1977

Great Lakes Focus on Water Quality: vol.3 iss.1

UWindsor Administrator
University of Windsor, scholarship@uwindsor.ca

Follow this and additional works at: https://scholar.uwindsor.ca/ijcfocus

Part of the Life Sciences Commons, and the Water Resource Management Commons

Recommended Citation
Administrator, UWindsor (1977) "Great Lakes Focus on Water Quality: vol.3 iss.1," Focus on International Joint Commission Activities: Vol. 3 : Iss. 1 , Article 1.
Available at: https://scholar.uwindsor.ca/ijcfocus/vol3/iss1/1

This Article is brought to you for free and open access by the International Joint Commission at Scholarship at UWindsor. It has been accepted for inclusion in Focus on International Joint Commission Activities by an authorized editor of Scholarship at UWindsor. For more information, please contact scholarship@uwindsor.ca.
COMMISSION PUBLISHES AGREEMENT REVIEW

In February the International Joint Commission sent its “Special Report on Various Provisions of the Great Lakes Water Quality Agreement” to the Governments of Canada, the United States, the eight Great Lakes States and the Province of Ontario. Highlights of that report follow. For a copy of the report in its entirety, write to the Focus Editor.

The 1972 Great Lakes Water Quality Agreement required that the Parties conduct a comprehensive review of its operation and effectiveness during the fifth year. In its Fourth Annual Report, dated September 16, 1976, the International Joint Commission stated it would prepare a special report on various provisions of the Agreement for consideration by the Governments in their review.

In preparing the report, the Commissioners consulted with the Co-Chairmen of the Great Lakes Water Quality Board and of the Research Advisory Board, as well as their staff. However, the assessment and recommendations expressed in the report are those of the Commission itself. The report concentrates on those aspects with which it has some responsibility.

INTRODUCTION

The general concept reflected in the Agreement has proven to be sound. Basically it provides for agreement on specific water quality objectives for the boundary waters, with each country committed to developing and implementing the programs and other measures required in its territory to achieve those objectives, and with provision for coordination where the programs interface.

The Agreement provides a strong basis for dealing with existing water quality problems and a framework for dealing with the future pollution problems.

While the high hopes of 1972 for quick results in cleaning up existing pollution and preventing further deterioration of water quality have not all been realized and there have been public expressions of disappointment, much has been achieved. The stage is set for continued progress towards the goals of the Agreement. Both countries are committed to and have major programs underway for municipal sewage treatment and phosphorus removal facilities. Industrial pollution control has shown some progress and the emphasis is shifting now to monitoring, surveillance and enforcement of legal requirements. Some nearshore waters have shown noticeable improvement in quality and phosphorus loadings have been reduced, although the agreed loading targets have not been achieved. Legislation for controlling toxic contaminants, though not implemented, has been enacted in both countries. Whether or not this legislation is adequate to protect the environment from all known and future adverse effects of toxic contaminants is still to be determined. The existing water quality conditions are much better known because surveillance activities have been expanded. This permits more effective consideration of necessary remedial measures. The general public is also better informed concerning the condition of the waters.
and the status of pollution control in the Lakes.

While much remains to be done to restore the water quality of the Lakes and to deal with emerging problems that threaten their future, the Commission believes that the necessary programs and other measures can be implemented without any substantial changes in the Agreement itself.

Effective municipal and industrial waste treatment and phosphorus removal facilities are still a short-term priority. The long-term problems involved in reducing pollution from diffuse sources such as atmospheric fall-out and various land use activities will require more time for solution, but are nonetheless important.

Finally, the Commission believes that the fundamental principles of non-degradation and enhancement of water quality where required should continue to be the basis of the Agreement.

WATER QUALITY OBJECTIVES

The Commission will soon be forwarding to the Governments recommendations concerning the revision of some general and specific water quality objectives and the establishment of other new objectives which, if accepted, will become part of the Agreement. The proposed objectives have been designed to protect the most sensitive beneficial uses of the waters. Although this concept may be just an extension of the principles underlying the existing objectives, the Commission feels that it clarifies the definition of the Agreement’s goal of “restoring” water quality. The development of such new concepts reflects the improved perception of Great Lakes water quality which has emerged as a result of experience in implementing the Agreement.

That different concepts can be developed within the framework of the Agreement says much for the flexibility of its provisions concerning water quality objectives. This flexibility must be preserved.

Difficulties were encountered in formulating the new and revised water quality objectives due to inadequate information on the effects of certain pollutants on public health and the environment. A great deal more attention and money should be devoted to this research so that well-founded water quality objectives may be established. Once established, these objectives would be the basis for more effective early identification of potential water quality problems.

TOXIC SUBSTANCES

Toxic substances, e.g. heavy metals and persistent organic contaminants, may well be the most serious problem governments face in ensuring future beneficial uses of the Great Lakes. They pose serious threats to water quality, the fishery, human health, and the ecosystem in general. Too little is known of the identity of these substances, their sources, amounts present, characteristic forms and behavior, and their effects. Control and monitoring programs are imperative, but research is urgently required to permit both the early identification of such substances and the establishment of appropriate water quality objectives.

The Commission urges the Governments to implement recently enacted toxic substance control legislation as quickly and as comprehensively as possible.

PUBLIC HEALTH ASPECTS

There is a lack of available information on what adverse effects various pollutants, both organic and inorganic, may have on the public health. In some areas where information is available there are differing opinions among the jurisdictions as to the seriousness of their public health effects, e.g. mirex in Lake Ontario.

The Commission recommends that the Governments determine what can be done to strengthen all public health related pollution control efforts in the Great Lakes Basin during perhaps the next five years.

For instance, the Commission considers radioactivity a major potential threat to public health and intends to monitor developments closely. The Governments are urged to complete their consideration of refined radioactivity objectives as soon as possible.
TARGET DATES

Since December 31, 1975, the Great Lakes Water Quality Agreement has been without a time frame against which progress in the implementation of programs can be measured.

The Commission believes that Governments should at the very least set general time frames for the development and implementation of remedial measures for those 63 problem areas identified in the Water Quality Board's Fourth Annual Report, and such other problem areas as may be identified in the future. A number of specific target dates can be identified for the uncompleted municipal and industrial projects. They may well be those currently being used by the respective control agencies for enforcement purposes, but there are obvious advantages in having such targets agreed as acceptable to the Parties.

PHOSPHORUS

Annex 2 of the Agreement set out "anticipated" loadings for lakes Ontario and Erie. These loadings were based upon the prevailing knowledge of total loadings to the lakes combined with load reductions expected to result from phosphorus control programs. Similarly, Appendix I adopted on November 21, 1973 set out anticipated loadings for lakes Superior and Huron.

These reductions have not been achieved because of delays in the construction of treatment plants as well as inefficient operation of those which have been completed.

Loadings of phosphorus to the Great Lakes are significantly greater than was originally thought because of the contributions from atmospheric fallout, non-sewered population, land drainage and resuspension of lake sediments. Since these sources are not easily controlled, and early reduction in loadings (and thereby in eutrophication) must be achieved by improved municipal and industrial control programs, the Commission is convinced that the completion and efficient operation of municipal and industrial treatment facilities must be pursued with renewed vigor, particularly at Detroit and Cleveland.

Strict limitations on the phosphates content of detergents used in the Great Lakes Basin would hasten reduction of phosphorus loadings to the lakes. All jurisdiction in the Basin are urged to establish such restrictions. The Commission cautions, however, that the "builders" used as substitutes for phosphates in detergents must be carefully evaluated to ensure that they do not themselves endanger public health and the environment.

To control phosphorus loadings from diffuse sources in the longer term, the Governments should identify the magnitude of these inputs and develop control strategies.

Finally, the Commission recommends that Annex 2 (Control of Phosphorus) of the Agreement be reviewed in the light of current knowledge and updated.

POLLUTION FROM LAND USE ACTIVITIES

The Reference on Pollution from Land Use Activities is expected to produce recommendations of major importance in 1978. Some of these recommendations may require changes or additions to the Agreement to permit their effective implementation. In the interim, any failure to meet the water quality objectives that is attributable to land use activities will be drawn to the attention of the Governments in the Commission's reports.

LAND USE PLANNING

Planning activities in the Basin have not always recognized the water quality objectives of the Agreement as internal constraints on development. This situation must be remedied to avoid further water quality deterioration resulting from population growth, resource development and increased water use. Therefore, the Commission recommends that the Governments consider measures to increase the effectiveness of land use planning at all government levels as it relates to water quality in the Great Lakes.

The Commission does not review plans and policies for future land use developments and often is not informed of them in advance. The Commission recommends that the Governments agree to provide information to the Commission as early as possible in the planning stages, on any projects and programs
which represent a major change in land use in the Basin and which, if implemented, may adversely affect boundary waters quality. The Commission could then disseminate such information to all jurisdictions in accordance with Article VI of the Agreement.

**FUNDING**

Procedures being followed in financing activities under the Agreement have sometimes resulted in funding delays. The Commission recommends that the Governments review these procedures and, wherever possible, revise them to minimize such delays. One revision that might be considered is that the Great Lakes Basin activities of the various agencies in each country under the Agreement be included as a line item in their respective budgets, rather than in various categories under the national programs as at present. This would recognize the Great Lakes as a unique bi-national resource which merits national attention, and would facilitate the administration of the agencies' Great Lakes programs.

**JOINT ACTIVITIES ENVISAGED BY THE AGREEMENT**

There are numerous "joint activities" envisaged by the Agreement, but generally the responsible agencies are not specified, nor are the procedures that they should follow; no provision is made for informing the IJC of progress or results. Consequently, it has been difficult or impossible for the Commission to discharge its responsibilities under Article VI of the Agreement to collate, analyze and disseminate information on the operation and effectiveness of the programs and other measures, to tender advice to Governments, to provide assistance in coordination of the joint activities and to assess their effectiveness. What little information has been obtained indicates that progress in the joint activities has been slower than expected. In no case has the joint activity been carried to completion and the results communicated to the IJC.

The Commission recommends that the Parties not establish any additional joint institutions related to the Agreement that would operate in isolation from or outside the ambit of the International Joint Commission. The Commission also requests the Parties to confirm or correct its understanding that the responsibilities and functions of the Commission under Article VI of the Agreement relate to all aspects of the Agreement, including the joint activities undertaken by or on behalf of the Parties.

The Commission has received no request for assistance in coordinating joint activities. Some of the activities may have progressed to a point where assistance would not be helpful. However, the Commission is willing to assist by establishing either a special board or a committee of the Great Lakes Water Quality Board to be responsible for coordinating the joint activities and providing information and advice to the Commission.

**SURVEILLANCE AND MONITORING**

The Commission again stresses the need to implement a comprehensive water quality surveillance and monitoring program to provide the information necessary to identify water quality issues, to assess the achievement of water quality objectives, and to relate achievement or non-achievement of the objectives to a particular cause. The Commission urges Governments to ensure long-term funding in support of the International Great Lakes Surveillance Program recommended to the Governments on August 27, 1976.

**JOINT INSTITUTIONS**

The Commission urges continued support for the activities of the Great Lakes Water Quality Board, the Research Advisory Board, and the Regional Office. These institutions have been essential to the Commission's operations under the Agreement. Recently the Commission approved a change in operational procedures of the Research Advisory Board. These changes will enable the Board to involve the research community more directly in the specific problems with which the Commission is dealing, and thereby strengthen the Board's capacity to serve as principal research advisors to the Commission.

**IMPLEMENTATION OF THE AGREEMENT**

The Commission recognizes that the concerted efforts of the Governments have
resulted in many successes since 1972. It feels that continued efforts of the Parties over at least the next five-year period are vital to the ultimate success of the Agreement. The Governments are therefore urged to renew their commitment expressed in the Agreement to seek necessary legislation, funding, and the cooperation of the State and Provincial Governments.

PUBLIC INFORMATION

Many of the recommendations which the Commission makes under the Agreement, if implemented, would have significant social and economic impacts on residents of the Basin. The Commission has attempted to better inform the public on Great Lakes water quality issues and to provide opportunities for public comment.

The Commission believes that the value of a well-informed public should be recognized by the Governments in their implementation of the Agreement.

DRILLING IN LAKE ERIE

In 1970, the International Joint Commission reported to Governments on this question. The Commission recommended that no oil or wet gas drilling be permitted in Lake Erie, but said that natural (dry) gas drilling would be feasible in the eastern 2/3 of the Lake. The Great Lakes Water Quality Board, at its Cleveland meeting March 9, 1977, re-endorsed the International Joint Commission position. Board members will be pooling their information on dry gas drilling and regulations.

The Province of Ontario has conducted a dry gas drilling program in its Erie waters since 1913. State's position relating to dry gas drilling are reviewed below.

NEW YORK

Except for certain water grants along the shore which have been patented by the State to individuals, municipalities and corporations, all lands under Lake Erie within the boundaries of New York State are State property. The State also owns the rights to all minerals under such lands and has exclusive right to grant leases.

The State estimates leasing no more than 25% of the 373,000 acres which are attractive for potential natural gas production. No drilling will be permitted within 1/2 mile of interstate or international boundaries, or 1/2 mile of the shoreline. No drilling will occur until a permit to drill is granted by the State and any federal agencies which may have jurisdiction in such matters, (U.S. Environmental Protection Agency, Corps of Engineers, and Coast Guard). Proof of $1,000,000.00 liability insurance or an equivalent deposit, (with the State Department of Environmental Conservation), will be required to cover costs of emergencies or accidents, cleanup or containment. Further, all installations and vessels will be required to have contingency plans to deal with spills or accidental discharges of deleterious materials.

The State Department of Environmental Conservation's February 1, 1977, report to the Legislature on the Development of Natural Gas Reserves beneath the New York State portion of Lake Erie contains detailed requirements for reporting and for the drilling operations themselves. The report's basic conclusion is that "drilling for and production of the natural gas reserves submerged beneath the New York State portion of Lake Erie can be accomplished without particular risk to the environment". The report is subject to debate and public hearings. Present law prohibits development. On March 24, the N.Y. State Assembly Standing Committee on Environmental Conservation and Subcommittee on Water Resources and Management held hearings in Buffalo on lifting the ban. Focus will report those hearings in the next issue.

OHIO

A bill has been introduced in the Ohio Legislature to allow drilling for natural gas and the capping of wells should they produce oil or wet gas.

PENNSYLVANIA

The Commonwealth of Pennsylvania studied the question in the 1960's and had a few wells in Lake Erie. After holding public hearings, Pennsylvania determined that the technology exists to safely proceed with drilling. In mid-February Governor Milton Shapp signed an ex-
Executive order, effective March 16, rescinding the ban on drilling in the Pennsylvania's Erie waters. Arrangements can now be made to begin drilling for gas.

**MICHIGAN**

The State of Michigan is opposed to any drilling anywhere in its waters where oil or wet gas might be encountered. That precludes any drilling.

**BRIEFS**

Of the 183 municipal sewage treatment plants in Ontario, 177 now have phosphorus removal installations fully operational. The remaining six should be on line this spring. With that polluting sector generally under control, the Ministry of the Environment is considering control of industrial dischargers of phosphorus and has adopted guidelines to that end.

The extremely effective insecticide Leptophos, (Phosvel in Canada), has been banned in the United States. Canadian Health Minister, Marc Lalonde, also recommends it be banned in Canada. A decision is expected before this spring when the chemical would otherwise be used. Leptophos has been linked to nervous system problems and crippling in animals.

Canada Centre for Inland Waters scientists are pursuing numerous studies of toxic substances:

W. Strachan—identification and behaviour of toxicants, particularly in sediments; P. Hodson—toxic metals in fish; Y. K. Chau—lead; P. Wong—toxic metals effects on algae, G. Tsang and E. C. Chen—oil in flowing waters; P. Sutton—ammonia in effluent; B. Oliver—chlorinated organics effect on organic decomposition; K. Kaiser and D. Liu—mirex.

The United States Environmental Protection Agency adopted final regulations on January 19, 1977, prohibiting all direct discharges of PCBs (polychlorinated biphenyls) into waterways. Pretreatment regulations to cover sources which discharge indirectly through municipal treatment plants are being developed.

Ontario's Environmental Assessment Act has exemptions (as stated in December issue). For clarification of which provincial government works are covered by the Act, see pages 7-13 of *EA update*, January issue. That issue also has a glossary of terms which are used in the assessment process (pages 14-19). For a copy of that issue or the first issue of this new publications, write to: *EA update*, Publications Service, 3B-7 MacDonald Block, Queen's Park, Toronto, Ontario M7A 1N8. To receive future issues of this publication, which is free at present, write to: *EA update*, Information Services Branch, Ministry of the Environment, 135 St. Clair Avenue West, Toronto, Ontario M4V 1P5.

Michigan's "Safe Drinking Water Act" was signed into law January 4, 1977. The State's Department of Public Health has the rule making authority.

On December 15, 1976, Canada's Minister of Fisheries and the Environment, Romeo LeBlanc, announced that all non-essential uses of the F11 and F12 fluorocarbon propellants will be eliminated by 1978. By the end of 1977, the amount used will be reduced by half, to 15-million pounds, by the voluntary actions.


**LEGAL AND ECONOMICS WORKSHOP**

On February 21-22, in Windsor, 107 people attended the Great Lakes Research Advisory Board's Workshop on the Legal and Economic Mechanisms and policies which can be applied in the Great Lakes Basin to help meet environmental objectives.
maries of their papers on urban and agricultural non point pollution problems. Dr. Clive Southy of the University of Guelph summarized the Anthony Scott paper on the topic, "Who Pays for Past Mistakes?" Four panelists gave their comments and general discussion followed.

During the first day, discussions centred on the control of point sources. Mr. Blair Bower of Resources for the Future, Washington, D.C.; Donald N. Dewees of the University of Toronto; David Estrin, environmental lawyer from Toronto; and Jeffery Haynes of the Environmental Law Institute in Washington presented summaries of their papers.


In addition to the papers, presentations and discussion highlights, proceedings will include: policy lists generated during workshop sessions on both days, research needs, recommendations, conclusions, a list of participants and background papers prepared by the Workshop Planning Committee. Write to the Focus Editor if you would like to receive a copy of the documents.

CITIZEN'S GROUP HOLDS WORKSHOPS

The International Joint Commission has awarded a contract to Great Lakes Tomorrow to hold six informational workshops in the Lake Superior and Lake Huron basins on the report of the Upper Lakes Reference Group. Sigurd Olson Institute of Northland College in Ashland, Wisconsin, and the Conservation Council of Ontario, headquartered in Toronto, will co-ordinate the workshops in their areas and Great Lakes Tomorrow will carry out overall management of the workshops on the entire program.

The workshops will be held in Duluth, Min-
nesota; Thunder Bay, Ontario; Sault Ste. Marie, Ontario; Bay City, Michigan; Midland-Collingwood, Ontario; and Houghton, Michigan. Local co-ordinators will be appointed for each community. To learn who the co-ordinators are, and when the meetings will be held in your area, write to Richard Robbins, Great Lakes Tomorrow, 53 West Jackson Blvd., Chicago, Illinois 60604.

Content of the workshops will be flexible, but it will include a background on the Reference Group's report and recommendations, the role and function of the IJC, the format for the IJC hearings to follow the workshops, "How to's" in making effective presentations to the Commission, and the local significance of recommendations in the report.

The IJC will hold hearings on the Upper Lakes Reference Group's Report the weeks of June 26 and July 11. Specific times and places will be publicized.

**COMMISSION PUBLICATIONS**

Three proceedings of workshops will soon be available from the Regional Office: *Fluvial Transport of Sediment-Associated Nutrients and Contaminants*, (co-sponsored by the Pollution from Lake Use Activities Reference Group and Great Lakes Research Advisory Board), *Environmental Mapping*, (sponsored by the Great Lakes Research Advisory Board), and *Great Lakes Surveillance Monitoring*, (sponsored by the Surveillance Subcommittee of the Great Lakes Water Quality Board.

A number of Agreement publications are out of print. Because of high demand, several have been or are being reprinted; *Proceedings of a Symposium on Structure-Activity Correlations, 1975 Annual Report of the Great Lakes Water Quality Board*, and its Appendix C - Remedial Programs. The Proceedings should be available in April. Copies will be sent to all who requested it, and to all future inquirers. Annual Reports and Appendix C's have been sent to those whose requests were on file. If you have not received yours yet, please write again.

Recently, proceedings of a Research Advisory Board workshop on *The Dynamics of Stratification and of Stratified Flow in Large Lakes* were published.

Persons who would like to receive copies of the Fifth Annual Reports of the Great Lakes Water Quality Board, Great Lakes Research Advisory Board, and the Progress Report of the Pollution from Land Use Activities Reference Group, can pick them up at the International Joint Commission's Annual Meeting in Windsor, or may write to the Regional Office to request the particular reports they wish to have sent.

**MEETINGS**

On June 25, the American Society for Testing Materials Committee on Water will sponsor a symposium on "Native Aquatic Bacteria, Enumeration, Activity and Ecology" at the Radisson Hotel, Minneapolis, Minnesota. For further information contact: Dr. R. Colwell, Department of Microbiology, University of Maryland, College Park, Maryland 20742.

Another ASTM (D-19) sponsored symposium, "Methodology for Biomass Determinations and Microbial Activities in Sediments", will be held at the Galt Ocean Mile Hotel in Fort Lauderdale, Florida on January 30-31, 1978. For more information, contact: Dr. P. Seyfried, University of Toronto, Department of Microbiology and Parasitology, Fitzgerald Building, 150 College Avenue, Toronto, Ontario. Abstracts of no more than 250 words are to be submitted to Jane Wheeler, ASTM, 1916 Race Street, Philadelphia, PA 29202, by September 1, 1977. Authors should state session preference as: microbiological and enumeration procedures, biomass estimation or microbiological activities. Accepted papers must be submitted by December 1, 1977.

The Golden Anniversary Conference of the Water Pollution Control Federation will be held in Philadelphia, October 2-7, 1977. For general information write to the Federation at 2626 Pennsylvania Avenue, N.W., Washington, D.C. 20037, or consult the November, 1976 issue of the group's newsletter *Highlights*. Kenneth H.
Walker, Deputy Director of the IJC Regional Office will be presenting a paper regarding progress under the Great Lakes Water Quality Agreement.

On April 28, the Ecology Club of Groves High School in Birmingham, Michigan, is holding its Fifth Environmental Teach-In. Instead of attending classes, students, teachers and invited guests attend lectures related to pollution and ecology. As many as 1700 participate in up to 29 parallel sessions during four scheduled time periods. As far as we know, in no other school in the Basin does the administration allow the activities of one full day to be planned by a student environmental club. Write to the Focus Editor if you know of similar programs.

Great Lakes Tomorrow (GLT) has received a grant under the Canadian Local Initiatives Program. It will carry out a pilot project to begin building public awareness of land use related pollution in the area between Oakville and St. Catherines's, Ontario, in the Western Lake Ontario Basin.

Late in 1978, the IJC proposes to hold public hearings on the report of its Pollution From Land Use Activities Reference Group (PLUARG). GLT is beginning now to generate interest in the remedial measures the Group may recommend in its report.

The first phase of the program will begin April 23, 1977, starting at 9:00 a.m. at Canada Centre of Inland Waters in Burlington. GLT will sponsor a citizens’ workshop where there will be presentations on the IJC and how it functions, PLUARG and the relation of land use to water pollution, and how people can become involved in PLUARG and the Commission’s hearings.

Registration for morning donuts and coffee, lunch, and afternoon coffee will be $10.00. For more information write Gil Simmons, Great Lakes Tomorrow, 449 Bay Street North, Hamilton, Ontario, L8L 1N2.

On January 14, 1977, in Toronto, a one-day seminar sponsored by the Ontario Region of the Canadian Department of Fisheries and the Environment, was held to afford the interested public an opportunity to discuss the recommendations of the International Working Group on Dredging. Of the seventy-nine individuals who attended, thirty were non-government; five were representing citizen groups. Citizen involvement aspects of the meeting included recommendations that:

1. The local recipient of the disposed spoil should be included in planning so that its priorities are recognized (e.g. a municipality may have use for the spoil, but unless aware of the timing of its “arrival”, will not have considered it in current budgets). To satisfy the public as to the compatibility of disposal to local planning and other concerns, citizens should be informed and involved.

2. Small wetlands in the urban concept are of social benefit and should be protected. Decisions leading to their loss rarely include public consultation. Mr. M. Singleton, Ontario Federation of Naturalists, expressed four concerns in this regard:
   (a) Site specific, case-by-case review of dredging projects to protect long-term quality allows rationalization of local degradation, allowing an incremental degradation of the total values intended to be protected. A set of guidelines and long-term goals are required to give an overview of the degree to which individual projects meet, or are compatible with the achievement of such goals.
   (b) Recommendations for the protection of wetlands should be strengthened and guidelines set to prevent any further loss. Where losses do occur, provision should be made for off-setting measures (e.g. creation of new wetland areas).
   (c) All relevant legislation should be reviewed and consolidated into a single Act, administered by a single authority and applied to dredging in all waters, not just “navigable” waters.
   (d) Any dredging project, regardless of size, should be subject to an environmental assessment process if it is likely to have adverse impact. Procedures and guidelines are ineffective without...
positive enforcement measures.

PEOPLE

Frederick O. Rouse, 7½ years the Chairman of the Great Lakes Basin Commission, assumed new duties on February 28, as Executive Director of the St. Johns Water Management District in Palatka, Florida.

Keith A. Henry, Canadian Commissioner of the International Joint Commission, was elected Chairman of the Consulting Engineers of British Columbia for 1977.

In this quarter, many new members have been appointed to the Great Lakes Water Quality Board and Great Lakes Research Advisory Board. Sandra Gardebring is the new Executive Director of the Minnesota Pollution Control Agency, and that State’s representative to the Great Lakes Water Quality Board, replacing Peter Gove. John R. Hickman, Director of the Bureau of Health Hazards (air and water) for Health and Welfare Canada is the first representative of that agency on the Water Quality Board. Dr. Virginia Prentice of Ann Arbor, Michigan, Professor José Llamas of the University of Laval in Québec City, Mrs. F. Edna Gardner of Toronto, Dr. G. H. Tomlinson of Domtar Limited in Montréal, and Dr. James Day of the medical faculty at Queen’s University, Kingston, Ontario, are the new Research Advisory Board appointees.

LAW AND THE COURTS

The Minnesota’s Pollution Control Agency and Department of Natural Resources acted unlawfully in rejecting Reserve Mining’s application to dump taconite tailings at Milepost 7, according to the Sixth District Court of the State of Minnesota. At the time of printing, Focus had not heard that any appeal had been filed.

The Ontario Environment Assessment Act now applies to quote, “major commercial or business enterprises or activities or proposals or programs in respect of major commercial or business enterprises or activities ...”. Reed Paper Limited’s proposed development project for 18,983 square miles in the Kenora—Patricia—Thunder Bay area is currently the only one affected. Mr. Justice Patrick Hartt was appointed Chairman of the Environmental Assessment Act Inquiry into the Reed proposal. The Chairman can, under the Act, make “such surveys, examinations, investigations, tests and inquiries, as he considers necessary.” Premier William Davis announced that the power Justice Hartt would have “to cross-examine, take testimony under oath, and subpoena ... to examine broad, social, cultural, economic and sociological concerns of the native community as well as a full assessment of any impact on historic hunting, fishing and trapping rights of our native people, will greatly enhance the ultimate opportunity, which the in-
quiry under the Act will have, to reach an equitable and fair determination...the chairman of the inquiry will be free to hold hearings of a community nature on reservations and a technical hearing or hearings in Thunder Bay."

**TASK FORCE ACTIVITIES**

Professor Joseph Shapiro of the University of Minnesota-Minneapolis, is Chairman of a special task force which the Great Lakes Research Advisory Board has established to investigate the ecological effects of non-phosphite detergent builders. The task force has six members and three liaison members; two of the latter represent industrial associations.

A closely related task force is reviewing research findings on the human health implications of NTA in order to provide the Research Advisory Board with advice about the adequacy and validity of research and to recommend a course of action for the International Joint Commission. Paul D. Foley of the Ontario Ministry of the Environment is the Chairman of this seven-member group.

Dr. N. W. Schmidtke of Canada Centre for Inland Waters heads an eight-member task force on water and wastewater treatment.

The Chlorine Objectives task force is a seven-member group chaired by Dr. G. C. Becking of the Canadian Department of Health and Welfare. This group recently completed its final report, covering numerous issues including: the bioaccumulation of chlorinated organic compounds in the Great Lakes; alternate means of disinfection; some general guidelines to reduce chlorine usage at municipal wastewater treatment plants; and the interactions and complaints that might arise in attempting to achieve both the existing International Joint Commission microbiology objective and the proposed chlorine objective.

The Board will review the task forces' reports with the view of making recommendations to the International Joint Commission.

**BOOKSHELF**

"Polychlorinated Biphenyls in Municipal Wastewaters: An Assessment of the Problem in the Canadian Lower Great Lakes", (Research Report No. 49), reports the results of a survey of PCB concentration in 33 municipalities' raw wastewaters. Write for a copy from: Ontario Ministry of the Environment, 135 St. Clair Avenue West, Toronto, Ontario M4V 1P5.

The Ohio Division of Wildlife has developed a publication entitled, *Scientific Collectors Guide.* Copies of the new publication, suited to all levels of readers, can be obtained from the Division of Wildlife, Ohio Dept. of Natural Resources.

"Citizens' Bulletin" is distributed free of charge by the Information Services Directorate, Fisheries and Environment Canada as a service to non-governmental groups. To be added to the mailing list, write to: Citizens' Bulletin, Information Services Directorate, Fisheries and Environment Canada, Ottawa, Ontario K1A 0H3.

For an article on Reyes Syndrome in plain English, read the November, 1976, issue of *Environment Midwest.* Studies are being conducted to test the hypothesis that exposure to insecticides linked with later viral infection may bring about the disease. The disease was first discovered in 1963, but 14 years later the causes and cures are still not defined. Symptoms include persistent vomiting, listlessness and noticeable personality alterations. The liver begins malfunctioning, causing ammonia levels to rise in the bloodstream. Blood sugar drops and pressure builds on an already inflamed brain. Fatty degeneration of the intestines occurs. Death can follow the first symptoms in as little as 3 to 4 days. The disease is about 35-40 percent fatal, but early diagnosis and treatment would improve that percentage. Reyes strikes children between infancy and 16, but is most common in children 5-8 years old.
IJC ANNUAL MEETING

Mark your calendar and plan to be in Windsor, July 18-21, 1977. The International Joint Commission will hear the Fifth Annual Reports from its institutions under the Great Lakes Water Quality Agreement for the calendar year 1976 in meetings open to the public.

Prior to the meetings, there will be a news briefing on Monday morning at 9:00 a.m. by the six Chairmen of the Great Lakes Water Quality Board, Research Advisory Board, and Pollution from Land Use Activities Reference Group to present highlights of their three reports. All documents will be made available at that time.

Sessions will begin Monday afternoon with the Report of the Pollution from Land Use Activities Reference Group. That Group will continue to make presentations on Tuesday morn-

ing. On Wednesday, all day, the Research Advisory Board and its expert committees and task forces will report. On Thursday, the Great Lakes Water Quality Board will report until 3:00 p.m. At that time, a wrap-up briefing and news conference may be scheduled.

All meetings are to be held on the 12th floor of 100 Ouellette Avenue, in the facilities of the International Joint Commission Great Lakes Regional Office.

Anyone wishing more information about the meeting should write to the Regional Office. As soon as details are available, schedules will be sent.

FOR ADDITIONAL COPIES

Write to Patricia Bonner - Editor, Great Lakes Focus, IJC Regional Office, 100 Ouellette Avenue, Windsor, Ontario, Canada N9A 6T3.