



**US Army Corps
of Engineers**

North Central Division

Great Lakes Levels Update No. 29 3 December 1987

Through most of November, precipitation on the Great Lakes basin was light, continuing a year-long trend that began with November, 1986. Rain at the end of the month may bring the monthly precipitation up to near or slightly above its long-term average for November. However, high levels continue to diminish on the middle Great Lakes.

All of the Great Lakes are continuing their seasonal decline. As is apparent on the attached Bulletin, Lakes Michigan-Huron and Erie experienced almost no summer rise in levels this year, due to the below-average rainfall since the end of 1986. This has caused Lakes Michigan-Huron to approach average levels at a rapid rate. They now are about 0.8 foot above the long-term average for November, whereas the June levels were about 1.5 feet above the long-term average. However, Lakes St. Clair and Erie levels have improved at a much slower rate. They were about 1.7 feet above average for June and they are now 1.3 feet and 1.4 feet, respectively, above average for November. On Lakes Michigan-Huron, St. Clair and Erie,

some caution is appropriate for the fall and coming spring storm seasons.

For the Lake Superior outflow, a winter gate setting in the Compensating Works is usually established in December, to remain fixed over the five winter months, i.e., through the following April. The fixed winter setting is due in part to the difficulty of moving gates in the Compensating Works when they are frozen in ice. With Lake Superior below its long-term average level, and Lakes Michigan-Huron above their long-term average level, the current minimum setting of $\frac{1}{2}$ -gate-open will remain in effect for the winter of 1987-88. Discharge through the hydropower plants comprises most of the outflow at this time. The Lake Ontario level is below its long-term average and the outflows are as prescribed by Regulation Plan 1958-D.

In view of the improved situation, the Advance Measures Program to construct preventive works will continue only to complete projects underway: four in number.

The Corps is also authorized to assist local communities in responding to actual flooding, supplementing maximum state and local efforts. Requests for assistance should be directed through local and state disaster assistance agencies. For Great Lakes basin technical assistance or information, please contact one of the following Corps of Engineers District offices:

For New York, Penn. & Ohio:

**Colonel Daniel R. Clark
Cdr, Buffalo District
1776 Niagara Street
Buffalo, NY 14207-3199
(716) 876-5454, Ext. 2201**

For Mich., Minn. & Wisc.:

**Colonel Robert F. Harris
Cdr, Detroit District
P.O. Box 1027
Detroit, MI 48231-1027
(313) 226-6440 or 6441**

For Ill. & Indiana:

**LTC Jess J. Franco Jr.
Cdr, Chicago District
219 S. Dearborn St.
6th Floor
Chicago, IL 60604-1797
(312) 353-6400**

The "Help Yourself" brochure is still available at District Offices listed above or this office: North Central Division, 536 South Clark Street, Chicago, Illinois 60605-1592, telephone: (312) 353-6364.

Near-shore wave warnings are provided by various National Weather Service Offices for certain portions of the Great Lakes. Information can normally be heard on the National Weather Service's local weather radio broadcasts. The Corps of Engineers' "Self Help" program of distributing sandbags, sand and plastic sheeting to flood-threatened communities is continuing. In view of the current and predicted levels, it is our intention to continue the program through next spring. Local or state disaster assistance agencies can be contacted for materials and assistance under this program.

The IJC's Great Lakes study on level fluctuations continues with the development of a study plan. A Great Lakes Levels Workshop was held on the afternoon of November 17, 1987, at the Radisson Hotel in Toledo, Ohio. It was attended by approximately 100 persons. An overview of the IJC involvement with lake levels was distributed, along with a summary of the interim Task Force

papers recently completed, and a background paper to the study plan being developed for the lake levels reference study. The IJC will be reviewing possible measures, either to affect fluctuating lake levels or to modify the impacts of fluctuating levels around the Great Lakes. More information on the study is available from both the U.S. and Canadian Section Offices of the IJC: in the United States, the address is International Joint Commission, 2001 'S' Street, NW, 2nd Floor, Washington, D.C., 20440, or phone number (202) 673-6222.

These updates will continue to accompany the Monthly Bulletin until all the lakes approach long-term seasonal averages.

Theodore Vander Els
Brigadier General, USA
Commanding