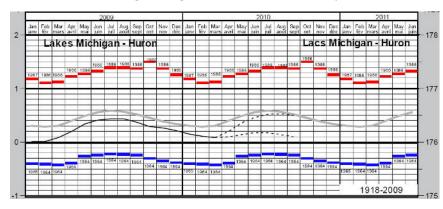
#### **Water Levels**

Water level forecasts can be found in the Canadian Monthly Water Level Bulletin. Historical maximums, minimums and averages are given here. Actual monthly data for each lake is given for the last two years, and



This sample chart for Lakes Huron and Michigan shows years of high water by month in red, years of low water by month in blue, and average monthly levels in grey. Actual monthly levels for 2009 and the first part of 2010 are shown in black and dashed lines show the forecast range of levels for April through September 2010.

It is expected that the water levels in all of the Great Lakes will be lower in 2010 than the previous year.

For the most current information for each of the Great Lakes please go to: www.waterlevels.gc.ca/C&A

Another very informative site covering current issues related to the Great Lakes is The Great Lakes Information Network. You can find it at: www.great-lakes.net a forecast is provided for the next six months. Use this information to adjust the depth shown on your chart. For example, if the current water level is 0.2 m below chart datum, deduct 0.2 m from depths shown on your chart. Water level information is also available on the continuous marine broadcast mentioned previously.

CPS is a non-profit organization dedicated to teaching safe boating across Canada.

Some of the courses we offer are: Pleasurecraft Operators' Card • Boating • Weather • Navigating with GPS • Electronic Charting • Radar for Pleasurecraft • and many others ...

To learn about the courses CPS offers, contact



Canadian Power & Sail Squadrons 1-888-CPS-BOAT | www.cpsboat.ca

# Canadian Power & Sail Squadrons

## Water Levels and Weather in the Great Lakes Basin



The Great Lakes are the largest system of fresh water on earth at 244 000 km<sup>2</sup> and represent 84% of all fresh surface water in North America and 21% of all fresh water on earth.

The Great Lakes Basin drains an area of 522 000  $\rm km^2.$ 

More than 33 million people in Canada and the U.S. live in the Great Lakes Basin

Are you doing your part to protect this priceless resource?

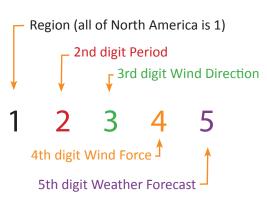


### **Checking Weather Conditions**

Before going out, you should check your Maritime Mobile Services, found on your VHF radio to get current weather and water level information.

VHF Channels 21B and 83B provide continuous marine broadcasts, updates on marine hazards, aids to navigation info, Notices to Mariners, plain language forecasts and coded MAFOR

MAFOR is the MArine FORecast represented by a 5-digit code.



#### **Real-Time Weather Data**

The National Data Buoy Centre provides current data and some historical data illustrated on maps and charts. Information for these is obtained from scientific buoys. at www.ndbc.noaa.gov

Following is a list of various station buoys which you would enter after 'station='

E.g. Grimsby buoy (45139—West Lake Ontario)

# w w w . n d b c . n o a a . g o v / s t a t i o n \_ p a g e . php?station=45139

Buoy	Decription	Location
45135	Pr. Edward Pt	43.79° N 76.87° W
45012	Lake Ontario	43.619° N 77.403° W
45159	NW L. Ontario Ajax	43.77° N 78.98° W
45139	West L. Ontario	43.26° N 79.54° W
45132	Port Stanley L. Erie	42.47° N 81.22° W
45149	Southern L. Huron	43.373° N 82.07° W
45154	North Channel East	46.05° N 82.64° W
45137	North Georgian Bay	45.54° N 81.01° W
45143	South Georgian Bay	44.94° N 80.63° W
45151	Lake Simcoe	44.5° N 79.367° W

Many others are available on the National Data Buoy Centre website www.ndbc.noaa.gov

> Geographical latitude and longitude and a picture of the buoys are given on this website. American and worldwide buoy data is available as well.

	2	3	4	5
Code	Period	Wind Direction	Wind Force	Weather Forecast
0	current	calm	1 - 10 knots	good to moderate visibility
1	3 hours	northeast	11 - 16 knots	risk of ice, temperature 23 - 32° F
2	6 hours	east	17 - 21 knots	strong risk of ice, temperature < 32° F
3	9 hours	southeast	22 - 27 knots	mist
4	12 hours	south	28 - 33 knots	fog
5	18 hours	southwest	34 - 40 knots	drizzle
6	24 hours	west	41 - 47 knots	rain
7	48 hours	northwest	48 - 55 knots	snow or rain & snow
8	72 hours	north	56 - 63 knots	squalls with or without rain
9	occasionally	variable	64+ knots	thunderstorms

The MArine FORecast is routinely updated 3 times per day at 0300, 1030, and 1830 with updates at other times as required.

As an example, the MAFOR code at 1830hrs is 12803; 11606; 15516; 11510

For the first 6 hours (1830 – 0030), the wind will be from the north at 0-10 knots with mist

For the next 3 hours (0030 – 0330), the wind will be from the west at 0-10 knots with rain

For the next 18 hours (0330 – 2130), the wind will be from the southwest at 11-16 knots with rain

For the last 3 hours (2130 – 0030) of this forecast the wind will be from the southwest at 11-16 knots with good visibility