

**US Army Corps
of Engineers**
Detroit District

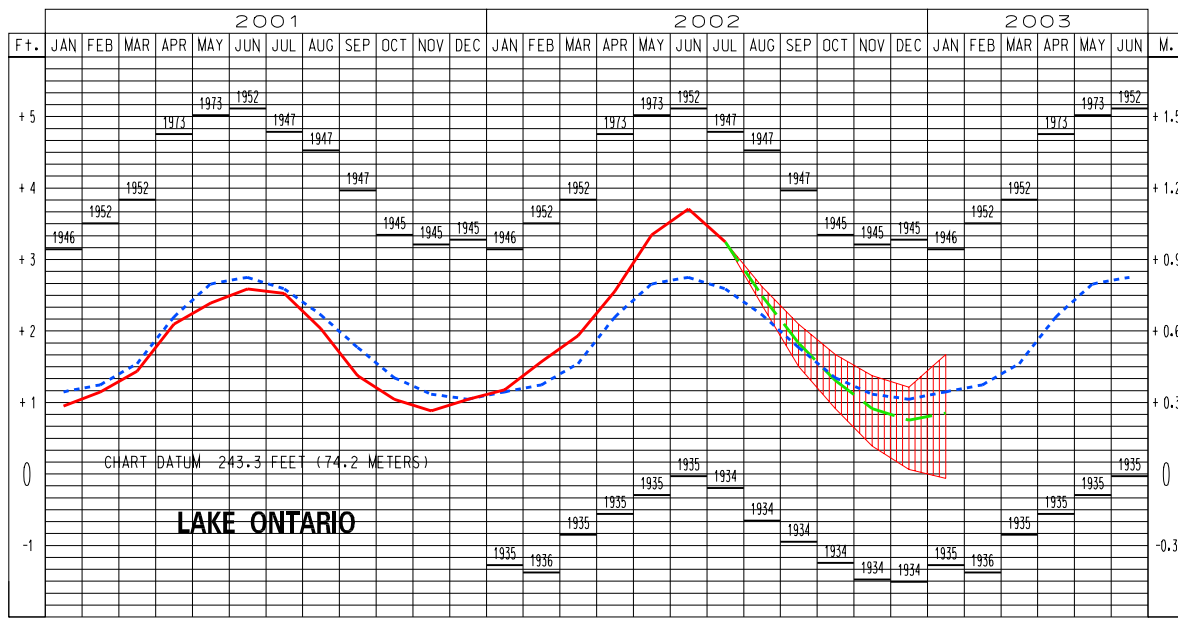
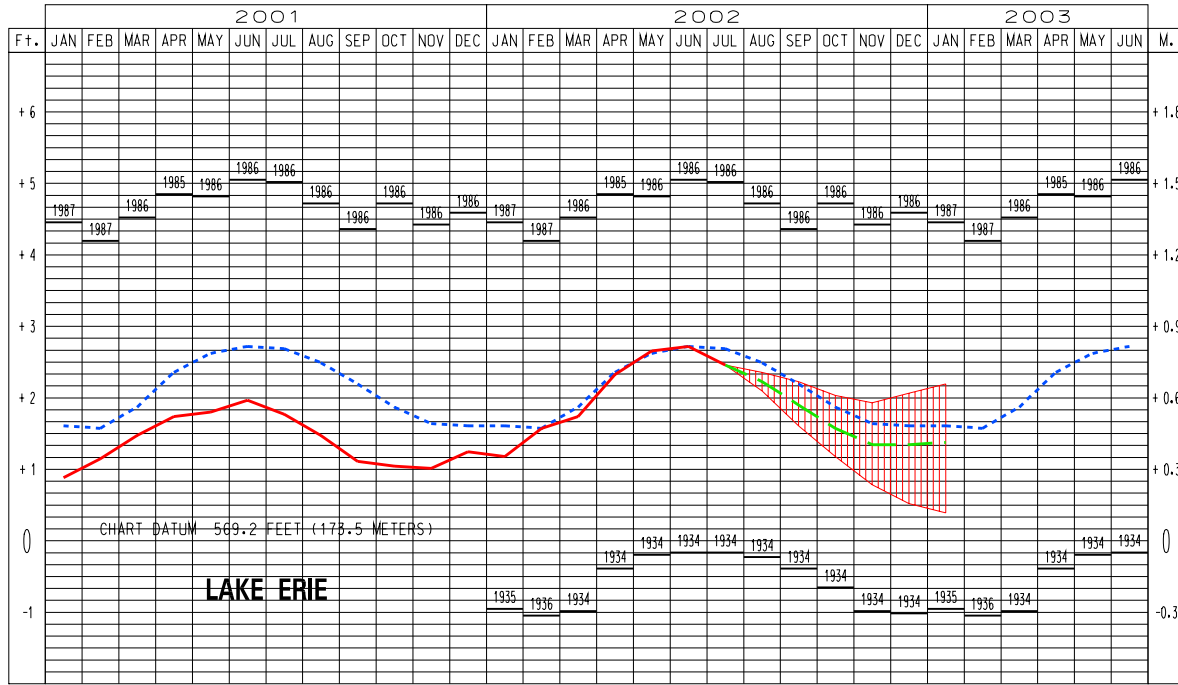
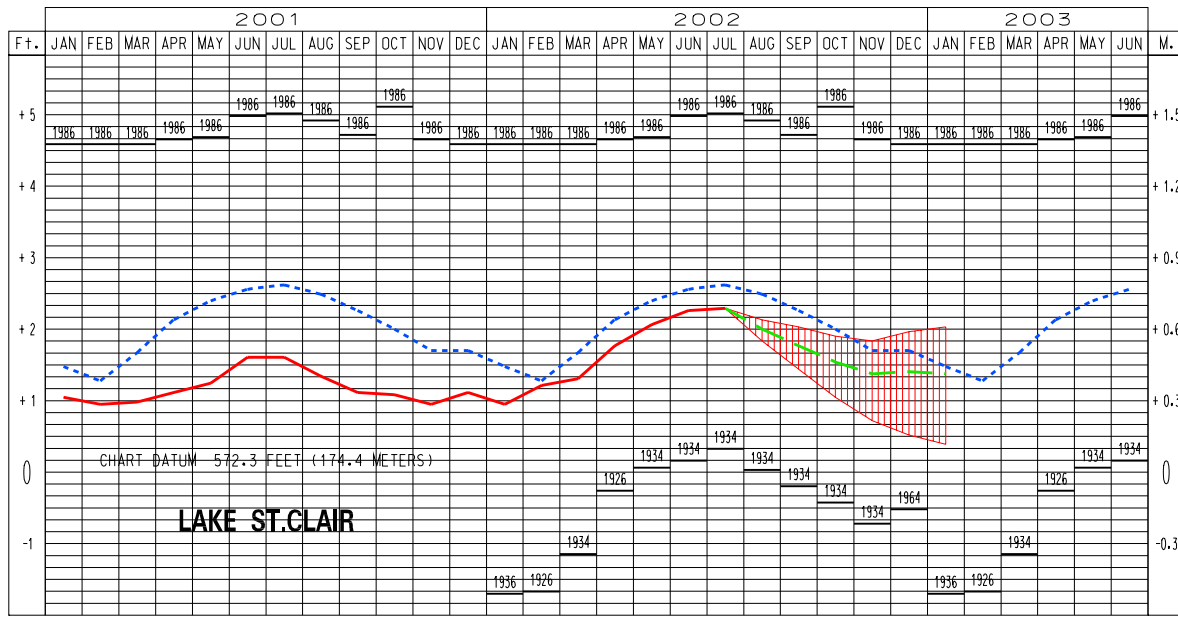
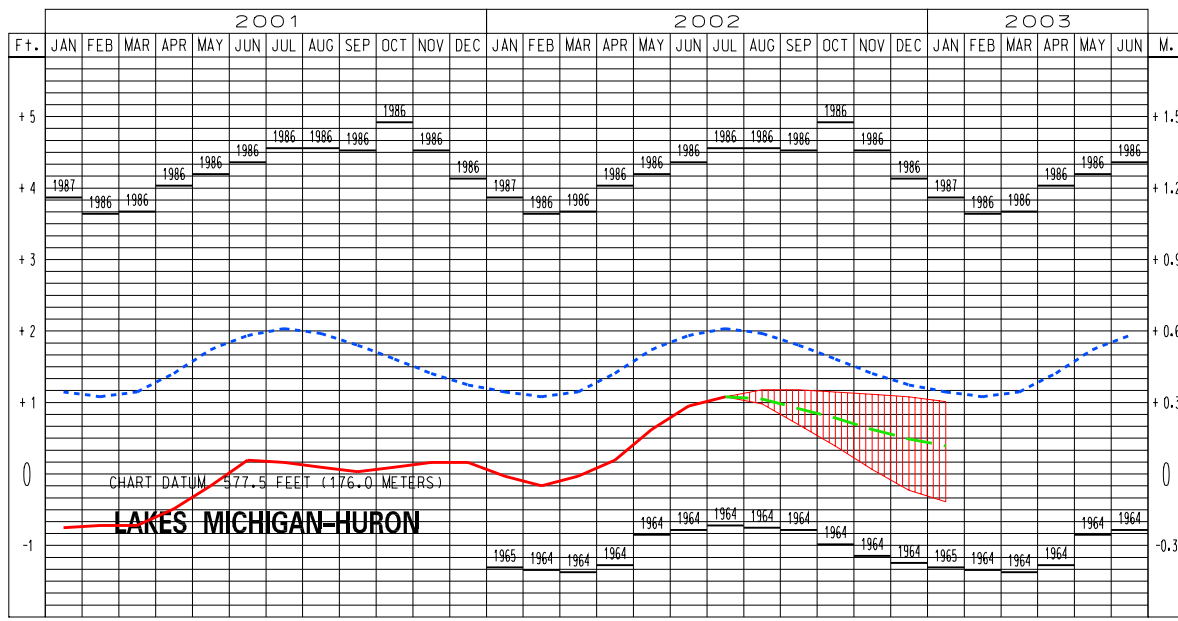
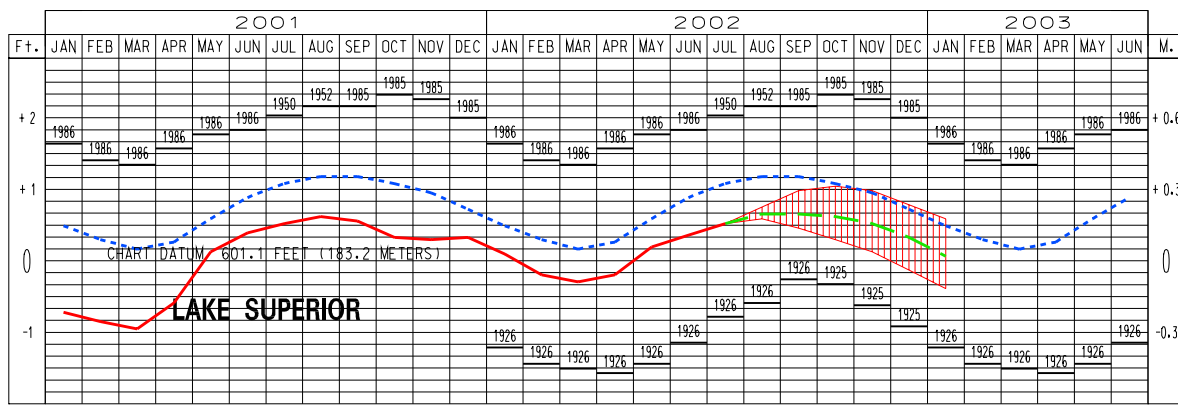


MONTHLY BULLETIN OF LAKE LEVELS FOR THE GREAT LAKES

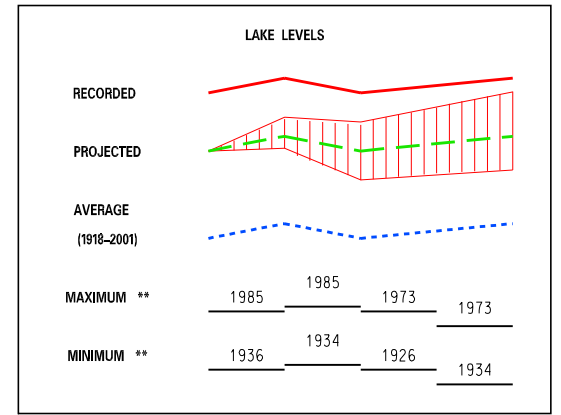
AUGUST 2002

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).

JULY MEAN LAKE LEVELS (IGLD 1985)

	Superior	Mich-Huron	St. Clair	Erie	Ontario
* 2002	Ft. 601.57	578.51	574.48	571.69	246.69
	M. 183.36	176.33	175.10	174.25	75.19
2001	Ft. 601.57	577.59	573.79	571.00	245.96
	M. 183.36	176.05	174.89	174.04	74.97
	Ft. 603.08	581.99	577.20	574.25	248.23
** MAX.	M. 183.82	177.39	175.93	175.03	75.66
	Yr. 1950	1986	1986	1986	1947
	Ft. 600.26	576.71	572.51	569.06	243.24
** MIN.	M. 182.96	175.78	174.50	173.45	74.14
	Yr. 1926	1964	1934	1934	1934
** AVG (1918-2001)	Ft. 602.13	579.46	574.80	571.92	246.03
	M. 183.53	176.62	175.20	174.32	74.99

* 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 July 2002

During July, precipitation was below average on all of the Great Lakes basins. For the last 12 months however, precipitation was above average for all of the Great Lakes basins. The net supply of water was below average to all of the Great Lakes basin for July due to lower inflow from upstream lakes/rivers. The table below lists July precipitation and water supply information for each of the Great Lakes basins.

In comparison with their long-term (1918-2001) averages, the July monthly mean levels of Lakes Superior, Michigan-Huron, St. Clair, and Erie were 7, 11, 4, and 3 inches, respectively, below average. Lake Ontario was 8 inches above average. Boaters should be aware of hazards to navigation due to current conditions.

PRECIPITATION (INCHES)								
BASIN	July				12-Month Comparison			
	2002	Average (1900-1996)	Diff.	% of Average	Last 12 Months	Average (1900-1996)	Diff.	% of Average
Superior	2.86	3.29	-0.43	87	32.94	30.41	2.53	108
Michigan-Huron	2.34	3.00	-0.66	78	37.22	32.09	5.13	116
Erie	2.51	3.33	-0.82	75	40.89	34.99	5.90	117
Ontario	2.54	3.12	-0.58	81	37.95	35.27	2.68	108
Great Lakes	2.53	3.14	-0.61	81	36.63	32.37	4.26	113

LAKE	July WATER SUPPLIES ² (cfs)		July OUTFLOW ³ (cfs)	
	2002 ¹	Average (1900-1989)	2002 ¹	Average (1900-1989)
Superior	118,000	130,000	79,000	81,000
Michigan-Huron	101,000	127,000	176,000 ⁴	195,000
Erie	-9,000	4,000	200,000 ⁴	211,000
Ontario	19,000	24,000	290,000	259,000

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.