



INTERNATIONAL JOINT COMMISSION
UNITED STATES AND CANADA
WASHINGTON, D.C. 20440



November 14, 1986

Honorable George P. Shultz
Secretary of State
Department of State
Washington, D.C. 20520

Dear Secretary Shultz:

As Governments are well aware Great Lakes water levels continue to be extremely high. As the fall storm season approaches, there is general agreement that with the current levels on the lakes, the potential for a possible emergency and extensive damage is high. In addition, it is expected that high water levels will be with us for an extended period of time. As a result of this serious and worsening situation, the Commission has decided to respond with this initial report under the Governmental Reference dated August 1, 1986.

To the Commission's knowledge there is at present no comprehensive effort to identify Great Lakes shoreline areas which are particularly vulnerable to storm surge activity. The Commission believes there is a need to improve advanced tracking and warning systems, and the forecasting and communication of information regarding the predicted impact of storm-related wave action. Existing programs such as the hurricane watch directed by the National Oceanic and Atmospheric Administration, and the forecasting services of the Atmospheric Environment Service, might well be used as models to expand upon.

In summary, the Commission believes there is an urgent need to improve both existing information about areas at risk and existing storm related predictive capacity in the Great Lakes Basin; and there is a need to communicate this information effectively to shoreline interests. The Commission also believes that evaluations of existing emergency and information dissemination programs may well show that additional resources need to be devoted to the problem. Accordingly:

1. The Commission recommends that Governments immediately act to improve early storm and storm surge forecasting and warning programs for the Great Lakes Basin. Further;
2. The Commission recommends that Governments act immediately to ensure that pre and post-storm emergency relief measures currently available through agencies of the respective federal governments, Great Lakes jurisdictions and others are adequate for dealing with the current state of emergency.

In 1985 the Commission recognized the impending danger of the high lake levels and organized and participated in public meetings and briefings whenever possible. Representatives of various federal agencies and Great Lakes jurisdictions were often members of briefing teams. These initiatives, in conjunction with a Commission sponsored information exchange between the Great Lakes Basin States and the Province of Ontario in April 1986, were useful in the necessary process of information exchange. Further, Environment Canada has been the focus of a Canadian federal effort to coordinate current actions with respect to the high water level problem and to disseminate information to the general public. These are welcome initiatives, but the Commission concludes that the extent of the current crisis necessitates increased coordination at all levels of Government, especially with regard to planning, coordinating, and implementing pre and post-storm emergency relief measures. Accordingly:

3. The Commission recommends that Governments formally designate a federal lead agency in each country to facilitate coordination between and among federal agencies and the large number of affected agencies and groups within the Provinces of Ontario and Quebec and the eight Great Lakes Basin States. The Commission believes the designation of federal lead agencies would facilitate binational cooperation in the important areas of information dissemination and program development.

The Commission notes that a process has begun to remove the barge stuck on the International Peace Bridge in the Niagara River. Nevertheless the barge is still in place and continues to raise the level of Lake Erie. Accordingly:

4. The Commission urges Governments to continue to expedite removal of the barge.

In addition to the above measures, in its Diversions and Consumptive Uses report the Commission recommended that steps be taken to improve coastal zone management practices as a way to reduce Great Lakes flood and erosion damage. Accordingly, the possibility of implementing emergency measures to inhibit or prevent further shoreline development in areas likely to be affected by water levels and storm surges could be called to the attention of relevant jurisdictions.

The Commission, with the assistance of its Boards, itself has initiated certain actions. Specifically:

1. The Commission has directed its International Lake Superior Board of Control to retain the remaining one inch of emergency storage on Lake Superior as a result of Commission actions during 1985, and to follow Plan 1977 until further notice. As a result of this storage, Lakes Michigan-Huron, St. Clair and Erie are approximately .04 ft, .04 ft and .03 ft lower than they otherwise would be at this time.
2. To date, Commission directed criterion (k) operations and other deviations from Plan 1958-D have resulted in an overdischarge from Lake Ontario corresponding to an approximate 2 1/2 foot reduction in the level of Lake Ontario as compared to what it otherwise would be. The Commission continues to review St. Lawrence River flow limitations.
3. The Commission's Great Lakes Water Quality Board has alerted agencies of Great Lakes jurisdictions to the potential dangers posed by the current unprecedented high water level situation for dredge and other waste disposal sites which are situated near or on the shorelines of the lakes. It warned of the possibility of erosion or storm damage to the sites releasing pollutants to the Great Lakes. Further, the Board has advised responsible agencies to ensure that all potentially vulnerable dredge and waste disposal sites are identified and, if necessary, that contingency plans for their protection are developed.

In addition to the above recommendations, the Commission is reviewing measures that are technically feasible, utilizing existing facilities, some of which could lower levels on some lakes or, taken all together, could lower levels on all the lakes. The reduction in levels would be small initially although further reductions would occur over the next few years. Most of these measures carry with them the potential for a redistribution of benefits and costs, some of which were

addressed in previous Commission reports but which the Commission has not had an opportunity to revise in light of any changed conditions or improved analytical techniques. They are being re-examined as a matter of priority but a complete analysis of all these measures will not be available within a year.

1. The Ogoki and Long Lac diversions could be shut down. Past experience with these measures was reviewed in the Commission's Great Lakes Diversions and Consumptive Uses report.
2. The Chicago Diversion could be increased to the maximum extent. In its Great Lakes Diversions and Consumptive Uses report the Commission noted that the Lake Michigan Diversion at Chicago (Chicago Diversion) could at times be increased by a change in operation of existing facilities.
3. Welland Canal flows could be maximized.
4. Timely closing and opening of navigation in the St. Lawrence River could be undertaken to maximize outflows through the river. While Lake Ontario levels have not to date been setting record monthly levels, under certain supply conditions Lake Ontario could begin setting monthly record levels as early as January, 1987. Flows can be increased following the end of navigation, but prior to ice formation. The Commission notes the importance of forming a solid ice cover on the St. Lawrence River during the winter so that maximum winter outflows from Lake Ontario can be achieved. Retention of an undisturbed ice cover on the St. Lawrence River and the connecting channels, until natural spring break-up, facilitates increased outflows.

Since April of 1986 the Commission and its International St. Lawrence River Board of Control have been discussing with the Seaway Entities scenarios which could assist in maximizing Lake Ontario outflows. These discussions continue.

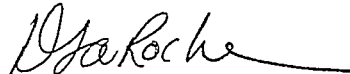
5. The Commission notes that consideration of interests in the St. Lawrence River can result in constraints on outflows from Lake Ontario. Consideration could be given to an examination of measures that could be undertaken, in appropriate situations, to make possible increased St. Lawrence River flows, taking into account all interests concerned.

6. Recently the Commission inquired of the U.S. Army Corps of Engineers as to the feasibility of employing existing valves on the miter gates of the Black Rock lock to flow additional water. The Corps has responded that these valves could be employed to discharge an additional 1,000 cfs through the Black Rock Canal facility. Also, the Corps reported that the lock filling mechanism could be operated on a test basis to increase Lake Erie outflows by an additional 300 cfs. Both of these measures could be taken.
7. The Commission notes that ice jams can and have taken place in the connecting channels with consequent flooding. Under certain conditions winter navigation can contribute to such problems. Accordingly, given current high levels in the connecting channels, winter navigation in the connecting channels could be curtailed or eliminated, thereby reducing the potential for ice jams which can cause flow retardation with consequent shoreline flooding.

The Commission will submit further reports as appropriate.

A similar letter is being sent to the Secretary of State for External Affairs from the Secretary of the Canadian Section of the Commission.

Sincerely,



David A. LaRoche
Secretary
United States Section