

2002 ANNUAL REPORT of Lake Carriers' Association

2002 WATER LEVELS

Each of the five Great Lakes rose during 2002 to levels that were higher than the year before, thanks to a wet fall in 2001, a near-average snowpack in the northern basin, and a wet spring. Nonetheless, the gains evaporated after a hot, dry summer and all the Lakes ended 2002 below their Long Term Average (LTA).

Lake Superior began 2002 five inches below its LTA and started to rise in March; however, even when Superior peaked in October, the Lake was four inches below LTA. Superior ended the year six inches below LTA.

Lakes Michigan/Huron (hydraulically, they are one body of water divided by the Straits of Mackinac) started 2002 14 inches below LTA, but nine inches higher than a year before. Although Michigan/Huron stayed above 2001 levels for a period, it remained below LTA and the scorching summer caused the body of water to plunge to 18 inches below LTA by year's end.

Lake Erie's water level was five inches below LTA as 2002 began, but a wet spring allowed the Lake to rise to near LTA by June. The hot summer hastened the Lake's normal decline in the fall, and Erie ended the year seven inches below LTA.

It was a roller coaster year on Lake Ontario. Ontario actually began 2002 a tad above LTA and rose to 11 inches above LTA by June, but the Lake fell just as quickly, ending 2002 eight 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 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 2002 were still below 1998 levels. 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: 2002-1998

(net tons)

Port	Commodity	Largest Cargo					5-Year Average
		2002	2001	2000	1999	1998	
Two Harbors	Iron Ore	67,118	65,981	64,723	66,846	68,950	66,724
Escanaba	Iron Ore	67,643	67,878	63,402	72,226	74,092	69,048
Superior	Coal (Head-of-the-Lakes)	67,258	64,681	64,642	67,124	68,116	66,364
Presque Isle	Limestone	28,913	28,285	27,785	29,023	30,357	28,872
Alpena	Cement	16,696	15,919	15,393	16,057	17,298	16,273
Fairport Harbor	Salt	22,852	22,785	22,872	23,000	26,230	23,548

Note: Since Escanaba is located below the Soo Locks, loadings are not controlled by water levels in the connecting channels, so when the Lakes are high, cargos of 70,000 tons or more are common.

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COMPARISON OF AVERAGE CARGO: 2002-1998
(net tons)

Port	Commodity	Average Cargo					5-Year Average
		2002	2001	2000	1999	1998	
Two Harbors	Iron Ore	49,645	44,501	44,385	44,183	47,663	46,075
Superior	Coal	49,942	47,947	45,289	47,971	51,171	48,464
Calcite	Limestone	20,109	19,126	19,097	20,969	21,220	20,104

Note: "Light loading" has been system wide; similar decreases have been recorded at every port.

Some commentary on the Average Cargo Table is necessary, lest there be false conclusions. The increase in the average iron ore cargo at Two Harbors (Minnesota) primarily reflects more cargos loaded into 1,000-foot-long vessels than in previous years, as in 2002, the dock was supplying some of Ispat Inland Steel's pellet requirements. Superior coal likewise benefited from additional 1,000-footer capacity being available, given reduced demand for iron ore.