

US Army Corps of Engineers
Detroit District

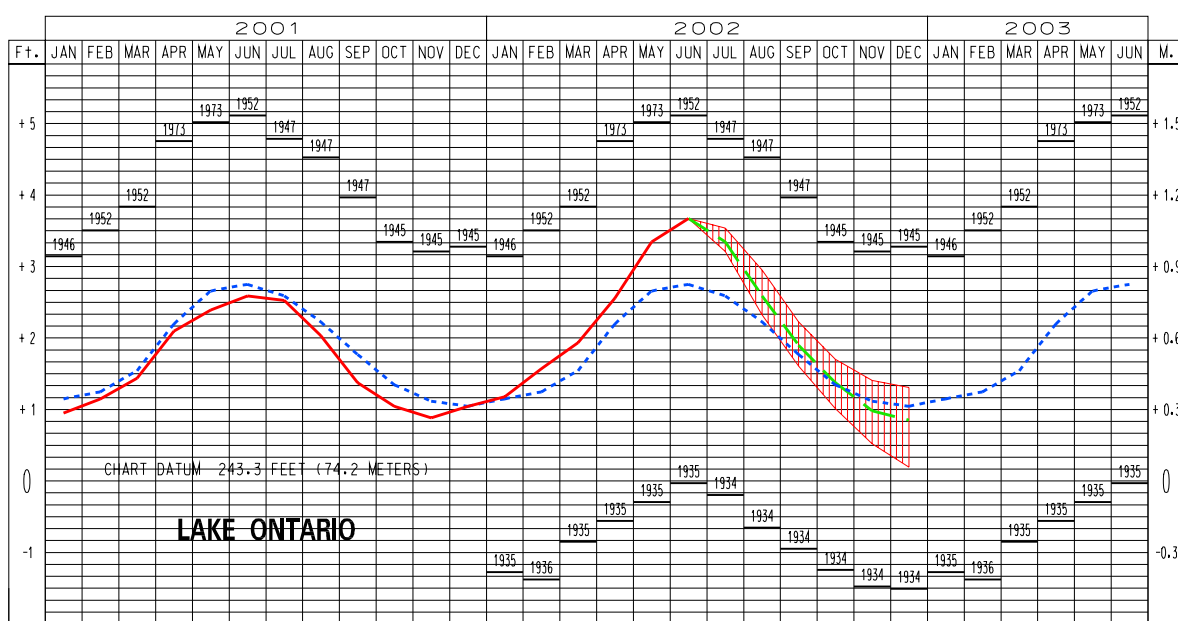
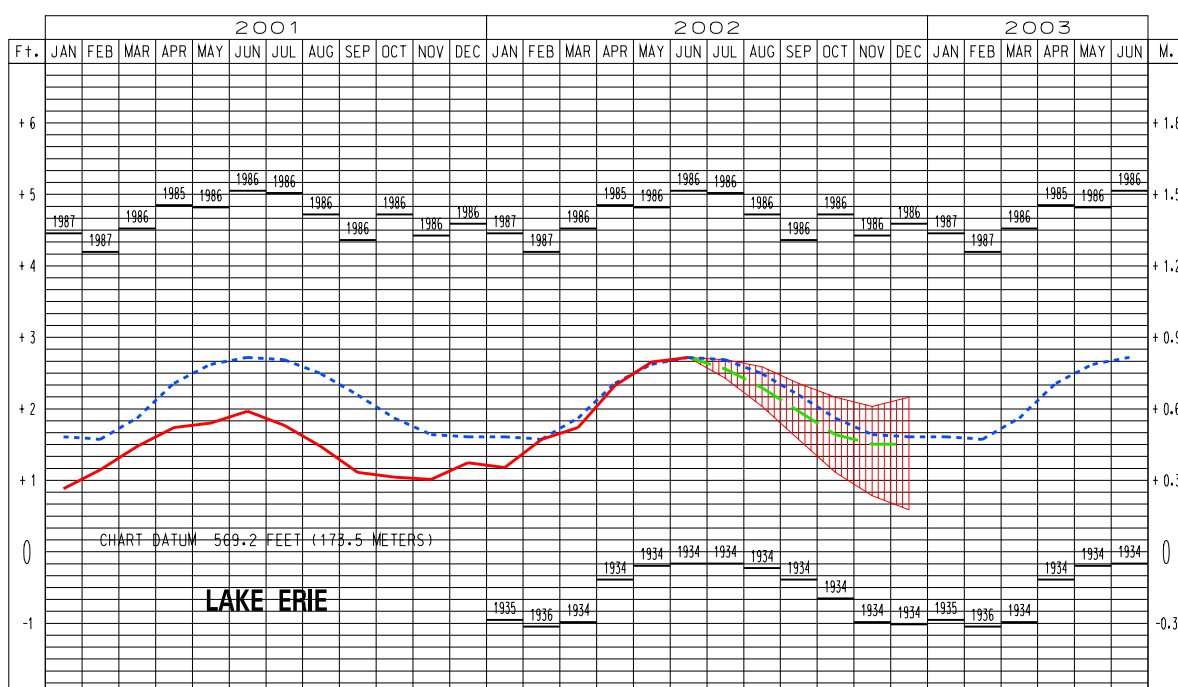
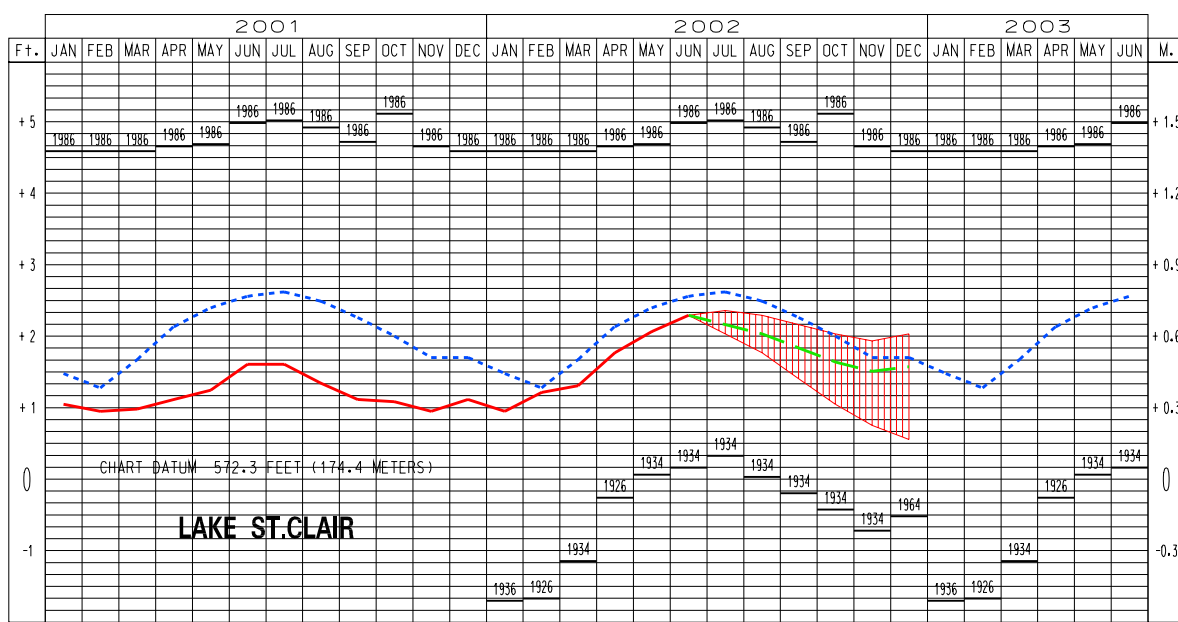
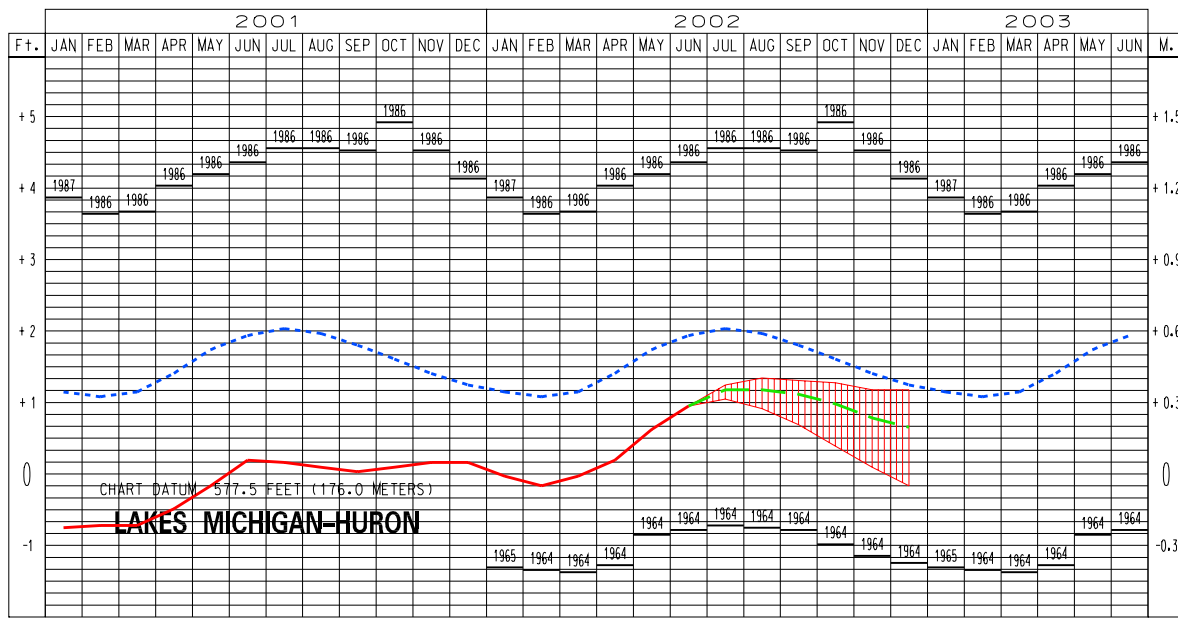
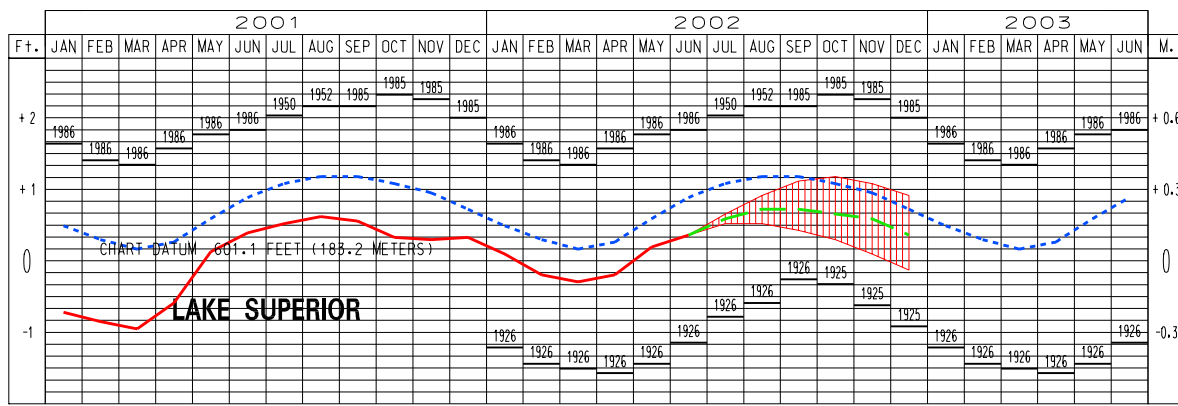


MONTHLY BULLETIN OF LAKE LEVELS FOR THE GREAT LAKES

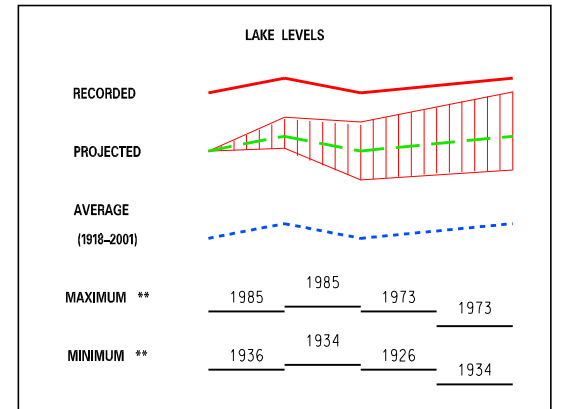
JULY 2002

Water levels for the previous year and the current year to date are shown as a solid line on the hydrographs. A projection for the next six months is given as a dashed line. This projection is based on the present condition of the lake basin and anticipated future weather. The shaded area shows a range of possible levels over the next six months dependent upon weather variations. Current and projected levels (solid and dashed lines) can be compared with the 1918–1999 average levels (dotted line) and extreme levels (shown as bars with their year of occurrence). The legend below further identifies the information on the hydrographs.

ELEVATIONS REFERENCED TO THE CHART DATUM OF EACH RESPECTIVE LAKE



LEGEND



The levels on the hydrographs are shown in both feet and meters above (+) or below (-) Chart Datum. Chart Datum, also known as Low Water Datum, is a reference plane on each lake to which water depth and Federal navigation improvement depths on navigation charts are referred.

All elevations and plots shown in this bulletin are referenced to International Great Lakes Datum 1985 (IGLD 1985). IGLD 1985 has its zero base at Rimouski, Quebec near the mouth of the St. Lawrence River (approximate sea level).

JUNE MEAN LAKE LEVELS

(IGLD 1985)

	Superior	Mich-Huron	St. Clair	Erie	Ontario
* 2002	Ft. 601.41	578.38	574.48	571.95	247.11
	M. 183.31	176.29	175.10	174.33	75.32
2001	Ft. 601.44	577.62	573.79	571.19	246.03
	M. 183.32	176.06	174.89	174.10	74.99
Ft. 602.89	581.79	577.17	574.28	248.56	
** MAX.	M. 183.76	177.33	175.92	175.04	75.76
Yr. 1986	1986	1986	1986	1986	1952
Ft. 599.90	576.64	572.34	569.06	243.41	
** MIN.	M. 182.85	175.76	174.45	173.45	74.19
Yr. 1926	1964	1934	1934	1935	
** AVG	Ft. 601.94	579.36	574.74	571.95	246.19
(1918-2001)	M. 183.47	176.59	175.18	174.33	75.04

* Provisional
** Maxima and Minima for period 1918-2001

Information

Recorded water levels in this bulletin are derived from a representative network of water level gages on each lake (see cover map). Providers of these data are the U.S. Department of Commerce, NOAA, National Ocean Service, and the Marine Environmental Data Service, Department of Fisheries and Oceans, Canada. The Detroit District, Corps of Engineers and Environment Canada derive historic and projected lake levels under the auspices of the Coordinating Committee on Great Lakes Basic Hydraulic and Hydrologic Data.

This bulletin is produced monthly as a public service. Tables of possible storm-induced rises at key locations on the Great Lakes are available on request. The Corps also publishes the "Great Lakes, Connecting Channels and St. Lawrence River Water Levels and Depths" twice monthly, which provides a forecast of depths in the connecting rivers between the Great Lakes and the International Section of the St. Lawrence River. These publications can be obtained free of charge by writing to the address shown on the front cover, or by calling (313) 226-2201. Notices of change of address should include the name of the publication(s). The Internet address <http://www.lre.usace.army.mil> contains this information on the Internet.

Great Lakes Basin Hydrology June 2002

During June, precipitation was above average on the Lake Superior and Ontario basins and below average on the Lakes Michigan, Huron, and Erie basins. For the last 12 months, precipitation was above average on all of the Great Lakes basins. The net supply of water was below average to Lakes Superior and Erie, and above average to Lake Michigan-Huron and Ontario. The table below lists June precipitation and water supply information for all Great Lakes basins.

In comparison with their long-term (1918-2001) averages, the June monthly mean levels of lakes Superior, Michigan-Huron, and St. Clair were 6, 12, and 3 inches, respectively, below average. The monthly mean water level for Lake Erie was at the long-term average for June. Lake Ontario was 11 inches above average. Boaters should be aware of increased hazards to navigation due to current low water conditions.

PRECIPITATION (INCHES)								
BASIN	June				12-Month Comparison			
	2002	Average (1900-1996)	Diff.	% of Average	Last 12 Months	Average (1900-1996)	Diff.	% of Average
Superior	3.47	3.26	0.21	106	32.31	30.41	1.90	106
Michigan-Huron	2.99	3.10	-0.11	96	36.24	32.09	4.15	113
Erie	1.94	3.44	-1.50	56	39.82	34.99	4.83	114
Ontario	3.65	3.07	0.58	119	36.72	35.27	1.45	104
Great Lakes	3.05	3.19	-0.14	96	35.70	32.37	3.33	110

LAKE	June WATER SUPPLIES ² (cfs)		June OUTFLOW ³ (cfs)	
	2001 ¹	Average (1900-1989)	2001 ¹	Average ⁵ (1900-1999)
Superior	148,000	158,000	76,000	78,000
Michigan-Huron	239,000	204,000	173,000 ⁴	193,000
Erie	27,000	30,000	212,000 ⁴	214,000
Ontario	67,000	42,000	288,000	261,000

Notes: Values (excluding averages) are based on preliminary computations; cfs denotes cubic feet per second.

¹ Estimated.

² Negative water supply denotes evaporation from lake exceeded runoff from local basin.

³ Does not include diversions.

⁴ Reflects effects of ice/weed retardation in connecting channels.

⁵ Niagara and St. Lawrence River Average Flows period of record (1900-1989)