



Great Lakes States Sign Toxics Accord

by David Miller, Executive Director, GLU

Proper management of the Great Lakes—St. Lawrence River Ecosystem crosses political boundaries, making regional cooperation a necessity in protecting this fragile resource. Toxic substances emitted into the air, discharged from industrial sources or leached into the lakes from nearby landfills, know only ecological boundaries as they travel through the Great Lakes. Great Lakes jurisdictions are beginning to recognize the need for a regional perspective to Great Lakes ecosystem protection. To this end, a new initiative to control toxics was launched at a recent Council of Great Lakes Governors' session on Mackinac Island, Michigan.

On Wednesday, May 21, 1986, the eight Great Lakes States' Governors signed a Toxic Substance Control Agreement designed to cooperatively work towards the protection of the Great Lakes from toxic contamination. The Province of Ontario has committed to develop a memorandum of understanding for the toxics agreement to be instituted sometime this fall.

Similar to the design of the Great Lakes Charter, an earlier agreement to combat the threat of water diversion, the toxics agreement sets forth a series of joint principles. In addition, the toxics agreement contains plans to develop cooperative efforts to address airborne toxic pollution, water quality standards, fish advisories, research initiatives and other rehabilitative/preventative programs to implement the six principles. The principles are:

Principle #1: The Governors of the Great Lakes states agree that management of the water resources of the Great Lakes should be based on recognition of the economic and environmental importance of this natural resource.

Principle #2: The Governors commit to managing the Great Lakes as an integrated ecosystem, recognizing that the water resources of the Basin transcend political boundaries.

Principle #3: The signatory States concur that the problem of persistent toxic substances constitutes the foremost environmental issue confronting the Great Lakes.

Principle #4: The signatory States commit to continue reducing toxics in the Great Lakes Basin to the maximum extent possible. Such actions shall be consistent with the Federal Clean Water Act goal of prohibiting the discharge of toxic pollutants in toxic amounts, as well as the Great Lakes Water Quality Agreement's aim to "virtually eliminate" the discharge of all persistent toxic substances.

Principle #5: The signatory States commit to cooperating among themselves and with local and state agencies, regional groups, the federal government, the International Joint Commission and the public in the study, monitoring and management of the water resources of the Great Lakes Basin.

Principle #6: The signatory States agree to work cooperatively to improve the region's information retrieval and technical analysis



Great Lakes Governors sign Toxics Agreement on Mackinac Island, MI.

capabilities, recognizing that compatible data bases are key to the development of effective regulations and the control of toxic substances basin-wide.

The Governors agree to take the following actions to control toxic substances:

1. To work together through Congressional delegations and other national associations to advocate an increased federal emphasis on toxic pollution prevention.

2. That lowering environmental and health standards, or weakening enforcement standards, to attract new business to an individual state, is unacceptable.

3. To work together to develop an agreement by September 1, 1986 which will coordinate the control of toxic releases, and strive for greater uniformity of regulations governing such releases within the Great Lakes Basin.

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G.L.U. Tackles Toxics at Annual Meeting

In a return trip to the area which witnessed the birth of Great Lakes United, over 150 representatives of member groups, government officials and interested individuals met in Mackinac City May 16, 17, and 18, for the fourth annual meeting of Great Lakes United. Working with a tremendous spirit of cooperation, extension of commitment, delegates elected new officers, met in task force groups and formulated 20 policy resolutions for approval by the general assembly. Participants heard several dynamic presentations from Congressmen, scientists, administrators and citizens.

The Saturday morning program began with an address by Congressman Robert Davis (R) Michigan. Davis was questioned by delegates about his role in the weakening of an amended Superfund package by his colleagues in the House.

Perhaps the most stimulating portion of the entire meeting was a panel discussion on "Toxics in the Great Lakes: What Does It Mean To Us All?" Panelists included Dr. Katherine Davies of the Toronto Department of Health, Dr. Robert Ginsburg of Citizens For a Better Environment, Chicago, Dr. Doug Hallet, Canadian toxicologist and Tim Kubiak of the U.S. Fish & Wildlife Service. The entire discussion was video taped for a public access television program, thanks to the cooperation of Dr. Ray Dodge of the Center for Environmental Study.

Kubiak shocked the audience when he brought out a stuffed cornucopia with a grotesquely twisted beak. The deformity is thought to be the result of eating PCB contaminated fish from Green Bay. Davies revealed her recent study which suggests that residents of the

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From the President's Desk:

by Frederick L. Brown Ph.D., M.U.C.C.

Great Lakes United has demonstrated that it can effectuate consideration of basin-wide citizen views on Great Lakes management. We have learned to respect each other's differing views and, I believe, surprised ourselves by extensive agreement on both broadbased issues and on the necessity to consider the "whole-basin" impact of these issues. The diversity of organizational membership continues to expand, again emphasizing GLU's unique opportunity to bring-to-bear wide spread (both geographical and issue oriented) citizen involvement on management questions.

Officers, directors and staff will expand the program on this well-established base. Already underway is a major program to develop citizen input on the Great Lakes Water Quality Agreement with meetings to be held around the Basin. Additional local meetings will be considered to provide more

direct internal communication with emphasis on existing local problems and the means to initiate corrective action. For example, progress is continuing on expanding "across-the-border" citizen involvement in resolving pollution problems in the St. Clair River. GLU will be giving close attention to implementation of the newly-signed Great Lakes Toxics Agreement. Contacts with both federal governments and with provincial, state and municipal governments as well, will be maintained and expanded.

Your elected leaders accept this responsibility. We look forward to a challenging and busy year. We welcome your input.

Frederick L. Brown is the newly elected President of Great Lakes United, and serves as a delegate for Michigan United Conservation Clubs.



Mulroney Weak On Great Lakes Protection

by Sarah Miller, Canadian Environmental Law Association

Reaganomics is alive and well in Canada. The conservative administration of Prime Minister Brian Mulroney is dragging its feet on tackling the serious issues facing Great Lakes residents. Economic recovery dominates the Canadian federal Government's agenda.

Canadian environmentalists have become increasingly more alarmed as the federal government has revealed its attitude on environmental protection by budget freezes and cuts, censorship of Ministry of the Environment staff and information flow and by its failure to move ahead with domestic and diplomatic negotiations necessary to advance Great Lakes cleanup.

In the current Ottawa climate, all issues are evaluated on their ability to boost Canada's free trade negotiations with the United States. It is clear that no transboundary issue which could cause tensions between the two governments will be receiving any attention in Ottawa.

While Canadian papers had

banner headlines on free trade for months leading up to the recent Reagan/Mulroney summit, the subsequent vote in the U.S. House of Representatives and Senate received little press attention in the U.S. The significance of these negotiations to the environment has likely escaped concerned Americans.

It is becoming increasingly clear to Canadians that their natural resources, including their waters, are likely to be among the commodities that will flow more freely if a free trade agreement between Canada and the U.S. is reached.

The first sign that Canada's water was being considered as a commodity was the federal appointment of financial consultant Simon Reisman to head up Canada's free trade negotiations. Mr. Reisman, prior to this appointment, acted as a private consultant to GRAND CO, the company which is the proponent of the ambitious GRAND Canal scheme. This scheme involves diking of

James Bay to change it to a fresh water lake, rerouting the water south into the Great Lakes "storage" basin where it can be rerouted to the thirsty southwest. Mr. Reisman has made his bias clear in public statements that he believes water exports could be the key which will open the door to free trade and will dominate Canada-U.S. relations in the 21st century.

The Canadian federal government has been dragging its heels on the development of a comprehensive water management policy for years. Canadians who have been without any policy or any enforceable standards to protect their waters from contaminants have been demanding action. The *Federal Inquiry on Water Policy* which was undertaken by the previous federal Liberal administration, made its recommendations in September, 1985, and to date there has been little effort from the Conservative Government to begin implementing

its recommendations.

The Canadian Government's attitude toward the Great Lakes was evident when it failed to fill two vacancies out of three positions on the International Joint Commission for over two years. During that period they guaranteed Canada would not have a strong role to play. Funding of the federal government's Great Lakes program has been frozen for seven years. Some 600 positions within the federal Ministry of the Environment are being cut over the next five years. Subtle interdepartmental reorganizations are being used to shift emphasis from abatement to less contentious conservation emphasis and to public relations programs.

Environmentalists have been shocked recently by two actions of the new Minister of the Environment Tom McMillan. In February, Mr. McMillan announced that the press and public will only have

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Secretary John Hickey giving Robert Boice the President's Award.



Jane Elder and Mark Peterson discussing up-coming policy resolutions.



Director David Miller and Field Coordinator Tim Eder.



Thomas Washington (M.U.C.C.) and Kay Dodge (C.E.S.) enjoy banquet.

Annual Meeting

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Great Lakes may be exposed to dangerous levels of dioxin from food produced in the region. She said her study points out that research should be refocused on food as a potential source of as much as 80% of the contaminants ingested by humans.

In official action, delegates voted to: * Endorse the Toxic Substances Control Agreement signed by the Great Lakes Governors. At the same time however, the membership was disgruntled over inadequate and inconsistent public input in the development of the accord and called upon the jurisdictions to better involve the public in implementation of the document and in the development of similar vehicles in

the future. * Ask the EPA to replace its policy of containment at hazardous waste sites to one which emphasizes more permanent solutions.

* Ask the Great Lakes states to give waters of the Great Lakes the highest possible protection by designating them as "outstanding national resources" under the U.S. Clean Water Act. * Ask Congress to reauthorize strong Superfund and Clean Water Acts quickly and provide funding for Great Lakes research programs. * Begin evaluating proposed structural measures to reduce Great Lakes water level damage and land use options to better understand the risks involved.

At a banquet on Saturday evening several leaders of the organization were recognized for outstanding

contributions to the initial growth of GLU. Outgoing President Robert Boice was awarded a painting and a plaque for his "unselfish and diligent leadership" as GLU's first President. Sherry Finkbeiner was recognized for her outstanding and unselfish contribution to membership growth and her service as the first Treasurer of GLU. Daniel Green was recognized for his outstanding service as the first Vice-President of GLU.

On Sunday a new slate of officers were elected. They are President: Frederick L. Brown, Ph.D. from Midland, Michigan; Vice-President: John Jackson, Kitchener, Ontario; U.S. Treasurer: Joshua Wunsch, Traverse City, Michigan; Canadian Treasurer: Julia Langer, Toronto, Ontario; and Secretary: John Hickey, Cortland, N.Y.

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Ontario Region

Shoreline Erosion: An Alternative Solution

by Ronald J. Scrudato, SUNY at Oswego

Record high water levels in most of the Great Lakes have shoreline residents and agency representatives concerned about flood damages and erosion to shoreline properties. High lake levels coupled with large storm waves cause extensive erosion of shoreline properties resulting in millions of dollars in damages each year.

A debate continues on whether action should be taken to lower Great Lakes water levels through water diversions, channel modification or increasing flow at interconnecting channels. Although these actions claim local relief to shoreline residents, the overall effect of any of these suggested remedies will be of limited value in reducing shoreline erosion. Storm waves cause the most extensive damage to shore properties and lowering lake levels by a few inches to a foot will not eliminate this problem.

Most of the shoreline damage along coastal areas result from the action of large storm waves. Storm waves dissipate their energy as they break on the shore, eroding beaches.

These sediments are then relocated to deeper parts of the lake or other coastal areas. The most commonly employed method used to combat shoreline erosion has been to construct protective bulkheads (groins) or place large stones and debris along the shoreline which are less readily moved by wave action. Local, state and federal agencies have provided financial and technical assistance to shore residents to build structures to protect against shoreline erosion with mixed results. All too often the effects are highly localized and temporary in nature. Unless coordinated, the local efforts of a single or a few residents may lead to more extensive erosion of adjoining, unprotected properties.

It has long been recognized that natural offshore bars provide protection to coastal areas. An alternative to the most commonly used methods of shoreline protection is to use offshore submerged structures to reduce storm wave energies before they reach the beach. If the erosive forces of storm wave energies can be dissipated before reach-

ing the shore, wave damages would be significantly reduced, and in some areas, eliminated. Strategically placed offshore bars could be constructed which are designed to reduce storm wave energies, and if properly placed and oriented, could also provide habitat to lake fish species. In addition, submerged, protective bars could also serve to protect small boat operators who get caught in the offshore area during sudden storms. The water behind the offshore structure would be calmer providing a "harbor of refuge" for boat operators.

It's time to rethink the methods currently used to provide protection to shoreline property owners against shore erosion. Perhaps we should begin considering alternatives to the piecemeal, questionably effective shoreline protection measures currently being advanced by state and federal agencies. Strategically placed offshore structures constructed of stone and submerged a few feet below the surface would cause storm waves to break offshore of the beach and thereby reduce the

erosive forces of the waves. This suggested method will not be suitable for all areas of the Great Lakes, although I'm confident many coastal areas would benefit from this alternative approach. Despite the many problems related to this shoreline protective alternative, it offers a solution to a problem which draws from well known natural coastal processes. It will not cure the flooding problems related to Great Lakes high water levels, but neither will the proposed lowering of lake levels cure shoreline erosion. The piecemeal approach currently used to protect Great Lakes coastal properties is expensive and, for the most part, ineffective.

Ronald J. Scrudato is a newly elected Board Member of Great Lakes United and a geologist who has directed the Research Center at the State University of New York College at Oswego for the past eight years.



Erie Region

Pennsylvania's Window on the Great Lakes: An Overview of Environmental Blunders

by Richard Kubiak, Pennsylvania Sportsman Federation

The site of the City of Erie was a gift of the lake. Protected by a uniquely beautiful, seven-mile long, gently curving sand spit, a natural harbor was thus created, attracting late eighteenth century settlers who established a town in 1804. This community, born in the wilderness, prospered. Population, agriculture, industry and commerce grew.

Over 150 years of such development created the state's third largest city and its only Great Lakes port. Unfortunately, Erie citizens repaid the munificence of the lake and harbor with abuse. Exploitation of excellent fishing, pollution of lake waters and the inland watershed has increased.

Ten major discharges developed which carried agricultural, industrial and human waste into this once magnificent fishery and quality drinking water supply. Most of these pollution sources have been known and ignored by successive political administrations and local citizens since the turn of the century. One such source, the infamous Millcreek Tube, has been a veritable "river of human feces" since its construction some 70 years ago.

The community's Waste Water Treatment Plant has the distinction of being the longest continuous municipal violator of water quality standards on any of the Great Lakes.

Industrial waste discharges and even the city's Potable Water Treat-

ment Plant at the foot of Chestnut Street have created toxic hotspots in the harbor. Tumorous fish with elevated P.C.B. levels are currently being studied by the Fish and Wildlife Service and worried over by the local angling community.

These are some past abuses. Present transgressions may be of even greater concern.

The City of Erie relies on its tourism industry. It is valued at between \$100 and \$300 million and hinges entirely on Presque Isle State Park, the 1,800 acre sand spit mentioned. This park has a truly amazing ecological diversity, so great that it has been designated a National Natural Landmark. Unfortunately, we are in the process of beating the park to death.

Presque Isle is the second most heavily used park in the United States, second only to the Great Smokey National Park. Six million people visited the peninsula last year and Erie economic development people wish to increase that number with no end in sight! A four-lane highway funnels the recreationists onto and through the sand spit and a new "all purpose trail" brings even more people to an already overcrowded facility. To make matters worse, the trail was built through some of the most important wetlands in the eastern U.S. in violation of both federal and state statutes. More people, more pavement. This appears to be the future

trend for Presque Isle.

But there's more. The waste from six million visitors is disposed of through an elevated sand mound system. For example, there is sewage disposal at 13 park sites. Sands do not renovate waste. Sand mounds, according to D.E.R. regulations, cannot be placed on sandy non-soil sites, especially where the water table is less than 20" from the surface (on Presque Isle the water table is often 5" or less). These waste facilities directly discharge human sewage effluent into the ground water. Due to the park's sandy nature, this mixes directly with waters of the lake and harbor. Visitors to the park unknowingly swim in their own waste.

These elements are compounded by two proposed assaults on the lake environment. A Waste to Energy Incineration Plant is scheduled to be built this year in the heart of the city's west side. This facility will use a Swedish burn technology, currently under moratorium in that country due to excessive generation of dioxins. Southwesterly winds will carry the plant's emissions directly to the harbor, the park and the lake.

Finally, Erie has rediscovered its waterfront and explosive "development fever" threatens to restrict all but the rich from the harbor. Public access has thus far been relegated to two points; a 16-acre launch area on the west bayfront and a 35-acre

"park" next to the sewage treatment plant. Developers of condominiums, marinas, shops and other enterprises have turned a deaf ear to requests for "free public access" along the remaining four and one-half miles of waterfront.

Unfortunately, this is how Erie has repaid its debt to the lake. It's time citizens work to reverse this trend, before it is too late.

Richard Kubiak is a board member of Great Lakes United and serves as a delegate from Pennsylvania Sportsman Federation.

National Marine Educators Association Annual Conference

August 4-9, 1986

Presentations will cover a variety of aspects of marine and aquatic education: curricula, programs, research, cultural and natural history.

For registration information, contact Ohio State University, Dept. of Conferences and Institutes, Fawcett Center for Tomorrow, 2400 Olentangy River Road, Columbus, Ohio 43210. (614) 422-8571.



Task Force To Tour Hot-Spots, Hold Hearings

by Tim Eder, Field Coordinator, GLU

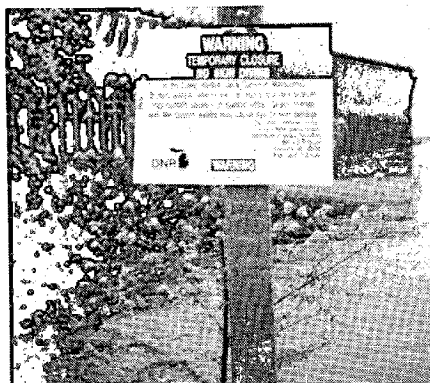
Great Lakes United's Water Quality Task Force will be traveling to 19 cities this summer and fall to conduct public hearings and meet with local citizen leaders to review the 1978 Great Lakes Water Quality Agreement between the U.S. and Canada. Across the basin, citizens and groups are gearing up for the tour, preparing to make presentations at the hearings and to guide the Task Force on a visit to local toxic hot-spots.

In some locations, citizens will be using the hearings as a forum to suggest ways the Agreement should be expanded, such as to address toxic rain or to enforce the clean-up of hot-spots. At other locations the Task Force will be hearing citizens' reactions to proposed remedial action plans. At all locations the major topic of concern will be toxic chemical contamination of the Great Lakes—how bad the public believes it is, what the public wants done about it and how the public wants the Agreement used to eliminate it.

The Agreement is the principal instrument which guides federal, state and provincial water pollution control programs. One of its goals is the virtual elimination of the discharge of toxic substances. That goal is restated in the U.S. Clean Water Act and the Toxic Substance Control Agreement recently signed by the Great Lakes Governors.

"We're anxious to hear from the public how our governments have done in achieving that goal, and how pollution control efforts should be focused in the future," according to John Jackson of Kitchener, Ontario, Chairman of the GLU Water Quality Task Force.

The hearings are particularly important to Great Lakes interests now as the U.S. and Canadian governments will soon begin a comprehensive review of the 1978 Agreement and will have the oppor-



GLU Photo

tunity to rewrite or amend the document. The public will have no other formal chance to review the Agreement before this governmental review. The IJC's third biennial report on the Agreement, the release of which will trigger the governmental review, is presently being drafted, and will likely be released in late summer.

In addition to its general goals, the Agreement contains guidelines for specific pollutants and spells out deadlines for the adoption of certain programs. When they signed the Agreement, our two governments committed themselves to enacting laws and designing programs to carry out both the general and specific objectives of the Agreement. In some cases, most notably in controlling phosphorus and checking eutrophication, the commitments have largely been met.

Unfortunately, that same success story does not apply to toxic chemicals. Have the EPA, Ministries of Environment and state agencies done all they can to virtually eliminate toxic substances? Is progress toward that goal being made? Have standards been adopted to meet the Agreement's specific objectives? Are present government programs adequate to deal with the "tough" sources of toxics, like toxic rain and hazardous waste storage sites? How

disturbed are you by recent reports that residents of the Great Lakes region have higher body burdens of toxic chemicals than elsewhere in North America? Are you, the public, willing to pay the high price to clean up in-place pollutants? Just how valuable is clean water to our health and our economy?

These are among the questions on which the Task Force hopes to hear public comments. A report which summarizes comments from the 19 hearings and makes recommendations, will be presented to the two governments prior to their review. In addition, the Center for the Great Lakes is holding a summit on the Water Quality Agreement and has invited Great Lakes United's participation. The Task Force's findings will be presented at that meeting, scheduled for November 17-19 in Detroit.

Remedial Action Plans

In addition to providing the public with a chance to review the effectiveness of agency efforts to meet the goals of the Agreement, the public hearings serve another important function. The IJC's Great Lakes Water Quality Board, made up of top level water pollution control program managers from the federal, state and provincial level, has a major effort underway to clean-up the 42 Areas of Concern in the Basin. At present, a Remedial Action Plan (RAP) is being written to clean-up these toxic hot-spots and restore the beneficial uses. The RAP process is described in the accompanying article about Toronto's waterfront. Completely cleaning up these sites means eliminating the sources of pollution and removing contaminated sediments, and will require a tremendous amount of political will and financial commitment. It is absolutely essential that the public be involved with the RAP process.

With some notable exceptions like

the Grand-Cal, Green Bay, the Rouge River and Toronto, the public has not been involved in the process. The hearing locations were chosen partly to coincide with the hot-spots and the Task Force is inviting the public to use the hearings to review the plans where that is possible and to join in the RAP process.

Enclosed in this issue of *The Great Lakes United* is a brochure listing the dates and locations of the hearings. We urge you to join us in this important review. If you wish to submit comments to the Task Force but are unable to attend a hearing you may do so in writing, prior to November 15, 1986, care of Great Lakes United.

At each hearing location, local organizers are already working to help set up the hearing and bring out the public. Below is a list of contacts for each of the hearings. You may wish to contact them to find out what is planned for the hearing nearest you.

The map below shows the IJC's 42 Areas of Concern. A team of writers from governmental agencies has been assigned to develop a Remedial Action Plan for each site. If you are interested, we urge you to contact your Ministry, your state pollution control agency or myself at GLU to find out who is working on these plans and to become involved in their review.

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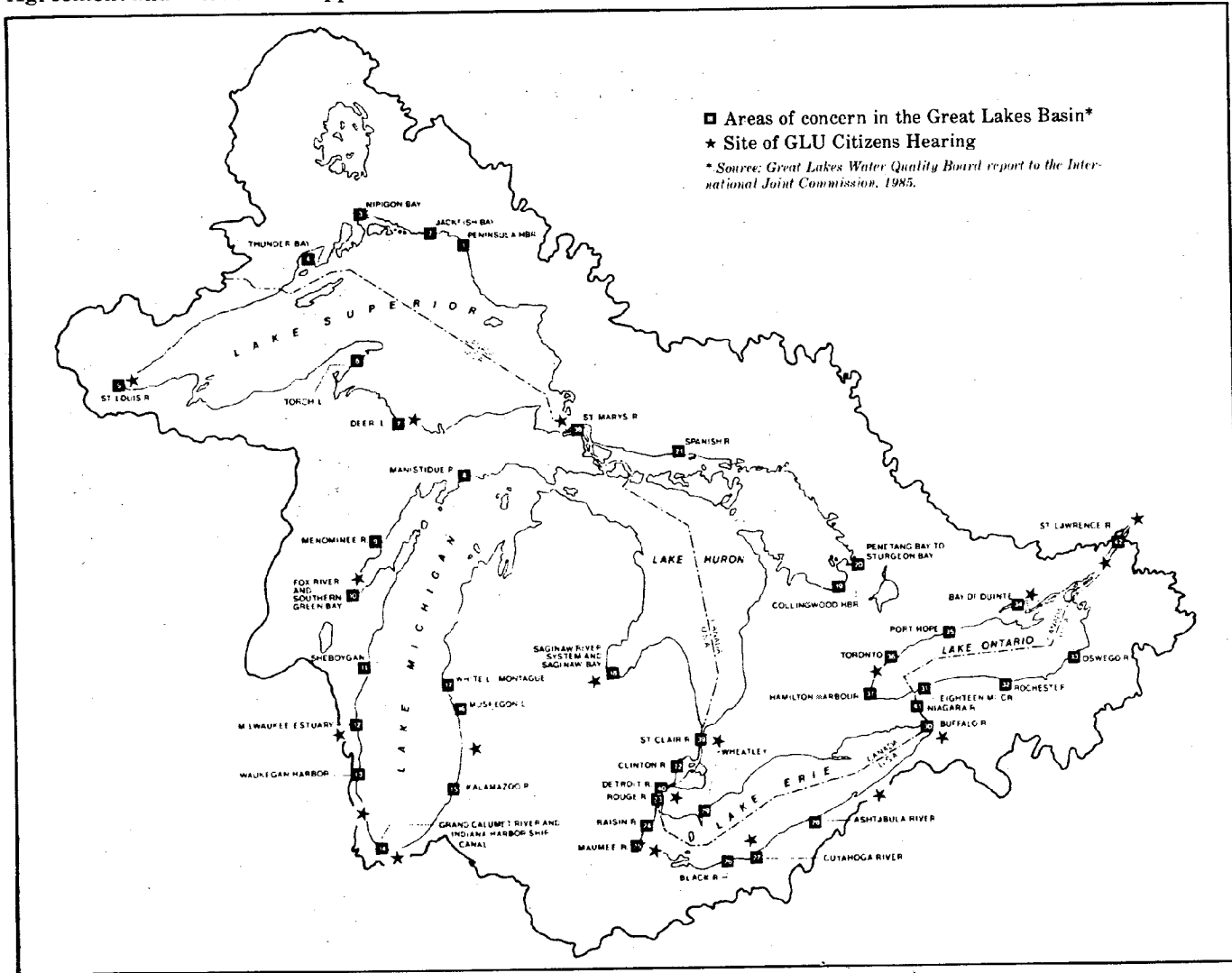
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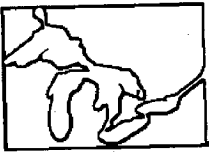
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Toronto Plans Own Clean-Up

by Theresa Zanatta, Toronto Dept. of Public Health

The Metropolitan Toronto area is one of very intensive and often conflicting water uses—swimming, boating, fishing, wildlife, port facilities, industry, municipal drinking water, sewage disposal and major lakefilling activities.

Richardson, 1980

These lakes are all things to all people—sources of drinking and dumps for waste, platforms for commerce and playgrounds for recreation, repositories of food and sources of coolant for power plants, inspiration for poets and raw material for industrialists. As the scale of human endeavor increases, some things must change—or something will give.

*The Hon. James Bradley
Minister of Environment,
Ontario
Large Lakes Conference,
May, 1986.*

The City of Toronto is in the unique position in Ontario of preparing a remedial action plan for the Toronto Waterfront. This article is about the City's anomalous role in the International Joint Commission's (IJC) process of remediation strategies.

Last June, the Water Quality Board of the IJC presented its progress report on Great Lakes clean-up initiatives since the signing of the Great Lakes Water Quality Agreement in 1978.

While there were some improvements with respect to conventional pollutants like phosphorus, oil and grease, oxygen demand (or BOD as it is often called), the actual major clean-up operations involving contaminated sediments and persistent toxic substances were disappointing.

It was obvious that better indicators on the status of an area and its long-term strategy for clean-up were needed. Consequently, the areas of concern previously identified by the Board were reviewed.

In the end, the Board had identified 42 areas of concern where environmental quality was degraded and beneficial uses were impaired. Seventeen of these areas were in Ontario. Twenty-five were in the United States. The Toronto Waterfront was one of the 17 identified in Ontario. (see map).

Having identified the areas of concern, the Board then decided to classify each according to the status of their remediation efforts.

Had causative factors been identified? Were investigating programs under way to determine the causes and the extent of the impairment? Was a plan in place to deal with these problems? If not, was a plan at least in the preliminary stages of being developed? Based on these questions and more, the Board classified each area of concern. Now at least in theory, there is a mechanism to determine the status of remediation efforts.

The Toronto Waterfront was classified as category 3. This meant that for the most part causative factors were determined but a remedial action plan was not yet developed. As a result, remedial measures were not fully identified nor implemented.

The Water Quality Board

informed the various jurisdictions and requested that written Remedial Action Plans be completed by December, 1986. That date has since been pushed forward to March, 1987.

Officially, the Federal Department of Environment and the Provincial Ministry of the Environment through the Canada-Ontario Agreement were requested to write the Remedial Action Plans for Ontario's 17 areas of concern.

However, because of the City of Toronto's own Waterfront management scheme, and its involvement in both the creation and the clean-up of pollutants along the Waterfront, a group of representatives from environmental research and advocacy groups in Toronto appeared before the Neighbourhoods Committee of City Council last October. They recommended that a special City of Toronto committee of concerned citizens groups and appropriate City staff be established to draft a Remedial Action Plan (RAP) for the Toronto Waterfront.

As a result of their submission, the Neighbourhoods Committee recommended to City Council that a working committee be established to develop the Remedial Action Plan for the Toronto Waterfront as recommended by the IJC. Council concurred.

On February 24th, a research assistant was hired and work on the Plan began. In effect, the group had recognized that public input was crucial to the development of these remedial action plans. While both the Ministry and Environment Canada had intended to include public input in their process, they had felt that public input would be more appropriate once the plan was completed. The public could then review it and make their comments. Aside from Toronto, most of the RAPs in Ontario will proceed in this way. Hence, Toronto is in the unusual position of creating its own Waterfront Remedial Action Plan through citizen input, while working in association with the Ministry and the Federal Government. However, Environment Ontario and Environment Canada will still jointly prepare their own plan.

The Committee calls itself the WRAP (Waterfront Remedial Action Plan) Committee and is 10-groups strong including Great Lakes United. It has met monthly since February and to date, has collected a fair amount of the data that has been documented. The report will contain a *problem definition*, a *source definition*, and an *action definition*.

The problem definition will document the extent of the impairment based on data collected to date. The Committee will look at how recreational water quality has been affected, how drinking water quality has been affected, the integrity of natural areas of habitat, our fish and wildlife and the extent of navigation.

The source definition will list those agents which have been identified as the source of the problems listed above. The Committee will look at in-place pollutants, storm sewer outfalls, combined sewer overflows, our sewage treatment plants, river watersheds, atmospheric fallout and shipping, dredging and lakefilling practices.

The action definition will list a series of recommendations for action. These will be intended to restore the impaired uses. This is the most critical part of the plan. Up to this point, the plan is merely a status report. With the action definition, the Committee will have developed a blueprint for the management of the environmental problems of the Toronto Waterfront.

Our Remedial Action Plan will be consistent with what the IJC has requested of such a plan. It will embody the spirit and the rationale of ecosystem management. In addition, our report will be written so as to provide a vehicle for informed public debate.

Public input is an especially important part of our remedial action plan. I think it is possible for Toronto's approach to serve as a model for other communities interested in contributing to the process and the development of a RAP.

From both Richardson's and Bradley's words quoted at the beginning of this article, it is clear that the RAP will be no easy task. In the context of a multi-user and multi-used resource, as is the Toronto Waterfront, many conflicting desired uses must be considered.

Report Reviews Agreement

by Scott O'Connor, Intern, GLU

In a unique international joint project, the National Research Council of the U.S. and the Royal Society of Canada have published a Review of the 1978 Great Lakes Water Quality Agreement.

The committee found that humans living in and using the Great Lakes basin are exposed to and accumulate appreciably more toxic chemical burden than people in other similarly large regions of North America. The difference appears to be due to the higher contaminant levels in food products derived from the lakes and the basin. Infants are also a high-risk population as they represent an even higher trophic level than adults, and are at a sensitive stage of development.

The report found that the sources of toxic substances in the Great Lakes basin is larger and more diverse than was anticipated and management will need to be much more comprehensive.

GLU suggests you obtain this report. It is an excellent source of information and can be a valuable reference in preparation for the public hearings described in the accompanying article. To obtain a copy write to: National Research Council, 2101 Constitution Avenue, N.W., Washington, D.C. 20418.

National Pesticide Telecommunication Network

A toll free telephone service is available to provide information to the health profession and general public on pesticides. Information for the health profession includes: pesticide product information; recognition and management of poisonings; toxicology and symptomatic reviews; referrals for lab analysis; training in recognition of poisonings; investigation of pesti-

cide incidents and emergency treatment information. Information for the general public includes: product information; protective equipment for safety; health and environmental effects; clean-up procedures and disposal, and regulatory laws. This service runs 24 hours a day, 365 days per year. The telephone number is 1-800-585-7378.

More importantly, their effect on the ecosystem specific to the Toronto Waterfront must and will be analyzed.

The process is an exciting one. The Committee has much to contribute and Toronto much to be gained by developing an overall, holistic approach to the management of Toronto's Waterfront.

The Toronto Waterfront was the prime reason for development of the City. Indeed its name, Toronto, means "meeting place." Through the years, the Waterfront has continued to serve as a meeting place for both commercial and recreational endeavours. It has provided a valuable asset to the people of Toronto and the many tourists who visit each year.

Citizen groups in Toronto, including representation from Great Lakes United have recognized that we have a responsibility to develop a tradition of good water resource management for ourselves and future generations. The fact that citizens have chosen to become involved bodes well for the process.

The Regulation of Toxic and Oxidant Air Pollution in North America

The Canadian Environmental Law Research Foundation of Toronto and the Environmental Law Institute of Washington, D.C., have recently completed a joint study of toxic and oxidant air pollutants and regulatory problems they impose. The resulting book is a groundbreaking work which will become the standard reference on toxic and oxidant air pollution and a catalyst for regulatory change.

This book documents the sources, transport and effects of toxic air pollutants. It addresses current regulatory approaches in Canada and the U.S. Existing bilateral controls on both sides of the border are critically analyzed and future bilateral negotiations are discussed. The book concludes with a listing of specific recommendations to American and Canadian policy makers, both with respect to domestic regulation in each country and cooperative approaches at the international level.

The book is 270 pages with a heavy paper cover and costs \$27.95. It is available from CCH Canadian Limited, 6 Garamond Court, Don Mills, Ontario M3C 1Z5.

Superior States Fight Nuke-Waste Facility

by Mark R. Peterson, Sigard Olson Environmental Institute

The reaction was swift and fervent among state officials and residents of Wisconsin and Minnesota last January 16. On that morning, the U.S. Department of Energy announced that ten specific sites in those states—along with ten other sites in Maine, New Hampshire, Virginia, North Carolina and Georgia—would be studied as burial grounds for extremely lethal radioactive wastes. Twelve of these sites will be given especially serious study with the remaining eight being looked at if one of these primary study sites is found unsuitable. People of these states are adamantly opposed to burying these wastes near the top of the Great Lakes and in the headwaters of tremendous groundwater reservoirs.

Now that the dust has begun to settle from that announcement, we can stand back and analyze what this might mean to the Great Lakes and the people whose lives are dependent on the Lakes.

Contrary to the near unanimous disapproval by citizens to DOE's announcement, there was some good news. First, DOE has narrowed the search from 235 potential sites in 17 states to 20 sites in seven states. We can now begin to closely examine these sites in a manner that is comprehensive and understandable. This was not the situation previously.

Secondly, many special and ecologically fragile areas were excluded. We can breathe easier knowing they are no longer viewed as viable candidates. Of particular note is the exclusion of northeastern Minnesota's Arrowhead region. Lying between Lake Superior and the million-acre Boundary Waters Canoe Area Wilderness, it is a freshwater and recreational paradise of equal.

Everyone's backyard is special, but the entire Great Lakes region appears to have a lot at risk should a site in this region be selected.

Transportation of the wastes is of special concern. Officials estimate that at least eight or nine shipments of nuclear materials would be carried by truck and rail to the site each day for thirty years or more. Despite elaborate safeguards, such accidents are possible with disastrous consequences. Besides the obvious health effects on local populations, surface water contamination from an accident in Wisconsin or Minnesota could end up in either the Great Lakes or the Mississippi River threatening the drinking water of millions. Many areas under consideration lack a modern, well-developed transportation network designed to transport hazardous wastes of this type. In addition, the sheer enormity of the repository in the upper midwest or northeast could result in contamination of several of the Great Lakes.

Although one can only speculate about methods of transportation, it is not unreasonable to assume that shipments on the Great Lakes would be seriously studied should one of the possible Wisconsin or Minnesota sites be chosen.

One fact is clear: large amounts of radioactive waste will need to be

transported, much of it through the Great Lakes watershed. Once the repository reaches full operations, the amount of spent fuel transported each year to the dump site will be about the same amount as the total shipped during the entire history of the nuclear industry.

Sub-surface water is also at risk. About 70,000 tons of radioactive shipments will come to their final resting place in caverns 2,000 to 4,000 feet below the ground. Here the granitic bedrock is "comparatively" unfractured and nonporous. Groundwater travels slowly. The waste is lethal for 10,000 years and scientists believe its intense radioactivity will corrode the underground containers within 500 years. What happens then is anyone's guess, unless we devise better alternatives in the meantime.

We also know that many wetlands found in Wisconsin and Minnesota exist because of groundwater discharge. If one of these discharge areas was near a radioactive leak, it could provide underground radioactivity a pathway to the surface.

The eleven Chippewa tribes in Wisconsin and Minnesota have been adamant in their opposition to the siting of a nuclear repository in this region.

"Potential impacts for reservations are proportionally much greater than for the state," says Al Ruger, Environmental Biologist for the Great Lakes Indian Fish and Wildlife Commission. "For example, a tribe's economy may be dependent on a lake for wild rice. The loss of the lake through contamination or a decrease in groundwater levels would destroy that tribe's economy."

DOE officials point out that the site will employ 2,000 to 3,000 construction workers and 1,000 permanent employees. The operation will generate about \$150 million annually for the local community.

But others counter that this will not offset the loss of tourism dollars to the area and that no one can put a price tag on damage should an accident occur.

Federal backers of the project argue that we all benefit from nuclear technology: from the electricity it generates and from the national defense it provides. Thus, they say, we have a national responsibility to bear the burden should studies show that a site in the Great Lakes region is most suitable. They blame detractors as having a case of NIMBY (an acronym for "Not In My Back Yard").

Indeed, we do benefit from nuclear technology. It supplies about 12% of the nation's power. In addition, much of the wastes already generated and in temporary storage (10,000 metric tons) are from the Defense Department's nuclear testing programs.

Yet, many critics of the repository suggest that what is needed is to eliminate the sources of high-level nuclear waste generation. If the nation put the \$30-\$40 billion into energy conservation measures and more efficient power generation, they contend, we might not need



GLU Photo

nuclear generation for power. At the same time, they feel, a path to nuclear disarmament must be found. Without such a course of action, more nuclear waste repositories will be needed about 40 years from now.

However, applying a NIMBY attitude in this case may not be the same as opposing a local landfill or power plant. With a nuclear waste dump, the stakes are raised much higher and the risks will be with us, basically, forever.

No matter what the final outcome, the process will go like this: For the next six years, DOE will conduct studies at each of the 12 "potentially acceptable" sites to determine their suitability for the project. In the event that one or more of these sites proves undesirable, one of the eight back-up sites could be considered and studied. In 1991, DOE will select three sites for full-scale geological study. Seven years later in 1998, DOE will nominate one of these sites for the repository. States have power to veto a site, but the veto can be overruled by a majority vote in both houses of Congress. Twenty years from now, in 2006, the project would be completed. This eastern repository, along with a western repository, would be sized to accommodate all high-level radioactive wastes anticipated to be generated through 2020. After that, presumably, more storage area would need to be found. The debate will be with us for several years until a final siting decision is made. Let's use this time to learn all we can about this issue and strongly voice our concerns. Let's try to determine whether there isn't a wiser site than a location in or near the Great Lakes watershed.

Mark Peterson is the newly-appointed Director of the Sigard Olson Environmental Institute at

Northland College in Ashland, Wisconsin, and was elected to GLU's Board of Directors at the May Annual Meeting.

Author's Note

At press time, the U.S. Dept. of Energy announced its decision to drop from further consideration potential radioactive waste sites in the eastern United States. However, funding for research on deep site repositories will be continued. Potential sites in the basin, such as Wisconsin, will be studied over the next ten years and transportation of nuclear wastes in the watershed remains a concern as the Department of Energy shifts their current focus to the western United States.

Letter to the Editor

Dear Editor,

I read with great interest your story on the potential selection of a Great Lakes state to host a national high level nuclear waste repository.

It is irresponsible to house the nation's nuclear waste in a state situated on top of many of the country's critical watersheds. A radioactive leak could jeopardize the largest body of fresh water in the world.

The question we must focus on, rather, is whether to build a second repository at all. It would be safer and cost billions less to operate a single waste facility rather than develop two facilities that perform the same function.

It is essential that all the Great Lakes states stand together in opposition to the location of a nuclear dump in the Great Lakes watershed.

Best regards,

The Honorable
Robert W. Kasten, Jr.
United States Senate



House Subcommittee Approves Acid Rain Bill

By a 16-9 vote on May 20, the House Subcommittee on Environment passed H.R. 4587 the Acid Deposition Control Act. The bill was introduced in April by Representatives Gerry Sikorski (D-MN), Silvio Conte (D-MA), Sherwood Boehlert (R-NY) and Bill Richardson (D-MN).

The Acid Deposition Control Act of 1986 would amend the Clean Air

Act by establishing a national program to control emissions of sulphur dioxide (SO₂) and nitrogen oxides (NO_x). The bill calls for a 10 million ton reduction in sulphur dioxide and a 4 million ton reduction in nitrogen oxide emissions by 1997. For further information, contact Chris Ballantyne, Sierra Club, (608) 257-4994.

Studies Released On Reef Systems for Erosion Control

Erosion control effectiveness by Surgebreakers Offshore Reef Systems in Lake Michigan and the Gulf of Mexico is documented in two new research reports.

Surgebreakers are pre-cast steel fiber reinforced concrete models, that are 4 feet high and 4 feet by 6 feet at the base, with sloped front,

back and three tapered channels. These patented modules are designed to reduce the destructive energy of waves by tripping them and slowing their passage over and through the barrier. Surgebreakers are aligned parallel to the shore in the surf zone and encourages sediment deposits in front and in back of the reef.

In addition to its positive protection, the reef system does not incur the negative effects of breakwaters, seawalls, and groins, such as undermining and flanking of structures, deepened waters, and accelerated down-drift erosion.

Copies of the research reports done by Dr. Charles W. Shabica, Coastal Geologist and Chairman of Earth Sciences at North Eastern Illinois University, Chicago, and Paul A. Kakuris, Co-inventor and President of Great Lakes Environmental Marine Ltd., are available from Great Lakes Environmental Marine Ltd., 39 LaSalle Street, Chicago, Illinois 60603.

Great Lakes Wildlife Federation Meeting Set For August

The Illinois Wildlife Federation will be hosting a Great Lakes Affiliates meeting August 1-3, 1986, at the Quality Inn Mid-Way, 5001 West 79th Street, Burbank, Illinois.

For more information contact the Illinois Wildlife Federation, 123 South Chicago, Rossville, Illinois 60963, (217) 748-6365.

Great Lakes Week—July 20-26, 1986

by Sally Shearer, Great Lakes Week Chairperson

The Great Lakes United Education Task Force requests the assistance of all Great Lakes United member organizations in making the 3rd Annual Great Lakes Week a success! This year's event is scheduled for July 20-26, 1986 and requests for proclamations have been sent out to all ten Great Lakes jurisdictions and forty major cities in the basin. If you would like a proclamation kit for your locality, please contact me or the GLU office.

If each member organization would help to publicize Great Lakes Week in their own localities as well as committing to sponsor at least one educational activity during the week, we could greatly increase the number of individuals interested in protecting the Great Lakes-St. Lawrence River system. Some possible activities include—film and slide shows, panel discussions on basin issues, educational workshops, boat tours, picnics, hikes, etc.

Let's put some additional efforts into making this year's week a worthwhile endeavor.

Special thanks goes out to last year's sponsors of events including Northeast Ohio group of the Sierra Club, Save The River, Save Oswego County, the United Auto Workers and all those jurisdictions who made proclamations last year. Please let me know of your group's activities this year so we can help publicize them. If you have any questions or



New York State Senator Hugh T. Farley and Assemblyman Frank J. Sponzo present Great Lakes Week Proclamation.

GLU Photo
information, please contact me at Save Oswego County, RD #2, Box 52, County Home Road, Mexico, New York 13114 (315) 963-8904. Good Luck and Keep 'em Great!

Detroit Audubon Requests Moratorium on Incinerators

With a unanimous vote of support by its Board of Directors, the Detroit Audubon Society (DAS) has formally requested that the State of Michigan impose a one year moratorium on the construction of all solid waste incinerators. DAS is calling for a careful analysis of health risks, a thorough investigation of alternatives, and the development of what they are calling a "prudent" waste management plan for the state.

The DAS request for a moratorium hinges on the following concerns: A) that the safety of solid waste incineration has not been proven; B) that significant differences of opinion exist as to the definition of Best Available Control Technology; C) that current technologies have not shown that they can

fully remove dioxins, furans, heavy metals, and acid gases; D) that landfills will still be required for the disposal of toxics laden ash from the incinerator; E) that citizens have been excluded from the decision-making process which led to the states solid waste incineration policy; and F) that recycling and waste reduction strategies are likely to be "foreclosed," for perhaps a generation.

"Waste separation and recycling can save the state millions of dollars in the long-term while reducing toxic air emissions," says Grant Ruttinger, Chairman of the DAS Conservation Committee, "but the state's rush to incinerate eliminates these alternatives for an entire generation."

Public Information Hearings Set for Michigan

Michigan's Office of the Great Lakes (OGL), as part of the state's "Clean Water 86", is sponsoring a series of meetings in 10 Great Lakes locations. Thomas D. Martin, Director of OGL, has been commissioned by Governor James Blanchard to conduct meetings which will focus on the nature of the water quality problems in the area, the progress being made in developing a plan to solve the problems, the potential solutions, and what the community can do to become involved.

The areas of concern were designated by the International Joint Commission, since water quality in those areas is not meeting the objectives set under the U.S.-Canada Great Lakes Water Quality Agreement of 1978. Governor Blanchard has pledged that these areas will receive special funds and attention

to ensure that clean-up plans are finished promptly.

The OGL evening meetings are scheduled as follows: Kalamazoo (June 3); White Lake (June 17); River Raisin (July 3); Cuyahoga River (July 17); Torch Lake (July 29); Muskegon Lake (August 21); Manistee River (September 2); Saginaw River/Bay (September 16); Detroit River (October 9). A meeting concerning Deer Lake/Carp River was held in May; the Rouge River is already receiving citizen input through a special task force; Canada is spearheading action on the St. Clair and St. Mary's Rivers; and the state of Wisconsin is taking the lead on the Menominee River. For further details about meeting times and locations, contact Thomas Martin, P.O. Box 30028, Lansing, MI 48909; (517) 373-3588.

Join Us!

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

Name

Organization:

Address:

State/Province: Zip/Postal Code:

Phone: ()

☐ Individual Membership (\$15.00)

☐ Organizational Membership (\$100.00)

Information Request:

☐ By-Laws

☐ Member Organizations

☐ Resolutions

☐ Other (Please Specify)

Would you be interested in volunteering for Great Lakes United?

☐ Yes ☐ No

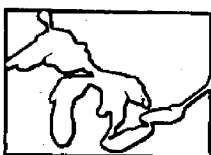
Time Available?:

Please return this form with checks payable to:

Great Lakes United
24 Agassiz Circle
Buffalo, New York 14214

For additional information, send request to the above address or contact:

David J. Miller, Executive Director
(716) 886-0142



RECEIVED JUL 18 1986

Great Lakes United Wins Water Quality Suit

On June 4, 1986, a New York State Supreme Court justice rejected challenges by 29 Niagara Falls companies to the state's new water quality standards. Defenders of these standards, Great Lakes United, the Hudson River Sloop Clearwater, the State Attorney General and the Department of Environmental Conservation, mark Justice Robert C. Williams' decision as a major victory for environmentalists in and out of government.

Great Lakes United has long maintained that we must work together to improve and properly manage the water resources of the Great Lakes-St. Lawrence River. To achieve this, direct and indirect discharges of toxic chemicals in our waterways must be eliminated over time and toward that end tougher standards must be established. The intent of this goal has been supported by federal laws and international agreements, and will provide long-term benefits to the region's

environmental, social and economic well-being. Unfortunately, this view is not always embraced by those who are responsible for discharging toxic chemicals into our environment.

In December of 1985, the Niagara Falls Industrial Liaison Committee and the National Solid Waste Management Association filed suit against the New York State Department of Environmental Conservation in an attempt to overturn newly promulgated water discharge standards for some 95 toxic chemicals. In response to this action Great Lakes United and the Hudson River Sloop Clearwater, (an environmental organization based in Poughkeepsie, N.Y.), filed a separate suit in defense of the state's water quality standards.

The industrial groups claim that the Department of Environmental Conservation's decision on standards was arbitrary and did not fully consider the social and economic

impacts of stricter standards. GLU and Clearwater views the new standards as an essential step toward achieving the goals of the federal Clean Water Act and the Great Lakes International Water Quality Agreement. John Mylod, director of Clearwater, stated that the industrial challenge is without merit and the standards are needed to improve the quality of our waterways from an ecological and enforcement standpoint.

In the spring of 1986, legal arguments were heard from the industrial, environmental and state agency representatives before the Supreme Court of the State of New York, in the County of Albany. The arguments were confined to the issues raised in the administrative hearings, which approved the standards in 1985. The Clearwater and Great Lakes United memorandum emphasized the legality of the process, the need for standards and asked that the annulment petition

be dismissed, with costs.

The reasons Great Lakes United's board of directors decided to join the suit in defense of the standards are simple. The new standards are a first step toward the water quality goals of the organization. Secondly, and foremost, Great Lakes United believes the annulment of these standards could pose a significant threat to jurisdictional standard setting processes across the basin. Great Lakes United hopes that this sound victory in the New York case will provide legal precedents to help other jurisdictions in their quest for improved Great Lakes water quality.

It may prove to be one of the most significant water quality legal decisions facing the Great Lakes this decade. Great Lakes United hopes its involvement not only assists the state of New York in upholding its standards, but also helps its member organizations in their future defenses of challenges to come.

Toxics Agreement

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4. To work toward interstate cooperation in hazardous waste management planning, with recommendations for cooperative actions by January 31, 1987.

5. To initiate a study of long-term funding sources that will permit continued progress toward a healthier Great Lakes ecosystem, with a preliminary report to be developed by December 31, 1986.

Great Lakes United believes that the toxic agreement is an important first step in basin-wide programs to control toxic contamination to the system. The key element to insure incorporation of the six principles will be public participation at each stage of reporting and implementation by the jurisdictions.

"It is our view that implementation of the broad toxic agreement will not be easy, making basin-wide public participation essential," said Frederick L. Brown, President of Great Lakes United from Midland, Michigan.

The Great Lakes United membership passed a resolution of support for the principles and programs outlined in the toxics agreement during the fourth annual meeting held in Mackinaw City in May. The delegates at GLU's annual meeting echoed President Brown's concerns, marking the importance of sound and open implementation of the toxics agreement.

Once again, Great Lakes United can provide the information exchange and forum to assist in basin-wide implementation of the agreement. We ask that citizens and organizations commit themselves to becoming involved in its implementation for the sake of long-term ecosystem protection. Great Lakes United hopes citizens in each jurisdiction will:

1. Contact their governor's offices and regulatory agencies to determine avenues for public workshops, hearings and comment periods for agreement implementation;

2. Work to insure that the Canadian provinces are involved in the programs outlined in the toxics agreement; and

3. Inform Great Lakes United of your activities so we can better assist in ensuring information exchange and sound public involvement programs.

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The toxics agreement will only be another bookshelf document unless citizens and organizations push for increased jurisdictional budgets and stronger laws to implement these goals. Already, certain jurisdictions have stronger water and air quality laws than others. It is our goal to strengthen all jurisdictional laws in the quest of "eliminating the discharge of all persistent toxic substances" into the Great Lakes-St. Lawrence River System.

Mulroney

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access to appointed spokespersons in his ministry, a move he said to "silence loose cannons" in his department. This is a serious setback for groups like the Canadian Environmental Law Association and Pollution Probe who relied on the expertise of federal government scientists in their interventions on behalf of Canadians on the Niagara River dump sites. This censorship has resulted in the resignation of one of the most dedicated Great Lakes scientists, Douglas Hallet, from Environment Canada. It was Mr. Hallet's research which led to the initial discovery of dioxin in the Great Lakes ecosystem.

The second most revealing gesture of Environment Minister

McMillan has been his withdrawal of a pamphlet entitled "Storm Warning" issued by his own Ontario office. This pamphlet described how toxic chemicals are transported atmospherically and deposited in food and ingested by humans. The report concluded that "airborne pollution poses a distinct threat to human health" and is the next major battle to be fought in the Great Lakes basin.

The explanation of the withdrawal of this eight-page report was that the format did not conform to government specifications for layout and design. Due to budget restraints, it will not be reprinted. It is clear that the federal government is not willing to undertake the new emphasis and programs which the findings of this report would entail if taken seriously.

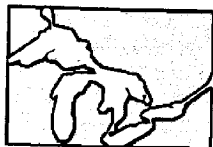
GLU's Canadian Directors are placing a lot of hope in the new Ontario Liberal Environment Minister James Bradley, who has displaced 42 years of Conservative government rule in Ontario. Mr. Bradley has proven that he takes his responsibility for Lake Ontario seriously. In an unprecedented move, he has made it known he is not happy with the progress of talks between Canada, the U.S., New York State and Ontario on the Niagara River Accord.

"Ontario's goal is virtual elimination" of toxic substances, Mr. Bradley said. "There's more work to be done so we can have a meaningful agreement that will have a chance to clean up the river."

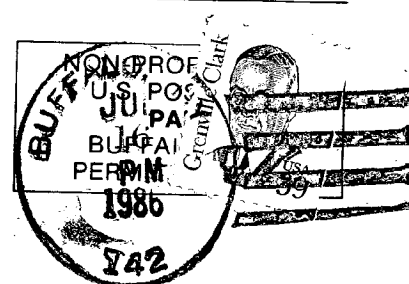
Mr. McMillan, upset at Ontario's reluctance to be signatories to a weak agreement which does not include excavations or a tangible timetable for clean up, publicly attacked Mr. Bradley's standards as "too high." He has accused him of "playing politics" with the environment. Mr. McMillan's willingness to sign the insubstantial and weak Niagara River Accord is seen as another public relations effort by his government to further their efforts to cooperate with the Reagan Administration.

Great Lakes United members will have the opportunity to bring their concerns to Ottawa and to the Ontario Government when GLU holds its first lobby effort in Canada this winter. It will be important to urge them to take their role in the Great Lakes seriously or the whole basin will suffer the consequences of their lack of will.

Sarah Miller, a Canadian Director of Great Lakes United, is the Coordinator of the Canadian Environmental Law Association and lives on an island in Toronto Harbour.



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