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THE CENTER FOR THE GREAT LAKES



RETURNING TO THE WATER

Cities find new life, growth along waterfronts

Montreal and Milwaukee, hundreds of miles apart but linked by the Great Lakes/St. Lawrence River system, are each remaking themselves in a fundamental way: they are among dozens of cities in the region quite literally turning around to embrace their waterfronts.

The waterfronts were once the very reason for Milwaukee and Montreal and many other Great Lakes/St. Lawrence cities to spring up and thrive where they did, and have remained central to the commercial life of the region. Now, the waterfronts have gained a new role in the economic life of the region, revitalizing central cities and bringing new investment and new excitement.

Lily Robert, a spokeswoman for Montreal's executive committee (which includes Mayor Jean Doré), said the city is currently working on its first-ever comprehensive urban plan. "One of the priorities of that plan is to create access to the water," she said. Mark London, a Montreal official in charge of plans for redevelopment of two city-owned islands in the St. Lawrence River, said the focus of that project is "to turn the islands' orientation to the waterfront."

The waterfronts have taken a new role in the region's economy.

Milwaukee has learned, Mayor John Norquist said, "that our water gives us an advantage. How a city looks has become a key factor in whether businesses locate there. We don't even put out any brochures now without pictures of the (Lake Michigan) shore."

Urban planners have learned that waterfronts are crucial to cities' economies. A Chicago city study of the future of the city's



Milwaukee planners are encouraging the construction of riverwalks along the Milwaukee River, as part of an overall plan to turn the focus of the city's downtown toward the water.

lakefront suggested in its final report that at least 20% of the metropolitan area's economic activity "depends, one way or another, on the availability and the attractiveness of the Lake Michigan shoreline." Norquist noted that "real estate values rise fastest near the water."

Donna Hinde, an architect with the Toronto consulting firm M. M. Dillon Ltd., said waterfronts have become the focus of many cities' overall economic development plans, and not simply because new development can be lured to the waterfront itself. "There's a strong interest now in how the waterfront improvements can improve the image and development climate of the whole community," she said.

Cushman & Wakefield, a major U.S. real estate firm, performs an annual survey of corporate leaders on which cities are most attractive for locating businesses. Among factors cited as "absolutely essential" for locating office facilities, the percentage of survey respondents listing "quality of life for employees" increased from 18 in 1987, to 23 in 1988, to 32 in 1989.

Fred Klancnik of the planning and engineering firm of Johnson, Johnson & Roy—with offices in Detroit and Chicago—pointed out Racine, Wisconsin's thriving waterfront as "an example of a city putting the waterfront at the core of an overall development strategy. The success of the waterfront projects is sparking other development in the city's downtown area."

Waterfront development can also be a boon to tourism. Milwaukee's Norquist pointed out that "Anyone who casually looks at a map of North America sees this huge body of water in the middle. But our tourism potential has gone largely untapped."

Earlier waterfront projects, analysts say, typically focused on mostly private or single-purpose developments, notably marinas. Thousands of new boat slips have been added or are being built across the Lakes.

Marinas are still a common feature of Lakes waterfront developments, leading some analysts to wonder when the supply of

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Remaking our cities

Milwaukee Mayor John Norquist, along with Montreal Mayor Jean Doré, has joined *The Center for the Great Lakes* in co-hosting *Water Works-1990*, an international conference on Great Lakes/St. Lawrence River waterfront development. We asked Mayor Norquist for his thoughts on what waterfront development means for the region.



Milwaukee Mayor John Norquist

Mention the mighty Great Lakes economy to someone from outside the region and they will likely summon an image of a city. Chicago, Montreal, Toronto, Milwaukee, Hamilton, Buffalo, Cleveland, all these and others serve as emblems of North America's teeming industrial heartland. Even more than in other regions, the economy of the Great Lakes/St. Lawrence region is tied to the fate of its cities.

It is imperative for city leaders in this region to join together and seek common strategies for future economic progress. The 1990s present an exciting opportunity for Great Lakes/St. Lawrence cities to seize control of their collective economic destiny and ensure the region's prosperity for decades to come.

The long-term viability of our regional economy is closely linked to the health of its resource base, and the Great Lakes in particular. This link is not proscriptive, a limiting factor, but rather a supreme opportunity for sustained economic growth.

By acting as foresighted stewards of our common resources, by aggressively but responsibly utilizing those resources, and by cooperatively promoting our efforts in this respect, Great Lakes/St. Lawrence cities can maintain thriving waterfront economies that will carry them well into the next century.

The City of Milwaukee is experiencing an economic revival, and is on the verge of a genuine economic boom. Evidence indicates that this resurgence can be partially attributed to very specific local policy decisions to renew the community's emphasis on Lake Michigan and its tributaries. Milwaukee's experience is far from unique among Great Lakes/St. Lawrence cities.

Even more than in other regions, the economy of the Great Lakes/St. Lawrence region is tied to the fate of its cities.

In May, the mayors of Great Lakes and St. Lawrence River cities from Duluth to Quebec City will gather in Milwaukee to discuss our shared concern for our waterfronts and our natural resources. The challenge before us is simple and straightforward: to develop more effective tools to renew our urban shorelines' economies and environments.

We can start by learning from each other about ways to involve our citizens and business communities in revitalization efforts, about new methods to finance the costs of shoreline renewal and pollution cleanups, and about the latest innovations in waterfront restoration.

We can also pledge to work together to assure that the needs of Great Lakes and St. Lawrence River cities get fair consideration in Ottawa, Washington, and our state and provincial capitals. An active and effective alliance of cities can be a strong aid in regional efforts to sustain our economies and restore our natural resources. We can turn the new decade's promises of prosperity to reality. □

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THE CENTER FOR THE GREAT LAKES views the Great Lakes system as an irreplaceable asset which forms the foundation of a strong regional economy and quality of life. That potential can be realized only through a vigorous commitment to protecting and developing this unique natural resource.

Toward that end, The Center works to:

- foster regional cooperation among political, business, and environmental leaders on both sides of the U.S./Canada border;
- identify critical natural resource and economic issues;
- conduct objective, concise analysis of these issues to bring about informed action by decisionmakers;
- promote public understanding and awareness of opportunities for action.

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Utilities working to meet power demand

As demand for electricity continues to rise, and environmental concerns make building new power plants more difficult, electric power producers are crafting different responses across the Great Lakes/St. Lawrence region. As Hydro Quebec expands its production and export of electricity, other utilities in the region are searching for new ways to meet the new demand.

Building new power plants "is getting tougher all the time," said Trevor Falk, a manager at Ontario Hydro. John Abramson of Michigan's state Public Service Commission said "construction has just stopped" in Michigan. New York Power's Vincent Tobin said, "Utilities are pretty much out of the business of building large new plants."

According to the U.S. Energy Information Administration, power producers in the East North Central census region (Illinois, Indiana, Michigan, Wisconsin and Ohio) plan new construction totalling only a 4% increase in capacity over the decade 1989-1998.

Environmental questions are making it more difficult and costly to build new power plants. "The costs of coal-fired plants will keep going up," Abramson said, thanks to new and more stringent acid-rain laws being imposed by state, provincial and federal governments.

"Nuclear plants are not an option now at all, in the U.S.," Abramson said, since "governments haven't found answers to disposal of radioactive waste at all." No new nuclear power plants are planned in the six westernmost Great Lakes states through 1998.

Forecasters, though, predict steadily rising demand for electricity in the region, particularly in Ontario, where Metropolitan Toronto's growth continues to surge.

Ontario Hydro, in its 25-year plan for meeting the province's electricity demands, foresees the construction of two new nuclear power plants sometime after the year 2000, to meet about 30% of the projected increased demand to the year 2014. Although public and governmental concern about nuclear safety has "given us pause," Falk said, the utility sees nuclear generation as desirable due in part to tighter regulation of emissions from fossil-fuel plants.

"Demand management," in the form of encouraging conservation of electricity by industrial and residential consumers, is taking a more prominent place in the utility's long-range planning. The 25-year plan projects meeting one-third of the increased demand for electricity through conservation and better efficiency.

Utilities are also turning to "co-generation" plants, small power plants built by entrepreneurs or industry in major



As part of its efforts to meet surging demand for electricity, Ontario Hydro plans to expand its Sir Adam Beck Generating Station on the Niagara River.

industrial areas. The co-generation operator sells power to the local public utility, and the steam from the electric turbines to local manufacturers for use in driving heavy machinery.

Hydro Quebec, which generates 97% of its power from hydroelectric projects, has "many plans" for new plants in northern Quebec, executive vice-president Jacques Guerremont said.

Despite the utility's emphasis on hydroelectric production as "the most environmentally sound type of production," Guerremont said, "it is getting more difficult" to get government approval for new facilities. The utility's proposed new James Bay project has drawn sharp opposition as damaging to local ecosystems and wildlife in the James Bay area.

Quebec's provincial government has long seen hydroelectric production, significantly less expensive than other generation techniques, as an economic advantage. According to federal estimates, electricity cost about 3.4 cents (Can) per kilowatt-hour in Quebec in 1987, compared with 4.9 cents in Ontario. U.S. electricity prices were much higher, with Great Lakes states' average prices ranging from 8.7 cents (U.S.) per kilowatt-hour in New York and 7.8 cents in Illinois, down to Minnesota's 5.4.

Hydro Quebec development plans include research and development aimed at encouraging the establishment of industries that rely heavily on electricity. Quebec already dominates the region's electro-metallurgy industries, ranking among the world's nations, behind only the U.S., the USSR, and Canada as a whole in the production of aluminum.

Hydro Quebec's sales to U.S. utilities will expand, Guerremont said, as the latter seek less expensive sources of power. New York

Power has reached a new 20-year agreement to purchase electricity from Hydro Quebec, to go with two other contracts already in place. Similarly, Ontario Hydro has reached an agreement to purchase power from Manitoba Hydro.

Quebec has long seen hydroelectric production as an economic advantage.

One reason the Free Trade Agreement enjoyed strong support in Quebec was the prospect of increasing power sales to U.S. utilities. New York Power's Tobin said the trade pact "sort of bound the status quo in power sales. It guarantees to us that Canadian electricity will remain tariff-free, and we feel pretty good about that." The major purchases, New York and Ontario officials say, help reduce the need for large new power plants in areas where demand is outrunning supply.

The region's utilities, with the exception of Hydro Quebec, are also strongly "interconnected," or linked up for transfers of alternating current (alternating current is electricity that can be sent directly to consumers; large power sales are in direct current, and do not constitute true interconnections). That is increasingly important, Falk said, for meeting new demand in the absence of major new generation: "We can automatically get power from the next supplier when peak demand gets too high. We all need to make better use of all the power that's available in the region." □

COVER STORY

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slips will begin to outpace the demand for them. But Mike Mutter of Lavalent and Horwath, a major U.S. accounting and real estate firm which has done market studies for a number of marina projects on the Lakes, said, "We're being told that boat sales have flattened out the last year or two, after a number of years of strong growth. But there's still considerably more demand than supply of slips on the Great Lakes."

Public reaction to private development along a number of city waterfronts has changed the way cities look at these lands, planners say. In Toronto, for example, the construction of a series of high-rise projects along the city's Harbourfront led to a freeze on development there, and the appointment of a commission to take public comment and produce overall recommendations for developing the area.

In Milwaukee, officials working on the city's lakewalk/riverwalk system point with a sigh to a "dockminium" project on the Milwaukee River which was built before the city began enforcing the construction of riverwalks, and which will interrupt the system.

The public, as a Canadian federal study put it, considers "waterway and waterfront environments to be 'crown jewels.'"

Inspired by that public sentiment, cities are placing a high priority on public access to the water. Promenades, parks, and other



Racine's thriving Lake Michigan waterfront has helped revive the city's downtown area, planners say, attracting new retail and residential development.

public facilities are becoming the prime focus of waterfront plans.

Montreal's London explained that the city's plans for Ile Saint Helene and Ile Notre Dame are being driven by the idea of "creating an open area on the water for the people of Montreal." The former island was first developed, and the latter one created, for the city's Expo 67 world's fair in 1967; they are connected to the city's mass transit system.

"The Expo was very inward-looking," London said. "The islands' shorelines are very steep, with little access to the water at all, and little vegetation. We'll be looking at

re-naturalizing some of the shorelines, and building walkways along the river. This is to be a public area, a great urban park."

At one end of Ile Saint Helene, London said, "We plan to develop the major celebration site for the city. It's right on the water, with a picture-postcard view of the river and the city." One transient marina dating from Expo 67 will be rehabilitated, London said, and "There is no residential component at all."

Robert noted that development plans for the city's federally-owned and historic Old Port area, announced in December, "were

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Land, cleanups are among the obstacles

There are, planners agree, several common barriers that Great Lakes/St. Lawrence cities find they must overcome in order to redevelop their waterfronts.

PUBLIC ACCESS Toronto planning consultant Donna Hinde said city planners often must overcome public skepticism of changes to waterfronts. "People are typically leery of making any change on the waterfront," she said. In Ontario, she said, "They hold up Toronto as an example of what they don't want to see happen."

To convince the public of the desirability of redeveloping the waterfronts, Hinde said, planners must "show that the community will gain new public access and amenities, not just new condominiums for a lucky few."

LOCAL CONTROL In some cases, cities find simply getting control of key waterfront lands to be a major obstacle. A number of Canadian cities are pressing federally-owned ports for control of underutilized port lands along the cities' waterfronts, with "very mixed results," as one analyst put it. Federal control of key waterfront land in Toronto, Montreal, and Quebec City has been a source of considerable frustration for municipal officials in those cities.

Gary, Indiana officials have been frustrated by on-again, off-again negotiations with the giant USX Corporation for several hundred acres of prime lakefront land.

ENVIRONMENTAL CLEANUPS Environmental problems, notably contaminated sediments, are a problem in some cities. Dozens of Lakes harbors and rivermouths contain sediments laced with toxic substances. The sediments typically can-

not be dredged until federal, state, and/or provincial governments agree on a safe disposal option.

Mike McKenna of EWI Engineering, a Madison, Wisconsin firm, said, "Contaminated sediments, currently, just shut the project down." Developing waterfronts will in some areas, he said, depend upon governments finding the will and the money to clean up such problems. Plans to develop Sheboygan, Wisconsin's waterfront are on hold, as the state and federal governments investigate the extent of contaminated sediments in Sheboygan Harbor.

Although overall improvements in Great Lakes water quality have been a key factor in encouraging the waterfront development boom, local water quality problems can also be a hurdle. Montreal's London said, "In the long term, cleanup of the St. Lawrence River is very important to what we're trying to do." The provincial and federal governments have committed hundreds of millions of dollars to cleanup efforts for river.

UNDERSTANDING THE MARKET Waterfront planners in the Great Lakes draw an important lesson from the experience of Toledo, Ohio, where a large "festival marketplace" development has struggled since it was opened with much fanfare in the mid-1980s.

"You can't just copy what's in another market," Johnson, Johnson & Roy's Fred Klancnik said. "The Toledo project was just like what they did in Baltimore, but the demographics are very different."

Hinde said, "Our approach is that the plan really has to come from the particular community. We try to design a plan that only makes sense in that place, so it looks like it's always been there." □

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well-received by the city. The waterfront will be open to the public, with a children's museum and green space."

Milwaukee officials have adopted a strategy of integrating public access to the water with commercial and cultural developments. The city's efforts have focused on both the Lake Michigan shoreline, and the Milwaukee River, which flows through the city's downtown.

The lakefront, physically removed from most downtown office buildings, features a lakewalk promenade, and a large park where the city's spectacularly successful Summerfest is held each year, drawing hundreds of thousands of visitors. The newest addition is a Milwaukee County project to turn vacant land near the lakefront into a park atop an underground parking garage. This project will "create direct lakefront/downtown access," city marketing director Kris Martinsek said, by linking the lakefront parkland with the end of Wisconsin Avenue, the downtown area's "main street."

The city last year passed a planning guide for the Milwaukee River, Martinsek said, which includes four general efforts to improve public access to the river. One, she said, is the riverwalk system. "Any new developers are strongly encouraged to build riverwalks" of certain minimum widths, with lighting, she said. Another phase, she said, is "get developers to design toward the river, and to discourage expansion of non-water-related, non-public businesses along the water."

The public considers waterfronts as 'crown jewels.'

Milwaukee Center, a public/private mixed-use development covering an entire block along the river, represents a successful culmination of those ideas, Martinsek said. The project includes a 28-story office tower, a hotel, retail space, under-

ground parking, and the renovation of a former power plant into a theatre complex for the Milwaukee Repertory Theatre. An enclosed pedestrian concourse links the buildings with each other and with a riverwalk along the water.

The city is also, Martinsek said, "proposing a system of barges with restaurants and concession stands and so forth" to be permanently moored in the river during the warm-weather months.

Lastly, Martinsek said, the city is "working on an idea for a water transportation system—water taxis." The river forms a natural transportation corridor through the downtown, she said.

Developers who are not receiving any government assistance for their projects are not legally required to follow the river planning guide, but, Mayor Norquist said, "We use very strong persuasion on them, and pay half the cost of the riverwalk, just like we would any other sidewalk." Several block-long riverwalks have been built, with several more planned or under construction. □

Mixing ports and new growth a key challenge

The trend toward new development of Great Lakes/St. Lawrence River waterfronts represents, in part, a "recycling" of those waterfronts from their historic commercial/industrial roles to new ones. In some cases, though, the competing demands for the waterfront require careful planning.

The Port of Milwaukee "is still very important to a lot of businesses here," Milwaukee Mayor John Norquist said. "We have to be careful not to crowd the port out; the port people are concerned about conflicts with the increasing recreational uses."

The Port of Montreal, the second-largest port on the St. Lawrence River and Canada's largest container port, stretches along 25 kilometres (15.6 miles) of riverfront. To provide for public access to the water, the federal port in the late 1970s surrendered 53 hectares (131 acres) of the historic Old Port area to a newly created federal commission charged with developing it for the public.

Port official Brent Cedric noted, though, that the move left little possibility for further expansion. So, the port has begun planning to acquire 150 hectares (373 acres) along the south shore of the St. Lawrence, about 40 km (25 miles) downstream of the city, "as a land bank for future dry-bulk or container facilities," Cedric said.

In Cleveland, a boom in recreational and entertainment development in "The Flats," a former warehouse district along the Cuyahoga River, has created conflicts with nearby heavy industry. Genevieve Ray of the Flats-Oxbow Association, a nonprofit



With Montreal's central waterfront being developed for public recreation, The Port of Montreal has purchased land on the St. Lawrence River's south shore to provide for future expansion.

development corporation, said the group has convened a task force of shippers, recreational boating interests, and landowners to "do some common-sense things to reduce the river traffic problems."

Ray said the group is also working with the city's planning department to create new zoning "to protect the existing river-dependent industry, and still allow for change to occur. We're trying to find ways to share the river."

Ron Doering of Canada's Royal Commission on the Future of the Toronto

Waterfront said that the relationship between working ports and waterfront development plans "varies, depending on the health of the port."

In Hamilton, he said, "they have a big, successful port, and clearly, any redevelopment there is secondary to the working port." In other cities, he said, such as Oshawa on Lake Ontario, port authorities own hundreds of acres of "underutilized and very valuable waterfront land, and cities are pressing them for the land, for redevelopment." □

Port of Montreal

AREAS OF CONCERN

AN OBJECT LESSON FOR AOCs

Stakeholder, corporate involvement seen as crucial for Puget Sound

The task before the Puget Sound Water Quality Authority would be familiar to Remedial Action Plan (RAP) teams at Great Lakes Areas Of Concern (AOCs)—and its successes and difficulties may provide some object lessons.

Overlapping government agencies and jurisdictions, a growing urban population, and a variety of daunting pollution problems including contaminated sediments and urban runoff, are among the problems facing Puget Sound, one of North America's largest and richest estuaries.

The Authority (or PSWQA) was created by the Washington state legislature in 1985 in response to growing public concern about the state of Puget Sound. The sound is home to more than three million people and the state's largest city, Seattle, and has long supported key segments of the region's economy, including commercial and sport fisheries, shellfish harvesting, shipping, and water recreation.

In recent decades, water pollution has led to the closing of shellfish beds, destruction of wetlands has reduced fish spawning and other wildlife habitat, and sediments contaminated with toxic substances have led to public advisories against eating fish from certain parts of the sound.

The region's efforts on behalf of the sound have been helped by a unique way of planning for reducing runoff, and by

More than 450 governments and agencies have jurisdictions affecting Puget Sound.

two innovative ways of funding pollution control.

The PSWQA, said staffer Nancy Hansen, decided in its 1987 Puget Sound Water Quality Management Plan to take a "watershed planning approach" for tackling nonpoint source pollution (runoff). There are about 75 individual watersheds within the overall Puget Sound watershed, she said.

"We asked the 12 counties on the sound to list their watersheds and rank them for Watershed Action Plans for nonpoint source control programs," Hansen said. While the ranking process was underway,



Shellfishing areas in Puget Sound have been closed due to pollution.

Hansen said, the authority also singled out 12 "early action" watersheds, "where the need was clear and people were raring to go."

For each watershed, she said, the PSWQA is assisting local governments in forming local councils, much like AOCs' "stakeholder" groups, to work on the Watershed Action Plans. "That's important," she said, "because it has local citizens, environmental groups, farmers, everybody participating in deciding what can be done."

The Action Plans, she said, "are very site-specific," and typically include improving monitoring of septic systems, changing rural land management practices, and efforts to redirect stormwater runoff.

Planning and some implementation of control efforts are already underway for a few watersheds, she said, with local councils now being formed for some of the watersheds receiving the highest priority rankings from the county governments.

The planning process and the formation of the local councils are being paid for from a dedicated state fund. Along with the PSWQA, the legislature in 1985 had created the Centennial Clean Water Fund, financed by a tax on cigarettes, which generates about \$40 million each year for

water quality projects.

Some local governments are taking advantage of a unique funding mechanism known as a "stormwater utilities fee." State law allows the governments to assess the fee on each parcel of land to create a fund for stormwater control programs.

"It's really helping," Hansen said, "because stormwater problems (such as combined sewer overflows) can be so expensive to correct."

Recently, efforts by the Authority (or

Local councils are writing Watershed Action Plans for runoff control.

PSWQA) to clean up the sound suffered what PSWQA officials describe as a setback—one which reinforces the importance of building local "stakeholder" support for such efforts.

In February, the state legislature, over the objections of the seven-member PSWQA board, passed legislation reducing the authority's independence. The PSWQA

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offices will be moved to Olympia, the state capital, and the chair of the state's Department of Ecology will become chair of the authority.

In response to the new law, PSWQA chair Kathleen Fletcher and executive secretary James Abernathy resigned, effective May 1 and March 31, respectively. Successors had not been named at press time in early April.

Fletcher and David Harrison of the independent Northwest Policy Center described the change as an effort by industrial dischargers, led by the powerful Boeing Company, to "reign in" the authority.

"The authority had been created to be an independent voice and advocate on behalf of the sound," Harrison said. "The change will bring more control by the state government over the authority."

Fletcher said, "The industrial dischargers are very concerned about the

authority's pressure on the Department of Ecology to tighten discharge standards. Boeing fronted for them; we couldn't match their clout in the legislature." The Boeing Company is the Seattle area's largest employer.

Boeing spokesman Russ Young said, "We were certainly one of many parties in-

***'We will see progress
over the next decade,
if the political battles
can be won.'***

terested in the legislation, but we certainly don't think it amounts to a weakening of the authority. It was generally an issue of whether we really need another layer of government."

Although describing the changes as a

setback for efforts to restore the sound's water quality, Fletcher predicted that "we will see progress over the next decade, if the political battles can be won."

The lesson of the recent legislative battle, she said, is "that what needs to happen is to turn the grass-roots interest in the sound into political action. We have done a great deal of public involvement work, but the public and constituent groups have not quite got the message through to the political leadership."

Harrison said that the sound has also not had "a corporate culture of companies to support the cleanup when Boeing got mad." Fletcher agreed, saying, "We need to get the corporate people who do feel that our quality of life demands a cleanup to speak up. They haven't been heard."

Noting that the improvements called for by the authority will cost hundreds of millions of state dollars, Fletcher said, "This has to shift more into a political debate."

Great Lakes Areas of Concern



The Center for the Great Lakes has completed and made available to the public Fact Sheets on each of the 42 Great Lakes Areas Of Concern (AOCs). These include a description and history of each AOC, and information on the Remedial Action Plan process. In addition, The Center has prepared Fact Sheets on two broad problems affecting many of the AOCs: contaminated sediments, and heavy metals. The Fact Sheets are available free of charge, and are updated regularly. To request copies, write or call the Information Service at The Center for the Great Lakes, 435 N. Michigan Avenue, Suite 1408, Chicago, IL 60611 (312-645-0901), or at The Centre for the Great Lakes Foundation, 320½ Bloor St. West, Suite 301, Toronto, ON M5S 1W5 (416-921-7662).

AREAS OF CONCERN

AOC DIGEST: News from around the Lakes

NEW ROLE PROPOSED FOR U.S. ARMY CORPS

The U.S. Army Corps of Engineers could help clean up contaminated sediments in Areas Of Concern, under a bill introduced in Congress in March.

New York Congressman Henry Nowak and Ohio Senator John Glenn introduced House and Senate versions of the "Great LEAP" bill. Among other things, it would broaden the Army Corps' traditional mandate from maintaining navigable waterways and mitigating flooding and erosion problems, to include environmental cleanups.

The Army Corps, Nowak said, has experience and expertise in dredging operations, and "is well positioned to provide assistance in cleaning up Great Lakes harbors."

Great LEAP, or Great Lakes Environmental Action Program, would also include wetlands creation and habitat enhancement, and expansion of the Army Corps' data collection efforts regarding wetlands and contaminated sediments. □

IJC SUPPORTS NAMING ERIE HARBOR AOC

Erie Harbor, Pennsylvania, will probably become the 43rd Great Lakes Area Of Concern (AOC).

The International Joint Commission (IJC) has recommended that the harbor, also known as Presque Isle Bay, be placed on the AOC list. Under the Great Lakes Water Quality Agreement, each nation designates AOCs within its borders, with the advice of the IJC.

Valdus Adamkus, Great Lakes Program Manager for the U.S. Environmental Protection Agency, said, "There is no question in my mind that Washington will accept" the designation.

The harbor suffers pollution problems common at AOCs, including contaminated sediments and combined sewer overflows.

Richard Boardman of Pennsylvania's Department of Environmental Management noted that "state cleanup plans are already underway, and moving along" for Erie Harbor. The state has opposed AOC designation, Boardman said, because, "We don't think it will be a significant change. We haven't been excited about the process and procedures of an AOC designation."

Sister Pat Lupo, a leading Erie-area environmental activist and board member of Great Lakes United, said of an AOC designation, "We think it gives us a little more influence, and a commitment from



Erie Harbor is enclosed by the sweep of Presque Isle on Lake Erie.

the governments that the process will continue as administrations change."

Lupo chairs the Erie Harbor Improvement Council, created a year ago by the city and county governments, which she said "could form the basis for a stakeholders' group for the harbor." □

'FLUSHING' NOT AN OPTION AT QUINTE

"Flushing out" Ontario's Bay of Quinte is not the best way to reduce phosphorus contamination, local citizens there have decided.

The Bay of Quinte Public Advisory Committee has in recent months published a list of options for lowering the bay's excessive nutrient enrichment, caused mainly by phosphorus. The committee, after taking public input at several meetings, released its final recommendations to the federal provincial Remedial Action Plan (RAP) team in early April.

"There is a clear consensus for options to reduce input of phosphorus, rather than simply mitigating its effects," Jan Samis, facilitator for the committee, said.

The committee, Samis said, "established an overriding principle: that a watershed ceiling be established for phosphorus loadings into the bay."

The committee also recommended that improved treatment be required at sewage treatment plants along the bay, and that industrial dischargers be required to remove phosphorus from their effluent.

Although a handful of committee members supported the possibility of diverting Lake Ontario water to "flush

out" the bay, Samis said, "the majority of committee people and the public did not feel that dilution really is the solution." □

NEW USEPA RULES TO GUIDE STATE WORK

New U.S. rules about exactly what levels of cleanups will be required at Areas Of Concern (AOCs) may be part of a new federal "Great Lakes Initiative."

The U.S. Environmental Protection Agency (USEPA) has begun an effort to "make what we do under the (U.S.) Clean Water Act support the Great Lakes Water Quality Agreement," USEPA Region V staffer Joan Karnauskas said.

Under the Clean Water Act, the USEPA sets national water quality standards, which are enforced by individual states. The Great Lakes Initiative should produce federal guidelines to "get some consistency among state regulations, with an eye towards the Water Quality Agreement," Karnauskas said.

According to a concept paper for the Initiative, the guidelines "will serve as a basis for USEPA review and approval of state revisions to water quality standards."

Region V, which includes six Great Lakes states, is leading the work. Two other USEPA regional offices, along with the agency's Great Lakes National Program Office, state agencies, and various municipal, academic, public-interest, and industry representatives, are participating in three committees set up to develop the new guidelines.

Final guidelines under the Initiative are scheduled to be sent to USEPA headquarters for approval by mid-1991. □

Water Quality Agreement efforts changing

GOVERNMENTS', IJC ROLES UNDER REVIEW

The 1987 amendments to the Great Lakes Water Quality Agreement are inspiring some quiet but fundamental change in how Great Lakes governments go about their work under the agreement. The result, observers and officials say, could be to make the Canadian and U.S. federal governments more directly accountable for progress in cleaning up and protecting the Lakes.

The Great Lakes Water Quality Agreement (GLWQA), first signed in 1972 and amended three times since then, commits Canada and the U.S. to a variety of steps aimed at protecting and improving the water quality of the Lakes. In recent years, the two "parties" and the binational International Joint Commission (IJC) have fielded a rising chorus of criticism about their efforts to implement the pact.

At the IJC's biennial meeting last October in Hamilton, Ontario, citizens and environmentalists spent much of a two-day public hearing complaining that GLWQA implementation has moved too slowly. Reports in 1985 by Canadian and U.S. research groups, and in 1989 by the U.S. federal General Accounting Office, concluded that the two governments have ignored many IJC recommendations for implementing and enforcing the agreement.

Most recently, a group of ten environmental groups in January released a sharply critical letter on the GLWQA, addressed to U.S. officials.

The respective roles of the federal governments and the IJC had been somewhat murky until the 1987 protocol amending the agreement, said longtime Great Lakes analyst Peter McAvoy, who was involved in the crafting of the 1987 amendments. "The parties were trying to make the roles clearer," McAvoy said, and the amendments "spell out more exactly what the parties will do," clearly placing the IJC in a "review and comment" role.

John Jackson, director of an Ontario environmental group and president of Great Lakes United, said of the change, "Previously, it hadn't always been clear who was responsible for doing what under the agreement. But now, for example, the amendments make it very clear that the IJC doesn't designate Areas Of Concern, the parties do."

Forty-two existing Great Lakes Areas Of Concern, or toxic hotspots, identified by the IJC in the early 1980s, were incor-

porated into the GLWQA and targeted for special cleanup efforts by the two federal governments and the provincial and state governments. Erie Harbor, Pennsylvania, may soon become the first area added to that list under the 1987 amendments (see page 8).

The recent public criticism, along with the amendments, have helped inspire the IJC's newest members, led by new U.S. commissioner Gordon Durnil, to begin an in-house review of IJC activities and structure. An in-house task force, Durnil said, "Has been looking at priorities and the IJC role, including what we can and can't do under the agreement."

Canadian commissioner Davie Fulton, co-chair of the task force, said the 1987 amendments "placed a lot of new tasks upon us, in terms of review and evaluation. We've concluded that we may not be best structured, perhaps, to carry them out."

The respective roles of the governments and the IJC had been somewhat murky until the 1987 amendments.

The roles and membership of the IJC's principal advisory body, the Water Quality Board, are being discussed, Durnil and Fulton said. Of arguments that the board should not include managers of government programs being evaluated by the board, Fulton said, "We are conscious indeed of those criticisms, and will consider them."

One possibility, Durnil said, is for the Water Quality Board members "to become more truly advisors to the commission on overall Great Lakes policy, with the staff doing the detailed review work."

Under the agreement, each federal government is charged with ensuring that the federal, provincial and state governments enact the laws and programs called for to improve Great Lakes water quality.

Ontario's activities to implement the GLWQA have for more than a decade been directed by the terms of an agreement signed in the 1970s between the Canadian and Ontario governments. The U.S., though, has not had any such overall plan describing specific state and federal responsibilities and coordinating their respective roles.

"The Canada-Ontario Agreement gives them much more of a structure to work under," said Carol Finch, director of the U.S. Great Lakes National Program Office. "The Water Quality Board has served more of that role for the U.S."

The net effect may be to 'shine the light more clearly' on the two federal governments.

As the IJC contemplates changing the role of the Water Quality Board, Finch said, "We've been meeting with the state environmental administrators to talk about how U.S. efforts ought to be structured." The Great Lakes Initiative, a U.S. Environmental Protection Agency effort now underway, is intended to set specific rules for state compliance with the GLWQA, Finch noted (see page 8).

Perhaps the most important effect of all this discussion and all those committee meetings, some observers say, is to "shine the light more clearly" on the two federal governments. "I think the 1987 amendments make it clearer who's responsible for implementing that excellent plan," Jackson said.

Grif Sherbin of Environment Canada pointed out that the two federal governments recently released draft "ecosystem objectives" for Lake Ontario, which would help direct water quality standards and regulations. "In the past, the IJC has taken the lead on this sort of thing," Sherbin said. "This way creates a more solid commitment by the two governments—it's our proposal, not somebody else's."

A number of environmental groups have called on the IJC to "take advantage," as Jackson put it, of the 1987 amendments' emphasis on a role as evaluator and reviewer, and "become more pro-active in their evaluation of what the parties are and are not doing."

Fulton said, "Whether we could or should take on that sort of role would be within the field of discussion" of the IJC's in-house task force, which was scheduled to meet with the full commission in April. □

Zebra mussel solutions elusive

As the zebra mussels spread rapidly throughout the Great Lakes-St. Lawrence River system, researchers and governments are scrambling to respond to the Lakes' latest ecological invasion, and find ways to prevent new ones.

First found in Lake St. Clair in 1988, the mussels quickly established themselves in Lake Erie, and in recent months have been found in Lake Ontario, the St. Lawrence River, and Green Bay.

The small, hardy shellfish have already clogged municipal and industrial water intakes in western Lake Erie and the Detroit and St. Clair rivers, and estimates of future costs to clear and enlarge pipes around the Lakes run into the billions.

The mussels' effects on the Lakes' food chain, and the prospects for reducing or limiting their spread, are "big uncertainties," Ohio Sea Grant researcher Fred Snyder said. The mussels are "filter feeders," and some experts predict that they will disrupt the food chain by greatly reducing the amount of plankton and algae available for small fish and other shellfish.

Europe's experiences with the zebra mussels seem to provide few useful clues, Snyder said. Zebra mussels are native to Poland, Bulgaria, and Russia, and spread throughout Europe via canals built in the late 18th century.

Since most of Europe's modern industry and waterborne commerce developed after the zebra mussel was established, Snyder said, "there's no before-and-after picture to look at. Intake pipes were built wider there from the beginning, and there's no good data from before then on fish populations and so forth."

Diving ducks have helped keep zebra mussel populations under control in some parts of Europe, but the same ducks are not abundant in the Lakes region. Much research is now concentrating on determining what Great Lakes fish species may be feeding on zebra mussels, Snyder said.



Zebra mussels attach themselves to any hard surface and reproduce rapidly, building up clumps that can clog pipes and damage boat hulls.

Neither European nor North American researchers have found a chemical which can be used to eradicate the mussels without killing other marine life, Snyder said.

Europe's experiences with the mussels seem to provide few useful clues.

Canada's Coast Guard, under increasing pressure from the Great Lakes Fishery Commission and others, is resisting calls for mandatory switching of ballast in ships entering the St. Lawrence Seaway. Ships' ballast is considered the most likely way for the zebra mussel and other non-native species to enter the Lakes from rivers or freshwater harbors on other continents.

"We would prefer," Coast Guard spokesman Tom Fleck said, to stick with a voluntary ballast-switching program begun last year. The Coast Guard estimates that

about 20% of ships entering the St. Lawrence River are not complying with the program.

Fleck said the Coast Guard will conduct a program this year to more precisely monitor compliance with the voluntary ballast-switching program, and "if the shipping industry is not complying, then we will consider regulations."

In March, U.S. senators John Glenn (Ohio) and John Heinz (Penn.) and Congressman Henry Nowak (Buffalo), with 16 House co-sponsors, introduced the U.S. Non-indigenous Aquatic Nuisance Act of 1990. The bill, scheduled for spring committee hearings in both houses of Congress, directs the U.S. Coast Guard to issue regulations requiring ballast exchange. It would also set up federal regional commissions to address specific threats from exotic species, the first to be set up in the Great Lakes region; and would authorize federal research, with initial annual funding of \$8 million, half of that to be spent on zebra mussel control efforts. □

Protection Fund priorities stress reducing toxics

The Great Lakes Protection Fund is calling for proposals for projects to combat and prevent toxic contamination of the Great Lakes.

At its March meeting, the Protection Fund's Board of Directors agreed on six priorities for the Fund, including airborne toxics, contaminated sediments, the human health effects of toxic contamination, its effects on fish and wildlife, nonpoint source pollution, and pollution prevention.

The board in April released a set of funding guidelines for projects to support those priorities. The guidelines include three "multi-media" categories: pollution prevention; reducing, con-

trolling and cleaning up toxic contamination; and research-related monitoring and surveillance.

The board also provided detailed priorities and criteria for each category. Proposals for projects are due by June 30, with the first awards scheduled for the fall.

The Fund, planned as a \$100 million endowment to provide sustained funding for projects to combat toxic pollution in the Great Lakes, was established by the Council of Great Lakes Governors in 1989. To date, six of the eight Great Lakes states have pledged or contributed their shares, which are based on Great Lakes water usage. □

AROUND THE REGION

St. Lawrence cruises finding new markets

Overnight cruises on the St. Lawrence River and Lake Ontario have become a growth industry, with one new vessel sailing the historic waterway this year, and another being contemplated.

A number of international cruise lines have long made ports of call at Montreal and Quebec City for trans-Atlantic cruises. Two companies sail regular cruises up the St. Lawrence into Lake Ontario: the St. Lawrence Cruise Lines Inc. of Kingston, Ontario, and the American Canadian Caribbean Lines, based in Florida and Rhode Island.

Robert Clark, co-owner of the St. Lawrence Cruise Lines, said he has been running week-long cruises between Kingston and Quebec City for eight years, and "we're always full." The *Canadian Empress*, a 33-metre (108-foot) vessel with berths for 66 passengers, has sailed six round trip voyages each summer, he said.

This year, Clark will add the *Victorian Empress*, a 59-metre (192-foot) ship which he purchased from the Exxon Corp. American Canadian Caribbean Lines spokeswoman Yvette Behrendt said the firm sails about 20 12-day cruises each



The *Victorian Empress* is the newest addition to St. Lawrence River cruise traffic.

summer between Providence, Rhode Island and Quebec City, by way of Long Island Sound, the Hudson River, the Erie Canal, Lake Ontario, and the St. Lawrence River.

Demand for berths on the two ships sailing that route "has definitely increased in recent years," Behrendt said. The *Caribbean Prince* carries 76 passengers, while the *New Shoreham II* carries 72. "We're almost always full now," Behrendt said.

"We're toying with the idea of building

another ship for that run," Behrendt said. The surging demand, she said, "seems to be related to an increase in awareness of the St. Lawrence, and I think there's a tremendous interest in history."

Noting that "we're getting quite heavy bookings from California," she added, "There's a feeling of exotica about the Northeast, the Erie Canal and the St. Lawrence and so forth." □

WATER WORKS



1990

WATER WORKS — 1990, a binational conference on Great Lakes waterfront development, will be held on May 16-18 in Milwaukee. **WATER WORKS — 1990** is sponsored by The Center for the Great Lakes and the cities of Milwaukee and Montreal.

WATER WORKS! — 1990 will bring together regional political leaders and waterfront development experts to examine the Lakes-St. Lawrence waterfront development boom. More than 250 regional leaders and experts attended The Center's first Water Works conference, held in 1986 in Toledo, Ohio.

To register, fill out and return this coupon, along with a check payable to the City of Milwaukee. You will receive more information, including conference schedules and lodging information.

Conference fee... \$265 (CAN) \$225 (U.S.)
Companion registration

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by Paul Botts

What have other areas with strong regional identities got that the Great Lakes haven't got? A flag.

That's right, a flag; a banner; a visible symbol to rally 'round. A flag would remind us, consciously or subconsciously, that we are a part of a unique region with a unique identity.

Granted, there are lots of things more important for the

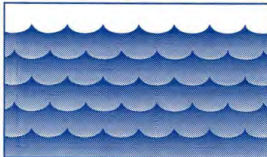
future of our Lakes than a flag—each issue of the Great Lakes Reporter is devoted to pointing them out and explaining why they're important. But the power of a symbol should not be underestimated.

All sorts of sub-national groups and regions use flags as rallying points. A Great Lakes flag could, in a subtle but public way, reinforce our regional identity every time it waved in front of a town hall

or museum.

Of course, the first question on everyone's lips is, what would it look like? Well, we don't know, but we asked Joe Heller, a Green Bay editorial cartoonist who has done numerous newspaper cartoons on Lakes issues, for his vision. We also drew up an idea of our own.

Now, if we just had a regional anthem to sing at ballgames while the flag is raised. . . .



Green Bay artist Joseph Heller designed a flag with the five levels of waves representing the five Great Lakes.



A Center staff concept included the outline of the Lakes and St. Lawrence River, with the maple leaf and star symbolizing the region's binational identity.

The Great Lakes
REPORTER

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