

A New Environmental Era for Ontario?

By Sarah Miller, Canadian Environmental Law Association

On October 18th, 1990, Ontario's first social democratic government was sworn in. The University of Toronto's Convocation Hall was selected by the New Democratic Party (NDP) government for the ceremony to accommodate the overflow crowds of supporters with whom they wanted to share this historic occasion. The NDP had hoped to win a minority in the election but ended up winning a strong majority: 74 out of 130 seats in the Legislature. The Party's traditional supporters, organized labour, the province's multi-cultural community, and advocates for social change and justice had reason to be jubilant. Many of their own colleagues had been elected, with many serving their first term as politicians. The cabinet which Premier Rae introduced now has a record 11 women out of 25 members.

The NDP had been a strong supporter of environmental protection before it came to power. Does their election usher in a new era for the Great Lakes and the environment? With four of the five Great Lakes on its border, Ontario governs half their waters. It is critical that Great Lakes advocates on both sides of the border should examine the NDP's policies. These policies and recent campaign promises must now be transformed into tangible results.

PARTY POLICY

Before the election in June 1990, the

NDP developed a party policy paper that anticipates some of the tough challenges which they will now face. Many of these choices may make it difficult to remain at the side of their traditional supporters - organized labour. The NDP's historic position, full employment through economic growth, will have to be tempered, states *The Greening Policy*, by a new environmentally sustainable economy. A green economy should have the ability "to be naturally labour-intensive," the policy says, and have value added through job creation in soft energy alternatives, environmental cleanup and the manufacturing of environmentally-friendly products and services. Making these transitions will mean job loss, dislocation and change. It offers strategies for diversifying one-industry towns, alternatives to resource depletion, and compensation and retraining for job loss. These strategies emphasize that the burden for the change to a green economy must be equitably shared in society.

Much of historic NDP policy on the environment has grown from the workplace; from occupational health and safety, and worker and community right-to-know. The Party's own roots make their government an ideal forum for Great Lakes United's newly formed Labour/Environment Committee to promote their work. Of interest to Great Lakes advocates are the Green Policy's commitments to:

- giving priority to waste reduction
- strengthening the *Environmental*

Assessment Act

- increasing funding for the environment
- overhauling environmental regulations to integrate the regulatory process to eliminate its present fragmented and arbitrary nature
- speeding up air and water pollution regulation
- expanding public education on the environment
- limiting CO2 emissions from automobiles
- suspending plans for new coal-fired and nuclear power plants
- implementing Green Tax Reform by taxing environmentally damaging activities, fossil fuels, virgin paper, plastics and metals
- reducing the use of pesticides in agriculture by 50 per cent by 2002

THE CAMPAIGN

During the campaign Bob Rae repeatedly called upon the electorate to send a strong message to the govern-

ment. That message was sent. Liberal David Peterson was overwhelmingly defeated in his riding by the co-ordinator of a battered woman's clinic convinced at the last minute to run so that the Premier would not go unchallenged.

The August election campaign was not a dynamic one; however, environmental concerns were consistently raised. Public opinion polls showed that 84 per cent of people felt the Province's garbage crisis had grown out of the government's control. Protesters from many of the candidate landfill sites for Toronto's garbage protested loud and often at Liberal whistletops.

The NDP used the opportunity to decry the effectiveness of the government's protection of provincial drinking water supplies when Bob Rae campaigned in Wallaceburg and Elmirā, two communities whose potable water supplies have been continuously threatened by industrial pollution. In his remarks, Bob Rae called for zero discharge of toxins by the year 2000.

The Liberal Party had promised to phase out nuclear power just as the NDP

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EPA's 5-Year Great Lakes Plan: How Well Have They Done?

By Bruce Kershner, GLU Field Coordinator

We have an aggressive plan that incorporates innovative methods of coming to grips with Great Lakes problems," said U.S. Environmental Protection Agency (EPA) Regional Administrator Val Adamkus in October 1985.

This was his response to the Buffalo News when asked about EPA's Five-Year Plan for the Great Lakes that was released in 1985. *The Five-Year Program Strategy for the Great Lakes Program Office 1986-1990* mapped out nearly 150 goals and actions for the period. He emphasized, however, that the plan "would not end contamination of the lakes - that could take a generation - but it will put an effective remedial program into place for the rest of this century."

Now that the end of that five-year period has been reached, how has EPA done toward its ambitious goals? To assess this, GLU interviewed six EPA officials (including Val Adamkus, and Carol Finch, past director of Great Lakes National Program Office (GLNPO)), six state agency officials from Michigan, Wisconsin, Ohio and New York, and six citizen environmental leaders.

Five major topics were selected for their critical importance and for being the focus of great attention. They are Zero Discharge; Remedial Action Plans; Fish Contamination; Phosphorus Control; and Contaminated Sediments.

Other goals were not assessed simply to allow a more in-depth discussion of the first five topics.

ZERO DISCHARGE

"The aim of the strategy is that, to the

extent possible, by 1990 there should be no direct discharges in the Great Lakes basin of effluents that are acutely or chronically toxic to aquatic biota."

All those interviewed agreed that this goal had not been achieved. "They clearly have not done it, and they have a long way to go," responded J.D. Snyder, director of Michigan's Office of the Great Lakes. This was a typical answer.

Dr. Fred Brown, member of Michigan's Water Resources Commission, noted that "every state agency is required to list watersheds that do not meet water quality standards for point sources. In Michigan, a dozen or so watersheds are not meeting them."

While in general agreement, EPA's Adamkus added that for this goal, "it was not a total failure -- there have been noticeable achievements in certain areas. We have been effective in totally organizing the Basin's approach to this problem, e.g., there are offices of the Great Lakes in each of the eight states. And Great Lakes toxics are now a top priority for EPA and for Congress."

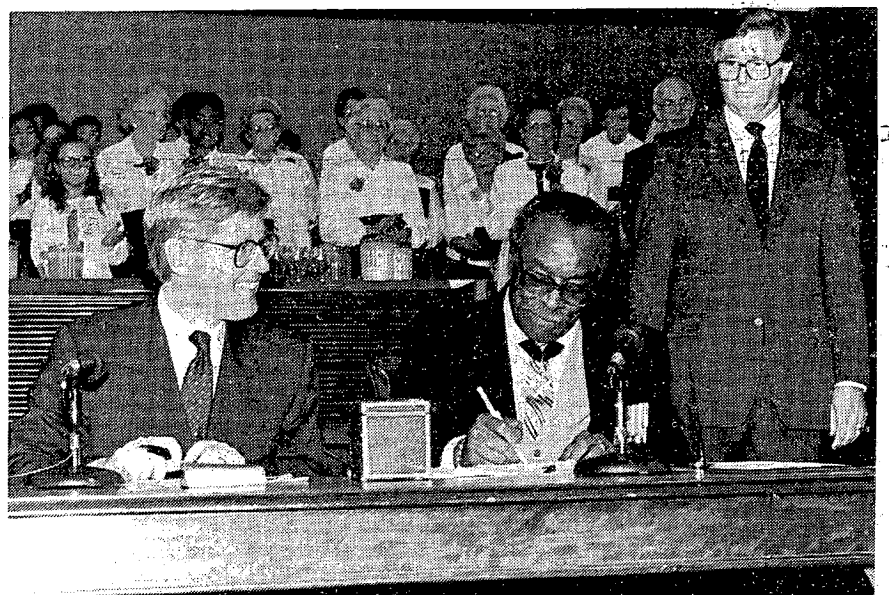
He explained that "our original goal was too ambitious; we didn't realize the severity of the problem in 1985."

Still, Glenda Daniel, Lake Michigan Federation director, points out that "this goal will never be accomplished until we get rid of 'Zones of Initial Dilution.' EPA did not try to get Wisconsin and other states to end their resistance to controlling bioaccumulatives in these zones. They 'wimped' out."

RAPs

"The goal of five-year program strategy [is] to develop and implement remedial pro-

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Bob Rae (left) became Ontario's new Premier last October 18. Also shown are Lieutenant Governor Lincoln Alexander (center) and Peter Barnes, Secretary of the Cabinet (right).

GLU Awarded First of Great Lakes Fund's Grants

By Kristine Miller, GLU Development Coordinator

Great Lakes United has been awarded one of the first-ever grants given by the Great Lakes Protection Fund. The Fund received over 100 applications from the U.S. and Canada and chose nine to share over \$1 million. GLU's grant is for \$86,000.

The eight Great Lakes Governors formed the Fund in 1989. Each state contributes to the Fund in proportion to its water use. The only two states which have not put in their share of Fund money are Illinois and New York. (Illinois has not decided if it will even participate). New York's \$12 million share hinged largely on the passage of the Environmental Quality Bond Act, which voters turned down (see article on p.3).

The Fund's yearly interest, estimated at \$7 and 10 million, is earmarked for environmental cleanups, pollution prevention, research and public education. Said board chair, Craig Kennedy, "We had a challenging task before us in making our selections, especially since we are working to make a relatively small fund serve as an engine for significant change and innovation."

The board chose projects that provided regional applicability, potential for direct action, links to existing policy, and that did not duplicate other efforts.

The Great Lakes United project will target community pollution prevention and the elimination of persistent toxic chemicals in the Great Lakes Basin. "The hundreds of people who testified at the IJC meeting in Hamilton last year clearly showed that no issue is of greater importance to Basin residents than the elimination of toxic chemical pollution," said Phil Weller, GLU Executive Director. "These projects will further GLU's ongoing efforts to implement Zero Discharge throughout the Great Lakes."

The GLU campaign includes four community education and outreach initiatives.

• Publishing and Promoting "Pollution Prevention Success Stories"

The GLU newsletter will be expanded to relay key examples of successful pollution prevention strategies. "There are people who want to stop toxic chemical pollution in their communities but are overwhelmed by the obstacles,"

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New NDP Gov't Has Strong Environmental Record

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As. However, during Liberal government, Ontario Hydro announced plans to add ten new units to three nuclear plants to provide two-thirds of the province's electricity needs by 2014. These needs projections are now undergoing Environmental Assessment and the NDP faces a huge challenge to turn around this growth scenario to conservation soft-energy options. In another specific promise made to environmentalists on August 14, 1990, Bob Rae supported the groups' call for a ban on toxic organochlorine discharges from pulp and paper mills.

THE ELECTION

How did the Party which many felt was destined to remain perpetually in opposition in Ontario, win such an upset? Many political pundits are portraying this win not as an indication of the NDP's strength but as the result of the electorate's deep disgust with the hubris displayed by both former Premier David Peterson's Liberal government and the current federal Conservative government of Prime Minister Brian Mulroney. The summer of 1990 saw Canada's constitutional integrity torn to shreds when the failure of the Meech Lake Accord discussions created a crisis over the status of the Province of Quebec and of Aboriginal

rights. These talks were carried out by Canada's Premiers with no public mandate or involvement. A shamed nation spent the summer watching the build-up of the governments' heavy-handed armed stand-offs with the Mohawk Nation at Kahnawake and Kahnatesake. In addition, the federal government was using similar tactics to force through a Goods & Service Tax of 7 per cent on an unwilling nation.

In this climate, Premier David Peterson made the fatal error of calling the provincial election, one year before his term of office was over. He said he needed a new mandate for the constitutional challenge ahead. He was candid that he was doing so because public opinion polls indicated the Liberals had a majority. The electorate reacted strongly to this blatant opportunism.

SINCE THE ELECTION

While many of the NDP's policies could go a long way toward environmental reform, the realities of governing and staying in government during a recession has clearly hit the NDP. In their first month in office they have been very cautious on which policies they will pursue. On November 20, his throne speech announced a target of 25% diversion from landfills, a Safe Drinking Water Act, an Environmental Bill of Rights, and a moratorium on new

nuclear plants. The Bill of Rights would give citizens long overdue rights to bring lawsuits to protect the environment and to uphold laws, to be informed of environmental decision-making, and protect from reprisal workers who reveal information on pollution caused by their employers. The Premier's public appearances since his election have been primarily at forums to reassure business that an NDP government has sound fiscal policies and will not ignore them. He has even taken time to convey this message to Wall Street, certainly a long way away from the logging road where Bob Rae made headlines a year ago with his arrest for joining a blockade to protect Temagami old-growth pine forests.

Bob Rae's appointment of Ruth Grier as Minister of the Environment and as Minister Responsible for the Greater Toronto Area (GTA) was welcomed with enthusiasm by environmentalists. The dual portfolio is an important one. Many of the environmental problems within the GTA and Western Lake Ontario are precipitated by uncontrolled development. This appointment transfers decisions on such growth from the Ministry of Housing to the Ministry of the Environment.

Ruth Grier has been a strong environmental advocate as Environment Critic in the Legislature since 1985. She has sponsored private member bills, an

Environmental Bill of Rights and *A Safe Drinking Water Act*, neither of which were successful. Ruth Grier has a strong understanding of the needs for water quality regulation reforms. She has been quick to point out the weaknesses of the province's role in Remedial Action Plans and has been critical of Ontario's water regulation program, the Municipal Industrial Strategy for Abatement. Her own riding of Etobicoke Lakeshore has been under siege from intensive waterfront development which she has struggled to have brought under *The Environmental Assessment Act*. Ruth's challenge will be to reform and implement the province's water quality programs in the next four years.

The NDP's win in Ontario may not in fact be an anomaly. Recent polls indicate that the federal NDP is leading all other parties with a 38 per cent majority of public opinion polls even though a federal election is not expected for a few years. The electorate will be watching the NDP Ontario government's actions to guide them in the selection of Canada's next federal government. □

Pollution Prevention is Goal of GLU Grant

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says Bruce Kershner, Editor and Field Coordinator. "These success stories will show them that it is possible-- and where to start." The articles will explain different pollution prevention techniques and provide contacts and resources.

• Pollution Prevention Training Workshops

In 1991, GLU will sponsor six pollution prevention training workshops, giving residents the basic technical skills needed to fight community pollution. GLU will explain how to monitor industrial pollution permits, participate in permit reviews and develop pollution prevention strategies for the special environmental problems of their communities. Following the workshops, GLU will provide technical and organizational assistance to groups that want to start up their own programs.

• Basin-wide Conference on Achieving Zero Discharge

This two day conference will focus on innovative pollution prevention techniques for the home, community and industry. Speakers who have worked on

zero discharge projects will exchange strategies with participants. This conference will also set an agenda for the Basin-wide Zero Discharge campaign.

• Zero Discharge and Pollution Prevention Guides for Citizens

Over the next year, GLU will publish and distribute two new citizens' guides; one on achieving zero discharge in Areas of Concern; and one on practical strategies for achieving zero discharge in Basin communities. The guides will provide follow-up material for workshop participants, and will help those who cannot attend GLU workshops but want to learn how to fight pollution in their region.

Fighting toxic chemical pollution in the Great Lakes is the toughest and most crucial fight facing GLU and the people of this region. GLU's new programs, made possible by the Fund, will give people the skills they need to achieve pollution prevention and zero discharge in their communities. GLU's project will also link the efforts of all people fighting for zero discharge and promote a coordinated, grassroots Basin-wide effort.

Other awardees are: the Lake Michigan Federation, Chicago, IL, \$50,135; Brock University, Ont. and State University of NY, Buffalo, \$38,425; Cornell University, NY, \$111,281; Heidelberg College, OH, \$130,145 (over 3 years); University of Illinois, Urbana, \$35,000; WTTW/Channel 11, Chicago, IL, \$40,000; U.S. Fish & Wildlife Service, Ann Arbor, MI, \$34,615; University of Minnesota, and Michigan State University, E. Lansing, \$460,354 (over 3 years).

Long time GLU member, the Lake Michigan Federation, will use its \$50,000 grant to start pilot clean-up projects in two contaminated sites. The projects will incorporate pollution prevention strategies for the Milwaukee River, WI, and the Grand Calumet/Indiana Harbor.

As long as the Great Lakes Protection Fund is used as a supplement to, not a replacement for, government-sponsored environmental programs, it will continue to strengthen clean-up efforts throughout the Great Lakes, and should serve as a model for funding regional restoration projects. □

EPA's Great Lakes 5-Year Record Is Assessed

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programs in all [28 U.S.] Areas of Concern and to "Support public involvement of RAPs in Areas of Concern."

The dozen who commented on this goal put the achievement somewhere between poor to fair. All agreed that support for public involvement has been a failure in particular. "I think EPA totally failed with regard to playing a leadership role for RAPs," states John Jackson, president of Great Lakes United and chair of the Ontario Environment Network. "They sat back and left it up to the states, and didn't even play a serious advisory role." Jane Elder, director of Sierra Club's Great Lakes Program, adds, "They have given emotional support, but I'm not sure what else they've offered other than a rather modest financial support."

Adamkus and Kent Fuller, a senior advisor for EPA, agree that "EPA has done quite poorly as an agency regarding RAP support." They note, however, that they were very frustrated by the lack of federal funding and that it definitely limited EPA's support for RAPs. "We did provide grants to seven

states to fund state RAP coordinators, \$1 million for consultant background reports for numerous Areas of Concern, prototype RAPs for the Rouge River and Grand Cal Harbor, and major toxic studies for the Niagara River, Love Canal and Erie Harbor."

"GLNPO staff for RAPs were not given enough travel money to even visit their Areas of Concern or attend public meetings," Glenda Daniel comments.

Another reason for EPA's limited role was that they were not formally assigned (nor did they try to assume) a lead role in RAPs. It was left up to states, who varied widely in their commitment and schedules. "There was no reason for EPA to opt out of a leadership role," notes Phil Weller, GLU's Executive Director. "The Great Lakes Water Quality Agreement clearly states that the 'federal government, in cooperation with the states,' should develop RAPs."

One sign of EPA's role with RAPs is summed up by Jane Elder's comment, "No one outside of EPA seems to know 'Who in EPA is in charge of RAPs?'"

PHOSPHORUS CONTROL

"By 1990, all publicly owned treatment

works should be meeting the 1 mg/l limit for phosphorus discharges into the Great Lakes."

"I believe we've met this one," EPA's Adamkus says, and there was wide agreement among the others. "We have virtually 100% achievement in Michigan," agrees J.D. Snyder. "In Ohio, we have almost 100% compliance," says Gary Martin, a water quality division chief in Ohio EPA (state agency).

U.S. EPA has clearly done well on this goal. But some environmental leaders wondered if the goal needs to be stricter now. "And they haven't approached the problem of combined sewer overflows. On a dry day, we're OK, on a rainy day, the phosphorus loads are not good," says Jane Elder.

CONTAMINATED SEDIMENTS

"The objectives by 1990 (include)...assist completion of sediment criteria...design a demonstration program for removal (of contaminated sediments)...and make recommendations for removal, treatment and disposal technologies of polluted sediments."

There was general agreement that EPA has a mixed record here, with progress in some areas and lack of progress in others. Continued on page 3

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St. Lawrence & Lake Ontario Regions

New York's WQ Standards Are Too Weak

By Tim Eder, National Wildlife Federation
Great Lakes Natural Resource Center

The State of New York, which has more anglers who spend more on fishing than any Great Lakes State except Michigan, is not adequately protecting those who eat their catch from toxic chemicals. The National Wildlife Federation (NWF) has challenged the New York Department of Environmental Conservation's (DEC) Water Quality Standards for PCBs and other key Great Lakes toxics as being too weak. Water Quality Standards are tools that the States use to set discharge limits for point sources and in other pollution control programs for other sources. While the standards apply to water, not fish, water quality standards that are too lax allow fish contamination sources to continue.

In a letter to the DEC this September, NWF compared New York's Water Quality Standards for PCBs, TCDD (dioxin) and mercury to several other Great Lakes States. For years, New York has boasted that their Water Quality Standards are superior to the other Great Lakes States and Ontario's. It is true that New York was one of the first States to promulgate numeric standards for a large list of chemicals. However, the numbers tell the tale:

GREAT LAKES WATER QUALITY STANDARDS

	NY	Mich.	Wisc.	Minn.
PCBs (ng/l)	1.0	.02	.15	.014
TCDD (ug/l)	1.0	.014	.03	.0004
Mercury (ug/l)	2.0	.0006	.002	.0069

New York's standards are orders of magnitude weaker for chemicals of concern to human health because their standards are based on drinking water criteria. For most chemicals of concern in the Great Lakes, the most important route of exposure is from consuming contaminated fish, not drinking water. This is because these chemicals are very insoluble in water, but highly soluble in fat. Therefore, they accumulate in fatty fish like Lake Trout and Chinook Salmon to much greater concentrations than found in water.

By basing standards to protect human health on drinking water criteria, New York's current standards do not protect humans, especially sport anglers who eat fish from New York's

Great Lakes waters. NWF recently hired Dr. Wayland Swain to develop model Water Quality Standards to protect humans from the reproductive and developmental effects of PCBs. By his calculations, an angler would have to drink Great Lakes water and breathe air for 85 years to get the same dose of PCBs as from eating just one half-pound meal of Lake Ontario salmon contaminated at the FDA action level of 2 ppm.

In our letter to New York, NWF recommended that the DEC revise their currently proposed set of Water Quality Standards to protect humans, especially sport anglers, from toxic chemicals that bioaccumulate. New York's rules include procedures for calculating standards that would generate numbers based on avoiding excess cancer risk. In general, these procedures are adequate; they incorporate assumptions that anglers eat 33 grams of fish per day (roughly one meal per week) and the calculations are based on a 1-in-1 million cancer risk. The problem is, the State has just not followed these procedures.

NWF also urged New York to devise standards to protect humans from non-cancerous effects, including reproductive and developmental effects. There is a great deal of scientific data on the health effects observed in offspring of women who consumed contaminated fish from Lake Michigan, and some from Lake Ontario. New York should use these data to calculate a Water Quality Standard for PCBs that will protect women and children from reproductive and developmental effects.

Sport fishing in Lake Ontario, Lake Erie, the Niagara River, the St. Lawrence River and New York's inland waters is extremely important to New York. In 1985, 2.3 million anglers spent over \$1 billion in New York, and many of them ate their catch. New York should have Water Quality Standards and pollution control programs that better protect these people.



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St. Lawrence Toxics Threaten Canadians

By John E. Milnes, St. Lawrence River
RAP Public Advisory Committee, Canada

(Articles have previously appeared on two casualties of St. Lawrence River toxic contamination, the Beluga whales (Spring '88 GLU newsletter) and the Mohawk Akwesasne Nation (Summer '90). This article focuses on another population threatened by St. Lawrence toxics.)

The St. Lawrence River Area of Concern (AOC) extends from the Power Dam at Cornwall, Ontario, through to the Beauharnois Power Dam in Quebec. It is at the confluence of two provinces of Canada and one state of the U.S., three nations, Akwesasne, Canada and U.S.

What makes this area so different is the fact that it is at this point the waters of the St. Lawrence River become wholly Canadian. The Area of Concern is a collecting point for total loadings from all upstream sources, the other Great Lakes.

If we believe the Beluga whales and

Native Peoples are endangered by what is coming from the Great Lakes Basin, the same must hold true for more than three million Canadians living at, or downstream of, Cornwall, Ont. and Massena, N.Y. within 65 miles. Naturally, those same contaminants also impact on the aquatic ecosystems in the AOC.

Those three million Canadians are also impacted by loadings from local industries in Cornwall and air deposition from industries on both sides of the border that are physically well removed from the AOC. At the same time our Canadian aquatic environment is being bombarded by PCBs from three plants in Massena, N.Y.

The latest studies, by Canadian government agencies, show we have just cause for our concerns. PCB levels in Spottail Shiner forage fish have risen almost 180-fold over the last three years. The levels of PCBs in Mallard ducks taken in Lake Francis are the highest of any found in the Great Lakes Basin.

The problems created by shipping, which uses the lake as a passageway to the Great Lakes, are immense. Shipping impacts on the contaminated sediments and causes them to be mobile, making their contaminants constantly available to the biota in the lake. Wave action also carries attendant problems of erosion and displacement of macrophytes which aggravate the already volatile health problems of the area.

Naturally it is difficult to portray to people living around the lake the dangers of eating the products of Lake St. Francis because the thought still persists that the waters flush away that which we do not want. Additionally there are fishermen who rely on fishing for their living. These fishermen do not want to hear their product is unhealthy.

When we add to this the sports angler who hasn't adopted 'catch and release' as the only safe way to enjoy fishing in these waters, we have severe problems. Like the problems of the Beluga whale, the problems of all Canadians along the St. Lawrence are serious.

EPA & the Great Lakes: A 5-Year Assessment

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"GLNPO has played a major role in getting the sediments demonstration project (ARCS) underway, and are testing 20 technologies," remarks Glenda Daniel. "We plan to issue a report soon to give guidance to the Areas of Concern for the best technologies for contaminated sediments," says Carol Finch, GLNPO director from 1987 to 1990. However, there were many complaints about the program's slow movement.

But completing uniform sediment criteria has been another matter. "We haven't made that goal, we're moving too slowly on it," states Lyman Wible of the Wisconsin DNR. "Wisconsin offered our draft criteria to EPA, but they were not receptive to using them." "We're generally pleased with the ARCS program, but haven't seen progress with the sediment criteria," adds Jackie Moodie, NY DEC's Great Lakes Special Assistant.

Paul Horvat, EPA's ARCS coordinator responds, "Everyone must realize that sediment criteria are not so easy and 'cut and dry.' They've turned out more difficult than everyone expected."

"EPA simply hasn't been given the funding to comprehensively tackle the sediment problem," Jane Elder says. David Miller, Vice President of National Audubon Society for the Northeast Region, and GLU's first director, summed up where much of the problem really lies. "It is Congress that needs to give a stronger directive to EPA to establish criteria, innovative technology, and to finance clean-up activities."

FISH CONTAMINATION

"By 1990, accomplishments should include... binational agreement... on reporting fish advisories... measuring aquatic toxicity... (and) risk assessment methodologies used in setting fish advisories." "Reach agreement on methods and standards for state fish advisories." "Initiate discussions with states on uniform standards for fish advisories."

EPA's performance received a wide range of responses on this goal. "We are pleased to see EPA has shown some

responsiveness. They got in the game late, but are now becoming a player," remarks Lyman Wible. "EPA's role in state uniform standards has been non-existent," counters J.D. Snyder. "I agree we're far from these goals," states Carol Finch. Kent Fuller of the EPA notes that "we did take the initiative for uniform standards for all states bordering Lake Michigan. We had envisioned a more active role for EPA at the time of the Plan. But when the process shifted to the Council of Great Lake Governors, they slowed the pace considerably." "EPA has not played any meaningful role in encouraging the states even turned its back on the process for attaining uniform standards for the states," claims Mark Van Putten, director of National Wildlife Federation's Great Lakes Natural Resource Center.

Wayne Wilford of EPA says instead that "EPA has encouraged the states and helped provide forums to develop uniform state advisories. We have been active and involved and have been pushing for uniformity, but it has taken awhile to get support at the highest levels," emphasizes Adamkus.

Van Putten also points out, "There is still no uniformity for fish consumption advisories from lake to lake. They are not scientifically uniform. Instead, the states simply strike political deals for each lake, with some lakes tighter or laxer depending on the fish or chemical." Val Adamkus agrees that "politics has influenced the results for fish advisories."

With regard to US-Canada uniformity, "There has been no US involvement with Canadas," says Van Putten. Adamkus responds, "The fact is that discussions on uniform standards with Canada have never come up formally. But while GLNPO may not have been strong in the past, we are strongly committed now toward this goal."

In a subsequent issue, we will discuss the future plans for GLNPO with its new director Christopher Grundler.

NY Environmental Bond Act Loses

By Sr. Margeen Hoffman, Niagara Environmental Coalition

Environmental advocates received a disappointment last election day when NY voters turned down the 21st Century Environmental Bond Act. Environmental supporters, including GLU, had campaigned hard for the Act, which would have provided nearly \$2 billion for projects that would have been a big boost for the environment and especially the Great Lakes. The Act would have upgraded treatment plants, closed landfills, funded recycling programs, bought wetlands, public access to the coast, sensitive areas and park lands. It would also have specifically funded NY's \$12 million portion to the Great Lakes Protection Fund. But the reasons for the voter's rejection of the Bond Act, are as complex as the geographically and culturally diverse regions of the Empire State.

The narrow 51.6 to 48.7 percent defeat of the Bond Act reflected uneasiness with state fiscal woes and perceptions of a threatened economy. New York voters were also leery about the Middle East conflict and energy resources.

Besides these concerns, controversy over park acquisitions, and opposition of farmers and developers to wetland regulations saddled New York voters and not the intent of the bond proposal.

Ironically, those areas that stood to gain the most led the defeat! In New York City, only 37 percent of registered voters went to the polls, and although beset with the highest density of hazardous waste sites in the Great Lakes, Niagara County voters rejected the proposal, 69.5 to 30.5 percent.

The narrow defeat cost Western NY its best opportunity to buy more than \$7.6 million worth of Lake Erie and Niagara River parklands and for the cleanup of the Buffalo River.

A key item for Great Lakes protection, however, was not a victim. New York's \$12 million share of the eight-state Great Lakes Protection Fund is still secure! This is because in May 1990, the New York State Legislature approved \$84 million in bottle deposits and other revenue for NY's portion of the Fund.

What will happen to the programs that the Bond Act would have funded? "Local communities will have to pick up the tab for recycling, landfill closing and coastal acquisitions," states Francis Sheehan, the state's Bond Act spokesman. "New state measures to support local efforts will now be a major topic of discussion. If the state is not successful in coming up with new funding, projects like coastal park protection will not be achieved."

(Sister Margeen, vice-president of GLU, chaired the Western New York Committee for the Environmental Bond Act).



Should Contaminated Waterways Be Stocked?

By Thomas R. Anderson, Save the Dunes Council

The question of stocking contaminated waterways by state agencies seems, at first glance, to be a simple one. Clearly, we all want cleaner waterways and fish. Therefore, it seems logical to assume that stocking the cleanest waters would bring us closer to that goal. However, the issue of contaminated fish, impaired waters, and health advisories are anything but simple. This matter is highlighted when we look at the specific question of stocking Trail Creek in Michigan City, IN.

Trail Creek is a major tributary to Lake Michigan located in LaPorte County. Over 150 years of past industrial abuse has impaired these waters, especially the lower few miles. There are numerous dumps along Trail Creek, in-

cluding Waste, Inc. Superfund Site, a Confined Disposal Facility, and dozens of other discharges. The upper watershed contains many point and non-point sources of pollution from agricultural and residential development. In fact, the International Joint Commission identified Trail Creek as an emerging Area of Concern in the 1989 Report on Great Lakes Water Quality.

Trail Creek is also the major salmonid stream in Indiana and is stocked with over 100,000 steelhead and also coho and chinook salmon every year. This fishery represents the basis for the largest sportfishing industry in Indiana. The Sport Fishing Institute, Washington, DC, estimates 55,000 anglers spent over \$30 million fishing for steelhead and salmon in Indiana waters during 1988. This, along with recreational boating, represents one of the largest and fastest growing industries in a state desperate for diversifying the local economy.

However, evidence clearly supports current health advisories concerning Lake Michigan fish. Lake Michigan fish are contaminated with PCBs, chlordane, dieldrin, and DDT. The state of Indiana joined other states around Lake Michigan to issue a joint advisory which classifies fish into 3

fish are least contaminated, and Group Three are the worst and includes the largest lake trout, chinook, and brown trout. Various groups have accused these health advisories as being too restrictive or too permissive. Locally, we are convinced these advisories have focused attention on the problem and directed broad-based support for finding solutions to this problem.

Fish from Trail Creek were included in the health advisories in 1989 for the first time. Many people feel it was the most important point to illustrate the need to clean up this waterway. Although water and sediment monitoring reports have identified numerous contaminants in Trail Creek for years, the public tends to overlook much of the technical data available. However, the news that fish from certain waters are unsafe to eat, affects everyone that lives near that waterway and has initiated a local effort to reclaim these waters. It is spearheaded by the Michigan City Mayor and members of the public, industry, the environmental community, the Port Authority, and state and federal agencies. This has initiated a watershed management plan that addresses long-term solutions, a tangible result which would have been lost if not for the attention focused on this issue. In fact, one of the strongest allies for cleanup of our impaired waters is the sportfishing community. Any future stocking programs should include this knowledge and include input from this source. The local Northwest Indiana Steelheaders are leaders in supporting

clean water and watershed protection which broadens support to address long-term pollution problems.

Test results clearly show each species accumulates toxins at different rates. Therefore, a better question may be: *What species should we stock?* Existing data demonstrates, for example, that steelhead tend to feed lower on the food chain and contain lower fat content, which results in lower contamination levels and less risk. The species stocking mix is an issue that should be included in any decision for future stocking in impaired waters. Also, waters polluted by discharges and contaminated sediments may not be the major source of toxins in a given fish population. Many of these species travel thousands of miles in open water and spend little time directly exposed to the stocking waters. Similarly, atmospheric deposition may contribute as much as 50% or more toxins in the Great Lakes. This is independent of stocking locale.

In conclusion, the issue of stocking fish in impaired waters is complex. There are many reasons for concern as we search for ways to improve Great Lakes waters. We need to increase public awareness of the health advisories and to get citizens to reduce their intake of toxins from fish sources. However, we cannot overlook the importance of the sportfishing coalition to the group of citizens concerned with the cleanup of our lakes and tributaries and the important role that fish can serve to focus those concerns. □



Dredging of contaminated sediment from Trail Creek (Credit: Tom Anderson)

Coastal Landfill Projects Raise Serious Environment Issues

By Paul A. Kakuris, President, Great Lakes Environmental Marine Ltd., Chicago, Coastal Consultants

Environmental groups have been closely scrutinizing two Chicago-area Lake Michigan shoreline projects that raise serious issues of adequate monitoring and mitigation for erosion impacts on downdrift beaches and shores.

The projects are a proposed 20-acre lakefill at the Chicago campus of Loyola University of Chicago and a park beach breakwater complex in suburban Lake Forest, some 35 miles north.

Both projects were opposed by environmental groups because they would prevent sand replenishment of downshore beaches and accelerate erosion and loss of shoreline property.

The Loyola project was blocked (see *Great Lakes United Summer '90* issue) when U.S. District Judge Marvin Aspen granted a permanent injunction to the Lake Michigan Federation and individual plaintiffs. Loyola has since dropped the project without appealing.

Key monitoring-mitigation and other environmental issues in the suit were not ruled on because the court decided on the single issue that under the long-established "public trust" doctrine Loyola could not legally buy state-owned lake bottom for basically private use. Although environmental issues were not adjudicated, preparation of the case focused on environmental concerns that could give rise to future challenges in other instances. Indeed, some observers assume that difficulties with environmental issues were a main factor in Loyola's dropping the project.

The Lake Forest complex is an arc of six rubblemound (rip-rap) breakwaters some 3,200 ft. long and up to 350 ft. into the lake. All are connected to shore, four of them by massive steel groins. They create filled-beach bays and a small-boat basin. Both this and the now-scuttled Loyola project had in common as design-development consultants W.F. Baird & Assoc.; Warzyn Engineering, Inc.; and Johnson, Johnson & Roy.

In the Lake Forest case, in which chal-

lenges have been made to the state and federal permit agencies, the objectivity and adequacy of officially sanctioned monitoring-mitigation have been questioned by environmentalists.

Charging that no independent peer review has taken place since the complex was built in 1986-87, the Illinois chapter of the Sierra Club has called on the state to reject the Lake Forest breakwaters monitoring committee report and to appoint a new and independent review team. Also, the Lake Michigan Federation seeks stronger future monitoring.

Additionally, downdrift village riparians and Great Lakes Environmental Marine Ltd. (GLEM), coastal consultants active on the lake shore since 1974, have filed extensive protests *pro bono* with state and federal agencies as to procedures and substance.

The Lake Forest monitoring committee was skewed in conflict of interest, critics charge, when the city named its own project designers to serve on the committee, take surveys, lead the peer review, and draft evaluation of their own work. Designers' serving on the panel violates the American Society of Civil Engineers rule on proper peer review, we point out.

We also charge that the city and its consultants violated permit conditions and the permit agencies failed to enforce them. Violations include failure to take complete pre-construction data and all required seasonal data, failure to take crucial near-shore data along much of the frontage, and making serious, self-admitted errors and omissions and then using data flaws to justify inability to define impacts.

To offset a new sandbar that has formed at the site, the committee recommended mitigation of 10,000 cu. yd. of sand downdrift, but this falls far short of a 2-year, 30,000 cu. yd. downdrift deficit estimated by an independent team of coastal scientists.

The third-party estimate was included in an environmental assessment of the Loyola project, which the Chicago Park District contracted to GLEM, because of relevancies of the two projects to Chicago parks. The estimate was cal-

culated by Dr. Robert G. Dean, graduate research professor at the University of Florida, with concurring team members from University of Delaware; Queen's University at Kingston, Ont.; University of Miami; MIT; Scripps Institute of Oceanography; and Purdue University.

The skewed monitoring report is criticized for omitting observations of adverse offshore impacts by Corps staff engineers on the committee, as well as many of their specific recommendations for future monitoring guidelines.

Reacting to protests, Lt. Gen. Henry J. Hatch, Corps Chief of Engineers, set in motion special inquiries by the Corps Coastal Engineering Research Center, Vicksburg, MS, and the Corps' North Central Division Chicago office. They are reviewing rulings by the Corps Chicago District office and the Illinois Department of Transportation on amount of mitigation and guidelines for additional 5-year monitoring.

Corps documents made public under our Freedom of Information Act requests, in appeals upheld by the Corps Chief Engineer, disclose that two key state officials recommended 20,000 cu. yd. of pre-construction pre-mitigation, but were over-ruled. Other documents quote the designer as saying in 1989 that if doing the project over, he would first place sediment to offset anticipated erosion and add more post-mitigation than in the final report.

In response to protests, the state has said it intends to withdraw from the committee and is enlisting the Illinois State Geological Survey for involvement. But the flawed report still blocks proper monitoring/mitigation to protect downdrift beaches and shores by following these essential principles:

- Independent coastal expertise in gathering and interpreting data.

- Adequate mitigation to offset reduction of littoral transport feeding downdrift shores.
- Separate monitoring activity and regulatory decisions. (Permit agency staff sat on the Lake Forest monitoring committee.)
- Public access to committee meetings and documents. (In the Lake Forest case, they were secret.)
- Public input before monitoring committee findings.
- Mechanisms to require proper implementation of monitoring and mitigation, governed by science and free of politics.

Based on our experience with Lake Michigan projects, the public and parties who can be affected need to be more watchful and better informed in "monitoring the monitors." This can avoid lapses in defining appropriate mitigation before and after shoreline construction that is capable of trapping or diverting littoral transport sediment.



City of Lake Forest, IL Forest Park Beach Project, a 3500-foot series of groins and breakwaters that would disrupt coastal processes.



Groups Hold Superior Strategy Meeting

By Chris Clark, Environment North

"In general, Lake Superior remains a pristine body of water..."

Lake Superior presents an opportunity for the Parties and relevant jurisdictions to demonstrate they are willing to take one step in a strategy towards zero discharge. This step will also help retain the generally pristine condition of the Lake Superior environment.

The Commission therefore recommends the parties designate Lake Superior as a demonstration area where no point source discharge of any persistent toxic substance will be permitted.

International Joint Commission
Biennial Report, April 1990

This bold statement was what brought together 36 people last October to a Lake Superior strategy meeting in Thunder Bay.

From the hotel was a view of the Sleeping Giant Mountain, guarding over the harbour. It was a perfect setting for the meeting, sponsored by Great Lakes United and Environment North, to discuss setting up a network of concerned groups and citizens from both sides of Lake Superior. We met face to face to talk about what we wanted to see our lake become. We call it our Superior Vision.

People representing environmental, health, and angler and hunter groups addressed several topics, including

toxics and zero discharge, forestry issues (see accompanying articles), wildlife habitat, and networking.

The thrust of the discussion was on bringing to reality the IJC recommendation to make Lake Superior a model project for zero discharge.

To achieve zero discharge in Lake Superior, it is clear that discharges of organochlorine chemicals must be eliminated. The paper and pulp industry is the primary discharger of organochlorines into Lake Superior. Organochlorines are unnecessary since they are used to bleach paper, even though unbleached paper is just as good as bleached paper, and there are also non-chlorine methods to bleach paper.

The group discussed how to ensure elimination of chlorine from pulping. We also agreed to develop specific proposals to be put forward at a major conference next spring (see letter below).

In addressing land use and habitat issues, the participants discussed the need to protect the natural features of Lake Superior. One question posed was "Could Lake Superior be established as a Biosphere Reserve?" We decided to prepare a background paper next spring.

We all agreed on the importance of networking as a way to increase our effectiveness. This meeting was just the first step toward a major Lake Superior network conference, to be held later in 1991. □



Zero discharge was the focus of the strategy meeting in Thunder Bay, Ont. held last October.

Winter Shipping Extended by a Week

Winter navigation through the Soo Locks at Sault Ste. Marie has been extended by one week, the U.S. Army Corps of Engineers decided last August. Shipping will now be allowed up to January 15th, instead of January 8th.

"We're uncomfortable about this one-week extension of the navigation season," states Great Lakes United Executive Director Philip Weller. "But at least it was only a minor extension—it could have been much more, and the threats to the Great Lakes would have been greater."

Since its inception, Great Lakes United has been opposed to winter navigation in the Great Lakes - St. Lawrence River because of the impacts of ice scouring on aquatic communities, spawning areas and shore damage caused by the movement of ships through ice. Winter navigation also greatly increases the risk of a shipping mishap that leads to an oil or chemical spill. Icy conditions would prevent a cleanup until spring, when the damage will have already taken place.

The Army Corps decision cited the lack of commercial need for shipping beyond January 15th, not the environmental concerns, which it said were "not significant."

By Kristina Lee, Canadian Member of St. Clair River BPAC

It began as just another uneventful Binational Public Advisory Committee (BPAC) meeting on September 18, 1990. However, after the delegates' presentations, the environmental representatives read a statement which accused the governments of stalling the BPAC process. The representatives then proceeded to walk out of the meeting. What followed was a motion by two industrial representatives which supported the walkout. A vote to adjourn the meeting was carried. Thus ended the 22nd meeting of St. Clair River BPAC.

What happened during those 22 meetings to cause the representatives to take such unprecedented action? Unfortunately, there are no easy answers, only many more questions.

Why have there been four Remedial Action Plan (RAP) co-ordinators and at least three executive assistants in the last two years? Why has the attendance at the 22 meetings diminished to about 40%? Where is the accountability for writers of the RAP to meet their own deadlines? Why did the BPAC have to wait for the new fiscal year before the new staff were hired? Who was supposed to set the agenda and what kinds of items should be on the agenda? What

The Little Known Plight of Canada's Snow Forest

By Chris Clark, Environment North

Clearcuts spreading across the horizon...cutting of huge areas of one of the largest continuously forested regions in the world...massive government-sponsored mining or hydropower projects destroying wildlife habitat, water quality and damaging hydrological functions...threatened survival of Indian people on their ancestral lands.

Sound like a description of the Amazon Rain Forest? Well, it's a lot closer to home. It describes what is happening to Canada's "Snow" Forest.

The "Snow" Forest refers to the vast boreal conifer forest here in Canada. It may be tough to accept, but Canada's forest is being treated like a "third world" country. This is being done with the consent of provincial governments who are squandering what remains of "our" (read "Canadian Citizens'") resources to foreign interests.

The threat to the snow forest was one of the topics that came up at the Lake Superior strategy meeting (see article). Large areas around Lake Superior are being clearcut, causing local changes in climate, degradation of fishery, wildlife, water quality and water recharge.

Here's how the Rain Forest and the Snow Forest compare:

- Size of Canada's Snow Forest: 3.3

million sq. km; Brazil's Rain Forest: 3.5 million sq. km.

- Amount of Canadian forest cleared annually: 12,220 sq. km; of Brazil's Rain Forest cleared annually: 35,000 sq. km.

- Amount of productive Canadian forest that is now barren or insufficiently restocked: 10.3%; amount of Amazon forest that is barren: 12%.

- Amount of Canada's Snow Forest protected from development and commercial resource extraction: 2.6%; of Brazil Rain Forest protected: 9.4%.

- Average timber produced annually by Canada: 421 million cubic metres; by Brazil: 493 million cubic metres.

- Estimated number of Indians living in Snow Forest: 100,000; living in the Amazon Rain Forest: 170,000.

The similarities are painfully clear, and the lesson for Great Lakes advocates is that if we want to save our waters, we will also have to save our forests.

(For more details on this issue, read "Heartwood" by Christie McLaren in Equinox Magazine, Sept/Oct 1990, and "The Forest Ecosystem, Tropical & Boreal" by Dr. Eberhard Bruening, Ambio, Vol. 16, No. 2-3, 1987.) □

Lake Superior Joint Letter Urges Action

Twenty-one groups including the National Wildlife Federation, Great Lakes United, Sierra Club, Environment North, Upper Peninsula Environmental Coalition and MUCC, sent a joint letter last September urging Canadian, U.S., state and provincial government officials to act on the IJC's Lake Superior zero discharge recommendation. Here are some excerpts:

"We are writing to request your endorsement of a moratorium on any new or increased discharges of persistent toxic pollutants into Lake Superior or its tributaries pending implementation of the International Joint Commission's recommendation that Lake Superior be designated as a "zero discharge demonstration zone." Without this moratorium, Lake Superior water quality is likely to be severely degraded by increased toxic pollution before the

IJC's proposal is reflected in policy...

Last year, the U.S. General Accounting Office documented the sad history of many past IJC recommendations that have been ignored. The IJC's recommendation for designating Lake Superior as a zero discharge demonstration zone is too important to allow it to suffer this fate. But, if [the several current] proposals for new or increased toxic discharges into the Lake Superior watershed are allowed to proceed, the IJC's historic recommendation will be undermined before it ever takes effect.

Therefore, we call on each of you to endorse an immediate moratorium on any new or increased discharges of persistent toxic pollutants into Lake Superior or its tributaries until federal, state and provincial programs have been revised to enforce the IJC's recommendation." □

Citizens Walk Out of St. Clair BPAC

is the directional objective for the agendas? Many of the presentations were educational but members often found they were unable to connect them to the immediate goals of the RAP process.

In April, 1988, the citizens from both sides of the St. Clair River met for the first time for the RAP. It was a new government "buzz word." The notion that government had finally recognized the area as an environmental "hot spot" but also was willing to invest time, personnel, and money into a clean-up plan was encouraging.

At the beginning, the environmental sector was apprehensive about how many members were sympathetic to the industries? Would industry "out muscle" the environmental interests? The larger, more powerful corporations have access to scientific consultants; would local environmental groups get access to the same level of expertise? Even though one may represent a non-industrial sector, what if he/she were employed by one of the larger corporations? What kinds of financial commitments are the governments willing to make? What happens if the leading political party changes?

When the first co-ordinator was named, there was a feeling of direction and high anticipation. When that co-ordinator resigned, there was a feeling of

disappointment but still a continued optimism. After the third co-ordinator resigned within two years and BPAC was left with a vacancy (having to wait for a new fiscal year), there was total apathy and skepticism in the process.

A basic rule of survival is that we must learn to adapt and not make the same mistake twice. In my opinion, RAPs are a positive influence at the grass roots level. I have faith that the St. Clair RAP will get back on track, and it will have learned from its mistakes. The purpose of this article is to promote discussion and self-evaluation of other RAPs.

To make the system work more efficiently, the government must make a choice regarding the role of the co-ordinator and the amount of autonomy it allows the RAPs. Since the BPAC members are not elected in the democratic context, should they have autonomy? Personally, I am strongly against allowing each Area of Concern to make decisions that should only be made by elected candidates. Therefore, the role of co-ordinator must be designated to a person who has some political authority and clout, can demonstrate accountability to BPAC, has a high profile in the community, and is willing to serve the term of office which can ensure that the job will be completed. □



Canadian Governments Shift Position on Delisting

By Karen Murphy, GLU Field Coordinator.

We oppose the proposed Principles for Delisting Canadian Areas of Concern. The proposed principles make us very suspicious that the main motivation of the governments is to weaken the RAP process -- that the main objective of the governments is to delist Areas of Concern even if the problems in an area have not been cleaned up."

This was the message sent by Great Lakes United and 19 other groups from throughout the Basin to the governments of Ontario and Canada in response to their proposal to develop delisting principles and criteria for Canadian Areas of Concern.

Groups from around the Basin opposed these criteria for several reasons. First, we felt that it was an unnecessary repetition of activities already being undertaken by the IJC. Second, the principles allowed fundamental

requirements of the Great Lakes Water Quality Agreement -- such as the ecosystem approach and zero discharge -- to be implemented in Areas of Concern only "if it is desired". And third, the Principles and Objectives of the Water Quality Agreement were not used as the basis for the governments' proposed principles.

In response to this opposition, the Canada-Ontario Steering Committee (the government body responsible for oversight of the RAP process in Canada) has moderated its previous position on the delisting principles. First, they state that they are not developing province wide delisting criteria. Secondly, specific criteria that will be developed for each Area of Concern during Stage 2 of the Remedial Action Plan will include the IJC's delisting guidelines, locally defined use goals, and applicable agency standards and objectives. This new proposal will be circulated to Public Advisory Committees and interested

citizens and groups for review over the next few months.

Criteria for delisting Areas of Concern (perhaps it would be better to think of them as "restoration" criteria) are important because they provide specific guidelines for determining when an area has been cleaned up. However, inadequate criteria could lead to delisting 'in name only' and not actual cleanups.

In March/April of 1989, the IJC released draft listing/delisting criteria for all Areas of Concern. Citizens and groups from throughout the Basin provided comments on these criteria to expand and improve upon their scope. The IJC is now reviewing comments on the draft criteria, and final criteria may be released in December.

In apparent dissatisfaction with the IJC's proposed criteria, Environment Canada in consultation with the Ontario Ministry of Environment (MOE)

developed "Principles for Delisting Canadian Areas of Concern." These were not specific criteria but principles which would guide the development of criteria. The Canada-Ontario Steering Committee had planned to present final principles and draft criteria at the November presentation at the meeting of the Parties.

Citizens should review this new proposal carefully. The COA Steering Committee still proposes that deviations from the IJC delisting criteria, if justified, can occur. These delisting criteria deviations may be akin to granting a variance and variances have not always been beneficial for the environment.

We urge you to watchdog this process. To review the delisting materials, contact Tom Coape-Arnold, Ontario MOE (416)323-4943 or Louise Knox, Environment Canada (416)973-9736.

Great Lakes Added To International Beach Cleanup

By Robert Slammon

The International Beach Cleanup Day originated four years ago and has since spread rapidly to 26 states, Canada, Mexico, Puerto Rico, and Japan. But it was not until this September that the Great Lakes were introduced to the Cleanup.

New York State, in fact, has participated in the Cleanup for the past three years, but its effort last year covered only eight miles of state shoreline along the ocean. This year, however, the project added 25 miles of shoreline of Lakes Erie and Ontario and Niagara River in Western NY.

Over ten tons of waste were collected from the 25 miles of Great Lakes shoreline. 525 volunteers picked up 276 bags of debris consisting of an assortment of interesting artifacts: hundreds of balloons, pull tabs, plastic, six-pack rings, syringes, dialysis bags, a steel beam, bed springs, outboard motors, a kitchen sink, and, as volunteers reported, too many cigarette filters to count.

Sharen Trembath, the Erie County Coordinator, considers this fall's effort a "remarkable success," and its volunteers' commitment laudible: "I can't tell you how impressed I was with the dedication of each volunteer...People really care...They know how important the environment is and are willing to do what they can."

Ms. Trembath wishes, however, that she had had more cooperation among local governments and businesses. Except for the support of a few businesses, most businesses along littered shorelines were apathetic about the project. Also, she regrets that the cleanup could have been more extensive, but some government representatives never responded to the invitation. Ms. Trembath predicts, with the support of all local businesses and governmental officials, the project will undoubtedly expand in the future.

Internationally, the cleanup rallied 100,000 volunteers and covered 3000 miles of beach. Patty Debenhorn, national clean-up coordinator, calls the turnout "a confirmation of the worldwide concern over the plight of our coasts and beaches."

The purpose of the project is twofold: one, to clean up our coasts and beaches; and two, to identify what and who contributes to our littered shorelines. Volunteers are asked to record on data cards each item of trash found. After the cleanup the cards are collected for analysis and identification. The results of the study are presented by the sponsor and promotor of the

cleanup, the Center for Marine Conservation (CMC), in an annual report called *Cleaning Up North America's Beaches: 1990 Beach Cleanup Results*.

Initially, each effort analyzed the data on a local basis only, but the CMC has since consolidated the data collected internationally. According to New York State Beach Cleanup representative, Roberta Weisbrod, this has added to the effectiveness of the study.

She adds that the study is significant in that it assists policy makers in adopting measures to correct our international problem. In 1988, for instance, the CMC presented that year's national report to the U.S. Senate, which resulted in the ratification of an international treaty which bans the dumping of plastics in national waters.

The study also clarifies the legislative and enforcement measures that must be taken in the future. The preliminary results from this September's study claim, for example, that plastic remains the most prevalent debris type collected in the US and Canada; that the states with the largest percentage of bottles on their beaches (Virgin Islands, NJ, GA, Puerto Rico) do not have beverage container deposit laws; and that the highest amount of six-pack rings were found in Texas and Washington, two states that do not have legislation that require six-pack rings to be degradable.

According to Ms. Trembath, studies such as the International Beach Cleanup are effective in deterring illegal dumping; after publicizing the results of a similar study on medical waste, she noticed a radical decrease in medical waste found on the beaches thereafter.

Considering the past success of this project, and especially the deplorable condition of our world's largest lakes, it is interesting that no one is clear as to why the National Beach Cleanup ignored the Great Lakes until now? "It's not the lack of interest," claims Betsy Schrader, an administrator at the CMC. "People came forward this year and voiced an interest in expanding the cleanup in that area."

The prospects for expanding the Cleanup in the Great Lakes in years ahead remain unknown. The CMC, reports Ms. Weisbrod, is currently discussing the matter. Whether the Cleanup's expansion in the Great Lakes in the future would be a success is also an important question. If the Erie County section of the Beach Cleanup, however, represents any indication, the answer would most likely be "yes."

To get involved in a Cleanup in your area, contact the CMC, 1725 DeSales St., NW, Suite 500, Washington, DC 20036, (202)429-5609.



Great Lakes volunteers remove garbage during Buffalo River Cleanup Day, held close to the International Beach Cleanup Day last September.

Sustainability As if We Mean It

Sustainability As if We Mean It. This is the name of a report that is the first-ever attempt by Ontario's citizens' and environmental groups to compile a comprehensive action agenda for a sustainable future.

It was released by the Ontario Environmental Network (OEN), a non-profit body that facilitates cooperation among almost 400 environmental groups in Ontario.

The agenda addresses the need for a sustainable society. This is a society that does not consume more of Earth's resources than it needs; that does not unnecessarily produce vast amounts of wastes; that does not assume that environmental contamination is a necessary price of economic development; that shifts from non-renewables to renewables; that considers the impact of land development on biological diversity and quality of life; and that does not put a priority on economic growth over environmental health.

The title, *Sustainability As if We Mean It*, reflects our frustration at failure of business, government, and the people of Ontario to take the steps needed to achieve sustainability. But it also reflects our hope that we are now more prepared than ever to do what must be done to restore and preserve our environment.

Here's a sampling of the nearly 100 action initiatives:

Citizen Involvement: Establish policies, laws and funding to enable effective public participation by 1992.

Labour: Strengthen the right to refuse unsafe work.

Environmental Bill of Rights: Enact as soon as possible.

Hazardous Waste: Set targets for reducing hazardous waste generation in Ontario by at least 50% by 1995.

Provincial Government: Implement a sustainability strategy that addresses implications of all government policies.

- Fund citizen intervenors before the

Ontario Municipal Board and an Environmental Auditor to review the government's performance.

Water Quality: Achieve Zero Discharge of persistent toxic substances from Ontario industries and municipal sewers by 2000.

- Eliminate organo-chlorine emissions from pulp plants by 1993.

- Improve funding and expand the powers of the Remedial Action Plan process for Areas of Concern.

Air Quality: Implement the Clean Air Program by 1995, including zero discharge of persistent toxics.

- Phase out ozone-destroying chemicals by 1995; ban "soft" CFCs by 2010.

Solid Waste: Adopt zero waste disposal goal for all solid wastes with an interim target of 85% reduction by 2000.

- Implement mandatory source separation of recyclables and compostables in all waste generators.

Nuclear Power: Phase out Ontario's nuclear programme and exports.

- Require cleanup of active and decommissioned uranium tailings sites by 1995.

Agriculture: Adopt a target of achieving sustainable agriculture of Ontario croplands of 100% by 2005.

Forestry: Restrict large area clear-cutting and prohibit logging where sites cannot be regenerated.

Urbanization: Develop a public planning process for Greater Toronto, subject to the Environmental Assessment Act.

Wildlife and Natural Areas: Amend Ontario's Provincial Parks Act by 1993, including banning of mineral exploration and logging in all parks.

It is time now for Ontario to enter a new era of resolute action on the environment; time to adopt sustainability as if we mean it. To obtain a copy of the report, write to the OEN, PO Box 125, Station P, Toronto, Ontario M5S 2E7.



Clean Air, Great Lakes Laws Passed in U.S.

In the dying minutes of the 101st Congress, President Bush signed into law a number of important bills which affect the Great Lakes. Significant among them are the Clean Air Act and the Great Lakes Critical Programs Act. The Clean Air Act, after a decade-long struggle revises US air pollution laws. The new Act has special provisions for protecting the Great Lakes from contamination by airborne toxics. It requires on-going EPA monitoring, a study and finding by the agency on whether or not special regulations are needed to protect the Great Lakes, and a five-year deadline for such regulations to become effective.

Unfortunately, the Act was weakened by several provisions that say that coke ovens that meet specific requirements in the 1990s may be exempt from a second round of regulation until 2020. Congress also exempted coal burning electric utilities from mercury controls.

The Great Lakes Critical Programs Act codifies many features of the Great Lakes Water Quality Agreement, a major step toward a long-time goal of GLU.

The Act sets deadlines for Remedial Action Plans and Lakewide Management Plans, increases funds for the EPA Great Lakes Program, and institutes clean-up programs for Long Island Sound, Lake Champlain and Onondaga Lake.

The U.S. Congress also approved a final budget that includes more than \$30 million in Great Lakes funding, including \$3 million for zebra mussel control and prevention. Most of the appropriations were higher than Administration requests. Included in the appropriations were \$16.2 million for EPA's Great Lakes National Program Office (GLNPO), \$2 million for the EPA's Large Lakes Environmental Research Laboratory, and \$5.7 million for NOAA's Great Lakes research laboratory in Ann Arbor, Mich.

LAKE-LEVEL UPDATE

Water levels of four Great Lakes rose slightly due to higher precipitation. November 16, 1990 levels recorded by the Department of the Army were:

	Change from record Nov. high	Since last Nov. 16
Lake Superior	-22 in. (1985)	+2 in.
Lake Mich.-Huron	-41 (1986)	+4
Lake St. Clair	-28 (1986)	+6
Lake Erie	-25 (1986)	+4
Lake Ontario	-23 (1945)	+1

Clean Water Act appropriations included \$81.7 million for enforcement programs and \$51.4 million for non-point source pollution. Other appropriations included \$40.7 million for Sea Grant programs, \$34.6 million for state grants through NOAA's Coastal Zone Management program, and \$6.5 million for the Great Lakes Fishery Commission and \$1.2 million for International Joint Commission (IJC), the same as last year.

The President signed into law the Coastal Barriers Improvement Act of 1990, which protects more than 800,000 coastal acres from development. It is the first time the Great Lakes coast will get protection. But the 31,381 acres of Great Lakes shores that is included is much less than the 58,000 acres that were in the original bill, with most of that being cut from Michigan.

Great Lakes protected coasts now include: NY - 6,679 acres; OH - 3,187 acres; MI - 18,198 acres; WI - 2,377 acres; MN - 940 acres; and none in IL, IN, or PA.

Lastly, Senate inaction killed a bill that would have added 3,400 acres to the Indiana Dunes National Lakeshore. Supporters were hopeful that it would pass the Senate after the House passed it, but Senator James McClure (R-ID) gutted the bill.

Policing the Great Lakes Program Offered

Policing of the Great Lakes: Comparison of Innovative Strategies will be offered March 2, 1991 at Lawrence Technical University, Southfield, MI for agency and citizen groups. It will present the latest on stricter monitoring methods, citizen suits and other enforcement strategies. For more information, call Great Lakes Forum, 313-5432-4180.

ERRATUM Due to printer error, the author of "Mohawks Seek Unity..." (Summer '90 issue) should have been Dr. Ward Stone, Wildlife Pathologist, NY DEC. Mary Machuga should have been the coauthor on p. 4 "National Jewel..." We regret the errors.

Gov'ts Preparing Pollution Prevention Strategy

Last July, US EPA's Reilly and Canada Environ't Minister de Cotret announced they were developing a binational pollution prevention strategy for the Great Lakes, to be released Oct. 31, 1990. This date, however, will be delayed to allow time for input.

In the Public Interest

By Paul Muldoon and Richard Lippes

Q I have heard that "pollution prevention" and "toxic use reduction" laws are becoming very popular. What is the nature of these laws and which jurisdictions in the Great Lakes ecosystem have them?

A Agencies are slowly realizing that the pollution control approach has not worked, and that a new pollution prevention approach is needed. The traditional pollution control approach assumes that there is always an "acceptable" level of discharge for all pollutants and that the key is to find pollutant collection or treatment systems "at the end-of-the-discharge-pipe." This approach deals with pollutants after they have been generated. One of the primary problems of the pollution control approach is that it usually serves only to transfer pollutants from one media to another. Pollution control equipment buries residues (resulting in toxic leachate) or burns residues (resulting in toxic air deposition). Overall or absolute discharges may not have been reduced despite the large expenditure on control equipment.

Rather than the pollution control method, avoiding the use, generation, and discharge of toxic pollutants is preferred. This approach emphasizes in-process changes, end product and raw product substitution, use of closed-loop systems and good operating practices. And this approach partly recognizes that some toxic chemicals must be phased-out altogether.

While governments are slowly recognizing the pollution prevention approach, some legislative action is taking place. The most obvious trend in the U.S. by state governments is the enactment of "toxic use planning and reduction" laws. There are about a dozen U.S. states that have enacted or proposed such laws, including Massachusetts, Oregon, State of Washington, Texas, Maine, among others. While there are many differences among these laws, the common features can be summarized as follows:

Pollution Prevention as the Preferred Option - Virtually all of the toxic use reduction and planning laws

recognize that pollution prevention is the preferable approach to the problem of toxic chemicals in the environment.

Reduction Targets - Most of the laws set toxic use reduction targets for all emissions from facilities covered under the law; for example, many states have set a 50% reduction target by 1997.

Industrial Toxic Use Planning - Facilities covered under the law are required to prepare a toxic use reduction plan to achieve the targets set by the law. Usually, these plans are kept on site and summaries are submitted to agency staff. The plans, however, must be certified by a pollution prevention planner, (who is a state official that has undergone training at a Pollution Prevention Institute, described below). In some laws, citizens have the opportunity to challenge these plans.

Technical Assistance - All laws emphasize providing technical assistance, such as pollution prevention clearinghouses, demonstration projects, on-site consultations, and public education material.

Toxic Use Fees - Some of the states fund the program through the imposition of toxic use fees. These fees are based upon the amount of toxics released in the workshop.

Institutional Reform - Some jurisdictions have established a new "Office of Pollution Prevention" within their environmental agency and a "Pollution Prevention Institute." The Institutes are to be set up at local universities to train pollution prevention planners and conduct research.

In the Great Lakes, only Minnesota has mandatory toxic use reduction and planning laws. Illinois and Indiana have voluntary programs. Unfortunately, the Canadian federal government and provinces have yet to enact similar laws.

While these laws will not solve the toxics problems, they can play a useful and effective role in implementing the pollution prevention approach. It is interesting that, despite the fact that there is obligation of zero discharge in the Great Lakes, the jurisdictions in the basin are not taking the lead in developing pollution prevention laws.

Public Input Top Priority For IJC Water Levels Study

By Philip Weller, GLU Exec. Director

The high water levels experienced in the Great Lakes in 1985-86 have subsided but determining appropriate responses to fluctuating water levels remains as relevant today as it was during the peak of high water in December 1985. The second phase of an International Joint Commission study examining responses to changing water level conditions is now underway and is emphasizing involvement of members of the public. Canadian co-chairman of the study Tony Wagner, Environment Canada, conceded, "Although we encouraged citizen involvement in the first part of the study, we are placing even more importance on public participation during Phase 2." The first phase of the study was completed in the fall of 1989.

Public involvement in the second phase of the study is being accomplished in a variety of ways. The study is directed by an 11-person board which includes four members of the public (two Canadians and two U.S. citizens). This is the first time that members of the public have been represented in the formal management of a IJC Reference Study. Included among the four public members of the study board are Great Lakes United Executive Director Philip Weller and Past President Frederick Brown, Cliff Sasfy a Monroe, MI member of the shoreline property owners group Great Lakes Coalition, and Peter Yeomens, Mayor of Dorval, Quebec are

the other two public representatives on the study board.

Representatives of Environment Canada and the Army Corps of Engineers chair the study board which also includes four representatives of states and province and a study director.

In addition to the public representatives on the study board the Commission has established an 18-member Citizen Advisory Committee to provide public input and comment on all aspects of the study. The Committee includes representatives of shoreline property owners, environmental groups, Native People, power and shipping interests and recreational concerns.

In an October news release the study board formally released its Plan of Study which outlines how the study will be undertaken, and what its cost will be. Among the issues to be addressed are re-evaluating existing lake regulation plans, plans for system-wide regulation of levels and flows, and land use and management practices. Brig. General Jude Patin of the U.S. Army Corps of Engineers encouraged comments from the public on the Plan of Study. He noted "We think it is important to ask for suggestions on how we can improve the study process." It is expected that the study will be completed by the fall of 1992 and will cost approximately \$6 million. For a copy of the Plan of Study, contact Neil Fulton, IJC Levels Reference Study Bd., 72 Lyme Rd, Hanover, NH 03755-1290 or the GLU office.

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THE GREAT LAKES UNITED

Environmental Debt, Fiscal Burden

By John Jackson, President, Great Lakes United

This is a time of transition in several of the government jurisdictions in the Great Lakes. In September, a new premier was elected in Ontario. In November, new governors were elected in Ohio, Michigan, Illinois and Minnesota. Provincial, state and U.S. federal elections have brought many new faces into government as well as returning some previously well-known ones.

In Ontario, the electoral message from the public clearly reflected desire to have environmental issues at the top of the political agenda. In the U.S., the message was less clear as major environmental initiatives, such as California's "Big Green" and New York State's Bond Act, were defeated at the polls. It is generally felt that the costs attached to these proposals were the major reason for their defeat.

Throughout the Great Lakes Basin, we are now hearing similar messages from our governments: yes, environmental action is essential, but this may have to be tempered because these are times of economic recession and excess government debt.

The economic times, however, do not lessen the need for, and the reasonableness in taking, strong actions now to protect and clean up the Great Lakes. For the well being of our environment and of our economy, we cannot afford further delays.

The environmental warning signs are getting clearer. Wildlife and humans are increasingly displaying the sometimes insidious, but always ultimately devastating, impacts of there being too many chemicals in the Great Lakes ecosystem. Reproductive problems, birth defects, physical and mental developmental problems, breakdown of immune systems, and cancers -- all these point towards a bleak future for us unless we take strong actions immediately.

We know the ways to stop the worsening and reverse these trends: stop discharging the pollutants into the environment and clean up what we have already put out. Implementation of zero discharge programmes by changing our production processes and our behaviour in our homes, in agriculture and at work in order to reduce our use of toxics and stop the use of the worst offenders is the only reasonable approach to take now.

Suggesting that we may have to delay such programmes for economic reasons does not make sense.

Some governments say that their debt burden is too high and fiscal restraint is necessary. But environmental programmes are not serious contributors to the governments' debt burdens because these programmes are a small percentage of the governments' expenditures. Both the U.S. and Canadian federal governments divert funds from other programmes, including environmental ones, to posture and

threaten in Saudi Arabia.

The most fundamental question governments must ask themselves when assessing our responsibility not to burden future generations with debt is *What kinds of debt will future generations be most unforgiving about?* It is clear the environmental debt is potentially the most devastating for our children and grandchildren.

How could they forgive us for burdening them with hundreds of billions of dollars in clean-up costs because of our irresponsibly running up environmental debt? How could they forgive us for the continued careless destruction of the environment leaving them with the burden of living with a diminished environment, and with the human and financial costs of greater illness?

Some say that in times of economic downturn we cannot place greater financial costs on industry by forcing them to move towards zero discharge. But this perspective reflects a lack of understanding of what will make our industries and our economy healthy.

The Great Lakes is sometimes characterized as having outdated plants with outdated production methods -- as being the "rust belt". We now have the opportunity to leap into the forefront of economic trends, to become leaders rather than being left behind in the dust.

Transforming the economic base of the Great Lakes to a zero discharge approach will give us a competitive ad-

vantage over other parts of the continent because of our more efficient use of resources. As the inevitable ratcheting down of environmental regulations occurs, we will be in the enviable position of having the production methods for achieving these goals. We will reap the economic benefits of being on the leading edge. Our production methodologies will become the models for others to follow -- and purchase from our industries.

We call upon our governments in these difficult economic times not to fall into the traps created by existing myths. Economic difficulties do not mean we should restrict our actions on the environmental front. Truly solving our environmental problems inevitably involves the kinds of changes that will bring us to both a healthy environment and healthy economy.

This is a period of challenge. But challenges are opportunities. The people of the Great Lakes Basin are ready to grasp this opportunity because we are in the forefront of recognizing the direction we must go to find long-term solutions to our environmental problems -- solutions that will also give us a healthy economy.

(Besides being President of GLU, John Jackson is also president of the Ontario Environmental Network, chair of both the Ontario Toxic Waste Research Coalition and the St. Clair International Citizens Network.)

GLU OFFERS FIVE CITIZEN GUIDES

Citizens now have five more tools to use in their goal to clean up the Great Lakes! GLU has just released:

- Citizens Guide to Thunder Bay Remedial Action Plan
- Citizens Guide to Rochester Embayment Remedial Action Plan
- Citizens Guide to Bio-Monitoring in the Great Lakes and St. Lawrence River
- Citizens Guide to Combined Sewer Overflows in Detroit
- Citizens Guide to White Lake Remedial Action Plan

The goal of the guides is to translate technical subjects into "citizen friendly" material that lay people can use to promote cleanup of their area. They tell how to ensure an effective RAP, how to understand toxic chemical processes, what the regulatory processes are that citizens can tap into. They tell how biomonitoring can be used as a powerful tool to protect water quality, and how to understand the challenging problem of combined sewer overflows.

The guides were made possible by grants from Ruth Mott Fund and W. Alton Jones Foundation. To obtain copies, contact the GLU office.



Ottawa is the scenic setting for GLU's Annual Meeting next May.

CALENDAR

Lake Ontario Toxics Management Plan Workshops:

December 10, 1990, 5 - 9 pm, Carl Hallauer Student Ctr, Rochester, NY. Call Cindy Brown, NY DEC, (518) 457-0669

December 13, 1990, 4:30 - 9 pm, Hamilton Convention Ctr, Hamilton, Ont. Call Ljubica Pelletier, Envir. Canada (416) 973-5434 or Frank Giorno, Envir. Ontario (416) 323-4648

International Symposium on Water Diversions & Pipelines in Great Lakes Basin: March 12 - 13, 1991, Waterloo Inn, Waterloo, Ont. Contact The Water Network, Univ. of Waterloo, Ont. N2L 3G1 (519) 885-1211 x6962.

COME TO THE

GREAT LAKES UNITED 10TH ANNUAL MEETING OTTAWA, ONTARIO May 3-5, 1991

Mark your calendars now!
Details to follow.

NOTICE:

Anyone wishing to run for the GLU Board of Directors should have their nomination submitted in January, with a deadline of February 1, 1991. Nominations will also be taken from the floor at the Annual Meeting.

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