

**19<sup>th</sup> MEETING OF THE IHO CAPACITY BUILDING SUB-COMMITTEE**  
**IHO-CBSC19**  
**June 2021**

**Paper for the Consideration by CBSC19**

**Meso American & Caribbean Sea HC Report**

<b>Submitted by:</b>	MACHC CB Coordinator
<b>Executive Summary:</b>	This document provides a summary report of the CB activities at MACHC.
<b>Related Documents:</b>	MACHC CB Plan 2021-2023
<b>Related Projects:</b>	

## 1. Introduction / Background

A three-year plan for CB activity in the MACHC region was approved by the membership in December 2020. This plan covers the period 2021-2023 and is reviewed annually (during MACHC meetings) to ensure it meets regional requirements. The plan is based on assessing the phase of development of each of the coastal states within the MACHC region (as determined by the IHO's three phases of CB) and arranging training activity to build the necessary capability to meet SOLAS treaty obligations. There is a great deal of 'SOLAS awareness' required in this region.

The three-year plan for CB activity in the MACHC region looks to address emerging challenges in the region that will arise with changes in technology and standards and also looks to incorporate wider regional Capacity Building opportunities.

## 2. Assessment of Capacity Building Phase Stage of Coastal States

	Country / Territory	NHC or NHCC	CB Phase 1	CB Phase 2	CB Phase 3	Last TV
1	Antigua & Barbuda	2	4	1	3	2006
2	Bahamas	-1	2	1	3	2006
3	Barbados	2	4	1	3	2006
4	Belize	1	2	2	3	2011
5	Brazil	-1	4	4	4	2008
6	Colombia	-1	4	4	4	N/R
7	Costa Rica	-1	2	1	3	2011
8	Cuba	1	4	4	4	N/R
9	Dominica	-1	2	1	3	2006
10	Dominican Republic	1	2	1	3	2018
11	El Salvador	1	1	3	3	2017
12	Grenada	0	3	1	3	2006
13	Guatemala	2	2	2	3	2019
14	Guyana	-1	4	2	3	2013
15	Haiti	-1	1	4	4	2017
16	Honduras	-1	1	2	3	2010

17	Jamaica	2	4	1	3	2006
18	Mexico	-1	4	4	4	N/R
19	Netherlands - Antilles & Aruba (Leeward)	2	4	4	4	N/R
20	Netherlands - Antilles (Windward)	2	4	4	4	N/R
21	Nicaragua	-1	2	2	3	2014
22	Panama	1	2	2	3	2020
23	St. Kitts & Nevis	1	4	1	3	2006
24	St. Lucia	-1	4	1	3	2006
25	St. Vincent & Grenadines	0	4	1	3	2006
26	Suriname	2	4	4	3	2008
27	Trinidad & Tobago	-1	2	1	3	2006
28	UK - Anguilla	1	2	3	3	2006
29	UK - Bermuda	-1	2	3	3	
30	UK - British Virgin	-1	2	3	3	2006
31	UK - Cayman	-1	2	3	3	2006
32	UK - Montserrat	2	2	3	3	2006
33	UK - Turks & Caicos	-1	2	3	3	2006
34	USA - Navassa	0	4	4	4	N/R
35	USA - Puerto Rico & US Virgin	2	4	4	4	N/R
36	United States of America	2	4	4	4	N/R
37	Venezuela	-1	4	4	4	N/R

### KEY

- The numerical grid below describes the status of the National Hydrographic Committee (NHC)/National Hydrographic Coordination Committee (NHCC):

Value	Assessment
-1	No information available
0	The country does not have a NHC/NHCC
1	The country is in the process of establishing a NHC/NHCC
2	The country has established a NHC/NHCC

- The numerical grid below applies to the Phases:

Value	Assessment
-1	No information available
0	The country is unaware of its national obligations
1	The country is aware of its national obligations but does not have the means to do it
2	The country has some ability to fulfil national obligations
3	The country fulfils its national obligations through a third party
4	The country fulfils its national obligations in a sustainable manner

Note: [the assessment represented by 3 is an alternative to 4] as explained in the IHO's Capacity Building Strategy

3. Those coastal states with a mature hydrographic service and consequently don't require a technical visit are marked as N/R (not required)

### **3. Activities completed since CBSC18**

The COVID-19 pandemic has heavily impacted the delivery of capacity building activities that were planned for 2020 due to the dependence for delivery upon face to face engagement. The region is working to adapt their methods of working to deliver CB activities where possible such as the SDB Webinar delivered in place of the propose Seminar on Raising Awareness of Hydrography which was delivered prior to MACHC21 in November 2020. This was supported by regional Subject Matter Experts, including a case study by Venezuela and industry.

### **4. Activities planned for 2021**

Activities planned for 2021, subject to the ongoing COVID-19 situation are:

A-03 Technical Visit to Honduras – Will require face to face engagement

A-06 High Level Technical Visit to Dominican Republic - Will require face to face engagement

A-07 High Level Technical Visit to Jamaica - Will require face to face engagement

P-17 Seminar on Raising Awareness of Hydrography - The delivery of this will be determined by the decision of MACHC22 Chair and Host and may be delivered virtually.

To counter the impact of COVID and make use of the development of VTC capability webinars to support the RHC working groups are being developed. In conjunction with the MACHC ICCWG an S-100 Webinar is being developed to build regional knowledge and awareness and to provide

### **5. Challenges faced in the region**

The challenges in the MACHC region are complex. The rise in numbers of all types of vessels (commercial and cruise), the increasing size of vessels transiting the new larger locks of the Panama Canal, the age/reliability of the survey data that was used to compile the existing navigational products (and in some areas the lack of data) and climate change all add to the risk of transiting this area. The impact of COVID-19 on the region has been particularly significant and the long-term effects are unknown.

The Western Atlantic endures a hurricane season which extends from July to November. The 2020 hurricane season was notable for its record number of named storms (30) and also for its record number of rapidly intensifying storms. In November 2020 two powerful hurricanes made landfall within weeks of one another impacting Central America heavily with countries affected having their economic development set back over 20 years.

The region is also experiencing changes to rainfall levels. 2019-2020 has been the 5th driest year at the Panama Canal in 70 years and water saving measures have had to be implemented to ensure operational reliability. In 2018 rainfall was 20% below the historic average and it was predicted that there would be a significant restriction to cargo transiting the waterway if interventions were not employed.

The high number of Small Island Developing States (SIDS) in the MACHC offers a unique challenge because these states generally have no hydrographic infrastructure and are usually reliant on a national Maritime Authority or some other organization for the provision of hydrographic services. Much work is still required in building and developing sustainable Hydrographic Governance in these states. This also applies to several Central American States.

The UKs Commonwealth Marine Economies (CME) and Overseas Territories Programmes (OTSMP), have worked across the region to improve the maritime framework through the development of hydrographic governance, undertaking seabed mapping to update navigational products assisting territories and countries in scope to meet their international obligations.

The CME programme is aimed at helping the most vulnerable SIDS make the most of their natural maritime advantages, to enable sustainable economic growth and alleviate poverty. Under the programme a number of SIDS have benefitted from the development of Phase 2 training, building their data gathering capabilities.

Whilst the development of VTC technology and eLearning has provided some alternative methods to deliver modified activities, limited connectivity and engagement by participants has highlighted the difficulties of using these means as full replacements to face to face engagement.

## **6. Achievements and lessons learned**

The MACHC region continues to look for opportunities to work with other partners including neighbouring RHCS to better utilize resources and develop collaborative networks. Collaboration is also being undertaken with partners such as the IMO, IALA, IOCARIBE, the Intergovernmental Coordination Group for the Tsunami and other Coastal Hazards Warning System for the Caribbean and Adjacent Regions (ICG/CARIBE EWWS), and the Central American Marine Transportation Commission (COCATRAM) to provide benefits to the region. These latter two organisations, along with the neighbouring RHCs (SWAtHC and SEPRHC) are co-sponsoring the Tides and Water Levels for Spanish speaker training that is planned for deliver in 2021, having been postponed from 2020 to deliver the broadest benefit for all participants.

The MACHC is beginning to explore potential CB opportunities with donor organizations such as the Inter-American Development Bank which made a presentation at the MACHC20 and MACHC21. The Climate Investment Fund through the Inter-American Development Bank (IADB) has provided \$10.39 million USD in grant funding to implement over 5 years the Investment plan for the Caribbean Regional Track of the Pilot Program for Climate Resilience (PPCR). This includes the collection of Bathymetric LIDAR data in vulnerable coastal areas of interest in Jamaica and Haiti. Such activity is clearly of interest to the MACHC and presents a potential collaboration opportunity for increasing data collection and capacity building. However, there needs to be a better understanding of the criteria used for country participation and how to best engage with the IADB. The MACHC would welcome support from the CBSC to explore additional donor funding opportunities that could expand the resources available for capacity building across RHCs.

Mexico's FOCAHIMECA project is building Phase 2 capability in a number of Spanish speaking states and the UK's Commonwealth Marine Economies and Overseas Territories Seabed Mapping Programmes has assisted a number of SIDS with data gathering, hydrographic governance and data management in their littoral zones. Furthermore, the UKs approach to promoting the onward usage of seabed mapping data through its international programmes has gone a long way to raising the profile and importance of hydrography as a component part of Oceans Governance Policy.

## **7. Conclusions**

The MACHC continues to raise hydrographic awareness throughout the region enabled through the provision of funding by the IHO for the seminar preceding the annual MACHC meeting. The attendance by Associate Member and Observers at the regional meeting enables the importance of regional hydrography to be highlighted and the benefits of collaboration to be showcased.

Given that capacity building requirements far exceed the available IHO CB funds available, it is essential to identify further collaboration opportunities with donor organizations and other governmental, non-governmental and industry partners to leverage scarce resources to meet common CB goals.

The long-term impact of COVID-19 on the region cannot be fully understood at this time, nor how future requirements of coastal states will be shaped. By continuing to look for opportunities to work closely with other regional organizations it is hoped that regional education of the importance of hydrography, data collection and the provision of products and services will help in limiting the impact on the Blue Economy and the development of the region.

## **8. Actions required of CBSC:**

The CBSC is invited to:

- a. note the report
- b. encourage all RHCs to collaborate on CB training of common interest to maximise the use of CB funds.
- c. invite the CBSC to explore opportunities with donor organizations and
- d. take any action considered appropriate.

Lucy Fieldhouse  
MACHC RHC CB Coordinator