A photograph of a calm, light blue lake with distant hills in the background.

"I always wished that I

could go swimming in the

Great Lakes ... but I've

never had the chance to

do that and I hope some-

day my kids or the future

generation will have the

chance to do something

like that."

High School student,

1989 Biennial Meeting

**Fifth Biennial Report on
Great Lakes Water Quality**

Part I

International Joint Commission

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FIFTH BIENNIAL REPORT UNDER THE
GREAT LAKES WATER QUALITY AGREEMENT OF 1978
TO THE GOVERNMENTS OF THE UNITED STATES
AND CANADA AND THE STATE AND PROVINCIAL
GOVERNMENTS OF THE GREAT LAKES BASIN

PART I

COMMISSIONERS

Gordon K. Durnil
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Robert S.K. Welch
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International Joint Commission
United States and Canada

International Joint Commission
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he International Joint Commission is required to report to the Governments of Canada and the United States at least biennially on its findings with respect to the implementation of the Great Lakes Water Quality Agreement. Normally the Commission's Biennial Reports made after each Biennial Meeting reflect primarily the results of the Commission's consideration of the reports of its Great Lakes Water Quality and Great Lakes Science Advisory Boards for the two years since the preceding Biennial Report. This Biennial Report is also prepared with the benefit of having available to us the substantial and useful reports of these Boards. However, we have concluded that, on this occasion, the Report should also discuss specifically the input we have received from the public, and particularly the public input at the Biennial Meeting itself.

Increasingly in recent years, reports concerned with the Great Lakes from nongovernmental organizations such as Sierra Club, the Rawson Academy, Great Lakes United, Greenpeace, and the notable work of the Conservation Foundation and the Institute on Research in Public Policy (*Great Lakes, Great Legacy?*) have become available, not to mention the broader literature on various pertinent subjects. All of these documents, together with the organization and increasing activity of these institutions in the Great Lakes field, reflect the increasing knowledge and consequent concern on the part of the general public regarding the gaps in implementation of the Agreement. These organizations are com-

posed of and directly represent many thousands of Great Lakes basin residents living on both sides of the international boundary, in all jurisdictions and municipalities and from all walks of life.

Many of the conclusions and recommendations in the reports referred to above, and much of the public input received at the Commission's fifth Biennial Meeting in Hamilton, Ontario, reinforce conclusions and recommendations which have been previously submitted to the Commission from its Water Quality Board and Science Advisory Board and communicated to the Governments of Canada and the United States by the Commission.

The increasing level of public concern for the Great Lakes ecosystem and insistence on governmental response to Agreement objectives were strikingly evident, and outspokenly vented, at the Commission's recent Biennial Meeting. Because of the importance — and the abundant evidence this occasion provided — of public support and individual demands for government action, we concluded that we should deal specifically with that meeting in this Report.

As we came to draft the Report it further became clear that the contents could in fact appropriately be divided into two parts, one dealing with the broad matter of concern over progress, or lack of it, as expressed at the Biennial Meeting, and the other dealing with the more detailed aspects of what must be done to implement the Great Lakes Water Quality Agreement. Accordingly, this year our

Biennial Report is so divided. Since the other matters require more time to complete and there is some urgency in advising governments of the public concern, we have concluded that we should submit this completed portion, dealing with the Biennial Meeting, as Part I of our Biennial Report. Part II will be completed and delivered with all due dispatch.

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he Commission's fifth Biennial Meeting was held in Hamilton, Ontario on October 11, 12 and 13, 1989. The meeting was noteworthy by reason, amongst others, of the excellent facilities provided and the warm hospitality extended by the Mayor and Council of the City of Hamilton. It is noted with pleasure that the high quality of the reception accorded to us by the City of Hamilton is matched by the diligent efforts being made to restore the quality of the waters in Hamilton Harbour and the surrounding area.

The meeting was remarkable, however, not only for the quality of the external arrangements, but also for its internal content in terms of the number of members of the public taking part and the quality of their presentations. Not only were there a record number of individuals present, and participating by way of presentations, but since they included persons speaking for the representative organizations mentioned above as well as others, it is true to say that the Great Lakes population was indeed well represented.

There were frequent and enthusiastic comments on the way in which this meeting had been organized to give the public an opportunity to participate and express their views, and the extent to which that participation had taken place. But it must be recorded that, while the members of the public were enthusiastic in their praise for the opportunity to participate, this was not so with regard to their assessment of progress made under the Agreement — in fact the exact opposite was the case. Although there was occasional

recognition of and expression of support for progress made in certain isolated areas or respects, there was virtual unanimity of opinion that real progress towards achievement of the Agreement's objectives is sadly, if not totally, lacking; further, that responsibility for this fact must be faced and accepted by the Governments of the United States and Canada who have the overall responsibility for ensuring that the objectives of the Agreement are put into effect in order that its principles and purpose may be attained.

This is not to say that the Commission itself and its Boards were not also subject to criticism. They were, and it is our intention to analyze and consider those criticisms carefully and fully and to take action as appropriate. To some of them we shall in fact respond in later sections of this Report. But in view of the extent and weight of the criticisms — and suggestions — with respect to the areas where the Parties in particular or governments in general must accept responsibility, and in view of our advisory role as set out in the Agreement, we consider it our responsibility to bring to the attention of the concerned Parties and other governments the effect and weight of those criticisms and/or suggestions.

This may most appropriately be done in two sections, dealing first with those criticisms and/or suggestions concerned with matters of a general or background nature, and secondly those dealing with specific items or areas of the Agreement itself. The Commission notes that while much of what was said at Hamilton is

consistent with previous and current Board and Commission views, we do not necessarily concur with all concerns and views expressed at that time, many of which are reflected in the following pages.

GENERAL COMMENTS PROVIDED BY BIENNIAL MEETING PARTICIPANTS

One theme was common to most of the presentations which we heard: the time has come to translate the principles, purposes and objectives of the Agreement into enforceable law(s) and to ensure that those laws are in fact enforced. There were a number of variations of this theme — ranging from the suggestion that there has been enough scientific research to establish the danger and that enactment of laws prohibiting the creation and/or discharge of dangerous pollutants is now the essential requirement, through suggestions for broadening the base or scope of such research, to the view that enforcement action is the main priority or need — that basic laws are now in place, but the necessary drive to enforce them is what appears to be sorely lacking. As we shall be making our recommendations in Part II of this Report, we will deal here with the broad issues only.

Reverse Onus A common statement was that the principle of reverse onus should be incorporated into whatever laws are enacted. In effect, this means that where approval is sought for the manufacture or discharge of any material or substance that will or may enter the environment, it should not be necessary for anyone to prove that the discharge will or may be harmful, but should be necessary for the applicant to prove that the discharge will not be harmful.

Standards The criticism was made that to date no lakeshore government (state, provincial or municipal) — and neither federal

government — has in fact enacted programs that would give full effect to the philosophy of zero discharge. In the same context, criticism was voiced that too frequently there are departures from standards, or failure to enforce requirements, which are or should be incorporated in remedial action plans (RAPs), and the concomitant suggestion/criticism that the lakeshore municipalities and other local authorities — which are greatly affected by RAP implementation — are not made active partners in the whole Agreement implementation and enforcement process. It was also suggested that RAPs should be made legally enforceable.

Legislation and Regulations A number of criticisms/suggestions were made to the effect that it should be a requirement that the Commission review all proposed legislation and/or regulations dealing with what is permitted to be, or prohibited from being, discharged into the Great Lakes Basin Ecosystem before they are enacted, and report on the extent to which they conform, or fail to conform, to the purpose and objectives of the Agreement. An example was given of recently introduced state legislation on the subject of controlling discharge which completely ignored, if it did not contravene, the spirit if not the letter of the Agreement, insofar as the elimination of dangerous toxic substances and achievement of zero discharge are concerned.

Numerous submissions endorsed the position that it is essential that the principles of the Agreement be incorporated into

enforceable legislation now; that while remedial and cleanup measures are important, they must be secondary to enactment and enforcement of preventive legislation — because without prevention at the source, remediation is but a sop and cannot be an answer to the problem. While there were also suggestions worthy of consideration that governments should ensure that RAPs and other remedial measures require those responsible for the pollution to pay for — or at least contribute substantially to — the cost of cleanup, this is perhaps subordinate to, if not incorporated in, a general principle that was universally supported.

That principle was that, with respect to both the enactment of preventive measures and the enforcement of penalties for infractions, there must be an end to the “business as usual” attitude: there must be strict application and enforcement of zero discharge and other restrictions as appropriate, and meaningful penalties for violations. The theme that the time has come when the principle of the Agreement must be given the force of law, providing for prohibition of the creation and/or discharge of dangerous substances and for appropriate penalties for breach, and that attention to this requirement should be given top priority, was either specific or inherent in the great majority of submissions made at the meeting, and was greeted with strong applause by all whenever it was proposed.

One specific suggestion as to how this general objective

might be accomplished was made by two or three of the participants, and deserves specific mention. That was, that the provisions of the Agreement, amended to give effect to the prohibitory and penalty suggestions referred to above, should be embodied in a formal Treaty between our two countries. Those provisions, in this view, would thus be given the force of law consistently throughout the basin and, in the words of one participant, "thus bring together legalities and ethics" with respect to our responsibility to preserve the environment.

S P E C I F I C C O M M E N T S P R O V I D E D B Y B I E N N I A L M E E T I N G P A R T I C I P A N T S

onsiderable concern was expressed that there is unnecessary delay, or at least uncertainty, in preparing a comprehensive list of those substances which are designated as pollutants which must be barred, and enacting the appropriate provisions. In this context several submissions were made to the effect that while the impact on human health is an important criterion in determining whether particular substances should or should not be on such a list, proven human health effects should by no means be the sole or final determining criteria.

Here it was pointed out that from an ecosystem perspective, all elements of the environment — human, animal, vegetable and others — are interdependent, and that what is a detriment in the long term for one element will inevitably be a long-term detriment to others. It was emphasized that there are volumes of specific evidence of harmful effects of particular substances on animal, bird and fish life in the Great Lakes basin, and that having regard to the urgently necessary objective of preserving the integrity of the ecosystem, no further time should be lost in including substances known to be harmful in that context on the list of prohibited or controlled substances under the Agreement; and, again, in translating those prohibition and control provisions into effective and enforceable laws and taking coordinated action to enforce them.

Demonstrating Zero Discharge Several other specific suggestions or recommendations should, we think, at least be mentioned

in this Report. One that came from several sources, and received widespread indications of support, was that a start should be made now, at least on a trial basis, on a program of zero discharge. It was specifically recommended in more than one submission that a start should be made by using Lake Superior as a test case. Reasons put forward in support of this suggestion included the fact that the Lake Superior area is not as intensively industrialized as the other lakes, and thus a test or trial run to identify the problems and practicalities of such a program would be less difficult there. Further, the lessons could be applied immediately on a basinwide basis, and it was felt that Lake Superior is a good starting point for such a cleanup effort since its waters are eventually distributed throughout the entire system. One other important matter of detail, the subject of a widely supported submission, should be noted. This related to the subject of zero discharge, and the trial or test run suggested for Lake Superior. It was also suggested, and appeared to be widely supported, that an immediate ban be placed on the use of chlorine in the process of pulp and paper production.

Continuing Citizen Input A related criticism/suggestion was that the Commission and its Boards are not in sufficiently direct contact on a continuing basis with the lakes and their problems, and that the Commission should set up a citizens' advisory board for each lake in order to receive continuing and practical public input on the problems that exist and the means and progress with respect

to their elimination. This reflects a continuing and growing expression of concern provided on other occasions that sufficient arrangements are not in place to ensure public input into such questions as, where are the problems and what is required by way of preventive and remedial measures, nor to secure public involvement in the design and implementation of specific remedial measures.

Involving Native Peoples A closely related criticism and concern was expressed by several representatives of Native Indian Bands or Associations who made submissions. They pointed out that their people have for centuries been dependent on, but lived in harmony with, their environmental surroundings — that they have been in truth a harmonious part of the ecosystem. Since they still rely on the integrity of the ecosystem to a greater degree than the non-Indian population, they are more directly and adversely affected by disruptions of that system. They asked for greater appreciation of this situation and greater opportunity for effective input and acceptance of their view that prevention at source, not cleanup after the event, is the only practical and effective approach to the problem of maintaining the integrity of the ecosystem.

The Commission's Agenda for Public Consultation In connection with the two last mentioned criticisms and suggestions, the Commission announced at the meeting itself that measures are under development which should result in appropriate response. First, with respect to public input, a commitment has been made and

plans are now being completed for a series of roundtable conferences at various sites throughout the basin to discuss specific Agreement-related problems. It is expected, and intended, that these will result not only in the immediate opportunity for public participation, but also in the development of concrete and workable plans for public input on a continuing basis and at satisfactory levels.

Public Education and Responsibility Closely related to, but requiring separate consideration from, the matter of public input is another matter receiving mention: the necessity for public education, not only as to the extent and imminence of irreversible damage to the environment and the urgency for measures to meet that threat, but also the extent to which those measures will require acceptance of substantial alterations in many of our ways of or approach to living, as well as of the substantial costs of those measures. In this context, it was interesting to observe that while there were strong and generally accepted views that those members of the industrial and commercial community who create and/or release the damaging substances must bear a fair and proportionate cost of implementing the new approach, nevertheless there seemed to be a prevailing opinion that there will inevitably be a substantial cost to be borne by governments — that is, the general citizenry of our countries — and that those citizens are, in general, prepared to accept this cost as the unfortunate but necessary price of saving the

environment.

On the subject of public education emphasis was repeatedly placed on the necessity for our school system to introduce to all children, from the earliest age, knowledge and understanding of our interrelationship with the environment, of our dependence on the integrity of the ecosystem of the basin, and of the responsibility of each individual and the community to ensure that nothing in human conduct is allowed to imperil that integrity. This theme was reflected also in the comments of several high school students who reported on the results of a day-long educational conference called "The IJC, the Great Lakes and You," held earlier in the week. A number of goals for the year 2020 were developed by the students, together with specific projects that could be undertaken to demonstrate environmentally-sensitive behaviour in their schools and communities. The expectation of a more hopeful future and the recognition of personal responsibility to help achieve it underlay much of this commentary.

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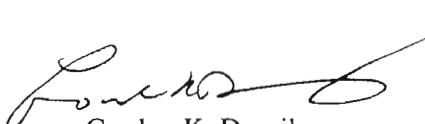
s stated above, the purpose of Part I of our Report primarily is to bring to the attention of the Governments of Canada and the United States the concerns of the public about Agreement-related problems. With respect to certain of these and other matters, we will be making recommendations in Part II of the Report. With respect to matters of internal organization or conduct of the Commission, relevant actions proposed or underway have been indicated above. This leaves the broad area of enforcement of Agreement principles and objectives — the general subject for which there was expressed such widespread concern and unanimous agreement that positive steps to translate Agreement objectives into effective and enforceable legislation are desperately needed.

On this matter we believe that it is so vital that there be continued public confidence in and support for the Agreement and Agreement-related activities, and that the grounds for concern are so real, that we should bring this public concern to the attention of the Parties and jurisdictions at the earliest moment. That is the purpose of this Part I of our Biennial Report.

As to conclusions and recommendations, these will be included in Part II of the Report, which will follow shortly. In that document we shall incorporate some of our conclusions on specific matters drawn from consideration of the reports of the Water Quality and Science Advisory Boards and other reports and input, together with our recommendations based thereon. We shall

incorporate also recommendations based on our conclusion with respect to the matter of Agreement enforcement discussed in this Part, which conclusions however will in turn be drawn from a consideration not only of the public input at the Hamilton meeting but also of our Board Reports as well as of various other sources of input. That broad spectrum of input will in turn be the base for the specific recommendations set out in Part II.

Signed this 8th day of February 1990 as Part I of the Fifth Biennial Report of the International Joint Commission pursuant to the Great Lakes Water Quality Agreement of 1978.



Gordon K. Durnil
Co-chairman



E. Davie Fulton
Co-chairman



Donald L. Totten
Commissioner



Robert S.K. Welch
Commissioner



Claude Lanthier
Commissioner

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Fifth Biennial Report on

Great Lakes Water Quality

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