

# US-CA Hydrographic Impact and Engagements

United States – Canada Hydrographic Commission (USCHC) Québec City Convention Centre February 2020

\*PowerPoint prepared by OAR/NOAA Research and NOAA Policy and Constituent Affairs Division for the NOS International Coordination Committee, edits for USCHC by NOAA OCS





# High Level and Long-term Engagements

### **OOC vs Ocean Decade vs UNOC**

**Our Ocean Conference**: annual conference started by former US Sec of State, John Kerry, with a rotating host. 2020 meeting in Palau in August.

**UN Decade of Ocean Science for Sustainable Development:** 2021-2030

**UN Ocean Conference**: June 2-6 in Lisbon. Occurs every three years, last meeting in 2017, hosted by Sweden and Fiji at UNHQ, NYC.





Memorandum on Ocean Mapping of the United States Exclusive Economic Zone and the Shoreline and Nearshore of Alaska

# International Hydrographic Organization



- Potential New Strategic Plan with 3 Goals
  - Evolving the hydrographic support for safety and efficiency of maritime navigation, undergoing profound transformation
  - Increasing the use of hydrographic data for the benefit of society
  - Participating actively in international initiatives related to the knowledge and the sustainable use of the Ocean

### Major decade long drivers-

- S-100 implementation
- WENS
- Capacity Building
- MSDI
- CSB
  - SB 2030
  - Ongoing Hydrographic Office evolution

#### **F**

# **Decade Goals**



### A Clean Ocean

Sources of pollution are identified, quantified and reduced, and pollutants removed from the Ocean.



### A Safe Ocean

Human communities are protected from ocean hazards and the safety of operations at sea and on the coast is guaranteed.



### A Healthy and Resilient Ocean

Marine ecosystems are mapped and protected, multiple impacts, including climate change, are measured and reduced, and the provision of Ocean ecosystem services is maintained.



# A Sustainable Productive Ocean

The provision of food supply and alternative livelihoods are secured.



## A Predicted

### Ocean

Society has the capacity to understand current and future Ocean conditions, forecast their change and impact on human wellbeing and livelihoods.



## Transparent and Accessible Ocean

All nations, stakeholders and citizens have access to ocean data and information, technologies, and are capable of making informed decisions.

# **UN Ocean Decade Priority Areas**













Map the entire ocean floor and processes, new level of mapping Bolster ocean observation systems in all basins

Conduct an inventory of ecosystems and their functioning Develop a data Es and i information m portal

Establish an integrated multi-hazard warning system

Include ocean component in earth-system observation, research and prediction Strengthen capacities and accelerate technology transfer and ocean literacy



# **U.S. Decadal Vision**



### **Modernize R&D infrastructure** Big data, models, R2O



**Promote Economic Prosperity** Seafood competitiveness, energy, minerals, econ/eco balance, workforce



**Resilient Coastal Communities** Disaster risk reduction



**Safeguard Human Health** Plastics contaminants & pathogens, HAB, Natural Products



**Ensure Maritime Security** Arctic transport, situational awareness

# **UN Decade Goals**



#### **Transparent Ocean** Data sharing & application products, services, policy



#### **Productive Ocean** Sustainable BE, safe thresholds for econ growth, mitigate impacts of envir. change



#### Safe Ocean Disaster risk reduction



#### Healthy/Resilient Ocean Ecosystems mapped & protected, impacts mapped, measured & reduced



### **Clean Ocean** Pollution identified, quantified, reduced & removed



#### **Predicted Ocean**

All ocean basins observed and mapped; obs for mgmt. & BE

#### **OCEANS PROTECTION PLAN – PROTECTING OUR COASTS**

The national Oceans Protection Plan is the largest investment ever made to protect Canada's coasts and waterways for future generations, while growing our economy.

BILLION



#### \$338 MILLION Stronger ecosystem conservation

Restoring coastal aquatic habitats through the Coastal Restoration Fund
Researching the effects of marine shipping on six ecosystems in Canada
Addressing the threats to marine mammals from vessel noise and collisions
Removing and preventing abandoned and derelict vessels

#### **278** Improved emergency preparedness MILLION and response

Establishing 24/7 emergency response and incident management
Increasing on-scene environmental response capacity
Improving oil spill response plans

### **5250** Increased Canadian Coast Guard capacity for prevention and response

Acquiring new environmental response equipment
Increasing emergency tow capacity to respond to ships in distress
Building six new lifeboat stations and an inshore rescue boat station
Establishing a new Canadian Coast Guard Auxiliary for Indigenous Peoples in British Columbia

#### 207 Enhanced prevention with safer MILLION navigation and vessel tracking

Investing in modern hydrography and charting of Canada's ports
Investing in Canada's space-based Automated Information System to better track ships
Sharing near real-time information on marine traffic with Indigenous and coastal communities

#### \$161 Greater marine protection MILLION for Canada's Arctic

Investing in safety equipment and marine infrastructure in northern communities
Expanding the National Aerial Surveillance Program to detect oil spills
in the Arctic

• Increasing the Canadian Coast Guard presence in the Arctic

#### \$103 Increased marine MILLION research and science

 Improving Understanding of how oil behaves in water
Enhancing ocean models of winds, waves and currents, to help responders track spills and predict their path

Expanding research on oil-spill response technology

#### Engaged Canadians and partnerships MILLION with Indigenous Peoples



 Building meaningful partnerships with Indigenous Peoples
Expanding marine training opportunities for Indigenous Peoples through the Marine Training Contribution Fund
Engaging Canadians to improve their understanding of Canada's marine safety system

**\$56** MILLION MODERATE MARKED MODERATION MODERATICA MODERATION MODERATION MODERATION MODERATION MODERATION MOD



Updating The Pilotage Act, which governs marine pilots in Canada
Modernizing Canada's marine safety regulation and enforcement regime
Increasing Canada's representation in international marine safety initiatives

For more information, please visit the Oceans Protection Plan interactive map. Note: program spending rounded to nearest million

> https://www.tc.gc.ca/en/initiatives/oceans-protectionplan/oceans-protection-plan-funding-graphic.html



2020 UN Ocean Conference Lisbon, 2-6 June 2020

- US focus on dialogue 1 and 2
- Delivering interventions, and announcing engagements at meeting

#### **Proposed Interactive Dialogues:**

- 1. Addressing marine pollution (target 14.1);
- 2. Managing, protecting, conserving and restoring marine and coastal ecosystems (targets 14.2 and 14.5);
- 1. Minimizing and addressing ocean acidification (target 14.3);
- 2. Making fisheries sustainable and providing access for small-scale artisanal fishers to marine resources and markets (targets 14.4, 14.6 and 14.b);
- 3. Promoting and strengthening sustainable ocean-based economies, in particular for small island developing States and least developed countries (target 14.7 and other relevant targets);
- 4. Increasing scientific knowledge, and developing research capacity and transfer of marine technology (target 14.a);
- 5. Implementation of international law, as reflected in the United Nations Convention on the Law of the Sea (target 14.c); and
- 6. Leveraging interlinkages between Sustainable Development Goal 14 and other Goals towards the implementation of the 2030 Agenda

# Are there US-CA hydrographic efforts to recognize?

# **US-CA Hydrography**

- Hydrographic partnering at key international ocean policy events?
  - UN Ocean Conference (Lisbon)
- USCHC outcome based goal targets for 2030 based on closer alignment to the IHO Strategic Plan (if it is adopted)?
  - 100% S-101 ENC by 2028?
- Leadership in the region measurably progressing SB 2030 and CSB? NONNA-100 announcement?
- Identify and market collaborative R&D efforts and active personnel exchanges
- Identify IHO WG product development
  - the new international standard for paper charts? Delivering WENS?
- Regional foci: Great Lakes, Atlantic, Pacific transboundary areas?
- S-100 rollout: Stronger external planning and messaging: IMO, Arctic Council, UN Ocean Goals

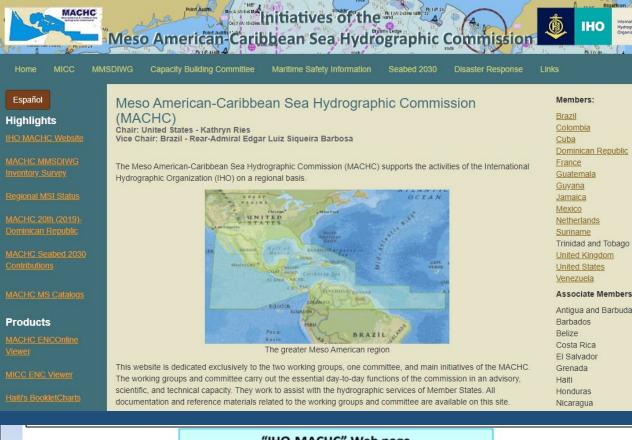
# US-CA Delivering Ocean Governance and Science

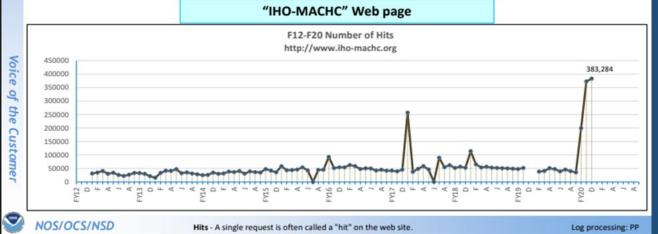


# Do we want to approach the decade with anticipated achievements in mind?

# **USCHC Web Presence?**

- Raise Awareness
- Better planning and organizing of efforts between RHC meetings
- Support HGPSC and other national and global efforts
  - SB 2030 (regional snapshot of Region A)
  - Planning and Information sharing
- Build synergies with other RHCs
- Populated with a calendar of key hydrographic conferences and exchanges
- Less maintenance with only two HO's





### **Hydrographic Meetings 2020\***

Date	Title	Location	Website	Point of Contact
24-27 Feb	Canadian Hydrographic Conference	Québec City Convention Center, Québec City	http://chc2020.org /	chc2020@conferium. com
17-19 Mar	Oceanology International	Excel London	https://www.ocean ologyinternational. com/Conference/	https://www.oceanol ogyinternational.com /forms/customer-ser vice-form/
6-7 May	Remote Hydrography Conference	National Oceanography Centre, Southampton, UK	https://www.ths.or g.uk/content.asp?p age=99	helen@ths.org.uk or conference@ths.org. uk
26-28 May	CRCL State of the Coast (SOC2020)	New Orleans Ernest N. Morial Convention Center, New Orleans, LA	https://www.stateo fthecoast.org/	stateofthecoast@cr cl.org
2-4 June	21st Annual JALBTCX Airborne Coastal Mapping and Charting Workshop	NOAA Western Regional Center, Seattle, WA	Website	JALBTCX@usace.ar my.mil
9-11 June	Capitol Hill Ocean Week	Ronald Reagan Building and International Trade Center, Washington DC	https://marinesanct uary.org/capitol-hill- ocean-week/	conference@marines anctuary.org
15-18 June	Advancing the Marine Transportation System through Automation and Autonomous Technologies: Trends, Applications and ChallengesSixth Biennial Marine Transportation System Innovative Science and Technology Conference	The National Academy of Sciences, Washington DC	https://trb.secure-pl atform.com/a/page/ MTS2020	

Date	Title	Location	Website	Point of Contact
13-17 July	Esri User Conference	San Diego, California	https://www.esri.co m/en-us/about/eve nts/uc/overview	confregis@esri.com
14-16 July	HydroVision 2020	Minneapolis, Minnesota	https://www.hydroe vent.com/	https://www.hydroeve nt.com/contact-us/
17-18 Aug	Our Ocean Conference	Palau	https://www.ouroce an2020.pw/	info@ourocean2020. pw
29-30 Sept	Teledyne Marine 2020 Canadian Users Conference	Best Western Plus Chocolate Lake Hotel, Halifax, NS		
19-22 Oct	Oceans 2020 (Hosted by the Marine Technology Society and the IEEE Oceanic Engineering Society)	Mississippi Coast Convention Center, Biloxi, MS	https://gulfcoast20. oceansconference. org/	laurie.jugan@usm.edu
2020	GEBO Science Day and Symposium	TBD	https://www.gebco. net/about_us/meeti ngs_and_minutes/ #science	
January 2021	Field Procedures Workshop	TBD, US	твс	твс
15-17Jun 2021	HydroVision 2021	Portland, USA		

\*List in no way exhaustive, but a list in progress of upcoming hydrographic meetings