

THE GREAT LAKES UNITED

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Great Lakes United—A Binational Coalition for the Great Lakes/St. Lawrence Ecosystem

Summer 1991

Canada Policies Decried at GLU Annual Meeting

by Bruce Kershner,
Great Lakes United

Canada has not upheld its end of the binational commitment to clean up and restore the Great Lakes—St. Lawrence River ecosystem,” said Great Lakes United president John Jackson at the start of the GLU’s ninth Annual Meeting. “The protection and restoration of the Great Lakes requires Canadian federal leadership, leadership that has been lacking,” he said.

The 1991 Annual Meeting was held in Hull, Quebec, its easternmost location yet, and for the first time in the St. Lawrence River vicinity. The site was a strong reminder of Canadian federal leadership, or lack of it, as members met within the sight of Canada’s majestic Parliament buildings, across the Ottawa River from Hull.

During the meeting’s first session, Dr. Pierre Beland, St. Lawrence, National Institute of Ecotoxicology, discussed the mysterious contamination of St. Lawrence beluga whales. The animals could not have gotten their toxics loads from their primary food, herring, since they contribute only 3 percent of the whales’ toxics body burden. “The culprit turned out to be Lake inferior eels, which were so contaminated that one week’s feeding accounted for much of the high levels of toxics found in the whales.

Hunter Grimes of Save the River, one of GLU’s co-founding groups, pointed out a very different trend in the St. Lawrence Basin. Instead of a loss of wetlands, as is occurring in most areas around the Great Lakes, there is an actual gain in wetlands in the St. Lawrence region, due to extensive beaver damming of lowland meadows. But local residents are upset because

the beavers are cutting inland trees and flooding country roads.

In other St. Lawrence issues, Christian Simard, of the Union Québécoise pour la Conservation de la Nature, asked, “Will Phase 2 of the St. Lawrence Action Plan actually get implemented, including the cleanup?”

Health & Welfare Canada scientist Andy Gilman noted that, “DDT, Mirex and dioxin are found in nearly all people.” Eighty to 95 percent of persistent toxics in the body are contributed by food, he said. The figure rises to 99 percent for those who consume sizable quantities of Great Lakes fish, he added.

Don Gamble of the Rawson Academy of Science (see cover photo) was promoting the Ecosystems Charter, sweeping pledge by governments, institutions and citizens.

“As a direct result of outspoken citizens, Lake Superior became an international model for zero discharge,” announced Gayle Coyer, of the National Wildlife Federation. “However, the proposal for a moratorium on new pulp mills around the lake has gotten a poor response from government.”

Coyer concluded that government is not sincere about achieving zero discharge for Lake Superior, but that it does feel a need to respond to the LJC and citizens’ recommendations.

In deference to the current push to eliminate toxic chlorine bleaching of paper, Coyer noted wryly that a position paper she and others are preparing on what should happen to Lake Superior really could not be called the traditional “white paper.” “We’ll have to call it an ‘Off-White Paper,’ I guess,” she said.

“How I Became an Ecosystem

Evangelist” was the luncheon address by David Crombie, commissioner of the Royal Commission on the Future of the Toronto Waterfront and former Toronto mayor. “A sixth of Canada lives in the Toronto metropolitan area. Unless we learn to marry the environment with the cities, we’re just blowing in the wind,” he declared. Crombie told how the environmental movement in Canada had reordered

party defending their environmental record.”

Caccia compared the Conservatives’ allocation of \$4.5 billion to petroleum production off the coast of Newfoundland to the meager \$25 million budgeted for prevention of pollution in the Great Lakes.

The New Democratic Party’s Laurie Goulet said, “The current federal government budget is giving to the environment on one hand,



Don Gamble, Rawson Academy of Science, holds up Ecosystem Charter at GLU Annual Meeting

corporate strategies and government priorities and transformed individual behavior.” The ecosystem approach actually turns urban planning on its head,” he said.

The first day’s formal talks ended with discussions by representatives from the Liberal and New Democratic parties. The ruling Progressive Conservative party chose not to attend the discussion, causing Liberal Party representative Charles Caccia to remark, “This deprives us of seeing a unique political feat—that of the ruling

and taking away from it with the other.”

The serious mood of the meeting ended at Saturday night’s banquet with rousing performances of “Garbage Canada” and other polished parodies by River Barge Production’s John Burt, Barry Keating, Mary Law and David Brand.

Sunday morning’s activities included debate about a proposed bylaw to add one seat to the GLU Board of Directors for a representative of the Native

continued on page 7

National Attack on Wetlands Underway

by Philip Wetler,
Great Lakes United

Wetlands are a vital part of the Great Lakes landscape. They provide flood protection, pollution control, fish and wildlife habitat and recreation. They are an important part of a healthy economy, since the natural functions they provide are free, and the loss of wetlands requires society to pay for those lost functions.

Despite their importance and value, however, wetlands continue to be drained, filled and poisoned. Less than 35 percent of the Great Lakes’ original wetlands remain today. Despite the limited amount of wetland acreage that is left, these fragile landscape features are under increasing attack. In fact, protection—or, more appropriately, unprotected—of wetlands is quickly becoming one of the hottest political topics in the U.S. Congress. Wetlands protection in Canada has not generated the same political heat, but the political attack is just as destructive to wetlands.

Visits to congressional members during the annual Great Lakes Week in March revealed the depth of the struggle that is taking place on wetlands. One congressman

told a group of Great Lakes activists that, “Never before has my office received such intense lobbying on an issue so early in discussions on an act.”

To date, most of the lobbying on this issue has come from members of the builders, real estate, and oil and mining industries. At a January congressional hearing on wetlands by the Small Business Committee in Niagara Falls, members of industry and local government testified one after another about the devastating effect of existing wetland rules.

One member of the small business community testified that wetlands laws were responsible for a two-thirds decline in housing starts in Western New York. Under new rules adopted by the Army Corps of Engineers, the speakers claimed, 60 to 65 percent of the land in Niagara County was now “new” wetlands. The true figure is 10 to 12 percent, but that did not stop the farmers and town officials into a near stampede against existing wetland laws.

The irony and often-forgotten point in the discussion to date is that existence of a wetland does not

continued on page 6

New EPA Great Lakes Chief: An Interview

by Bruce Kershner,
Great Lakes United

In an earlier issue, we asked Great Lakes officials and leaders to assess how well the U.S. Environmental Protection Agency had done in achieving the goals of its Five-Year Great Lakes Plan Strategy (1988-1991). In this article, we interview Chris Grundler, the newest head of EPA’s Great Lakes Program Office, about his vision of the next five years for the Great Lakes.

Much of this vision is being articulated in the EPA’s newest five-year plan, 1992-96. The plan will be available for public review later this summer.

GLU: What is the purpose of this newest five-year plan?

CG: It is a joint strategy with the states and other federal departments, including all parts of EPA, to truly chart Great Lakes programs over the next five years. Its key priority will be reduce toxic inputs measurably over that period years. There will be a clear bias for action. We will use environmental

measures of success, such as our toxic release inventory database, to see how we’re doing on toxic releases.

GLU: Are there other priorities besides water quality?

CG: We will emphasize the relationship between ecological health and human health. We will also have a Great Lakes wetlands strategy, and plan to identify, protect and restore critical Great Lakes habitats and heritage areas.

GLU: Will the plan include specific needs for funding?

CG: EPA Administrator William Reilly is putting money where his mouth is, and he’s using the Great Lakes as a proving ground for environmental management, new technology, and as a model for attaining a healthy economy and healthy environment.

GLU: What can you tell us about your strategy for zero discharge?

CG: Zero discharge is a very important goal, but it means different things to different people. We may not be able to achieve “zero molecules of toxics,” but it is

continued on page 2

What Are EPA Great Lakes Goals for Next 5 Years?

continued from page 1

good as a goal to work toward. Pollution prevention and source reduction will be primary tools toward this. But the burden must remain on the toxic discharger. Lastly, we intend to progress toward zero discharge without transferring the pollution to the air.

As for the environmentalist's campaign for zero discharge, you could stand to lose among elected officials if you come across as supporting a "no growth" philosophy.

GLU: What about the IJC's proposal to use Lake Superior as a model for zero discharge?

CG: This is still in the discussion stage, and we are taking this recommendation very seriously. We want to move toward action through the Great Lakes Water Quality Initiative. The question will be, "What is the best way to achieve it?" Our interest is in taking actions, not conducting academic exercises. We are having dialogue with the pulp industry, and the Toxic Substances Control Act program is developing rules that apply to pulp mill solid waste sludge. We also plan to use the RAPs, permits and pollution prevention programs for Lake Superior.

GLU: In the 1986-91 EPA Great Lakes Plan Strategy, most observers thought there was inadequate commitment by EPA to the RAP process. What can you

tell us about this?

CG: The federal government has an obligation to support these RAPs. Our funding to the states should go up five to six-fold for RAPs. The EPA Water Division is assigning a specific person to each RAP; to facilitate communication, financial support, and to prevent the process from being bogged down.

But the EPA and states also need to do a better job of telling the public what is happening in remediation while the RAP process is going on. RAPs must be "living" documents.

However, while we need to have more commitment to have EPA liaisons of RAPs, the RAPs will not succeed if they are imposed by the federal government, only if they are grassroots efforts.

GLU: There was apparently slow progress with contaminated sediments over the last five years. What are your projections for the next five years?

CG: In recognition of the national significance of contaminated sediments, we have an EPA National Task Force for this issue. But it is an enormously complicated task. The task force is utilizing the expertise developed in the Great Lakes. We've even obtained the interest of the nation's top administration.

We've completed assessment work in the five contaminated sediment

demonstration areas and we've identified five treatment technologies to demonstrate. We will be conducting full field demonstrations of sediment technology over the next two years.

We must also identify a prevention aspect for new sources of contaminated sediments.

GLU: What about funding for this major task?

CG: We will apply the "polluter pays" philosophy. But we need to look for affordable, non-duplicated solutions, and must reduce red tape.

GLU: Fish contamination is a major worry in the Great Lakes. What are your plans for this problem?

CG: We've made a fair amount of progress between EPA and the Food and Drug Administration, a real step forward. There's a four-state common fish advisory for Lake Michigan now. There are common protocols for fish monitoring. The Great Lakes Water Quality Initiative is an historic effort to develop uniform water quality standards across the Great Lakes states...next we need a uniform advisory for fish consumption.

GLU: What about plans to attain U.S.-Canada uniformity for advisories?

CG: This is a good question. We need to get Canadian involvement, and it has to be done formally. We

have a way to go on this.

GLU: Some who have assessed EPA's phosphorus control achievements over the previous five years have given it high marks. What do you propose for the next five years?

CG: We're recognized in the Great Lakes as a world-class success in phosphorus control. But now we must look at other nutrient concerns such as chloride levels, and also non-point source loadings including combined sewer overflows. It is also EPA's priority to get a better handle on urban non-point and stormwater water discharges.

GLU: Do you have any concluding remarks?

CG: I grew up near Lake Michigan and I made the environment my career. My return to the Great Lakes and my ability to make a contribution to the Great Lakes is an opportunity of a lifetime.

Anyone interested in reviewing a copy of EPA's new Five-Year Great Lakes Plan should contact GLNPO, U.S. EPA at (312) 825-0374.

Members Pass 17 Resolutions at GLU Annual Meeting

Seventeen resolutions were passed at GLU's Annual Meeting last May. Here are summaries:

Water Quality

Lake Superior. GLU calls upon the governments to issue a moratorium on new or increased toxic discharges to Lake Superior; designation of the lake as an Outstanding National Resource Water; and phase-out of the use of chlorine in the pulp/paper industry.

GLWQA. GLU commends former Michigan Gov. James Blanchard for requiring that state regulations and programs be consistent with the Great Lakes Water Quality Agreement. GLU urges other Great Lakes states and provinces to make a similar commitment.

Dredging sediments. GLU urges the United States and Canada to stop disposing contaminated sediments in the Great Lakes and that the U.S. Army Corps abide by state water quality standards.

Great Lakes Initiative. To achieve the initiative, GLU urges that dischargers with effluent levels below the permitted level be reissued permits that require the current level to be the new permitted level. GLU urges that wildlife and human health criteria be designed to protect sensitive species and high-risk populations. Permits must include a sunset provision to phase out discharges of bioaccumulative compounds and must include approved pollution prevention plans.

Zero discharge. To achieve the United States and Canada's goal of zero discharge under the GLWQA, GLU urges an immediate freeze on toxic dumping, a sunset on the most dangerous toxic chemicals, reduced use of toxics by technical assistance programs and right-to-act provisions and adoption of best available technology for zero discharge.

Habitat and Wetlands

Canada. Because of continued high rates of wetland destruction in Canada, GLU urges Ontario to develop and enforce new and current legislation to ensure adequate protection for wetlands.

Clean Water Act. GLU calls upon the U.S. Congress to reauthorize the Clean Water Act and to oppose any bills that would weaken the wetland protection. GLU also urges that section 404 be expanded to include activities that may damage wetlands and that section 401 be amended to include the protection of wetlands.

Implementation of "No Net Loss." Because wetland loss continues at a high rate, GLU urges that a specific annex to address Great Lakes wetlands losses be added to the GLWQA, and that the United States and Canada should immediately declare the Great Lakes Basin a "demonstration region" for a net gain in wetlands.

Not-for-profit easements. Unlike the United States, Canada does not allow not-for-profit organizations to accept conservation easements from property owners, thus preventing them from protecting environmentally sensitive lands. GLU urges that Canada adopt laws to allow non-profits to acquire such easements.

Remedial Action Plans

Trail Creek. Because of severe contamination problems, GLU strongly urges the IJC to recommend, and the United States and Canada to designate, Trail Creek, Indiana, as an Area of Concern.

Public participation. GLU urges that the United States and Canada fund public involvement in implementation of RAPs, that the Canada-Ontario Agreement formally ensure that the public is involved, and that GLU and other

groups be full participants in the renegotiation of the Canada-Ontario Agreement.

Lakes Diversion

GLU strongly urges the Great Lakes governors to withhold approval of the Lowell, Indiana water diversion proposal (details on page 7).

Fish and Wildlife

Because of threats by contaminants to the health of the St. Lawrence beluga whale, GLU requests that Canada use the Wildlife Protection Fund to support Pierre Beland's research to protect this endangered species.

Land Use

James Bay. GLU opposes Hydro-Québec's James Bay hydropower project until its effects on Native cultures and the environment are fully addressed by New York State and Canada. We commend New York state legislators William Hoyt and Maurice Hinchey for introducing Bill A.2162A, which requires environmental studies by the state before it purchases more Hydro-Québec power.

Indiana Dunes. To protect and expand the Indiana Dunes National Lakeshore, GLU supports the Dunes Expansion Bill, introduced by Rep. Viscloskey, and urge Sen. Richard Lugar and Sen. Dan Coats to introduce a similar bill in the Senate.

Labour and Environment

GLU places a high priority on obtaining new funding to support the Labour & Environment Task Force. GLU will promote worker compensation and economic protection in all its pollution prevention policies, and the task force will evaluate current worker protection and compensation programs to develop recommendations to the GLU Board of Directors.

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EPA Lakes Initiative Needs Urgent Care

by Rebecca Shriner,
National Wildlife Federation
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The Great Lakes Water Quality Initiative is entering a critical stage and activists should be on the alert.

The initiative is being developed by the U.S. Environmental Protection Agency to establish uniform water quality standards and regulations among all the Great Lakes states. Uniform standards have long been a major priority of Great Lakes advocates, including Great Lakes United.

The regulated community is on a campaign to sedate if not euthanize the initiative process and all the potential it offers to carry out the long-standing commitments of interstate and international agreements on Great Lakes water quality. Industrial representatives have met with several governors and are lobbying Capitol Hill, the EPA and state agencies to weaken the rules. They have even asked Congress to repeal the Critical Programs Act because of the legal backbone it gives the initiative.

Environmental groups support the initiative process because it may deal with the vital issues of pollution prevention through a toxic freeze, sunset of toxic chemicals, toxic use reduction, and reforms in water quality standards.

The process is now nearing its pivotal turning point, as the proposals of the Technical Work Group and Public Participation Group are presented for conceptual approval by the initiative steering committee in June.

EPA has been developing a comprehensive proposal for public review and comment that will commence in September.

The idea of a consistent Great Lakes-wide process to develop water quality criteria was conceived and presented by the National Wildlife Federation, Great Lakes United and other environmental organizations in response to the government's failure to carry out the goals of the Great Lakes Water Quality Agreement. This failure was caused by state review and revision of Water Quality Standards.

In a publication entitled *Promises to Keep*, the organizations offered a new, holistic approach to the Great Lakes Water Quality Agreement intended to put all the Great Lakes states on an equal playing field with regulated polluters. Along with the Water Quality Standards, the foundation of clean water programs, the result of the initiative will be EPA guidance on the implementation of the Agreement.

The initiative process began in 1989 with the arduous task of dev-

elopment of uniform water quality standards. The initiative's Steering Committee, comprising top-level agency officials, the Technical Work Group, and the Public Participation Group, was set up.

From the outset, EPA solicited the involvement of interested groups by including representatives of industry, local government, academia and environmental groups as members of the Public Participation Group.

The Technical Work Group laid out the general topics to be addressed by the initiative: numeric water quality criteria for aquatic life, wildlife, and human health protection, bioaccumulation, antidegradation, and pollution prevention.

Citizens can make an impact on the initiative process by contacting initiative steering committee members from their state. Write Dale Bryson, EPA Chair of the Steering Committee, U.S. EPA, Region V, 230 South Dearborn, Chicago, IL 60636.

TIMETABLE:

Sept. 1: Final draft to be published in the Federal Register

Sept. 27-Oct. 3: IJC biennial meeting, Traverse City, Michigan.

Fall: Public review on proposals.

June 30, 1992: Deadline in the Critical Programs Act for publication of the final rules.

June 30, 1994: Deadline for adoption of Great Lakes Water Quality Standards by all states.

Answer to Bush Malady?

U.S. President George Bush's recent diagnosis of Graves' disease, less than a year after his wife was diagnosed with the same disease, has brought to national attention a possible connection between the First Family's mysterious thyroid illness and an issue that Great Lakes advocates have been concerned about for many years: fish contamination.

After news reports about the president's condition, Dr. John Lore of the University of Buffalo School of Medicine physician wrote the president, who is an avid angler and fish eater, that consumption of contaminated fish is "a potential environmental risk factor for [Graves'] disease."

Lore is conducting a study, supported by the Great Lakes Protection Fund, to determine the incidence and distribution of thyroid diseases in the region, and their link to consumption of contaminated fish. Scientists suspect that environmental contamination may trigger autoimmune disorders, which include Graves' disease.

Pollution prevention. Prohibit new or increased toxic discharges into the Great Lakes; ban the use of the most harmful persistent toxics; designate Lake Superior a demonstration area where point source discharge of persistent toxics will be prohibited.

Wetlands. Develop a plan for implementing annex 13 (non-point pollution control) of the Water Quality Agreement.

RAP programs. Congress should assist the states in funding the RAP process and cleanup and should direct EPA's Great Lakes National Program Office to assist the states in utilizing existing federal funding.

Citizens Issue Clean Water Act Goals

by Andrew Savagian,
Sierra Club Great Lakes Program

With the release of a comprehensive "Agenda for Clean Water" by a coalition of 43 organizations, environmental activists have levelled the first salvo in the battle to reauthorize the U.S. Clean Water Act.

The coalition, which includes the Sierra Club, Great Lakes United, the National Wildlife Federation, the U.S. Public Interest Research Group, Greenpeace, the Natural Resources Defense Council, and the Lake Michigan Federation, urged Congress to revise the act to prevent pollution, protect critical ecosystems, and strengthen enforcement.

"The public is tired of waiting for clean water," said Bob Adler of the NRDC. "Congress established a goal that all rivers, lakes and coastal water should be safe for fishing and swimming by 1983, and that all releases of pollution into the nation's waters would end by 1985. Yet billions of pounds of toxic and other pollutants continue to reach the nation's waters each year."

The coalition agenda cites key issues that should be addressed by the new Clean Water Act include:

Pollution prevention. Congress must reduce toxics discharges, prevent polluted runoffs and require national minimum standards to eliminate the release of toxics into public sewers. Groundwater must be protected and raw sewage and toxic discharges from combined sewer systems must be eliminated. "We want to see the zero discharge goal of the Clean Water Act become a reality," said Rick Hind of Greenpeace.

Strengthen enforcement. Citizen access to information and to the courts must be broadened. "Citizens have the right to know which water bodies are safe to drink from and swim in," said Joe Schneider of U.S. PIRG.

Protect aquatic ecosystems. "We've made some progress in protecting the water in our lakes and streams, but we've barely begun to make a dent in protecting the ecosystem as a whole," said Steve Moyer of the National Wildlife Federation. "The development of floodplains, the loss of wetlands, and the damming and channelizing of free-flowing rivers are destroying

habitat all over the nation."

Save wetlands. Wetlands legislation is already a big topic this year. Congress is debating bills, especially the Comprehensive Wetlands Conservation and Management Act (H.R. 1330), that weaken wetlands protection under the Clean Water Act.

The part of existing law that is under attack is section 404, which pertains to Army Corps of Engineers permits for the disposal of dredge and fill materials in the nation's waters. Congress designed the section for water quality but it has become a major tool to protect existing wetlands.

According to its proponents, H.R. 1330 simply categorizes wetlands as regulated more, the same, or less than current law. The third class of wetlands, say proponents of H.R. 1330, would be only those that "provide no measurable wetland functions and values." These areas would not be regulated at all.

The bill would cause greater loss of wetlands, weaken section 404. Sierra Club National Wetlands Chair Jerry Paulson said the bill would "gut" Section 404 "under the guise of classification." Proponents of H.R. 1330, Paulson said, want to protect only those wetlands that have "lots of ducks" and endangered species. These proponents of the bill include real estate developers, agribusiness, and oil, mining, and natural gas interests.

"The failure of this thinking is that section 404 is not designed to just protect ducks—it is designed for water quality," Paulson said. H.R. 1330 and similar bills in Congress "write off supposed marginal wetlands" that have great economic and environmental benefits, he said.

Business interests pushing to weaken section 404, he noted, also claim that the federal government is, in effect, appropriating private property without due compensation. That notion is false, said Brett Hulsey, the Sierra Club. "Wetlands are part of U.S. waters and belong to us all." The taking of private property is the focus of a Senate bill that would weaken wetlands protection, S. 50, introduced by Sen. Steve Symms (R-Idaho). Another bill, H.R. 404, would also weaken wetlands protection.

GLU Cites Great Lakes Needs for Clean Water Act

Great Lakes United testified to the U.S. Congress last May on how the Clean Water Act could be changed to better address Great Lakes needs. Among GLU's recommendations were:

Contaminated sediments. Develop a national inventory of contaminated sediment sites; set up strong sediment quality criteria and standards; devise a funding mechanism to pay for a national sediment strategy.

Combined sewer overflows. Establish a demonstration program for effective CSO solutions; direct the U.S. Environmental Protection Agency to set clean-up standards and timetables.



MISA: Ontario's Failing Hope

by Burkhard Mausberg,
Pollution Probe

The Municipal-Industrial Strategy for Abatement was supposed to be Ontario's shining progressive water policy. But the program, announced in 1986, has failed to deliver any improvement in Ontario's water quality.

MISA's goal was the "virtual elimination of toxic discharges into waterways." Best available technology standards were to be applied to 10 designated industries and 22 designated industry categories, and special water quality standards were to be written for waterways that needed additional protection.

To date, none of these plans has materialized. MISA is currently stuck in the monitoring phase. Incredibly detailed discharge data is still being collected and analyzed.

Five years after MISA's announcement, not one single Best Available Technology regulation has been passed; the water quality standards have been indefinitely postponed; the sewer use control program for those who discharge indirectly has yet to be developed, let alone implemented; and public participation in the process has been completely unsatisfactory.

So far this failure has cost \$60 million, and the Ministry of Environment has become an "education centre" for training employees who are then hired away by the private sector, which needs experts to understand MISA's technical details.

MISA has also been criticized on a more fundamental level. First, the program focuses only on toxic discharges into water, ignoring toxic air discharges and both on- and off-site disposal of toxic substances. The lack of a multimedia approach will induce industries to remove toxics from their discharges and dispose of them in other ways.

Second, pollution prevention is not the primary and legislated goal of the MISA program. End-of-pipe methods are considered, valid control mechanisms.

Third, even though discharge standards will be based on best available technology, industries can employ any method they see appropriate to achieve the standard. Thus, much time and

money is being wasted on developing BAT standards, even though they will not necessarily be used.

Finally, in order to eliminate persistent toxic substances from Ontario waterways, certain chemicals must be banned or phased out. Currently, MISA does not include a banning procedure.

What is to be done, then?

The first step: change MISA from a single-media program to a multimedia one. Experience in the United States has shown that single-media standards take a long time to develop and are generally ineffective. Thus, MISA should be changed to a toxic use reduction program, with pollution prevention as the central objective.

It is surprising that eight years after Pollution Probe's publication of *Profit from Pollution Prevention*, governments and industries have still not recognized that pollution prevention is ecologically and economically the only way to deal with toxics.

The second step: reform MISA to include mechanisms to phase out and ban the worst products, processes and substances.

The final step must be the establishment of timetables and reduction goals. Timetables and goals are useful for identifying progress and failure; corrective measures can be taken if goals are not met. Citizens are calling for a 50 percent reduction in the use of toxic chemicals by 1996, 75 percent by the year 2000.

Before the September election that put him into office, Bob Rae, the premier of Ontario's first New Democratic Party government, signed onto the goal of zero discharge presented to him by environmental groups. Moreover, Minister of the Environment Ruth Grier repeatedly and seriously criticized MISA while in opposition.

Citizens are now hoping that the NDP will not prove to be another "broken promises" government.

Indeed, there has been talk of restructuring MISA, but little action has followed. According to one government insider, one of the most difficult tasks is to convince civil servants in the Ontario Ministry of the Environment that MISA has been a failure and that new directions are needed.

IJC Holds Lake Superior Roundtable

by Gayle Coyer,
National Wildlife Federation,
Great Lakes Natural Resource Ctr.

The International Joint Commission held a roundtable discussion in May to discuss ways to end the discharge of persistent toxic substances from point sources in the Lake Superior basin.

Attending the second IJC roundtable on this subject were representatives of the federal, state and provincial governments, the environmental community, industry, mining interests, and wastewater treatment plants.

The Thunder Bay, Ontario, roundtable evaluated the technological and economic barriers to achieving zero discharge into Lake Superior.

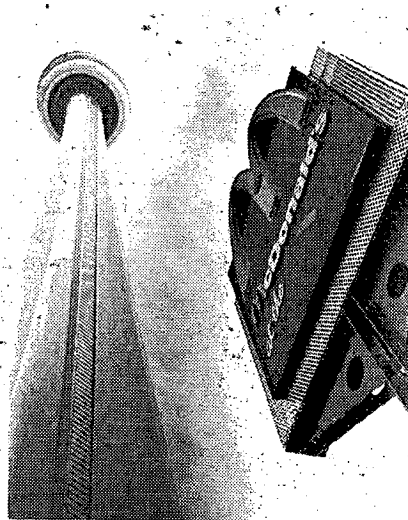
The only technological barrier to zero discharge of toxic substances by the pulp industry was found to be the kraft pulping process. There are currently no chlorine-free alternatives for producing bright white paper. However, many participants felt there are only a limited number of uses for bright

white paper.

Market barriers to chlorine-free pulp production was a more difficult subject. The cost of installing chlorine-free bleaching equipment is large. Environmental participants recommended that no new mills using chlorine be allowed on Lake Superior.

Suggested strategies for conversion of existing mills included government subsidy, guarantees to the Lake Superior mills of markets for their chlorine-free paper, and the forming of a marketing consortium of Lake Superior mills to market chlorine-free products with a "Superior" label.

The roundtable was considered productive and worthwhile by most participants and the IJC commissioners. The real outcome of the roundtable, however, will be the recommendations made by the IJC to the two governments in the IJC's next biennial report, to be written after the October biennial meeting in Traverse City, Michigan.



"McCN," Toronto



"Love Canal Basketball Association," Love Canal

Photos: Jeremy Lynch © 1990

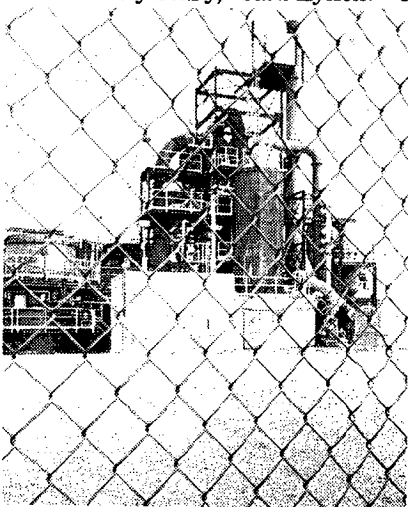
A Lakes Photographic Solution of Pollution

Lake Ontario water is so polluted that it can actually develop photographs! Toronto photography student Jeremy Lynch has put together a portfolio of black-and-white pictures he developed using only water from the lake (no photographic chemicals).

"It's really scary," said Lynch. "I

have one print that's almost like a regular photograph, the quality of the image is so perfect."

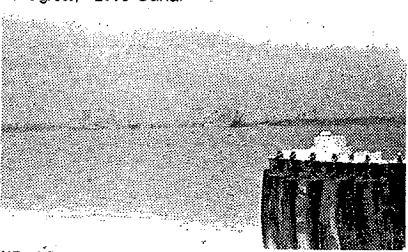
Lynch successfully developed film in water samples from Lake Ontario (for 28 hours) and Love Canal (for only 3 hours). Lynch concludes, "The worse the water, the better the results."



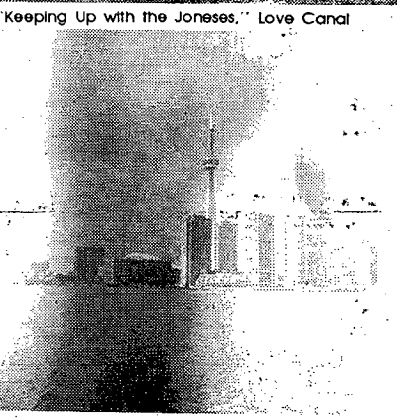
"Progress," Love Canal



"Keeping Up with the Joneses," Love Canal



"East Toronto," Toronto



"A Post Card from Toronto," Toronto

Come Celebrate at Fleuve et Musique Festival

by Kristine Miller,
Great Lakes United

Come celebrate the river and the lakes at Fleuve et Musique! Fleuve et Musique (river and music) is a summer festival joining the arts and the environment this August 1-4. For the past three years thousands of Quebecois have gathered along the shores of the St. Lawrence River in Repentigny (near Montreal) each summer to hear popular musical entertainers and to learn about the St. Lawrence River ecosystem.

The festival is designed to raise awareness of Great Lakes-St. Lawrence River ecosystem issues and to raise money for environmental projects. Strategies Saint-Laurent, a coalition of St. Lawrence River groups, and Great Lakes United will design the environmental content of the events and share its proceeds.

Presenting Fleuve et Musique is a binational effort of people and groups from French- and English-speaking Canada, the United States and Native people. Groups like GLU, Strategies Saint-Laurent, the U.N. Environment Program, Environment Canada, Environment Québec, the Buffalo office of the Canadian Consulate and many others are involved in the festival coordination.

Organizer Pierre Lussier

developed the Fleuve concept and has made it one of the most popular festivals in Québec. "Fleuve et Musique brings people back to the river's edge to experience its beauty and to learn about the things which threaten it. It's a balance of both education and celebration. With too much of the first, people get overwhelmed, and too much of the second, nothing is changed."

Last year's festival ran for four days with 25,000 participants and over 100 sponsors. The 1991 festival will bring five days of environmental activities and two nights of musical entertainment. It will also include boat tours of the St. Lawrence, story tellers, hands-on recycled paper-making, interactive displays on water quality, and theatre pieces.

This is the first year that the festival is planning to expand beyond Montréal. Organizers are currently working with GLU to bring the festival and its environmental message to the United States along the Niagara River this September—making Fleuve et Musique the first Canadian festival to "export" itself.

Plans are now underway to bring Fleuve et Musique to other locations around the Great Lakes and St. Lawrence River in the years to come.

Toledo Waters Held Hostage by U.S. Army Corps

by Jeff Busch,

Toledo-Lucas County Port Authority

Toledo Harbor, the third largest port on the Great Lakes, accounts for nearly 20 percent of all Great Lakes dredging, with an annual average of 1 million cubic yards.

This volume, which is twice as much as the basin's second-largest dredging operation, is caused by Toledo's location on the Maumee River, at the entrance to Maumee Bay. Nearly 80 percent of the area's drainage basin is under till, providing about 1.2 million cubic yards of annual sediment runoff.

Historically, the channel has been dredged by the Army Corps of Engineers and the material placed in the cheapest location, along the banks of the river and in Lake Erie or Maumee Bay. Several traditional dike disposal facilities are located along the river.

In 1975, in response to the Clean Water Act and the necessity to confine polluted dredged material, a new confined disposal facility (CDF) was built. Testing of the sediments from Maumee Bay in 1983 indicated that some improvement had occurred in the bay's water quality. The U.S. Environmental Protection Agency considered the sediment "suitable for open lake disposal" and began disposal at an off-shore site.

From the outset, this decision has been contested by the state and local governments. They consider it contrary to the water improvement efforts that are at the heart of the Remedial Action Plan for the Maumee River/Bay Area of Concern.

Certain pollution levels in the sediments exceed the EPA's designation of "severely polluted," in-

cluding those for the four heavy metals, nutrients, oil and grease, and pesticides.

Disposed sediments do not remain at the site. Due to the shallowness of Maumee Bay, storms continually resuspend the materials and transport it to other locations.

The disposal site lies up-current from the cities of Toledo and Maumee. During disposal operations, deterioration of the water supply occurs.

To address these concerns, the Memorandum of Agreement Committee was established to eliminate open-lake disposal. Members include the Toledo-Lucas County Port Authority, the Army Corps of Engineers, the City of Toledo, Ohio EPA, and the Toledo Metropolitan Council of Governments.

With the group's approval, in 1987 Ohio EPA put into effect a five-year plan to eliminate open-lake disposal. The plan incrementally decreases sediments disposed of in the lake, leading to the total elimination of the practice by the summer of 1992.

The group was also charged with devising alternative strategies to confine the dredged sediment. The committee has identified a number of confinement alternatives. The most promising is raising the dikes around a portion of the current CDF, providing about 25 years of disposal capacity.

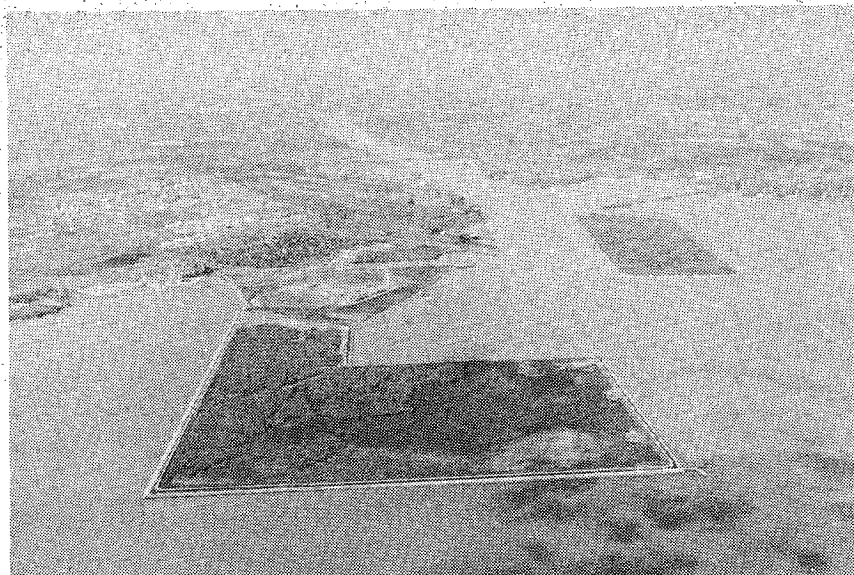
The committee has spent considerable time and money, but little progress has been made because of the uncooperative attitude of the Corps. The Buffalo District has balked at disposal in any manner other than open-lake, consistently stating that its responsibility under the Clean

Water Act is to dispose of the dredgings in the "least cost and environmentally acceptable" manner—meaning in the open lake.

The committee's the past year have been directed at breaking down the Corps' "environmentally acceptable" condition. In April 1990, the U.S. EPA sent a letter to the Corps' Buffalo District

with the support of the U.S. EPA, will not issue a section 404 water quality permit beginning next year if it includes any open-lake disposal.

Another issue is the planned extension of the current confined disposal facility (CDF). Construction was planned for this summer, with completion in the fall of 1992.



Local authorities want to end open-lake disposal of contaminated sediments by expanding containment facilities such as these (geometric shapes at center and center right), located at the mouth of the Maumee River.

affirming support for Ohio EPA's five-year plan, stating unequivocally that the Corps' present sediment disposal practices were environmentally unacceptable, and declaring that the sediment must be confined.

However, the Corps has refused to stop disposing in the lake and publicly challenged EPA's research findings. The Corps cites studies of its own supporting the safety of open-lake disposal. The Corps further states that the EPA letter did not come from a high enough level.

Privately, we have been told that the Corps' stubbornness comes down to money. The Corps does not want to set a precedent for confining anything but severely polluted sediment because many other sites around the country would be similarly affected.

As a result, the Port of Toledo is being squeezed by different federal and state agencies. Ohio EPA,

However, Ohio EPA refuses to issue a permit for construction unless the Corps agrees to mitigate for the loss of habitat. The Corps has simply responded that the government is not required to mitigate for any public works project.

This deadlock is time critical. The present CDF has only two to three years' capacity left. With an expansion requiring about two years, work on the extension must start this season, or the Toledo Harbor could be left with no available storage capacity as early as 1993.

This issue should receive considerable attention this summer. Sen. John Glenn (D-Ohio) will address this issue during a field hearing in Toledo on Corps activities in the basin. Sen. Howard Metzenbaum (D-Ohio) will also hold a hearing on Great Lakes issues related to reauthorization of the Clean Water Act.

RAPs Can Help Economy, Basin-wide Survey Shows

by Dr. Mike Campbell,

Erie Harbor Improvement Council

Designation as an Area of Concern does not have a harmful effect on an area's economy and may benefit it in some cases, according to a basinwide survey of the economic impacts of the Remedial Action Plan process.

The survey of 42 of the Great Lakes' Areas of Concern was conducted by the Erie (Pennsylvania) Harbor Improvement Council, a stakeholders group charged with identifying appropriate strategies to clean up pollution in Presque Isle Bay, within the city of Erie, Pennsylvania, on the southeast coast of Lake Erie.

When the survey was being carried out, the federal government was considering whether to give Erie an Area of Concern (AOC) designation. Just when the survey results were compiled, the area was announced as the Great Lakes' newest AOC.

Of the 26 Areas of Concern that returned the survey, only one said that lake-related tourism was not important to the local economy. Twenty-three said that it was important.

Three-quarters of the respondents said that Area of Concern designation had no effect on the local economy. Three respondents said it actually benefitted the economy. None said it had a harmful effect.

The survey figures do not always add up to 100 percent because the surveys were not always completely filled out.

All but one of the responding AOCs have their RAP process underway. Annual funding for RAP

committee operations totaled over \$20,000 for eight AOCs, between \$4,000 and \$20,000 for six AOCs, and less than \$4,000 for eight AOCs.

Half of the AOCs have three or more technical staff assigned to the RAP and \$50,000 or more in combined salary and other technical staff expenses.

Eight AOCs reported that federal, state or provincial governments spent in excess of \$500,000 for pollution studies and testing. One AOC indicated that local government spent over \$1 million for that purpose. Four AOCs were provided between \$100,000 and \$500,000, two received between \$50,000 and \$100,000, and five were provided less than \$50,000.

In 17 of the areas, no money has yet been allocated or spent for physical remediation and cleanup since the formal RAP process began. Other areas reported total funds from all sources in excess of \$20 million (and in one case over \$100 million) earmarked or spent on cleanup.

Ten AOCs thought that without AOC designation, most or all cleanup and remedial actions would not have taken place. Eight AOCs thought that all actions would have taken place without AOC designation.

Eleven AOCs thought that the AOC/RAP process accelerated the cleanup process. Nine AOCs thought it had no effect. None felt that AOC designation had delayed or prevented cleanups.

For a copy of the full results, contact Mike Campbell, Biology Dept, Mercyhurst College, Erie, PA 16546, or call 814-825-0374.

Will Trail Creek Become 44th AOC?

by Cam Davis & Kristin Solberg,
Lake Michigan Federation

The state has known for a long time about the problems in Trail Creek," said Thomas Anderson, of the Save the Dunes Council, "but the creek's water quality and aquatic life aren't getting healthier. It's time for the federal and state governments to act."

Anderson's hoped-for action is designation of Trail Creek as an international Area of Concern. In May, the Dunes Council, the Lake Michigan Federation, and Great Lakes United jointly called on the United States, Canada, the International Joint Commission and the state of Indiana to designate Trail Creek as the newest international Area of Concern.

If Canada and the United States agree to the designation, Trail Creek would be the Great Lakes 44th, Lake Michigan's eleventh and Indiana's second (after Grand Cal River) official "toxic hot spot."

"Trail Creek's fish and wildlife populations are suffering from degraded water quality," said Cameron Davis, deputy director of the Lake Michigan Federation. "The agencies can't dredge when they

want and dispose of the sediments where they want because the sediment is loaded with contaminants," he said.

Because a number of "beneficial uses" in Trail Creek are impaired, the tributary qualifies as an international Area of Concern under the Great Lakes Water Quality Agreement, according to the groups. Based on findings by the Lake Michigan Federation, the impaired uses under various articles of the agreement include:

- Degradation of fish and wildlife populations (article III);
- Degradation of benthos-organisms that live in the sediment and that are at the base of the food chain (article VI);
- Restrictions on dredging activities (article VII); and
- Loss of fish & wildlife habitat (article XIV).

The call for Trail Creek's designation, which would make the creek eligible for federal clean-up funding, comes four months after Erie, Pennsylvania, was designated as the 43rd Great Lakes Area of Concern, capping a four-year campaign by Great Lakes United and the Erie County Environmental Coalition.

President's Message

In the past decade, the public has succeeded in opening up many of the doors behind which government decisions used to be made. In the coming decade, the public will insist that the doors to private corporate board rooms also be opened up.

Private corporations can contaminate our communities, destroy wetlands and farmlands, destroy the health of workers, and through their employment and closure decisions, deprive people of their livelihoods and sense of worth. We, unfortunately, have many examples of these kinds of devastation throughout the Great Lakes.

Over the past decade, government has increasingly become involved in controlling and limiting private corporate decision-making, primarily through regulations and permitting. However, these controls have not sufficiently increased the ability of those people who are most directly affected to change corporate decision-making. Federal, provincial and state governments can no longer act as intermediaries between private corporate wishes and the public's will. The public is demanding to be directly involved in corporate decision-making—not simply in making input into government programmes that affect corporations.

During this decade, the public will be insisting on:

- Full access to information on hazardous substances used, generated and released into the environment;
- Community and worker right to inspect corporate facilities to assess hazards and controls on hazards;
- Right of community and worker representatives to sit down with plant owners and managers to assess toxics use reduction and control programmes;
- Corporate requirement to consult with community and worker representatives during the development of plans for expansions, restructuring, layoffs and closures;
- Corporate responsibility to develop in advance with the community and workers plans to protect the community from devastation should environmental or economic threats arise; and
- Corporate responsibility to further community goals such as protection of green areas.

The mechanisms for implementing some of these rights and responsibilities will have to be worked out through trial and error. Inevitably, these will involve the opening up of corporate board rooms to community and worker representatives.

—John Jackson

Citizens Need to Speak Up on Wetlands Now

continued from page 1
prohibit and prevent a landowner from developing it. When applying for a federal permit to develop a wetland, a landowner may be told to design the proposal differently to prevent damage to the wetland, but, according to the Corps, 97 percent of the permits requested are ultimately approved. In fact, over 10,000 permits to fill wetlands are granted each year.

There are now twelve bills before congress that would weaken wetlands protection. Environmental groups have been generally slow to respond to the threats to wetland laws in the United States. Recently, however, the National Wildlife Federation, the Sierra Club, and the Audubon Society, among others, have been directing necessary attention to this issue.

It is important that we in the Great Lakes region add our voices

to the national debate on this issue. At our annual meeting this May, Great Lakes United's membership passed a resolution reaffirming the organization's commitment to protecting wetlands.

The resolution was supported by a media conference convened by Great Lakes United in early May, part of a series of nationally coordinated events held to support wetlands protection around the Great Lakes and elsewhere.

It is important to remember during these discussions that we cannot afford to simply slow the rate of loss of wetlands. We need to achieve a net gain in wetland acreage by simultaneously protecting existing wetlands and, where possible, restoring wetlands already damaged or destroyed. Wetlands of wide extent and good quality are critical to the health of the Great Lakes ecosystem.



Photo: Furmberger/Sheedd Aquarium

Join the Great Lakes Beach Sweep!

by Karen Furmberger,
1991 Coastal Cleanup

Last year, the Center for Marine Conservation decided to extend its annual National Beach Cleanup effort to the shores of the Great Lakes. The move adds 10,000 miles of shoreline to the cleanup, much of it ripe for the picking up.

The newly inaugurated Great Lakes Beach Sweep, coordinated for the center by the Shedd Aquarium in Chicago, wants volunteers for the 1991 event, scheduled for September 21.

Begun in 1988, the National Beach Cleanup is a one-day event that enlists volunteer beach crews to collect debris as they collect beach debris. Every piece of trash picked up is recorded by category and weight. Summaries of the results are published in an eye-opening annual report.

The increasingly hefty book gives a breakdown by source (gallies, wastes, commercial and recreational fishing and boating wastes, sewage, medical refuse, and foreign debris) and devotes a section to wildlife found entangled in debris. The book is sent to scientists, environmentalists and legislators as a tool for stemming the tidal wave of trash at its sources.

Most revealing of our trash (and, by extension, consumer) habits is the report's annual "dirty dozen"—the 12 most common types of garbage found during the cleanup. Heading the list in 1990 with 12.5 percent were cigarette filters, up from fifth place in 1989, followed by plastic and foam pieces and utensils, paper, glass, plastic bags and wrappers, glass bottles, and cans.

This affronting flotam can be found on the planet's most remote beaches, and the National Beach Cleanup has evolved beyond its name to count Canada, Guatemala, Japan, Mexico and Taiwan among

its international components. Last year, 105,000 participants around the world logged in more than 2.6 million pounds of trash on multinational data cards.

Last year's Great Lakes efforts included teams in Erie County, New York, led by Sharon Trembath, and in Chicago, Illinois, led by Tim Early, of the Aquasphere Project, a conservation-oriented diving club.

The Erie effort logged 525 volunteers and 30,000 pounds of debris along 25 miles of New York shoreline. The Illinois-Indiana cleanup, on a three-quarter-mile Chicago beach and a quarter-mile stretch of Indiana's dunes, bagged 1,000 pounds of trash.

The Great Lakes Beach Sweep is still looking for coordinators for Minnesota, Ohio, Pennsylvania, Wisconsin, Ontario and Québec. These coordinators will recruit local coordinators and a steering committee, attract media coverage, invite government officials to participate, solicit donations of supplies such as refreshments, gloves, and pencils, and organize the data cards.

The local coordinators can count on CMC regional coordinators for data cards, bags for cleanup, press kit, media coverage, and guidance and support in pulling it all together.

Judging from our experience, one successful beach cleanup generates many more the next year.

For information on joining the Great Lakes Beach Sweep, send a postcard with name, address, daytime telephone number and details of desired involvement to Karen Furmberger, Shedd Aquarium, 1200 S. Lake Shore Drive, Chicago, IL 60605. For a detailed information kit on organizing a beach cleanup, call 312-939-2426, ext. 3374.

Karen Furmberger is science editor at Shedd Aquarium and self-proclaimed Poobah of Great Lakes Beach Garbage.

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The GLU 1991 Pollution Prevention Tour tee

100% unbleached cotton

U.S.: \$12/\$15; Canada: \$13/\$16
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GLU Testifies to Congress on Lakes Research

Last April 30, GLU Board member Jack Manno testified to a Congressional subcommittee on the need to adequately fund Great Lakes research.

He stated that, "There is no question that federally supported research is essential for the protection of the Great Lakes." Yet, from 1982 to 1990, repeated attempts were made to reduce or eliminate critical research funding. "We are very pleased that the Bush Administration in its 1992 budget proposals has recommended an increase in Great Lakes funding for the first time in a decade."

He pointed out, though, that many important programs will still see reduced funding under the

proposed budget, e.g. the Great Lakes Environmental Laboratory, for which the President requested \$4.2 million, \$1.2 million below its current level. The Coastal Zone Management Program and Sea Grant are also facing cuts.

Without sufficient funding, we will not be able to discover ways to manage the zebra mussel invasion, to control sea lamprey or to find solutions for contaminated sediments.

Further, several Great Lakes bills were passed by Congress that will go seriously underfunded, included laws addressing implementation of RAPs and development of uniform water quality standards for the Great Lakes.

Historic Diversion Decision Awaited

by Tom Gray,
Great Lakes United

This is an historic meeting," remarked Dick Bartz of the Ohio Department of Natural Resources. "It is the first consultation meeting under the Great Lakes Charter" to address a proposed Great Lakes diversion.

The meeting was of the Council of Great Lakes Governors, held in May, the proposed diversion was that requested by Indiana for the town of Lowell, located 25 miles south of Gary, Indiana, and four miles south of the boundary of the Great Lakes drainage basin.

Lowell's existing supply contains fluoride levels that exceed U.S. EPA environmental standards. The city wants to pipe up to 3.5 million gallons of water daily from Lake Michigan for municipal use. The water would be discharged into the Mississippi River basin, not back into the Great Lakes.

Great Lakes United representatives at the meeting urged the members to veto the diversion proposal.

Five of the eight states said they would approve the diversion. Michigan, Wisconsin and New York had not made a decision. Ontario and Québec are non-voting parties. Ontario has not taken a position; Québec recommended that the diversion be limited to one million gallons.

A formal vote will be made during the summer. Only one state's veto is needed to disapprove.

The diversion of Great Lakes water to ultimate discharge outside its basin has grave implications. Other regions have already applied pressure to permanently divert Great Lakes water for their use. Such large-scale manipulation would turn the Great Lakes into mere holding tanks and have a severe impact on wetlands, fish spawning areas, shoreline access, shipping channels and hydropower output.

A similar proposal made last year to divert a daily 3.2 million gallons of Great Lakes water at Pleasant Prairie, Wisconsin, resulted in an

agreement by the state to ultimately build a pipeline so that the water could be returned to Lake Michigan.

GLU strongly urged Indiana to follow that example.

U.S. Public Law 99-662, which states that diversion of any water, from the Great Lakes Basin is prohibited unless approved by the governors of every Great Lakes state. The Great Lakes Charter, a pact signed by all the Great Lakes governors in 1985, also requires approval of all eight Great Lakes states, but only for diversions exceeding 5 million gallons per day.

To meet the requirements of the federal law, however, the governors use the consultation procedure spelled out by the charter.

"GLU recognizes that Lowell's drinking water quality is a serious issue," said GLU Executive Director Phil Waller. "But the environmental health of the Great Lakes ecosystem must also be considered."

The proposed diversion is not intended just to find a replacement for Lowell's contaminated water, but also to provide for the "future growth" of Lowell and to fill the needs of residents located between Gary and Lowell.

In reviewing options for replacing Lowell's water supply, neither the city nor the state considered building a pipeline to return the water to the lake.

One staffer for the Council of Great Lakes Governors called the Lowell request a "test case for how the process works"—the diversion would set a precedent for future diversion proposals. Several state officials thought there were many towns just outside the Great Lakes basin that might look to the Great Lakes for a solution to their drinking water problems.

"It is ironic that Indiana wants to use Great Lakes water, but it is not a participant in the Great Lakes Protection Fund, which allots funding for protection efforts based on each state's total use of Great Lakes water," noted one Michigan representative.

Mexico Free Trade Could Hurt the Lakes

by Pamela Leisinger, United Auto Workers Conservation Department

Environment has become a major issue in the debate about creating a "North American Free Trade Agreement," as proposed by U.S. President George Bush, Mexico's President Carlos Salinas and Canadian Prime Minister Brian Mulroney.

The agreement will have environmental effects that extend far beyond the U.S.-Mexico border region and the acknowledged serious environmental problems that already exist there. In fact, environmental repercussions of the agreement will reach all the way back to the Great Lakes.

A great deal of money has been spent by government and business in recent years to clean up environmental problems in the Great Lakes region. This effort has retained employment in communities in the region, produced a healthier environment, restored recreational opportunities, and fostered sustainable economic activity.

But would business have made the necessary investments and remained in the region if, under the terms of a U.S.-Mexico trade agreement, they were convinced they could move their operations to Mexico and retain assured access for their output into the U.S. market? Further, what happens to the leverage of the Great Lakes area to vigorously enforce and strengthen environmental laws if the pollution that has been allowed

on the U.S.-Mexico border is not directly confronted and eliminated by the two governments?

Many environmental organizations have joined with unions, consumer groups, church groups and others in opposition to granting the Bush administration "fast-track" authority for the proposed U.S.-Mexico negotiations. Fast-track authority means the Congress can only vote for or against the agreement negotiated by the administration; no amendments to the agreement would be allowed.

All these groups share the concern that the agreement reached may not contain satisfactory environmental provisions. Equally important, they fear that the agreement may fail to include an enforcement mechanism able to assure compliance with whatever environmental provisions are included.

Only if Congress retains the authority to amend the agreement can there be good certainty that these essential provisions will be a part of a U.S.-Mexico trade deal.

The people of the Great Lakes region have imposed additional costs on companies operating locally in order to assure a healthy environment for workers and other area residents. That effort would be severely undermined if enforcement of strong environmental laws in Mexico is not included as an integral element of any North American trade agreement.



Clockwise from upper left: Jerry Jakes and Joe Freibauer auction off a painting; David Corbin gives the luncheon address; five large productions sing "Greetings Canada"; GLU staff at the luncheon; Michelle Donnelly and Kim Miller on banquet night; portrait of Robin McCallister, GLU's speaker; Christian Strand addresses clearing up the St. Lawrence River.



Join Great Lakes United !

"Unless someone like you
Cares a whole awful lot,
Nothing is going to get better,
It's not."

The Lorax, by Dr. Seuss

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☐ subscriber (\$20.00) ☐ sustaining member (\$50.00)
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Organization: _____
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- ☐ I would also like to volunteer my time for GLU
☐ I would like to know more about what GLU does



Great Lakes United
Cassidy Hall, 1300 Elmwood Avenue
Buffalo, NY 14222 (716) 886-0142



New Board, Bylaw Voted in at Annual Meeting

continued from page 1

nations. Board members previously represented only the nations of Canada and the United States. The bylaw, which passed, will recognize the sovereign national status of Native peoples, including the fact that a number of their reserves, which are ravaged by contamination, straddle the Canada-U.S. border. The bylaw will go into effect in 1992.

GLU members voted in three new members of the board. Eugene Perrin, M.D., of the East Michigan Environmental Action Council, and Jeanne Jabonowski (replacing outgoing Bill Munson), of Toronto

Environmental Protection Office, were elected to the board. Dick Kubink, of the Pennsylvania Sportsmen Federation, was elected the new GLU vice president, replacing outgoing Sister Margen Hoffmann. O.S.F. Margen was the driving force behind the Ecumenical Task Force, which was instrumental in bringing the contamination at Love Canal to government attention. Sister Margen was editor of *Earthcare: Lessons from Love Canal*, and was named 1986 "Citizen of the Year" by the *Buffalo News* for her work on Love Canal issues.

THE GREAT LAKES UNITED

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Summer 1991

Time Is Ripe for Changes in IJC Great Lakes Boards

by Henry Regier, Director,
Institute for Environmental Studies,
University of Toronto

Across its broad stretch of jurisdictions, the network of Great Lakes Basin actors, organizations and agencies is "maturing." Twenty years ago, two federal governments dominated Basin activities, mostly through the International Joint Commission (IJC), the Great Lakes Fishery Commission, and the Great Lakes Basin Commission. The Basin Commission, now defunct, was not formally binational but did involve Canadians informally; the newer Great Lakes Commission has continued some of the former Basin Commission's earlier activities.

Since the late 1970s, the relative importance of the federal governments in Great Lakes governance has been waning, partly because of U.S. and Canadian federal policies shifting responsibility on some environmental issues to lower levels of government and partly because the latter have been evolving autonomously to play larger roles. The various commissions and especially environmental non-governmental organizations have unintentionally assisted in this shift. Under these changing circumstances, the mix of roles for various institutions has been changing.

This is especially true of the International Joint Commission. The roles of IJC under the 1972 and the 1978 Great Lakes Water Quality Agreement (GLWQA), are three-fold:

- * Pro-actively to help with issue identification, fact finding, consensus building, strategic planning, i.e., the usual "reference" function;

- * Co-actively to help coordinate implementation of the formal agreement and with the less formal, in-service education and co-opting of agency and non-government experts into their boards, committees and task forces; and
- * Re-actively to help evaluate or assist the Parties' progress under the Agreement.

As amended in 1987, the Agreement clarified the roles of the IJC, its board, and the roles of the parties to the Agreement. In general, the parties (the United States and Canada) are to be more clearly responsible pro-actively for initiating detailed plans, for implementing them, and for reporting jointly on current progress. IJC re-actively will try to hold the parties accountable to their commitments but will also continue to be involved in policy-oriented research and ecosystem information services. As these roles come to be distinguished more clearly, the tasks and the modus operandi of the IJC's boards are being altered.

Three major parts of the Agreement are germane to the issue of reorganization: "Powers, Responsibilities and Functions" of the IJC (article VII); "Joint Institutions and Regional Office" (article VIII); and relevant to article VIII, the "Terms of Reference for the Joint Institutions and the Great Lakes Regional Office." The joint institutions include the Great Lakes Water Quality Board (WQWB) and the Great Lakes Science Advisory Board (SAB). Elsewhere in the agreement—as in the "Specific Objectives" (supplement to annex 1)—certain responsibilities are specifically assigned to the parties.

But articles VII and VIII and the terms of reference attached to article VIII are not clear on what the outcome of the IJC restructuring will be. The agreement has mandated reorganization but does not spell out operational details. The IJC has worked to clarify its responsibilities and may soon make its plans public. The responsibility for proposing ecosystem objectives has been removed from the SAB and has been jointly assigned to the parties. The responsibility for producing periodic joint binational reports on progress under the Agreement has been reassigned by the Parties from the WQWB to a Canadian-U.S. Great Lakes Coordinating Committee.

Thus the SAB and WQWB have each had a major responsibility reassigned back to the parties. I suggest reorganizing responsibilities under the Agreement by modifying further the structure and processes of the two boards:

- * The SAB could become more strongly but not exclusively proactive as the "Strategic Advisory Board";
- * The WQWB could be recast as a reactive "Ecosystem Audit Board."

The "Strategic Advisory Board" could build on the proactive tradition of the SAB with its Council of Great Lakes Research Managers to foster innovative science and scholarship. An increasing need for policy-oriented studies, for work on professional and environmental ethics, etc., has

been apparent in recent years, as reflected in some SAB initiatives. The existing board has not been limited to "scientific" matters, and interdisciplinary ecosystemic synthesis should be a strong theme of the proposed "Strategic Advisory Board."

The "Ecosystem Audit Board" could perform the function of evaluating progress in the waters under the parties' activities. It might also review or audit the role of science and scholarship in the achievement of the purpose of the Agreement. This was a recommendation of the 1985 Report of National Research Council/Royal Society of Canada, specifically relating to the eutrophication phenomenon.

There should be relatively less dependence on the parties' managerial experts than has been the case under the WQWB. So that the new board can be relatively independent, most members of the "Ecosystem Audit Board" should come from agencies and organizations other than from those with lead roles in direct implementation of the agreement.

Both for the more pro-active "Strategic Advisory Board" and the more re-active "Ecosystem Audit Board," strong support will be necessary from the Great Lakes Regional Office.

Dr. Regier served on the Great Lakes Commission and the IJC Great Lakes Science Advisory Board and participated in the founding of Great Lakes United.

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Strong citizen response made a difference at the last meeting.

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For information on organizing bus trips to Traverse City, call GLU (716) 885-0142

September IJC Meeting

The 1991 IJC Biennial Meeting promises to be an exciting and diverse event. In addition to the IJC Meeting itself, there are 4 other events occurring:

Sept. 28-28, the IJC will sponsor a workshop on RAPs.

Sept. 27-28, The Michigan Audubon Society will sponsor a Cause-Effects Linkages II Symposium for citizens.

Sept. 29, grassroots workshop and rally, Greenpeace

Sept. 30-Oct. 1, the two federal governments will showcase their pollution prevention programs.



Charles Caccia presents the Liberal Party's Great Lakes portfolio of GLU's annual meeting.

What's Inside

- GLU Annual Meeting 1
- Attack on Wetlands 1
- Interview with EPA Official 1
- GLU Annual Resolutions 2
- EPA Initiative Needs Care 3
- Goals for Clean Water Act 3
- MISA is Failing Hope 4
- Lake Water Develops Photos 4
- IJC Holds Superior Meeting 4
- Toledo Waters Held Hostage 5
- Trail Creek, In Newest AOC? 5
- RAPs Economic Benefits 5
- Join Lakes Beach Cleanup! 6
- Lake Diversion Proposal 7
- Mexico Free Trade Fears 7
- IJC Boards Need Change 8



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The Model Law

by Tony Luppino

Two years ago the Massachusetts legislature unanimously passed the Toxics Use Reduction Act, a sweeping measure designed to reduce the use of toxic chemicals by Massachusetts industry. The state law and program has come to be viewed by many pollution prevention advocates as a good model of what state toxics use reduction programs should look like. While not perfect, TURA is clearly the most ambitious piece of pollution prevention legislation in the country.

The Massachusetts law explicitly requires toxics use reduction programs, as opposed to weaker and less clear waste reduction or waste minimization programs. Toxics use reduction is defined by the law as "in-plant changes in production process or raw materials that reduce, avoid, or eliminate the use of toxic or hazardous substances or generation of hazardous byproducts per unit of product, so as to reduce risks to the health of workers, consumers, or the environment, without shifting risks among workers, consumers, or parts of the environment."

Among techniques included in the law's definition of toxics use reduction are:

- Input substitution—the replacement of a toxic substance or raw material used in a production process with a non-toxic or less toxic substance;
- Product reformulation—changing an end product to reduce or eliminate the amount and toxicity of toxic substances used;
- Production process modification—redesign of existing production processes or development of new ones to reduce or eliminate the use of toxic substances and the generation of hazardous waste;
- Production process modernization—upgrading or replacing equipment or methods in the context of an existing production process;
- Improved operation and maintenance controls of production process equipment and methods, including improved housekeeping, system adjustments, and product and process inspections;
- In-process recycling—reuse or extended use of toxic chemicals within a production process by filtration and other closed-loop systems, reducing the use of toxics or waste per unit of production.

Excluded from the definition of toxic use reduction by the Massachusetts law are incineration, transfer from one medium of release or discharge to another, offsite waste recycling, and end-of-pipe treatment of toxics as wastes.

Chemicals covered. TURA currently covers all 300-plus chemicals listed in Title III of the U.S. federal Superfund Amendment and Reauthorization Act. Later this year the chemicals listed by the U.S. Comprehensive Environmental Response and Liability Act will be phased into TURA oversight. Up to 10 additional chemicals may be added to the list each year by the TURA-mandated Council on Toxics Use Reduction, which encourages coordination of all state regulations, reporting, and programs dealing with

toxics, or by the Department of Environmental Protection.

User categories

Any company in TURA-covered industries that employs 10 or more full-time employees is affected in some way by the act. TURA divides users of toxic chemicals into small-quantity and large-quantity categories. LQUs are those companies that use at least 10,000 pounds of a listed substance per year, or that manufacture or process at least 25,000 pounds of a listed substance per year. All other users are classified as SQUs.

Reporting requirements

Massachusetts' TURA directs state LQUs to file annual toxic or

realize;

• An implementation schedule for the proposed toxics use reduction program;

• Two- and five-year toxics use reduction goals for each chemical in each production process, expressed as a byproduct reduction index (reduction per unit of product);

• Two- and five-year reduction goals for both use and byproduct generation for each chemical in each facility as a whole;

• Explanations of why particular toxics use reduction options were or were not implemented.

If a large quantity user fails to produce a plan, it can be fined up to \$25,000. There are also criminal penalties for those who willfully violate the planning requirement. The toxics use reduction plans are to be updated every two years. Summaries of the plans are made available

The Pilot Project

by Karen Murphy

Discussions about toxics use reduction inevitably raise questions about the use of existing regulatory programs to promote toxics use reduction. Can "Best Available Control Technology" be redefined to mean process changes? How can greater coordination between programs help close regulatory loopholes? Is multimedia permitting possible and effective?

In 1987 the Massachusetts Department of Environmental Protection began to formulate a pilot project aimed at exploring the effectiveness of multimedia inspection and enforcement programs. Further development, planning, and fundraising for the project occurred through 1989 and the Blackstone Project was launched in 1990. The project has three primary goals mandated in the 1989 Massachusetts Toxic Use Reduction Act:

- Development of multimedia inspection procedures.
- Promotion of toxics use reduction through enforcement actions.
- Coordination of regulatory and technical assistance activities.

The DEP, which has responsibility for inspections and enforcement, and the Department of Environmental Management (DEM), which administers the state's pollution prevention technical assistance program, jointly conducted the project in cooperation with the Upper Blackstone Water Pollution Abatement District. The project targeted 26 metal-intensive manufacturing facilities located in the service area of the Upper Blackstone Publicly Owned Treatment Works (POTW).

DEM staff were trained to conduct multimedia inspections for air quality, hazardous waste, water pollution/industrial pretreatment, and Superfund Title III compliance. Crucially important, inspectors were also charged with identifying source reduction opportunities during the inspections, recommending source reduction enforcement strategies, and drafting enforcement documents.

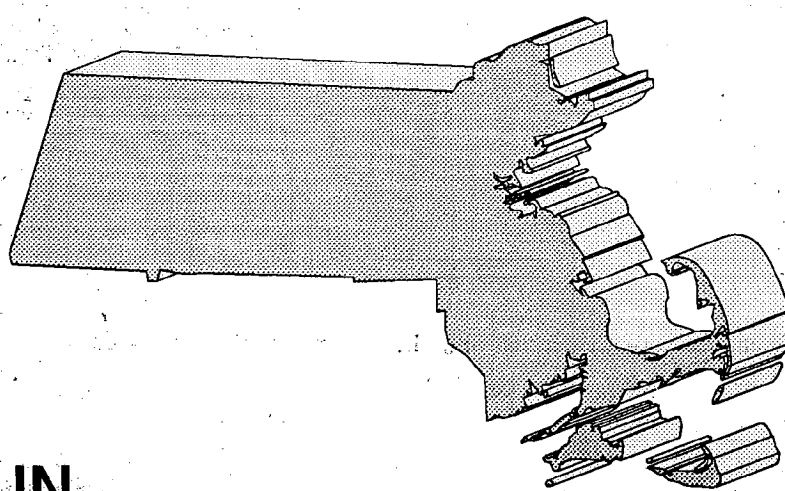
1990 Findings

The primary focus for the Blackstone Project's first year was on testing various multimedia inspection models and determining if they were effective given a number of different parameters ranging from cost to environmental protection.

Cost. The Blackstone Project demonstrated that certain multimedia inspection models were more cost-effective than their single-media counterparts, particularly in small to mid-sized facilities. At very large facilities the project team recommended coordinated single-media inspections of a facility or multimedia inspections of particular production units.

Violations. Of the 26 facilities inspected, 20 were found to be violating. *continued on page 4*

TOXICS USE REDUCTION



IN MASSACHUSETTS

hazardous substance reports. These reports must indicate, for each facility, the amounts of every listed chemical used, manufactured, generated as byproduct, put in a product shipped offsite, and/or recycled on-site.

For each chemical in each production process the reports must show the year's byproduct and emissions reduction indexes (measures of percent reduction per unit of product). The reports are also to include a matrix for each chemical and production process showing the methods or techniques used to reduce the byproducts generated. The annual reports are reviewed by agency staff and made available to the public.

Reduction plans

TURA requires that LQUs develop toxics use reduction plans for each facility covered under the act. These plans focus solely on toxics use reduction and must include:

- An analysis of all production processes in which TURA-covered chemicals are manufactured or used;
- Current and projected use of toxic chemicals;
- Economic impacts of each chemical used;
- Appropriate technologies for meeting toxics use reduction goals;
- All training, technologies, and procedures to be used under the proposed toxics use reduction plan, and anticipated cost savings they may

to the public.

Public involvement

TURA also includes provisions for worker and community involvement in the toxics use reduction process. Six months before toxics use reduction plans are due, LQUs must notify all employees of the planning process, identify substances covered by the plan, identify production units, and solicit comments or suggestions from the workers in the facility. Ten or more residents living within 10 miles of a facility may petition the Department of Environmental Protection to review the facility's plan, plan summary, and backup data. The DEP must then report back to the petitioners on its findings.

TURA also contains provisions allowing citizens to take legal action to compel enforcement of the act. Funding is provided to pay fees for attorneys and expert witnesses. Also funded are toxics use reduction training and assistance to citizens, community groups, and workers, primarily through the Toxics Use Reduction Institute at the University of Lowell.

Bureaucratic overhaul

More than any other U.S. toxics use reduction law, the Massachusetts TURA reforms the existing state environmental regulatory system so that it promotes toxics use reduction. *continued on page 2*

GLU's First Pollution Prevention Workshop

A good neighbor agreement does not just address the environment, but also job security and the long-term sustainability of the community.

—Sanford Lewis
National Toxics Campaign

by Karen Murphy

Negotiating good neighbor agreements was the major focus of Great Lakes United's first citizen's pollution prevention workshop.

Held in Western New York in mid-April and co-sponsored by the Citizens' Environmental Coalition, the workshop trained citizens in getting information on local companies, developing organizing strategies, and building coalitions with labor.

Good Neighbor Agreements

Over the last five years the idea of good neighbor agreements has captured the imagination of community organizations throughout the United States. These agreements between communities and the industries they host address issues such as:

- pollution prevention
- remedial actions
- accident prevention
- the right to inspect
- access to information
- health monitoring and
- long-term job security

One California community is negotiating for a local health clinic. Another negotiated and won the right to inspect a facility. Other communities have negotiated for reductions in the use of toxic chemicals.

Sanford Lewis, of the National Toxics Campaign, told workshop participants that good neighbor agreements should be approached as

contractual arrangements—that is, put in a legal form with enforcement clauses written in.

A good neighbor agreement is not easy to obtain. It takes hard work, persistence, clear thinking, and a good organizing campaign.

Waste Audits

The first step in obtaining an agreement is determining what problems need to be addressed. This process can begin by conducting waste audits—research to identify what chemicals are going into and out of a facility. There is a lot of public information available. Charlie Griffith, of the Ecology Center of Ann Arbor, Michigan, and Charlie Tebbutt, of Allen, Lippes and Shonn of Buffalo, New York, led workshop participants through a series of permits and other public documents that can provide important information:

Resource Conservation and Recovery Act. Waste generators must submit "hazardous waste manifests," forms detailing the types, quantities and destinations of wastes in each offsite shipment of waste. The government compiles an annual report summarizing the manifests.

Emergency Planning and Community Right to Know Act. Companies are required to identify various hazardous chemicals stored onsite in amounts over 10,000 pounds on what are called Tier I and Tier II forms. Companies must also report all releases of certain chemicals to the air, land or water on Form Rs.

Clean Air Act and Clean Water Act. Industries are required to obtain permits for all discharges to air and water. The Clean Water Act

requires companies to report on their compliance with the permits. All permitted companies must also fill out an annual survey detailing the chemicals its facilities use.

Mounting a Campaign

To get companies to change the way they operate, community and labor organizations must build strong coalitions that can effectively apply pressure. Keith Mestrich, of the Food and Allied Service Trades, led workshop participants through exercises to help community and labor organizations identify what they want to do, how they plan to go about doing it, and who they will target:

Goals

- What are labor's short- and long-range goals?
- What are environmentalists' short- and long-range goals?
- What are the common goals?
- What will be called a victory?

Organization

- How will the organization be structured?
- Will the campaign recruit new members and allies?
- Who are potential allies?
- How will the organization be lead, and who will lead it?
- How will money be raised?
- What are potential strengths and problems in working together?
- What resources does each coalition member bring to the campaign?

Research

- How will the target's environmental problems be researched?
- Its labor problems?
- Who are the regulators at the city, state and federal levels that may have information on the target?

What are their powers?

- What other facts could be of use? (E.g., company finances, executives' backgrounds.)
- Can research be done in ways that build neighborhood and union involvement?

Targeting

- Who has the power at the plant or in the community to meet demands and solve problems?
- How does each target hold power—by voters, by appointment, by ownership, or in some other way?
- What are the strengths and weaknesses of each target?

A recurrent theme of the workshop was the need to build stronger coalitions with labor. Plants workers may be the most affected by releases of toxic chemicals, since 284,000 cases of new work-related disease are reported annually, but they are also the most vulnerable to intimations that solving environmental problems is a threat to their economic well-being.

Representatives of the United Steel Workers of America shared with participants a number of pertinent recommendations approved at the union's recent national convention that addressed the issue of job blackmail and the environment. The recommendations closed by declaring that, "In the long run, the real choice is not jobs or environment. It's both or neither. What kind of jobs will be possible in a world of depleted resources, poisoned water and foul air, a world where ozone depletion and greenhouse warming make it difficult even to survive? The only answer is to link environmental issues with economic justice."

...Massachusetts' Model Law: The Toxics Use Reduction Act

...continued from page 1
tion. The act sets a goal of 50 percent reduction in the toxic byproducts generated in Massachusetts by 1997.

Beginning in 1995, the state may designate segments of industry as priorities for achieving reduction goals, based on toxics use and economic feasibility. Performance standards for levels of toxics use will then be set based upon the industry segment's average byproduct reduction index. Those companies falling below the performance standard will be required to implement additional toxics use reduction measures in order to comply with their segment's current standard.

Multimedia enforcement

The Massachusetts law mandates that state environmental enforcement efforts be "multimedia" in nature, that is, designed counter the effects of pollution control efforts that merely transfer toxic chemicals from one medium to another, say from air to landfill. The workplace is expressly considered one of the environmental media.

This multimedia orientation should push Massachusetts environmental enforcement toward toxics use reduction, because it is the only method of pollution control that does not simply transfer pollution from one place or form to another.

Massachusetts environmental agencies are currently studying methods of multimedia enforcement via the Blackstone Project, a pilot initiative employing whole-facility inspections to regulate industries in the state's Upper Blackstone Water Pollution Abatement District (see article elsewhere in this issue).

Innovation waivers

The act also provides for the formulation of new environmental regulations so that obstacles standing in

the way of toxics use reduction can be eliminated. TURA allows the state to grant "innovation waivers" that can relax or delay specific permit or regulatory requirements. Innovation waivers may be granted if they:

- Help implement toxics use reduction techniques;
- Achieve compliance with environmental regulations within two years;
- Do not cause too much risk;
- Achieve greater net environmental benefits than would be possible without a waiver.

Technical assistance

The Massachusetts law funds programs to assist toxics users in their efforts to reduce their use of toxic chemicals. TURA created the Office of Technical Assistance, a department separate from the state's environmental regulatory agencies that is prohibited from giving company information to those agencies except in specific circumstances. Free services offered to businesses by the OTA include:

- Onsite technical evaluation of toxics use reduction opportunities;
 - Economic analyses to help identify relative costs and benefits of toxics use reduction options;
 - Conferences, workshops, and trade fairs to disseminate information on toxics use reduction;
 - Training in the recognition of toxics use reduction opportunities.
- TURA also established the Toxics Use Reduction Institute at the University of Lowell. The institute combines technical assistance with toxics use reduction research. Its important activities include:

- Curriculum development and training of toxics use reduction planners.
- Sponsoring research in new technologies or methods that reduce toxics use.

- Development of public policy to decrease risk to the environment and to public health.

Providing technical support and scientific advice to government in advancing pollution prevention programs.

TURA funding

TURA is funded by a scaled fee structure. LQUs pay a base fee for each facility and \$1,100 per chemical used in quantities over the threshold amount, with a ceiling on both the base and total fees determined by the number of employees at that facility.

This dedicated fee system is perhaps the most important element of the Massachusetts TURA. Even the best toxic use reduction law cannot be implemented without sufficient funding. The type of funding source determines how consistently long-term funding will be available for the program. Dedicated fees and taxes are the most reliable source of funding for toxics use reduction programs. The Massachusetts fee system raises \$4 million to \$5 million each year. Federal waste reduction grants bring the current annual funding for the Massachusetts program up to \$5,242,000, far greater than any other state program, according to "An Ounce of Toxic Pollution Prevention," a report on ten of the nation's toxics use reduction laws released by the Center for Policy Alternatives, the National Environmental Law Center, and the Center for Public Interest Research. Minnesota came in a very distant second with \$1,525,000.

TURA's shortcomings

The panel of experts that rated state toxics use reduction laws for "An Ounce of Toxic Pollution Prevention" found some shortcomings in the Massachusetts act. Several of the experts found TURA's reporting

requirements inadequate because facilities must annually report toxics use for the facility as a whole, not for individual production processes. David Allen, coordinator of the National Toxics Campaign Fund, believes that TURA's exclusive focus on a list of individual chemicals may limit its effectiveness. "The Massachusetts program could be broadened through a two-tiered approach which, in addition to seeking reduction in the use of the specific chemicals on a list, also seeks to reduce the generation of all wastes regardless of their specific chemical content."

A pollution prevention grant program providing grants to businesses, trade associations, and labor and environment organizations to develop pollution prevention methods and programs would also make the Massachusetts TURA more effective. At present the act includes only a limited loan program.

Of course, even the best pollution prevention law is ineffective if it is not well implemented. Since almost all the important deadlines written into the act have yet to be reached, it is still too early to assess how TURA is performing. Many of the large quantity users must file their annual toxics use reports by July 1.

Bulletin of Pollution Prevention

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The Pollution Prevention Project and the Bulletin of Pollution Prevention are funded by the Great Lakes Protection Fund.

pollution prevention SUCCESS STORIES

by Monica Campbell,
Toronto Dept. of Public Health

Two years ago Toronto's Environmental Protection Office began planning a hazardous waste program. It was not to become a typical pollution control effort.

Consistent with the prevention (rather than treatment) philosophy of the Department of Public Health,

available to the public through computerized data files.

Plant Visits

The program will make site visits to consult hazardous waste generators on waste minimization measures. Initial visits will involve informing these organizations about the Hazardous Waste Minimization

by Tony Luppino

Erie County, New York, which includes the Buffalo metropolitan area, has initiated a three-year, \$1 million demonstration effort to help small and medium-sized businesses reduce the amounts and toxicity of the wastes they generate. The new Office of Pollution Prevention is part of the county's Department of Environment and Planning.

Printing, photography, metal manufacturing, electroplating, dry cleaning, and auto body repair are among the industries being targeted by the program. The office will offer businesses in these and some other sectors workshops, seminars, informational materials, environmental/waste audits, and onsite consultation.

"With the creation of the Office of Pollution Prevention, Erie County is taking a proactive role in forging ahead as a national pioneer into the pollution reduction frontier," said

labor, academia, the environmental community, and area economic development agencies, has also been formed.

The office will collaborate with RECRA Environmental and the Center for Hazardous Waste Management to evaluate new waste-reduction technologies useful for smaller-scale businesses. "This program is aimed to bridge the gap between the inventor/developer of new and improved waste reduction technologies and the owner of a small business producing wastes," explained Dr. Ralph Rumer, executive director of the Center for Hazardous Waste Management.

While the public and the environmental community correctly pay the most attention to larger corporate polluters, it is important that small toxic waste generators are not neglected. Their contribution to the hazardous waste stream is significant because of their numbers. Their

TORONTO

of which the environment office is a division, the program emphasizes hazardous waste prevention. The idea is to limit the amount of hazardous waste created rather than simply to find the best ways to contain the waste after it has been produced.

To this end the program will help Toronto's waste-generating establishments reduce their production of hazardous emissions or wastes and/or to recycle them. It is hoped that 80 percent of these establishments will be involved in the program—undertaking hazardous waste audits and actively pursuing waste minimization options—within three years. The focus will be on small industrial, commercial and institutional sectors.

After two and a half years, the program's performance will be assessed. The city can then consider making waste audits and waste reduction targets mandatory.

Hazardous Waste Assessment

The program will develop a profile of hazardous waste generators in Toronto. All industrial establishments will be listed, ranked and categorized according to the types and quantities of waste they generate and/or haul off-site. Where possible, the waste minimization potential for each industry will be estimated.

Finally, a preliminary compendium of company profiles will be compiled in order to identify those establishments with the greatest potential for minimizing the wastes they produce.

All this information will be made

Program and its services. Subsequent visits will provide assistance in identifying the source and composition of wastes, and in their handling, treatment and disposal.

Program staff will conduct investigations and research to determine appropriate waste minimization measures for specific waste types. Staff will help determine estimated cost reductions and approximate payback periods after implementation of waste minimization measures.

Information Clearinghouse

The program will establish a clearinghouse to provide general, technical and financial information on hazardous waste minimization opportunities to other government departments, industrial companies and associations, and the public.

General introductory materials will address the underlying principles of hazardous waste minimization, its benefits and its constraints, and include examples of establishments that have been successful in minimizing their hazardous wastes.

Technical information will be available on specific hazardous waste minimization methods, organized by industrial categories, industrial waste streams and industrial processes. Technical bibliographies, journal articles, database information, contacts and self-assessment or auditing materials will also be collected and made available.

Financial information explaining how to obtain low-interest and long-term loans and grants will be pro-

ERIE COUNTY

Erie County Executive Dennis Gorski. The office is partially funded by two grants from the federal Environmental Protection Agency.

The new office will be working closely with the Western New York Economic Development Corporation, the New York State Center for Hazardous Waste Management at the University of Buffalo, and RECRA Environmental Inc., a local consulting firm. A project advisory group, with representation from industry,

contribution is estimated to be about 15 percent in New York. And with limited in-house technical resources at their disposal, smaller polluters have a great need for the kind of pollution prevention assistance being offered by the new office.

Erie County's program offers local Great Lakes governments a clear example of what they can do to help make zero discharge through pollution prevention a reality in the Great Lakes Basin.

vided. Resource lists of financial institutions and public grant programs will also be made available.

Program staff will design waste minimization presentations and actively solicit hazardous-waste generators for opportunities to provide speeches, videos and slide shows.

The bureau will also provide workshops for interested groups and appropriate organizations. Workshop

topics could include waste auditing, improved effluent monitoring and sampling, waste reduction identification, assessment opportunities for reducing wastes, building management and employee support for waste reduction, waste management alternatives, the costs and benefits of alternatives, and implementation of simple, inexpensive measures to immediately reduce waste.

by Steven Skavronek,
Milwaukee Metro Sewerage District

Preventing the discharge of toxic substances into the waste stream is cheaper and more effective than treating waste to remove toxics. Accordingly, the Milwaukee Metropolitan Sewerage District is sponsoring and staffing a community-wide group to "minimize toxic waste discharged

The Milwaukee Metropolitan Sewerage District serves nearly one million people in a 420-square-mile area. It maintains the region's major sewers and operates two sewage treatment plants that discharge approximately 200 million gallons of treated effluent into Lake Michigan daily.

MMSD is currently in compliance

also presently in Milwaukee-area rivers and in Lake Michigan and its bottom sediments;

- Creation of programs to encourage individuals, businesses, industries, and government to comply with toxics regulations and reduce the use of toxic substances;

- Education of homeowners, business owners and industrial person-

and air emissions;

- Assess the existing and future regulatory environment for effluent, sludge, and air emissions and potential implications for MMSD;

- Determine priority areas for toxics minimization initiatives and evaluate waste minimization strategies for each;

- Develop an implementation plan that identifies recommended actions, timetables, and lead roles;

- Work with appropriate organizations to facilitate solutions to environmental problems within the Greater Milwaukee ecosystem;

- Generate task force recommendations for presentation to the MMSD Commission, other appropriate agencies and the community.

The task force has completed a toxics reduction strategy and submitted it to the commission for its consideration. The task force sees an ongoing role for itself advising MMSD on implementation of the strategy.

For further information on the district's toxics use reduction efforts, call Steve Skavronek at 414-225-2174.

MILWAUKEE

to the MMSD system."

The Greater Milwaukee Toxics Minimization Task Force comprises representatives of industry and labor, trade associations, educational institutions, environmental advocacy groups (including the Lake Michigan Federation and Citizens for a Better End), as well as consulting engineers, environmental lawyers, and support staff from MMSD and the Wisconsin Department of Natural Resources.

with all state and federal regulations, but increasingly stringent state and federal limits on the discharge of toxic substances to all media, as well as the objectives of the Great Lakes Water Quality Agreement, are forcing the district to go beyond its current programs in order to meet future requirements. Needed will be:

- Participation in local and national research focused on the impact of toxic substances;
- Identification of toxic materi-

nel about their role in minimizing the use and eventual discharge of toxic materials.

To objectives of the toxics minimization task force are to:

- Quantify mass balances for certain toxic substances across the MMSD system. Major inputs that have been quantified are domestic, permitted industries, other industries and commercial activities, and stormwater. Major outputs that have been quantified are effluent, sludge,

The Federal Lakes Agendas

by John Jackson

Five Great Lakes governors and U.S. EPA Administrator William Reilly met in Chicago this April to sign the "Great Lakes Pollution Prevention Action Plan." The highly orchestrated event was broadcast to media by satellite and followed by a "media availability session" and lunch. The announcement stressed partnerships between government and industry and put out challenges to all involved to institute pollution prevention programmes.

In May, Environment Canada brought about 70 people together in Toronto to discuss formation of a multistakeholder committee that would develop sectoral pollution prevention plans. The meeting mirrored the Chicago event's emphasis on partnerships, challenges and voluntary approaches to pollution prevention.

The two events were part of the buildup to the International Joint Commission's biennial meeting scheduled for the end of September in Traverse City, Michigan. The meeting has become a focal point for people involved in Great Lakes issues. The U.S. and Canadian federal governments plan a day-and-a-half-long "International Symposium on Pollution Prevention" at the event to showcase advances in pollution prevention.

As we count down to Traverse City, we must ask what the two federal governments have accomplished in the area of pollution prevention since the last meeting of the IJC two years ago.

Zero Discharge

Pollution prevention programmes in the Great Lakes are supposedly aimed at achieving the goal of zero discharge. Due to long-term pressure by citizen activists across the lakes, the phrase "zero discharge" is now found everywhere—in the U.S.-Canada Great Lakes Water Quality Agreement, in speeches by the IJC commissioners and in all IJC publications, in all environmental and citizens' group publications and presentations, and even in presentations by some representatives of industry.

Zero discharge is now found ev-

erywhere—except in official statements from the two federal governments. In all descriptions of their pollution prevention strategies both governments studiously avoid use of the words. Canada's former environment minister, Robert de Cotret, fumbled awkwardly when challenged to use the phrase at a news conference in March 1991. The materials presented by the U.S. EPA at the April signing of the Great Lakes Pollution Prevention Action Plan make no reference to zero discharge.

"Virtual elimination" is commonly found in government statements, but "zero discharge" is not. The problem is that we will never achieve virtual

lutants such as chlorine and benzo(a)pyrene are not on the list. Only two of the 17 chemicals on the EPA list are on the IJC's critical pollutants list.

The targets are only 50 percent of current levels, even though the U.S.-signed Great Lakes Water Quality Agreement calls for zero discharge of persistent toxic substances.

As for the Canadian government, it has failed to set any targets for reductions in the use or release of persistent toxic substances.

Voluntarism/Partnerships

The word "partners" permeates Canadian and U.S. federal govern-

could push polluters to develop tougher pollution prevention plans.

The Canadian federal approach to pollution prevention is almost totally based on voluntary methods. It calls on each sector to develop its own goals for pollution prevention; amazingly, polluters are even asked to identify what the target pollutants should be. These plans are to be completed by October 1992.

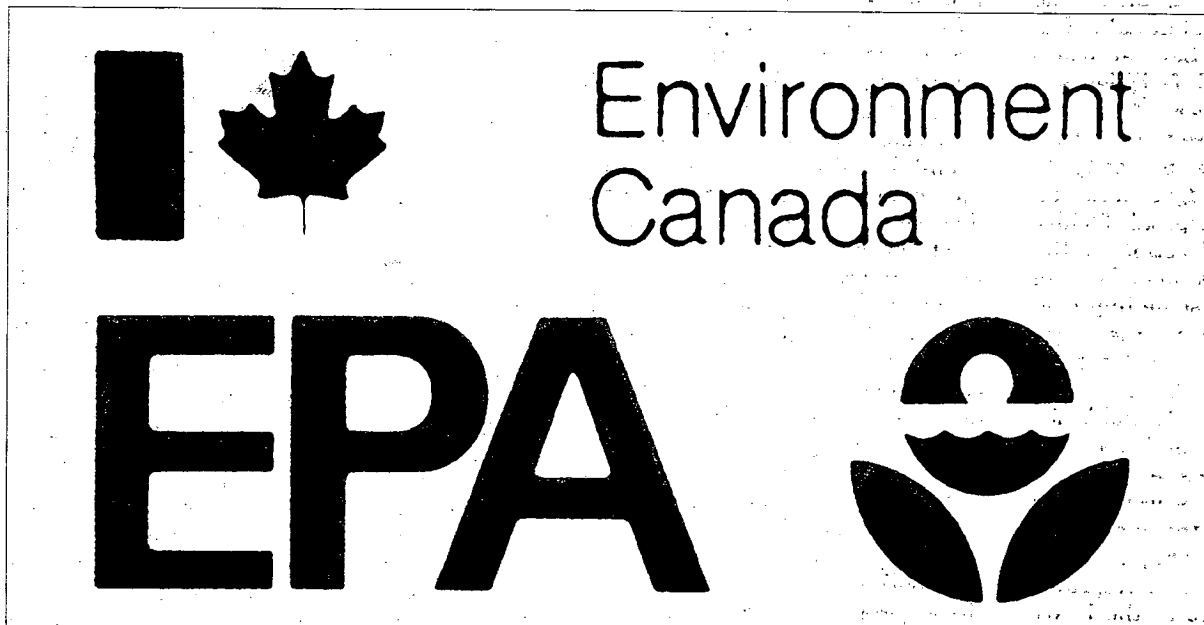
Lake Superior

Citizens at the last IJC meeting stressed that Lake Superior should be subjected to zero discharge guidelines and plans immediately, in order to protect what is still a relatively pristine lake. Six months later the IJC called on the U.S. and Canadian governments to designate Lake Superior a demonstration area in which "no point source discharge of any persistent toxic substances will be permitted."

After more than a year neither government has committed itself to achieve this objective. In April the U.S. government committed itself to "reducing the quantity of persistent toxic substances entering the lake," but gave no targets or objectives. It certainly did not say its objective was "no point source discharge." The Canadian government has made no announcements on Lake Superior.

The State of Progress

The U.S. and Canadian federal governments have failed to live up to the challenges given them two years ago by a concerned public, and over a year ago by the IJC. Perhaps this failure is due to the governments' setting their objectives too low. At the Toronto multistakeholder meeting, the official responsible for Canada's Great Lakes efforts said that the government's zero discharge programme was an attempt just to get to first base on the issue. The two federal governments first committed themselves to zero discharge in 1978. Thirteen years have passed since then. Why are we still just trying to get to first base on zero discharge? Isn't it time for a home run?



elimination without zero discharge.

Targets

Over a year ago, the IJC declared that, "Target dates for the staged reduction and early elimination of these substances [persistent toxic substances] should be set in the very near future and strictly enforced by incorporating them into appropriate parts of the legislative program discussed below."

But in the past year the two federal governments have made little if any progress towards setting target dates. The U.S. government has set up its "33/50 Program," by which the releases of 17 pollutants are to be reduced by 50 percent by 1995. This target has two major flaws:

- The formula applies to only 17 chemicals. These chemicals were chosen on a nationwide basis and do not, therefore, address the persistent bioaccumulative chemicals of major concern in the Great Lakes. For example, major Great Lakes pol-

lutants such as chlorine and benzo(a)pyrene are not on the list. Only two of the 17 chemicals on the EPA list are on the IJC's critical pollutants list.

In taking a "partnership" approach the governments are making voluntarism the cornerstone of their environmental protection strategies. The stress is on challenging the various sectors of society (i.e., industry, agriculture, municipalities, etc.) to prepare their own plans for pollution prevention. The danger with such an approach is that each sector will come up with a plan that simply lists the great things it is already doing. "Challenges" and "partnerships" can only be real if high reduction targets are set by governments in advance and polluters have to develop plans that will achieve them.

The U.S. EPA is working on its Great Lakes Initiative, which is aimed at developing new uniform standards for water quality throughout the Great Lakes states. This

...Blackstone Project: Multimedia Enforcement

...continued from page 1
ing some environmental protection regulation. Sixteen violations and five other problems found through Blackstone inspections would probably not have been found during single-media inspections. The violations fell into several categories:

- Unregistered waste streams in media regulated by programs with which the facility was otherwise registered;

- Illegal or unpermitted waste streams in media regulated by programs with which the facility was not registered;

- Hazardous waste generators either incorrectly listed or acting out of status;

- Facilities in proximate but legally separate locations, reducing regulatory scrutiny. One facility was taking advantage of a loophole created by a disjuncture between the air

and POTW programs.

Compliance with the Emergency Planning and Community Right-to-Know Act. Five facilities were found to have chemical and chemical amount discrepancies in their Toxics Release Inventory reports. Three other companies failed to file reports.

Water Pollution Problems. Fifteen of the 26 facilities discharge to the sewage treatment plant, while four have direct discharge permits. "Some of the most severe water pollution problems found by Blackstone Project inspectors had to do with inadequate pretreatment plant operation and maintenance manuals, and/or staffing, as well as violations of pretreatment standards for reporting and effluent." Many of pretreatment program's problems identified by the Blackstone Project have not been resolved.

Single-media bureaucracy. The

DEP's single-media "structure and culture" raised continuous problems for Blackstone Project staff. Information on facilities was housed in separate files—there was no master file on a facility. Facilities were often referenced through different systems or nomenclature. Facility classification systems were not uniform. Finally, communication between programs was limited.

"Much of the cost of the Blackstone Project was due to the mismatch between the Project's multimedia mission and the single-media structure and culture which currently characterizes DEP. The multimedia/single-media mismatch was apparent in all aspects of planning and implementing each inspection."

Changes at DEP

DEP is currently compiling a master file system. A total of 45,000

records are being merged to 18,000 files on individual facilities. DEP program offices are slated to be linked by an electronic mail system.

DEP is not planning to dismantle the single-media structure or approach to pollution control, but does plan to improve the quality of its information, the coordination of its efforts, and the number of areas of interface between multi- and single-media programs.

Just as significantly, the project has begun the difficult cultural process of internal retraining, moving DEP personnel to think in terms of toxics use reduction rather than pollution control, and to assess the gaps engendered by the single-media approach.

For a copy of the state report on the Blackstone Project, contact Walter Hope at (617) 292-5953, or Great Lakes United.