

# 17th SESSION IOCARIBE



**unesco**

Intergovernmental  
Oceanographic  
Commission

Sub-Commission for the Caribbean  
and Adjacent Regions

Subcomisión para el Caribe y  
Regiones Adyacentes

Bogotá, Colombia  
May 08 - 11, 2023



GOBIERNO DE COLOMBIA



COMISIÓN  
COLOMBIANA  
DEL OCEÁNO

# OCEAN DECADE SAFE TROPICAL AMERICAS AND CARIBBEAN OCEAN ICHEWS PROJECT

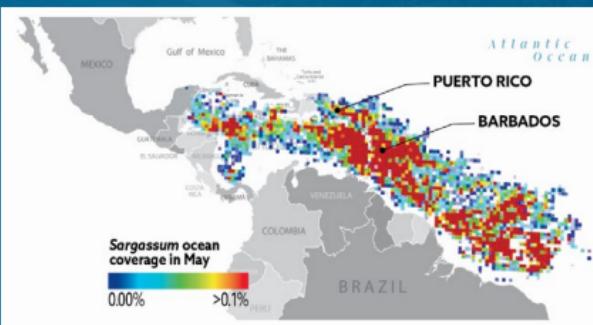
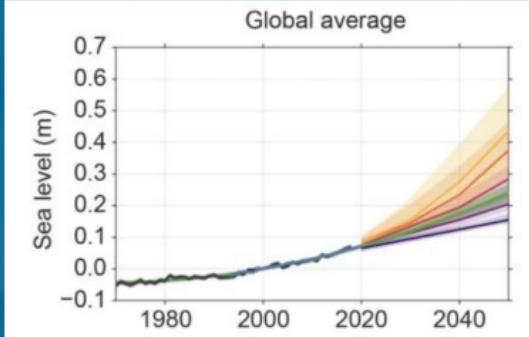
**CHRISTA VON HILLEBRANDT-ANDRADE**

LEAD SAFE OCEAN WORKING GROUP OF THE IOCARIBE DECADE  
PLANNING GROUP

INTERNATIONAL TSUNAMI INFORMATION CENTER – CARIBBEAN OFFICE  
IOCARIBE XVII SESSION

MAY 9, 2023

# COASTAL THREATS ARE REAL AND GETTING WORSE



# CHALLENGE: BREAKING DOWN SILOS



“The Ocean is Crying  
and our People are  
Dying”

Hon. Sharlene Dabreo, BVI, Permanent Secretary

Silo Art Trail in Sea Lake of the Wimmera-Mallee, Australia (painted by Joel Fergie & Travis Vinson) as photographed by Julie Powell (<https://juliepowell2014.wordpress.com/2019/11/20/wimmera-mallee-silo-art-sea-lake/>)



2021  
2030  
United Nations Decade  
of Ocean Science  
for Sustainable Development



With the Support of Norway

*One Planet, One Ocean*

*Un Planeta, Un Océano*

*Une planète, un océan*

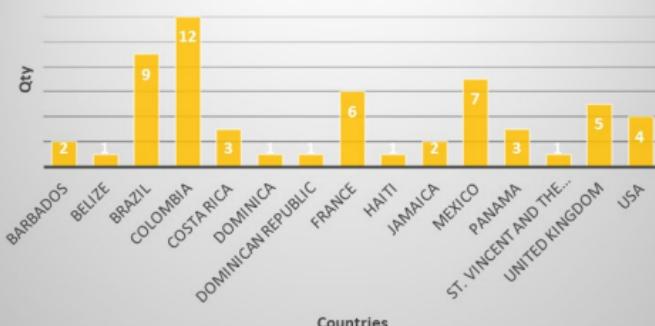


@IOCARIHOCEAN

# SAFE OCEAN WORKING GROUP

73 MEMBERS

# Members by Country



Ocean  
and Coastal  
Research

CASE REPORT

<https://doi.org/10.1590/2675-2824/69.21-027-cvha>  
ISSN 2675-2824

Co-Designing a safe ocean in the Western Tropical Atlantic  
within the framework of the UN Decade of Ocean Science for  
Sustainable Development

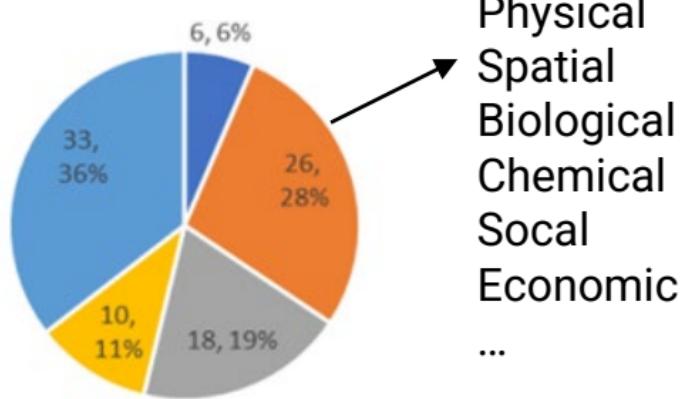
Christa von Hillebrandt-Andrade<sup>1</sup>✉, Azra Blythe-Mallett<sup>2</sup>, Elva Escobar-Brienes<sup>3</sup>

<sup>1</sup> International Tsunami Information Center Caribbean Office (259 Blvd. Alfonso Valdés, Mayagüez, Puerto Rico, 00682)

<sup>2</sup> Ministry of Agriculture & Fisheries (Kingston, Jamaica)

<sup>3</sup> Universidad Nacional Autónoma de México, Instituto de Ciencias del Mar y Limnología (Ciudad Universitaria 04510, Mexico City, Mexico)

## Feedback from Safe Ocean survey conducted in April 2020 at the IOCARIBE Ocean Decade Planning Meeting



- a. Scientific understanding of the threat
- b. Observation/Data/Alerts
- c. Partnerships and financing
- d. Capacity development
- e. Education, Outreach and Communication

# Prioritization of Hazards (70 respondents) – June 2021



## TOP SEVEN

- Sea Level Rise (Climate Change)
- Sargassum Influx
- Tsunami
- COVID 19
- Waste Water
- Hurricanes
- Oil Spills

# INTEGRATED COASTAL HAZARDS EARLY WARNING SYSTEM AND SERVICES (iCHEWS-TAC) - OBJECTIVES

- Evidence- and impact-based integrated Coastal Hazards Early Warning System and Services (iCHEWS-TAC) addressing four key elements: Monitoring and Warning, Risk Knowledge and Understanding, Warning Dissemination and Communication (through regional, national and local levels), and Response Capabilities
- Enhanced resilience to Coastal Hazards, considering lessons from COVID 19.
- Address threats, their direct and cascading impacts, cultural, political, economic and social diversity, social capital, capacity development, human and environmental sustainability requirements, and engagement and inclusion of the most vulnerable.
- Enhanced Capacity Development and Governance Structure

# PARTNERS 1

Regional Office for the Americas and the Caribbean, UN Office of Disaster and Risk Reduction (UNDRR)

Caribbean Disaster and Emergency Management Agency (CDEMA) – Early Warning Consortium

Coordination Centre for the Prevention of Natural Disasters in Central America (CEPREDENAC)

Etat-Major Interministériel de la Zone de Défense et de Sécurité Antilles (EMIZA)

Intergovernmental Coordination Group for Tsunami and Other Coastal Hazards Early Warning System for the Caribbean and Adjacent Regions (UNESCO/IOC ICG CARIBE-EWS)

Caribbean Tsunami Information Center (UNESCO/IOC)

WMO Regional Association III (South America)

WMO Regional Association IV (North America, Central America and the Caribbean)

Global Ocean Observing System (IOC-WMO-UNEP-ICSU)

Sargassum Information Hub (GEO Blue Planet, IOCARIBE, AtlantOS, and the AIR Center)

Pan American Health Organization

Regional Early Warning Systems Consortium

CREWS (Climate Risk Early Warning System)

Caribbean Institute for Meteorology and Hydrology

Caribbean Meteorological Organization

# PARTNERS 2

Meso America and Caribbean Hydrographic Commission

Red Cross, and International Federation of Red Cross

Central America Tsunami Advisory Center (CATAC at INETER, Nicaragua)

US NOAA National Hurricane Center

CCCCC (Caribbean Community Center for Climate Change)

National HYDROMET Services (NHMS)

National Disaster Management Organizations

National Tsunami Warning Centers

Local Emergency Management Organizations

University of the West Indies (Seismic Research Center, Trinidad and Tobago; Jamaica)

University of Puerto Rico (Mayaguez, School of Medicine, Public Health, Rio Piedras)

National University Costa Rica (SINAMOT-UNA)

French West Indies University (Guadeloupe)

National University of Mexico (Sea Level and Seismic Centers)

# ENDORSEMENT AS AN OD PROJECT OF COAST PREDICT

## REDEFINING THE COASTAL OCEAN

### Main Objectives:

- Integrate observations global through local observations and numerical models to produce predictions with uncertainties from extreme events to climate, for the coastal marine ecosystems (their services), biodiversity,
- Co-design transformative response to science and societal needs.
- Focus on the many common worldwide features, to produce observations and predictions of natural variability and human-induced changes in the coastal areas
- Upgrade the infrastructure for data exchange in line with recognised standards.

## Establish Governance and Management framework

Role of TAC Safe Ocean WG?  
IOCARIPE? Member States?

Identification of other relevant  
Decade and National, Regional  
and Global Actions

Eg. Sendai, EW4ALL, CARIBE EWS

## Member State Needs and Resource Assessment

In consultation with UNDRR,  
IOCARIPE-GOOS

## Define an Initial Activity

Eg. Blue Line - What and Who are  
at Risk from Coastal Inundation

Next  
Steps

*One Planet, One Ocean / Un Planeta, Un Océano / Une planète, un océan*



Intergovernmental  
Oceanographic  
Commission



2021 United Nations Decade  
of Ocean Science  
for Sustainable Development  
2030



Norad  
With the Support of Norway

TROPICAL AMERICAS AND THE CARIBBEAN REGION

REGIÓN TROPICAL DE LAS AMÉRICAS Y EL CARIBE

RÉGION DE L'AMÉRIQUE TROPICALE ET DES CARAÏBES



The clock is  
ticking...and  
we are  
overloaded.

*One Planet, One Ocean / Un Planeta, Un Océano / Une planète, un océan*

[iocaribe.ioc-unesco.org](http://iocaribe.ioc-unesco.org) / [loc.unesco.org](http://loc.unesco.org) / [www.oceandecade.org](http://www.oceandecade.org)

@Iocaribeocean

# OBRIGADO

# THANK YOU



# MUCHAS GRACIAS



# MERCI BEAUCOUP



# BEDANKT

Christa von Hillebrandt-Andrade  
ITIC-Caribbean Office  
[christa.vonh@noaa.gov](mailto:christa.vonh@noaa.gov)