# LEVEL news



Great Lakes - St. Lawrence River Water Levels

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## Be Up-to-date when You Set Out

Whether you are a recreational boater or a ship's captain, knowledge about marine weather and water level conditions is important to you.

#### **Marine Weather**

You can find the information you need on current and forecasted weather, wind and wave conditions for the Great Lakes on Environment Canada's weather Web site at: http://www.weatheroffice ec.gc.ca

#### **Water Levels**

Be sure you also have up-to-date navigation charts and know how water levels compare to chart datum (please see item below) where you plan to cruise or sail.

Present water levels on the Great Lakes, their connecting channels and upper St. Lawrence River are available by telephone from a network of gauging stations operated by the Canadian Hydrographic Service (CHS). When one of these gauging stations is called, the caller will be asked to press 1 on the touch-tone telephone for English or 2 for French. If a touch-tone phone is not used, the message in English will start after a few seconds and the message in French will follow. The message gives the present water level in metres above chart datum at that station, followed by the high and low water levels recorded during the previous

12 hours. The height of the presently adopted chart datum for that station is then given in metres above International Great Lakes Datum 1985 (IGLD 1985). Pressing 1 or 2 at any time during the message will restart the announcement from the beginning and pressing 0 at any time will end the call.

#### **About Chart Datum**

Water-level gauges are referenced to the same vertical datums that are used for navigation charts. For safety, depths on a navigation chart are shown from a low-water surface or a low-water datum called chart (continued on next page)

Great Lakes Water Level Information					
	June 2006 Monthly Mean Level		Beginning of July 2006 Level		
Lake	Compared to Monthly Average (1918-2005)	Compared to One Year Ago	Compared to Beginning-of-Month Average (1918-2005)	Compared to One Year Ago	
Superior	16 cm below	9 cm below	20 cm below	14 cm below	
Michigan-Huron	43 cm below	7 cm below	45 cm below	7 cm below	
St. Clair	17 cm below	5 cm below	15 cm below	2 cm below	
Erie	7 cm below	7 cm below	4 cm below	2 cm above	
Ontario	17 cm below	14 cm below	16 cm below	11 cm below	





datum. Chart datum is selected so that the water level will seldom fall below it and only rarely will there be less depth available than what is portrayed on the chart. On most lakes a single, level surface is adopted as chart datum over the whole lake. Along a river, chart datum is a sloping surface that approximates the slope of the river surface under low water conditions.

In non-tidal waters, such as the Great Lakes, chart datums are often assigned an elevation on some vertical reference system. On the Great Lakes, water level and chart datum elevations are presently referenced to International Great Lakes Datum 1985 (IGLD 1985). A new reference system is required approximately every 25-30 years to correct for differential movement of the earth's crust in the Great Lakes region.

#### FOR MORE INFORMATION:

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E-mail: water.levels@ec.gc.ca http://www.on.ec.gc.ca/greatlakes/

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**Editor, Chuck Southam** 

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## June Precipitation over the Great Lakes

As a percentage of the long-term June average:

Great Lakes Basin 68% Lake Erie 97%
Lake Superior 44% (including Lake St. Clair)
Lakes Michigan-Huron 62% Lake Ontario 110%

**NOTE:** These figures are preliminary

Lake Superior	at Thunder Bay at Rossport at Michipicoten	(807) 344-3141 (807) 824-2250 (705) 856-0077
Ct Manua Divor	at Gros Cap above the lock	(705) 779-2052
St. Marys River		(705) 949-2066
Nauth Chainnal	below the lock	(705) 254-7989
North Channel	at Thessalon	(705) 842-2215
O : D	at Little Current	(705) 368-3695
Georgian Bay	at Parry Sound	(705) 746-6544
	at Collingwood	(705) 445-8737
Lake Huron	at Tobermory	(519) 596-2085
	at Goderich	(519) 524-8058
St. Clair River	at Point Edward	(519) 344-0263
	at Port Lambton	(519) 677-4092
Lake St. Clair	at Belle River	(519) 728-2882
Detroit River	at Amherstburg	(519) 736-4357
Lake Erie	at Bar Point	(519) 736-7488
	at Kingsville	(519) 733-4417
	at Erieau	(519) 676-1915
	at Port Stanley	(519) 782-3866
	at Port Dover	(519) 583-2259
	at Port Colborne	(905) 835-2501
Lake Ontario	at Port Weller	(905) 646-9568
	at Burlington	(905) 544-5610
	at Toronto	(416) 868-6026
	at Cobourg	(905) 372-6214
	_	,
	at Kingston	(613) 544-9264
St. Lawrence River	at Brockville	(613) 345-0095
	at Iroquois above lock	(613) 652-4426
	at Iroquois below lock	(613) 652-4839
	at Morrisburg	(613) 543-3361
	at Cornwall	(613) 930-9373
	at Summerstown	(613) 931-2089

Please contact CHS at (905) 336-4844 (during office hours 08:00 to 16:00) or by fax at (905) 336-8916 or by e-mail to CATCWL@dfo-mpo.gc.ca to report any problems.

### **June Outflows from the Great Lakes**

As a percentage of the long-term June average:

Lake Superior 97% Lake Erie 87% Lake Huron 88% Lake Ontario 87%

**NOTE: These figures are preliminary**