



# MACHC 23 Meso American- Caribbean Sea

## Hydrographic Commission

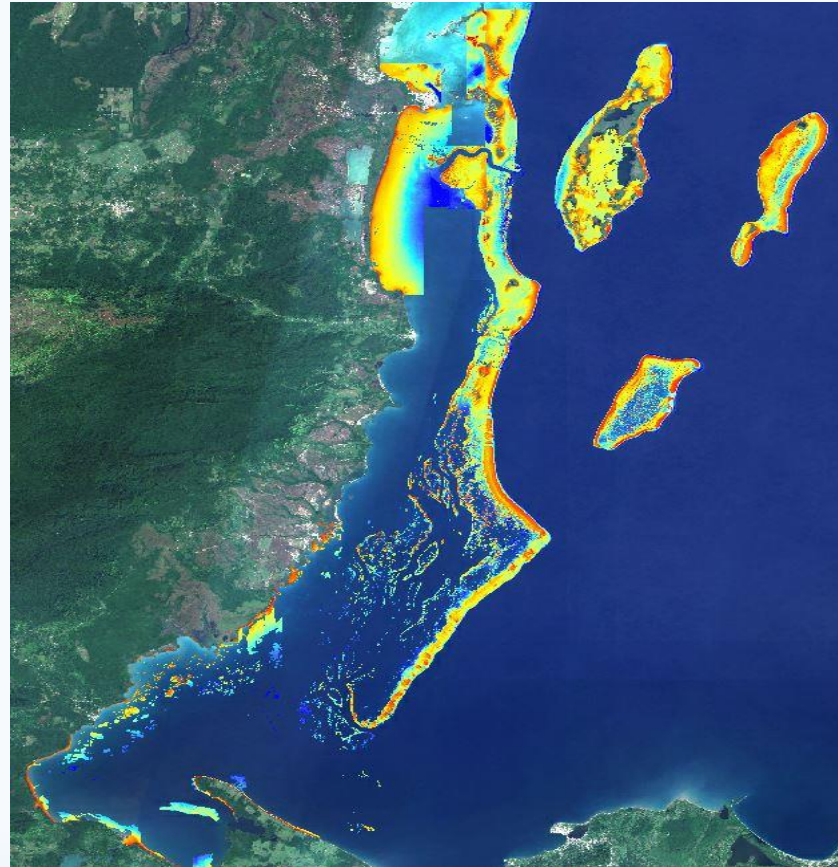
National Report Belize C.A.

**Presented by: Mr. Michael Jenkins, Operations and Safety Manager  
Belize Port Authority**



# Through the Commonwealth Marine Economies Program.

- Enabling Safe and Sustainable Marine Economies across Commonwealth Small Island developing States  
UKHO delivered SDB data to Belize on the 29<sup>th</sup> April 2022.



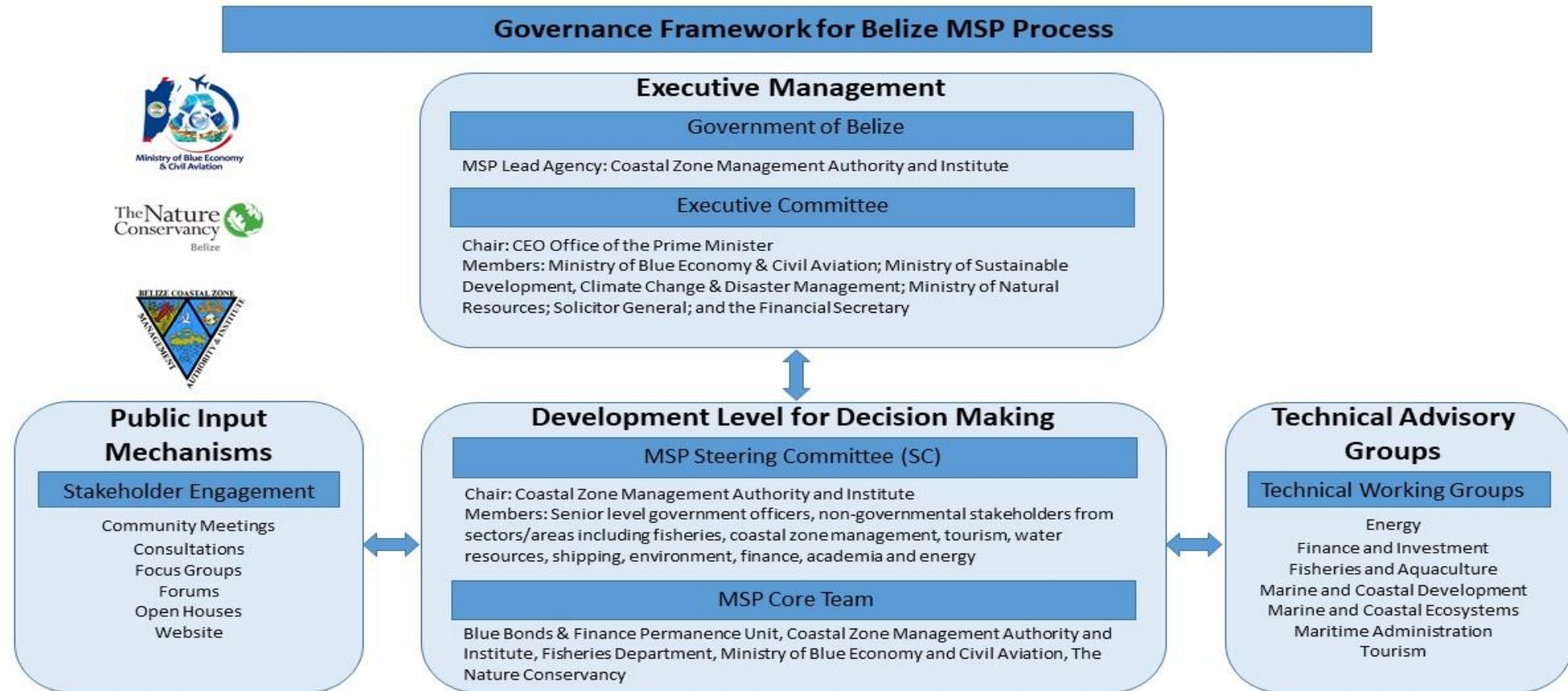


# Achievements accomplished during the past year; establishing a Steering Committee to develop a Marine Spatial Plan comprising of the following stakeholders

1. Ministry of Blue Economy and Civil Aviation
2. Ministry of Sustainable Development, Climate Change and Disaster Risk Management
3. Ministry of Tourism and Diaspora Relations
4. Ministry of Finance, Economic Development and Investment
5. Ministry of Natural Resources, Petroleum and Mining,
6. Coastal Zone Management Authority and Institute
7. Blue Bonds/Finance Permanence Unit, Office of the Prime Minister
8. The Nature Conservancy
9. Belize Network of Non-Governmental Organizations (BNN)
10. Belize Port Authority
11. Energy Unit, Ministry of Public Utilities, Energy and Logistics
12. University of Belize (UB)
13. Belize National Coast Guard
14. Belize Fisheries Department
15. Belize Forest Department
16. Department of Environment
20. Chairs of 4 TWGs: (1.) Finance and Investment; (2.) Fisheries (*inclusive of Aquaculture*); (3.) Marine and Coastal Ecosystems; (4.) Tourism



# Governance of the MSP Process





International Hydrographic Organization  
*Organisation Hydrographique Internationale*





# Achievements made in year 2022



## 1. New surveys conducted in the internal waters of the New River

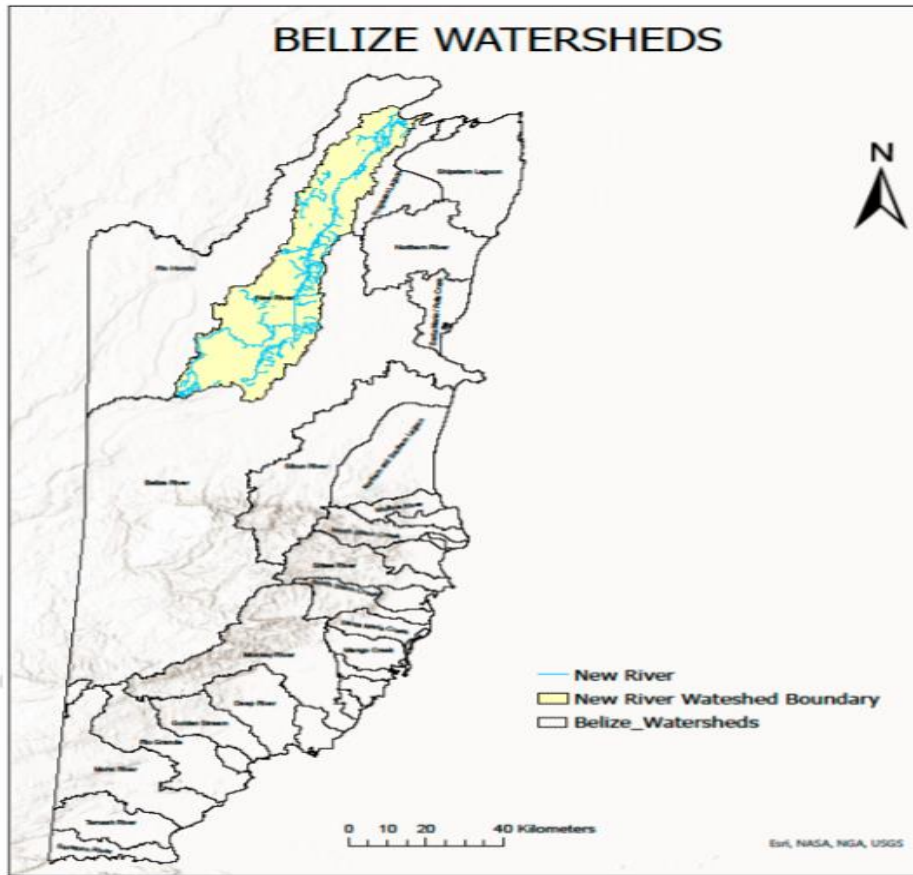


Figure 1: Belize Watersheds

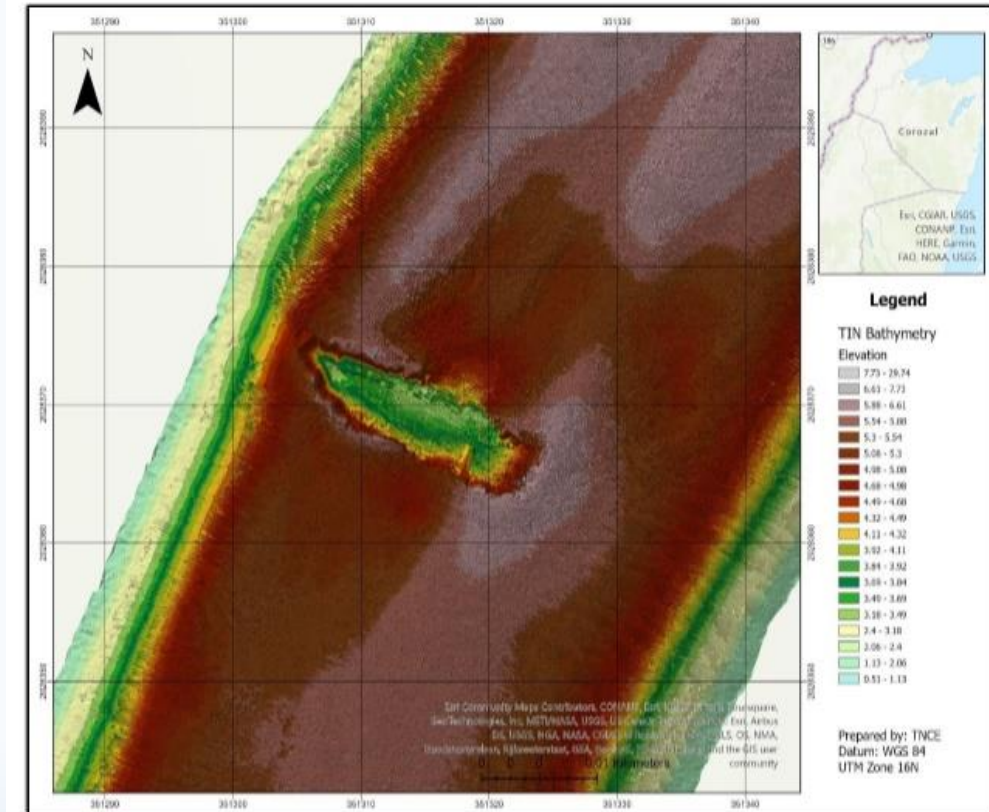


Figure 2-14: Elongated feature located in the New River

As can be seen in **Figure 2-30**, it can be visibly identified that the Western river wall within this portion of the river extends past the expected center in a sloped formation; and within this sloped feature there is a notable rectangular formation that is settled within the western portion of the river wall at a depth of 4.4-meters (14.4-ft).

Its elevation is only 0.2-meters above its surroundings and is about 6-meters in length and 3-meters in width. It is located in the North-East proximity of Orange Walk Town as can be seen in **Figure 2-31**.

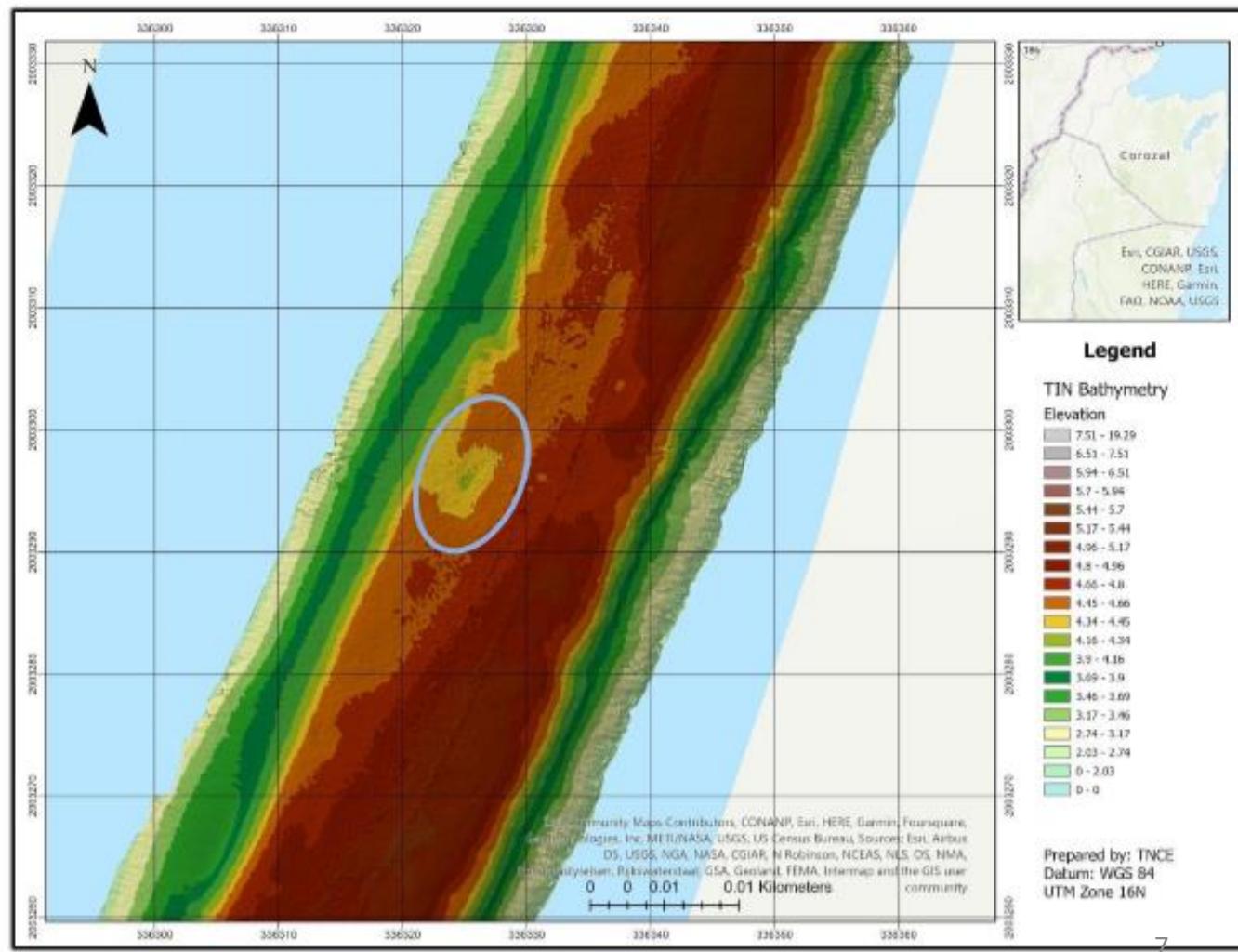
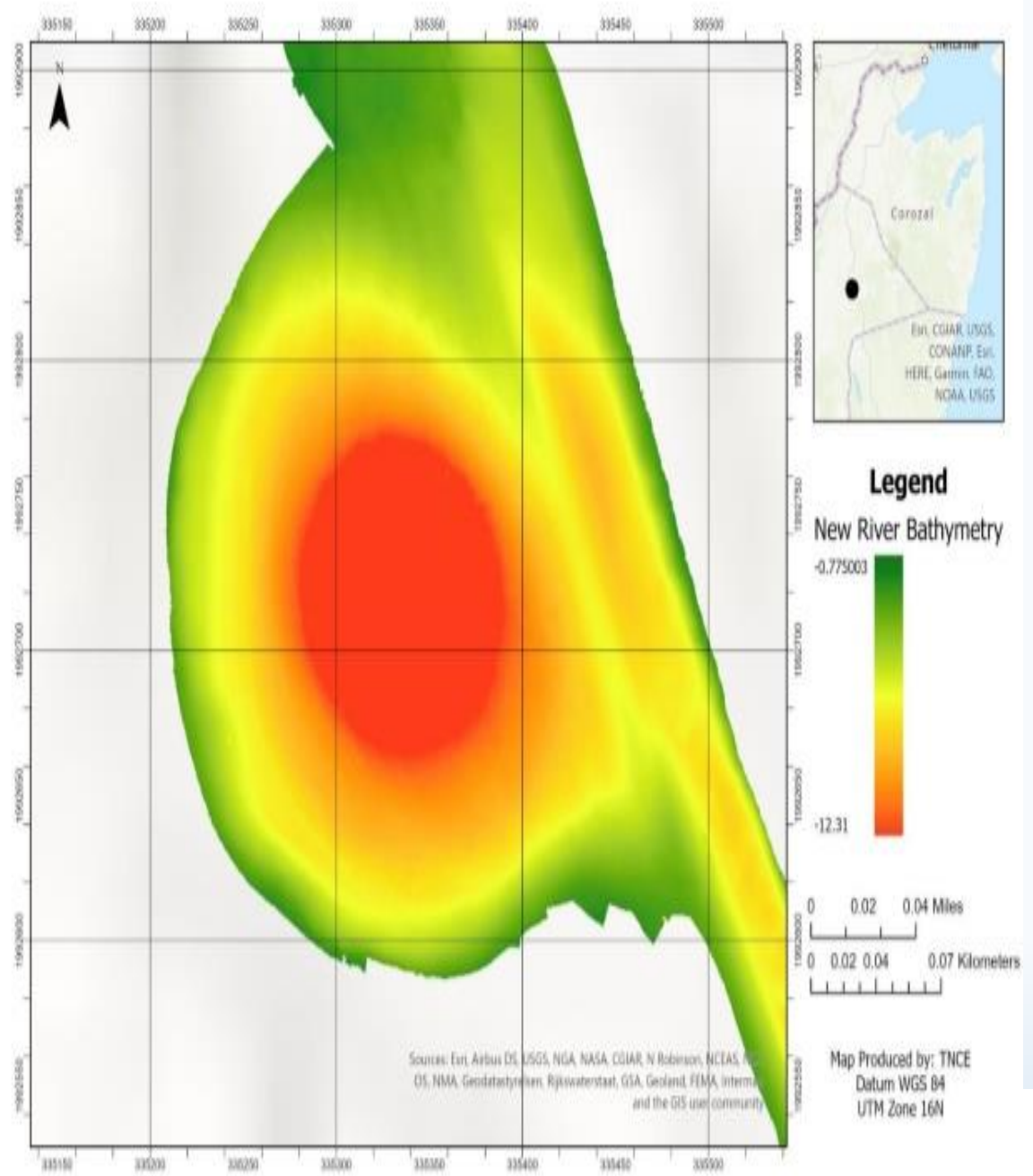


Figure 2-30: Mound-like Feature (4<sup>th</sup>) nearer to Orange Walk Town



# Belize through the UKHO was able to share data with GEBCO Seabed 2030 and continues to support this initiative to collect and share survey information

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## Survey sheets that has been approved for submission to GEBCO

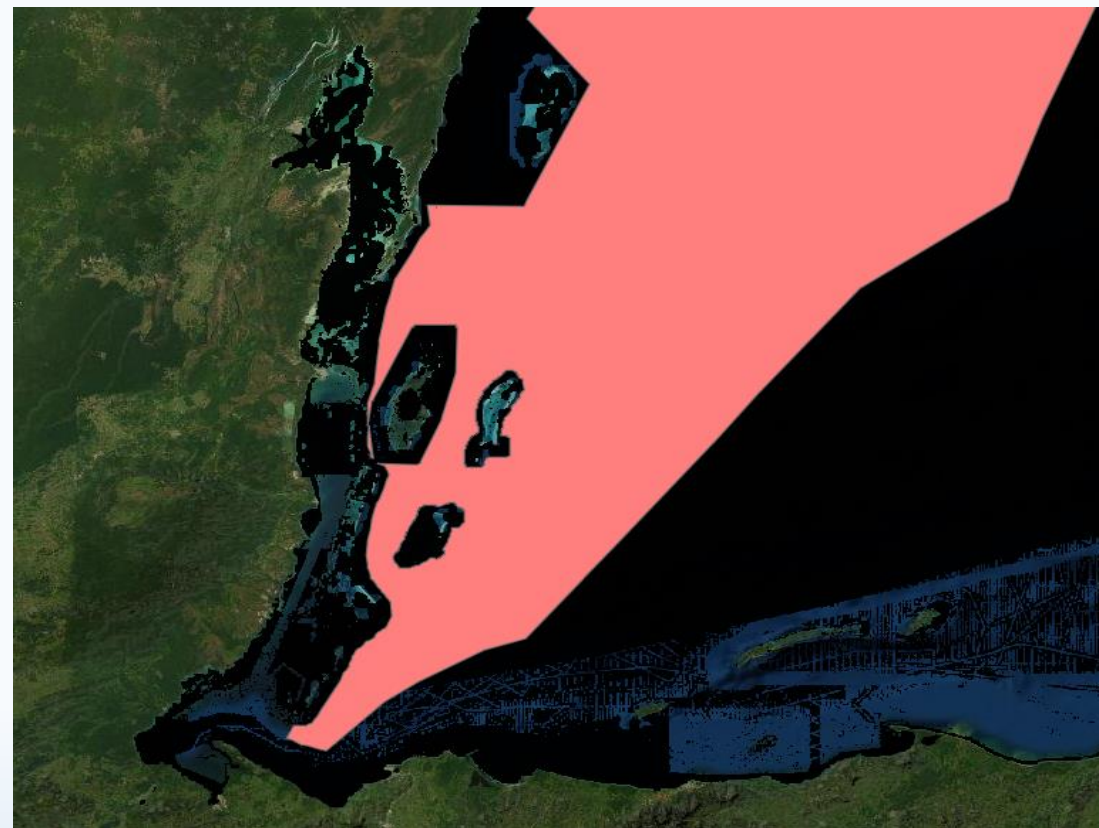
- HI1563 Commonwealth Marine Economy (CME) Belize United Kingdom  
Hydrographic Office 2018 HI1563 Belize Buzzard Shoals 0-40m 2m SDTP
- HI1563 Commonwealth Marine Economy (CME) Belize United Kingdom  
Hydrographic Office 2018 HI1563 Belize Buzzard Shoals 38-80m 4m SDTP
- HI1563 Commonwealth Marine Economy (CME) Belize United Kingdom  
Hydrographic Office 2018 HI1563 Belize Commerce Bight 2m SDTP
- HI1563 Commonwealth Marine Economy (CME) Belize United Kingdom  
Hydrographic Office 2018 HI1563 Belize Big Creek 2m SDTP
- HI1563 Commonwealth Marine Economy (CME) Belize United Kingdom  
Hydrographic Office 2018 HI1563 Belize City 2m SDTP
- HI1553 Commonwealth Marine Economy (CME) Belize United Kingdom  
Hydrographic Office 2019 HI1553 Belize Lidar 2m SDTP





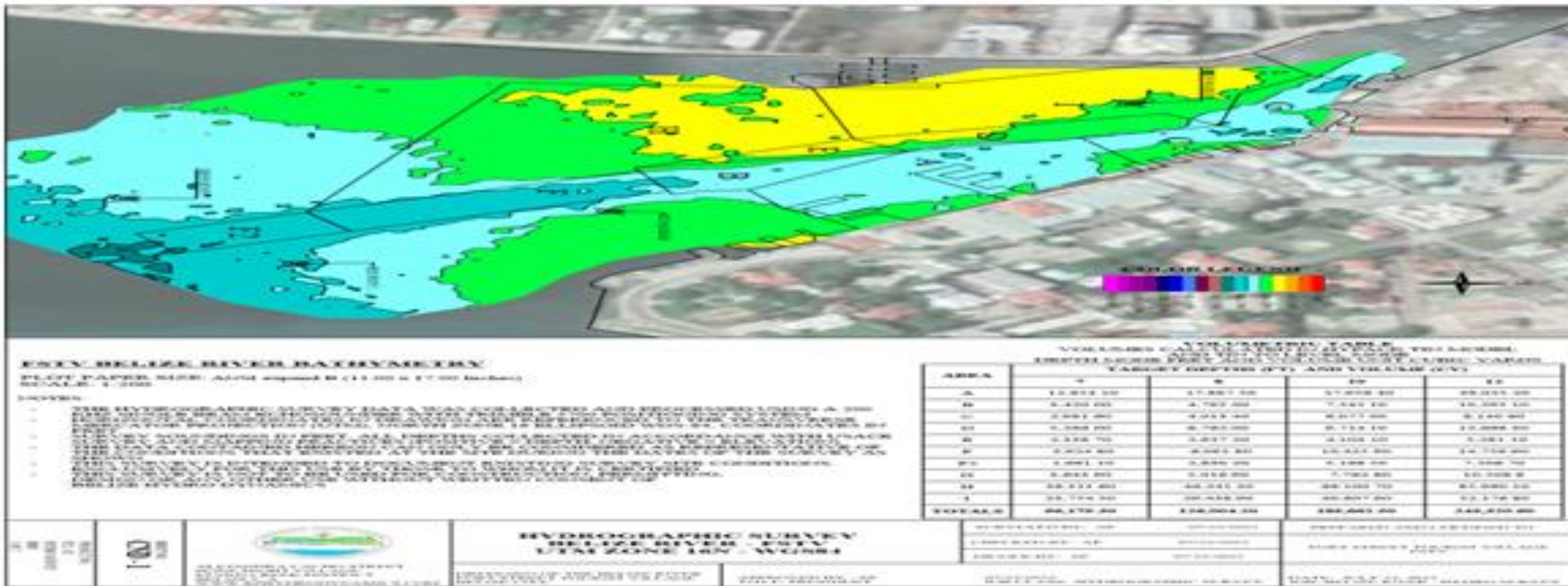
## Challenges in conducting and receiving hydrographic survey data:

- Belize seeks to acquire survey information that extends into our EEZ so as to extend our enforcement and to help assess and quantify the natural resources that lies beneath the sea.
- It has been confirmed that survey data exist in the industry sector and also data as restricted information.  
It is hopeful that existing data can be Identified, declassified and shared.



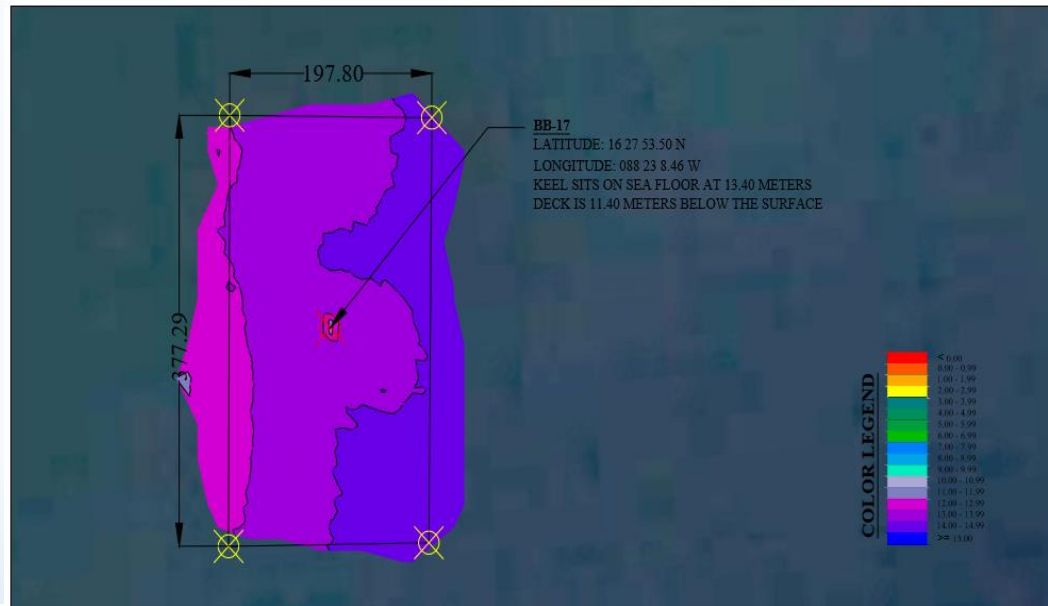
# Challenges

- The cruise ship passenger terminal on a yearly basis sees increased siltation that requires extensive dredging for the safe passage of tender vessels servicing the cruise ships. This is a yearly challenge to find the resources to meet the demands of the cruise ship arrival during high season of November to April each year. Increasing the time period to conduct maintenance dredging is the Authority's challenge.



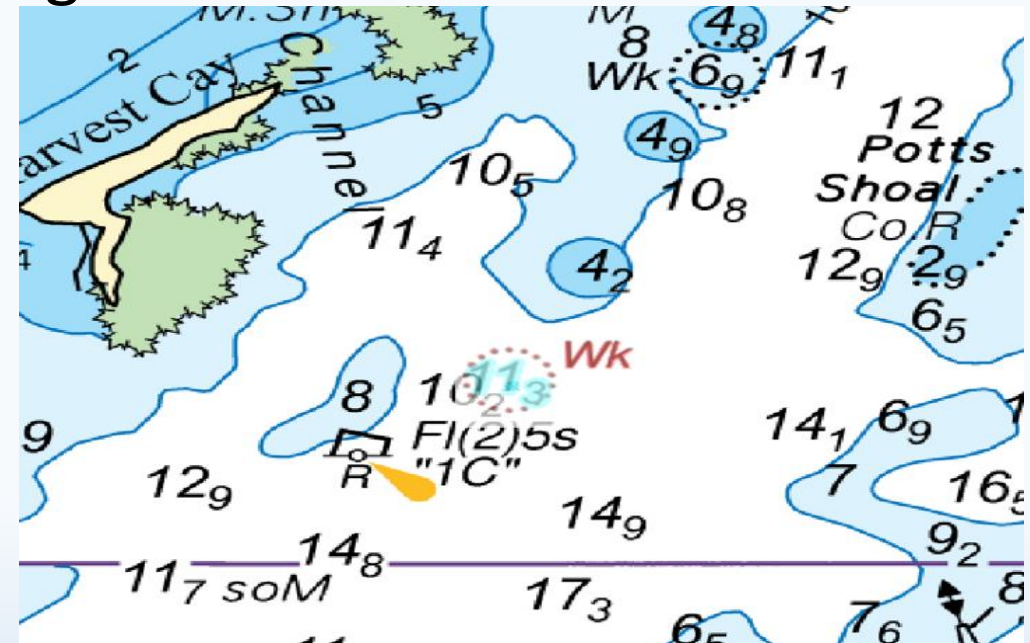


In 2022 a vessel casualty involving a push tug and a steel barge resulting in the steel barge submerging and now resting on the sea floor is being classified as a risk to navigation. The Belize Port Authority is requiring the owners to remove vessel from the position it rest due to the proximity to the Big Creek Access Channel and anchorage area.



# Challenges

- Owners not having the right equipment to salvage the submerged barge is requesting for approval to have barge remain in the sunken position but with the increase in vessel size and calls to that port facility it is foreseen barge posing a serious risk to navigation even with proper demarcation identifying its location.
- Chart correction showing wreck





# Continued Challenges faced by the Belize Port Authority



1. The Authority is unable to conduct our own independent surveys due to lack of survey equipment.( support needed to acquire a Multi beam system with the training associated with it)
2. Communication coverage for our priority Area 1.( additional repeater system needed)
3. Acquiring a buoy tender for efficiency and safety in carrying out ATON maintenance. ( vessel platform)



# Future Initiative: Mooring buoy installation has started with a pilot project in southern Belize where five mooring buoy with 60 ton holding capacity available.

15 additional mooring buoys will be installed in 2023

Placencia Harbor Mooring 1 and 2

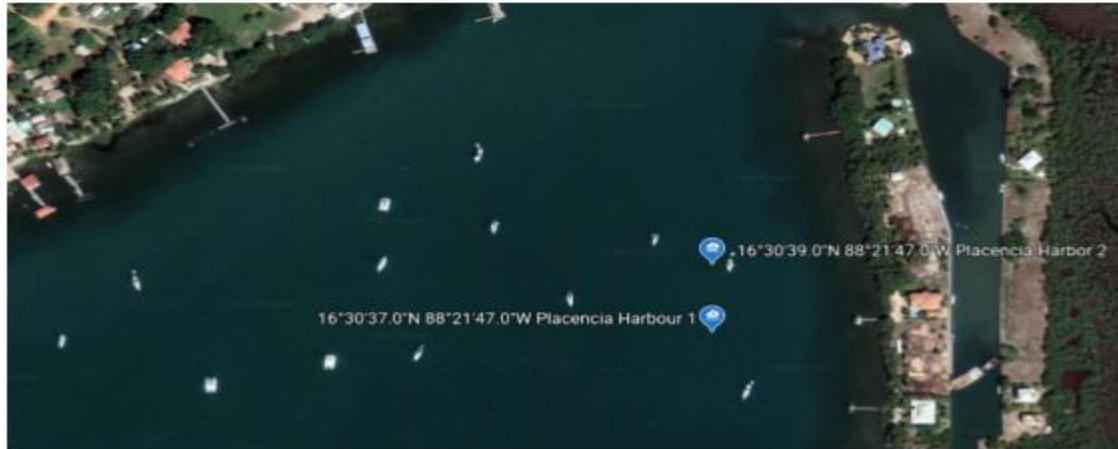


Figure 12: Placencia Harbor Moorings 1 and 2

Table 4: Placencia Harbor Mooring 1 Site Description

Description	Details
G.P.S coordinates	N 16 ° 30' 37.0" W 88° 21' 47.0"
Water depth	30 feet
Swing radius to nearest shallow	345 feet
Line scope	30 feet
Distance to another mooring buoy	200 feet
Substrate type	Mud/Silt
Max load Capacity	60 tons
Harbouring conditions	The area can provide protection from wind direction: North / Northeast/ Northwest/ Southeast



Figure 10: Lark Caye Mooring 2



Figure 11: Lark Caye Mooring 2 (Different Angle)





In partnership with the Ministry of the Blue the implementation of the MSP will see more resources placed on information gathering through hydrographic surveys and the placement of navigational markers in key areas for safety of navigation and protection of the environment .

Milestone Number	Milestone Summary Description	Time after signing the Agreement	% of Ocean in High Protection <sup>1</sup>	% of Ocean in Medium Protection <sup>1</sup>	Total % of Ocean in Biodiversity Protection <sup>1</sup>
1	Expand Biodiversity Protection Zones to 11.57% of the Ocean	6 months	Increased to 11.57%	Remains at the current 8.96%	20.53%
2	Designate Public Lands within the BBRRS as Mangrove Reserves	6 months			
3	Belize initiates MSP process	1 year			
4	Expand Biodiversity Protection Zones to 25% of the Ocean	3 years	Add 4.5% more in total across either Medium and/or High zones <sup>1</sup>		25% <sup>1</sup>
5	Implementation of ICZMP	4 years			
6	Complete Biodiversity Protection Zones, MSP signed in to law and Implemented	5 years	Add 5% more in total across either Medium and/or High zones <sup>1</sup>		30% <sup>1</sup>
7	At least 3 IUCN Green List Applications Submitted	6 years			
8	Approved Management Plans	8 years			

<sup>1</sup>In all cases, is the lower of the % or the amount specified in the MSP



# To be completed Amendment to our legislation 2023

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1. Repeal and replace the BPA Act
2. Marina Regulations
3. Draft Marine Pollution Bill (MARPOL)
4. Draft STCW Bill with IMMARBE our Flag State



# Challenges faced by the Belize Port Authority

1. The Authority still face challenges in receiving reliable information on status of our farthest lighthouse due to inconsistent communication. This pose a problem in disseminating MSI on a timely basis to both the local user and the international merchant marine. To date the Authority has issued five messages through our NAVAREA IV;
  - I. Message one and two was send on February 7, 2022 - Hunting Caye Light and
  - II. Glover's Reef South/West Caye Light unlit
  - III. Message three was send on May 8, 2022 - Glover's Reef Light Restored
  - IV. Message four was send on July 19, 2022 - Dangerous Wreck (Big Creek and Approaches)
  - V. Message five was send on October 8, 2022 - Hunting Caye Light unlit



# MACHC 23 Plenary



## 1. What is your greatest capacity building priority to recommend for IHO CB funding consideration (Phase 1)? (Select one)

*a) High-level visit (political awareness and buy in into the importance of having hydrographic survey capabilities.*

## 2. What is your greatest capacity building priority (Phase 2 or Phase 3) for which to seek other partnership/funding opportunities *outside* of IHO CB?

*The Belize Port Authority greatest capacity building priority is to receive training in Category A and Category B Hydrographic studies and to be able to acquire a multibeam hydrographic suite of equipment.*

The End

Thank You for your attention!