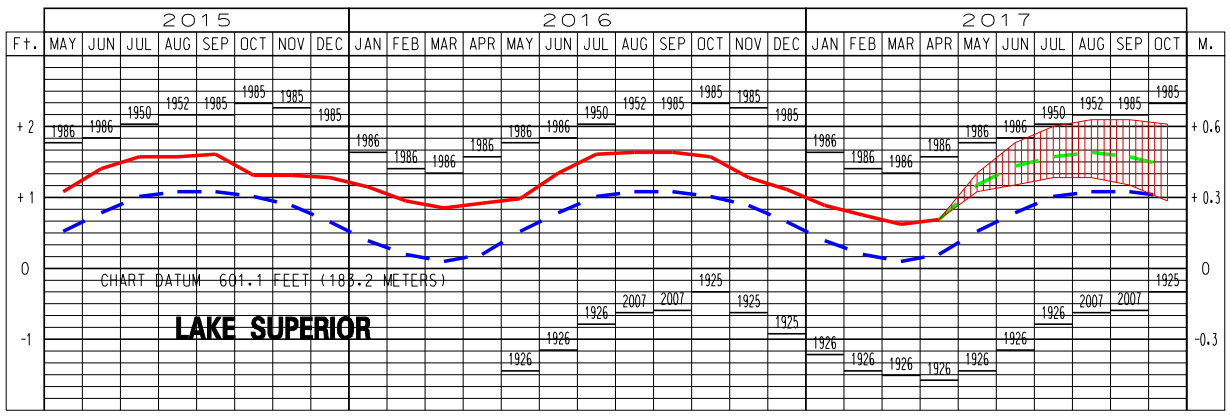
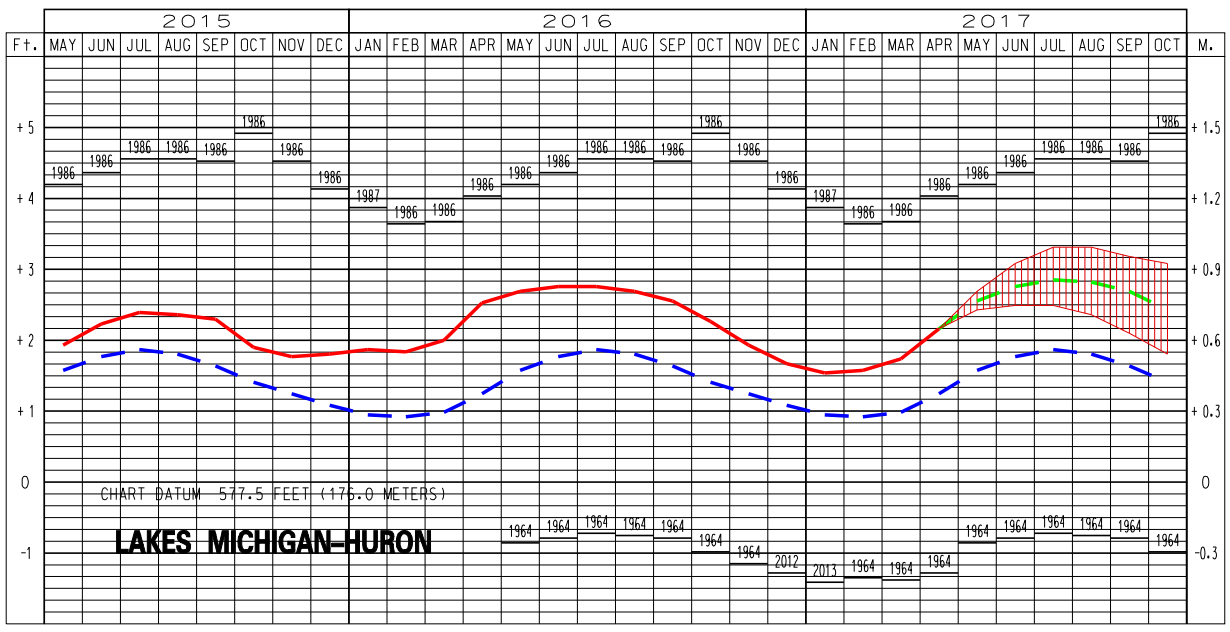
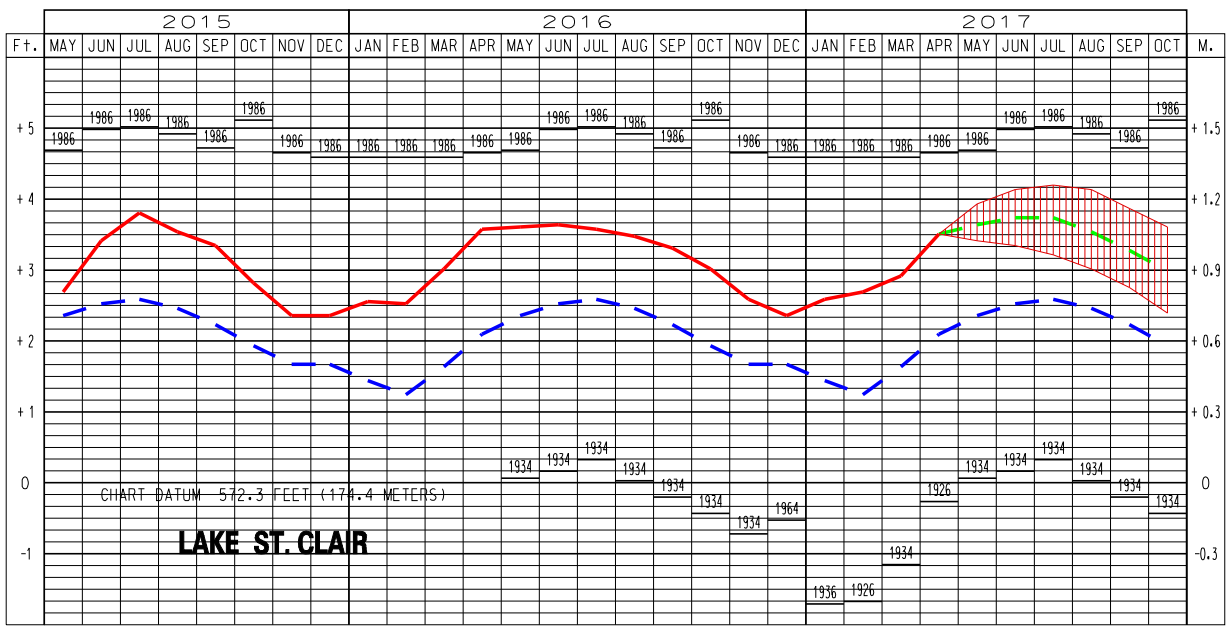
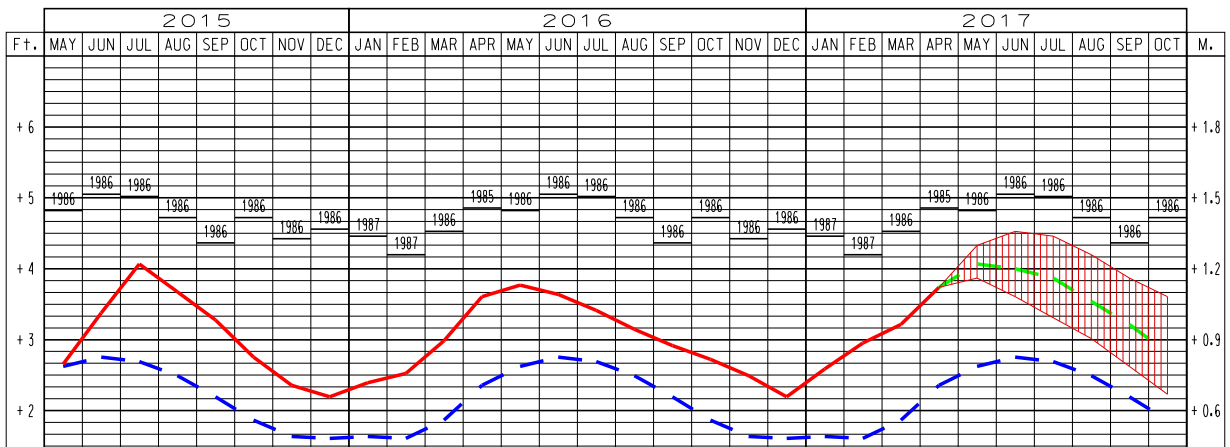
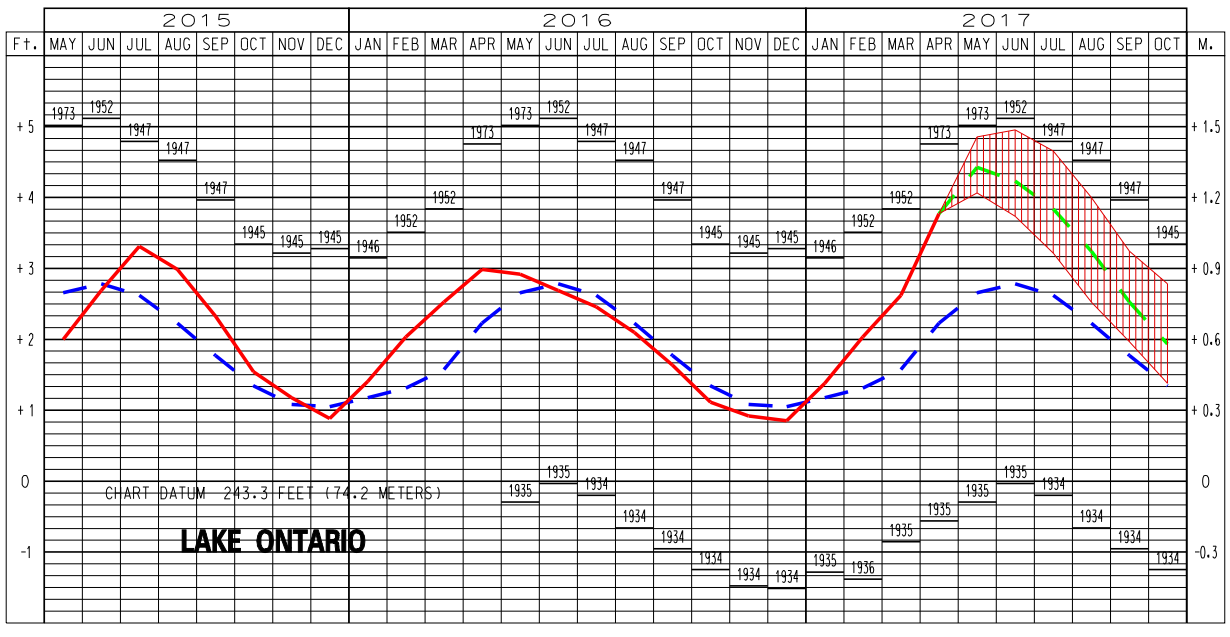










ELEVATIONS REFERENCED TO THE CHART DATUM OF EACH RESPECTIVE LAKE

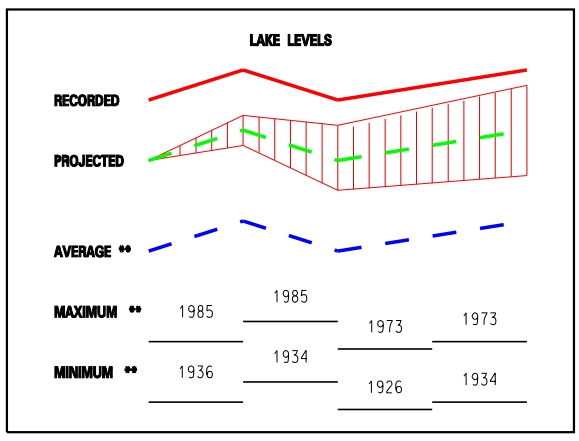
US Army Corps of Engineers
Detroit District

MONTHLY BULLETIN OF LAKE LEVELS FOR THE GREAT LAKES

MAY 2017

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 1918–2016 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).

APRIL MEAN LAKE LEVELS

(IGLD 1985)

		Superior	Mich-Huron	St. Clair	Erie	Ontario
* 2017	Ft.	601.74	579.59	575.69	572.97	247.21
	M.	183.41	176.66	175.47	174.64	75.35
2016	Ft.	601.97	579.95	575.75	572.83	246.42
	M.	183.48	176.77	175.49	174.60	75.11
	Ft.	602.62	581.46	576.84	574.08	248.20
** MAX.	M.	183.68	177.23	175.82	174.98	75.65
	Yr.	1986	1986	1986	1985	1973
	Ft.	599.48	576.15	571.92	568.83	242.88
** MIN.	M.	182.72	175.61	174.32	173.38	74.03
	Yr.	1926	1964	1926	1934	1935
** AVG.	Ft.	601.25	578.67	574.28	571.59	245.67
	M.	183.26	176.38	175.04	174.22	74.88

* provisional
** Average, Maximum and Minimum for period 1918-2016

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 Lakes* 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
April 2017

According to preliminary estimates, precipitation during the month of April was well above average for the Great Lakes basin. Lake Erie received 17% more precipitation than average, Lake Superior received nearly 50% more than average, while Lakes Michigan-Huron and Ontario received 62% and 54% more than average April precipitation, respectively. As a result of the large amounts of precipitation, water supply to all lakes was well above average. All lakes' outflows remained above average throughout April.

All of the lakes were above their long-term average (LTA) water levels for the month of April. All lakes are experiencing their seasonal rise. Lake Superior rose about 1 inch from March to April. Lakes Michigan-Huron, St. Clair, and Erie each rose 5 to 7 inches, while Lake Ontario rose 14 inches. The mean April Lakes Superior and Michigan-Huron levels were both below last year's April levels. Lakes Erie and Ontario, on the other hand, were 2 and 9 inches above last year's levels, respectively.

PRELIMINARY PRECIPITATION (INCHES)

BASIN	April				12-Month Comparison			
	2017	Average (1900-2014)	Diff.	% of Average	Average Last 12 months	Average (1900-2014)	Diff.	% of Average
Superior	2.99	2.03	0.96	147	33.25	30.52	2.73	109
Michigan-Huron	4.32	2.66	1.66	162	33.29	32.57	0.72	102
Erie	3.74	3.20	0.54	117	34.33	35.65	-1.32	96
Ontario	4.53	2.94	1.59	154	33.75	35.87	-2.12	94
Great Lakes	3.57	2.59	0.98	138	33.07	32.76	0.31	101

LAKE	April Net Basin Supplies[1] (cfs)		April Outflows[2] (cfs)	
	2017	Average (1900-2008)	2017	Average[3] (1900-2008)
Superior	240,000	150,000	77,000	68,000
Michigan-Huron	422,000	284,000	212,000	182,000
Erie	95,000	67,000	245,000	207,000
Ontario	126,000	93,000	269,000	251,000

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