

Coastal Zone Management Authority & Institute

# Multi-Stakeholder MSP Workshop 1: Assessments for Planning

May 8 – 10, 2024- Day 1 Belize Biltmore Plaza Hotel, Belize City





# Workshop Purpose

- Kickoff participatory spatial planning activities to achieve Milestones 4 and 6 within the scope and goals of the larger BSOP process.
- Define and initiate key assessments to enable spatial planning.



# Desired Outcomes

### Day 1

- Understanding of key MSP steps and assessments
- Awareness of areas under consideration for new protections
- Current conditions considered
- Possible future scenarios developed

### Day 2

- Planning criteria and indicators defined
- Compatible and incompatible uses identified
- Zoning approach defined

### Day 3

- Understanding of the Ocean Use Survey (OUS) results
- OUS results verified
- Understanding how Marxan can inform and support the BSOP process

# Agenda: Day 1

Time	Topic
9:30	Welcome, introductions, workshop overview
10:15	Setting the scene for planning
10:45	Coffee/tea break
11:00	Marine Spatial Planning process overview
11:30	Areas under consideration for new Biodiversity Protection Zones
12:00	Lunch, provided
1:00	Rapid assessment of current conditions/uses
2:00	Future condition scenarios (part I)
3:00	Coffee/tea break
3:15	Future condition scenarios (part II)
4:45	Closing session
5:00	Adjourn Day 1



# Introductions

- 1. On 2 Post-It Notes, and write down:
  - 1 thing you hope to learn in this workshop
  - 1 thing you have to contribute
- 2. With the people at your table, share:
  - your name
  - the organization or sector you represent
  - 1 thing you wrote down
- 3. Post your notes on the designated flip charts



# Housekeeping

- Restrooms are located outside of the building on the left.
  - Exit the main doors and turn right to leave the building.
- Breaks, snacks & lunch will be provided
- Wifi network: BSOP Workshop
- Wifi password: WORKSHOP2024



## **Ground rules for participation**

- 1. Arrive and return from breaks on time.
- Listen with an open mind. Assume good intent and refrain from side conversations or interrupting.
- 3. Seek first to understand, then to be understood.
- 4. Raise your hand to ask clarifying questions.
- 5. Share relevant information concisely and stay on topic.
- 6. Focus on interests, not positions.
- 7. Agree on the meaning of key words.
- 8. Silence phones. Take calls and check emails during a break.





# SETTING THE SCENE FOR PLANNING

Safira Vasquez, Senior Technical Officer Belizario Carballo, Technical Officer

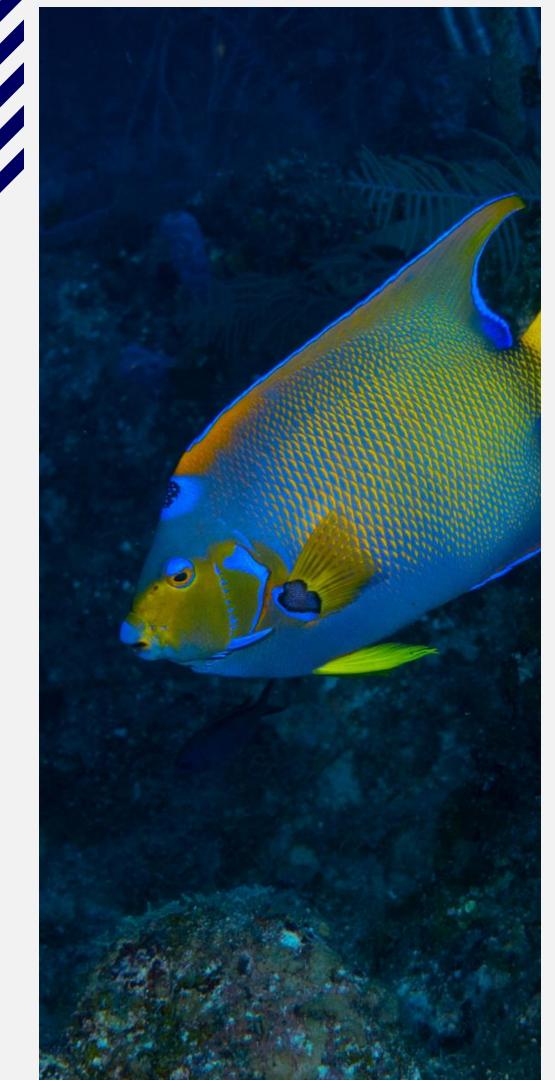






# Table Of Content

Review of Conservation Commitments and MSP Milestones	01
Revised BSOP Vision, Goals	02
BSOP Governance Framework	03
People-Centric ConservationAgenda	04



# Conservation Milestones





#### **IUCN Green List** November 2027

Application for at least 3 MPAs to be listed

#### **ICZM** November 2025

Legislate Revised CZM Act Endorse ICZMP

#### Initiation of the **MSP Process** November 2022

Official MSP Launch Designation of Lead Agency Establishment of MSP SC

#### **Expand BPZ** May 2022

HBPZ = 11.65% MBPZ = 8.64%Total BPZ of 20.3%



#### Designation of **Mangrove Reserves** May 2022

Public lands within the BBRRS designated as Mangrove Reserves

08

#### Management

OFFICE of the PRIME MINISTER

Plans

Approved Management Plans for BPZ

#### **Expand BPZ**

#### November 2026

Increase BPZ by 5 % for total of 30% BPZ or MSP % MSP endorsed for Implementation

#### **Expand BPZ** November 2024

06

Increase BPZ by 4.5 % for total of 25% BPZ

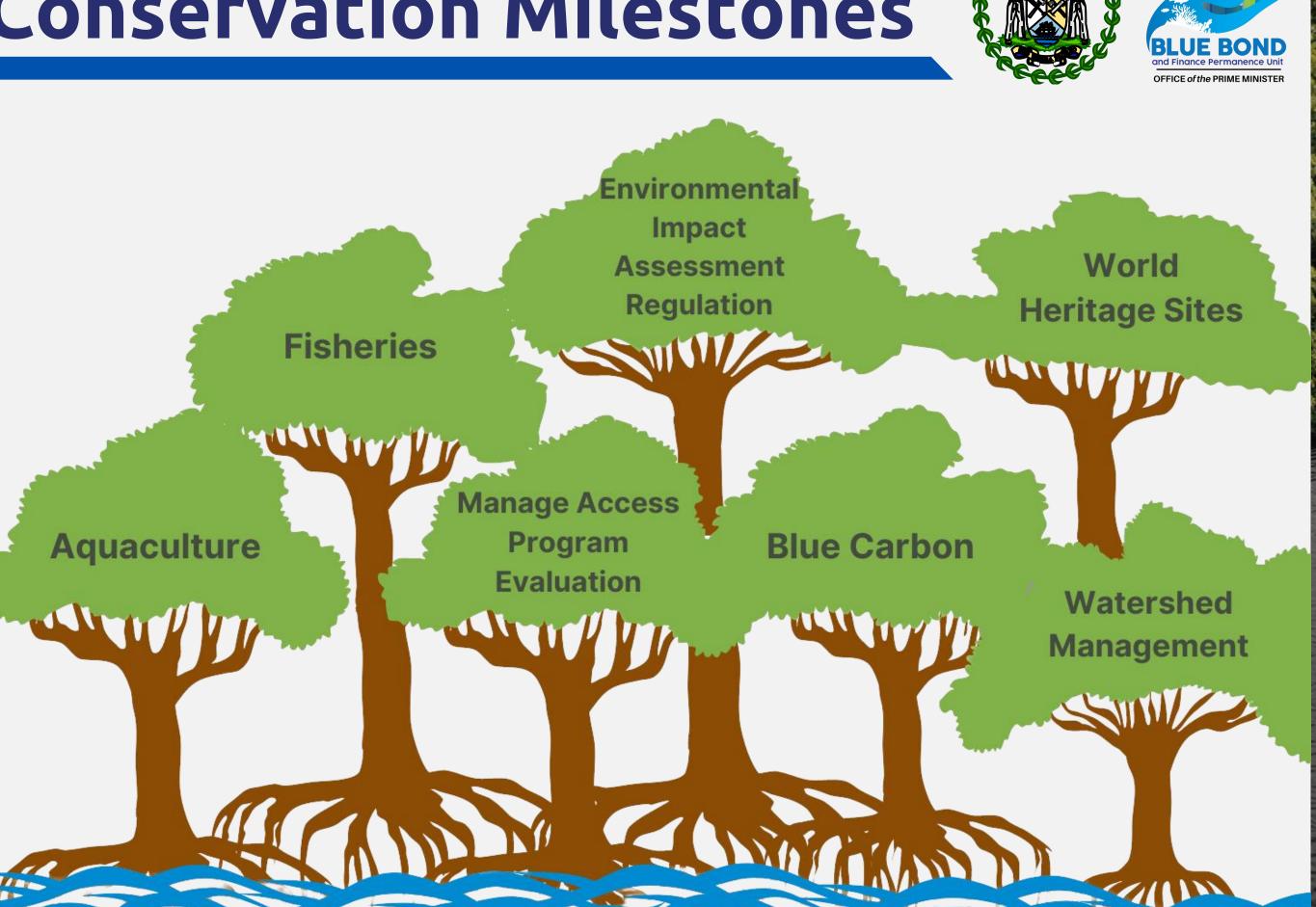


#### November 2029

# Conservation Milestones















BSOP Overarching Goal

To enact and publish legislation

To enact and publish legislation required to legally enforce the Marine Spatial Plan that guides sustainable development and designates up to 30% of Belize's ocean as Biodiversity Protection Zones.



#### **Governance Framework for Belize Sustainable Ocean Plan**

#### **Executive Management**

#### Government of Belize

MSP Lead Agency: Coastal Zone Management Authority and Institute

#### **Executive Committee**

Chair: CEO Office of the Prime Minister

Members: Ministry of Blue Economy & Civil Aviation; Ministry of Sustainable Development, Climate Change & Disaster Management; Ministry of Natural

Resources; Solicitor General; and the Financial Secretary



#### Public Input Mechanisms

#### Stakeholder Engagement

Community Meetings
Consultations
Focus Groups
Forums
Open Houses
Website

#### **Development Level for Decision Making**

#### **BSOP Steering Committee (SC)**

Chair: Coastal Zone Management Authority and Institute
Members: Senior level government officers, non-governmental stakeholders from sectors/areas including fisheries, coastal zone management, tourism, water resources, shipping, environment, finance, academia and energy

#### **BSOP Core Team**

Blue Bonds & Finance Permanence Unit, Coastal Zone Management Authority and Institute, Fisheries Department, Ministry of Blue Economy and Civil Aviation, The Nature Conservancy

## Technical Advisory Groups

#### **Technical Working Groups**

Energy

Finance and Investment
Fisheries and Aquaculture
Marine and Coastal Development
Marine and Coastal Ecosystems
Maritime Administration
Tourism

#### **Core Team Working Sub-Groups**

Stakeholder
Engagement
&
Communications

Science & Technical

Policy & Legislation







# MSP Milestones and Timelines



#### BPZ EXPANSION MAY 2022

to 11.65% Belize
having MPBZ of
8.64% TOTAL BPZ
and MPAs of 20.3%



### BPZ EXPANSION NOVEMBER 2024

Expand BPZ to 25% with an increase to Milestone 1 of 4.7%



#### BPZ MANAGEMENT PLANS NOVEMBER 2029

Approved

Management Plans

for BPZ

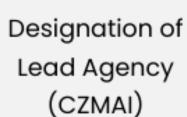


Signing of the Agreement (BLA and CFA)



#### MSP PROCESS NOVEMBER 2022

Official Launch of the MSP Process (October)



Establishment of MSP SC



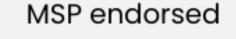
### BPZ EXPANSION NOVEMBER 2026

Complete BPZ (additional 5%) for 30% OR MSP%



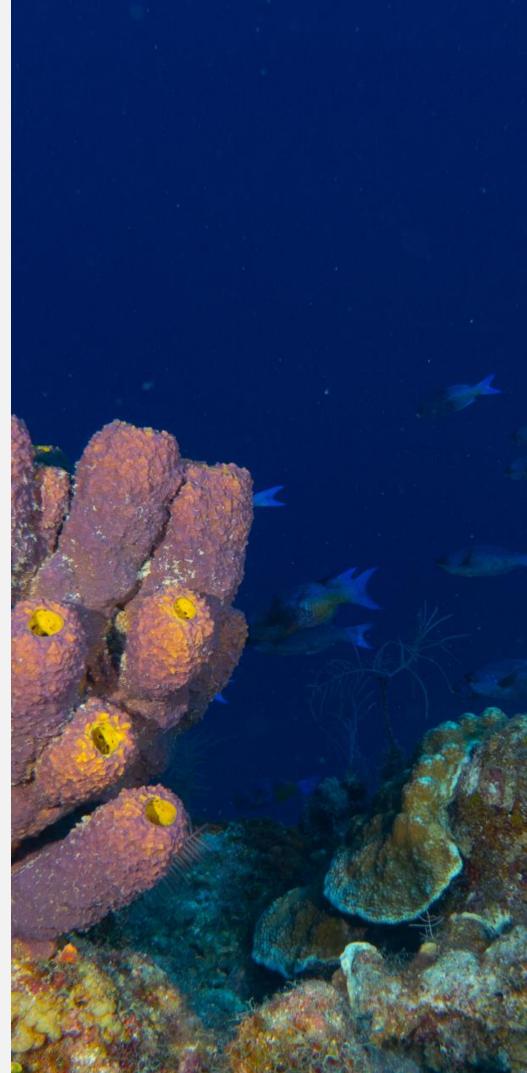






for

implementation









# People-Centric Conservation Agenda

In September of 2023, Cabinet Approved "A People-Centric Conservation Agenda (PCCA) for Belize's Blue Space."

The PCCA will be implemented through the Resilient Bold Belize (RBB), a Project Finance for Permanence for Belize's marine and coastal protected areas.





# People-Centric Conservation Agenda

This agenda will include a framework consisting of three key commitments for marine and coastal conservation:

 Triple the area of Belizean coral reefs that are under full protection, from the current 7% to 20%, and identify the most advantageous places to increase coral reef protection.

# THANKYOU



infobbfp@opm.gov.bz



**Belize Blue Bonds: Blue Finance for Nature and People** 

https://2ly.link/1vxUt



**FOLLOW US ON** 



Blue Bond & Finance

Permanence Unit



@bbfpunit











# COFFEE BREAK

15 minutes





**Chantal Collier** 



# What is Marine Spatial Planning (MSP)?

"A public process of analysing and allocating the spatial and temporal distribution of human activities in marine areas to achieve ecological, economic, and social objectives that are usually specified through a political process."

- MSP global, 2021

- Globally recognised way to manage ocean space
- More than 300 MSP initiatives in 40+ countries
- Ecosystem-based management approach
- Stakeholder participation is a key to success





# Why plan? Ocean Health. People. Marine biodiversity protection and a well-managed ocean

**BIODIVERSITY** 



**FISHERIES** 



**ENERGY** 



**TOURISM and RECREATION** 



**CULTURE** and **VALUES** 



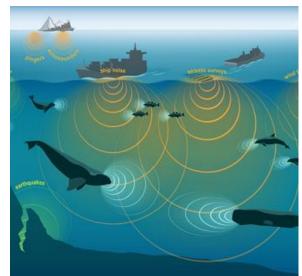
**LIVELIHOODS** 



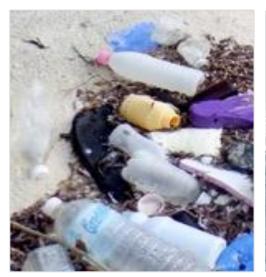


# Why plan? Ocean Health. People. Avoid and Reduce Human Impacts in the Ocean

b





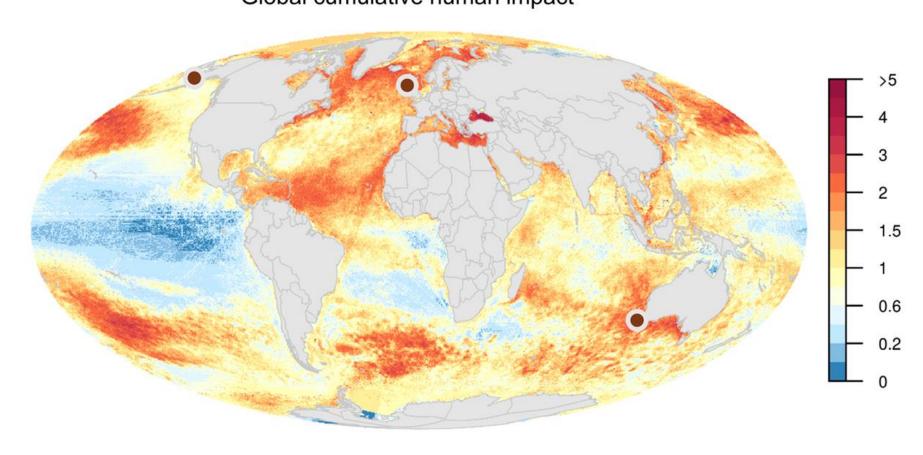








#### Global cumulative human impact



Halpern et al., 2019. Recent pace of change in human impact on world's ocean. Nature.

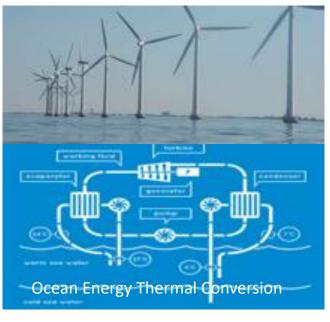
Figure 1. Global patterns of cumulative human impacts. (a) Annual change in CHI estimated using a linear regression model from 2003 to 2013 for each raster cell (white cells did not have a statistically significant trend,i.e., p > 0.05), Scale values reflect min and max raster values (-0.3 and 0.52) and 99.999th quantile values (-0.21 and 0.32). (b) Static map of 2013 CHI.



# Why plan? Ocean Health. People. Future Proof – Plan for Future Uses and Activities









DEEP-SEA
EXPLORATION
& MINING

GLOBAL TOURISM & TRAVEL

MARINE RENEWABLE ENERGY BIO-PROSPECTING

- ILLUSTRATIVE FUTURE USES -



# Why plan? Ocean Health. People. Commitments, Policies, and Targets

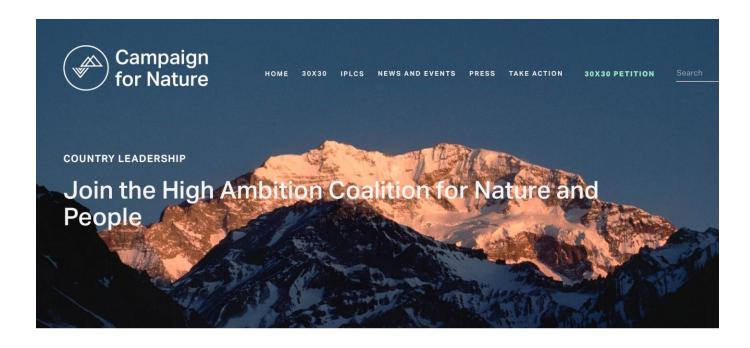
















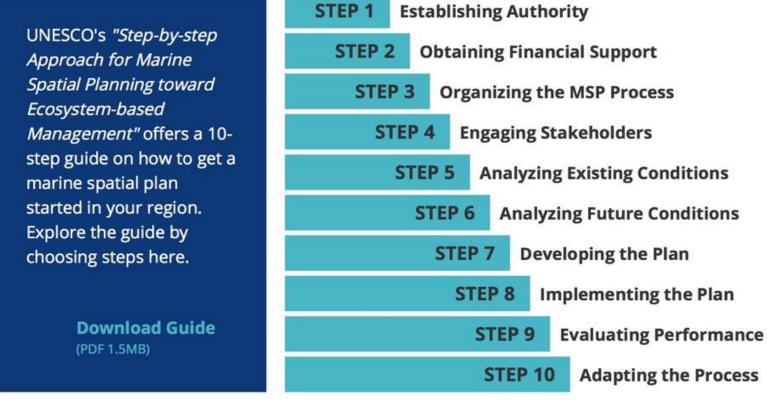
... and many more.



### How does MSP work?

- MSP is an iterative process
- International 'best practices' have been compiled and published to support development and implementation of MSP processes worldwide
- IOC-UNESCO guides provide frameworks and guidance on key steps and assessments that are consistent with international best practices for MSP





Ehler, C. and F. Douvere. 2009. Marine spatial planning: a step-by-step approach toward ecosystem-based management. IOC-UNESCO

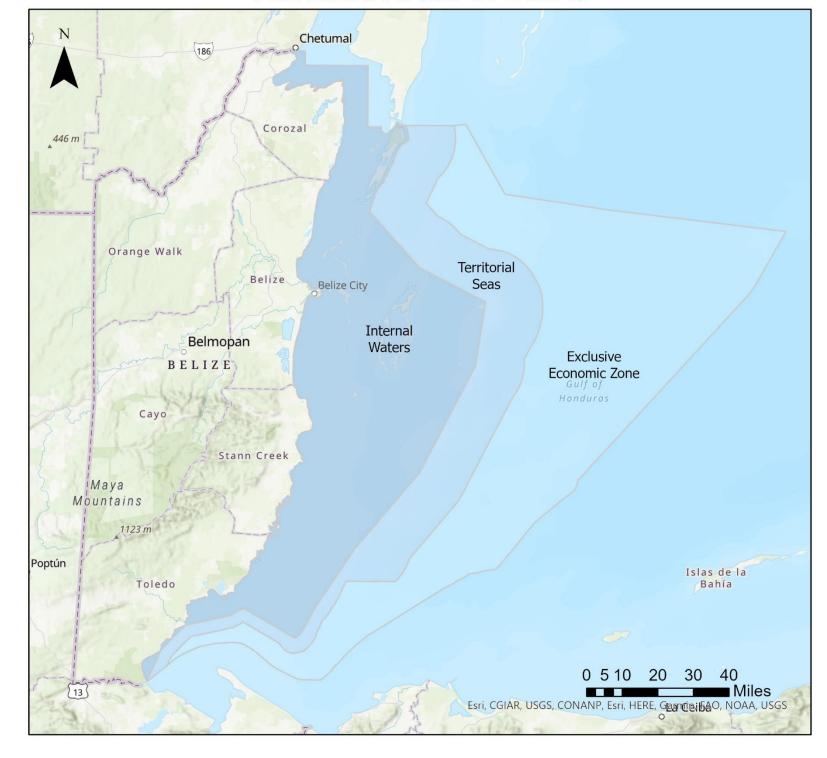
### Belize's Conservation Commitments

As part of its debt conversion through the Blue Bonds for Ocean Conservation program, Belize committed to:

- complete a legally enforceable MSP,
- designate up to 30% of its Ocean in Biodiversity Protection Zones,
- other conservation commitments not addressed by the MSP.

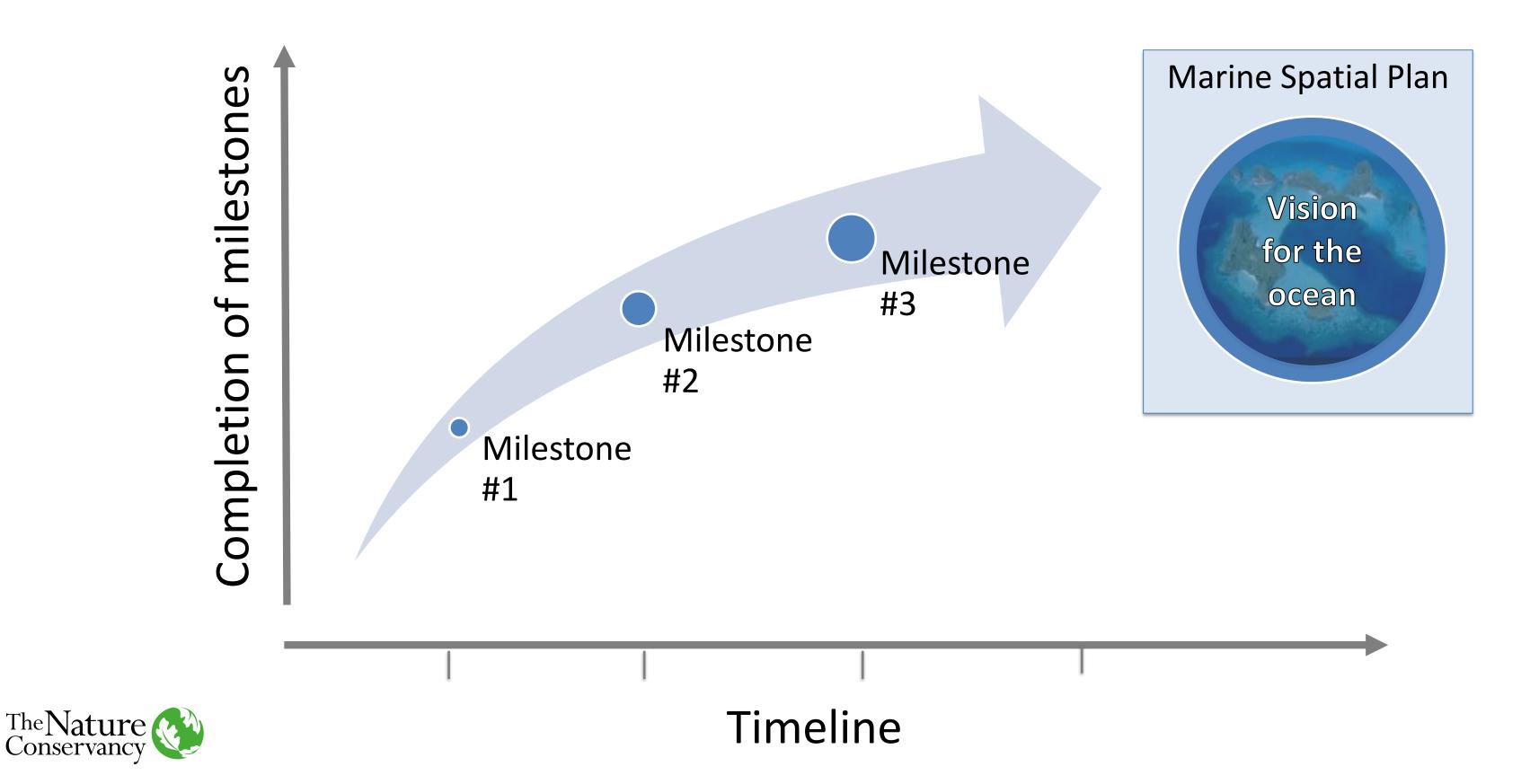


#### **Maritime Areas of Belize**



### Milestones

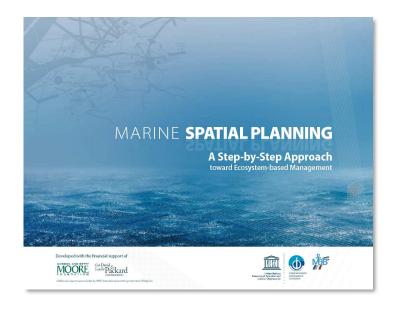
### Markers along the road map to the Conservation Commitments

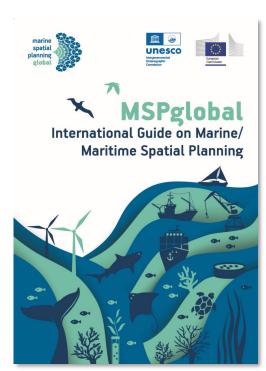


# Belize's Conservation Commitments The Marine Spatial Plan

- The MSP shall include marine conservation outcomes for biodiversity protection and denote, in reasonable detail, the permissible activities that may be lawfully carried on in any part of Belize's Ocean.
- The MSP shall:
  - 1. expand the percentage of Belize's Ocean in Biodiversity Protection Zones to whichever is the lower of:
    - a. 30% of Belize's Ocean, with at least 15% in High Protection for Biodiversity Zones and 15% in Medium Protection for Biodiversity Zones, or
    - b. The percentage stated in the MSP.
  - provide that all Biodiversity Protection Zones be Gazetted and submitted to the relevant international authority (e.g., the WDPA, IMO, IHO)
  - 3. contain an Implementation Plan
  - 4. be legally enforceable, and
  - 5. be Implemented.

 The MSP shall be completed consistent with frameworks set forth using international best practices, such as the IOC-UNESCO 2009 Guide, "Marine Spatial Planning - A Step-by-Step Approach toward Ecosystem-based Management".





IOC-UNESCO MSPglobal. 2021. International Guide on Marine/Maritime Spatial Planning



# Sample Timeline with Key Steps for MSP Where is Belize now?

Year

BSOP Process Years 1 - 2

BSOP Process
Years 1 – 5

	MSP STEPS	0	1	2	3	4	5	6	7	8
	MARINE SPATIAL PLAN PROCESS									
	MSP Inception Meeting/Workshop									
ı	Organise the MSP process									
ı	Organise Communications									
J	Organise Stakeholder Participation									
	Define Current and Future Conditions									
	Develop Planning Tools									
	Science and Technical Work for Zones									
	Optional Science and Consultancies									
	Prepare Marine Spatial Plan							<u>)</u>		
	IMPLEMENT MARINE SPATIAL PLAN									
	Launch Implementation Plan									
	Develop Management Plans									
	Endorse Management Plans									
	Legal Enforcement Starts									
	Monitor, Adapt and Revise Marine Spatial Plan								$\rightarrow$	$\rightarrow$
		0	1	2	3	4	5	6	7	8

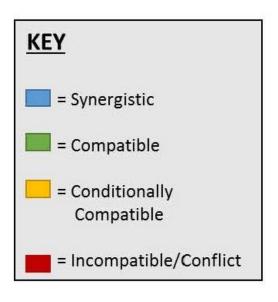
Critical Steps for BSOP Process in 2024 (Year 3)



# Key Steps & Assessments for BSOP Process in 2024 (Year 3)

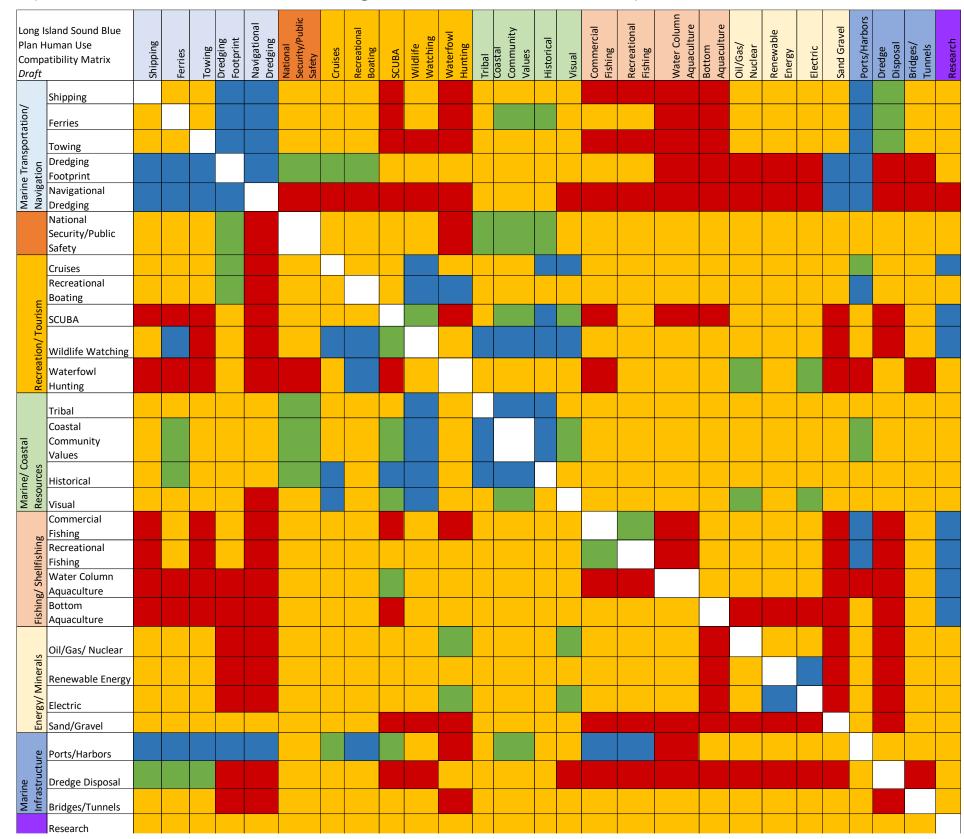
# 1. Define existing and future conditions

- Master list of uses, activities, and definitions
- Identify current conditions and trends
- Prepare future scenarios



\*This compatibility matrix is a draft, and should not be understood as a final product.

Example: Draft human uses compatibility matrix for Long Island Sound, USA (CTDEP & LISBPAC. 2019. Long Island Sound Blue Plan).





# Key Steps & Assessments for BSOP Process in 2024 (Year 3)

### 2. Develop planning tools

- Geospatial database
- Web-based data viewer and planning tool(s)
- Compatibility matrix
- Zoning approach & Zoning framework
- MPA network design criteria

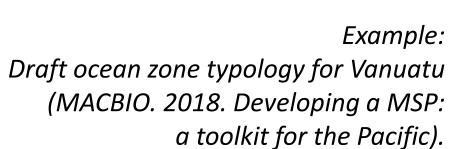


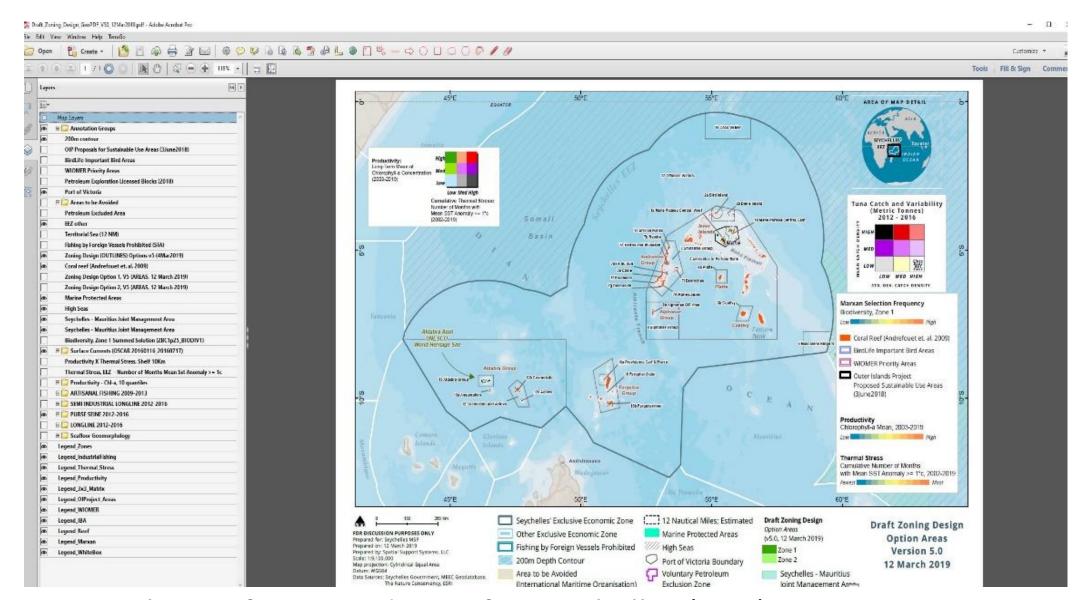


Table 5. Draft ocean zone typology for Vanuatu.									
	General Use Zone (GUZ)/ Akses Solwota Eria (ASE)	Community Conservation Area (CCA)/ Kastom Manej-men Eria (KME)	Sustainable Use Zone (SUZ)/Garen Solwota Eria (GSE)	Limited Use Zone (LUZ) / Neseri Sol-wota Eria (NeSE)	No Take6 Zone (NTZ)/ Notek Eria (NE)	Special Zone (SZ)/Spesel Solwota Eria (SSE)			
Activities									
Commercial mining, exploration, prospecting (sand, gravel, aggregate, deep sea, oil, gas)*	Yes	No	No	No	No	No			
Non-commercial sand, gravel and aggregate mining	Yes	tbd per site <sup>4</sup>	No	No		No			
Industrial fishing*1	Yes	No	Yes	No	No	No			
Other non-artisanal fishing*indudes take of sea cucumber, trochus, aquarium fish, coral, live rock, reef fish and charter fishing <sup>2</sup>	Yes	tbd per site <sup>4</sup>	Yes	No	No	No			
Benthic disturbance (trawling/ dredging, weighted lines)*	Yes	tbd per site <sup>4</sup>	Yes	No	ВІ	No			
Fish Aggregating Devices (FADs)*	Yes	tbd per site <sup>4</sup>	Yes	No	No	tbd per site <sup>4</sup>			
Anchoring (including for cruise ships)	Yes	tbd per site <sup>4</sup>	Yes	No	No	tbd per site <sup>4</sup>			
Walking/standing	Yes	tbd per site <sup>4</sup>	Yes	No	No	tbd per site <sup>dz</sup>			
Use of traps	Yes	tbd per site <sup>4</sup>	Yes	No	No	tbd per site <sup>4</sup>			
Gleaning	Yes	tbd per site <sup>4</sup>	Yes	No	No	tbd per site <sup>4</sup>			
Hand spearing	Yes	tbd per site <sup>4</sup>	Yes	No	No	tbd per site <sup>4</sup>			
Netting (3 finger mesh, gill, cast, etc.)	Yes	tbd per site <sup>4</sup>	Yes	No	No	tbd per site <sup>4</sup>			
Hand-line fishing	Yes	tbd per site <sup>4</sup>	Yes	Yes	No	tbd per site <sup>4</sup>			
Trolling	Yes	tbd per site <sup>4</sup>	Yes	Yes	No	tbd per site <sup>4</sup>			
Non-extractive uses (diving swimming, snorkelling, kayaking/canoeing, sailing, boating etc) except research	Yes	tbd per site <sup>4</sup>	Yes	Yes	Yes	tbd per site <sup>4</sup>			
Ecosystem restoration e.g. coral re- introduction, stock enhancement <sup>8</sup> , dams, removal of crown-of-thoms	Yes	tbd per site <sup>4</sup>	Yes	Yes	Yes	Yes			
Research*	Yes	tbd per site <sup>4</sup>	Yes	Yes	Yes	Yes			
Mariculture <sup>3</sup>	Yes	tbd per site <sup>4</sup>	Yes	No	No	No			
Hull maintenance/cleaning	Yes	tbd per site <sup>5</sup>	No	No	No	No			
Artificial modification*e.g. beach nourishment, restocking <sup>5</sup> , artificial reefs	By licence only	tbd per site <sup>4</sup>	By licence only						
Works*(dredging, reclamation, building, laying of cables)	By licence only	tbd per site <sup>5</sup>	By licence only	No	No	No			
Dumping of solid and liquid waste induding sew-age and ballast water from	Yes	No	No	No	No	No			

# Key Steps & Assessments for BSOP Process in 2024 (Year 3)

#### 3. Science and technical work

- Create a resource library for the BSOP Core Team
- Map all habitats
- Map all sectors and uses
- Map all existing maritime zones
- MPA gap analysis
- Develop list of priority conservation features
- Scenarios for high priority areas for biodiversity (and other scenarios, e.g., for blue economy)
- Map stakeholder preferences and spatial priorities
- Develop zoning designs



Example: Draft zoning design for Seychelles (TNC).



# Today: Identifying Existing Conditions & Uses in the BSOP Planning Area





#### **HOW WILL BSOP SUPPORT EMERGING SECTORS?**

MARICULTURE/ **AQUACULTURE** 



PHARMACEUTICALS

SERVICES

**OFFSHORE** RENEWABLE



social and

MINERALS

- Public awareness and participation are critical to the development of the BSOP. You can actively participate by:
- · Staying informed by attending public meetings
- Visiting the BSOP website and social media pages to get updates on engagements
- Participating in technical or community consultations and providing your input



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501-223-5739/501-223-0719

- 📢 Belize Sustainable Ocean Plan
- https://bsop.coastalzonebelize.org/

- Compilation, review and evaluation of existing literature, maps and data for coastal and marine ecosystems in the planning area, as well as expert and local knowledge
- A broad assessment of existing physical, biological, social, economic, and cultural conditions, including the governance dynamics in the planning area.
  - Status and trends of the marine environment's health
  - Types of human uses and activities occurring in the coastal and marine environment
  - Associated socio-economic factors
  - Prevailing ocean governance systems (includes how communities, societies and organizations choose to organize themselves to make decisions about the use and protection of coastal and marine commons)

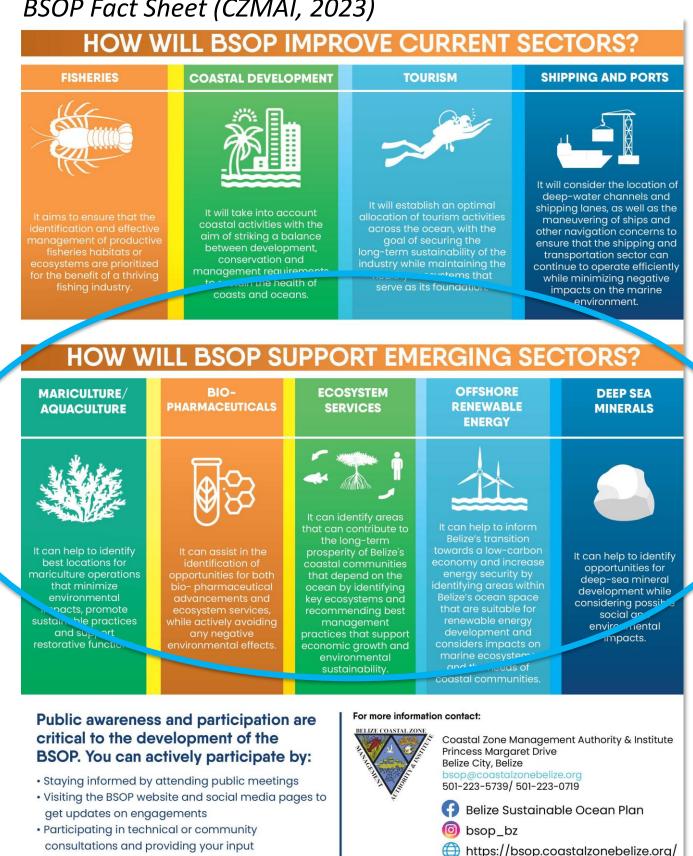


# Today: Developing Future Scenarios in the BSOP Planning Area

- Projection and assessment of anticipated future developments and trends, accounting for environmental, socio-economic, and climate-related variables
- Identifies challenges, opportunities, and priority issues crucial for guiding the MSP
- Identifies where there are key data and knowledge gaps that may need to be addressed during the MSP process
- Essential for informing spatial zoning designs in the planning area
  - emphasizing the importance of sustainable and effective marine resource management
  - reducing user conflicts
  - enhancing ocean conservation



BSOP Fact Sheet (CZMAI, 2023)





Coastal Zone Management Authority & Institute

# Areas Under Consideration for New Biodiversity Protection Zones

Samir Rosado MSP Process Lead





### CONTENTS

- CONTEXT
- REVIEW OF PROPOSED AREAS
- OVERVIEW OF KEY CONSIDERATIONS
- FEEDBACK EXERCISE
- QUESTION & ANSWERS







Blue Loan Agreement:

Enables Belize to lower its overall sovereign debt through the restructuring of the "super bond"



Conservation Funding Agreement:
Stipulates the use of savings from debt servicing to achieve agreed-upon conservation commitments.

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% m across eithe and/or Hig	r Medium	25%1
5	Implementation of ICZMP	4 years		,	
6	Complete Biodiversity Protection Zones, MSP signed in to law and Implemented	5 years	Add 5% mo across eithe and/or Hig	r Medium	30%1
7	At least 3 IUCN Green List Applications Submitted	6 years			
8	Approved Management Plans	8 years			

In all cases, is the lower of the % or the amount specified in the MSP



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>
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In all cases, is the lower of the % or the amount specified in the MSP

### CZMAI TO LEAD

**MILESTONE** 

No later than November 4th 2024: Expand Biodiversity Protection Zones to 25% of Belize's Ocean Space

**MILESTONE** 

No later than November 4th 2025: Revised Coastal Zone Management Act and Integrated Coastal Zone Management Plan, inclusive of chapter on Biodiversity Offsets.

**MILESTONE** 

No later than November 4th 2026: Expand Biodiversity Protection Zones to up to 30% of Belize's Ocean Space and completion of the MSP (Belize Sustainable Ocean Plan).

**MILESTONE** 

No later than November 4th 2028: Development of management plans for BPZs.

4

5

6

8



### MILESTONE

No later than November 4th 2024: Expand Biodiversity Protection Zones to 25% of Belize's Ocean Space.

#### MARINE SPATIAL PLANNING

A public process of allocating and analyzing the spatial temporal distribution of human activities in marine areas to achieve ecological, economic and social objectives that are usually specified through a political process.

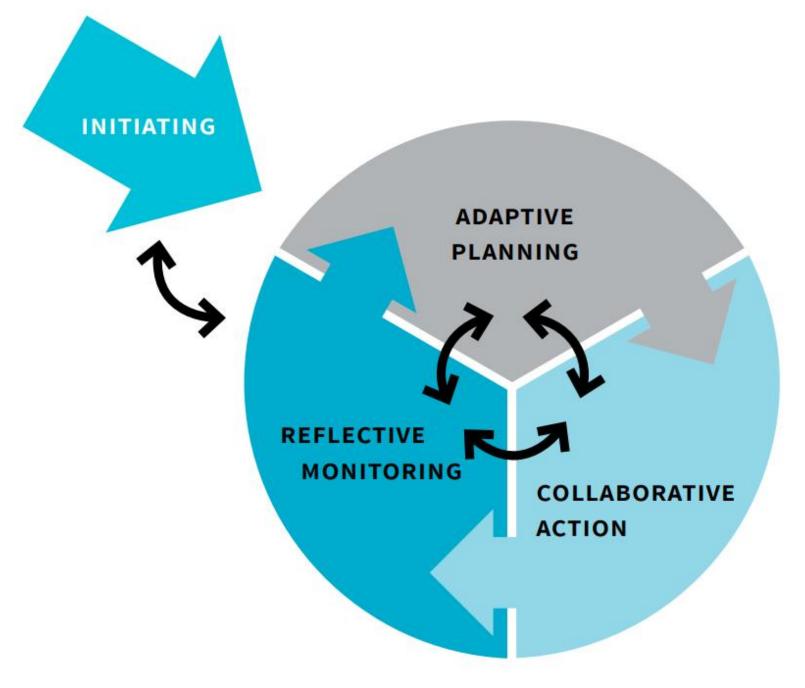
-UNESCO



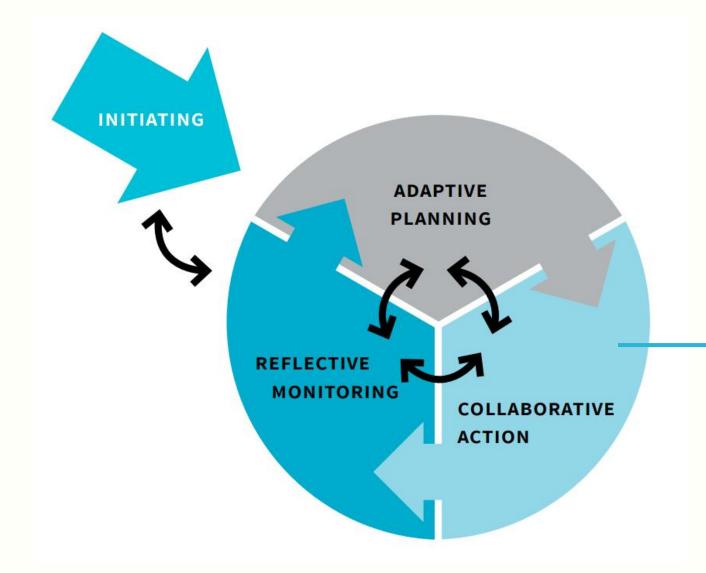












### **Analysis of Existing Conditions**



- SeaSketch (Ocean Use Survey and Ocean Planning Tool)
- Technical Working Groups
- ICZM Process

#### Identified potential areas for Medium Biodiversity Protection Zones:

- Lighthouse Reef Atoll
- Placencia Lagoon
- Central Region (Goff's Caye Area)
- Cayman Crown (High)

#### Opportunities:

- EEZ Banco Chinchorro/Bacalar Chico (Transboundary MPA)
- Glover's Reef Atoll (S.I. 128)
- Extended Lighthouse Reef Atoll (S.I. 128)



## REVIEW OF PROPOSED AREAS



## Belize Marine Protected Areas-Draft Map Corozal Hol Chan Stann Creek

## Belize Sustainable Ocean Plan

## Where We Are

- Total Ocean space 33,706.99km<sup>2</sup>
- 6,845.60km² total area of our oceans under protection
- 20.3% of ocean space under protection. Which 11.65% is High Protection
- Milestone 4: 25% of Belize's ocean space protected by November 4<sup>th</sup>, 2024

### Belize Marine Protected Areas-Draft Map MEXICO Bacalar Chico Corozal Rocky Point Hol Chan Caulker Cavo Stann Creek Toledo

## Milestone 4:

- Will prioritize medium biodiversity protection zones.
  - General Use Zones
  - Exception: Cayman Crown
    - High Protection 

      Fully Protected
- Remaining area to achieve 25% target: 1565.819 km²



### REVIEW OF PROPOSED AREAS

Lighthouse Reef Atoll



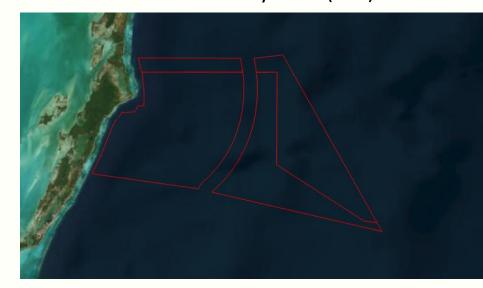
Central Region – Goff's Caye Area



Placencia Lagoon



Banco Chinchorro - Bacalar Chico Transboundary MPA (EEZ)



S.I 128 of 2021 – Shark Fishing Regulations





## Milestone 4: Lighthouse Reef Atoll

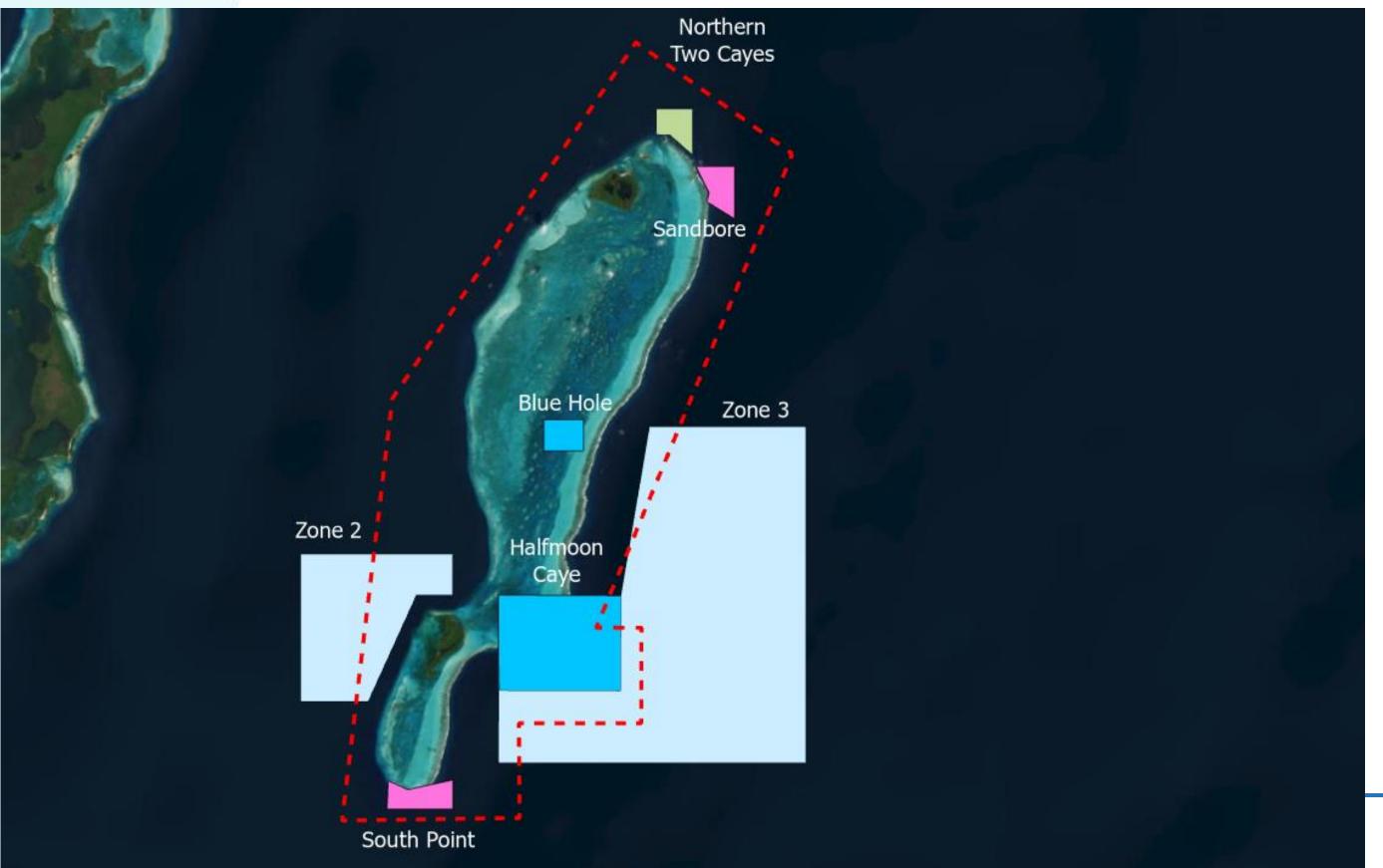


### **General Information**

- **Boundary Managed** Access: Area 7
- Area **613.60km**<sup>2</sup>
- 5 Cayes:
  - Northern 2 Cayes
  - Hat Caye
  - Half Moon Caye
  - Sandbore Caye
  - Long Caye



## Milestone 4: Lighthouse Reef Atoll

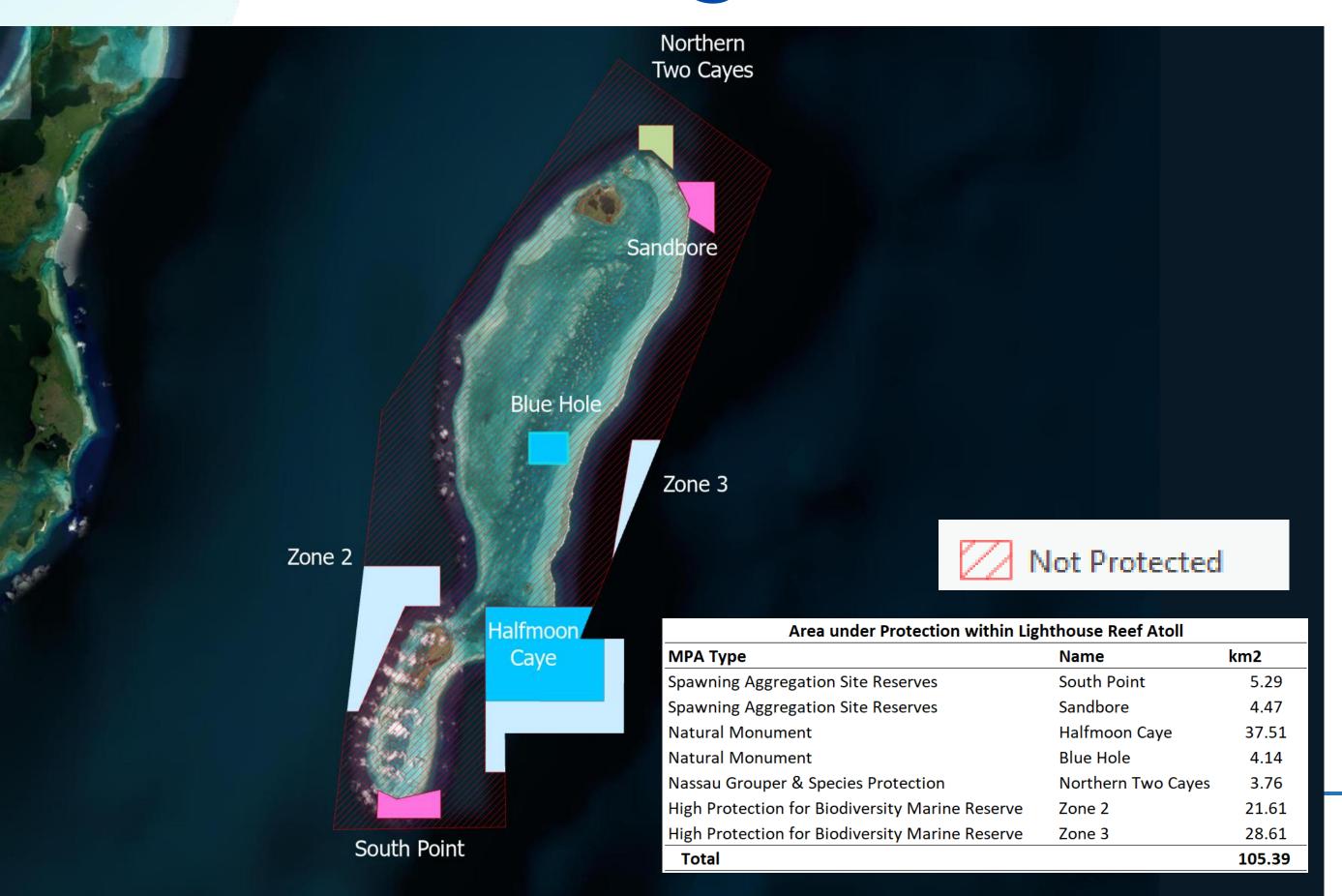


### **Existing management areas**

- Audubon Society and Forestry Department:
  - Blue HoleNatural Monument
  - Halfmoon Caye Natural Monument
- Fisheries Department:
  - Spawning aggregation site reserves(2)
  - Nassau Grouper & species protection(1)
  - High protection for biodiversity marine reserves(2)



## Milestone 4: Lighthouse Reef Atoll

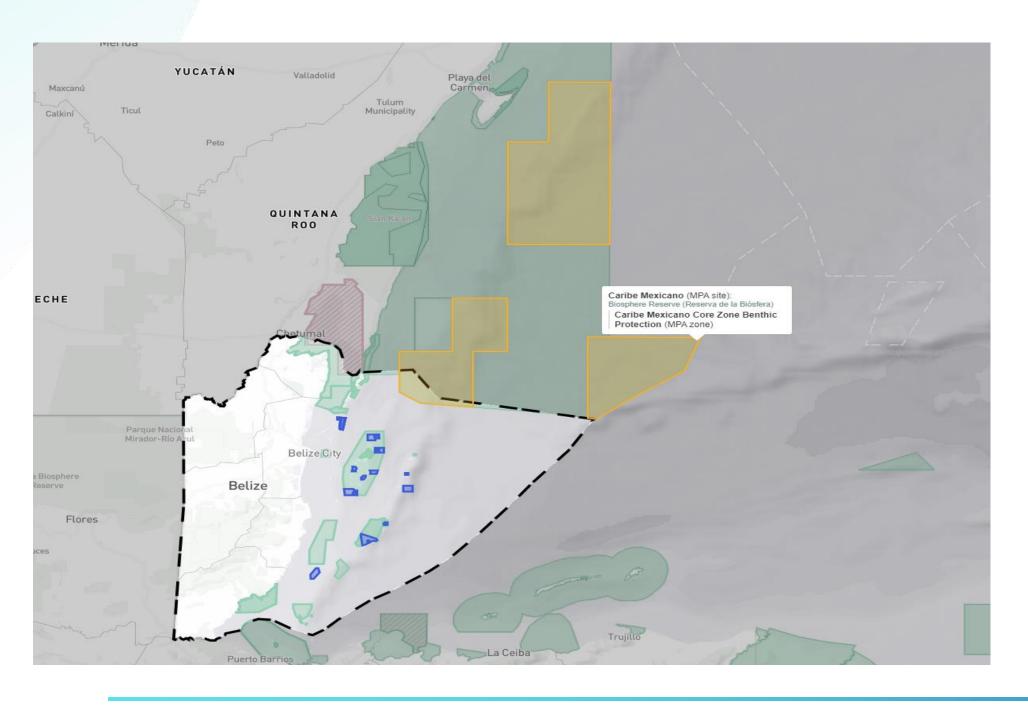


### **Existing Protection within Lighthouse Reef Atoll**

- Area under protection **105.39km<sup>2</sup>**
- Not Protected **508.216km<sup>2</sup>** or **1.507%** of ocean space
- 20.3% + 1.507%= 21.807% of Belize Ocean Space



## Milestone 4: Banco Chinchorro – Bacalar Chico Transboundary MPA



### Caribe Mexicano Core Zone Benthic MPA

• Less Protected /Unknown

Areas that afford some protection but allow moderate to extensive extraction and associated impacts.

Vertically zoned

The deep-sea zoning starts 100 meters below sea level and extends to the sea floor; fishing and mining activities are not permitted in this zone

- Other Activities allowed, such as snorkeling diving etc.
- no public or private stakeholders currently use resources from these deep zones

Why wait for conflicts to emerge in order to create MPAs?

These measures are implementing UN General Assembly resolutions on deep-sea protection, such as Resolution 61/105, and support similar measures taken by the European Union, individual countries, and regional fisheries management organizations around the world.

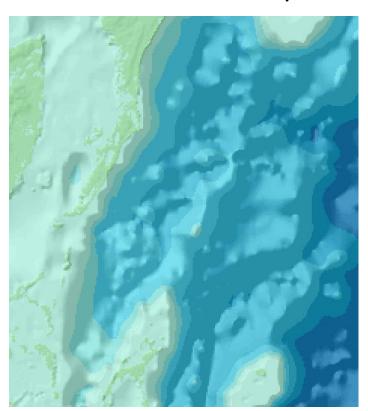


## Milestone 4: Banco Chinchorro – Bacalar Chico Transboundary MPA



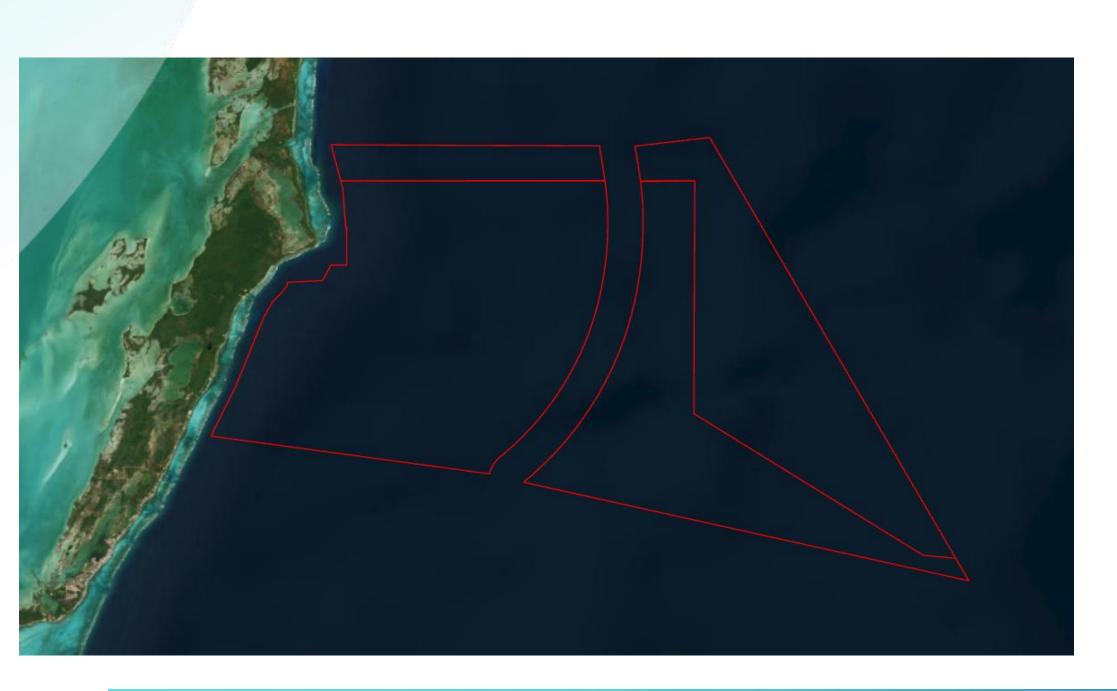
### Caribe Mexicano Core Zone Benthic MPA Overlaps with Belize

- **257.215km2** of overlap in Belize's Maritime Areas
- 0.763% of Belize's Ocean Space





## Milestone 4: Banco Chinchorro – Bacalar Chico Transboundary MPA

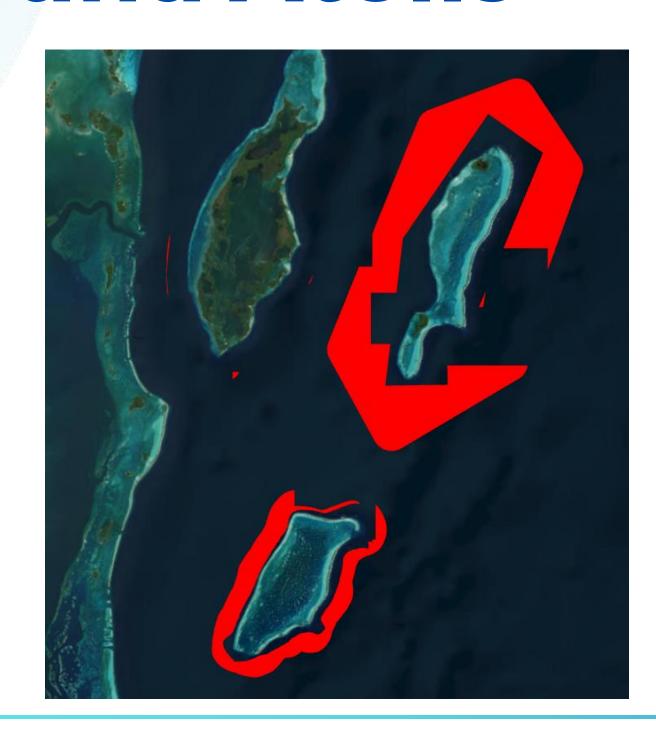


### Caribe Mexicano Core Zone Benthic MPA Connected to Bacalar Chico MPA

- 869.253km2 of overlap in Belize's Maritime Areas
- 2.579% of Belize's Ocean Space



## Milestone 4: Two(2) Mile Buffer around Atolls



### SI No.128 of 2021

- Red areas indicate the areas protected under SI No.128 2021
- SI 128 2021 states
  - No Person Shall within a radius of 2 Miles of Turneffe, Glover's or Lighthouse
    - Fish using hooks greater than 12/0
    - Fish using any unanchored or drifting longline
    - Fish for sharks(all species in the superorder Selachimor)
- 992.799km2 of overlap in Belize's Maritime Areas
- 2.945% of Belize's Ocean Space



## Milestone 6: Placencia Lagoon

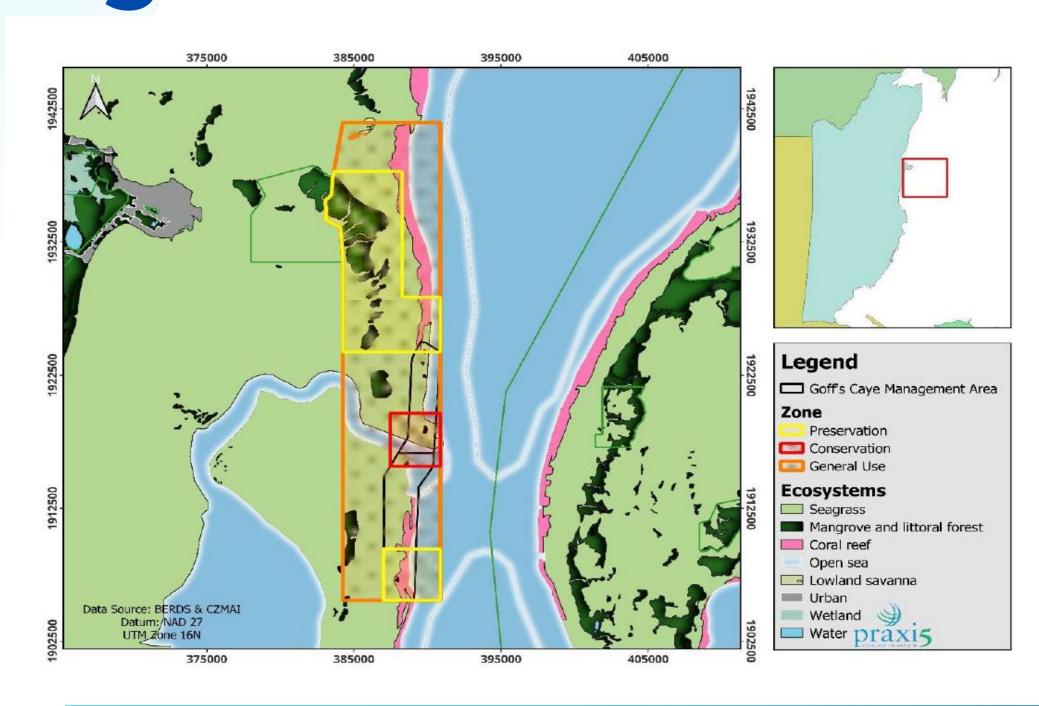


### **Protection of Placencia Lagoon**

- No Management
- Boundary created from Belize Maritime Boundary
- Lagoon area 29.476km<sup>2</sup> Or 0.087% of Belize's ocean space
- Interests in protecting the lagoon from NGO's
- There is a <u>Placencia Lagoon</u>
   <u>Management Plan 2015-2020</u>
   (WWF, SEA, prepared by wildtracks)



## Milestone 6: Proposed Central Region MPA

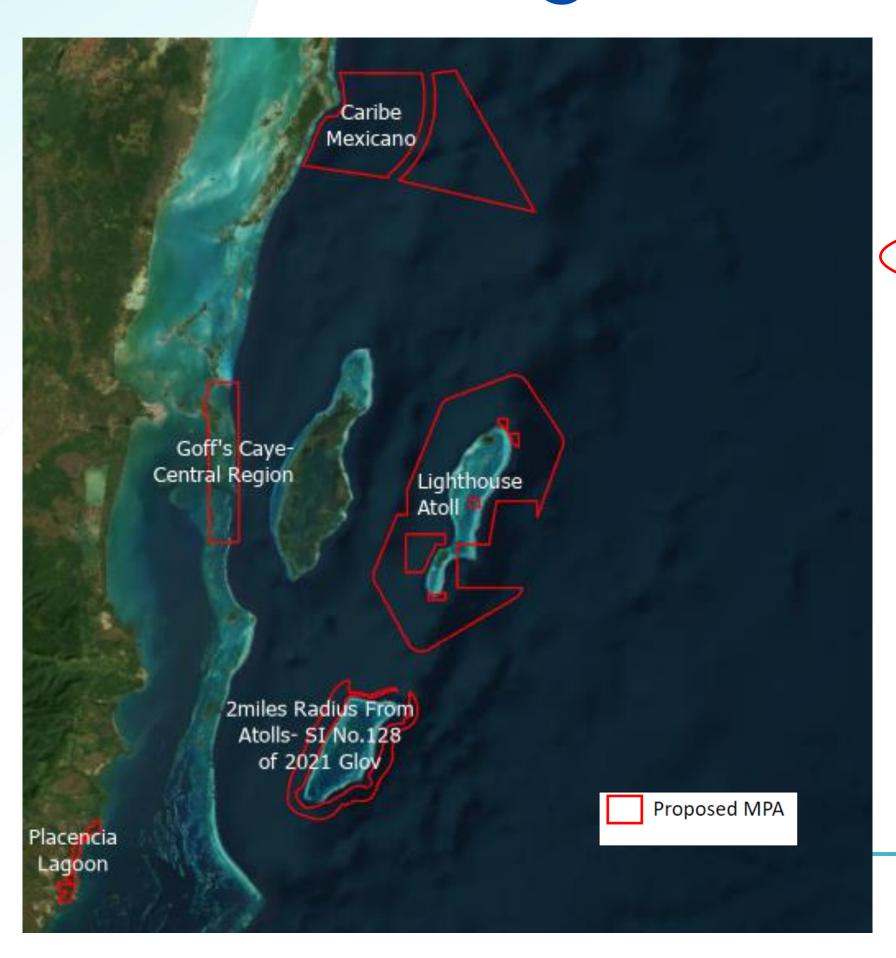


### **Proposed Central Region MPA**

- No MPA in central Region
- CZMAI has a management site.
- Area of Proposed site Boundary created from Belize Maritime Boundary
- Proposed area 242.698km² Or
   0.72% of Belize's ocean space



## Summary

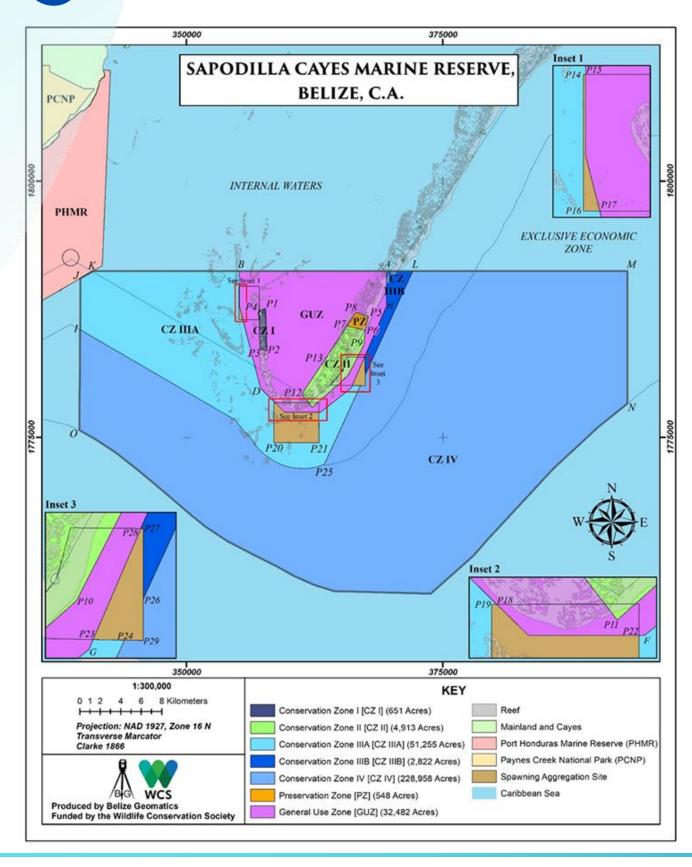


### **Possible Areas for Biodiversity Protection**

Possible Area of Protection	Area km2	%
Lighthouse Reef Atoll	1297.744	3.850
Placencia Lagoon	29.476	0.087
Central Region-Goff's Caye	242.698	0.720
2miles Radius (GLOVERS)	200.893	0.596
Mexico- Belize MPA	869.253	2.579
Total	2640.06	7.832
Current Protection	6,845.60	20.30
Grand Total	9485.66	28.132392
Remaining(km2)	629.51	1.867607939



## Cayman Crown



### Potential redesignation of the Cayman Crown Area from Highly Protected to Fully Protected.

- No Change in Percentage towards BPZ targets
- Will contribute towards the People Centric Conservation Agenda.



## OVERVIEW OF KEY CONSIDRATIONS



### IDENTIFICATION OF AREAS ARE NOT FINAL

 AREAS OF INTEREST HAVE BEEN IDENTIFIED BUT ANY BOUNDARIES WOULD BE DEFINED VIA THE MSP PROCESS.

## INFORMATION TO BE CONSIDERED TO DETERMINE BPZ BOUNDARIES

- HUMAN USE AREAS (OUS SURVEY OUTPUTS)
  - SOCIAL, ECONOMIC, AND ENVIRONMENTAL
- EXISTING DATA LAYERS
  - SENSITIVE HABITATS
  - ENDANGERED OR THREATENED SPECIES
  - COMMERCIALLY IMPORTANT SPECIES

### MILESTONE 4: MEDIUM BIODIVERSITY PROTECTION ZONE

• FOCUSING ON THE IDENTIFICATION OF MEDIUM BPZ.

\*EXCEPTION: POTENTIAL REDESIGNATION OF CAYMAN CROWN AS FULLY PROTECTED.\*

- PREVIOUS RESEARCH EFFORTS AND MODELING OUTPUTS
- MARXAN TOOL OUTPUTS
- INPUTS FROM THE SEVEN (7) TECHNICAL WORKING GROUPS.



## FEEDBACK EXERCISE



## FEEDBACK EXERCISE

- PRINTED MAPS OF THE AREAS ARE POSTED AROUND
   THE ROOM
- EXAMINE MAPS AND PROVIDE COMMENTS VIA POST-IT NOTES
  - GENERAL COMMENTS CAN BE WRITTEN AND PLACED IN THE FEEDBACK BOX.
  - FOR COMMENTS ON SPECIFIC AREAS
    - WRITE A NUMBER ON THE MAP AND PLACE THE CORRESPONDING REFERENCE NUMBER ON THE POST-IT NOTE.
    - TRY TO AVOID NUMBER DUPLICATION
- SUPPORTING SPATIAL LAYERS WILL BE PROVIDED FOR
  YOUR CONSIDERATION WHILE EXAMINING MAPS
  - COMPUTER STATIONS
  - DATA VIEWER USING QR CODE



https://bit.ly/3wo47iD



## QUESTION & ANSWERS



## Coastal Zone Management Authority & Institute

"Leading the sustainable use and planned development of Belize's coastal zone"





Belize Sustainable Ocean Plan

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## LUNCH

1 hour





## Rapid Assessment of Existing Conditions & Uses





### **Analyzing Existing Conditions**

- The process of understanding the situation in the marine space being planned.
- Provides information on the current physical, biological, social, economic and governance characteristics of the planning area.
- Forms the basis for exploring different approaches that may be taken in planning to meet set objectives.



## Analyzing Existing Conditions

### In Analyzing Existing Conditions:

- What are the current human uses of the planning area?
- What are the *key marine ecosystems* (e.g. coral reefs, seagrasses) & *current ocean conditions* (e.g. ocean temp, sea level, ocean currents)?
- What is the <u>perceived status</u> and <u>trends</u> in the planning area?
- Are there economic, social and governance factors that need to be considered?



The objective of this breakout session is a rapid assessment of the <u>perceived status</u> and <u>trends</u> of existing conditions in the planning area.





## Rapid Assessment of Existing Conditions and Uses

### Step 1

List the <u>current human</u>
<u>uses or current ecological</u>
<u>conditions</u> in the 1st table

### Step 2

Add the *perceived status* in the 2nd table (e.g. excellent, good, fair, poor, unknown)

### Step 3

Add the current <u>trends</u> in the 3rd table (e.g. improving, stable, declining, unknown)

### Step 1:

List the current human uses in the first table (some examples taken from the 2021 MSP Global Guide are provided below).

#### Fisheries and Mariculture

- nets
- hook/line
- pots/traps
- spears/harpoons
- trawls/dredges
- seine nets
- beach seine
- purse seines
- offshore aquaculture
- recreational fishing
- subsistence fishing
- seaweed farming

#### Tourism & General Uses

- sailing
- boating
- personal watercraft
- scuba diving
- snorkelling
- surfing
- wildlife watching
- cultural and historic conservation
- shipwrecks
- maritime archaeology sites
- cultural heritage sites
- sacred sites

#### Maritime Transportation

- ferry routes
- port and harbour operations
- cruise ship facilities
- industrial infrastructure
- dredging
- dredged material disposal
- offshore liquefied natural gas (LNG) terminals
- offshore industrial production facilities

#### Marine Development

- cables, pipelines, transmission lines
- offshore mining
- sand and gravel extraction areas
- dredging
- offshore renewable energy
- wind farms
- wave energy generators
- tidal energy generators
- current generators

#### Other Uses

- •scientific research
- marine protected areas
- •strictly protected marine reserves
- •multiple use marine parks

#### Human Uses

•	
•	
•	
•	



### Step 2:

List the <u>perceived status</u> in terms of activity/pressure level in the second column of the second table (i.e. high, moderate, low, none).

Sample questions to guide discussions and determining activity/pressure level:

- Think from the ocean's perspective. If the ocean could speak, how would it describe the current level of human activity? Would it be a constant "high pressure hustle" or scattered pockets of "low-key relaxation"?
- Imagine the ocean floor as a bustling city. Certain areas have intense activity (think of a busy shipping lane), while others are like quiet neighborhoods (think coral reefs). Sometimes "city life" spills over and disrupts the peaceful neighborhoods. How can we categorize human activities in the marine space based on their "pressure level"?

Human Uses	Perceived Status
1	
2.	
3.	
4.	



#### Step 3:

List and describe known <u>trends</u> in the <u>activity/pressure level</u> in the final column (i.e. increasing, decreasing, no change). Explain your reasoning behind the trends and their impact.

Sample questions to guide discussions and determining activity/pressure level:

- The ocean has witnessed a long history of human interaction. Imagine you could turn back time and observe the level of human uses in the marine space over the last 20 years. How would you describe the overall trend? Has the "pressure" on the ocean increased, decreased, or fluctuated?
- Think about the different areas of the ocean bustling shipping lanes, quiet coral reefs, or unexplored abyssal plains. How has the intensity of human activity in these areas changed over the past few decades? Has there been a surge in pressure, a decrease in pressure, or no change?

	Human Uses	Perceived Status	Trends
1.			
2.		l	<u> </u>
3.			
4.			
5.			



#### **Breakout Session**

- Worksheets are provided for both Human Uses and Environmental Conditions.
- 20 mins for this breakout session.
- Select one group member to report out in plenary.



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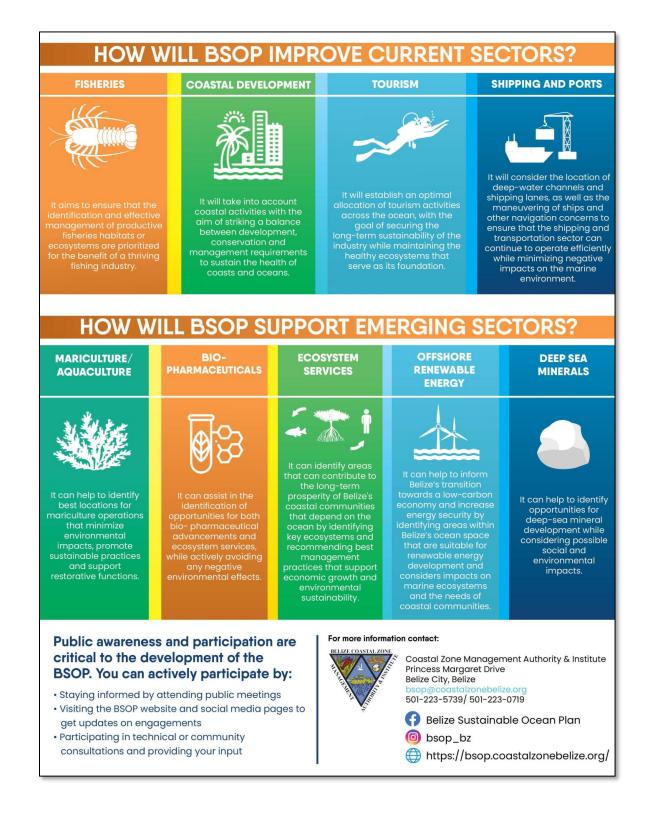
# Future Condition Scenarios Part I

Chantal Collier, The Nature Conservancy May 8, 2024









#### Consider:

- 1. What new or emerging sectors are likely to be developed in Belize's ocean?
- 2. How will Belize's ocean look if trends in current conditions and human uses continue without new management interventions?
- 3. How might Belize's ocean look under alternative spatial use scenarios?
- 4. What do Belizeans want their ocean to look like in 5, 10, 15 years?



#### **Answering these questions involves:**

- Projecting trends in current conditions and human uses into the future (may include mapping projection for each use to visualize implications)
- Estimating the spatial and temporal requirements of new demands for use of the planning area
- Identifying possible alternative future scenarios for the planning area
- Selecting a preferred scenario for use of the planning area that provides the basis spatial management decisions
- Compilation, review and evaluation of existing literature, maps and data for coastal and marine ecosystems in the planning area, as well as expert and local knowledge



#### The value of developing scenarios

- Inform present-day decision-making by exploring possible futures stories of what may happen, not what will happen.
- Examine all possible futures identified rather than focusing on the more desirable ones – with the understanding that any scenario may occur.
- Examine what is most uncertain and surprising as a mechanism to generate insights and promote action regarding future risks and opportunities.
- The implications drawn from the scenarios are designed to prompt discussion, provide insights, and inform choices, rather than serve as predictive outcomes.
- Involvement of individuals and institutions in scenario development and elaboration helps build shared understanding, relationships and trust to tackle complex issues, trade-offs, and commit to solutions.



#### **Proposed BSOP Focal Question:**

How will Belize's ocean space and marine resources be used to support sustainable growth and development of Belize's blue economy, while ensuring a healthy, resilient, and equitably shared ocean in 2030?



## Developing Future Scenarios - Part I

**Output :** Possible alternative future scenarios for use of Belize's ocean

#### Step 1

Identify driving forces of change (i.e., projections of current trends whose impacts on future ocean conditions and uses are anticipated or likely)

#### Step 2

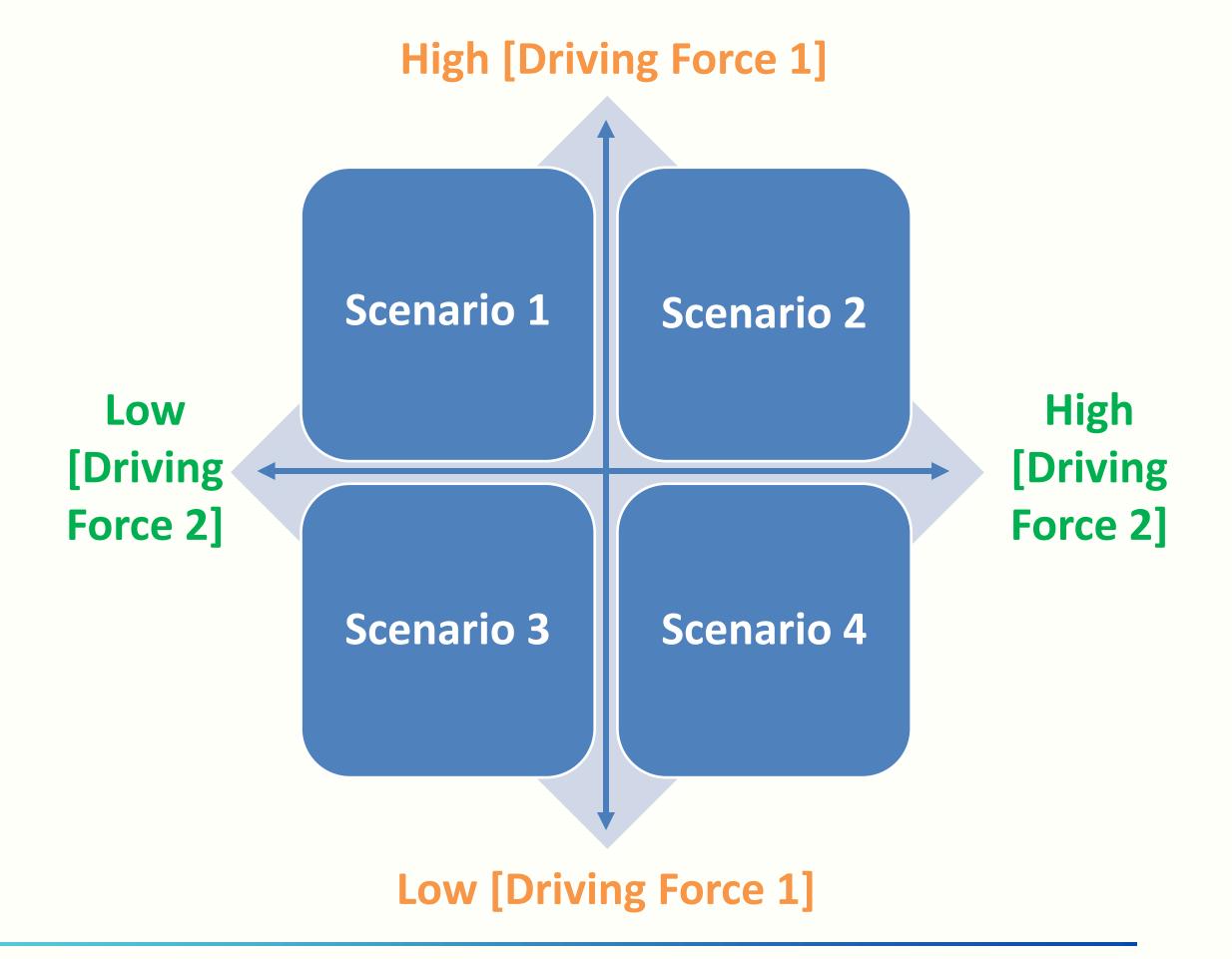
Identify implications of the driving forces for different sectors (e.g., challenges and opportunities)

#### Step 3

Prioritize driving forces that will most profoundly and unpredictably impact the BSOP focal question



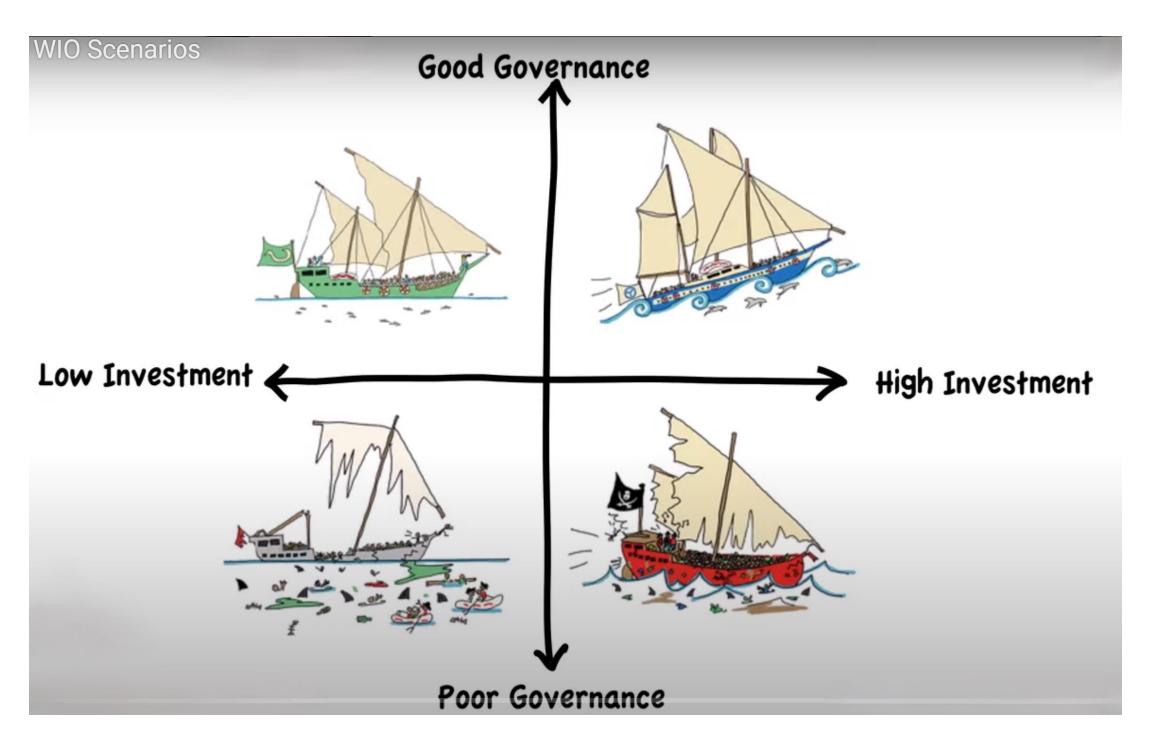
# Output: Four Possible Future Scenarios







#### Example: East & Southern Africa / West Indian Ocean Futures



Source: https://www.wiofutures.net/

#### The stories

With two main axes representing high and low levels of governance and investment, the four scenarios cover four combinations:

- 1. High governance with low investment,
- 2. High governance with high investment,
- 3. Low governance with high investment,
- 4. Low governance with low investment.



**Slow but sure** - In this country there is little investment but governance is good. There is little wind and the progress of the ship is slow, but the crew are good and able to make the most of their situation.

**Riding the wave** - This country is blessed by rich resources and a good government. The wind is strong and steady, powering the ship forward, while the skilled captain and crew steer it expertly through the challenges en route.

Pirate ship - This country has abundant wealth but poor governance. The wind and waves are turbulent and rough, and the captain and crew act like pirates, uncaring of their passengers.

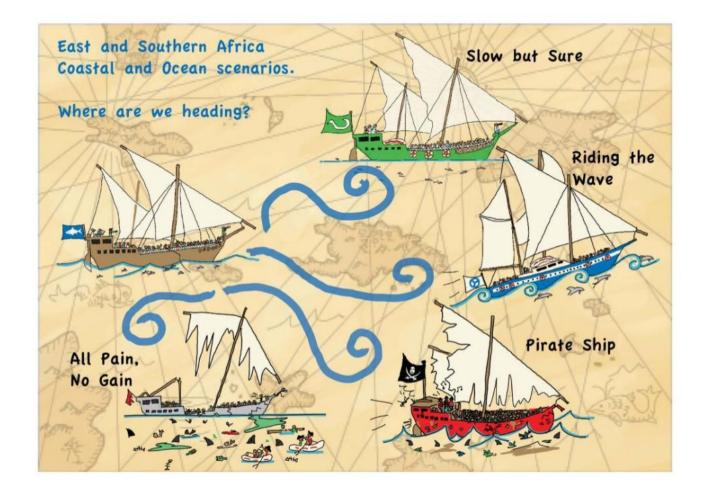
All pain no gain - This country is poor and poorly governed. With no resources or leadership it wallows without progressing, and all on board are dispirited.

How these major drivers play out against a backdrop of other drivers, common experiences and luck, are described in the narrative summaries on the next pages. The comparative table below provides a structured comparison of key narrative elements.









Identify driving forces of change - projections of current trends whose impacts on future ocean conditions and uses are anticipated or likely

#### **Examples**:

- increasing impacts of global climate change
- population growth
- intensification of current ocean uses
- development of new technologies
- increased demand for use of the ocean space by new or emerging sectors



#### Identify implications of the driving forces for different sectors

 For each sector, brainstorm a few challenges, issues, opportunities caused by the driving forces identified

#### Sample questions to start exploring uncertainties:

- 1. How will climate change and other threats impact the long-term stability and productivity of ocean ecosystems and species?
- 2. What will be the rate of seafood consumption and from what sources?
- 3. What will be the rate of availability and adoption of new technologies?
- 4. What will be the rate of offshore development and by which sectors?
- 5. What will be the rate of energy consumption and from what sources?
- 6. How might national, regional and local governance systems evolve in response to the driving forces?



Prioritize driving forces that will most profoundly and unpredictably impact the BSOP focal question, based on:

- 1. The highest degree of importance of the driving force to the focal question
- 2. The highest degree of uncertainty surrounding those forces

# Proposed BSOP Focal Question:

How will Belize's ocean space and marine resources be used to support sustainable growth and development of Belize's blue economy, while ensuring a healthy, resilient, and equitably shared ocean in 2030?





## COFFEE BREAK

15 minutes



# Developing Future Scenarios - Part II

Output: A preferred future scenario

#### Step 4

Make the scenario matrix using the most important and most uncertain driving forces from Step 3.

#### Step 5

Develop all 4 possible future scenarios.

#### Step 6

- Reflect on the 4 scenarios and discuss their implications for the MSP.
- Choose a preferred future scenario.

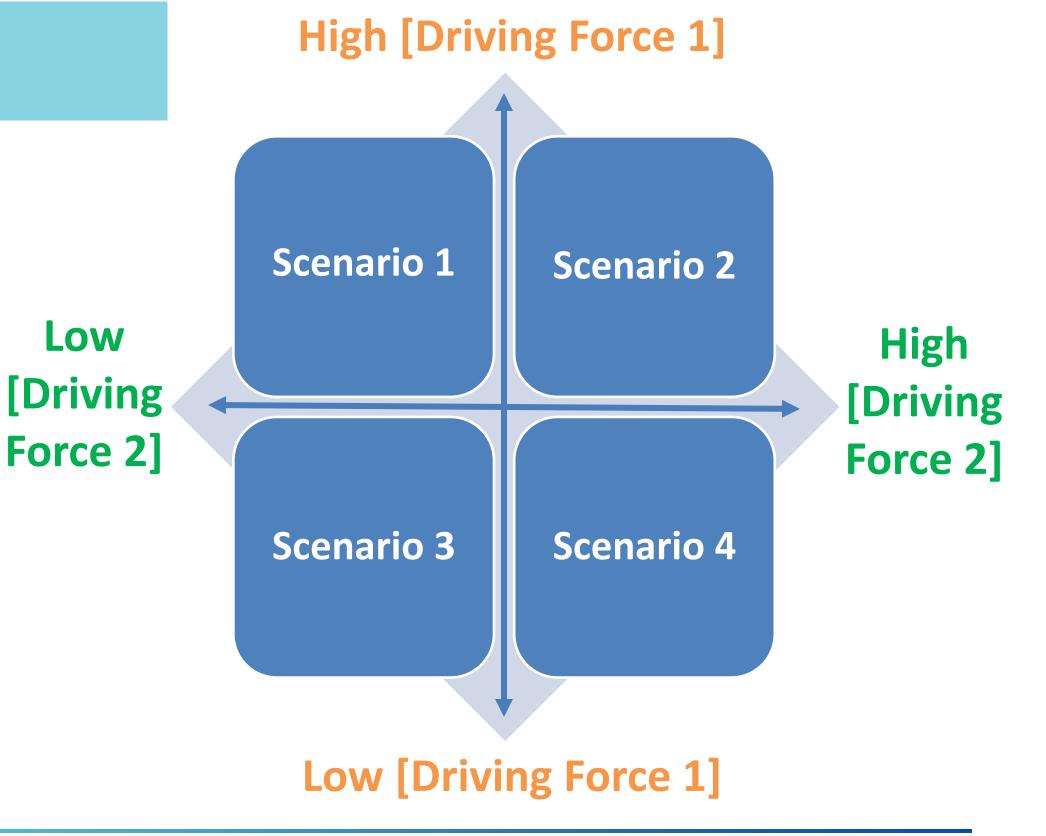


#### Make the scenario matrix.

- The driving forces which are:
  - 1. most important to the core issues in the focal question,

Low

- 2. most uncertain, will be the foundation for your future scenarios.
- Each quadrant of the matrix represents one scenario.





## Develop all 4 possible future scenarios by discussing the following questions:

- 1. What happens in each scenario?
- 2. What policy options are available for each scenario?
- 3. Which interventions are needed to prepare for each scenario?

# Proposed BSOP Focal Question:

How will Belize's ocean space and marine resources be used to support sustainable growth and development of Belize's blue economy, while ensuring a healthy, resilient, and equitably shared ocean in 2030?



- Reflect on the 4 scenarios and discuss their implications for the MSP.
- Choose a preferred future scenario for Belize's ocean.

# Proposed BSOP Focal Question:

How will Belize's ocean space and marine resources be used to support sustainable growth and development of Belize's blue economy, while ensuring a healthy, resilient, and equitably shared ocean in 2030?



## Closing Day 1

1. What transpired here today?

2. And why does it matter?



## Closing Day 1

## Looking ahead to tomorrow, Thursday, May 9th:

- Day 2 Focus: Foundational planning assessments and frameworks
- Kindly arrive promptly at 9am!





# Thank you for participating!





