, and water suppliers should implement, a precautionary approach in favour of people's health, issuing public

warnings, boil orders and, if necessary, system shut-downs at earlier stages of suspicion of contamination.

- ✦ Enforceable safe drinking water legislation should be in place in each government jurisdiction. Central components of this legislation should be the public right to access to safe drinking water, an enforceable set of water quality standards, and community right to know about water quality

The final lesson of Walkerton is that none of the above requirements can be achieved unless the responsible government agencies have sufficient resources to carry out their responsibilities.

### **... restoration strategy**

*continued from page 2*

tent elements, including timetables and mechanisms for dramatically increasing energy conservation and shifting to renewable energy sources.

In 1998 Great Lakes United held a dozen citizen hearings across the basin on the state of the Great Lakes. The concerns expressed in those hearings clustered in a few general areas: 1) cleaning up contaminated sites, 2) developing regional sustainable energy sources, 3) protecting water from in-basin abuse and out-of-basin diversion, 4) preventing new invasions of aquatic nuisance species, 5) inculcating clean production practices in basin factories, and 6) protecting functional habitats by controlling sprawl.

These are some of the issue areas that might be part of a comprehensive Great Lakes restoration strategy.

### **Please help**

We invite all Great Lakes citizens to quickly (by the end of December) help us identify 1) broad issue areas that satisfy the above criteria, 2) groups already working in these issue areas, and 3) a group or partnership of groups who might best lead the development of a consensus action plan for each issue area.

We hope to convene everyone involved at our June annual meeting in Chicago to discuss the draft strategy and to plan next steps for a serious, long-term, comprehensive restoration of the Great Lakes – St. Lawrence River basin ecosystem.

For more information, please contact Margaret Wooster at the Buffalo office.

## Membership News

### Membership profiles



*Ted Gephart*

Ted Gephart says his job is being a father to two daughters, seven and nine years old. As for making money, he does that by being a professional mariner holding a 100-ton master license (captain's license). Ted owns a small sailboat charter company and teaches an intensive training program for U.S. Coast Guard captain's license candidates who will sit for examinations to become captains.

As a resident of the south shore of Lake Superior, Ted says he has been watching public access to the lake

disappear even as we continue to contaminate the lake. Says Ted, "Something has to be done to stop it and we are the ones to do it. Great Lakes United is a grand way to stay in touch with like-minded folks in my watershed."



*Mary Muter*

Mary Muter is one of five vice-presidents of the Georgian Bay Association, an eighty-five-year-old volunteer umbrella organization representing twenty-three associations and 4,400 families on the eastern and northern shores of Georgian Bay and adjacent water bodies.

As chair of GBA's Environment Committee, Mary

## Join Great Lakes United!

**Sure! Somebody's got to care! Sign me up as a member:**

- ☐ Basic—\$30   ☐ Supporting—\$50   ☐ Library—\$50  
☐ Small Organization\*—\$30   ☐ Large Organization—\$100

\*annual budgets of \$15,000 or less

Name: \_\_\_\_\_ Affiliation: \_\_\_\_\_

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*In the United States please make checks payable and send to*

Great Lakes United, Buffalo State College, Cassety Hall, 1300 Elmwood Ave., Buffalo, New York, 14222

*In Canada please make cheques payable and send to Great Lakes United Foundation, 4525 rue DeRouen, Montréal, Québec, H1V 1H1*

coordinates a growing list of volunteers in tackling regional air and water concerns. The need for international cooperation is increasingly critical for success in these areas, and Mary says GBA's membership in Great Lakes United is particularly helpful in this respect.

Mary was instrumental in having the Ontario Ministry of the Environment establish an air quality monitor at Parry Sound. Transboundary air pollution from the U.S. Midwest has resulted in a record-breaking seventeen air quality advisory days last summer in an area with little local source. On seven days in May and June Parry Sound's ozone readings exceeded Toronto's.

Mary has also helped the Canada-U.S. International Joint Commission identify the need for a study of water levels on the upper Great Lakes by demonstrating the impacts of dramatically lower water levels on Georgian Bay wetlands.

"As one of Ontario's few seasonal resident networks, GBA understands well the value of shared expertise and experience," Mary says. "Great Lakes United's Sustainable Waters Task Force and conferences offer unique formats to keep us informed and renewed."



*Greg Barber*

Member Greg Barber lives in New York City and sells environmentally preferable papers—100 percent processed chlorine free papers, tree free papers, and high post-consumer recycled papers—and prints on them with soy inks.

Greg saw the need for protecting the environment in 1990, the twentieth anniversary of Earth Day, when he

saw middle school children celebrating the earth and later heard television newscaster Connie Chung say that 60 percent of our landfill problems are due to the paper and printing industries.

Some of the interesting printing projects Greg has been working on include environmental packaging to replace CD jewel cases and a line of tree free and 100 percent post-consumer-waste greeting cards.

Greg has a business and educational Web site, [www.gregbarberco.com](http://www.gregbarberco.com), that tells more about his work. Greg has been honored as an "Eco Kudo" award winner in *Communication Arts* magazine for his tireless promotion of the environment through his paper and soy ink printing businesses.

"I'm a big advocate of chlorine-free and post-consumer paper and Great Lakes United is working to make sure clean production becomes the rule rather than the exception."

### **New members**

Welcome to Great Lakes United and thank you so much for strengthening the coalition!

### *New individual members*

Hans Albarda, Wolfville, NS  
Wetenkamp Alpha, Wauwatosa, WI  
Greg Barber, New York, NY  
Cindy Bennet, La Fayette, NY  
Evert Bos, Milwaukee, WI  
Amanda Brown, Syracuse, NY  
Harvey Brundow, Milwaukee, WI  
Joe Chovan, Syracuse, NY  
Penelope Creeley, Buffalo, NY  
Vicki Deisner, Columbus, OH  
Robert Deming, Oswego, NY  
Bourne Dempsey, Cleveland, OH  
Carl Dennis, Buffalo, NY  
Marlene Doling, Victor, NY  
S.M. Dye, Rochester, NY  
Eugene Ebert, Mequon, WI  
Robert Fisher, Strongsville, OH  
Megan Harris, Burt, NY  
Abby Hartman, Kitchener, ON  
Carol Heermance, Saratoga, NY  
Kathy Hoffman, Clarence Center, NY  
Stanton Hudson, Buffalo, NY  
Helen Johnson, Hamburg, NY  
Ann Kaminsky, Whiting, IN  
John Klecka, East Chicago, IN  
Carl Kohls, Syracuse, NY  
Gary & Beth Koning, Coopersville, MI

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Matt & Stephanie Walker, Jenison, MI  
Vincent Walters, Angola, NY  
Alpha Wetenkamp, Wauwatosa, WI  
H. L. Yaryan, Toledo, OH

### *New organizational members*

Squaw Island Preservation Society,  
Canandaigua, NY

### *Renewing members*

Special thanks to our renewing members for your ongoing support of and participation in our campaigns. We couldn't accomplish anything without you!

### *Renewing individual members*

David & Judy Allen, Marquette, MI  
Georganna Bidlack, Geneva, OH  
Susan Bryant, Elmira, ON  
James Bunn, Williamsville, NY  
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John Schraufnagel, Superior, WI  
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Werner Sheliga, Agincourt, ON  
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Silas Townsend, Erie, PA

Maureen Wall, Toronto, ON  
Barbara Wallenhorst, Kenmore, NY  
Philip Weller, Austria  
Elgin Wolfe, Buffalo, NY

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Audubon Society - Michigan, Lansing, MI  
Bay Area Restoration Council, Hamilton, ON  
Buffalo Fire Dept. Federal Credit Union, Buffalo, NY  
CAW Local 1075, Thunder Bay, ON  
Citizens Natural Resources Association, Wauwatosa, WI  
Greater Cleveland Boating Association, Hiram, OH  
GRIP Québec Uqam Inc., Montréal, PQ  
I-M-G-I UAW CAP Council, Edmore, MI  
Niagara County Health Dept, Lockport, NY  
NYS Citizen's Environmental Coalition, Albion, NY  
Sisters of Mercy, Snyder, NY  
St. Lawrence Aquarium and Ecological Center, Massena, NY  
UAW — Local 1102, Conservation Committee, Green Bay, WI  
UAW — Local 2031, Adrian, MI  
UAW Local 599, Flint, MI  
UAW Local 730, Wyoming, MI

### **Wish list**

Can you help Great Lakes United operate more effectively by donating equipment? It would, of course, be tax-deductible. Here is what we need:

- ✿ Volunteers! (Work at home to support our projects!)
- ✿ Good office chairs
- ✿ Printers
- ✿ Digital still cameras, 1 megapixel or above
- ✿ A digital video camera
- ✿ A high-quality tape recorder
- ✿ New or near-new IBM-compatible personal desktop or notebook computers

### **Match challenge**

Through the kindness of private funders, Great Lakes United has been offered \$6,000 as a match for any contributions made by the end of this year from *new* memberships or donations *above and beyond* regular membership dues.

So this season please consider giving either a tax-deductible gift to Great Lakes United, or a gift membership to a friend.

Your generosity will be doubled!

### **Campaign updates**

#### *Member Get a Member*

Great Lakes United's "Member-Get a Member" campaign is almost wrapped up for this year. A select group of board and staff contacts were introduced to Great Lakes United through this campaign. We are proud to have them now as new members.

#### *House parties*

Special thanks go out to Tim Brown, current member of Great Lakes United's Board of Directors, for holding a party in his home to benefit Great Lakes United.

Not only did Tim introduce several of his friends and associates to the problems of the Great Lakes and the St. Lawrence River, but he also raised funds to help GLU in our efforts to turn things around.

If you might be interested in holding a similar party, call Great Lakes United Development Coordinator Maureen Sileo at (716) 886-0142 for more information.

## **Great Lakes United**

### *staff*

**margaret wooster**  
executive director  
**bonnie dann**  
financial manager  
**reg gilbert**  
senior coordinator  
**stéphane gingras**  
field coordinator (montréal office)  
**michael lawson**  
membership and development assistant  
**maria maybee**  
program coordinator  
**jennifer nalbone**  
biodiversity and habitat coordinator  
**maureen sileo**  
membership and development coordinator  
**barbara wallenhorst**  
office manager  
great lakes united's nonexecutive staff is represented by  
united auto workers local 55, buffalo, new york



### *volunteers and interns*

**paula borkowski • judy catalano**  
**virginia goss • steve john**  
**christal johnson • jane jontz**  
**henry sauberman • mike turkish**  
**joann zurek**



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# The lessons of the Walkerton tragedy

John Jackson, Board Member  
Canadian Environmental Law Association

After more than a year of work, the formal inquiry into last year's drinking water contamination in the town of Walkerton, Ontario, is nearly complete. The inquiry has many lessons to teach us.

The May 2000 Walkerton contamination incident is one of the worst public health disasters of recent times: 7 people died, 2,300 people were sickened, and 1,200 people are under long-term medical treatment that may last the rest of their lives.

The incident has shaken the Ontario government of Premier Mike Harris. Last month, at about the halfway point in his current term in office, Harris announced that he is stepping down as premier of Ontario.

The incident has alarmed Canada as a whole. A September national survey found that almost a third of Canadians now have either "no confidence" or "very little confidence" in the quality of their drinking water.

## The inquiry and its report

After great public pressure, in June 2000 Ontario set up

an inquiry to understand what happened in Walkerton and what needs to be done to prevent a similar tragedy from happening again.

Chaired by Justice Dennis O'Connor of the Ontario Court of Appeals, the inquiry process included 130 days of formal hearings and testimony from 114 witnesses, including successive provincial environment ministers

and Premier Michael Harris—the first time in fifty years an Ontario premier has been subjected to formal cross-examination. The inquiry process also included town hall and expert meetings and public hearings across Ontario.

The first part of the inquiry's report will be submitted to the province sometime in December.

The complete report will be finished by early spring.

The evidence that has emerged through the Walkerton Inquiry contains valuable messages for all people in the Great Lakes and applies to all forms of water contamination. In this article, we present some of the highlights from that evidence and some of the

*continued page 25*



Graffiti-daubed building that shelters Walkerton's well #7

Arne Brown, CBC Photos

## In this issue

Great Lakes restoration strategy 1  
Oak Ridges Moraine plan 1  
Fox River cleanup: half the job 3  
Michigan destroying its dunes 6  
Mercury switchout 8

Canada nukes coming back 10  
Long-term Great Lakes energy plan 11  
IJC biennial meeting 12  
Perrier proposal called diversion 14  
Wisconsin small dam removal 15

Interim ballast water standards 17  
Millennium pipeline 17  
Great Lakes forest logging 18  
Ontario "clearcut" guidelines 19  
Membership news 28



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