CANADIAN HYDROGRAPHIC SERVICE

Vessel Management

The Canadian Hydrographic Service (CHS) surveys shipping routes and ports to gather data that aids in the management of commercial ship navigation.

These surveys support the safety and business interests of the shipping industry.

Facilitating Commercial Navigation

Charting the Way

With the use of multi-beam (and multi-transducer) sonar devices and other tools, the CHS acquires as complete a picture as possible of every area we survey. We then share our findings with those who need them in the form of charts and other information materials and services.

CHS electronic navigational charts, for instance, present details captains require to bring their ships safely and smoothly into ports and alongside docks.

To ensure our charts are always useful, we update our data on an ongoing basis. Some survey projects, such as those at industrial facilities near Picton, Ontario, are conducted specifically to enhance our existing data and to support Canadian industry.

Freighter heading west bound out of Vancouver Harbour, under Lions Gate Bridge Photo: Craig Lessels, CHS Pacific

Up-to-the-minute Water Levels

Every inch of under-keel clearance is critical for a shipping company to maximize cost efficiencies.

More important than increased cargo, though, is the need for commercial ships to have up-to-date water levels for environmental protection. Without accurate and timely depth information, navigational accidents occur – and accidents involving large cargo-carrying ships can quickly cause devastating damage to our environment.

Providing real-time water levels is part of the CHS mission. This information can be obtained through a variety of channels, including the CHS Water Level Observation phone service (1-877-775-0790) and website, www.tides.gc.ca.

We also maintain 33 voice-announcing water level gauges for ships on the Great Lakes and St. Lawrence River.

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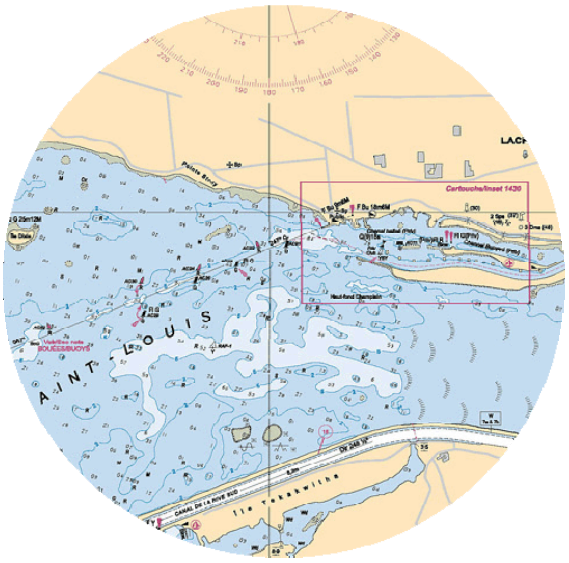
Cable and Pipeline Data

The CHS Data Management Centre works with the Navigable Waters Protection Program, engineering firms, and companies to collect and publish information on cables and pipelines, as well as wharves and infrastructures.

In the event of a significant change to a cable or pipeline, we will issue an alert to shippers registered on our *Notices to Mariners* website, www.notmar.gc.ca.

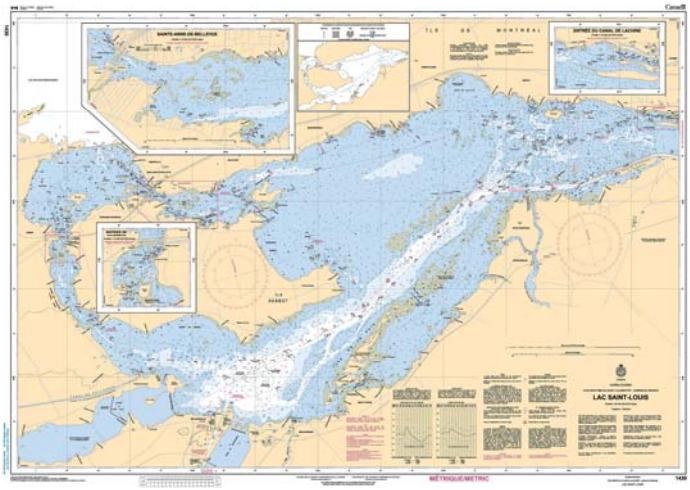
Notices to Shipping, www.ccg-gcc.ca/eng/CCG/Notship, are marine radio broadcasts notifying mariners of critical and time sensitive information on navigational hazards so that they may avoid them. These are later issued as *Notices to Mariners*, and charts and publications are then amended.



Shallow Water Bathymetry

Bathymetric features on CHS charts are presented so that they are easy to understand – with colour, contour symbols and numbers.

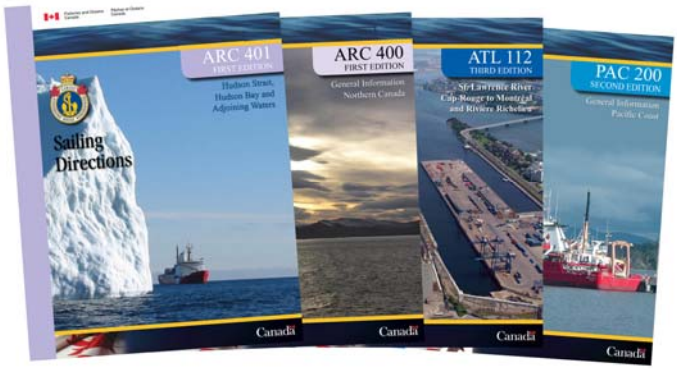
Operators of ships equipped with the Electronic Chart and Display Information System (ECDIS) now have the option to activate a service incorporating CHS bathymetric data that sets alarms to sound when a shallow-water contour is breached.



Overhead Obstacles

CHS also charts overhead obstacles like cables, bridges, pillars and pipelines. The charts indicate minimum overhead clearance to accommodate cables that sag as a result of weather conditions.

In addition to identifying lights on bridges on our charts, we also provide instructions in our publication, *Sailing Directions*, so captains know how to request that a bridge be opened or lifted for their ships to pass safely.



For more information about these and other ways the Canadian Hydrographic Service supports vessel management, please visit:
www.chs-shc.gc.ca

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