



US Army Corps
of Engineers

North Central Division

GREAT LAKES LEVELS UPDATE, NO. 2

3 September 1985

The Great Lakes, except Lake Ontario, continue to stay high, even though all but Lake Superior are experiencing their normal, seasonal decline. In some parts of the basin, particularly around Lake Superior, the rainfall has been extremely heavy. This has caused significant increases in the Lake Superior level and slowed the seasonal decline of the levels of Lakes Michigan-Huron, St. Clair and Erie. The approaching storm season continues to be of concern since the high lake levels could compound storm damage to shoreline property.

The enclosed bulletin shows our projected levels for the period September 1, 1985 through February 28, 1986. Lakes Michigan-Huron, St. Clair, and Erie are still extremely high and, although in their seasonal decline, are predicted to remain high for the next six months. Lake Superior is about 10 inches above average and is approaching its record highs. Lake Ontario, on the other hand, is only about two inches above normal for this time of year and is expected to fall to its normal levels by October.

The purpose of this update is to inform you of emergency actions taken to date by the International Joint Commission (IJC) and others to provide relief to Lakes Michigan-Huron, St. Clair, and Erie.

An initial action was the IJC's decision in late April to reduce Lake Superior outflows by about 30 percent below the flows prescribed by Plan 1977, the regulation plan for Lake Superior. The reduction began on 2 May and was scheduled to continue through October. However, heavy precipitation in August (35% above the average amount) on the Lake Superior basin has required the IJC to increase the Lake Superior outflows. Therefore, the August average outflow of about 81,000 cubic feet per second (cfs) was about 25% below the Plan 1977 flow of 108,000 cfs. This August flow increase was taken in an effort to prevent the criterion level of 602.0 feet (on a monthly mean basis) on Lake Superior from being exceeded. Currently, the level of Lake Superior is about 601.9 feet.

In July 1985, the International Joint Commission directed closure of all gates in the Compensating Works in order to facilitate the construction of a berm for the fishery in the St. Marys Rapids. The berm, which is designed to maintain a fish habitat in the Rapids, is expected to be completed by mid-September 1985. At that time, if the heavy rainfall continues in September, it may be necessary to increase the Lake Superior outflow to that prescribed by Plan 1977.

By the end of August, the status of the IJC's emergency action is as follows:

<u>Lake</u>	<u>Effect</u>
Superior	Up 4.2 inches
Michigan-Huron	Down 3.0 inches
St. Clair	Down 1.7 inches
Erie	Down 0.8 inch

A further action stemmed from the U.S. State Department's request to Canada to reduce the Ogoki Diversion into Lake Superior. This diversion normally flows at an average annual rate of about 4,000 cfs. Since June 28, 1985, Canada has been withholding this diversion in an effort to reduce the supplies to Lake Superior.

In addition, the Corps of Engineers' Detroit and Buffalo Districts are continuing to pursue a program for providing flood protection measures to the States of Michigan and Ohio. Potential flooding problems exist primarily along the shores of Lake Erie, the Detroit River, and Lake St. Clair. There are seven projects in Michigan that are under consideration for construction. They are: Luna Pier, Frenchtown Township, Estral Beach, Berlin Township, Brownstown Township and Detroit (St. Clair-Harding Canal and Jefferson-Chalmers areas). All other potential locations have declined participation in the program. In Ohio, seven projects are under consideration. They are: Eastlake, Reno Beach/Howard Farms, Whites Landing, Crystal Rock, Bayview, Wightmans Grove and Oregon. This program started later and construction starts will not be possible before September. In both States, protection measures will be constructed before November of this year where possible.

For Great Lakes basin technical assistance or information, please contact one of the following Corps of Engineers District offices:

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These updates will be continued for the next few months to provide additional information on the actions being taken to help alleviate high water level conditions and to provide flood protection.


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Commanding