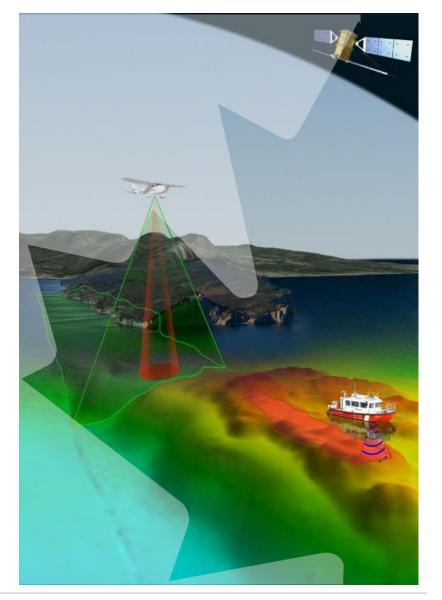


43rd Meeting of the United States of America -Canada Hydrographic Commission National Report of **CANADA**

Geneviève Béchard

Hydrographer General of Canada **Director General** Canadian Hydrographic Service Fisheries and Oceans Canada







Overview

Organizational changes

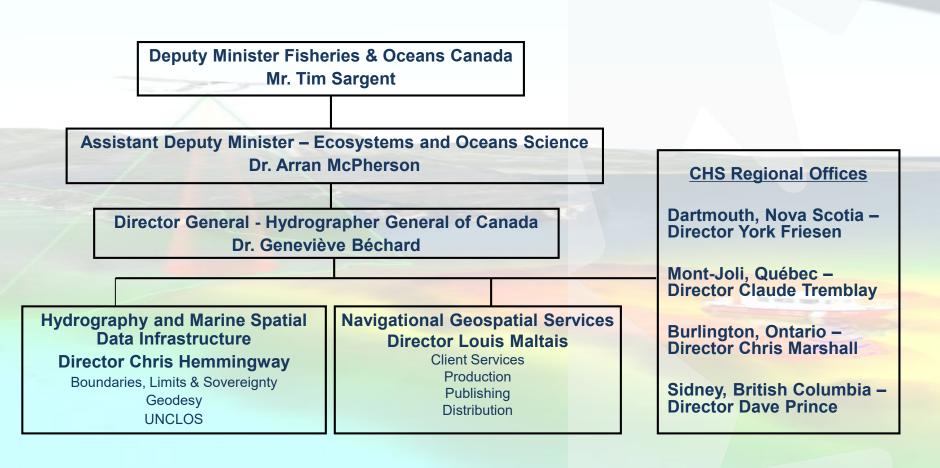
- -2019-2020 Fiscal Year National Surveys & Chart Updates
- -Developments from the Royal Canadian Navy
- -Non-Navigational (NONNA) Bathymertric Data
- -CHS Transformation
 - -Publications Going Digital
 - -Developing Digital Services
- -International Activities







Organization Update









2019-2020 Fiscal Year National Surveys

- Multibeam and LiDAR surveys in all regions
- Much of the work is funded under the Oceans Protection Plan (OPP)
 Initiative
- 1,000 km² LiDAR has been flown and validated
- Almost 30,000 km² Multibeam survey has been collected and validated so far this fiscal year







Multi-beam installation update



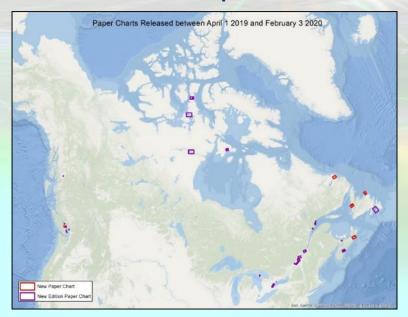




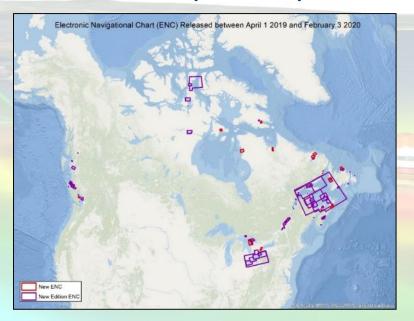


2019-2020 Fiscal Year Product Updates

- 33 New ENCs
- 5 New Paper Charts
- 124 New Edition ENCs
- 23 New Edition Paper Charts



- 1 New Edition Sailing Directions Book
- 1,119 Sailing Directions updates
- 526 Notices to Mariners
- 71 NAVWARNs (NOTSHIPs)









Developments from the Royal Canadian Navy



- Harry-DeWolf-class Arctic and Offshore Patrol Vessel
 - Capability of embarking additional, non-RCN personnel (CHS, RCMP, Border Security, etc.) as mission requires
 - No MBES fitted in final design
 - DND (with CHS assistance) is in the early stages of producing an engineering change to install MBES







Developments from the Royal Canadian Navy (continued)



Ship	Hull No.	Laid down	Launched	Commissioned
Harry DeWolf	AOPV 430	11 Mar 16	15 Sep 18	
Margaret Brooke	AOPV 431	29 May 17	10-Nov-19	
Max Bernays	AOPV 432	19 Dec 17		
William Hall	AOPV 433			
Frédérick Rolette	AOPV 434			
Robert Hampton Gray	AOPV 435			



HMCS Harry-DeWolf

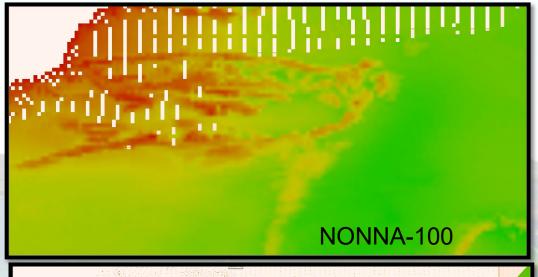
- Turnover to RCN early 2020
- Sea Trials, Work-ups in mid 2020

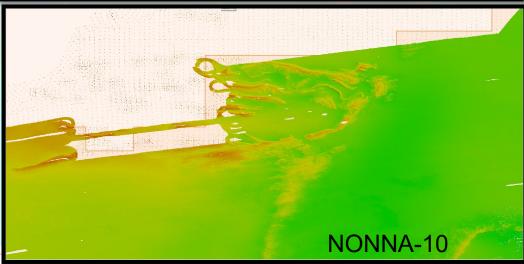






Non-Navigational (NONNA) Bathymetric Data





CHS NONNA-100

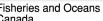
 Most viewed DFO data on Federal Geospatial Platform (FGP)

CHS NONNA-10

- Target release for non-Arctic data is Summer 2020
- It will be available to the general public, free of charge, for nonnavigational use on the Government of Canada's Open Data site
- Release of Arctic data TBD









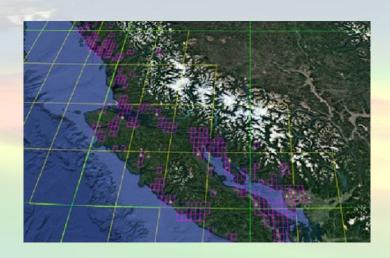




CHS Transformation Overview

- •Move from 6 to 3 coverages for S57 ENCs to prepare for S101 and S1xx
- •Full vectorization and rationalization of chart products
- •Fill ENC gaps
- Paper chart 2.0
- Comparative validation of bathymetric holdings
- Move to data as a service
- •Working with partners on transboundary cells in order to provide seamless coverage for clients
- Regional and international exchange opportunities
- •Will propose a grid schema for the Arctic to ARHC













Transforming CHS Publications - Going Digital

• CHS has recommended to Transport Canada that the word 'paper' be removed from the Charts and Nautical Publications Regulations.







 Sailing Directions publication with monthly NtMs applied available free on line since April 2019



- Next step will be to explore the full potential of the information contained within by georeferencing the contents and converting to ePub.
- Canadian Tide and Current Tables Available digitally online for several years
- Chart Catalogues conversion In progress, estimated completion Summer 2020 (converting to 8.5x11 printable format)











Transforming CHS Developing Digital Services

E-MAREP – Marine Information Report – under development













•TIDES – V1 is web based, V2 will be a standalone and downloadable











•Launched 4 web applications for MSDI platform (OPP Storyboard, CHS Priority Planning Tool, Northern Potential Low Impact Shipping Corridors, Arctic Voyage Planning Guide)

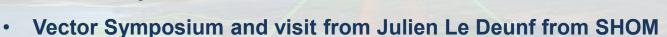






2019-2020 International Activities (selected)

- S-100 Sea Trials in Busan, South Korea
- Exchange with NOAA on board NOAAS Rainier
- World Maritime University's conference on "Empowering Women in the Maritime Community"



- 11th IHO HSSC meeting Cape Town, South Africa.
 - SA National Hydrographer, Capt. Theo Stokes was presented with the first CHS Coin
- ICG-PTWS in Montelimar, Nicaragua
- ENCWG4 in Monaco
- IHO Council 3rd meeting









