

**13<sup>th</sup> MEETING OF THE IHO INTER-REGIONAL COORDINATING COMMITTEE  
IHO-IRCC13  
VTC, 23-25 June 2021**

**Report of the**

**United States of America – Canada Hydrographic Commission (USCHC)**

<b>Submitted by:</b>	Chair, USCHC
<b>Related Documents:</b>	USCHC44 Minutes <a href="https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/USCHC/USCHC44/USCHC44_2021_EN%20MINUTES_final_May%2011%202021.pdf">https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/USCHC/USCHC44/USCHC44_2021_EN%20MINUTES_final_May%2011%202021.pdf</a> USCHC44 CA National Report <a href="https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/USCHC/USCHC44/USCHC44_2021_EN_04_CA%20Nat%20Report%20ver04.pdf">https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/USCHC/USCHC44/USCHC44_2021_EN_04_CA%20Nat%20Report%20ver04.pdf</a> USCHC44 US National Report <a href="https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/USCHC/USCHC44/USCHC44_2021_EN_03_U.S.%20National%20Report_ver1.pptx">https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/USCHC/USCHC44/USCHC44_2021_EN_03_U.S.%20National%20Report_ver1.pptx</a>
<b>Related Projects:</b>	IHO Strategic Plan; IHO S-100 Implementation Roadmap; GEBCO-Seabed 2030

<b>Chair:</b>	Dr. Geneviève Béchar, CA (March 19, 2021 to present) RDML Shepard M. Smith, US (February 24, 2020 to March 19, 2021)
<b>Vice-Chair:</b>	Dr. Geneviève Béchar, CA (February 24, 2020 to March 19, 2021) RDML Shepard M. Smith, US (March 19, 2021 – April 20, 2021) RDML Richard T. Brennan, US (April 20-May 13, 2021) USA (May 13, 2021 to present)
<b>Member States:</b>	United States of America -Office of Coast Survey, NOAA -National Geospatial Intelligence Agency (NGA) -United States Navy (USN)  Canada -Canadian Hydrographic Service -Canadian Forces Intelligent Command, Department of National Defence
<b>Observers:</b>	-International Hydrographic Organization (IHO) -United Kingdom Hydrographic Office (UKHO), USCHC44 -Service hydrographique et océanographique de la Marine (SHOM), USCHC44

**1. Meetings Held During Reporting Period**

From IRCC12 (October 2020) to the current IRCC13 meeting (June 2021):

Convened

18-19 March, 2021      44<sup>th</sup> Meeting of USCHC –USCHC44 - (VTC)

[The list of participants in USCHC44 can be found in Annex A.]

### Upcoming

Fall/Winter 2021 Intersessional (VTC) -TBC  
 June 2022 45<sup>th</sup> USCHC, Ottawa, Canada (in conjunction with Canadian Hydrographic Conference 2022) -TBC

### Ongoing

-Meetings of the USCHC Hydrographic Geospatial Products and Services Committee (HGSPC) held intermittently by VTC.  
 -NOAA-CHS Great Lakes Operations [informal] Group meets monthly by VTC.

## **2. Work Program**

Highlights of important issues and activities during the reporting period:

- a. Consideration and evaluation of the adoption of the new IHO Strategic Plan and implications specific to the USCHC.
- b. Implications of the S-100 Roadmap and WEND-100 services for USCHC.
- c. Engagement of USCHC in Seabed 2030 for the region.
- d. Both NOAA and CHS have implemented plans to cancel all of the raster navigational charts (BSB format) in their waters.
- e. Work is ongoing into how best to coordinate and harmonize S-100 products and services in the Region. A paper was presented ( [https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/USCHC/USCHC44/USCHC44\\_2021\\_EN\\_12a%20Transboundary%20Services%20One-pager.pdf](https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/USCHC/USCHC44/USCHC44_2021_EN_12a%20Transboundary%20Services%20One-pager.pdf)) and discussion held at USCHC44 on developing capacity for the delivery of US-CA transboundary (hydrographic) services over the upcoming decade. The HGSPC is drafting a report to the co-chairs of USCHC on considerations and options regarding implementation of operational capacity for transboundary services (forthcoming by end of year).
- e. The effort regarding A-1 Decision No 22, which states IRCC and its subordinated bodies to identify and recommend on whatever actions may be required to incorporate the Statement of Shared Guiding Principles for Geospatial Information Management in the work programmes is ongoing. A preliminary indications from USCHC MS are that there has been some success and this will be reported out in greater detail and recorded in response to IHO SPI 2.3.1 in the future.

## **3. Progress on IRCC Action Items**

The following table summarizes the progress made against the IRCC12 actions relevant to USCHC during the reporting period.

#	Action	Deadline	Status
1	RHC to Instruct MS in the promotion and distribution of publication of S-67 Mariners' Guide to Accuracy of Depth Information in Electronic Navigational Charts (ENC) to the Marine Institutions and Education Schools	IRCC13	Ongoing. CA has sent this to Canadian Ocean Mapping Research and Education Network.
2	Member States to review the paper on the Future of paper Charts and provide feedback on it	IRCC13	Overcome by events. HSSC NCWG has set up a PC project team and both MS are participating in this PT.

3	Member States strongly encouraged to continue updating C-55.	IRCC13	This is considered a continuous activity by the MS.
4	RHC to implement the IHO Resolution 2/1997 as amended by A-2.	IRCC13	In progress.
6	Invited the Member States who have experience in developing and providing eLearning contents to share their resources and experiences to the e-Learning PT.	IRCC13	Done. The USCHC rep to the PT is the vice-chair (Mina Foroutan (CA)), and USA is also represented via the WWNWS-SC (Christopher Janus (NGA)).
11	Promote the discussion of any item with relevance to SDI/MSDI/MSP and to take appropriate actions.	IRCC13	Ongoing
12	Consider CSB and Seabed 2030 initiatives be permanently added as an agenda item at future RHC meetings.	IRCC13	Done
13	Encourage Member States to support the CSB initiative with positive actions, such as requiring all research vessels to collect bathymetric data for later uploading, when on passage or when it does not interfere with other research activities	IRCC13	Done. However, getting agreements, procedures, etc. to effect these requirements is ongoing and will be a long-term effort.
14	Support the modification of the current "RHC Seabed 2030 Coordinator" to a joint "RHC CSB/Seabed 2030 Coordinator" and provide the identification of the Coordinators	IRCC13	Done. Andy Armstrong will serve as both the USCHC SB2030 and the CSB coordinators.
16	Encourage MS to release datasets or subsets into the public domain via the IHO DCDB.	IRCC13	Done. This is seen by USCHC as an ongoing activity.
17	Encourage Member States to promote the vital need to map the entire seabed.	Continuous	Ongoing
19	Encourage all Member States to make existing seabed mapping data available for use by Seabed 2030 in the GEBCO Grid.	Continuous	Ongoing
20	RHC to participate at Regional level in those actions of the UN Ocean Decade matching with IHO's new strategic targets (IRCC12-08C).	IRCC13	Done. Both MS have participated in regional and global UN Ocean Decade events, and will continue to do so.

#### 4. Problems Encountered

As with all organizations, the COVID-19 pandemic has impacted both domestic hydrographic programs and USCHC activities. The employment of VTC did allow for an expanded participation at USCHC44, however, particular technical issues prevented the IHO Secretary General for joining the same meeting.

While there has been some “VTC fatigue” evident, there have been opportunities for more frequent and informal communications (e.g. Great Lakes Operations Group).

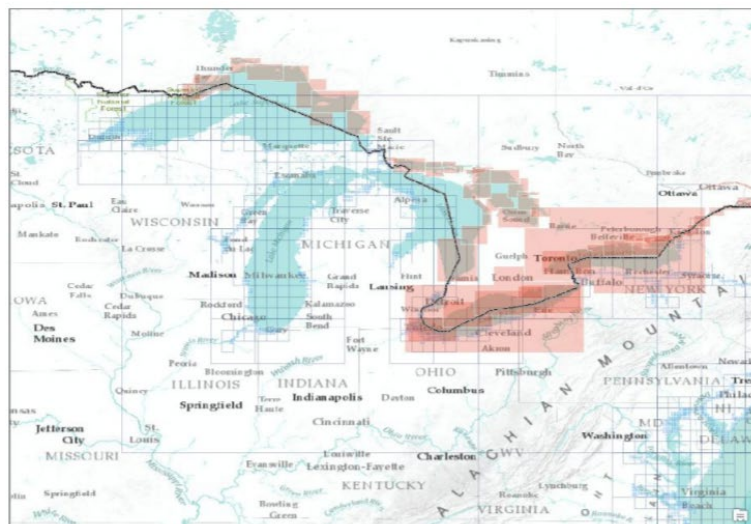
#### 5. Any Other Items of Note

Some other RHC items of note include:

a. Trans-boundary Limit GIS Tool. In collaboration with CHS, NOAA stood up the USCHC Transboundary Web App (see link below) which indicates current and re-schemed ENC coverage. This allows both agencies and the general public follow the changes in coverage resulting in re-scheming. It is important to note that the information for the GIS is being drawn from each HO’s databases.

At this time, the current and future ENC coverages are only available for the US but plans are to incorporate the new CA ENC schema into the tool in the near future, as well. The current focus is on the Great Lakes region.

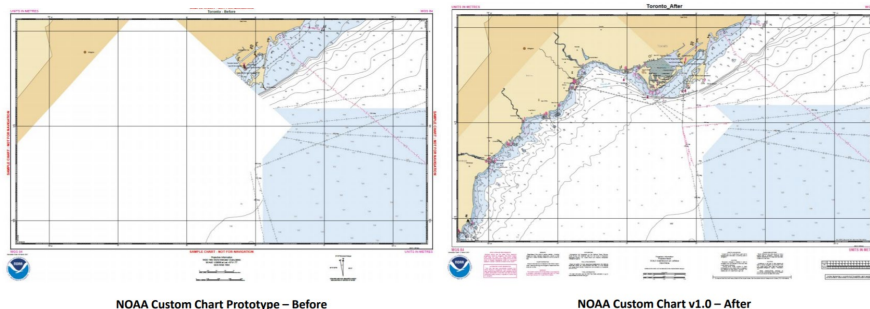
- Web application on NOAA GeoPortal (public)
- Extents:
  - Current/Future NOAA Reschemed ENC Cells
  - Current CHS ENC Cells
- Color Classifications:
  - ◻ Canada, Split M\_COVR at Boundary
  - ◻ Canada, Single Agency
  - ◻ US, Split M\_COVR at Boundary
  - ◻ US, Single Agency



<https://noaa.maps.arcgis.com/apps/webappviewer/index.html?id=3d56cca277334bb18d918e4292bd3313>

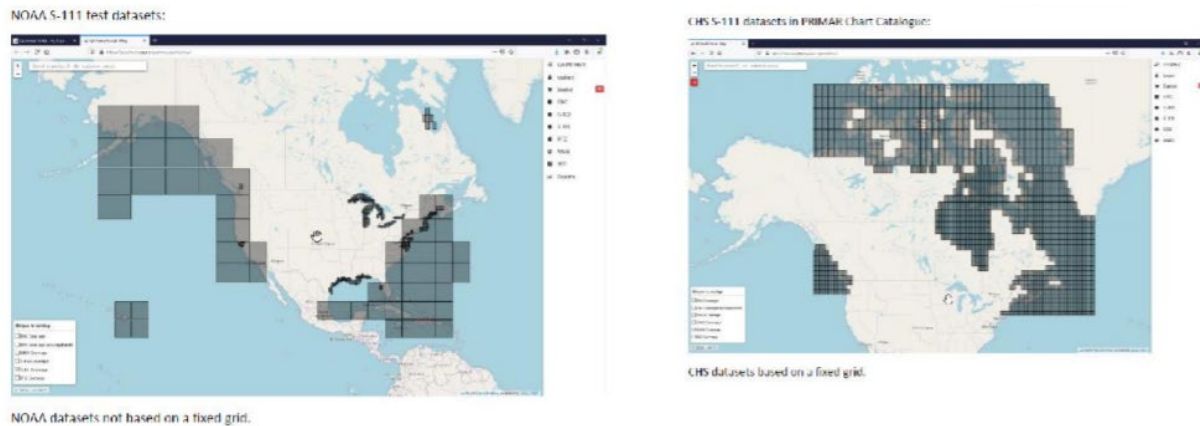
b. Combining ENC data from both MS to provide the user with seamless coverage in the NOAA Custom Chart Web Application.

- Combine
  - **US4NY26M** (Western Lake Ontario)
  - **CA473519** (Toronto to Hamilton)



The goal of this exercise was to evaluate options in order to provide a single, seamless ENC service to clients. Technically, this is quite feasible, however, joint distribution agreements and licensing requirements need to be developed.

c. S-111 Surface Currents. Work continues within the USCHC on how to deal with the overlapping coverage and resolutions of S-111 Surface Current data that is now being generated and made available. The graphic below illustrates the US-CA situation, however, this intra-regional situation for this, and other S-xxx products and services, will not be unique. Further discussion at the WENDWG level is required to determine if these types of situations create issues that need to be addressed.



d. Discussions continue within USCHC on how to “engage the crowd”, in order support GEBCO efforts (e.g. Seabed 2030) but also domestic charting and other scientific activities (e.g. UN Decade of Ocean Science).

e. After a briefing from a member of the IHR Editorial Board, USCHC is considering how to make a firmer commitment to contributing to the IHO journal. This was viewed as an excellent opportunity for staff and includes possible targets for the number of papers and/or notes originating from the Region. It was agreed that the IHR deadlines would be added to the USCHC calendar.

f. Passings. The USCHC family acknowledges the passing of two great colleagues and friends. RDML Richard (Rick) T. Brennan passed away on May 13, 2021 and Mr. Sean Hinds passed away on February 4, 2021.

Items of note from the national levels.

g. The United States of America established the National Ocean Mapping and Exploration and Characterization Council (NOMECC) with the expressed goal of fully mapping the US EEZ. A downstream effect will be added data for the GEBCO Seabed 2030 project and contributions to the UN Decade of Ocean Science.

h. In 2020 NOAA successfully executed a completely autonomous mission of 5 Saildrone ASVs from San Francisco to the Alaska-CA boundary. The units collected various scientific data in addition to single-beam echosounder data used to confirm the 20 and 50m contours off the Alaska coast.

i. CHS contracted a successful autonomous survey in western Lake Superior.

j. NGA briefed USCHC44 on its Global Maritime Traffic Density Service (GMTDS). This product which consists of monthly traffic densities on a 1 sq. km scale will be extremely useful and will be made available through the IHO INTogIS platform.

## 6. Conclusions and Recommended Actions

The USCHC has maintained good momentum during the pandemic with progress being made in several areas.

USCHC looks forward to hearing from the IRCC and other RHCs on how they are adapting to the IHO Strategic Plan and the S-100 Roadmap, both in terms of its implementation, that is, what is required of, and by, the RHCs to achieve the goals of these plans, and whether or not refinements are needed to report on the progress towards those goals (e.g. the SPIs).

USCHC has no specific recommendations for IRCC13.

## 7. Justification and Impacts

Not applicable.

## 8. Action Required of IRCC

The IRCC is invited to:

- a. Note this résumé of USCHC activities and plans.
- b. Provide feedback to the c/USCHC on any of the topics discussed.

## Annex A

### Membership of USCHC [Based on USCHC44 participation]

Member State	Name of Delegate	email
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Canada	<b>David Palmer</b>	<a href="mailto:David.Palmer@dfo-mpo.gc.ca">David.Palmer@dfo-mpo.gc.ca</a>
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