Coastal Marine Informatics

Island of Newfoundland

and

Southern Labrador

Mariner's

Deck Reference

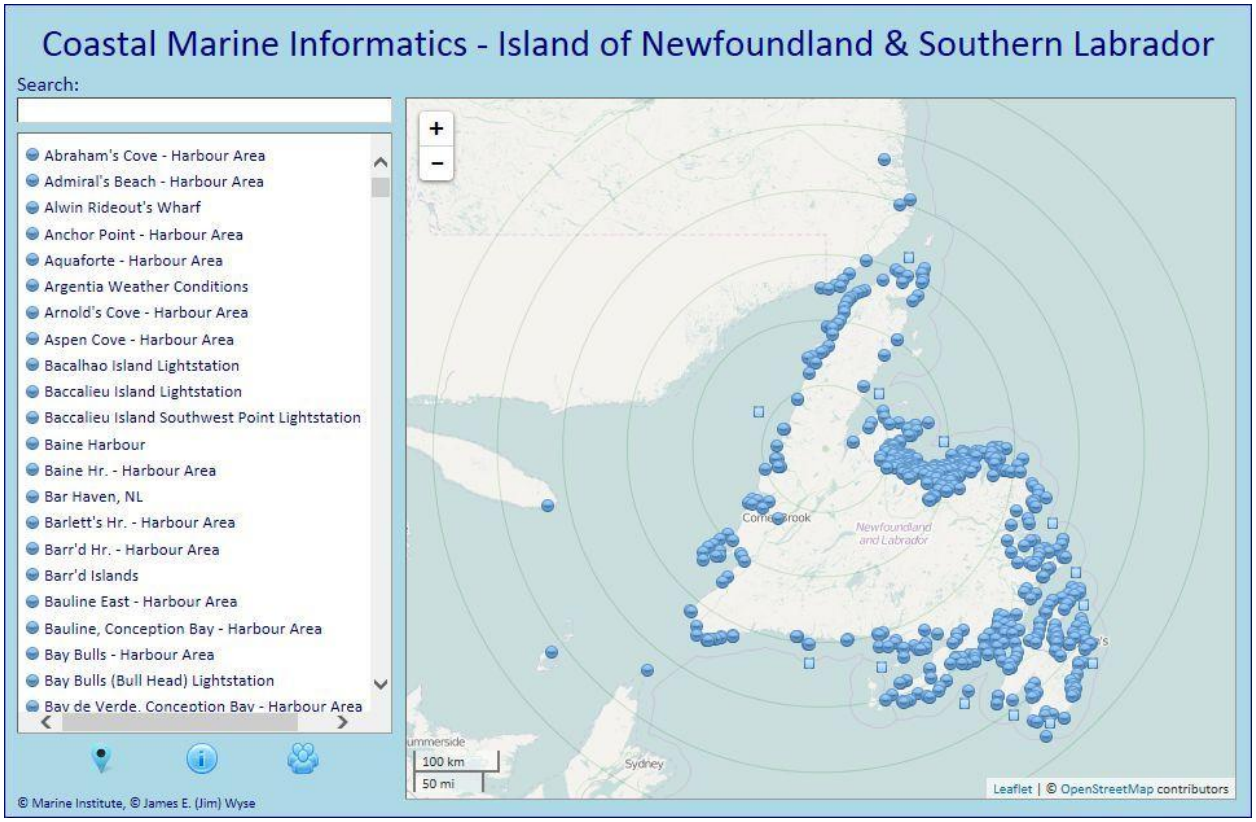
2015

Coastal Marine Informatics Initiative
Marine Institute of Memorial University of Newfoundland

Mariner's Deck Reference

The Mariner's Deck Reference (MDR) is a product of the Coastal Marine Informatics (CMI) Initiative. It describes a web-accessible resource facilitating access to over 700 web pages addressing the information needs of coastal mariners. MDR consists of two sections: Section I "Using the CMI Resource" describes the functionality available to those accessing CMI while Section II "CMI Components" provides overviews of CMI's constituent information sources.

The Coastal Marine Informatics Initiative is continually expanding the CMI resource with respect to both the range of functionality and the variety of component sources. Mariners should expect to find functional enhancements and further component sources on successive CMI website visits.



http://iprox.mi.mun.ca/CMI

(or, use search string: "i-prox cmi")

Mariner's Deck Reference

Section I: Using the CMI Resource

Section II: CMI Components

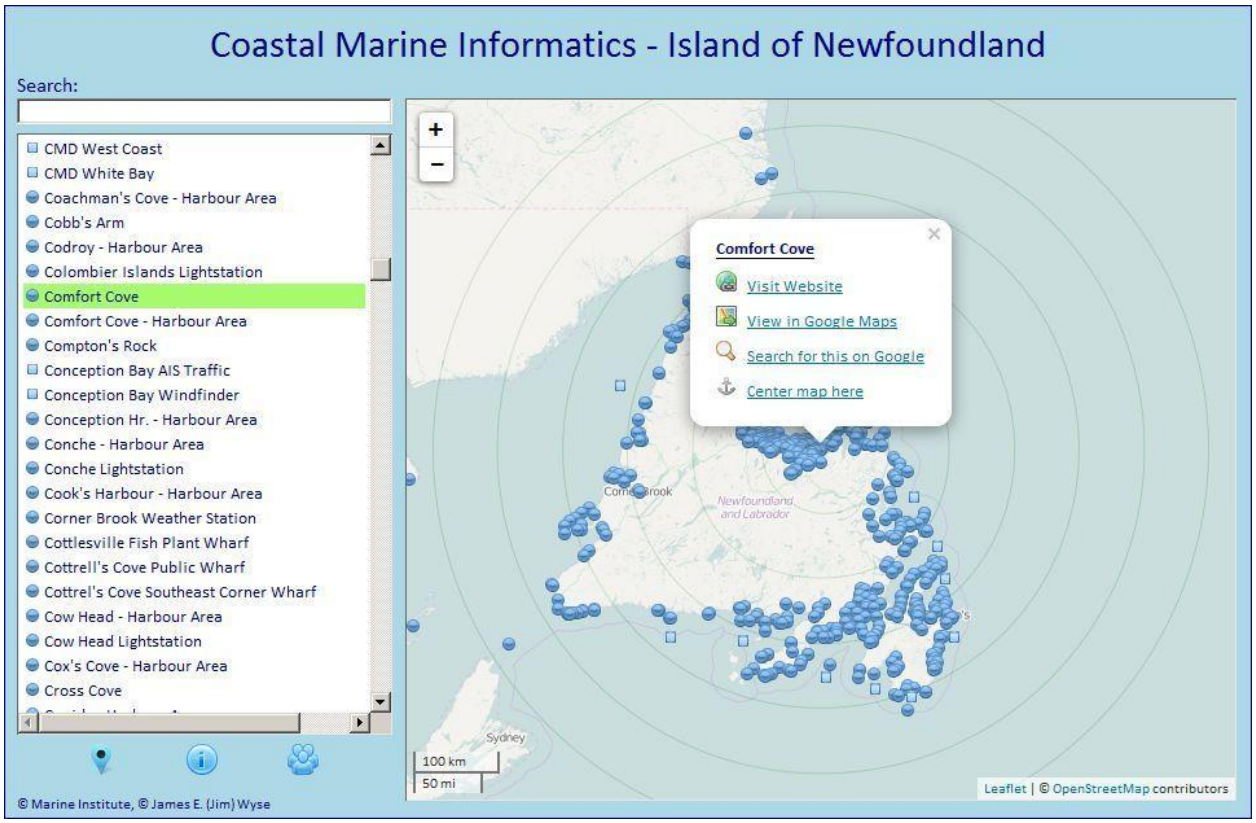
Section I

Using the CMI Resource

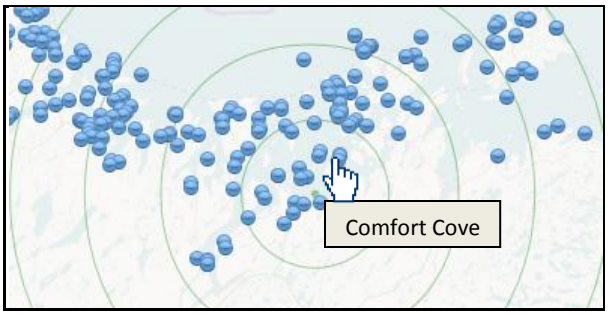
Note

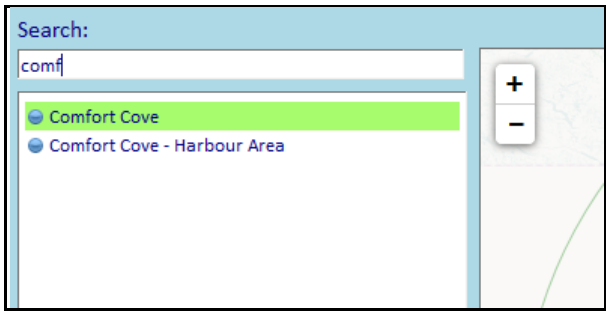
Each entry in the CMI resource is either location-focused or area-focused. An example of the first would be the CMI entry for Jerseyside Harbour; an example of second would be an entry for Placentia Bay. Location-focused entries are associated with round icons ( ) whilst area-focused entries are associated with square icons ( ).

I – 1: Location Finding



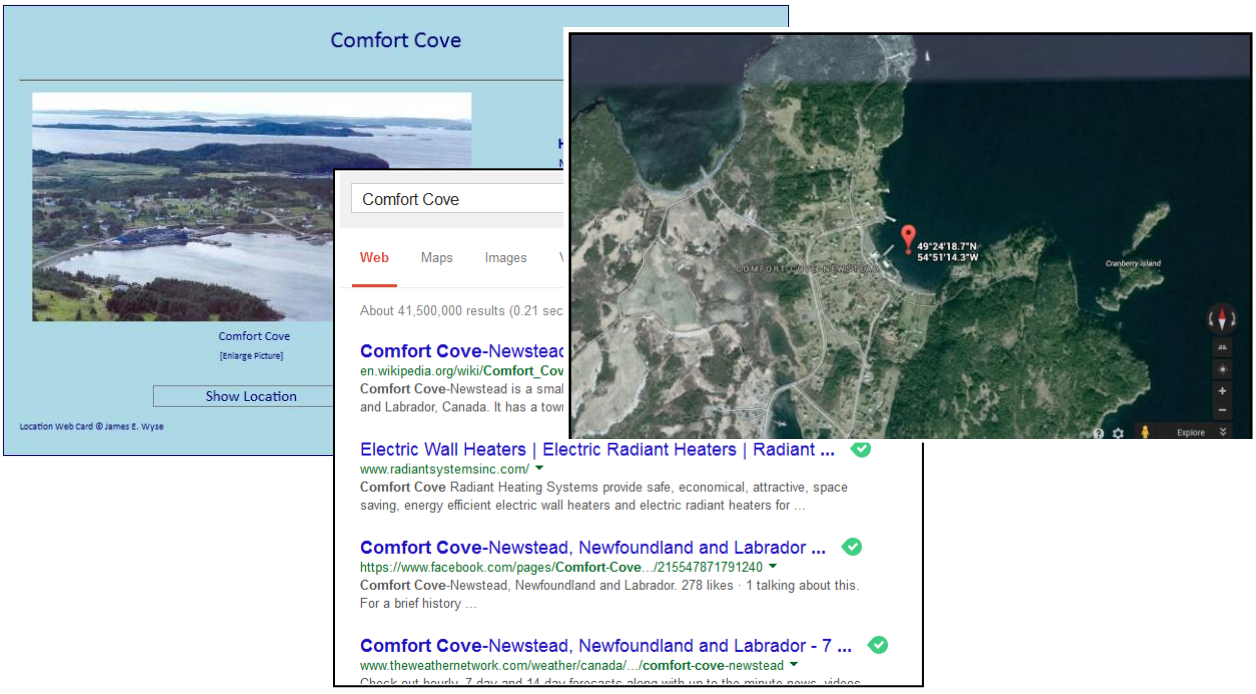
Finding a location (for example, Comfort Cove) may be done in three ways: (1) by scrolling the left-side list box and selecting its link (seen in green above), (2) by panning and zooming the map to the location's vicinity and then 'hover-searching' to reveal it (as seen below on the left), or (3) by entering a name or partial name (as shown below on the right) in the 'Search' box above the list box. In each case, selecting the location will reveal the Action Menu shown above.





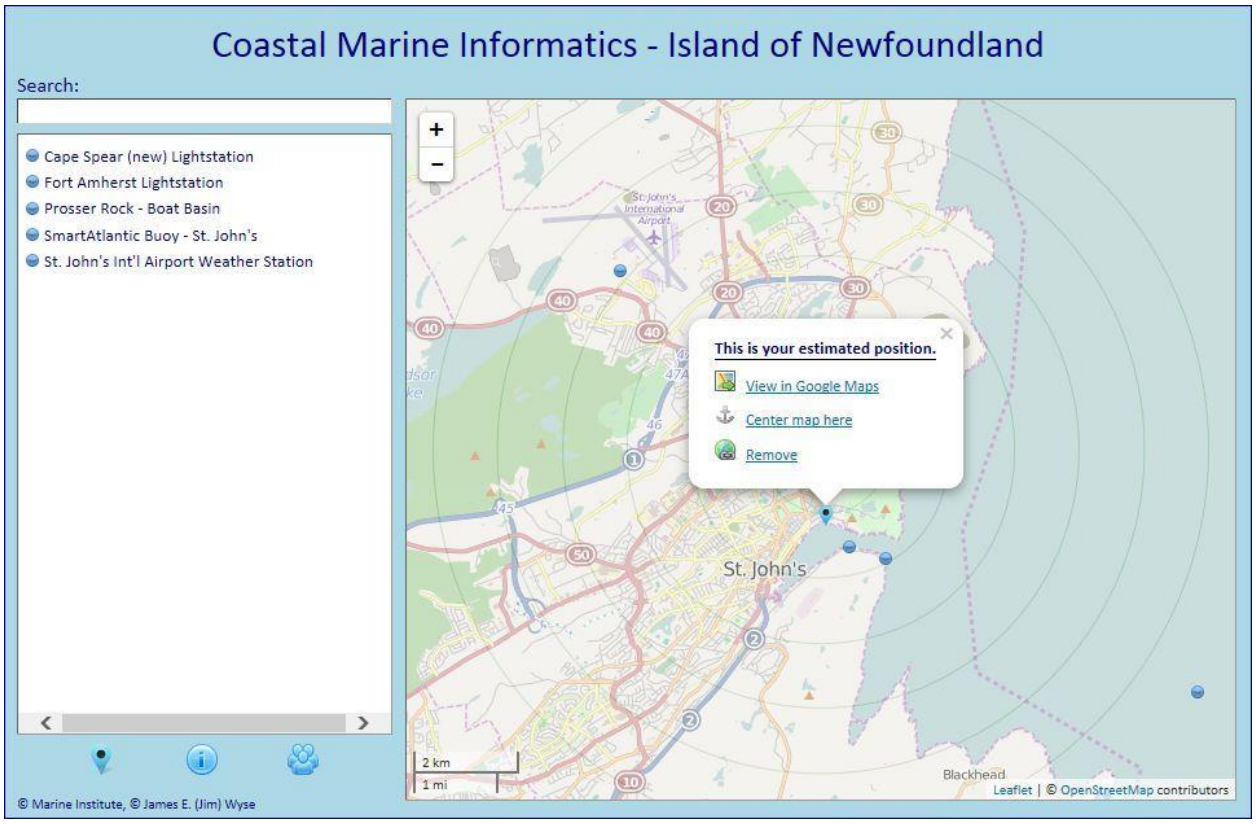
I – 2: Action Menu

The Action Menu provides options for website visitation, map generation, and web search. The result for 'Comfort Cove' for each action is show in the collage below. The fourth action places the selected location at the center of the background map. Whenever a selection is made from the left-side list box, the display will automatically pan to the selected location and center it. However, whenever an off-center location is selected (perhaps after a 'hover-search'), the Action Menu's centering option should be chosen if a location-centric map is required.



I – 3: Position Inclusion

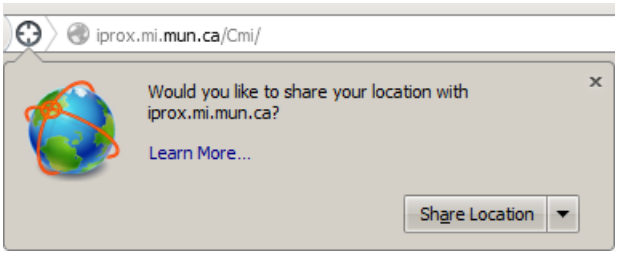
It is increasingly the case that a computing device, when permitted to do so, will use its geo-location function to provide the coordinates of its geographical position. Subsequent to obtaining permission to use a device's position the CMI web interface will include it as a mapped location and associate it with a three-item Action Menu (see below). The first two Action Menu items function the same as those similarly named and described in Section I-2 whilst the third item provides the option of removing the device's mapped position.

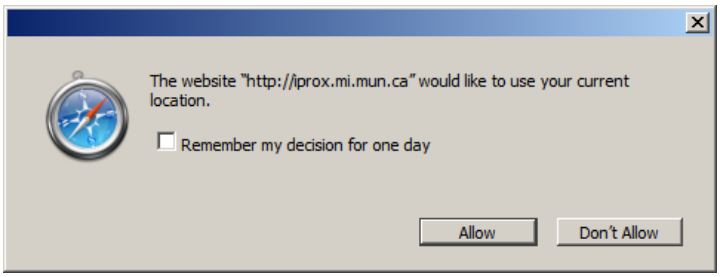


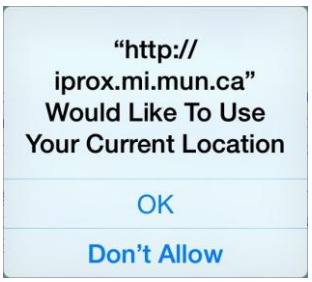
A request to include a device's position may be initiated using icon found in the bottom left area of the CMI web interface. Initiating a request will normally reveal a dialogue box that

requests permission to allow the CMI web interface to use a device's position. The specifics of the requesting message and the screen location of its dialogue box vary by web browser as well as by browser version. Note the dialogue

boxes below in this respect from various commonly used web browsers: Firefox and Opera (first row), Internet Explorer and Chrome (third and fourth rows), and Safari and iOS (fifth row).

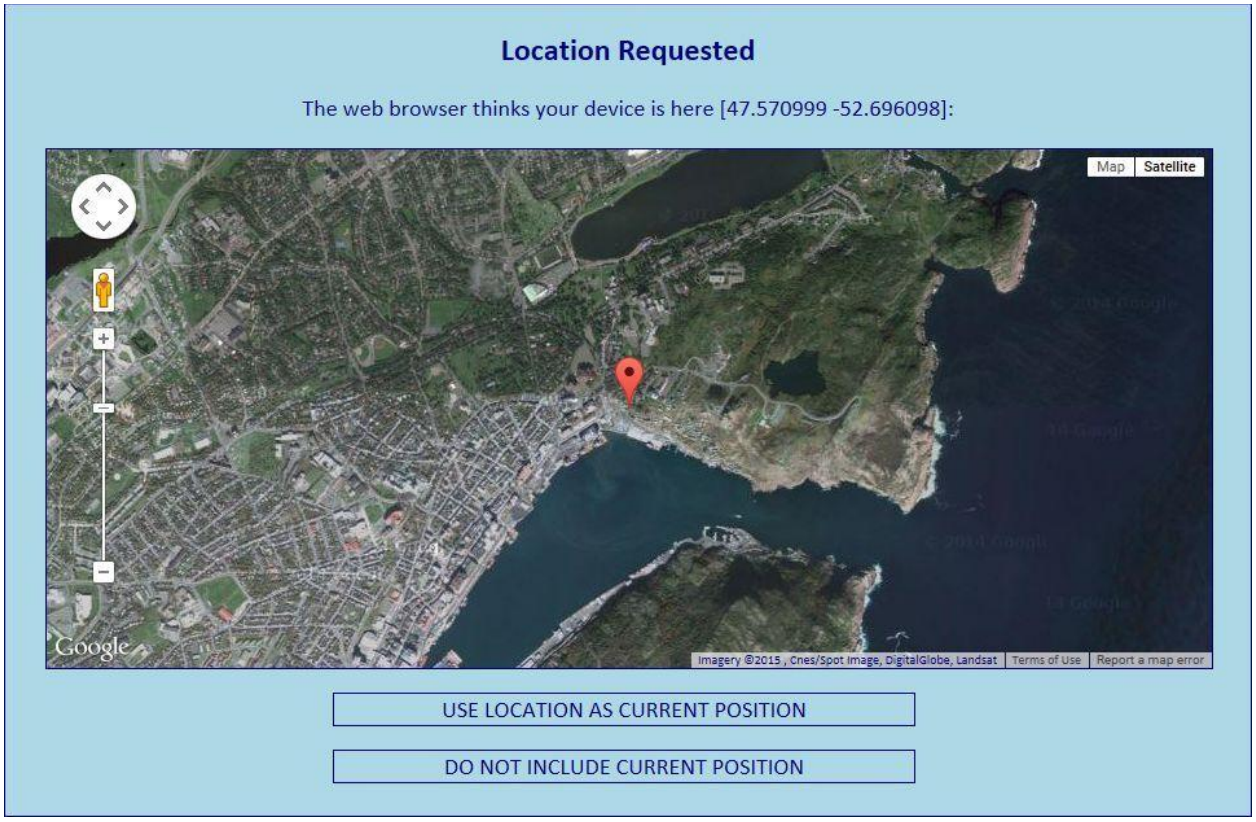






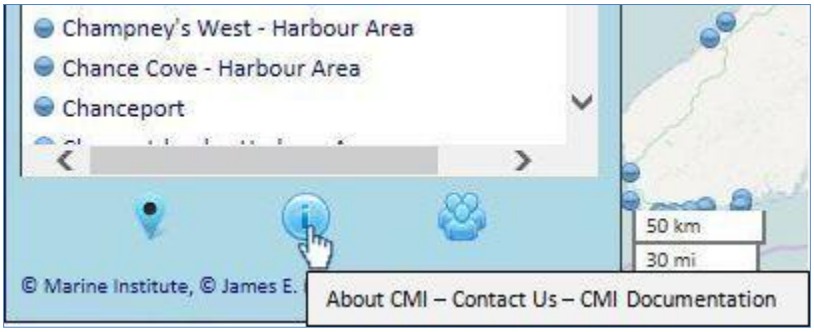
When permission is not readily forthcoming the following webpage will appear with information about actions that may be taken when geo-location is not available or when the geo-location function takes an unusually long period of time to acquire a device's position.

Upon successfully obtaining permission and acquiring a position, the CMI displays the position and seeks confirmation that it should appear on the CMI web interface map. The position provided by a device's geo-location function is often substantially inaccurate, sometimes 10s or 100s of kilometres away from its actual position. Selecting 'USE LOCATION AS CURRENT POSITION' confirms that the position obtained is acceptable for use as a device's estimated position.



I – 4: More About CMI

More information on CMI may be obtained by selecting the "I" link found in the web interface's bottom left-hand area:



The "I" link will reveal the following page with further information about CMI including contact e-mails for CMI's developers and downloading the document you are now reading (or a more recent edition).

Coastal Marine Informatics (CMI)

CMI is a web-based resource consolidating access to information sources of interest to coastal mariners including recreational boaters and those piloting small-scale commercial vessels engaged in near-shore industrial activities. We invite your comments, suggestions, and questions on any CMI aspect. Please contact Jim Wyse jwyse@mun.ca and/or Mark Wareham Mark.Wareham@mi.mun.ca.

Document Available: "Mariner's Deck Reference"

The Mariner's Deck Reference may be used aboard a vessel as a reference source describing CMI's functionality and content. It may be useful to those accessing CMI resources for information and/or planning purposes.

Download the Mariner's Deck Reference now.

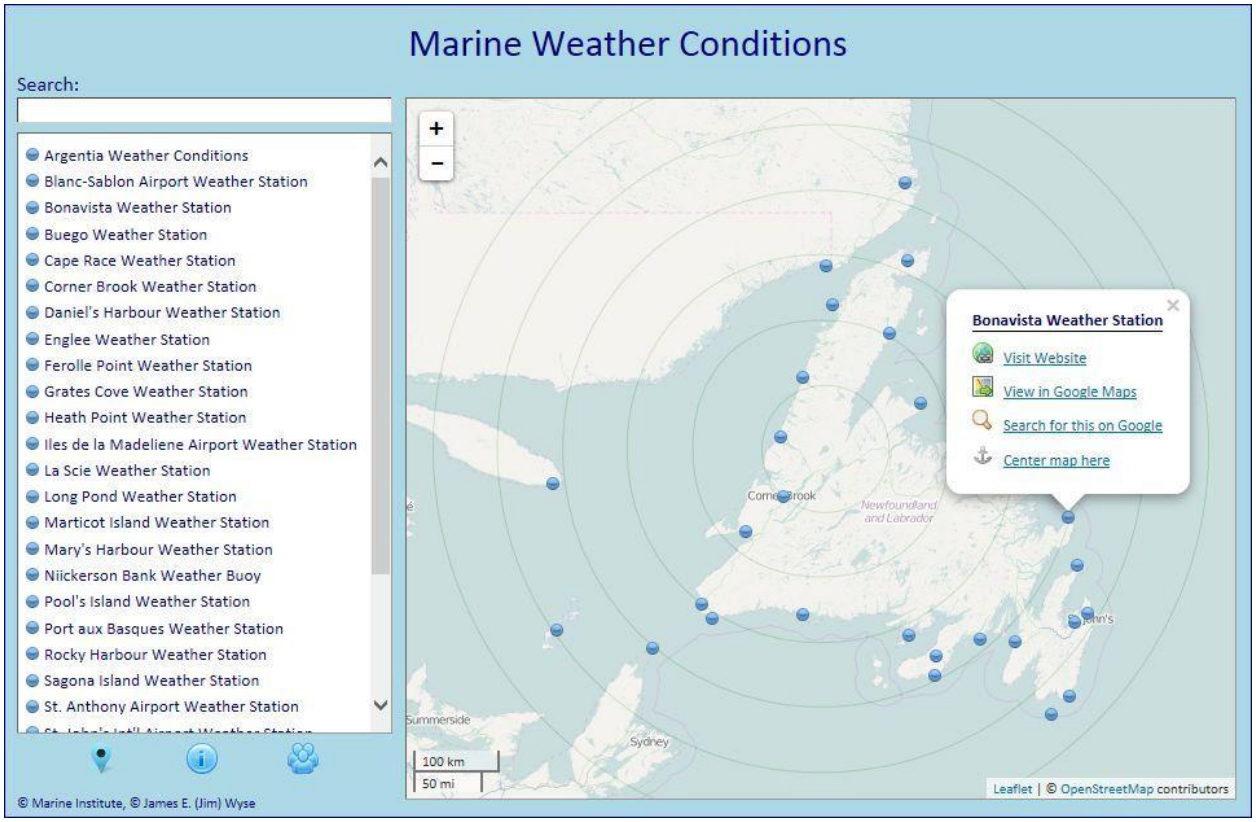
Section II

CMI Components

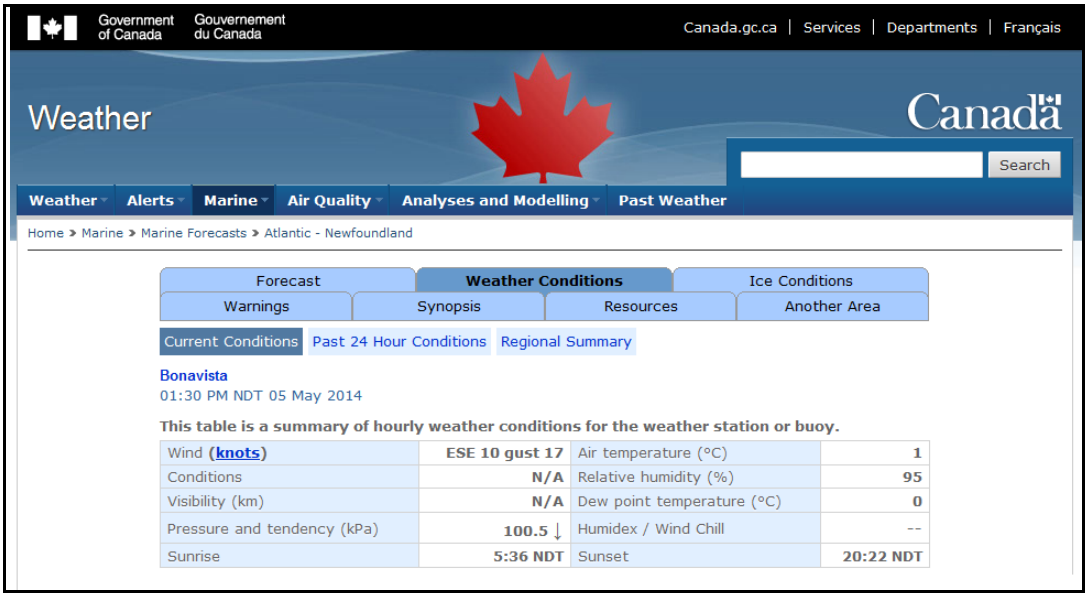
II – 1: CMI Components

Ten major components form CMI's consolidated informatics resource. This section briefly examines the content of each component. The component list shown above may be accessed as illustrated below.

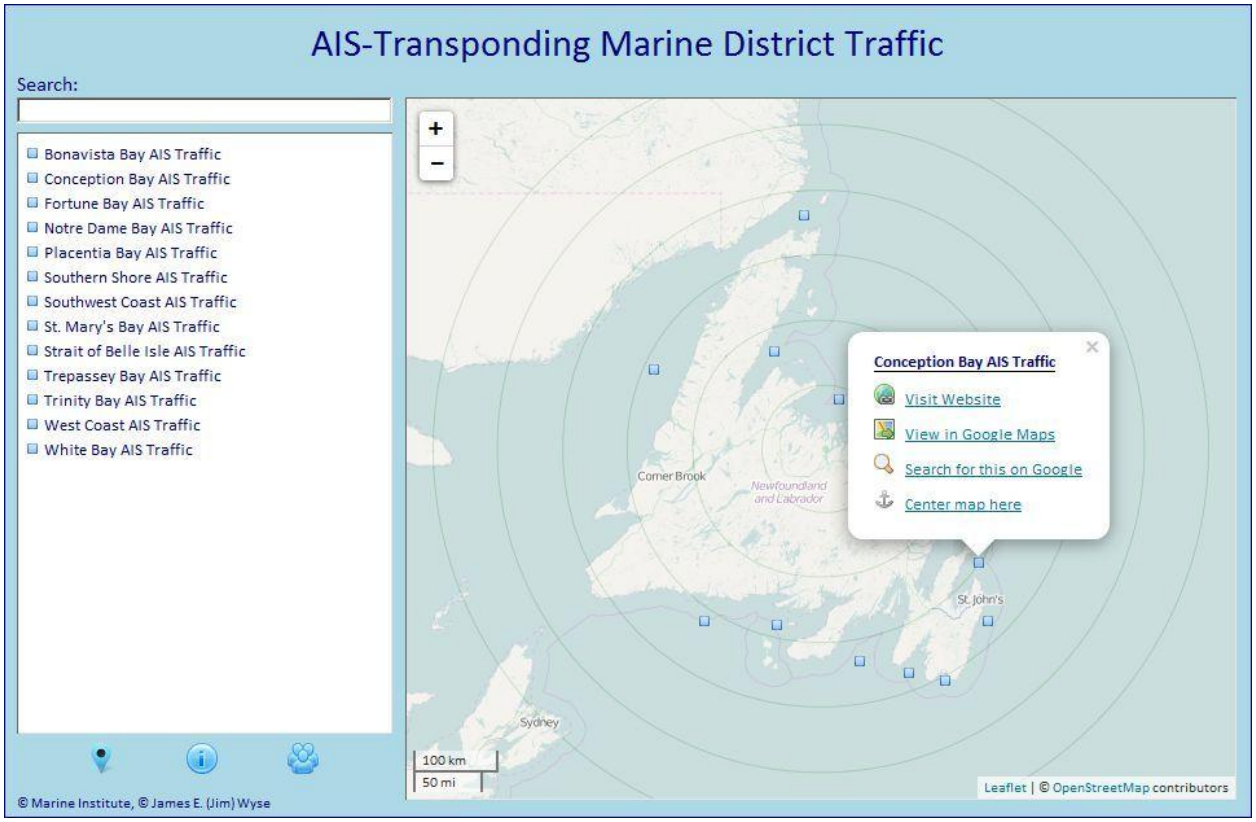
II – 2: Marine Weather Conditions



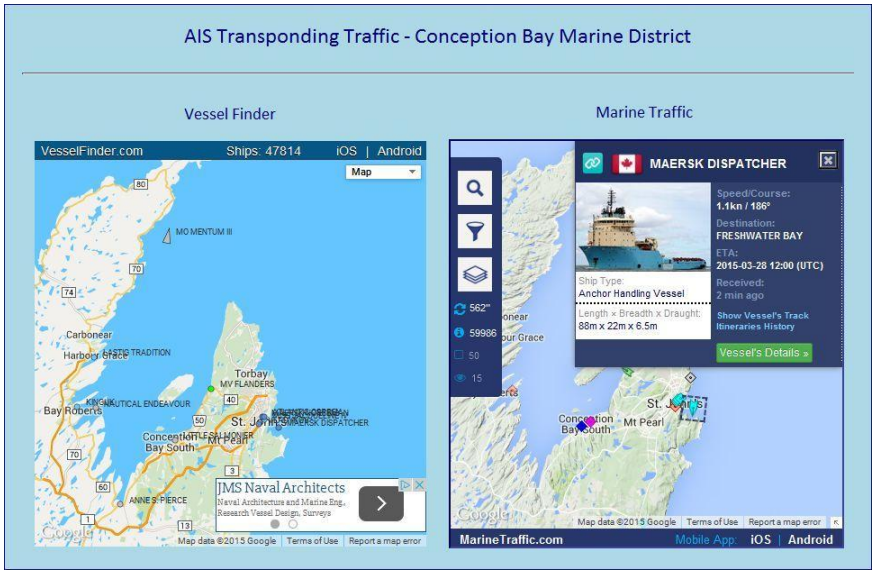
The informatic component for Marine Weather Conditions is populated with the locations of Environment Canada's Internet-linked weather stations. Above we see the location of the Bonavista station and (below) the webpage reporting the station's conditions.



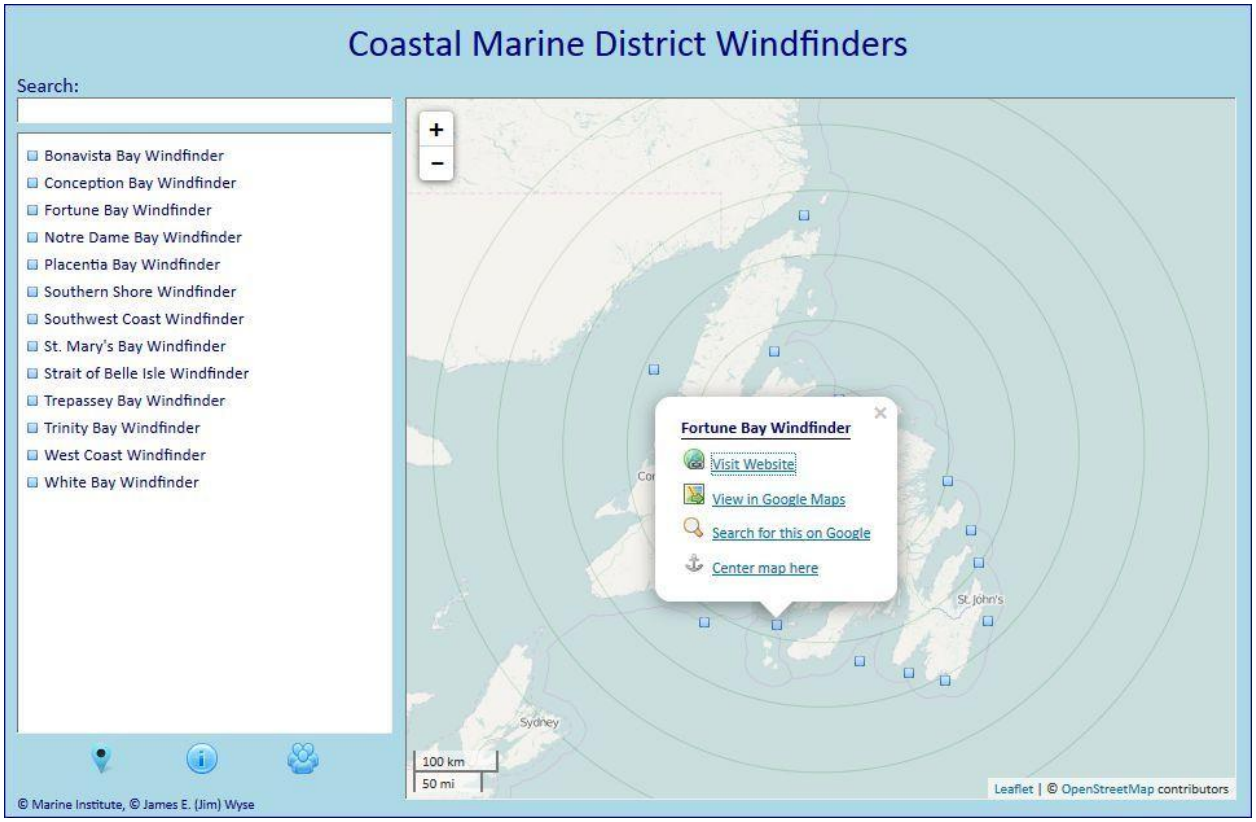
II – 3: Marine District AIS Traffic

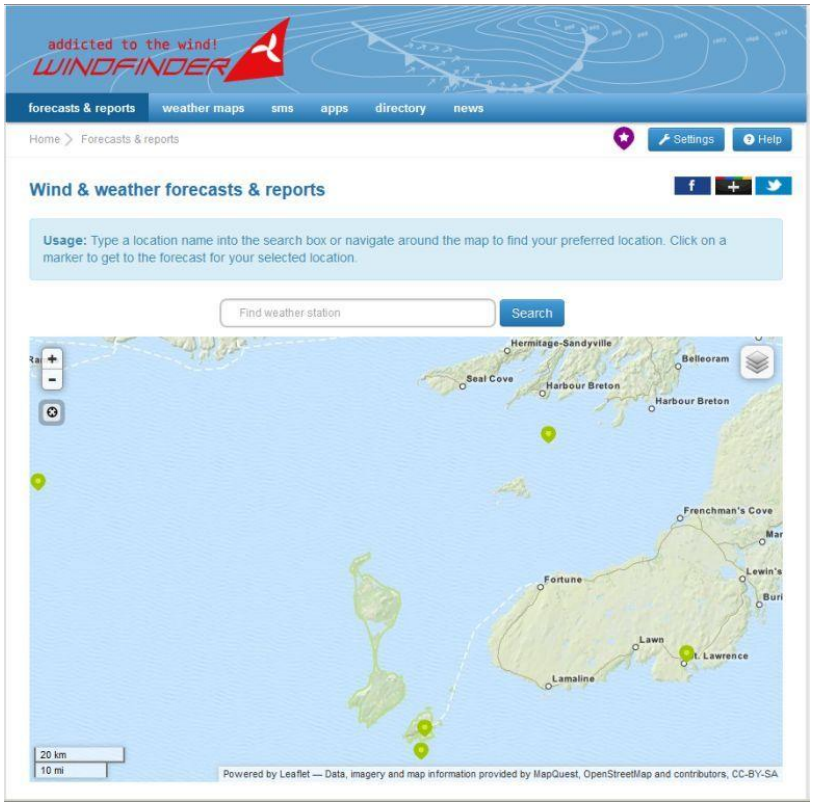


Two prominent Internet-based sources provide information on Automatic Identification System (AIS) marine traffic: VesselFinder.com and MarineTraffic.com. When selected (as seen above for 'Conception Bay AIS Traffic'), traffic reports from the two AIS sources will appear in the 'side-by-side' manner seen below.



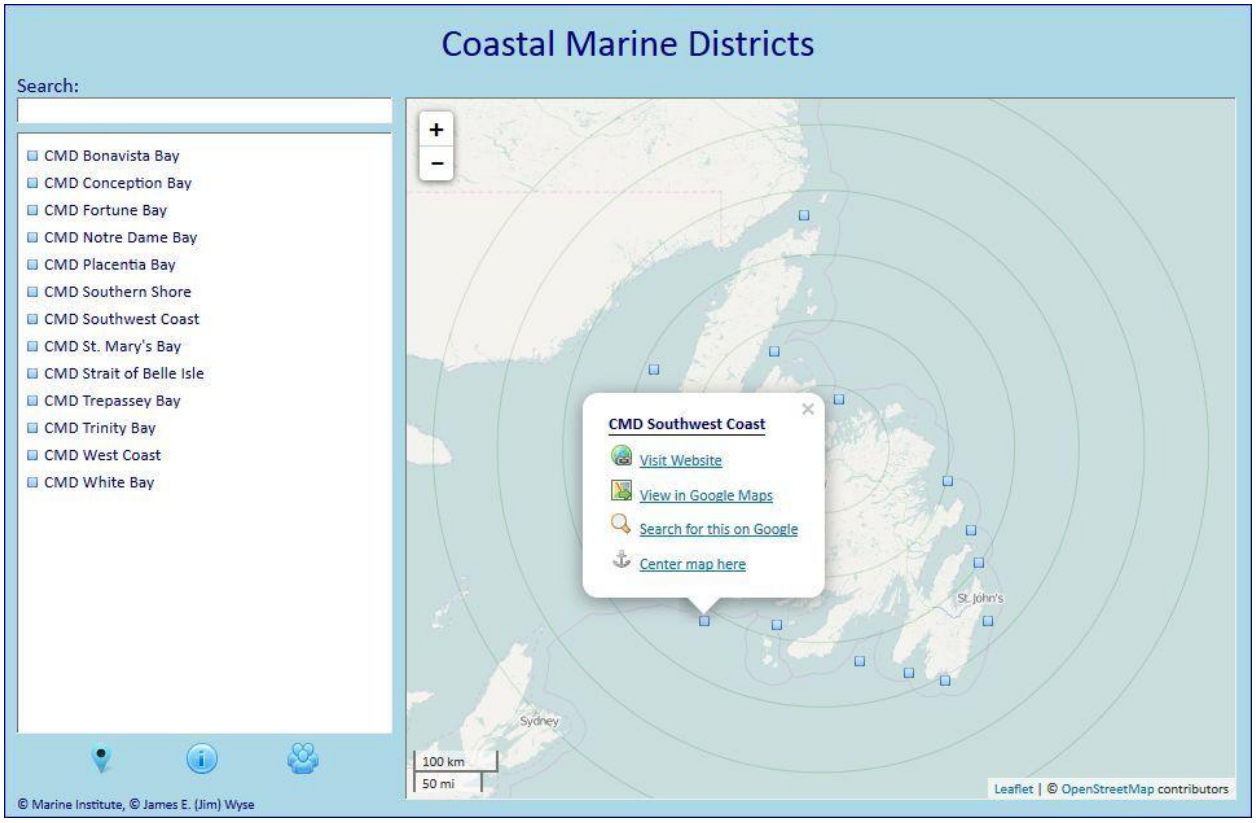
II – 4: Marine District Windfinders





This CMI component accesses the Windfinder web source to provide wind and weather forecasts for each marine district. Here we see the web page for the 'Fortune Bay Windfinder'.

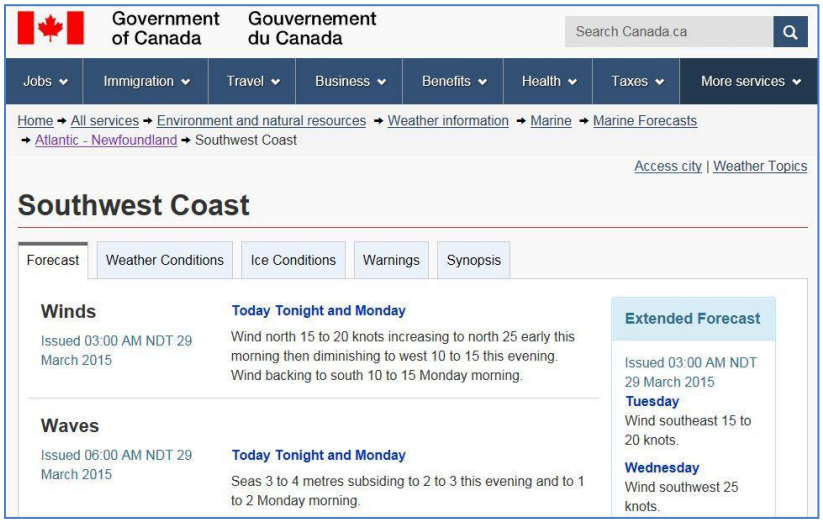
II – 4: Coastal Marine Districts



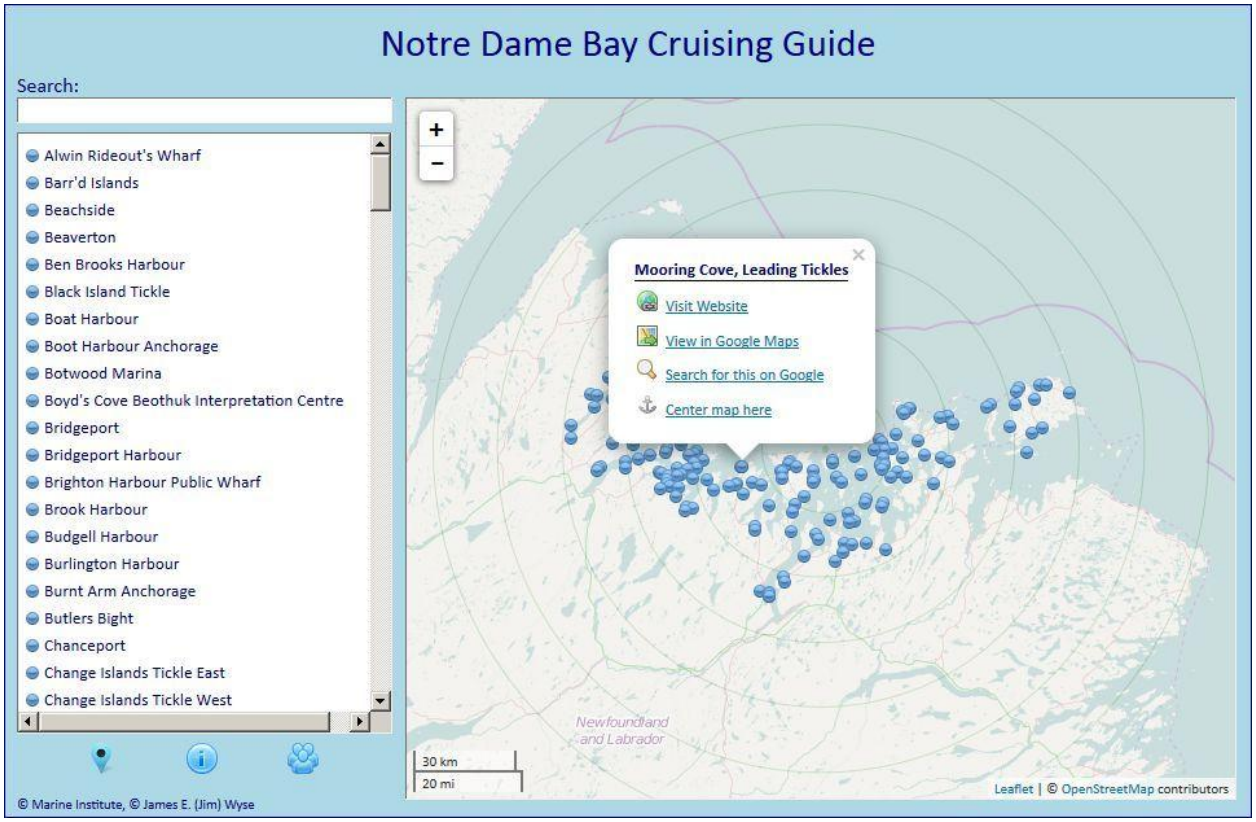
A Coastal Marine District (CMD) web page (selected above for CMD Southwest Coast and shown on the next page) consolidates informatic sources generally applicable to all locations within a CMD's areal extent. Note that a CMD's coverage map (seen below for CMD Southwest Coast) shows no icon marking a specific location, a reflection of the areal nature of each CMD.

II – 4: Coastal Marine Districts (Continued)

A district webpage (seen above for CMD Southwest Coast) includes web links to a variety of sources applicable to locations within the district: a marine weather forecast (seen below), the district's Winderfinder page, the province-wide Iceberg Finder, the district's marine traffic AIS page, an applicable tides-and-currents page, the district's 'lights lists', a district-centered CMI proximity, along with inland forecasts for various coastal communities throughout the district.

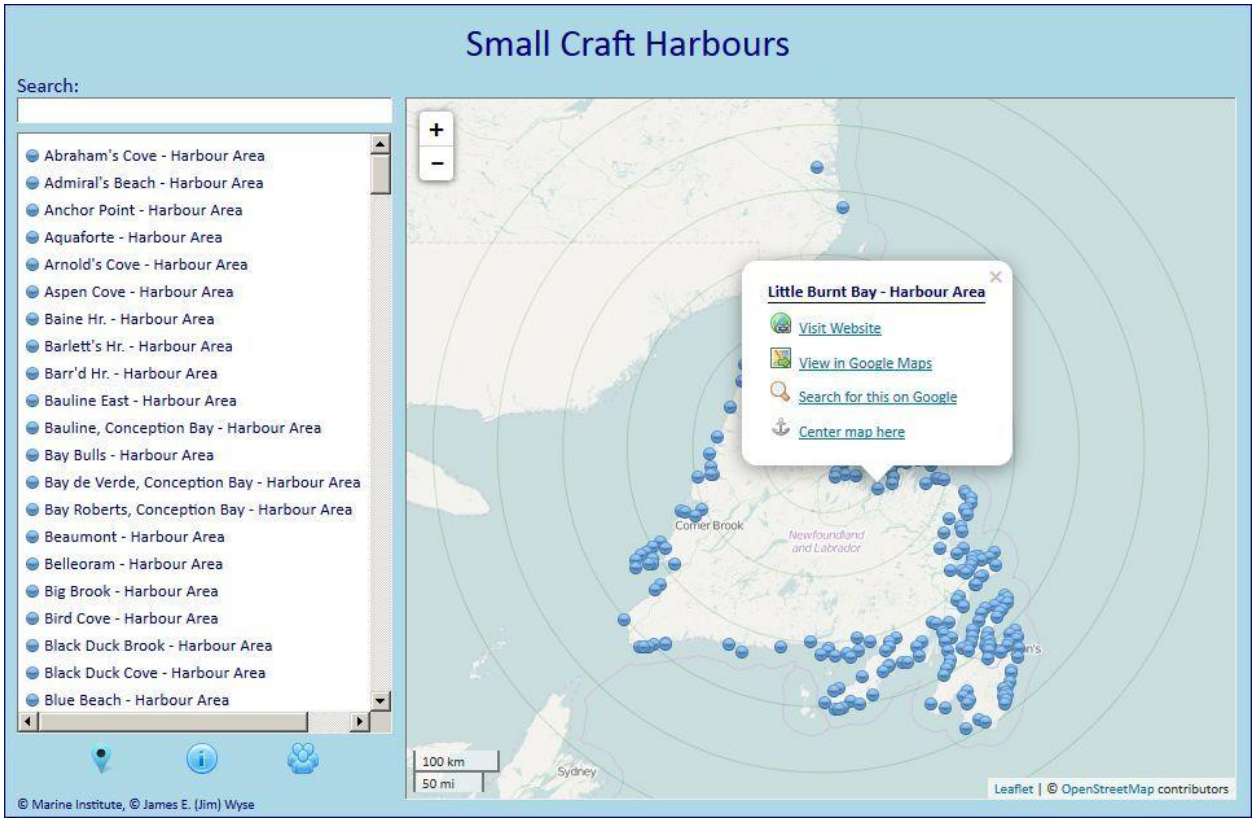


II – 6: Notre Dame Bay Cruising Guide



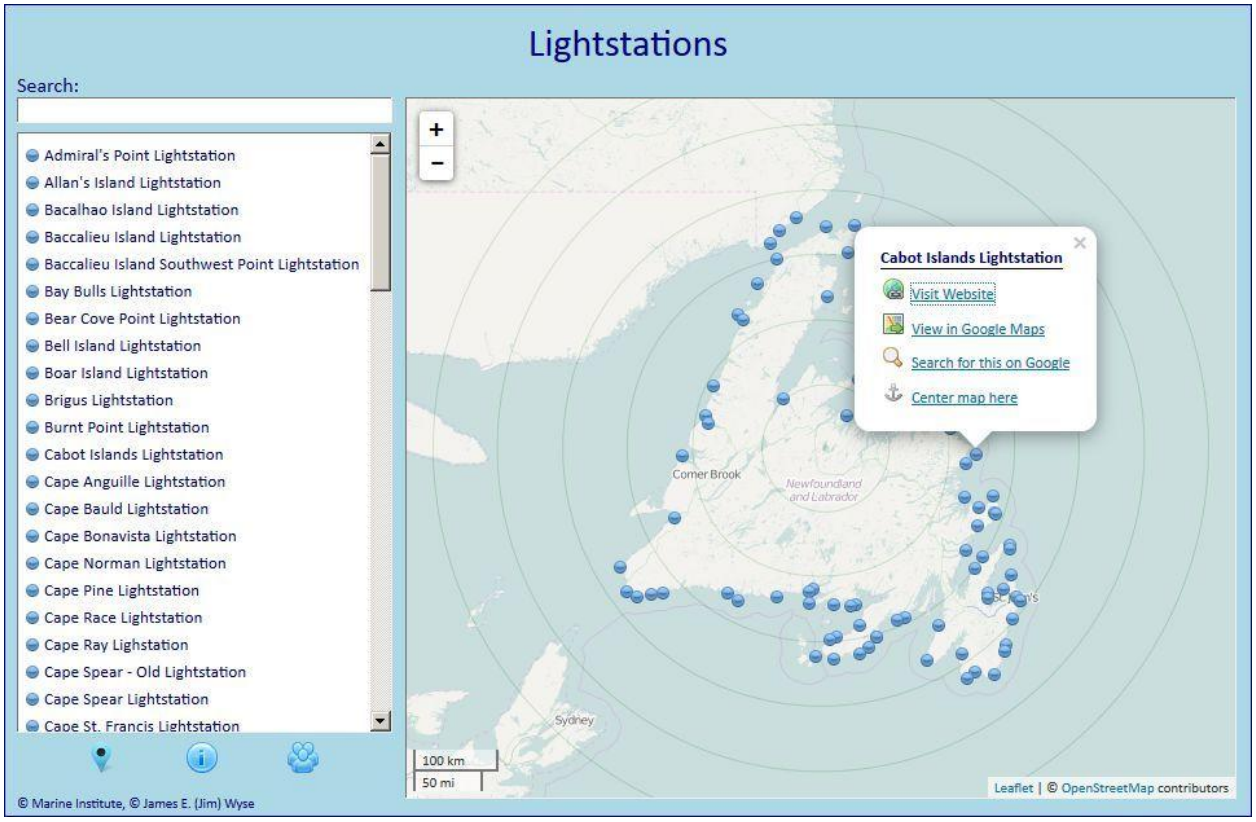
The NDB Cruising Guide reports on 173 locations throughout Notre Dame Bay. A section of the web page with Guide information on Mooring Cove in the coastal community of Leading Tickles appears below.

II – 7: Small Craft Harbours

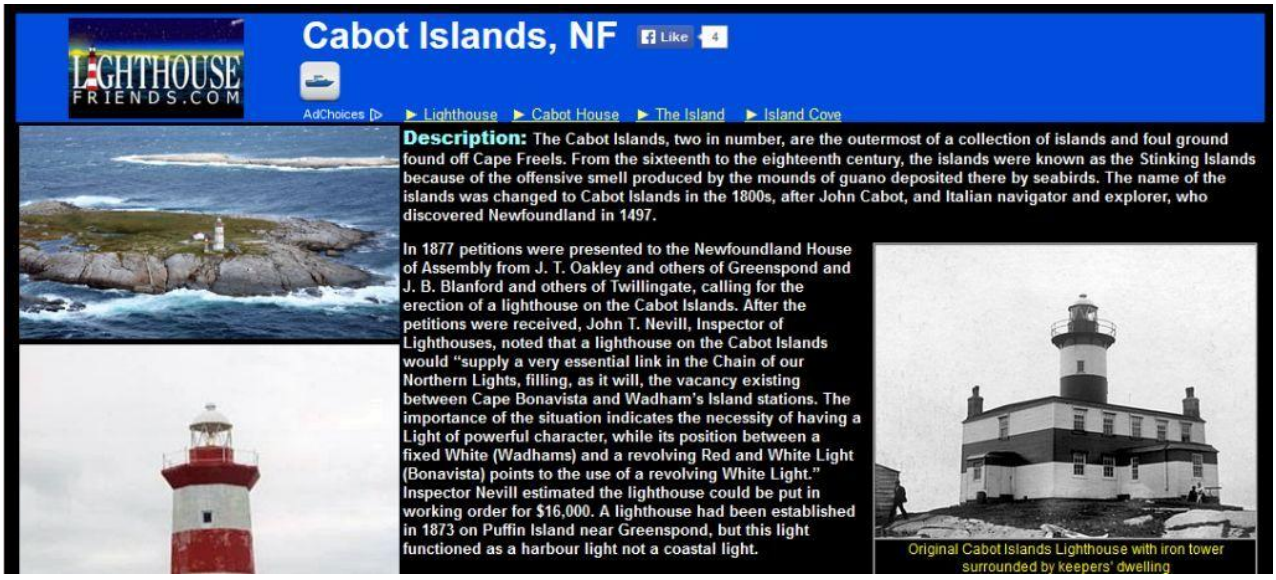


Fisheries and Oceans Canada's Small Craft Harbours website provides aerial photos on over 240 harbours throughout the Province. Here we see the CMI web interface accessing an aerial photo for Little Burnt Bay.

II – 8: Lightstations

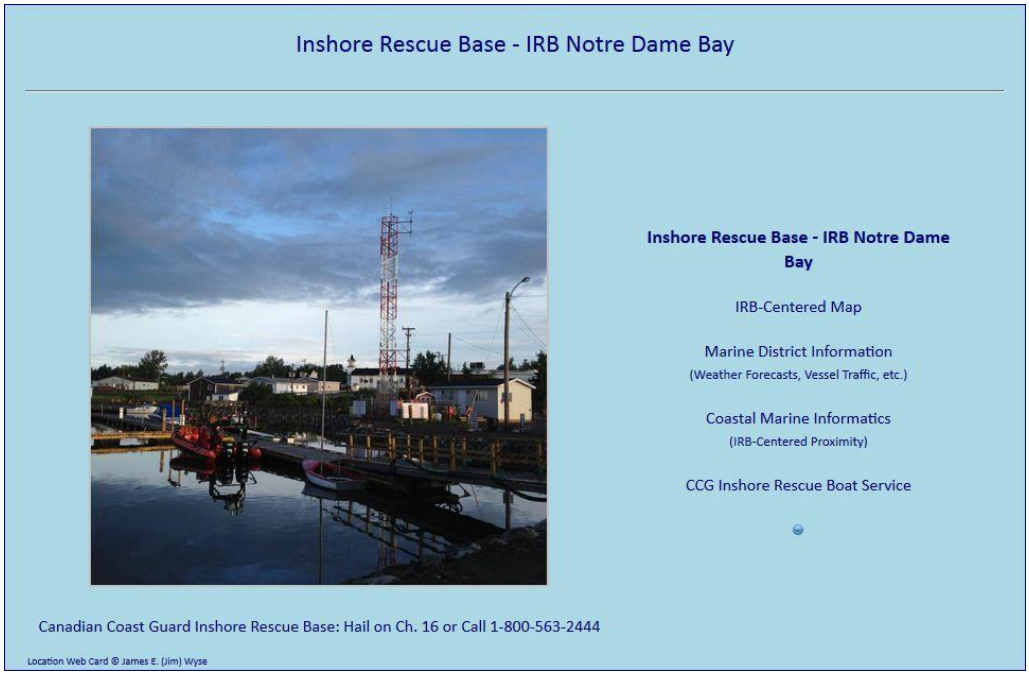


Lighthouse Friends.com publishes photos, histories, and more on lightstations throughout the US and Canada. About eighty of its lightstations may be found along the coasts of Newfoundland and Labrador. Here (below) is what CMI reports from Lighthouse Friends when queried about the lightstation on Cabot Island in Bonavista Bay.

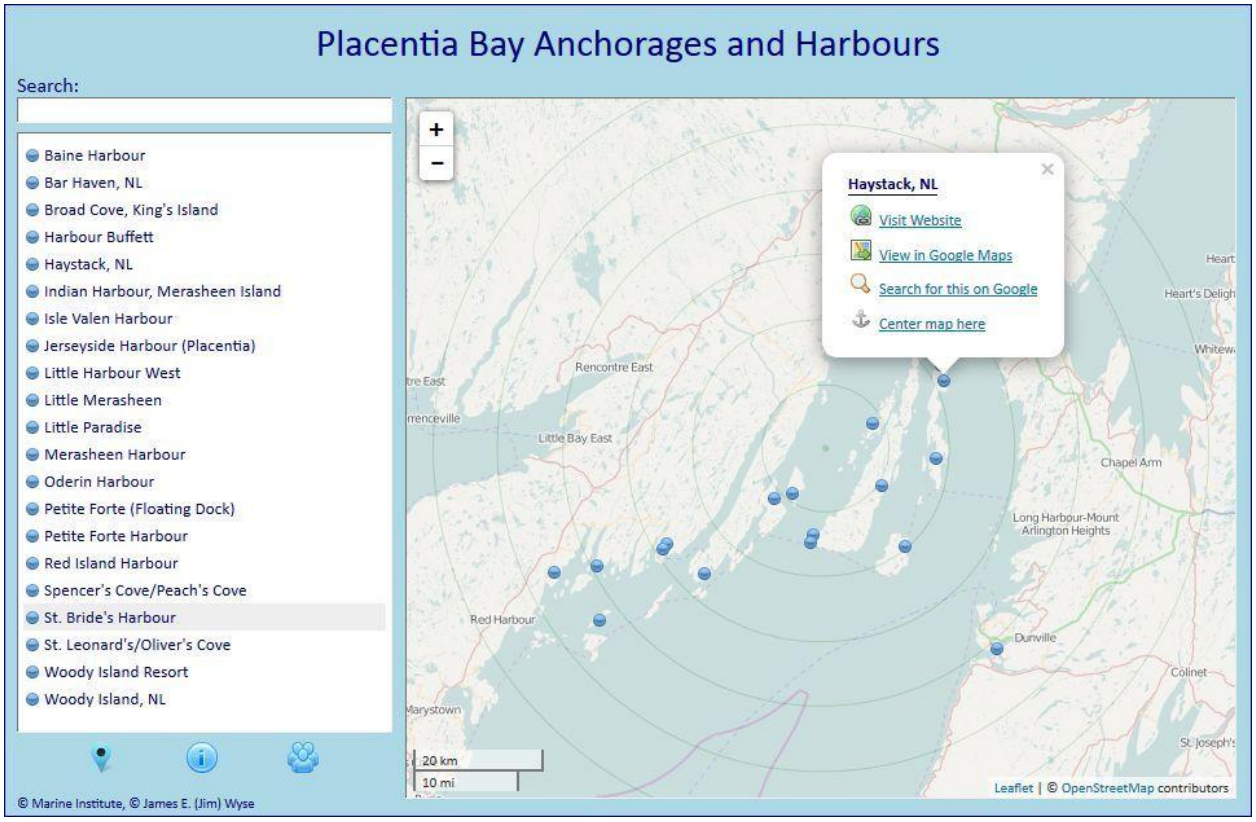


II – 9: Inshore Rescue Bases

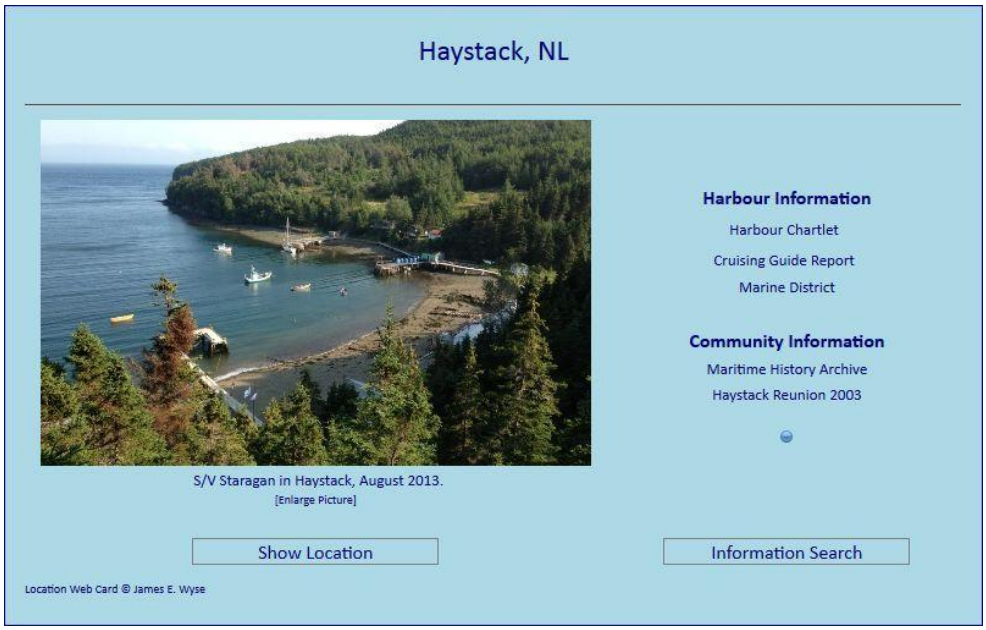
The Canadian Coast Guard operates three Inshore Rescue Bases (IRBs) in each of Notre Dame, Bonavista, and Conception Bays. Here's the webcard for IRB Notre Dame Bay.



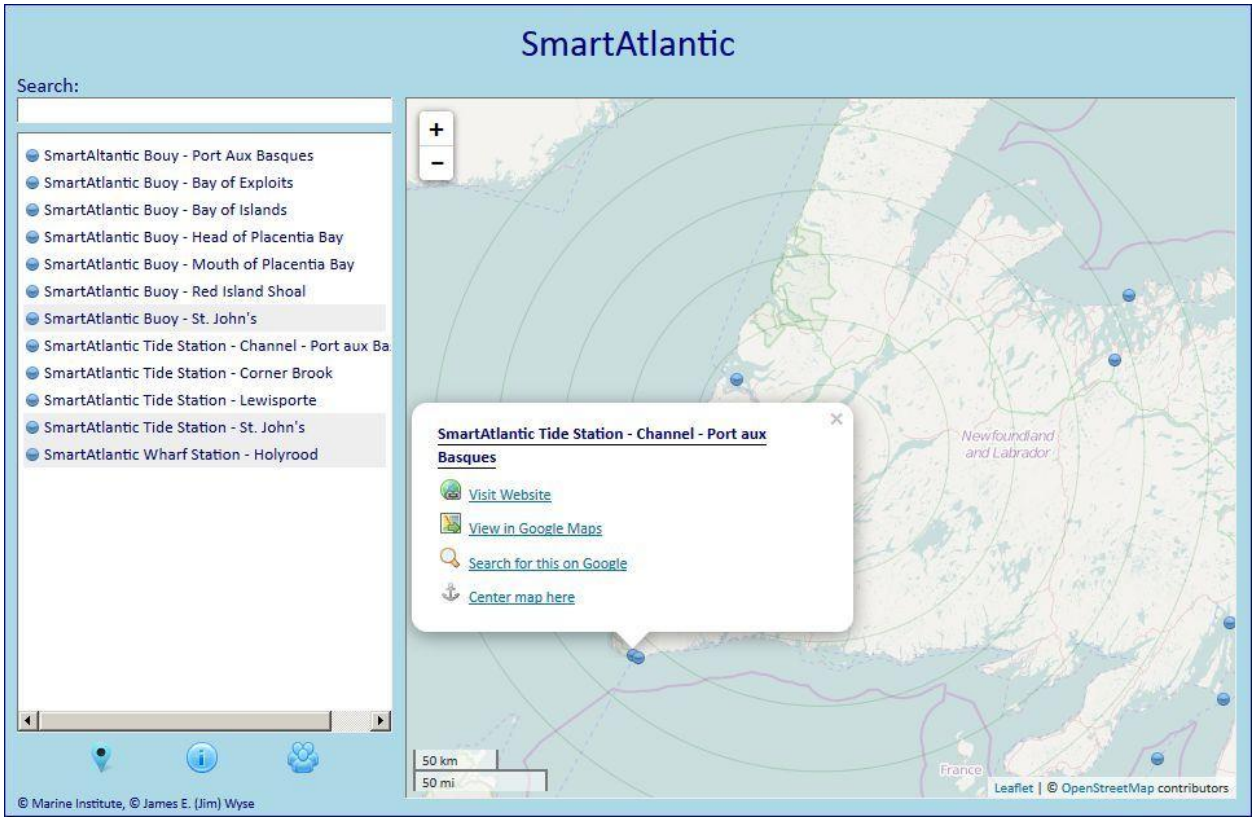
II – 10: Placentia Bay Harbour Reports



A series of location webcards prepared on anchorages and harbours throughout Placentia Bay constitute a mini cruising guide for the Bay's western shore and its inner islands areas. Selecting the Haystack link (shown above) yields the Haystack webcard (shown below).



II – 11: SmartAtlantic



The Marine Institute of Memorial University of Newfoundland operates Internet-connected meteorological/oceanographic buoys and stations throughout the Province. Here we see the CMI web interface accessing near real time data for tide station at Channel – Port-aux-Basques.