

2003 WATER LEVELS

Water levels on all but Lake Ontario remained below their respective Long Term Averages (LTA) in 2003. In the case of Lake Ontario, that body of water started 2003 nine inches below LTA, but above average precipitation raised Ontario above LTA by June and the Lake ended the year 8 inches above LTA.

Lake Superior began 2003 more than one-half foot below LTA. Even when the Lake reached its seasonal peak in August, it was 11 inches below LTA. Lake Superior ended the year 9 inches below LTA.

Lake Michigan-Huron (hydrographically they are considered one body of water) started 2003 twenty inches below LTA, yet when the Lake "peaked" in July, it had fallen another 3 inches below LTA. Increased precipitation in the fall eased the situation a bit; Michigan-Huron ended the year 18 inches below LTA.

Lake Erie was 7 inches below LTA in January and remained below LTA the entire year. Erie ended the year 4 inches below LTA.

IMPACTS OF LOWER WATER LEVELS ON COMMERCIAL NAVIGATION

Great Lakes freighters carry anywhere from 70 to 270 net tons of cargo for each inch of loaded draft and, when water levels permit, load to drafts that range from 21 feet for a cement carrier or river-class self-unloader all the way up to 28 feet or more for a 1,000-footer. (Some of the largest vessels have loadlines that allow for drafts of 30 feet or more, something currently unattainable given the project depth in the connecting channels and most ports.) Therefore, severe fluctuations in water levels can dramatically impact waterborne commerce. The table below illustrates how falling and rising water levels have affected Great Lakes shipping in recent years. Water levels began to fall in the summer of 1998. While there has been some recovery, the top loads in 2003 were again noticeably lower than previous years. A vessel in the long-haul iron ore trade will make roughly 50 trips; a ship in the mixed trades can carry 90-100 cargos, so even a loss of a thousand tons or so each trip becomes significant by year's end.

COMPARISON OF LARGEST CARGOS IN VESSELS OF COMPARABLE SIZES CALENDAR YEARS 1999-2003

(net tons)

PORT	COMMODITY	LARGEST CARGO					5-YEAR AVERAGE
		1999	2000	2001	2002	2003	
Two Harbors, MN	Iron Ore	66,846	64,723	65,981	67,118	64,860	65,906
Escanaba, MI *	Iron Ore	72,226	63,402	67,878	67,643	64,244	67,079
Superior, WI	Coal (Head-of-Lakes)	67,124	64,642	64,681	67,258	64,831	65,708
Presque Isle, MI **	Limestone	-----	33,109	34,521	33,123	30,346	32,775
Alpena, MI	Cement	16,057	15,393	15,919	16,696	15,927	15,998
Fairport Harbor, OH	Salt	23,000	22,872	22,785	22,852	21,903	22,682

* Since Escanaba is located below the Soo Locks, loadings are not controlled by water levels in the Connecting Channels. Therefore, when Great Lakes water levels are high, cargos of 70,000 tons or more are common.

** The vessel used to benchmark Presque Isle, the GREAT LAKES TRADER, did not enter service until 2000.