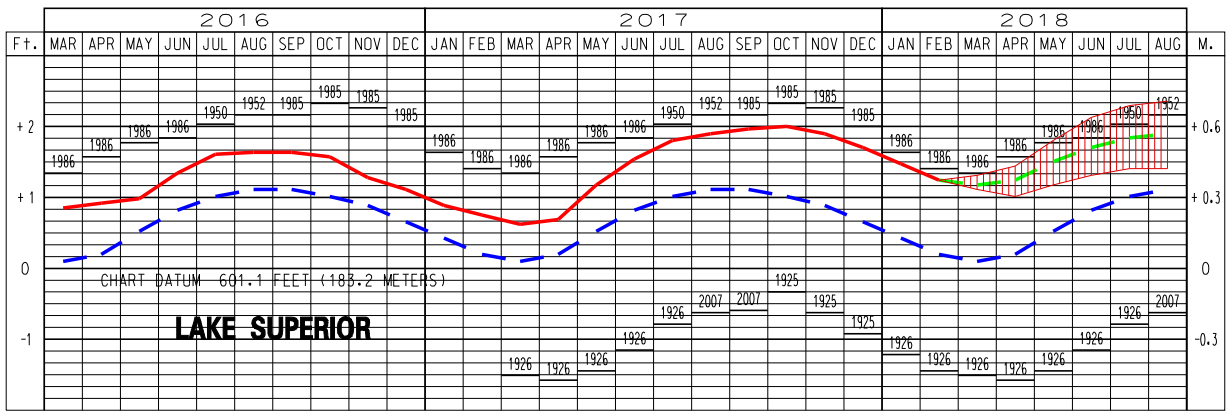
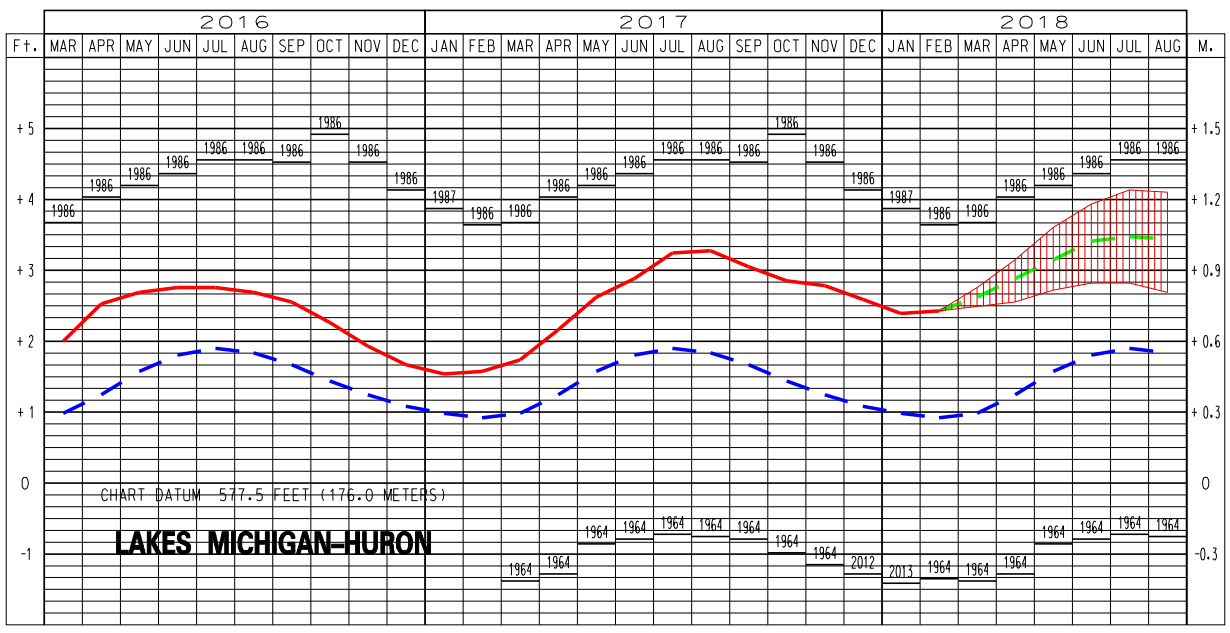
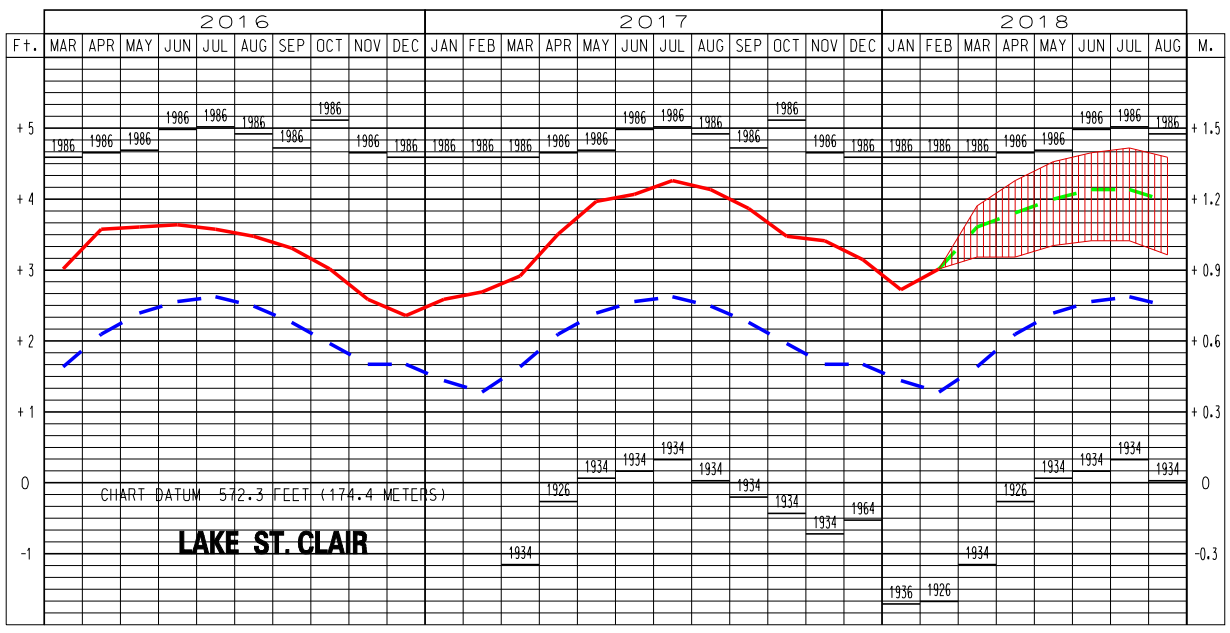
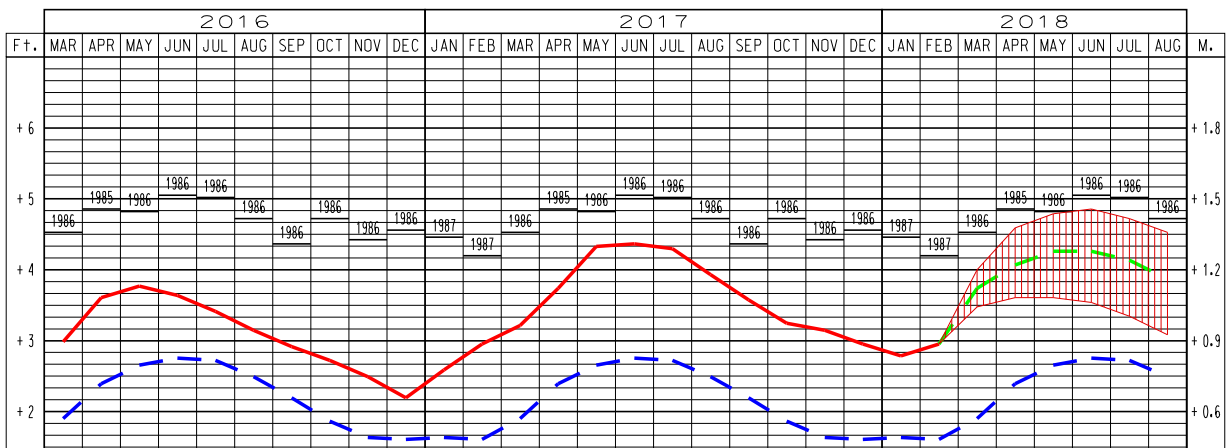
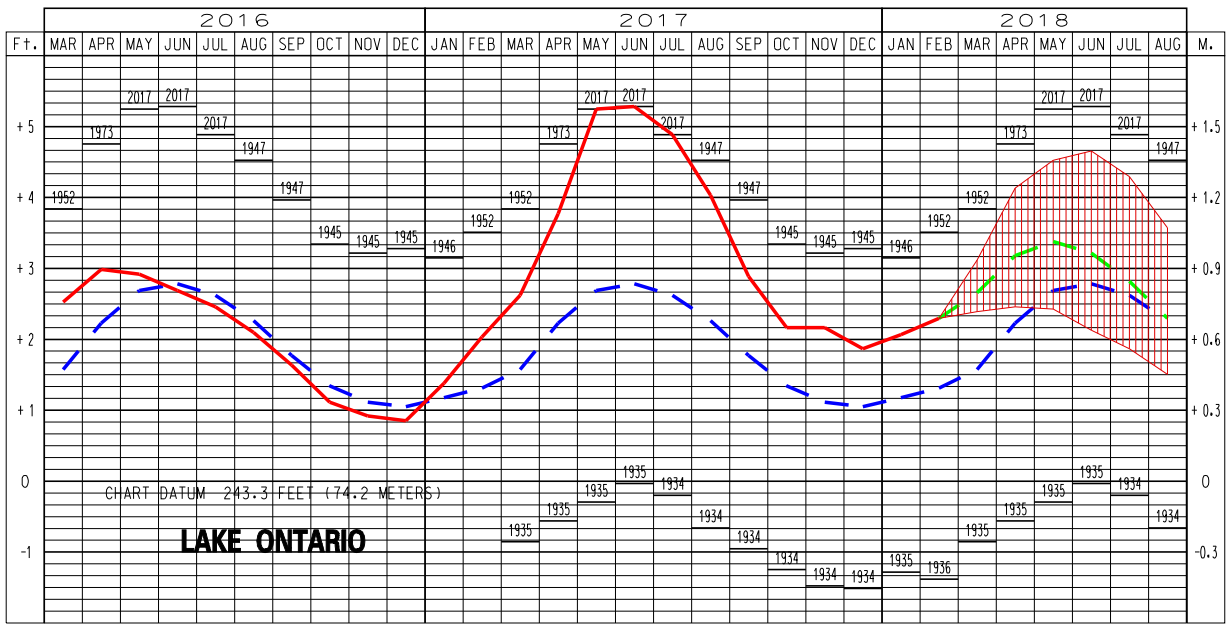










ELEVATIONS REFERENCED TO THE CHART DATUM OF EACH RESPECTIVE LAKE

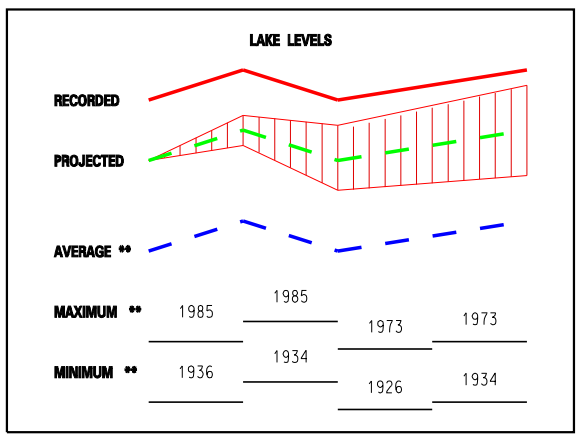
US Army Corps of Engineers
Detroit District

MONTHLY BULLETIN OF LAKE LEVELS FOR THE GREAT LAKES

MARCH 2018

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 1918–2017 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.

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).

FEBRUARY MEAN LAKE LEVELS

(IGLD 1985)

		Superior	Mich-Huron	St. Clair	Erie	Ontario
* 2018	Ft.	602.30	579.86	575.20	572.18	245.73
	M.	183.58	176.74	175.32	174.40	74.90
2017	Ft.	601.80	579.00	574.87	572.18	245.47
	M.	183.43	176.48	175.22	174.40	74.82
	Ft.	602.46	581.07	576.77	573.43	246.95
** MAX.	M.	183.63	177.11	175.80	174.78	75.27
	Yr.	1986	1986	1986	1987	1952
	Ft.	599.61	576.08	570.51	568.18	242.06
** MIN.	M.	182.76	175.59	173.89	173.18	73.78
	Yr.	1926	1964	1926	1936	1936
** AVG.	Ft.	601.25	578.35	573.46	570.83	244.75
	M.	183.26	176.28	174.79	173.99	74.60

* provisional
** Average, Maximum and Minimum for period 1918-2017

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 Integrated Science Data Management, 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. The Corps also, on a weekly basis publishes online the *Great Lakes, Connecting Channels and St. Lawrence River Water Levels and Depths*, which provides a forecast of depths in the connecting rivers between the Great Lakes and the International Section of the St. Lawrence River. This *Monthly Bulletin of the Lake Levels for the Great Lake*s may be obtained free of charge by writing to the address shown on the front cover, by calling (313) 226-6442 or emailing hhpm@usace.army.mil. Notices of change of address should include the name of the publication. This information is available on the internet at http://www.lre.usace.army.mil/Missions/GreatLakesInformation.aspx.

Great Lakes Basin Hydrology
February 2018

According to preliminary estimates, precipitation was above average for Great Lakes basin, at 119% of average precipitation. Individually, all of the lakes, except for Superior, received more than their average amount of precipitation for February. Lake Erie received the most precipitation at 154% of its February average and Lake Superior received the least at 95% of its average February precipitation. Basin-wide precipitation has been above average over the last 12 months. February net basin supplies and outflows were above average for all the lakes and according to provisional data, Lake Ontario's outflow set a record for February.

All of the lakes were above their February long-term average water levels. From January to February, most of the lakes' levels increased, where Lake Michigan-Huron rose by a half inch, Lake St. Clair's level rose almost 4 inches, Lake Erie increased by 2 inches, and Lake Ontario rose almost 3 inches. On the contrary, Lake Superior fell almost 3 inches. Each of the lakes were above last year's February levels by 3-10 inches, except for Lake Erie which matched its February level from last year. All of the lakes were below their record high levels in February. Lake Superior's February level was 2 inches below its February record high, while other lakes were 15 to 19 inches below.

PRELIMINARY PRECIPITATION (INCHES)

BASIN	February				12-Month Comparison			
	2018	Average (1900-2016)	Diff.	% of Average	Last 12 months	Average (1900-2016)	Diff.	% of Average
Superior	1.38	1.45	-0.07	95	33.06	30.58	2.48	108
Michigan-Huron	2.14	1.74	0.40	123	34.27	32.55	1.72	105
Erie	3.25	2.11	1.14	154	36.04	35.62	0.42	101
Ontario	2.42	2.38	0.04	102	40.96	35.87	5.09	114
Great Lakes	2.11	1.78	0.33	119	34.99	32.77	2.22	107

LAKE	February Net Basin Supplies[1] (cfs)		February Outflows[2] (cfs)	
	2018	Average (1900-2008)	2018	Average[3] (1900-2008)
Superior	25,000	9,000	74,000	67,000
Michigan-Huron	194,000	88,000	201,000	157,000
Erie	109,000	38,000	231,000	192,000
Ontario	74,000	37,000	304,000	227,000

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

[1] Net basin supply is the net result of precipitation falling on the lake, runoff from precipitation falling on the land which flows to the lake, and evaporation from the lake. Negative net basin supply denotes evaporation exceeded runoff and precipitation. The net total supply can be found by adding the net basin supply and the outflow from the upstream lake.

[2] Does not include diversions.

[3] Lake Ontario average water supplies and average outflows are based on period of record 1900-2005