Belize Sustainable Ocean Plan



# Belize's Ocean Blueprint:

## LIFELINES · PROSPERITY · SUSTAINABILITY

© Mindaugas Dulinskas / Adobe Stock

BELIZE COASTAL ZONE MANAGEMENT AUTHORITY & INSTITUTE

The Nature Conservancy Belize

Belize Fund For A Sustainable Future

BLUE BOND and Finance Permanence Unit OFFICE of the PRIME MINISTER

# Table of Contents

**Foreword** ..... **1**

**Executive Summary** ..... **3**

**Acknowledgements** ..... **6**

**Acronyms** ..... **7**

**Glossary** ..... **10**

**1 Marine Spatial Planning in Belize** ..... **14**

1.1 Global Context ..... 15

1.2 The Belize Marine Spatial Planning Process ..... 18

1.3 Key Challenges and Opportunities ..... 20

1.4 Belize Blue Bonds Agreement ..... 22

**2 The Belize Sustainable Ocean Plan** ..... **25**

2.1 Purpose of the BSOP ..... 25

2.2 Vision, Guiding Principles, Goals and Objectives ..... 27

2.2.1 Vision ..... 27

2.2.2 Guiding Principles ..... 27

2.2.3 Goals ..... 29

2.3 Scale and Scope ..... 32

**3 Legislative background** ..... **37**

3.1 National Legislation ..... 37

3.1.1 Regional Agreements ..... 39

3.1.2 International Agreements ..... 39

3.2 Governance structure ..... 40

3.3 Stakeholder Engagement and Communication ..... 40

3.4 MSP related Milestones ..... 42

3.4.1 Milestone 1 ..... 43

3.4.2 Milestone 4 ..... 44

3.4.3 Milestone 6 ..... 45

3.4.4 Achievement of 30% BPZ Target ..... 46

3.5 Compatibility Matrix ..... 48

**4 Zoning Design and Framework ..... 56**

4.1 Ocean Zoning Process ..... 57

4.2 National Ocean Zoning Framework ..... 58

4.2.1 Cumulative BSOP Zoning Map ..... 59

4.2.2 Human Use: Single Use Zone ..... 62

4.2.3 Human Use: Multiple Use Zones ..... 65

4.2.4 Objective Based Zones ..... 94

**5 BSOP Implementation Framework ..... 107**

5.1 Background ..... 107

5.2 Implementation Roadmap for the BSOP ..... 108

5.2.1 Theory of Change ..... 110

5.2.2 Gender, Youth and Social Inclusion ..... 111

5.2.3 Critical Preconditions for BSOP Implementation ..... 111

5.2.4 New Pillars to Support I&MP Success and Short-Term Actions ..... 112

5.2.5 Cross-Cutting Theme: International Reporting and Outreach ..... 124

5.2.6 Training and Implementation Sequencing ..... 125

5.2.7 Next Steps ..... 127

**References & Bibliography ..... 128**

**Appendix 1: BSOP Governance Framework ..... 133**

Executive Committee ..... 133

BSOP Steering Committee (SC) ..... 133

BSOP Core Team (CT) ..... 134

Technical Working Groups (TWGs) ..... 134

Public Stakeholders ..... 136

**Appendix 2: Stakeholder Engagement and Communication ..... 137**

**Appendix 3: Public Information Systems and Decision Support Tools ..... 141**

**Appendix 4: Rationale: Milestone 6 – Biodiversity Protection Zones ..... 144**

Gap Analysis ..... 144

MPA Design Criteria ..... 145

Urgent Policy Directives for MPA Expansion or Re-gazetting Existing MPAs ..... 146

Scenarios for Marxan Analysis ..... 147

Milestone 6 Outcomes ..... 148

Appendix 5: Zoning Typology..... 150

Appendix 6: BSOP National Ocean Zoning Framework ..... 155

Appendix 7: List Of MPA Zones, Types, Legislation and Management ..... 158

Appendix 8: Annotated Outline of the Implementation and Monitoring Plan..... 174

# List of Figures

**Figure 1-**A Alignment between MSP and SOP ..... 16
**Figure 1-**B The Belize MSP Process ..... 18
**Figure 2-**A The BSOP Timeline ..... 26
**Figure 3-**A Governance Framework for the Belize MSP Process ..... 40
**Figure 3-**B: BSOP Compatibility Matrix ..... 49
**Figure 2A** Framework for mapping stakeholders and informing engagement ..... 137
**Figure 2B** BSOP stakeholder engagement types and number of events ..... 138
**Figure 2C** BSOP community consultations ..... 139
**Figure 4A** Results of gap analysis showing representation of coral reefs and seagrass beds following Milestone 4 designation ..... 144
**Figure 4B** Results of gap analysis showing underrepresented deep-sea features ..... 144
**Figure 4C:** Marxan selection frequency across two scenarios ..... 148
**Figure 4D:** Representation of deep-sea features following the Milestone 6 designations ..... 149
**Figure 4E:** Location of the Sill within Belize's ocean space ..... 149

# List of Maps

**Map 1 Maritime Areas: Internal Waters, Territorial Seas, and EEZ** ..... 34
**Map 2 Belize Coastal Planning Regions and Coastal Communities** ..... 42
**Map 3 Marine Protected Areas in Belize: Expansion Under Conservation Commitments** ..... 47
**Map 4 Belize Benthic Habitats** ..... 52
**Map 5 Marine and Coastal Ecosystems** ..... 53
**Map 6 Cumulative BSOP Zoning Map** ..... 61
**Map 7 Coast Guard Operational Zone** ..... 63
**Map 8 Fisheries and Mariculture Zones** ..... 68
**Map 9 Tourism Zone** ..... 74
**Map 10 Marine and Coastal Development Zone** ..... 79
**Map 11 Energy Zone** ..... 84
**Map 12 Maritime Administration Zone** ..... 88
**Map 13 Community Use Zone** ..... 92
**Map 14 Flat Fishing Priority Zone** ..... 97

# List of Tables

**Table 1 Alignment of BSOP with International MSP and SOP Guides** ..... 16

**Table 2 Blue bond and debt conversation milestones** ..... 22
**Table 3 Milestone 1 designation type, size, year and statutory instrument** ..... 44
**Table 4 Milestone 4 designation type, size, year and statutory instrument** ..... 45
**Table 5 Milestone 6 designation type, size, year and statutory instrument** ..... 45
**Table 6 Summary of BPZ incremental achievement** ..... 46
**Table 7 Compatibility matrix classification system** ..... 48
**Table 8 National Ocean Zoning Framework Information** ..... 58
**Table 9 Summary of Spatial Allocations for Human Use Zones** ..... 60
**Table 10 Human Use Zone: Single Use Zone – Coast Guard Operational Zone Description Summary** ..... 64
**Table 11 Fisheries and Mariculture Zone Human Use Activities** ..... 66
**Table 12 Human Use Zone: Multiple Use Zone – Fisheries and Mariculture Zone Description Summary** ..... 69
**Table 13 Fisheries and Mariculture Human Use Zoning Typology** ..... 71
**Table 14 Tourism Zone Human Use Activities** ..... 73
**Table 15 Human Use Zone: Multiple Use Zone – Tourism Zone Description Summary** ..... 75
**Table 16 Tourism Human Use Zoning Typology** ..... 76
**Table 17 Marine and Coastal Development Human Use Activities** ..... 78
**Table 18 Human Use Zone: Multiple Use Zone – Marine and Coastal Development Zone Description Summary** ..... 80
**Table 19 Coastal and Marine Development Human Use Zoning Typology** ..... 81
**Table 20 Energy Zone Human Use Activities** ..... 83
**Table 21 Human Use Zone: Multiple Use Zone – Energy Zone Description Summary** ..... 85
**Table 22 Energy Human Use Zoning Typology** ..... 85
**Table 23 Maritime Administration Human Use Activities** ..... 86
**Table 24 Human Use Zone: Multiple Use Zone – Maritime Administration Zone Description Summary** ..... 89
**Table 25 Maritime Administration Human Use Zoning Typology** ..... 90
**Table 26 Community Use Zone Human Use Activities** ..... 91
**Table 27 Human Use Zone: Multiple Use Zone – Community Use Zone Description Summary** ..... 93
**Table 28 Community Use Zone Human Use Zoning Typology** ..... 93
**Table 29 Objective Based – Seabed Mines and Minerals Description Summary** ..... 95
**Table 30 Objective Based - Flat Fishing Priority Zone Description Summary** ..... 98
**Table 31 Objective Based – Marine Archaeological Sites Description Summary** ..... 100
**Table 32 Alignments of Relevant Frameworks and General Activities** ..... 101
**Table 33 Objective Based – Marine Protected Areas Description Summary** ..... 103
**Table 34 Marine Protected Areas Zoning Typology** ..... 104
**Table 35 Gap Cluster, New Pillar titles and Intermediate Outcomes.** ..... 109

**Table 36 Candidate Indicators** ..... 114
**Table 37 Dependencies and Risks** ..... 115
**Table 38 Candidate Indicators** ..... 117
**Table 39 Dependencies and Risks** ..... 117
**Table 40 Candidate Indicators** ..... 119
**Table 41 Dependencies and Risks** ..... 119
**Table 42 Candidate Indicators** ..... 121
**Table 43 Dependencies and Risks** ..... 122
**Table 44 Candidate Indicators** ..... 124
**Table 45 Dependencies and Risks** ..... 124
**Table 46 Implementation Sequencing Roadmap** ..... 126
**Table 2A Summary of Stakeholder Inputs** ..... 140
**Table 4A: Qualitative MPA design criteria to inform the remaining BPZs for Milestone 6.** ..... 145
**Table 4B: Marxan deep-sea scenario.** ..... 147
**Table 4C: Deep-sea geomorphology captured in the Milestone 6 proposal.** ..... 149

# Foreword

## BELIZE SUSTAINABLE OCEAN PLAN



Belize is an ocean nation. Our reefs, mangroves, seagrass beds and coastal waters are part of our identity and among the foundations of our national development. They support fisheries and tourism, sustain coastal communities, safeguard biodiversity, protect our shores and contribute to climate resilience. The health of our ocean is therefore inseparable from the well-being of our people and the strength of our economy.

This understanding guides the Government of Belize's ambition for a sustainable Blue Economy: one in which conservation and development reinforce each other, and in which the functional integrity of nature is safeguarded so that it continues to provide lasting benefits. At a time of increasing climate pressures, competing demands on marine space and growing opportunities for ocean-based enterprise, managing our ocean deliberately, inclusively and on the basis of sound science is essential.

The Belize Sustainable Ocean Plan (BSOP) is a key framework for turning that ambition into action. It is not simply a map of the sea or a set of boundaries. It provides a shared basis for deciding how our ocean space can be protected, used and developed, bringing biodiversity conservation together with fisheries, tourism, mariculture, maritime activities and emerging Blue Economy opportunities. By considering both existing uses and future needs, the BSOP can help reduce conflict, provide greater certainty and guide investment without losing sight of the people whose livelihoods, culture and heritage are connected to the sea.

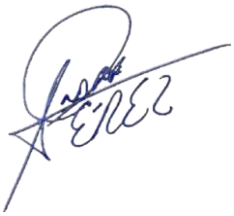
The BSOP builds on Belize's longstanding conservation efforts and on the momentum created by our landmark 2021 Blue Bonds transaction, which established long-term financing and time-bound commitments for marine conservation and sustainable ocean management. It also complements our strengthened framework under the Integrated Coastal and Ocean Management Act, 2025, and our continuing work to expand biodiversity protection toward the Blue Bonds commitment of up to 30 percent of Belize's ocean space. Together, these efforts reflect an approach that connects protection with sustainable use, science with decision-making, and financing with meaningful outcomes for nature and people.

Our ambition continues to grow. Belize's commitment, through the 100% Alliance for Sustainable Ocean Management, to sustainably manage all ocean areas under our national jurisdiction by 2030 reflects the next horizon of this national journey. The BSOP is one of the essential frameworks within that wider agenda: it helps establish how different parts of our ocean can be managed with purpose, while complementary policies, institutions, enforcement, monitoring and investment will be needed to deliver results across the entire ocean space.

Ultimately, the measure of this Plan will be found in healthier ecosystems, more resilient coastal communities, productive fisheries, responsible development, new opportunities for Belizeans and an ocean that continues to sustain future generations. This is the essence of people-centred conservation: protecting nature not apart from our people, but for and with them, while respecting the ecological limits on which lasting prosperity depends.

On behalf of the Government of Belize and the Ministry of Blue Economy and Marine Conservation, I extend sincere appreciation to the Coastal Zone Management Authority and Institute, the Fisheries Department, our communities and ocean users, and the many national and international partners whose knowledge, dialogue and commitment have shaped the BSOP. Its lasting value will depend on that same spirit of partnership as we move from planning to implementation.

The ocean has shaped Belize's past and present. Through purposeful stewardship, it will remain central to our future.



**HON. ANDRE PEREZ**

Minister of Blue Economy and Marine Conservation

# Executive Summary

The Belize Sustainable Ocean Plan (BSOP) is Belize's comprehensive framework for marine spatial planning (MSP), designed to guide the management of the country's ocean space encompassing internal waters, territorial sea, and Exclusive Economic Zone (EEZ) through a participatory, science-based, and adaptive approach. BSOP refers to Belize's Marine Spatial Plan and serves as a foundation to build on for more comprehensive sustainable ocean planning in Belize. Belize's marine environment is home to the second largest barrier reef in the world as well as mangroves and seagrass beds but faces mounting pressures from Sargassum proliferation, overfishing, coastal development, pollution, and climate change (coral bleaching, acidification). These marine ecosystems deliver critical ecosystem services including coastal protection, carbon sequestration, fisheries habitat supporting protected species (manatee, hawksbill turtle, Nassau grouper). The Blue Economy, especially tourism, contributes about 30% of GDP, while other sectors, such as fisheries, are vulnerable to climate change and economic shocks without coordinated management. For all these activities to take place safely, the BSOP defines clear agreements among the various users. It is structured into five sections, supported by eight appendices:

**Section 1** provides background information about the BSOP by setting out global MSP context, the Belize MSP process, key challenges and opportunities, as well as the Blue Bonds Agreement. The Blue Bonds Agreement (2021) secured USD 180 million for conservation over 20 years including obligations to complete a legally enforceable MSP that defines permissible activities in any part of Belize's ocean by 2026 (Milestone 6). The BSOP follows UNESCO-IOC MSP's 10-step process, adapted to Belize's legal, institutional, and ecological context.

**Section 2** introduces the BSOP: its purpose, vision, guiding principles, goals, and scale and scope. The BSOP was designed based on a vision, goals, and 12 guiding principles.

**Section 3** sets out the legislative background, including national legislation and regional and international agreements, the governance structure, stakeholder engagement and communication, MSP-related milestones and the compatibility matrix. The BSOP was led by the Coastal Zone Management Authority and Institute (CZMAI) under the Integrated Coastal and Ocean Management (ICOM) Act. The BSOP is delivered based on a multi-tiered governance structure that guides stakeholder interactions in a two-way information flow including the Executive Committee (Chief Executive Officer (CEO)-level), BSOP Steering Committee, BSOP Core Team (CZMAI-led), Technical Working Groups (TWGs) and Public Stakeholders. Stakeholder engagement has been central

throughout, including community outreach, public consultations, technical working groups, and regional advisory committees. The compatibility matrix informed the drafting of zoning design and framework. The Biodiversity Protection Zones (BPZs) were delivered under the following Milestones:

- Milestone 1 (Completed, 2022): 20.05% BPZs (11.67% High Protection for Biodiversity Zones + 8.38% Medium Protection for Biodiversity Zones); replenishment zones expanded from 4.5% to 11.6% through 7 new no-take areas
- Milestone 4 (Completed, 2024): 25.05% BPZs; designated 4 Medium Protection for Biodiversity Zones (11.67% High Protection for Biodiversity Zones + 13.38% Medium Protection for Biodiversity Zones)
- Milestone 6 (Ongoing, November 2026): 30% BPZs, MSP completed, approved, gazetted, implemented. The Milestone 6 BPZs were defined using the National Ocean Zoning Framework (NOZF) and marine protected area (MPA) design criteria.

**Section 4** discusses the zoning design and framework that informed the BSOP, including the ocean zoning process and the NOZF. The NOZF harmonizes existing zones with new zones under a holistic framework to include human use zones (single and multiple use), objective based zones and ecological features. It also defines six key sectors of the BSOP, based on the National Blue Economy Policy, Strategy and Implementation Plan 2022-2027. These key sectors include:

- ***Community Use*** covers a broad spectrum of religious, cultural, traditional, recreational, and medicinal uses for primarily non-commercial purposes.
- ***Maritime Administration*** including lanes and routes to support port/harbour operations, water taxi routes, navigational aids, shipping, recreational boating, maritime and security enforcement, and potential ballast water exchange. The Coast Guard Operational Zone is designated separately as a single-use human use zone.
- ***Marine and Coastal Development*** including management zones for overwater construction, offshore infrastructure, development and ports/harbour dredging, dredged materials disposal, land reclamation, sargassum management, and release of treated wastewater. Seabed minerals zones are regulated but dormant.
- ***Fisheries, Mariculture and Aquaculture*** including managed Access (8 coastal + 1 deep-water zones) which serves approximately 3,642 licensed fishers with lobster/conch dominating for exports and supports mariculture through Seaweed Farm Priority Areas within the Fisheries and Mariculture Zone.
- ***Tourism*** which drives 30% of Belize's GDP. The priority tourism clusters include Ambergris Caye/Caye Caulker, Turneffe Atoll and Lighthouse Reef Atoll. The main zone types are the Tourism Zones and Marine Archeological Sites which supports guided dives at selected sites.
- ***Energy*** includes energy zone for energy distribution via underwater cables. There is the potential for offshore marine renewable energy (OMRE) within the next 5–10 years.

**Section 5** sets out the BSOP Implementation Framework, including background, the Implementation Roadmap, Theory of Change, gender, youth and social inclusion, critical preconditions for implementation, and five pillars to support the Implementation and Monitoring Plan (I&MP), with international reporting and outreach as a cross-cutting theme. It also outlines short-term training needs and the sequencing of implementation actions across the pillars through to the end of 2027, and sets out next steps, including a proposed Memorandum of Understanding (MoU) as the immediate administrative mechanism for sectoral integration, led by CZMAI with the BSOP Steering Committee.

The appendices provide supporting detail on the governance framework, stakeholder engagement, public information systems and decision support tools, the Milestone 6 rationale, zoning typology, the National Ocean Zoning Framework, MPA zones and management, and the annotated outline of the I&MP.

The BSOP positions Belize as a global leader in ocean stewardship, delivering on Blue Bonds commitments, United Nations Convention on the Law of the Sea (UNCLOS), Convention on Biological Diversity (CBD) obligations, and Sustainable Development Goal (SDG) 14 while fostering a resilient Blue Economy for future generations.

# Acknowledgements

The development of the Belize Sustainable Ocean Plan (BSOP) has been made possible through the collaboration and commitment of many partners. We acknowledge the contributions of the Government of Belize, The Nature Conservancy, the Blue Bond and Finance Permanence Unit, the Belize Fund for a Sustainable Future, and the Belize Fisheries Department.

We also recognize the members of the BSOP Steering Committee and Core Team, whose representatives from government agencies under the Ministry of Blue Economy and Marine Conservation and other Blue Economy sector organizations have guided and supported the planning process.

We extend our sincere appreciation to Belize's coastal communities, whose knowledge, lived experience, and feedback have been invaluable throughout the development of the Plan.

The BSOP is a plan for all Belizeans, developed by Belizeans, and we look forward to continuing these partnerships as we move toward its implementation.

# Acronyms

| | |
|---|---|
| BAHA | Belize Agricultural Health Authority |
| BAS | Belize Audubon Society |
| BBFPU | Blue Bond and Finance Permanence Unit |
| BBIC | Belize Blue Investment Company |
| BBNJ | Biodiversity Beyond National Jurisdiction |
| BBS | Belize Bureau of Standards |
| BCCI | Belize Chamber of Commerce and Industry |
| BEL | Belize Electricity Limited |
| BFD | Belize Forest Department |
| BFiD | Belize Fisheries Department |
| BHSFU | Belize High Seas Fisheries Unit |
| BELTRAIDE | Belize Trade and Investment Development Service |
| BLA | Blue Loan Agreement |
| BLAST | Belize Local Association of Stakeholders in Tourism |
| BNN | Belize Network of Non-Governmental Organizations |
| BNE | Belize Natural Energy |
| BPA | Belize Port Authority |
| BPZ | Biodiversity Protection Zone |
| BSOP | Belize Sustainable Ocean Plan |
| BTB | Belize Tourism Board |
| BTIA | Belize Tourism Industry Association |
| CAC | Coastal Advisory Committees |
| CARICOM | Caribbean Community |
| CBD | Convention on Biological Diversity |
| CEO | Chief Executive Officer |
| CFA | Conservation Funding Agreement |
| CITES | Convention on International Trade in Endangered Species of Wild Fauna and Flora |
| CRFM | Caribbean Regional Fisheries Mechanism |
| CT | Core Team |
| CZMA | Coastal Zone Management Act |
| CZMAI | Coastal Zone Management Authority and Institute |
| DOE | Department of Environment |
| EDF | Environmental Defense Fund |
| EEZ | Exclusive Economic Zone |
| EIA | Environmental Impact Assessment |
| ERI | Environmental Research Institute |

| | |
|---|---|
| FOSC | Friends of Swallow Caye |
| GDP | Gross Domestic Product |
| GGA | Global Goal on Adaptation |
| GU | General Use |
| IA | Institute of Archaeology |
| ICZM | Integrated Coastal Zone Management |
| ICOM | Integrated Coastal and Ocean Management *[Act]* |
| IDB | Inter-American Development Bank |
| IMTA | Integrated Multi-Trophic Aquaculture |
| IUU | Illegal, Unreported, and Unregulated |
| KMGBF | Kunming-Montreal Global Biodiversity Framework |
| MARPOL | International Convention for the Prevention of Pollution from Ships |
| MBRS | Mesoamerican Barrier Reef System |
| MPA | Marine Protected Area |
| MSP | Marine Spatial Planning |
| NBIO | National Biodiversity Office |
| NFECMSAP | National Fisheries Enforcement and Conservation Monitoring Strategy and Action Plan |
| NGO | Non-Governmental Organization |
| NICH | National Institute of Culture and History |
| NOTAM | Mariners and Notices to Airmen |
| NPAS | National Protected Areas System *[Act]* |
| NZF/NOZF | National Ocean Zoning Framework |
| OMRE | Offshore and Marine Renewable Energy |
| OUS | Ocean Use Survey |
| PACT | Protected Areas Conservation Trust |
| PV | PhotoVoltaic |
| RAS | Rapid Situational Assessment |
| RBF | Rights-Based Fisheries |
| RHI | Reef Health Index |
| ROOT | Restoration Opportunities Optimization Tool |
| SACD | Sarteneja Alliance for Conservation and Development |
| SC | Steering Committee |
| SDG | Sustainable Development Goal |
| SFZ | Sport Fishing Zones |
| SIB | Statistical Institute of Belize |
| SICA | Central American Integration System |
| SMART | Spatial Monitoring and Reporting Tool |
| SOLAS | International Convention for the Safety of Life at Sea |
| SOP | Sustainable Ocean Plan |

| | |
|---|---|
| STCW | International Convention on Standards of Training, Certification and Watchkeeping for Seafarers |
| STMP | Sustainable Tourism Management Plan |
| TAC | Total Allowable Catch |
| TASA | Turneffe Atoll Sustainability Association |
| TEK | Traditional Ecological Knowledge |
| TIDE | Toledo Institute for Development and Environment |
| TJ | Terajoules |
| TNC | The Nature Conservancy |
| TPES | Total Primary Energy Supply |
| TURF | Territorial Use Rights in Fisheries |
| TWG | Technical Working Group |
| UB | University of Belize |
| UCH | Underwater Cultural Heritage |
| UB-ERI | University of Belize Environmental Institute |
| UNCLOS | United Nations Convention on the Law of the Sea |
| UNESCO | United Nations Educational, Scientific and Cultural Organization |
| UNESCO-IOC | UNESCO Intergovernmental Oceanographic Commission |
| UWI | University of the West Indies |
| WCS | Wildlife Conservation Society |
| WWF | World Wildlife Fund |

# Glossary

**Active observers:** Dedicated, non-critical stakeholders kept informed of BSOP progress.

**Allowed:** Human use that fits a zone's objectives and can take place there as a matter of course. It still follows the general laws that apply everywhere, such as fisheries licensing, but needs no extra permission or conditions specific to that zone.

**Biodiversity:** Variety of plant and animal life in a habitat or globally.

**Blue Economy:** Means the sustainable use of the blue space and its resources for economic growth, improved livelihoods and jobs while preserving the health of the marine ecosystems for present and future generations (Blue Economy Bill, 2025);

**Biodiversity Protection Zones:** High Protection for Biodiversity Zones and Medium Protection

for Biodiversity Zones.

**Climate:** Average weather conditions over 30 years (temperature, precipitation, wind).

**Climate Change:** Long-term change in climate mean state or variability (decades+).

**Climate Change Scenario:** Difference between future climate scenario and current climate.

**Climate Resilience:** Capacity to recover from shocks, self-organize, learn, and adapt.

**Climate Scenario:** Simplified representation of future climate.

**Climate Resilient ICZM:** Ecosystem-based coastal development incorporating ecosystem services, disaster risk management, climate adaptation (IDB, 2020).

**Context setters:** Non-dedicated, critical stakeholders kept satisfied and carefully engaged.

**Critical stakeholders:** Groups possessing indispensable resources (high BSOP dependency).

**Dedicated stakeholders:** Groups affected by clear BSOP costs/benefits.

**Ecosystem:** Natural unit of interacting living/non-living components producing stable systems.

**Erosion:** Movement/weathering of soil/rock by streams, waves, wind, water.

**Exclusive Economic Zone (EEZ):** 200 nautical miles beyond territorial sea; sovereign rights over resources (living/non-living).

**Exposure:** Presence of people/infrastructure/systems in hazard-prone areas (UNDRR, 2025).

**Fossil Fuel**: Organic materials (coal, oil, natural gas) formed over millions of years.

**Gender:** Social/cultural construct distinguishing roles/responsibilities of men/women, girls/boys.

**Hazard:** Natural events causing harm to people/assets/environment (UNDRR, 2025).

**High Protection for Biodiversity Zones:** Zones of the Ocean allocated for high marine protection and biodiversity goals, for representative habitats and species. High biodiversity protection zones conserve and protect the top priority areas for marine and coastal biodiversity. These zones are designated for habitats and species that may be rare, endangered, unique or with narrow distribution ranges. This zone includes breeding or spawning areas, key foraging habitat, fragile or sensitive species and habitats, and internationally significant areas. When combined, these zones provide habitats and species with long-term protection and are sufficiently large to ensure ecological resilience and climate change adaptation. This zone category is not suitable for extraction or sea-bed alteration and is considered a 'no-take' zone in common vernacular. Examples of high protection status, depending on the objectives and allowable human activities, are: Marine Protected Areas in the IUCN categories Ia, Ib, and II.

**Implementation Plan:** the plan developed during the MSP process that sets the course of future actions related to ocean management.

**Infrastructure:** Essential installations/services for development (roads, bridges, utilities, dykes).

**Integrated Coastal Zone Management (ICZM):** Means a dynamic, multidisciplinary, and participatory process designed to promote the sustainable use and management of coastal and ocean resources, including disaster risk management and climate change adaptation processes; recognizing the interconnectedness of terrestrial, coastal, and ocean ecosystems and aims to balance environmental, social, and economic priorities (ICOM Act, 2025).

**Internal waters:** Waters landward of territorial sea baseline (lagoons, bays, enclosed areas).

**Key players:** Critical, dedicated stakeholders with high levels of influence meaningfully engaged throughout BSOP.

**Ocean:** means Belize's Exclusive Economic Zone, Territorial Sea, Archipelagic Waters and/or Internal Waters as defined by the United Nations Convention for the Law of the Sea (UNCLOS), among others, in each case as defined in national legislation at the time the Agreement enters into force

**Marine Spatial Planning (MSP):** Public process analyzing/allocating spatial/temporal human activities for ecological/economic/social objectives (Ehler & Douvere, 2009).

**Meaningful engagement:** Inclusive stakeholder involvement respecting knowledge/cultures/interests in decision-making.

**Medium Protection for Biodiversity Zones:** Zones of the Ocean allocated for medium marine protection and biodiversity goals, for representative habitats and species. Sustainable uses are compatible with the biodiversity objectives in these areas. Medium biodiversity protection and sustainable use zones are proposed to conserve areas that are suitable for medium levels of biodiversity protection and are also compatible with some sustainable uses. These zones include habitats and species that have some tolerance to disturbance and human activities. These zones also include regionally and nationally significant areas. This zone category is suitable for some level of extraction and sea-bed alteration, with appropriate management and direction, depending on the objective of each designated area. Examples of medium protection status could include: Marine Protected Area IUCN categories V and VI, IUCN OECM category, and Locally Managed Marine Areas (LMMA).

**Mitigation:** Human interventions reducing climate impact (GHG reduction, sink enhancement).

**Multiple Use Zone:** Flexible area for compatible activities (fishing, tourism, navigation, recreation) under coordinated management.

**Non-critical stakeholders:** Replaceable resources/low-average BSOP dependency.

**Non-dedicated stakeholders:** No perceived clear BSOP costs/benefits.

**Polluter-Pays:** Internalizing environmental costs to responsible parties.

**Prohibited:** Human use that may not take place in a zone at all, either permanently or during set periods. It conflicts with the zone's objectives, such as protecting biodiversity or habitat, cultural heritage, safety, or security.

**Regulated:** Human use that is allowed in a zone only under specific controls. These include licences or permit, an EIA or a lower-level environmental assessment, seasonal closures, quotas, gear or size limits, setbacks, or limits on where it can happen within the zone.

**Renewable Energy:** Naturally replenishing sources (biomass, hydro, solar, wind, ocean, geothermal).

**Resources:** Practical means for objectives (knowledge, manpower, funding, authority, networks).

**Resource dependency:** BSOP reliance on stakeholder resources (limited/average/high).

**Risk:** Probability of losses = hazard × exposure × vulnerability/capacity (UNDRR, 2025).

**Single Use Zone:** Exclusive allocation for one primary activity; others restricted or prohibited (in the National Ocean Zoning Framework this is the Coast Guard Operational Zone).

**Stakeholders:** Individuals/groups affected by/involved in BSOP decisions.

**Stakeholder map:** Visual representation of stakeholder influence/interest.

**Territorial sea:** 12 nautical miles from coastal baseline.

**Vulnerability:** Susceptibility to climate impacts unable to cope (exposure × sensitivity × adaptive capacity).

**Weather:** Atmospheric conditions at specific time/place (vs. climate = average weather).

**Zone:** Defined marine/coastal area for specific/compatible purposes; allowable/restricted activities specified.

**Zone of influence:** 3 km area where activities affect coastal ecosystems/services.

SECTION

1

# Marine Spatial Planning in Belize



©Duarte/Adobe Stock

# 1 Marine Spatial Planning in Belize

IN THIS CHAPTER

1.1 Global Context
1.2 The Belize Marine Spatial Planning Process
1.3 Key Challenges and Opportunities
1.4 Belize Blue Bonds Agreement

The Belize Sustainable Ocean Plan (BSOP) is a national framework designed to guide the sustainable management of the country's ocean space. It supports informed decision-making by identifying suitable areas for different marine activities that may be lawfully carried out, highlighting zones that require protection, and balancing competing uses to promote sustainability, resilience, and shared national benefits.

Belize's marine environment is one of the most diverse and distinctive in the Atlantic-Caribbean region. The Belize Barrier Reef, the largest reef system in the region and the second largest in the world, features a unique combination of reef types. The reef, mangroves, seagrass beds and key features provide ecosystem services, including coastal protection, carbon sequestration, and critical habitats for marine life. They also support protected and endangered species such as the West Indian manatee, hawksbill sea turtle, and Nassau grouper. Despite their importance, these marine ecosystems face increasing pressures. The proliferation of Sargassum is smothering coral habitats, degrading water quality, and threatening marine biodiversity. The decomposition of Sargassum further releases hydrogen sulfide and ammonia, which have strong odors that may adversely affect the respiratory systems of humans and animals. These impacts are compounded by human activities such as high fishing pressure, coastal development, and pollution, as well as climate-related stressors including rising sea temperatures and ocean acidification. The increasing demand for Belize's Ocean for commercial fishing, marine tourism, coastal development, and conservation mandates as well as related challenges highlight the urgent need for comprehensive Marine Spatial Planning (MSP) to safeguard Belize's marine resources.

The Belize coast and ocean area hosts several key economic sectors including tourism, marine fisheries, maritime transport, and mariculture that is central for its blue economy. Tourism alone contributes approximately 30% of Gross Domestic Product

(GDP) (WTTC, 2023) and depends heavily on healthy marine ecosystems. However, challenges such as unequal access to resources, economic vulnerability in coastal communities, and overreliance on declining fish stocks underscore the need for more equitable and diversified management approaches. Promoting social equity through fair access to marine resources and inclusive economic opportunities, particularly for marginalized groups, is critical. Initiatives such as community-led seaweed farming and eco-tourism offer alternative livelihoods that can enhance resilience and reduce economic vulnerability.

In November 2021, the Government of Belize demonstrated its commitment to addressing these challenges by signing the Belize Blue Bonds Agreement with The Nature Conservancy (TNC) (TNC, 2021). This agreement aims to balance economic, environmental, and social priorities while positioning Belize as a global leader in sustainable ocean management. The debt conversion mechanism includes both the Blue Loan Agreement (BLA) and the Conservation Funding Agreement (CFA), the latter of which commits Belize to designating up to 30% of its ocean space as Biodiversity Protection Zones (BPZs). A key requirement of the Blue Bonds Agreement is the implementation of a transparent and participatory MSP process (CFA,2021). MSP is a public planning approach that organizes the spatial and temporal distribution of human activities in marine areas to achieve ecological, economic, and social objectives (Ehler and Douvere, 2009). In Belize, this process is embodied in the plan which is called the BSOP.

## 1.1 Global Context

A Sustainable Ocean Plan (SOP) is a strategic, knowledge-based and participatory zoning framework that a country develops to ensure the sustainable management of its ocean areas under national jurisdiction (Barzuna et al., 2025). The SOP defines a long-term vision for ocean sustainability and provides an actionable road map that aligns climate action and biodiversity conservation with sustainable use and equitable prosperity. The SOP serves as a comprehensive and holistic “umbrella” framework that unifies all ocean-related policies, governance, tools and mechanisms and helps align ocean policies with international frameworks and best practices (Figure 1). While the BSOP primarily serves as Belize’s Marine Spatial Plan, it also contributes toward broader SOP objectives and may help inform future ocean governance initiatives.

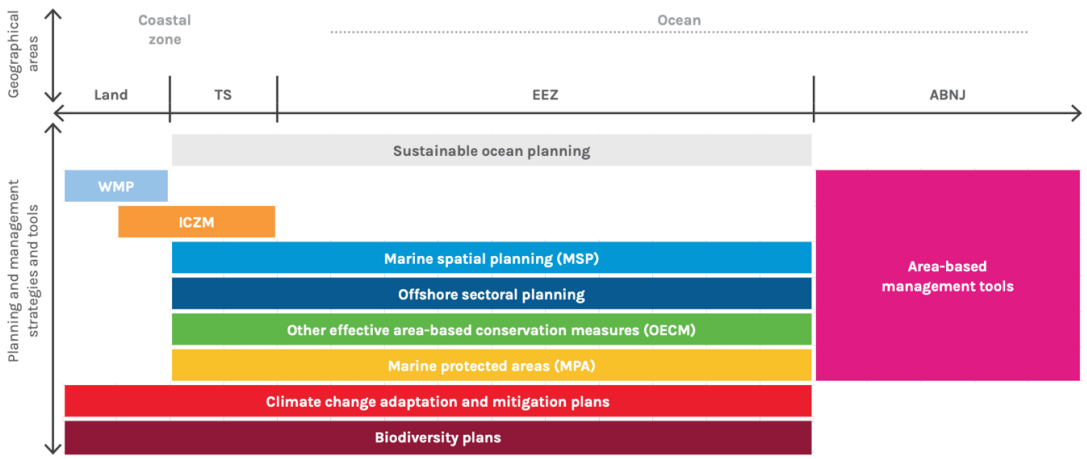



**Figure 1-A** Alignment between MSP and SOP. In Belize, the planning for coastal zone is addressed through the Integrated Coastal Zone Plan. The BSOP however integrates the Belize coastal zone and ocean zone. Source: The Sustainable Ocean Plan Handbook (Barzuna et al., 2025).

In Belize, MSP is the formal process for achieving sustainable use and resilience in the country's marine environment. It involves mapping ocean uses, engaging stakeholders, identifying zones for different activities (such as conservation and fisheries), and implementing legally binding measures to guide how ocean space is used.

The development of the BSOP is grounded in international guidance and best practices for MSP and sustainable ocean planning. It aligns with established global frameworks by promoting transparent, participatory processes, ecosystem-based management, and the integration of ecological, economic, and social objectives (Table 1).

Belize's MSP process has drawn on international guides and best practices while building on several national and regional initiatives, reflecting the country's strong commitment to sustainable ocean governance. These efforts span areas such as Integrated Coastal Zone Management (ICZM), biodiversity conservation, and blue economy development. The BSOP exemplifies a coordinated approach to managing the complex interactions between environmental protection, economic development, and social well-being.

**Table 1 Alignment of BSOP with International MSP and SOP Guides**

| Guides | Structure | Main stages |
|---|---|---|
| UNESCO-IOC MSP Step by Step Guide (2009) | A linear 10 step-by-step MSP process | 1. Identifying need and establishing authority.<br>2. Obtaining financial support.<br>3.Organizing the process.<br>4.Organising stakeholder participation.<br>5. Analyzing existing conditions.<br>6. Analyzing future conditions.<br>7. Preparing and approving the plan.<br>8. Implementing the plan.<br>9. Monitoring and evaluating the plan.<br>10. Adapting the plan. |

| Guides | Structure | Main stages |
|---|---|---|
| MSPglobal International Guide on MSP (2021) | A phased approach to the MSP process | 1.Setting the scene<br>2.Designing the planning process<br>3.Assessment for planning<br>4.Developing the plan<br>5.Enabling implementation of the plan<br>6.Monitoring, evaluation, and adaptation of the process and the plan |
| Sustainable Ocean Plan Handbook stages (2025) | A five-step practical framework for Sustainable Ocean Plans | 1. Setting objectives and defining scope.<br>2. Financial planning and resource mobilization.<br>3. Defining the baseline and analyzing future conditions.<br>4. Building the Sustainable Ocean Plan.<br>5. Implementation and action planning. |
| Caribbean Regional Marine Spatial Planning Step by Step Guide (2026) | A nine-step MSP process | 1. Preparation and pre-planning.<br>2. Plan and initiate stakeholder participation.<br>3. Information and data collection, and analysis.<br>4. Set vision, goals and objectives.<br>5. Zoning and policy options, and management actions.<br>6. Public consultation and plan approval.<br>7. Implementation.<br>8. Monitoring.<br>9. Plan review and revision |
| International Union for Conservation of Nature (IUCN) World Commission on Protected Areas (WCPA) 2012 international guidebook titled "Guidelines for Applying the IUCN Protected Area Management Categories to Marine Protected Areas", the IUCN-WCPA 2017 guidebook titled "Large-Scale Marine Protected Areas: Guidelines for Design and Management" and IUCN-WCPA 2008 technical guidebook titled "Establishing Resilient Marine Protected Area Networks – Making It Happen". | A nine-step MPA designation process | 1. Placing MPAs in their wider context.<br>2. Developing the legal framework.<br>3. Working with relevant sectors<br>4. Making partnerships with communities and other stakeholders<br>5. Selecting the sites for MPAs.<br>6. Planning and managing the MPA<br>7. Zoning.<br>8. Planning for financial sustainability.<br>9. Ensuring research, monitoring, evaluation and review. |

| Guides | Structure | Main stages |
|---|---|---|
| BSOP (2026) | Combined MSP and SOP approach | The Belize's process directly follows the UNESCO MSP steps but adapted to the local context and conditions of the Caribbean Sea to develop a legally enforceable plan, with a stated goal of guiding sustainable development and protecting up to 30% of ocean space. |

## 1.2 The Belize Marine Spatial Planning Process

The BSOP and therefore the Belize MSP process follows the United Nations Convention on the Law of the Sea Intergovernmental Oceanographic Commission (UNESCO-IOC) MSP Step by Step Guide with ten steps (Figure 2). The Belize MSP process is further aligned with the SOP Handbook (2025) and the Caribbean Regional MSP Step by Step Guide (2026). Belize's journey toward MSP is anchored in a series of structured initiatives that span legal, institutional, financial, and participatory dimensions. Each of the STEPs outlined below reflects progress in governance (STEP 1), financing (STEP 2), pre-planning (STEP 3), stakeholder engagement (STEP 4), and knowledge building through mapping and data analysis (STEPS 5 and 6), plan development (STEP 7) as well as setting the conditions for implementation (STEP 8), monitoring (STEP 9) and plan adaptation (STEP 10).

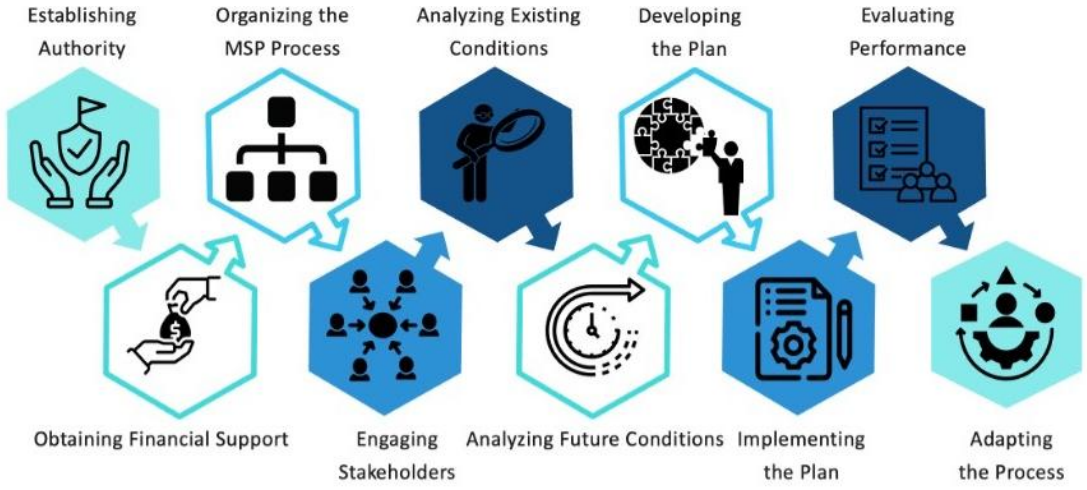



**Figure 1-B** The Belize MSP Process

**STEP 1. Identifying the Need and Establishing Authority:** Belize's MSP process was catalyzed through the Belize Blue Bonds Agreement. In 2022, Coastal Zone Management Authority and Institute (CZMAI) was formally designated as the lead agency for MSP, with legal authority grounded in the Coastal Zone Management Act (CZMA) (1998) and later replaced by the Integrated Coastal and Ocean Management (ICOM) Act (2025). A more detailed overview of the legislative background and governance structure is provided in Section 2.3 of this document. This step also included building CZMAIs capacity to develop the through training and hiring of new staff.

**STEP 2. Obtaining Financial Support:** Innovative financing was secured through the Blue Bonds debt conversion (TNC, 2021). This led to the establishment of the Belize Fund for a Sustainable Future, which manages conservation payments and disburse grants to support the MSP process via the Government Strategic Allocation. Other complementary allocations were provided by TNC and CRFM under the BE-CLME+ initiative for technical support.

**STEP 3. Organizing the Process through Pre-Planning:** The MSP Policy (CZMAI, 2025b). and Blue Economy Policy, Strategy and Implementation Plan (Ministry of Blue Economy and Civil Aviation, 2022) define the vision and objectives. CZMAI established a governance structure comprised of a Steering Committee (SC), Core Team (CT) and Technical Working Groups (TWGs) to guide the process. The planning area spans Belize's internal waters, territorial sea, and Exclusive Economic Zone (EEZ) collectively referred to as the Belize Ocean based on the UNCLOS (1982), ICZM Plan (2016) and the Belize Maritime Economy Plan (2022).

**STEP 4. Organizing Stakeholder Participation:** Extensive engagement has been central, including workshops, surveys, and consultations with communities, industry, non-governmental organizations (NGOs), and government. Digital tools like SeaSketch, dashboards, and story maps support transparency and participation.

**STEP 5. Defining and Analyzing Existing Conditions:** Existing conditions were defined through national and project-specific assessments such as the ICZM Plan (2016), interim National ICZM 2020-2025, and the Belize Maritime Economy Plan (2022), which mapped ocean space uses and compiled ecological and socio-economic data. The 2024 Belize MSP Data Gaps and Needs Assessment and the 2024 Interim Existing Conditions Report compiled and analyzed spatial data from multiple sectors and identified key habitat types, and cumulative human pressures. Mapping initiatives using the Belize SeaSketch project[1] were deployed to support spatial representation of current and potential marine uses. In May 2024, a Multi-Stakeholder MSP Workshop convened by CZMAI developed preliminary future scenario narratives and produced a compatibility matrix to inform zoning discussions. Tools such as Ocean Use Survey Heatmaps and Human Stressor Maps were used to visualize ecosystem use and pressures.

**STEP 6. Defining and Analyzing Future Conditions:** Efforts related to future trends, such as climate change adaptation, focusing on coastal actions were carried out in ICZM Plan 2016. Future use scenarios were partially explored. The Performance Indicators (2020) include indicators for monitoring climate change and coastal vulnerability. The 2024 Multi-Stakeholder MSP Workshop helped identify trends, risks, opportunities for

[1] Belize SeaSketch Project outputs can be accessed at: http://www.seasketch.org/belize.app

forward-looking planning and scenario modelling e.g., Marxan tools. Future planning sessions were conducted with the BSOP Steering Committee and in fifteen coastal communities across Belize. These sessions employed a scenario-based approach to explore how climate change and governance (identified as key drivers of change) could influence future use. The resulting scenarios were further evaluated using Marine InVEST to determine a preferred zoning configuration. This configuration was then assessed against outputs from two work streams: the Cumulative Effects Assessment of Socio-Economic Drivers and the Integrated Climate Risk Assessment, to establish the final future zoning scheme. Consequently, the resulting zoning scheme will incorporate climate change and biodiversity considerations while identifying opportunities for future community use.

**STEP 7. Preparing and Approving the Spatial Management Plan:** The BSOP compiles the vision, goal, objectives, zoning decisions, conservation priorities, and permitted uses for the Belize Ocean. The draft BSOP document underwent a formal national consultation and approval process which included; i) a sixty-day public inspection period with simultaneous community sessions, ii) a national validation session, and iii) gazetting. Finally, the BSOP was presented to Cabinet, the House of Representatives, and the Senate which marked the final steps in the approval process.

**STEP 8. Implementing and Enforcing the Spatial Management Plan:** The BSOP implementation framework is still evolving and being defined. Key challenges include limited enforcement capacity, fragmented institutional roles, and the need for clear legal backing and operational systems. Appropriate and revised regulations will be required to ensure that the finalized BSOP is legally enforceable and fully integrated into Belize's marine governance system.

**STEP 9. Monitoring and Evaluating Performance:** The BSOP monitoring system builds on ICZM indicators including climate resilience metrics. Social and governance indicators such as equity and participation are under development, along with other monitoring indicators.

**STEP 10. Adapting the Marine Spatial Management Process:** Belize aims to create a dynamic, adaptive MSP system, drawing lessons from ICZM to enable continuous improvement in response to environmental and socio-economic changes. The ICOM Act stipulates that the BSOP is to be revised every ten years with a five-year review period.

## 1.3 Key Challenges and Opportunities

The development and implementation of the BSOP requires addressing persistent challenges while leveraging existing opportunities. The main challenges and opportunities for the BSOP are related to:

**Key Challenges:**

- **Limited enforcement and compliance:** Limited patrol capacity, insufficient resources, and inadequate monitoring allow illegal activities like unregulated fishing to persist. Lack of clear, user-friendly zoning information also makes it hard for ocean users to follow rules, reducing compliance and trust.
- **Cross-border and Illegal, Unreported and Unregulated (IUU) Fishing:** Areas like Sapodilla Caye Marine Reserve face ongoing incursions (e.g., by non-Belizean fishers), threatening biodiversity, fisheries sustainability, and enforcement safety.
- **Poor institutional coordination:** Overlapping mandates and weak integration among agencies slow decision-making and reduce the effectiveness of marine policy implementation.
- **Outdated regulations:** Existing frameworks do not adequately address emerging issues such as climate change, new technologies, and evolving ocean industries.
- **Sectoral conflicts:** Competing uses like tourism development vs. fisheries (e.g., Ambergris Caye) or conflicts within the fisheries sector highlight the absence of detailed spatial planning and conflict-resolution mechanisms.
- **Environmental threats:** Climate change impacts, including coral bleaching in the Belize Barrier Reef, sea-level rise, and extreme weather, threaten ecosystems and coastal livelihoods.

**Key Opportunities:**

- **Stronger compliance through tools and engagement:** Improving access to zoning information, continued awareness with stakeholders of the use of already existing user-friendly tools (SeaSketch) and increasing stakeholder engagement can boost compliance and stewardship.
- **Coordinated enforcement:** Joint patrols across agencies (Fisheries Department, Coast Guard, Police, co-managers) provide a foundation to strengthen monitoring and enforcement systems. The Government of Belize has already taken significant steps towards formulating this new system through the development of the National Fisheries Enforcement and Conservation Monitoring Strategy and Action Plan (NFECMSAP, 2026).
- **Equitable access to resources:** Better governance can ensure fair access for communities, especially artisanal fishers in Southern Belize who depend heavily on marine ecosystems.
- **Sustainable blue economy growth:** Belize can expand sectors like ecotourism, fisheries, aquaculture, marine transport, and blue carbon while maintaining ecological integrity. Places like Placencia and Lighthouse Reef show how zoning can balance development and conservation.
- **Marine conservation leadership:** Expanding protected areas and BPZs can strengthen global leadership in ocean stewardship.

- **Nature-based solutions:** Mangrove restoration and similar initiatives can enhance coastal resilience, support biodiversity, and provide economic benefits.
- **Participatory governance:** Inclusive, stakeholder-driven planning under MSP improves legitimacy, equity, and public support for marine policies.
- **Evidence-based decision-making:** Using scientific data and planning tools through the BSOP enables adaptive, transparent, and informed marine management.

## 1.4 Belize Blue Bonds Agreement

The Belize Blue Bonds resulted in a USD 364 million debt conversion that reduced the country's public debt by approximately 12 percent of GDP (TNC, 2021). The transaction enabled Belize to repurchase USD 553 million in existing debt at a significant discount, lowering the principal by USD 189 million. Beyond debt relief, the agreement secured an estimated USD 180 million in long-term conservation financing over 20 years and formalized Belize's commitment to protect 30 percent of its ocean through the MSP process. A portion of the funds generated by the debt conversion was allocated to the development of the BSOP and will also support its implementation (CFA, 2021).

The BSOP is intended to complement existing management structures and, in Belize's case, add new elements to sectoral management measures to help achieve environmental, economic, and social objectives. One of the main outputs of the planning process is the allocation of Belize's Ocean into zones designated for uses. As defined in Clause 7 of the CFA, the marine spatial plan is "a plan analyzing and allocating parts of three-dimensional marine spaces (or ecosystems) to specific uses or objectives in order to achieve ecological, economic, and social objectives that are specified through a political process". Table 2 defines the milestones, timelines and allocation for biodiversity protection under the "blue bond" debt conversion agreement.

**Table 2 Blue bond and debt conversation milestones**

| Milestone | Milestone Description | Due Date | Status |
|---|---|---|---|
| 1 | Expand Biodiversity Protection Zones to 20.5% of Belize's Ocean | 5/4/2022 | Complete |
| 2 | Designate Public Lands within the Belize Barrier Reef Revere System (BBRS) as Mangrove Reserve | 5/4/2022 | Complete |
| 3 | Initiate the process of developing MSP for Belize's Ocean | 11/4/2022 | Complete |
| 4 | Expand Biodiversity Protection Zones to 25% of Belize's Ocean | 11/4/2024 | Complete |
| 5 | Implementation of Integrated Coastal Zone Management Plan (ICZMP) | 11/4/2025 | Complete |

| Milestone | Milestone Description | Due Date | Status |
|---|---|---|---|
| 6 | Expand Biodiversity Protection Zones up to 30% of Belize's Ocean; MSP completed, approved, signed into law, gazetted and implemented | 11/4/2026 | Completed |
| 7 | At least 3 International Union for Conservation of Nature (IUCN) Green List applications submitted | 6 years after signing | |
| 8 | Approved Management Plans | 8 years after signing | |

SECTION

2

# The Belize Sustainable Ocean Plan



©Duarte/Adobe Stock

# 2 The Belize Sustainable Ocean Plan

IN THIS CHAPTER

2.1 Purpose of the BSOP
2.2 Vision, Guiding Principles, Goals and Objectives
2.3 Scale and Scope

## 2.1 Purpose of the BSOP

The purpose of the BSOP is to provide a legally guided, participatory framework for deciding how Belize's ocean space should be used, protected, and managed. Section 27 and 28 of the ICOM Act 2025 stipulates the development of the BSOP and its use as a tool to integrate and manage cross-sector interests from fishing, tourism, sustainable land management, ocean research, conservation, maritime transport and bioprospecting.

The BSOP addresses multiple sectors by examining complementarities and conflicts among uses, and it creates measures to guide the sustainable use of marine resources. It complements existing management structures by adding new spatial measures that help the country achieve its environmental, economic, and social objectives. The BSOP designates up to 30% of Belize's ocean as BPZ to help achieve Milestones 4 and 6 in addition to Milestone 1 (Figure 3). It also includes marine conservation outcomes for biodiversity protection and permissible activities that may be lawfully carried on in any part of Belize's Ocean.




**Figure 2-A** The BSOP Timeline

## 2.2 Vision, Guiding Principles, Goals and Objectives

The BSOP is guided by a clear and ambitious vision, along with a set of guiding principles, goals, and objectives defined by the MSP Policy and designed to balance ecological conservation, economic development, and social equity. These vision, principles, goals, and objectives were developed through an inclusive process that engaged stakeholders at multiple levels and were aligned with global best practices, including the UNESCO MSP Guide, the SOP Handbook, and the Caribbean Regional MSP Step-by-Step Guide and Protocol. This approach ensures that the BSOP is both locally grounded and consistent with internationally recognized standards for MSP.

### 2.2.1 Vision

The Vision of the BSOP is:

> *A healthy, resilient, and equitably shared ocean that supports a thriving national economy and nurtures the culture and wellbeing of all Belizeans.*

This vision reflects the fundamental need for a healthy, resilient, and equitably shared ocean, ensuring that Belize's marine environment continues to sustain biodiversity, cultural heritage, and livelihoods. To translate this vision into action, the BSOP process is grounded in a set of guiding principles that provide the conceptual and operational framework for decision-making.

### 2.2.2 Guiding Principles

The MSP Policy defines approved and proposed principles for the development of the BSOP:

*BSOP MSP Guiding Principles for Decision Making*:

1. **Inclusivity:** The MSP process and BSOP must address the social, cultural, and economic needs of all stakeholders, including minority, marginalized, and underrepresented communities, while recognizing the value of traditional ecological knowledge (TEK) and ensuring accessible and equitable participation.

2. **Participation:** Stakeholders must be enabled to deepen their understanding, validate outcomes, and contribute meaningfully to data collection, scenario development, zoning decisions, and the management of marine sectors. The BSOP Governance Framework and Stakeholder Engagement Strategy institutionalize participation through the BSOP Steering Committee and TWGs, representing government and non-government interests.
3. **Transparency:** The BSOP process must be open to public scrutiny. The vision, goals, objectives, and guiding principles must be shared at the outset, and information on activities, decisions, and progress should be regularly communicated through the BSOP website, Interactive Story Map, Engagement Dashboard, SeaSketch, and social media, as well as through radio and television.
4. **Ecosystem-based approach:** MSP must apply an ecosystem-based approach that integrates land, water, and living resources, recognizing people and cultural diversity as integral parts of ecosystems. The framework must consider cumulative impacts and ecosystem services to maintain health and resilience, using tools that account for ecological, economic, and social dimensions.
5. **Precautionary principle:** Where there is a threat of serious or irreversible environmental or social harm, decisions must be precautionary even in the face of scientific uncertainty. A lack of certainty must not be used to delay measures that prevent or minimize such harm.
6. **Evidence-based planning:** Decisions must be grounded in scientific information and global best practices. Where data are limited, gaps should be addressed through research, expert consultation, stakeholder input, and modelling. Regional data-sharing and science-policy interfaces must ensure that ecological, social, and economic research inform MSP and adaptive management.
7. **Climate-smart:** MSP must recognize the high vulnerability of Belize's coast and ocean to climate change. Climate-smart planning must incorporate nature-based solutions, future-scenarios analysis, and climate-resilient zoning, including for emerging sectors such as aquaculture and sustainable transport, and must support blue-carbon initiatives.
8. **Equity:** The BSOP must promote fair access to marine resources, economic opportunities, and participatory processes, with targeted efforts to address pre-existing inequalities among coastal communities, small-scale fishers, and traditionally dependent groups.
9. **Balance:** The BSOP must balance social, cultural, economic, and ecological objectives, giving due consideration to both development and conservation. Transparent conflict-resolution mechanisms and multi-use zoning should help mediate competing uses, such as fisheries versus tourism, to maximize shared benefits and minimize harm.

*Proposed Principles* from stakeholder inputs received during the development of the MSP Policy.

10. **Integrated Governance:** MSP must promote coordination across sectors (e.g., fisheries, tourism, renewable energy, conservation) and levels of government (national, regional, local), reducing fragmentation and aligning marine uses under a coherent framework of shared objectives.
11. **Adaptive Management:** The BSOP must remain dynamic, revising and refining the plan in response to new information, changing conditions, and stakeholder feedback. Regular monitoring, evaluation, and learning cycles must support adaptive decision-making and long-term sustainability.
12. **'Polluter-Pays' Principle:** The BSOP must apply the polluter-pays principle, requiring those who cause environmental degradation to bear the costs of mitigation, remediation, and restoration. This will strengthen accountability and support compliance with conservation and management measures.

### 2.2.3 Goals

**Overarching BSOP Goal: 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 BPZs.**

The following are the BSOP goals based on the MSP Policy which highlights key opportunities for strengthening Belize's MSP process by incorporating science- based governance, climate resilience strategies, blue economy innovations, and equity- based resource management.

## BSOP GOAL 1. PROCESS GOVERNANCE GOAL

To establish and maintain an effective, transparent, science-based, and enforceable framework for coordinated ocean governance, sustainable decision-making, and adaptive management under the BSOP.

- Specific Objective 1: To operationalize a legally enforceable BSOP that strengthens integrated ocean governance and reduces user conflicts through coordinated inter-agency collaboration and compliance mechanisms.
- Specific Objective 2: Establish and strengthen inter-agency coordination, data-sharing mechanisms, and institutional arrangements to support transparent, evidence-based, and efficient implementation of the BSOP.
- Specific Objective 3: Develop and implement a communication, monitoring, and evaluation framework that promotes public awareness, stakeholder participation, accountability, and periodic review of the BSOP to support adaptive ocean management.

## BSOP GOAL 2. MARINE CONSERVATION GOAL

To conserve, restore, and sustainably manage Belize's marine and coastal ecosystems through legally protected and effectively managed ocean spaces that support biodiversity, climate resilience, ecosystem services, and sustainable blue economy development.

- Specific Objective 1: Design and implement BPZs that safeguard priority habitats, species, and ecological processes while improving ecosystem health and resilience within at least 30% of Belize's ocean space.
- Specific Objective 2: Strengthen and effectively manage Belize's Marine Protected Area (MPAs) network and critical habitats, including coral reefs, mangroves, seagrass beds, spawning aggregation sites, and World Heritage areas, using ecosystem-based and climate-resilient approaches.
- Specific Objective 3: Reduce cumulative impacts from climate change, coastal development, disasters, and unsustainable ocean use through ecosystem-based marine spatial zoning, management, and restoration measures.
- Specific Objective 4: By November 2026, enact and publish legislation necessary to legally enforce the Belize Sustainable Ocean Plan and establish measurable ecological indicators to monitor biodiversity, habitat condition, ecosystem health, and World Heritage conservation outcomes.
- Specific Objective: 5: By 2029, develop and implement legally enforceable management plans for Biodiversity Protection Zones (BPZs) that support long-term conservation effectiveness, compliance, and sustainable financing mechanisms.
- Specific Objective 6: Commence implementation, monitoring, and periodic review of Biodiversity Protection Zone (BPZs) management plans within one year of Cabinet endorsement to ensure adaptive and effective conservation management.

**BSOP GOAL 3. BLUE ECONOMY GOAL**

To promote a sustainable, inclusive, and climate-resilient blue economy that optimizes ocean space, supports livelihoods and economic opportunities, and balances environmental sustainability with the needs of present and future generations.

- Specific Objective 1: Identify, evaluate, and allocate suitable ocean spaces to support the sustainable development and management of traditional, existing, and emerging blue economy sectors while minimizing conflicts and environmental impacts.
- Specific Objective 2: Map, monitor, protect, and promote the sustainable use of blue carbon ecosystems to support climate resilience, conservation financing opportunities, and national sustainable development priorities, while fostering sustainable investment, innovation, maritime safety, navigational infrastructure, and environmentally responsible growth within fisheries, tourism, maritime transport, aquaculture, renewable energy, and other emerging blue economy sectors.

**BSOP GOAL 4. EQUITY GOAL**

To ensure inclusive, equitable, and participatory management of Belize's ocean space and marine resources, while safeguarding traditional livelihoods, cultural heritage, community well-being, and access to sustainable economic opportunities.

- Specific Objective 1: Strengthen and sustain meaningful stakeholder engagement and participation throughout the implementation and review of the BSOP, ensuring representation from coastal communities, vulnerable groups, women, youth, private sector, and civil society organizations.
- Specific Objective 2: Promote equitable access to ocean resources, benefits, capacity-building opportunities, and sustainable blue economy participation for vulnerable and underrepresented groups across Belize, while recognizing, protecting, and integrating traditional knowledge, cultural values, and customary marine resource use practices into ocean planning and management to support community stewardship and sustainable livelihoods.

## 2.3 Scale and Scope

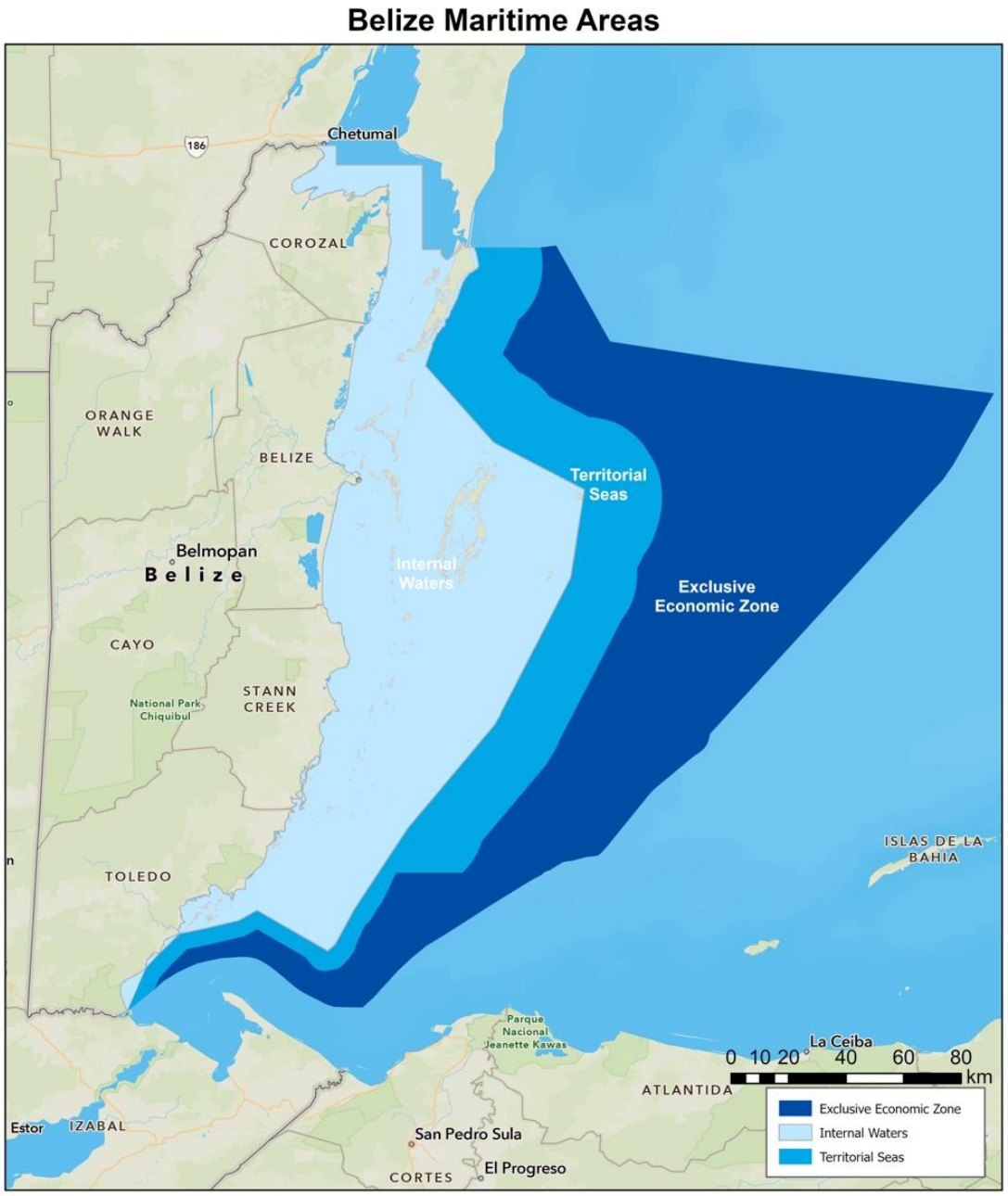
The BSOP is designed to span all maritime zones under the country's jurisdiction as defined by UNCLOS (1982). Therefore, the BSOP includes the Ocean Zone including internal waters, territorial sea and the EEZ (Map 1). These three legally defined

zones establish the spatial extent within which Belize exercises jurisdiction, management authority, and resource rights:

**Internal Waters (12,201.61 km²):** Internal waters are all waters on the landward side of the baseline of the territorial sea. These include coastal lagoons, bays, estuaries, and waters enclosed by the mainland coastline and cayes. Within internal waters, Belize exercises full sovereignty equivalent to that exercised over its land territory. This means that Belize has complete jurisdiction over all activities.

**Territorial Sea (6,410.76 km²):** Extending 12 nautical miles seaward from the baseline, it extends outward to twelve nautical miles from the baseline. Belize's sovereignty is subject to international law, particularly the rules governing navigation.

**EEZ (14,755.55 km²):** Extending h200 nautical miles from the baseline, the EEZ provides sovereign rights over exploration, exploitation, and conservation of marine resources.




**Map 1 Maritime Areas: Internal Waters, Territorial Seas, and EEZ.** Source: CZMAI

The rationale for defining the BSOP's geographic extent follows the national conservation commitments to designate up to 30% of its maritime areas as BPZs and the best practices outlined in global MSP frameworks. Furthermore, Belize's ICZM Plan 2025-2030 highlights the importance of coastal and marine ecosystems for national economic development, biodiversity conservation, and climate resilience. By including all national ocean zones under the BSOP and MSP, Belize ensures that marine governance decisions are comprehensive, strategically planned, and aligned with regional and international conservation efforts.

While the geographic scope of the BSOP is strictly limited to Ocean Zone, the MSP process acknowledges that many marine ecosystems and resources are transboundary in nature. As such, regional cooperation with neighboring countries like Mexico, Guatemala, and Honduras remains important to ensure coordinated management of shared ecological systems and alignment with broader conservation objectives. This ensures that the BSOP aligns with broader regional objectives for sustainable ocean governance and ecosystem-based management in the Caribbean region.

SECTION

3

# Legislative Background



©DECLAN/Adobe Stock

# 3 Legislative background

IN THIS CHAPTER

3.1 National Legislation
3.2 Governance structure
3.3 Stakeholder Engagement and Communication
3.4 MSP related Milestones
3.5 Compatibility Matrix

The BSOP is linked to various national legal frameworks and international agreements, including regional commitments. These connections ensure that the BSOP aligns with global standards and regional cooperation efforts.

## 3.1 National Legislation

**The Integrated Coastal and Ocean Management (ICOM) Act (No. 21 of 2025):** This relatively new legislation repeals and replaces the previous Coastal Zone Management (CZM) Act (Chapter 329, Laws of Belize, Revised Edition 2020). It provides the legal framework for MSP and ICZM to align with international best practices and ensures that the BSOP is legally enforceable.

The Act details the functions of CZMAI, including the establishment of a Foundation, database management, and the implementation of a National ICZM Plan 2025-2030. The CZM Act (1998) defined the legislative foundation for ICZM in Belize. Based on legislative reform required under the Blue Bond Agreement, it was repealed and replaced with the ICOM Act. The ICOM Act establishes the Barrier Reef Foundation (Section 36) and a Coastal Database (Sections 37-43), which are relevant for BSOP financing and data governance respectively.

**National Marine Spatial Planning Policy (2025):** The MSP Policy establishes the enabling environment for effective and coordinated implementation of the BSOP. It builds on a series of national and international commitments including Belize's Conservation Funding Agreement under the Blue Bonds Program. It defines the vision, goals and principles that guide the sustainable management and protection of Belize's ocean space through a participatory, science-based, and adaptive approach.

**National ICZM Policy (2025):** The National ICZM Policy serves as the country's official framework for managing Belize's coastal zone. It guides decisions on coastal development, conservation, climate risk, and livelihoods, and it is described as a cross-sectoral planning framework for Belize's coastal zone. This policy informed the development of the National ICZM Plan 2025-2030 as well as legislative reform of the CZM Act.

**Belize's Blue Economy Policy, Strategy, and Implementation Plan (2022–2027):** Belize's Blue Economy Development Policy, Strategy, and Implementation Plan (2022–2027), often referred to as the Blue Economy Strategy, provides a comprehensive framework for sustainable ocean resource use to drive economic growth, improve livelihoods, and protect ecosystems. The Strategy aims to transition to a sustainable, resilient, and productive marine-based economy, contributing to economic growth while protecting its coastal ecosystems (barrier reef, mangroves).

The strategy focuses on eight pillars that balance development and conservation: Sustainable fisheries and aquaculture marine tourism, maritime transport and ports, marine conservation, coastal infrastructure resilience, marine biotechnology, maritime safety and security and ocean governance. The BSOP is the primary spatial planning mechanism that operationalizes the Blue Economy Strategy by translating its policy priorities (e.g., fisheries, tourism, maritime transport, conservation, energy, and ocean governance) into spatial allocations, zoning decisions, and management measures within Belize's Ocean.

**Environmental Protection Act (CAP 328):** This legislation provides the framework for environmental conservation and management in Belize. Its provisions on environmental impact assessment (EIAs) and pollution control are essential to MSP, particularly in relation to regulating activities that may affect marine ecosystems.

**National Protected Areas System Act (NPAS) (CAP 215):** This Act establishes the legal framework for the designation, management, and conservation of Belize's protected areas network. It is relevant to the BSOP process, as it provides the legislative foundation for the creation and management of BPZs, aligning with Belize's conservation commitments under the Belize Blue Bonds.

**Fisheries Resources Act & Regulations (CAP 210):** This Act and its subsidiary regulations establish the legal framework for the sustainable management, conservation, and utilization of Belize's fisheries resources. They establish licensing procedures, enforcement provisions, and management measures that are critical to fisheries sustainability within the BSOP process. The Act also provides the legal basis for the designation and management of marine reserves.

**Belize Blue Bonds Agreement:** The Belize Blue Bonds establishes a comprehensive framework of agreements, including the Blue Bonds Loan Act (No. 28 of 2021), the BLA,

the CFA, and associated Statutory Instruments. Collectively, these instruments formalize Belize's financial commitments, conservation targets, and marine protection objectives that are integral to the development and implementation of the BSOP and conservation strategies (TNC, 2021).

### 3.1.1 Regional Agreements

**Cartagena Convention:** As a signatory to the Convention for the Protection and Development of the Marine Environment in the Wider Caribbean Region (Cartagena Convention), Belize is committed to regional cooperation in the sustainable management of marine and coastal resources. Its protocols, including those on specially protected areas and wildlife, align with the BSOP goals.

**Central American Integration System (SICA):** Through SICA, Belize participates in regional initiatives focused on sustainable development and environmental conservation. These efforts complement national MSP implementation by supporting marine resource management and regional coordination.

**Mesoamerican Barrier Reef System (MBRS):** Belize is part of the regional conservation effort for the Mesoamerican Barrier Reef. Although the MBRS Project has concluded, Belize continues to contribute to regional monitoring and management efforts through initiatives such as the Reef Health Index (RHI) and Reef Scorecard, which support ecosystem-based management and BSOP objectives.

### 3.1.2 International Agreements

**United Nations Convention on the Law of the Sea (UNCLOS):** As a Party to UNCLOS, Belize is committed to the sustainable use and conservation of marine resources within its Exclusive Economic Zone (EEZ) and beyond. UNCLOS provides the overarching legal basis for MSP by defining ocean zones and outlining rights and responsibilities of coastal states.

**Convention on Biological Diversity (CBD):** Under the CBD, Belize is obligated to develop strategies for the conservation and sustainable use of biological diversity, including marine and coastal ecosystems. MSP serves as a tool to fulfil these commitments by protecting biodiversity through spatial management.

**High Seas Treaty (BBNJ Agreement):** Belize signed the High Seas Treaty in September 2023 and ratified it in March 2024, becoming the first CARICOM country to do so. The agreement is a legally binding instrument under UNCLOS that promotes the conservation and sustainable use of marine biological diversity in areas beyond national jurisdiction and directly reinforces BSOP and broader conservation objectives.

## 3.2 Governance structure

The governance framework for Belize's MSP process is designed to ensure a two-way flow of information between the bodies coordinating technical, policy, and legislative inputs namely the BSOP Core Team (CT) and BSOP Steering Committee (SC) and the groups expected to provide input into the BSOP, including the Technical Working Groups (TWGs) and public stakeholders (Figure 4).

Inputs from the TWGs and the public are used to inform all outputs produced throughout the process. Once prepared, these outputs are forwarded to the Executive Committee for final approval and for onward submission of progress reports required under the BLA and CFA. This governance framework was endorsed as part of the BSOP process and aligns with the institutional arrangements set out in the CFA (Appendix 1).




**Figure 3-A** Governance Framework for the Belize MSP Process. This diagram illustrates the five major groups playing key roles in the development of the BSOP: the Executive Committee, BSOP Steering Committee, BSOP Core Team, Technical Working Groups, and Public Stakeholders. Source: CZMAI

## 3.3 Stakeholder Engagement and Communication

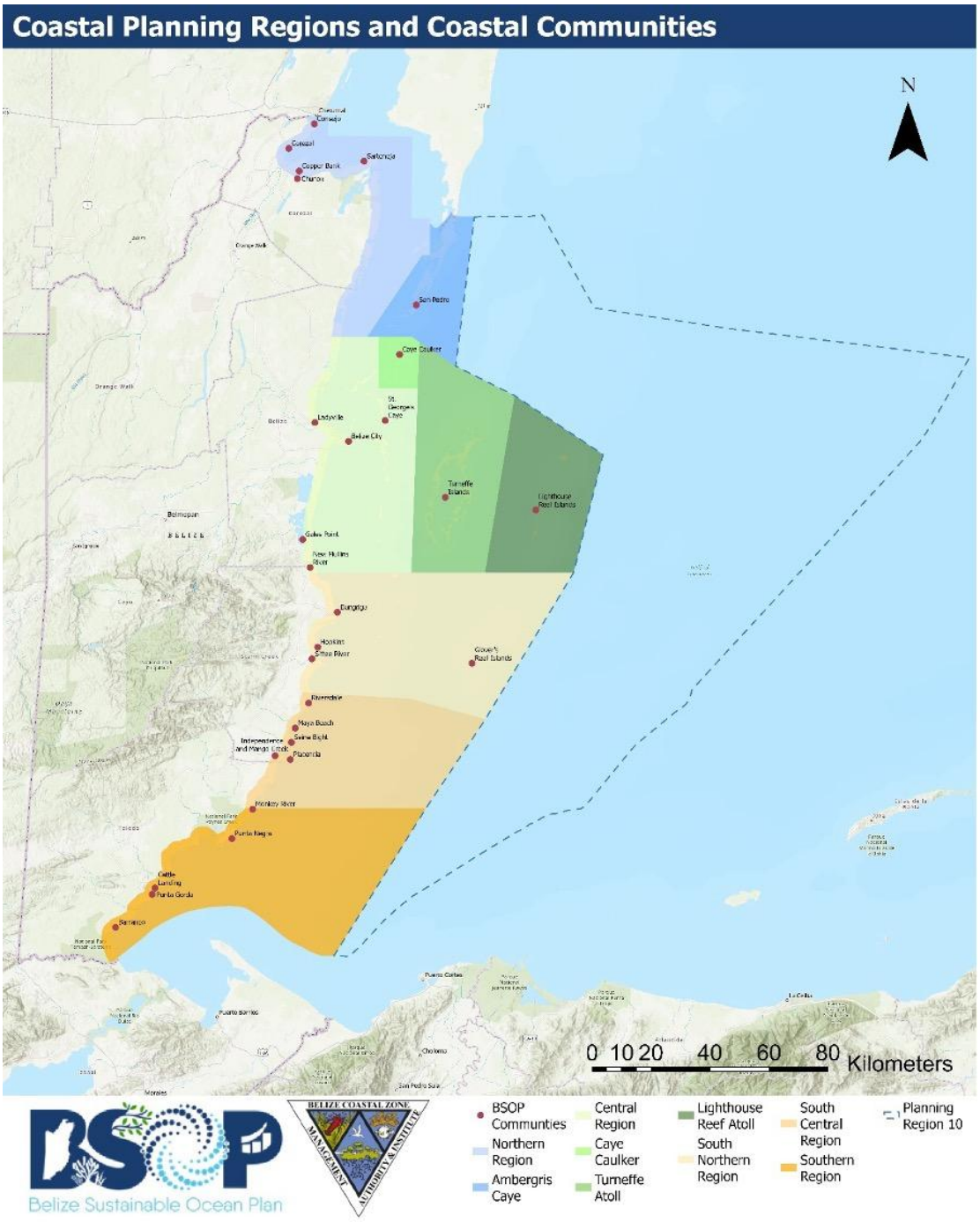
Stakeholder participation was a central component of the development of the BSOP. A Stakeholder Engagement Plan guided the identification, analysis and engagement of stakeholders and established approaches for inclusive participation along with social safeguards and conflict resolution.

Since the launch of the BSOP process in October 2022, engagement has included educational and public outreach, community consultations, sector-specific meetings, technical workshops, Core Team, Steering Committee and Technical Working Group meetings, and other targeted engagements. These activities provided opportunities for coastal communities, government agencies, resource users, private sector representatives and other stakeholders to contribute local knowledge, technical information, concerns and recommendations throughout the planning process (Appendix 2).

Transparency, information sharing and public participation were further supported through the BSOP website, spatial data viewer, social media platforms and other decision-support tools. These tools provided stakeholders with access to information and spatial data, facilitated engagement and feedback, and supported informed decision-making throughout the BSOP process (Appendix 3).

Stakeholder input informed key components of the BSOP, including the identification and mapping of existing and future ocean uses, development and refinement of BPZs, sector priority, zoning considerations and associated management measures. Multiple mechanisms were also established for stakeholders to submit comments, feedback and grievances throughout the process.

Overall, 317 stakeholder activities were conducted, recording approximately 9,442 participants interactions, including 34% female, 48% male and 18% were not specified. These figures include repeat participation by individuals across multiple engagements. About 132 engagements were community-based conducted across 27 coastal communities engaging approximately 7.4 thousand stakeholders in Belize, subject to duplicated persons (Map 2).




**Map 2 Belize Coastal Planning Regions and Coastal Communities. Source: CZMAI**

## 3.4 MSP related Milestones

Exhibit A: Clause 1 of the CFA explains the commitments the Government of Belize agreed to for (i) developing a legally enforceable Marine Spatial Plan (MSP) and (ii) designating up to 30% of Belize's ocean space as Biodiversity Protection Zones (BPZs). It sets out broad requirements to achieve conservation outcomes and references

international best practices to guide the process. Clause 1 also presents these commitments through eight time-bound Milestones, including five that outline a phased approach to complete the MSP process and reach the conservation targets. In particular:

- Delivery of Milestones 1, 4, and 6 was intended to support an incremental pathway toward designating 30% of Belize's ocean space as biodiversity protection zones.
- Milestones 3 and 6 were intended to signal the launch of the MSP process and the completion, gazetting, and legis of the marine spatial plan.

For clarity, Clause 1 defines high and medium BPZs and ties them to requirements under the Blue Bonds Agreement. It also requires that any new BPZs be consistent with IUCN zoning categories. Finally, the CFA ensures that marine conservation outcomes, both for biodiversity protection and permitted activities, apply across any part of Belize's ocean. Accordingly, the MSP and zoning Milestones were used to implement the BPZ designations.

### 3.4.1 Milestone 1

Milestone 1 required that, within six months of signing the Blue Bonds Agreement, the National Assembly approve, and the Government formally enact, sign, and Gazette, the Government's April 2, 2019, commitment[2] to expand the High BPZ (High Biodiversity Protection Zones) to 11.6% of Belize's ocean (Table 3). These High BPZ areas were identified through the National Replenishment Zone project, launched in 2013 through a partnership between WCS and BFid. The project's goal was to identify locations for new or expanded replenishment zones. The replenishment zones, also referred to as no-take areas, are a globally recognized fisheries management tool used to protect habitats where key biological functions occur, such as spawning, thereby safeguarding the reproductive capacity of fish species. Internationally, scientists, practitioners, and governments agree that countries should aim to protect at least 10% of their waters as no-take areas, a target reflected in SDG 14 and the Aichi Biodiversity Targets.

In Belize, expanding replenishment zones was necessary both to address current pressures on the national fisheries and tourism industries and to reduce future risks associated with declining fish stocks. The zones designated were designed to ensure that the MPA network represented all major marine habitat types, including previously underrepresented open deep-sea areas ranging from 200 m to 3,000 m depth. As a

[2] For more information visit https://www.pressoffice.gov.bz/expansion-of-fisheries-replenishment-no-take-zones/

result, seven new replenishment zones were established in 2022, increasing BPZ coverage to 20.05%, equivalent to 6,690.46 km² of Belize's total ocean area.

All zones were legislated under the Fisheries Resources Act of 2020, including regulations governing non-extractive recreational activities and scientific research, which require a license from the Fisheries Administrator.

**Table 3 Milestone 1 designation type, size, year and statutory instrument**

| Name | Designation Type | Size (Km²) | Yr Designated | S.I. No. |
|---|---|---|---|---|
| High Biodiversity Protection Zone 1 | High Protection for Biodiversity Marine Reserve | 75.42 | 2022 | 69 of 2022 |
| High Biodiversity Protection Zone 2 | High Protection for Biodiversity Marine Reserve | 53.37 | 2022 | 69 of 2022 |
| High Biodiversity Protection Zone 3 | High Protection for Biodiversity Marine Reserve | 230.11 | 2022 | 69 of 2022 |
| High Biodiversity Protection Zone 4 | High Protection for Biodiversity Marine Reserve | 120.33 | 2022 | 69 of 2022 |
| High Biodiversity Protection Zone 5 | High Protection for Biodiversity Marine Reserve | 106.39 | 2022 | 69 of 2022 |
| High Biodiversity Protection Zone 6 | High Protection for Biodiversity Marine Reserve | 86.65 | 2022 | 69 of 2022 |
| High Biodiversity Protection Zone 7 | High Protection for Biodiversity Marine Reserve | 621.68 | 2022 | 69 of 2022 |

### 3.4.2 Milestone 4

Milestone 4 required that, no later than three years after signing the Blue Bonds Agreement, the National Assembly shall approve, and the Government shall formally sign into law and gazettes BPZs covering a total of 25% of Belize's ocean. The areas designated under Milestone 4 contribute to the Belize National Protected Areas System established through the National Protected Areas System Act Chapter 215 (2020). Additionally, these areas were designated using the existing Marine Protected Area Framework, which includes General Use Zones that allow for varying degrees of extractive and non-extractive uses, conservation protection, sustainable fishing, tourism, research, and education. This type of zone aligns with Medium Protection for Biodiversity Zones as described in the CFA. The four Milestone 4 zones were legislated under the Fisheries Resources Act of 2020 are as follows (Table 4):

**Table 4 Milestone 4 designation type, size, year and statutory instrument**

| Name | Designation Type | Size (Km²) | Year Designated | S.I. No. |
|---|---|---|---|---|
| Lighthouse Reef GU Zone II | Medium Protection for Biodiversity Marine Reserve Zone | 720.56 | 2024 | 134 of 2024 |
| Lighthouse Reef GU Zone I | Medium Protection for Biodiversity Marine Reserve Zone | 507.45 | 2024 | 134 of 2024 |
| Glover's Reef GU-(Expansion) | Medium Protection for Biodiversity Marine Reserve Zone | 261.65 | 2024 | 133 of 2024 |
| Bacalar Chico GU Zone (Expansion) | Medium Protection for Biodiversity Marine Reserve Zone | 179.99 | 2024 | 131 of 2024 |

These areas received broad stakeholder support, reflecting recognition of the benefits of integrating them into the MPA system. Stakeholders acknowledged that these designations would strengthen ongoing, locally led efforts to manage the areas sustainably. Together, the Milestone 4 zones cover 1,669.64 km² (about 5% of Belize's ocean) and directly contribute to the BSOP's objective of increasing biodiversity protection in support of a thriving blue economy.

### 3.4.3 Milestone 6

Milestone 6 requires that, no later than five years after signing the Blue Bonds agreement:

a) The National Assembly shall approve, and the Government shall formally sign into law and gazettes BPZs covering a total of 30% of Belize's ocean or the percentage stated in the MSP; and
b) The MSP itself shall have been completed, approved by the National Assembly, signed into law, gazetted, and implemented.

The formal designation of the final 4.95% of Belize's ocean space to meet the overall target of 30% includes three areas designated within the Deep Sea and Exclusive Economic Zone (Appendix 4). These areas were designated as High Protection for Biodiversity Zones and are intended to increase protections for deep sea geomorphological features, some of which were underrepresented (<10% representation) in the MPA network. The identification of these areas was informed by a set of MPA Design Criteria developed via the stakeholder engagement process. Areas designated under Milestone 6 are as follows (Table 5):

**Table 5 Milestone 6 designation type, size, year and statutory instrument**

| Name | Designation Type | Size (Km²) | Year Designated | S.I. No. |
|---|---|---|---|---|
| High Biodiversity Protection Zone 3 (Expansion) | High Protection for Biodiversity Marine Reserve | 316.15 | 2026 | X of 2026 |
| High Biodiversity Protection Zone 8 | High Protection for Biodiversity Marine Reserve | 1219.56 | 2026 | X of 2026 |
| Sapodilla Cayes Conservation Zone IV (Expansion) | High Protection for Biodiversity Marine Reserve | 128.30 | 2026 | X of 2026 |

### 3.4.4 Achievement of 30% BPZ Target

Following the delivery of Milestones 1, 4, and 6, Belize has successfully delivered on its commitment to ensure that 30% of Belize's ocean space is under protection. The following (table 6) is summary of the incremental achievement of the 30% BPZ target:

**Table 6 Summary of BPZ incremental achievement**

| BELIZE PROTECTION FOR BIODIVERSITY ZONES STATS | | |
|---|---|---|
| | **Area (km2)** | **%** |
| **Total Ocean Space without terrestrial areas** | **33367.89** | **100** |
| **Total BPZ Prior to Blue Bond Agreement** | **5396.51** | **16.18** |
| **Milestone 1** | | |
| *High BPZ* | 1293.95 | 3.87 |
| *Medium BPZ* | - | - |
| **Total after Milestone 1 Delivery:** | **6690.46** | **20.05** |
| **Milestone 4** | | |
| *High BPZ* | - | - |
| *Medium BPZ* | 1669.64 | 5 |
| **Total after Milestone 4 Delivery:** | **8360.1** | **25.05** |
| **Milestone 6** | | |
| *Medium BPZ* | 78.29 | 0.24 |
| *High BPZ* | 1573.08 | 4.71 |
| **Total After Milestone 6 Delivery:** | **10011.47** | **30** |

| BELIZE PROTECTION FOR BIODIVERSITY ZONES STATS | | |
|---|---|---|
| High BPZ | 5468.04 | 16.38 |
| Medium BPZ | 4543.42 | 13.62 |




**Map 3 Marine Protected Areas in Belize: Expansion Under Conservation Commitments. Source: CZMAI**

## 3.5 Compatibility Matrix

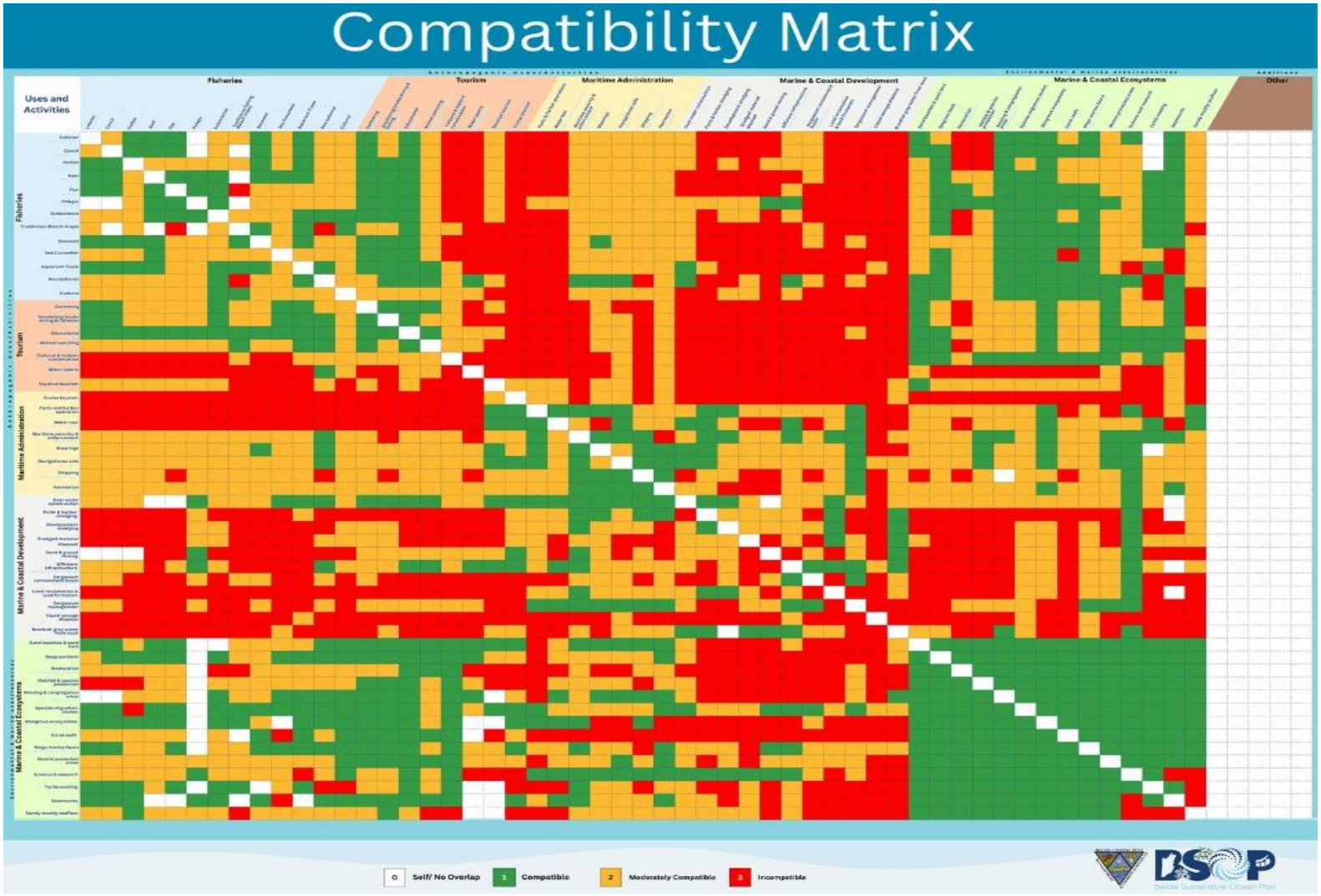
The Compatibility Matrix was used to assess how marine uses interact across Belize's ocean space and how those interactions align with ecological conservation goals. Human uses included in the matrix were compiled based on a literature review and were later revised through several iterations of validation with the BSOP Steering Committee. Initially, a five-level scoring system was utilized to categorize the interactions between uses. However, this made scoring tedious. Therefore, through a participatory process with stakeholders, activities were classified into four levels: no overlap, compatible, moderately compatible, and incompatible, based on the potential impacts of their interactions and environmental alignment (Table 7) (Figure 3-B). The Compatibility Matrix further informed the development of zone typology (Appendix 5) under each human uses.

**Table 7 Compatibility matrix classification system**

| Classification system | Score | Interpretation |
|---|---|---|
| No overlap | 0 | Activities do not occur within the same space at any given time. |
| Compatible | 1 | Activities can coexist and interact within a shared space without any conflict, interference, or degradation of function. Overlaps will not affect safety, usability, performance, and may even be mutually beneficial. |
| Moderately compatible | 2 | Activities can coexist and interact with a reasonable degree of harmony, but with notable constraints, trade-offs, or potential for occasional conflicts. The interaction may require monitoring and management. |
| Incompatible | 3 | Activities cannot coexist or function together within the same space. Interaction between activities would lead to conflicts, interference, and degradation. There are no acceptable overlaps that exists without substantial modification or intervention. |

**Figure 3-B**: BSOP Compatibility Matrix





The compatibility matrix classification was applied across the following aspects:

1. **Human Uses:** Human uses include extractive, recreational, cultural, scientific, and infrastructural activities carried out in the marine environment. Their compatibility with ecological conservation varies based on intensity, spatial footprint, and ecological impact.
2. **Ecological Features:** Ecological Features refer to natural ecological systems or features that provide habitats, biodiversity, and essential ecosystem services. They are not 'uses', but they are impacted by the extent, type, and location of surrounding human activities.

Coastal and Marine Ecological Features

The Belize marine and coastal ecosystem is characterized by interconnected mangroves, seagrass, and coral reefs that supports a high diversity of species.

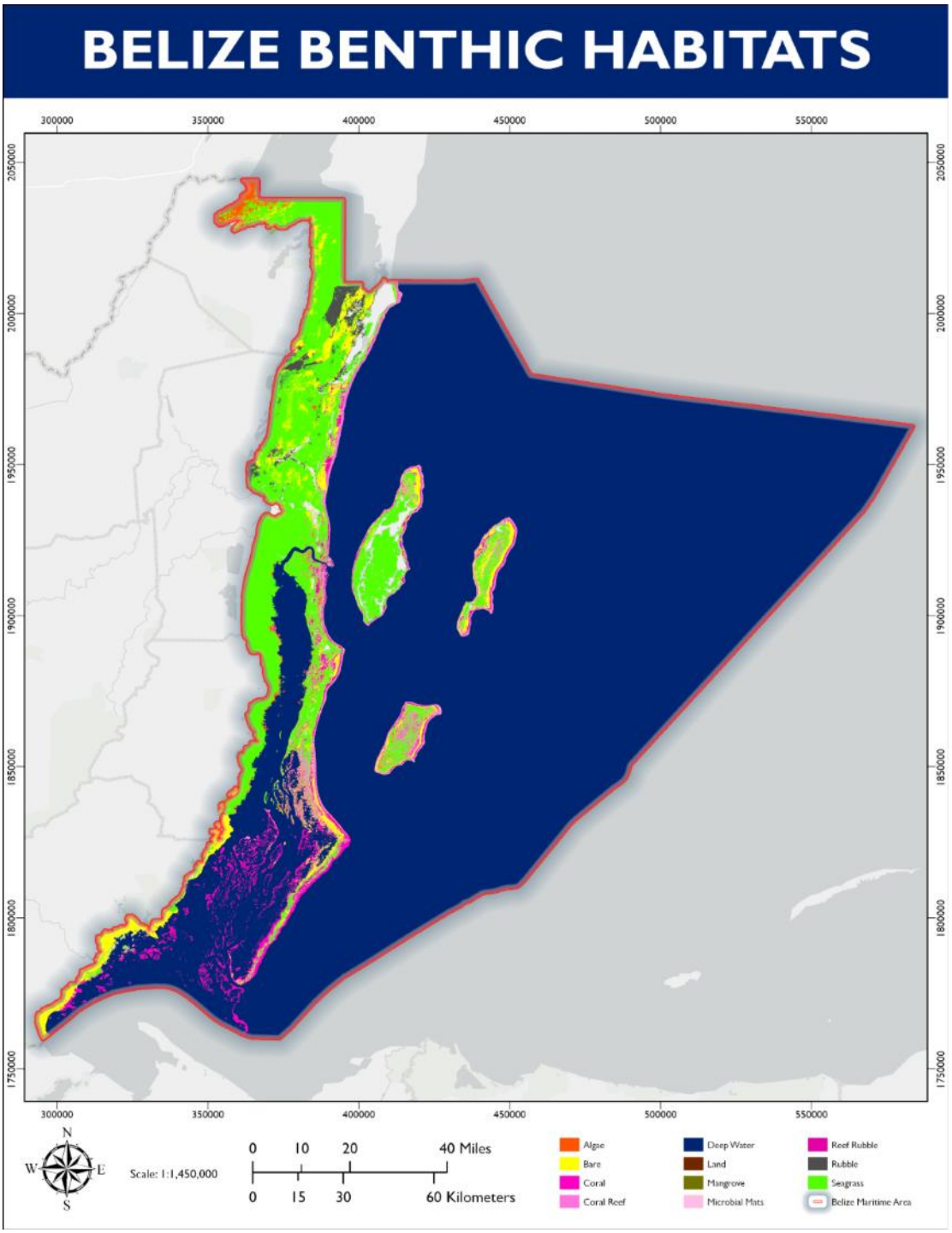
**Coral Reefs:** Belize's coral reefs are one of the country's most important natural assets. They support tourism, fisheries, coastal protection, biodiversity, and cultural heritage, but they are under pressure from sedimentation, pollution, warming seas, dredging, and other human activities. Recent assessments show reef health has declined, with many sites now rated poor or critical, and disease and overfishing are major concerns (McField et al., 2024). The Belize Barrier Reef contributes strongly to the economy through tourism, fishing, and shoreline protection (Cooper et al., 2008). The main threats are sediment runoff, nutrient pollution, coastal development, dredging, climate change, and coral disease. Reef health has worsened in recent years, with many monitored sites classified as poor or critical. The reef also supports endangered and threatened species and is ecologically linked to mangroves and seagrass beds.

**Mangroves:** Mangroves in Belize are vital for coastal protection, fisheries, and the economy, contributing about 25% of GDP and preventing millions in storm damage each year. Belize has around 57,854 hectares of mangroves, mainly on the mainland, with four key species. They are threatened by coastal development, pollution, logging, and agriculture, especially in high-value coastal areas like Ambergris Caye. Despite this, mangrove risk levels improved between 2016 and 2020 due to better management, though some areas remain under pressure. Mangrove loss continues at a modest rate, highlighting the need for ongoing conservation efforts.

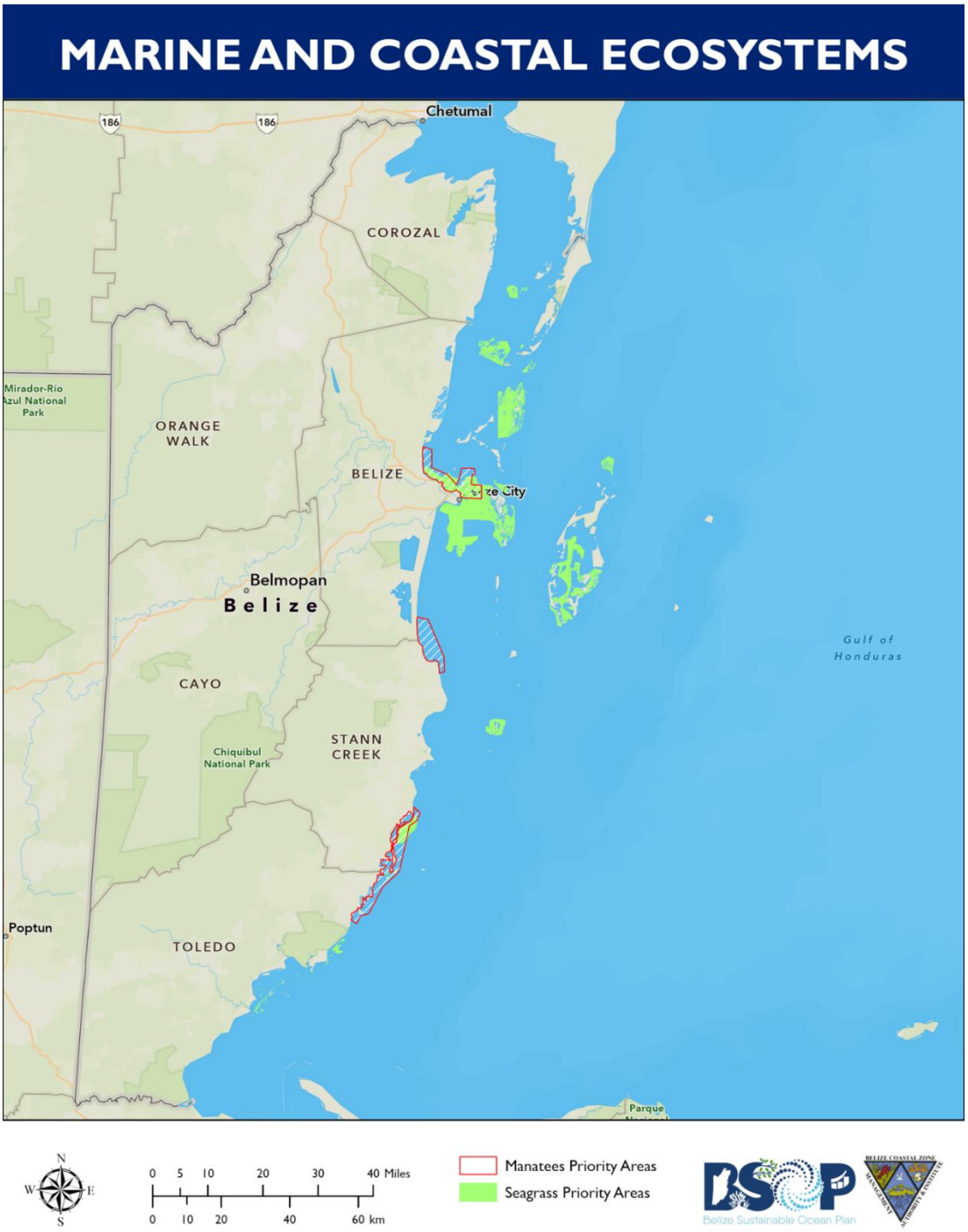
**Seagrass:** Belize has about six recorded seagrass species, and these habitats are ecologically important for juvenile marine life, shoreline protection, sediment control, nutrient cycling, fisheries, and carbon storage. Seagrass cover is extensive but difficult to measure precisely, and only part of the estimated habitat is currently protected. The main threats are coastal development, tourism, pollution, dredging, destructive fishing, and climate change, which have led to habitat loss and declining health in some areas.

Risk has shifted somewhat from high to medium in parts of Belize due to zoning measures, but pressure remains high in key regions, especially where human activity is intense.

**Threatened species:** Belize's Ocean contains several globally threatened species, including endangered megafauna such as the West Antillean manatee, American crocodile, marine turtles, and important birds. The Belize reef system also includes critically endangered species such as staghorn coral, elkhorn coral, goliath grouper, hawksbill turtle, and smalltooth sawfish. These species are under pressure from habitat loss, overfishing, coastal development, pollution, and climate change. Corals are especially affected by sedimentation, land-based contamination, warming seas, ocean acidification, and stronger storms, while hawksbill turtles face nesting habitat loss and skewed hatchling sex ratios caused by rising temperatures. Goliath grouper populations have also declined sharply because of fishing pressure, nursery habitat loss, and changing ocean conditions. Belize has 11 reef-associated species listed as endangered and 52 threatened species recorded in marine waters between 2014 and 2024. The marine and coastal ecosystems will be managed through an ecosystem-based approach through the delivery of the BSOP.




**Map 4 Belize Benthic Habitats. Source: CZMAI**




**Map 5 Marine and Coastal Ecosystems. Source: CZMAI**

The Marine and Coastal Ecosystem identified areas of priority for Seagrass and Manatee. The areas are:

**Manatees Priority Areas** - these areas depict areas of high-priority areas for Manatees as these areas have the highest density of mangroves along the coast. These areas are the (i) Placencia Peninsula lagoon, (ii) Off the northern coast of Stann Creek, and (iii) one off the coast near the mouth of the Belize River going up the Rocky Point Lagoon.

**Seagrass Priority Areas** – Seagrass priority areas that have been identified through community stakeholder engagement and consultation that were done for the Seagrass Management Policy. Areas identified include seagrass in front of Belize City, Southern Turneffe Lagoon, Caye Caulker, Seagrass on the leeward side of Ambergris Caye, Placencia Lagoon, and seagrass near the coast within Port Honduras Marine Reserve.

SECTION

4

# Zoning Design and Framework



©dam/Adobe Stock

# 4 Zoning Design and Framework

**IN THIS CHAPTER**

4.1 **Ocean Zoning Process**

4.2 **National Ocean Zoning Framework**

As pressures on Belize's ocean increase from development, tourism, transportation, climate change, and competing resource uses, the need for an integrated, science-based approach to managing the marine environment has never been greater. The Belize National Zoning Framework (NOZF) responds to this need by providing a comprehensive, legally grounded framework for organizing and governing all uses within Belize's ocean space. This zoning framework establishes a standardized set of national zone types that support existing and potential future use areas. Together, these zones delineate where and how various activities may occur, reducing conflict among users while supporting long-term ecosystem health. Each zone is aligned with the guiding vision of the BSOP: "*a healthy, resilient, and equitably shared ocean that supports people, nature, and prosperity*." The Framework integrates a wide range of legal, scientific, and policy foundations, as well as Belize's international commitments under global biodiversity, climate, and cultural conventions. Finally, this framework supports implementation of the BSOP through its application to Belize's national marine jurisdiction, excluding terrestrial areas. The total marine area used for zoning calculations is 33,367.89 km², representing 100% of Belize's Ocean. This includes:

- Internal Waters
- Territorial Sea
- EEZ

Clause 1 of the Conservation Funding Agreement stipulates that the MSP shall "Denote in reasonable detail, the permissible activities that may be lawfully carried out in any part of Belize's Ocean." These activities must cover the broad spectrum of existing and potential uses across the various sectors that comprise Belize's Blue Economy. Additionally, activities in any given space must align with marine conservation objectives focused on improving and maintaining biodiversity protection and Belize's capacity for climate change adaptation. Therefore, zone designations within Belize's Ocean will include the following:

- Human Use Zones (Single-Use and Multiple-Use)

- Objective-based zones

*Human Use Zone*

Refers to designated geographic areas within a marine environment specifically allocated to support existing and potential human activities. These use zones correspond to a wide array of activities across the various sectors identified for this process. There are two types of human use zones designated under this framework:

1. *Single Use Zones*: Designated ocean area allocated exclusively for one primary activity or purpose, where all other uses are restricted or prohibited to ensure safety, effectiveness, and management clarity.
2. *Multiple Use Zones:* Flexible ocean area where a variety of compatible activities, such as fishing, research, tourism, navigation, swimming, and community recreation, are allowed to co-occur under coordinated management. These zones are designed to support inclusive, equitable, and well-governed access to ocean space while reducing conflicts and maintaining environmental sustainability.

*Objective Based Zones*

Refers to areas of the ocean space defined and managed according to specific planning or management objectives, rather than only by the type of activity allowed there.

## 4.1 Ocean Zoning Process

Belize's ocean zoning process is a structured, evidence-informed, and participatory approach to designate BPZs and zones for permissible uses that may be lawfully carried out within the Belize Ocean. The process aligns with MSP principles of ecosystem-based management, transparency, and integrated governance, and is designed to balance ecological conservation, economic development, and social equity. The framework emphasizes cross-sector integration, ensuring that fisheries, tourism, conservation, navigation, security, and cultural heritage considerations are treated cohesively. A structured, objective-driven zoning approach was used to define national zone types, supported by scientific evidence, legal and policy analysis, and best-practice standards. This approach ensures that zoning decisions are transparent, evidence-driven, and adaptable to evolving environmental, social, and governance needs.

General steps for the preparation of this zoning framework are as follows.

1. *Assess Existing Zoning Frameworks:* Analyse existing sectoral zones and regulations, including biodiversity protection zones within the BSOP planning area, to determine alignment with international frameworks and best practices for zoning.
2. *Evaluate Human Uses and Compatibility*: Assess the Analysis of Current and Future Uses and Conditions & the BSOP Compatibility Matrix to identify existing & proposed human uses, zoning needs, and spatial or policy gaps within the current framework.

3. *Draft a National Marine Zoning Framework for the BSOP:* Develop a multi-sectoral zoning framework that defines zone types, objectives, and permissible activities, ensuring consistency with the BSOP's goals
4. *Facilitate Stakeholder Validation:* Conduct stakeholder consultations to review, refine, and validate the proposed zoning framework.

For this process, the foundational work to compile and define the National Ocean Zoning framework was done via a consultancy entitled "*Consultancy to produce a comprehensive Marine Protected Area (MPA) design criteria (Appendix 4) and national zoning framework to support the development of the Belize sustainable ocean plan*[3]".

The resulting draft NOZF produced via consultancy was further validated by stakeholders via subsequent rounds of community meetings and future planning sessions held in coastal communities. Additionally, the draft NOZF underwent additional scrutiny during the mandatory sixty (60) day public inspection and was finalized following a final National Validation Session.

## 4.2 National Ocean Zoning Framework

The NOZF developed for the BSOP defines ocean zones based on zone name, zoning category, spatial objectives, zone description, permitted activities, and restricted/prohibited activities (Appendix 6). Zone types are not mutually exclusive with existing designations but are designed to organize and harmonize them under a single national system. The framework will outline the following information (table 8):

**Table 8** National Ocean Zoning Framework Information

| | |
|---|---|
| *Zone Category* | Overarching type of area that prescribes specific permitted uses, activities, and management objectives within a designated portion of the marine or coastal environment. |
| *Zone Name* | The specific, identifiable label assigned to a distinct area or zone within the marine or coastal domain. |
| *Spatial Objectives* | A clear, measurable statement that describes the desired ecological, social, or economic condition for a specific area or the broader marine space. |
| *Zone Description* | Narrative text that explains what a zone is, why it exists, and the key characteristics that define its purpose, scope, and governance. |
| *Permitted Activities* | Uses or actions that are explicitly allowed within a zone under defined conditions, safeguards, and monitoring requirements. |
| *Restricted/Prohibited Activities* | Uses or actions that are not allowed or are severely limited within a zone, either permanently or under specific conditions, to protect objectives such as biodiversity, habitats, cultural values, or public safety. |

[3] Link to full report: Consultancy Report National Zoning Framework and MPA design criteria.pdf

### 4.2.1 Cumulative BSOP Zoning Map

- The BSOP Zoning Map outlines the National Ocean Zoning Framework for the entirety of Belize's Ocean Space (Map 6).
- Broad, translucent blue corridors delineate offshore Shipping Lanes, ensuring commercial navigation safely coexists with the network of existing and proposed underwater Submarine Cables.
- The nearshore internal waters features an intricate intersection of marine transportation and economic activity, marked by highlighted Tourism Priority Areas and an interconnected set of Water Taxi Routes.
- Careful consideration was given to balancing community use with marine livelihoods, with the identification of space to support Traditional Fishing, Seaweed Farming, Commercial Fishing, and the specialized Flat Fishing Priority Zone to sustain local economies and recreational marine heritage.
- Special consideration was given to vital marine habitats critical for biodiversity, leading to the designation of dedicated Manatee and Seagrass Priority Areas.
- The framework integrates maritime security and infrastructure by identifying key Ports and identifying space to support enforcement readiness through Coast Guard Operational Zones.

Notable Potential Spatial Conflicts

- Water Taxi Routes heavily intersect with Manatee Priority Area and nearshore Seagrass Priority Area along the central and northern coast. This overlap creates a high risk for vessel strikes on slow-moving manatees and wake damage to shallow seagrass beds.
- Existing and Proposed Submarine Cables traverse areas that overlap with coastal development activities. If these cable routes intersect with Mooring and Anchoring zones or Marine Dredging Hot Spots, it presents a severe risk of infrastructure damage and service disruption.
- Tourism Priority Areas heavily overlap with Commercial and Traditional Fishing Priority Areas near the barrier reef and cayes. The presence of recreational divers, snorkelers, and tour boats in the same physical space as active fishing operations can lead to direct user group clashes and resource competition. Currently, this overlap is being managed temporally, with both activities not typically occurring at the same time. However, with increasing spatial demand for both activities into the future, there may be the need for other specialized zonation (i.e. objective based zones).

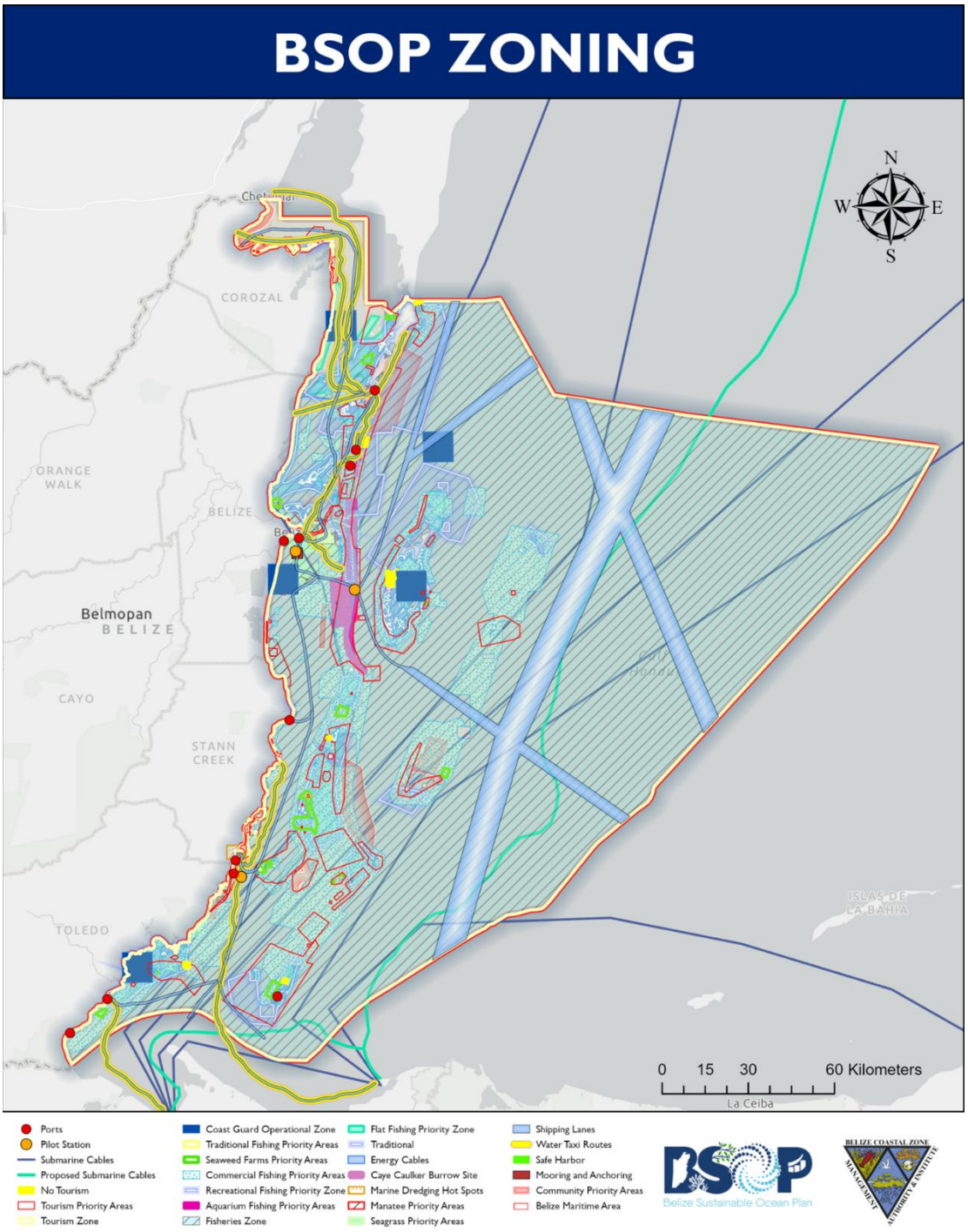
Notable Spatial Complementarity

- The overlap between Seagrass Priority Areas and Flat Fishing Priority Zones is highly complementary. Seagrass beds are the essential biological foundation for bonefish, tarpon, and permit. Protecting this habitat inherently sustains the lucrative, catch-and-release flat fishing industry.
- The alignment of Tourism Priority Areas with specific non-extractive zones works synergistically. Marine preservation enhances the aesthetic and ecological value of the area, which in turn drives the tourism economy.

The following table is a summary of spatial allocations for each human use zones considered during the MSP process:

## Table 9 Summary of Spatial Allocations for Human Use Zones

| Zone Category | Category Type | Zone Name | Area_km2 | % Ocean Space |
|---|---|---|---|---|
| Human Use Single | Coast Guard Operational Zone | Coast Guard Operational Zone | 500.2 | 1.5 |
| Human Use- Multiple Use Zone | Fisheries | Aquarium Fishing | 210.77 | 0.63 |
| Human Use- Multiple Use Zone | Fisheries | Seaweed Farm Priority Areas | 143.08 | 0.43 |
| Human Use- Multiple Use Zone | Fisheries | Flat Fishing Zone | 1934.36 | 5.8 |
| Human Use- Multiple Use Zone | Fisheries | Commercial Fishing Priority Zone | 5159.31 | 15.46 |
| Human Use- Multiple Use Zone | Fisheries | Fisheries Zone | 32301.66 | 96.8 |
| Human Use- Multiple Use Zone | Fisheries | Recreational Fishing Zone | 3712.9 | 11.13 |
| Human Use- Multiple Use Zone | Tourism | Tourism Zone | 33704.59 | 99.93 |
| Human Use- Multiple Use Zone | Tourism | No Tourism | 23.34 | 0.07 |
| Human Use- Multiple Use Zone | Tourism | Nautical Tourism Priority | 1078.83 | 3.23 |
| Human Use- Multiple Use Zone | Tourism | Tourism Priority Areas | 2490.59 | 7.46 |
| Human Use- Multiple Use Zone | Community Use Zone | Traditional | 3.96 | 0.01 |
| Human Use- Multiple Use Zone | Community Use Zone | Community Priority Use Zone | 1056.78 | 3.167 |
| Human Use- Multiple Use Zone | Maritime Administration | Shipping Lanes | 4379.72 | 13.13 |
| Human Use- Multiple Use Zone | Maritime Administration | Safe Harbour | 1.33 | 0 |
| Human Use- Multiple Use Zone | Maritime Administration | Mooring and Anchoring | 13.76 | 0.04 |
| Human Use- Multiple Use Zone | Energy | Energy Cables | 37.48 | 0.11 |
| Human Use- Multiple Use Zone | Marine and Coastal Development | Burrow Site | 6.31 | 0.02 |
| Human Use- Multiple Use Zone | Marine and Coastal Ecosystems | Manatee Priority Areas | 273.84 | 0.82 |
| Human Use- Multiple Use Zone | Marine and Coastal Ecosystems | Seagrass Priority Areas | 523.37 | 1.57 |




**Map 6 Cumulative BSOP Zoning Map. Source: CZMAI**

### 4.2.2 Human Use: Single Use Zone

#### 4.2.2.1 Coast Guard Operational Zone

Belize's Ocean space is occasionally used for Coast Guard training activities and exercises. The plan provides specific areas for the Coast Guard to conduct these activities within our ocean space. Five (5) areas have been identified as Coast Guard Operational Zones, which include existing and newly identified areas. The Coast Guard Operational Zone is temporal and during military exercises all other human ocean activities including boating, fishing, dredging, and tourism are restricted. Prior to conducting activities, a notice to the public and marine users will be issued. The zones were identified based on areas historically used, and areas used the least for tourism and fishing. Each zone is a 10-kilometer square and encompasses a total area of 100 square kilometers. The five zones include:

I. *Coast Guard Operational Zone 1- Northern:*

*This zone is designated for the Northern areas of Belize and lies near the coast of the Corozal District and approximately 10 kilometers west of Ambergris Caye. The area has minimal human use activities occurring in the areas and avoids high occurrence of manatee areas to have minimal impact on human activities and biodiversity.*

II. *Coast Guard Operational Zone 2- Deep Sea:*

*Zone 2 lies approximately 9 kilometers north of Turneffe Atoll's drop off and is in deep water.*

III. *Coast Guard Operational Zone 3- Central Belize:*

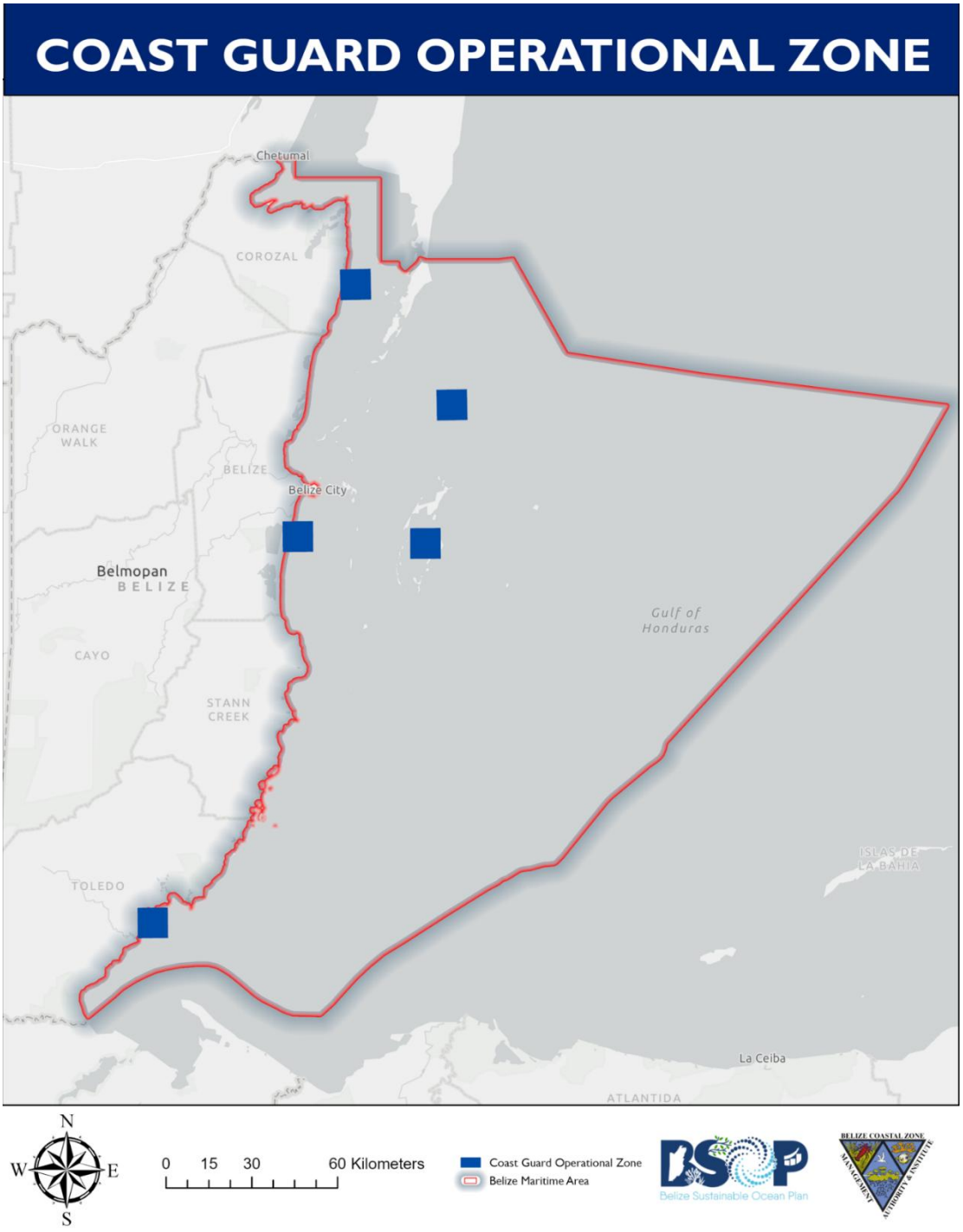
*Zone 3 is found in central Belize, and near the coast in front of Northern Lagoon and approximately 10 kilometers from the Belize City Coast Guard base going south along the coast. The areas designated have minimal human activities occurring in the area.*

IV. *Coast Guard Operational Zone 4- Turneffe Central Lagoon:*

*Zone 4 is located near the center of Turneffe Atoll's central lagoon, west of Blackbird Caye Conservation zone, north of Long Bouge Conservation zone and east of the preservation zone. The area is within the General Use of the Turneffe Atoll Marine Reserve, has the least fishing and tourism use, and the area has historically been used by the Coast Guard for military activities and exercises. The use of this zone is highly recommended outside of the conch and lobster season, leaving April, May and June as the recommended time to conduct these activities. Zone 2 can alternately be used at the peak of the tourism, conch and lobster season.*

V. *Coast Guard Operational Zone 5- Southern Belize:*

*Zone 5 is located near the coast of the Toledo District, near the mouth of the Seven hills creek. This area has minimal human uses occurring in the area and has historically been used for military exercises.*




**Map 7 Coast Guard Operational Zone. Source: CZMAI**

**Table 10 Human Use Zone: Single Use Zone – Coast Guard Operational Zone Description Summary**

| Zone Category | Zone Name | Spatial Objective | Zone Description |
|---|---|---|---|
| Human Use: Single Use Zone | Coast Guard Operational Zone | To designate offshore training areas for weapons and tactical exercises., used to support national security, patrol deployment, surveillance, readiness, and tactical training. These areas require controlled and restricted access to protect assets and personnel. | This zone defines areas to support military training and live firing ranges (temporal) at sea and restricts any other uses, especially during activation periods. |
| Permitted activities:<br>• Coast Guard operations only are permitted, including vessel deployment, maritime patrols, boat maneuvering, tactical training, drone use, and emergency response. (Note: "diving" is permitted if Coast Guard requests it; civilian diving is not permitted).<br>• Live Firing Ranges at Sea: Coast Guard live-fire training operations only during scheduled activation periods. Outside activation periods, normal navigation and transit are allowed. | | | |
| Restricted/Prohibited Activities:<br>• Civilian access is restricted only during active training periods. During activation, the area becomes a temporary no-entry zone for public safety. Notices to Mariners and Notices to Airmen (NOTAM) will be issued. Outside of designated training periods, normal navigation and transit are allowed.<br>• Airspace restrictions during live-fire operations are temporary and coordinated through Civil Aviation. | | | |

### 4.2.3 Human Use: Multiple Use Zones

#### 4.2.3.1 Fisheries and Mariculture

Overview:

- Relatively small but strategically important part of Belize's economy which supports livelihoods in coastal communities, food security, source of export earnings, and tourism.
- The sector comprises both high-sea and coastal fisheries, with coastal fisheries dominated by small-scale, artisanal operations.
- Approximately 3,642 licensed fishers operate from 988 vessels (2025).
- 3.6% Female to 96.4% Male licensed fishers.
- Management measures introduced include: fisherfolk licensing system, implementation of closed seasons (conch and lobster), use of a quota system (conch), size limits, gear restrictions, Marine Protected Areas, Managed Access system.
- Fishing Area 6 (Turneffe Atoll) contains the highest number of licensed fishers with 1,423 licenses followed by Area 3 (South Water Caye Area) with 1150 licenses.
- Most common vessel size ranges from 28ft - 32 ft in length (2025).
- Contribution to GDP: < 1% (2024)
- Value of sector exports: BZ $35.95 million (Lobster Tails $19.24 million, Whole lobster $2.49 million, Conch $13.37 million, Other products: approx.. $0.85 million (2024)
- Main export product: Spiny lobster *(Panulirus argus)*, Queen conch *(Aliger gigas)*
- Common species of finfish captured for domestic consumption include: groupers, snappers, jacks, hogfish, king mackerel, and barracuda
- Mariculture is very small and includes experimental or limited scale cultivation of seaweed.
- The Belize Fisheries Department currently issues seaweed operations with scientific or marine research permits as an interim regulatory arrangement.
- Seaweed cultivation is concentrated in the southern coastal communities of Belize along the Placencia Peninsula and Lagoon, Independence/Mango Creek Village, Punta Gorda, Hopkins-Sittee River areas and the Turneffe Atoll area.
- Value added products are crafted by at least three (3) enterprise or association; Blue Nutrients Belize, Riversdale Sea Moss/Blue Water Fishermen Association and the Belize Women's Seaweed Farmers Association.
- Recreational Fishing generates over $240 million USD annually.
- Recreational Fishing industry directly supports over 2,000 full-time local jobs, including specialized guides, captain crews, and coastal lodge staff.

- Anglers represent one of the highest-spending visitor segments in Belize, with an average stayover spend exceeding $2,500 to $3,500 USD per trip when factoring in specialized charter guides, luxury eco-lodges, gear rentals, and licensing fees.
- Most notable species include Bonefish, Permit, and Tarpon.

Key sector issues:

- Balancing the management of lobster and conch stocks while protecting fishing-dependent communities.
- Inadequate local/domestic landing and catch data
- Illegal transboundary fishing
- Inadequate human and financial resources to support robust and effective enforcement.
- Increase in ocean temperature, coral reef degradation, increased storms, and changes in species distribution associated with global climate change, which affect hydrographic and meteorological conditions, plankton dynamics, spawning success, nursery-habitat availability, and overall fish-stock productivity.
- Anecdotal and survey evidence suggests fishers are increasingly landing less desirable species such as barracuda, indicating pressure on key reef fish such as snapper and grouper.

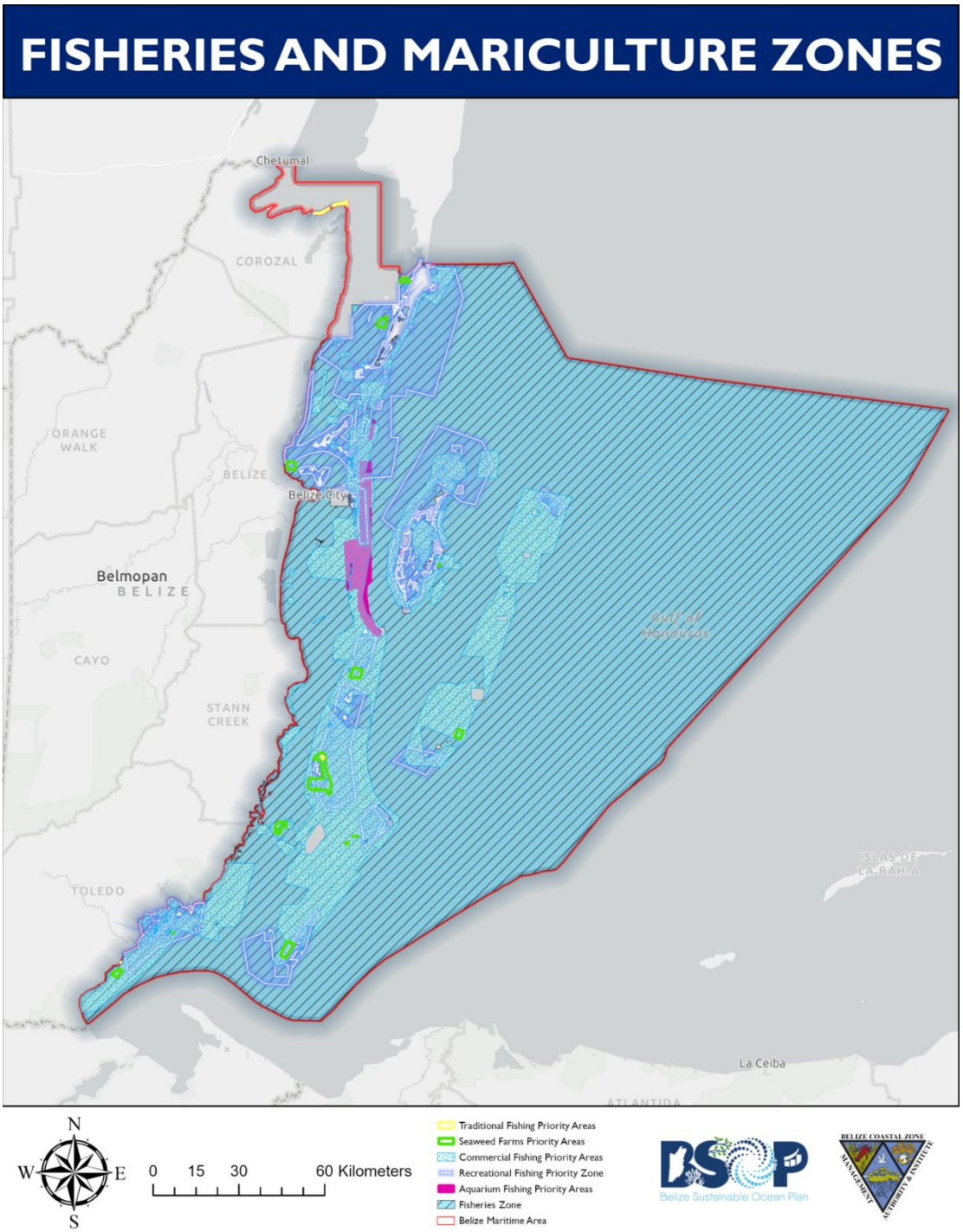
Fisheries and Mariculture Zone

In general Fishing can be done across our ocean space except for areas within Natural Monuments, National Parks, No Take Zones, Recreational Zones, Preservation and Wilderness zones, Seasonal Closure zones (during the closed season), Spawning Aggregation Sites (other than regulated traditional fishing where the site regulations allow it, e.g. Gladden Spit), Wildlife Sanctuaries (other than regulated subsistence fishing where permitted), the Coast Guard Operational Zone, Seabed Mines and Minerals zones and Marine Archaeological Sites (other than regulated traditional fishing). The Fisheries Zone represents areas where fishing is allowed within our ocean space. Areas within MPA's that overlap with the Fisheries Zone, such as Conservation zones and General use zones allow fishing but with restrictions- see Marine Protected Areas for additional information. The Fisheries zones also include priority areas for Aquarium Fish Trade, Commercial Fishing, Recreational Fishing, Seaweed Farms, and Traditional Fishing.

**Table 11 Fisheries and Mariculture Zone Human Use Activities**

Human Use Activities:

| | |
|---|---|
| *Aquarium Fishing Priority Areas* | Designated priority areas for the harvest, collection, and trade of fish intended for the aquarium trade, destined for display in public aquariums, retail shops, or private kept ecosystems. Currently the Aquarium fish trade is a small industry with approximately 7 active license holders to collect aquarium fish species. The Priority areas for this are areas along the barrier reef which include the reef in front of Caye Chapel Hill and from Frenchman's Caye along the reef up to Southern Long Caye. |
| *Commercial Fishing Priority Areas* | Designated priority areas for the taking, breeding, producing, killing or capturing of any fish by any means whatever or the attempt or preparation to do so, for the purpose of the sale, or other disposition of the fish for money or money's worth. |
| *Recreational Fishing Priority Areas* | Designated priority areas for sports fishing which include Reef, Pelagic and Flats Fishing areas which involve fishing for leisure and enjoyment as well as fishing with the intention to eat the fish caught, but shall not include sale, exchange or bartering. The priority areas span across shallow back reef areas, and off short atolls from North to South. In specific includes areas around Ambergris Caye, South Water Caye Marine Reserve, the three atolls, Port Honduras Marine Reserve, Sapodilla Caye Marine Reserve, areas around Gladden Spit and Silk Cayes Marine Reserve and Gallow's Point to Goff's Caye. |
| *Seaweed Farm Priority Areas* | Designated priority areas for the cultivation and harvesting of aquatic macroalgae (seaweeds) for commercial, subsistence, or research purposes. The priority areas include potential as well as current farms in front of the Placencia Peninsula, at Turneffe Atoll, and at Glover's Atoll. |
| *Traditional Fishing Priority Areas* | Designated priority areas for the fishing activities that are rooted in long-standing cultural practices, local knowledge, and communal or household livelihoods. These practices are typically passed down through generations and are intimately linked to the social and economic fabric of Belizean communities, including coastal Maya, Garifuna, Creole, and other local groups. Traditional needs can be undertaken for subsistence, cultural rituals, local trade, or small-scale sustenance needs, and are often conducted using historically common methods and gear. These zones highlight key traditional fishing grounds, outlining coastal beach traps used by Sarteneja fishers in the north and surrounding the waters of Peter Douglas Caye in the south, an essential area for Garifuna community members to gather marine products for traditional ceremonies. |




**Map 8 Fisheries and Mariculture Zones. Source: CZMAI**

**Table 12 Human Use Zone: Multiple Use Zone – Fisheries and Mariculture Zone Description**

**Summary**

| Zone Category | Zone Name | Spatial Objective | Zone Description |
|---|---|---|---|
| Human Use: Multiple Use Zone | Fisheries and Mariculture | i) To promote sustainable and equitable fisheries management, ensuring responsible use of Belize's marine resources while safeguarding the livelihoods and food security of traditional fishers. Ultimately, it contributes to the long-term ecological integrity and economic sustainability of Belize's fisheries sector.<br>ii) To allocate suitable marine and coastal areas for environmentally responsible mariculture operations that diversify Belize's blue economy, reduce pressure on wild fish stocks, and meet food security goals. | This zone delineates areas open to support sustainable fishing in Belize and identifies priority areas for commercial, traditional, Aquarium Trade, recreational, deep-sea fishing, sportfishing. Additionally, this zone designates areas suitable for mariculture activities of fish or other aquatic organisms in open water or enclosed systems, whether located in fisheries waters or land based. |

Permitted activities:

- Licensed commercial and subsistence fishing by registered fishers within designated fishing areas
- Catch, effort, and species-specific fishing consistent with Fisheries Department regulations and seasonal closures.
- Use of approved fishing gears and methods that minimize bycatch and habitat damage.
- Community monitoring, data collection, and compliance reporting.
- Education, training, and alternative livelihood projects that strengthen stewardship.
- Rearing and cultivation of approved species of marine finfish, shellfish, or aquatic plants using approved methods.
- Use of Integrated Multi-Trophic Aquaculture
- Implementation or approved Research and pilot projects with the proper permits.
- Environmentally compliant farm operations and best practices.
- Value-chain activities consistent with national standards.

Restricted/Prohibited Activities:

- Fishing by unlicensed individuals or outside designated Fishing Areas.
- Use of illegal, destructive, or banned fishing gear (e.g., Gillnets, chemicals, explosives, or fine-mesh nets).
- Harvesting of protected species, undersized catch, or during closed seasons.
- Commercial fishing in replenishment or conservation zones.
- Activities causing habitat degradation, pollution, or interference with other ocean-use zones
- No clearing of seagrass.
- Industrial development, seabed mining, or coastal reclamation within MPA boundaries without conducting an Environmental Impact Assessment or Limited Level Environmental Study.
- Rearing and use of invasive species
- Conducting operations without environmental clearance
- Conducting mariculture operations in ecologically sensitive or high-conflict zones
- Activities that can cause pollution, eutrophication, disease spread, or escapes of genetically incompatible stock
- Large scale and unregulated dredging in fishing areas outside MPAs.

### Table 13 Fisheries and Mariculture Human Use Zoning Typology

*Legend: A: Allowed, R: Regulated, P: Prohibited*

| | Human Use Zone: Single Use | Human Use Zone: Multiple Use Zones | | | | | Objective Based Zone | | |
|---|---|---|---|---|---|---|---|---|---|
| ***Fisheries and Mariculture Zone*** | *Coast Guard Operational* | *Tourism Zone* | *Coastal and Marine Development* | *Energy Zone* | *Maritime Administration Zone* | *Community Use Zone* | *Seabed Mines and Minerals* | *Flat Fishing Zone* | *Marine Archaeological Zone* |
| **Commercial Fishing** | P | R | A | A | R | R | P | R | P |
| **Non-Commercial Fishing** | P | A | A | A | R | A | P | R | P |
| **Traditional Fishing** | P | A | R | A | R | A | P | A | R |
| **Seaweed Farming** | P | R | P | P | P | P | P | R | P |
| **Sea Cucumber Farming** | P | R | P | P | P | P | P | R | P |
| **Aquarium Trade Fishing** | P | A | R | A | R | A | P | R | P |
| **Recreational Fishing** | P | A | R | A | R | A | P | A | P |
| **Deep Sea/Slope Fishing** | P | A | A | A | R | R | P | R | P |

#### 4.2.3.2 Tourism

Overview:

- Marine tourism is vital to Belize's economic stability, heavily supported by the renowned Belize Barrier Reef Reserve System.
- Ocean and coastal tourism generate roughly 40% of Belize's GDP and supports thousands of local jobs in hospitality, guiding, and maritime transport.
- Marine tourism demand is concentrated in key locations such as the Hol Chan Marine Reserve, the Great Blue Hole, and Turneffe Atoll, where snorkelling and diving dominate, complemented by sport fishing, sailing, and liveaboard excursions.
- Nautical Tourism is seen as a major emerging product with number of international pleasure craft and yachts increasing annually.

Key issues:

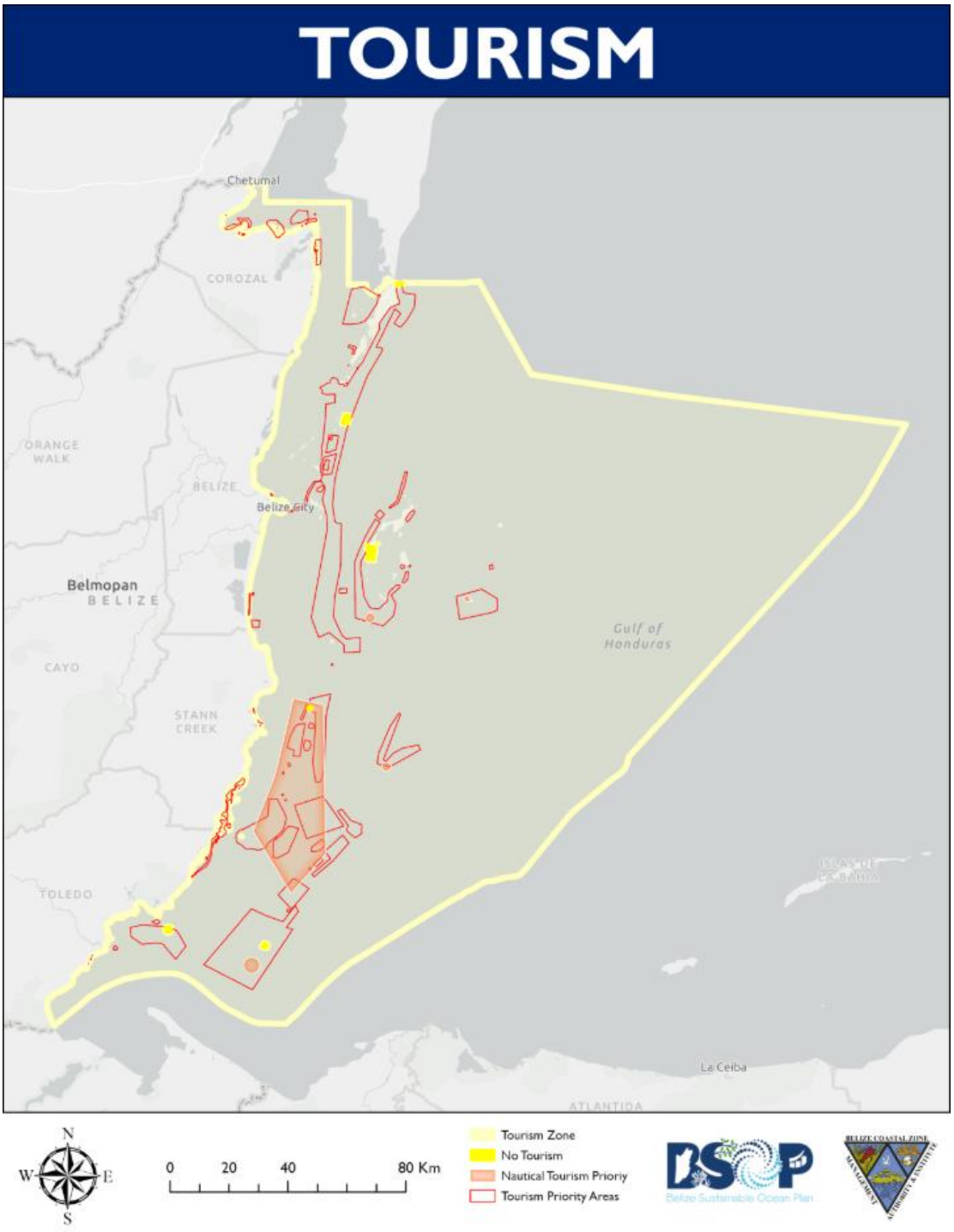
- Massive periodic inundations of foul-smelling sargassum seaweed smother the beaches of major hotspots like Ambergris Caye, Caye Caulker, and Placencia, causing booking cancellations and hurting coastal aesthetics.
- are Increased exposure to hurricanes, storm surges, ocean warming, and coral bleaching threatens low-lying coastal infrastructure and delicate coral ecosystems.
- Proliferation of tourism related development are associated with illegal mangrove clearing, which threatens coastal buffer zones and nursery habitats for local marine life and important commercial species.
- Expanding private coastal resorts occasionally restrict access to the 66ft buffer which creates social friction with local communities.

Tourism Zone

In general tourism activity can be conducted across our ocean space, except in areas designated as preservation and wilderness zones within MPAs and in the Coast Guard Operational Zone, and is otherwise subject to the Allowed/Regulated/Prohibited status set out for each zone in the Tourism Human Use Zoning Typology. Therefore, the Tourism Zone highlights priority areas that have been identified for various tourism-related activities. While most tourism activity is concentrated on the Barrier Reef, priority areas were also identified in deeper waters and near coastal communities. This human use zone identifies areas allocated for reef-based snorkelling and diving, swimming, educational and cultural/historical tours, animal watching, water sports, and nautical and cruise tourism.

**Table 14 Tourism Zone Human Use Activities**

| Human Use Activities: | |
|---|---|
| Swimming<br>*(Designate swimmable zones)* | Recreational and exercise activities conducted in coastal waters, harbours, nearshore zones, and where appropriate, offshore areas. |
| Snorkeling/Scuba<br>*(Snorkeling tours, recreational scuba diving, establishment of dive sites)* | Guided or organized recreational underwater activities that observe marine life and habitats, typically conducted by operators offering snorkeling trips or scuba excursions. |
| Educational<br>*(Field courses, research led field trips, citizen science activities)* | Organized travel and activities that emphasize learning about marine environments, coastal ecosystems, cultural heritage, and conservation while visiting coastal or marine locations. |
| Animal Watching | Guided experiences focused on observing marine wildlife in their natural habitats, conducted by operators for recreational or educational purposes. |
| Cultural/Historical<br>*(Interpretive tours, shipwrecks/site visits, heritage trails, underwater caves)* | Travel and educational experiences that emphasize the cultural heritage, historical use of coastal and marine species, and tangible resources such as shipwrecks, coastal settlements, traditional fishing practices, and nautical archaeology. |
| Water Sports<br>*(Surfing, Windsurfing, Jet Skiing, kayaking, canoeing, wakeboarding)* | Recreational aquatic activities that require access to and use of marine space, typically involving equipment or vessels and conducted for enjoyment, fitness, or competition. |
| Nautical Tourism<br>*(Sailboard charters, yachting, scenic cruise)* | Tourism activities and experiences that are centered on nautical culture, maritime heritage, and experiences on or around the sea that emphasize navigation, boating, and maritime landscapes. Includes sailboat charters, yachting, sailing festivals, regattas etc. |
| Cruise Tourism<br>*(Passenger vessels, high density excursions)* | Activity of visiting coastal regions or destinations aboard cruise ships, typically involving multi-day itineraries, port calls, and shore-side excursions. |




**Map 9** Tourism Zone. Source: CZMAI

**Table 15 Human Use Zone: Multiple Use Zone – Tourism Zone Description Summary**

| Zone Category | Zone Name | Spatial Objective | Zone Description |
|---|---|---|---|
| Human Use: Multiple Use Zone | Tourism Zone | To allocate space to support high-quality, sustainable tourism experiences that enhance Belize's competitiveness while protecting natural and cultural assets, maintaining carrying capacity, and generating economic benefits for local communities. | This zone identifies areas allocated for reef-based snorkeling and diving, swimming, educational and cultural/historical tours, animal watching, water sports, and nautical and cruise tourism. |
| Permitted activities:<br>• Low-impact tourism such as snorkeling, diving, wildlife viewing, guided tours, sportfishing, kayaking, cultural experiences, and community-based tourism enterprises consistent with STMP product development strategies.<br>• Mass tourism activities in appropriately designated areas.<br>• All tourism activities approved in site specific management plans and general tourism regulations. | | | |
| Restricted/Prohibited Activities:<br>• Conducting tourism activities that conflict with core sustainability, cultural integrity, or community well-being. (e.g. High-density tourism in ecologically sensitive areas)<br>• Unregulated or unauthorized motorized water sports activities.<br>• Activities that can cause irreversible and severe habitat destruction.<br>• Overcrowding beyond established carrying capacity.<br>• Activities that are inconsistent with Tourism regulations and best practices. | | | |

**Table 16 Tourism Human Use Zoning Typology**

| | Human Use Zone: Single Use | Human Use Zone: Multiple Use Zones | | | | | Objective Based Zone | | |
|---|---|---|---|---|---|---|---|---|---|
| ***Tourism*** | *Coast Guard Operational* | *Fisheries and Mariculture* | *Coastal and Marine Development* | *Energy Zone* | *Maritime Administration Zone* | *Community Use Zone* | *Seabed Mines and Minerals* | *Flat Fishing Zone* | *Marine Archaeological Zone* |
| **Swimming** | P | A | R | A | P | A | P | A | R |
| **Snorkeling/Scuba** | P | A | R | R | R | A | P | A | R |
| **Educational** | P | A | R | A | R | A | P | A | R |
| **Animal Watching** | P | A | R | A | R | A | P | A | R |
| **Cultural/Historical** | P | A | R | R | P | A | P | A | A |
| **Water Sports** | P | R | R | A | R | R | R | P | P |
| **Nautical Tourism** | P | R | A | A | A | R | A | P | P |
| **Cruise Tourism** | P | R | A | A | A | P | A | P | P |

*Legend: A: Allowed, R: Regulated, P: Prohibited*

#### 4.2.3.3 Marine and Coastal Development

Overview:

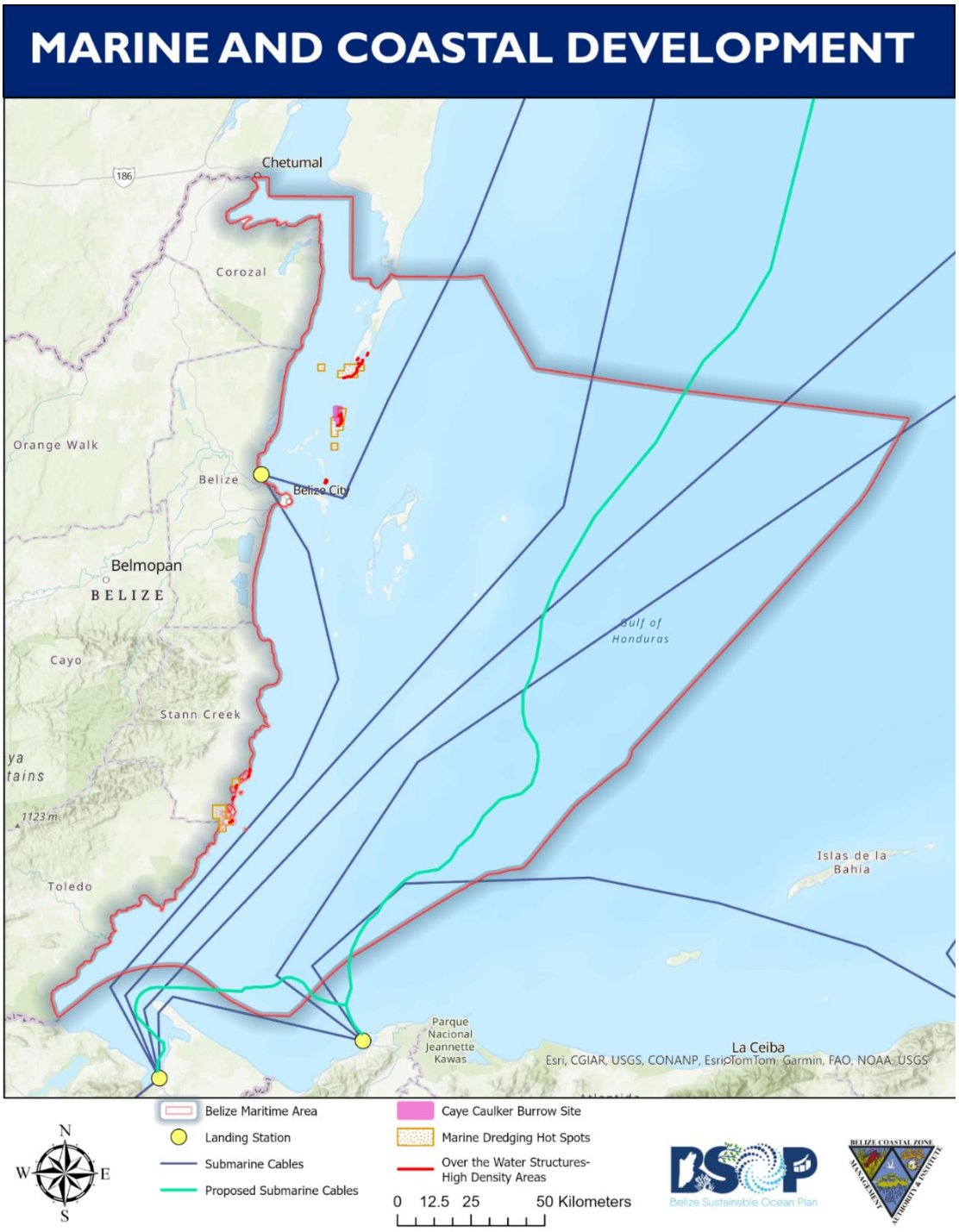
- This zoning category includes development activity carried out directly within Belize's ocean space or that causes a footprint.
- Unlike other the human use zones activities within this zoning categories are site specific and occur on an ad hoc basis, which makes it difficult to establish a use zones.
- The spatial information presented identifies dredging hotspots as well as areas with a high density of overwater structures that can be used to inform management decisions in the future. This may include areas where applications for overwater structure would experience greater scrutiny or can inform the placement of future Seabed Mines and Mineral Objective based zones for the extraction of materials.
- There are currently six submarine utility cables that extend across Belize's ocean space with landing sites in Belize, Guatemala, and Honduras. These cables currently support telecommunication access for all three countries. A seventh cable was being proposed as a part of the Trans Americas Fiber system that would likewise traverse through Belize's ocean space.
- In 2021, a pilot Burrow Site was established in Norther Caye Caulker. The area selected provides Caye Caulker Village and surrounding areas with fill material for development projects. To date, the burrow site is still active and serves as a demonstration of the effectiveness of zoning an area for dredging activity. This model can be used to inform similar sites in other hotspot areas identified.

Key Issues:

- Seabed excavation and sand mining to nourish beaches may destroy critical seagrass beds, release smothering sediment plumes onto nearby coral reefs, and disrupt shallow flats fisheries (crucial for sport fishing).
- Poor construction management can lead to sediments and pollutants washing into the ocean, presenting a risk to sensitive habitats.
- The fragile infrastructure of the small islands is unable to cope with the rate of development, with insufficient or nonexistent sewage treatment facilities adding to pollution issues.

**Table 17** Marine and Coastal Development Human Use Activities

| Human Use Activities: | |
|---|---|
| Overwater Construction *(bridges, piers, offshore breakwaters, marinas)* | Refers to structures, facilities, or installations that are supported above the natural water surface, typically extending into or across the sea surface. I) Can include fixed or floating platforms ii) Harbour or coastal infrastructure iii) floating or semi-submerged structures. Over the water construction were analyzed across major coastal communities to determine areas that have the highest coverage ratio (count and area of structures) within a one-kilometer distance. Areas with High Density have 11 piers or more, with an area greater than 150 square meters. The areas with the highest density are at the Boca del Rio to the southern end of San Pedro, Caye Caulker, areas along the Placencia Peninsula, and St. George's Caye. |
| Ports & Harbor Dredging *(Maintenance dredging sedimentation and siltation in berths, channels, turning basins, and approach paths.)* | Excavation activities conducted within or adjacent to ports, harbors, and their approaches to maintain or enlarge navigable depths ensure safe access, and support economic activity. |
| Development Dredging *(Dredging for land reclamation, coastal defense and offshore construction support.)* | Dredging carried out to enable or support new development projects or redevelopment of port, coastal, or offshore facilities. Dredging hotspots were identified through an analysis of the concentration of dredging permits using data from 2004 - 2025. The primary hotspots identified included Southern San Pedro Town Area, Caye Caulker, and Placencia. |
| Dredged Material Disposal *(Open water disposal of dredged materials)* | The placement of release of materials excavated from sediments or seabed during dredging activities into sea, coastal, or inland water areas. |
| Offshore Infrastructure *(Fixed platforms, piled foundations, floating systems)* | Man-made facilities and installations located in the marine environment beyond the coastline, typically extending into the continental shelf or exclusive economic zone. |
| Land Reclamation and Land Formation *(Dredged material placement, sand or rocks fills, structural barriers, shoreline protection)* | The creation of new land by filling or converting submerged seabed or coastal areas, effectively increasing the land area at the interface of land and sea. |
| Sargassum Management *(Mechanical removal and collection, barriers)* | The actions taken to address the presence and impacts of sargassum seaweed, particularly floating mats within coastal and offshore environments. |
| Submarine Cables | undersea communication and utility infrastructures that are laid on or buried in the seabed to transmit data between land-based stations. The existing landing sites, submarine cables and proposed cables have been identified across our ocean space. The goal of the proposed submarine cables is to establish the first phase of the Trans Americas Fiber system, a subsea fiber optic network designed to deliver telecommunications between USA, Central America and the Caribbean. Connectivity starts from the US to Honduras, with branching to Mexico and Guatemala. |
| Treated Wastewater (Release) *(Point source discharge)* | The discharge of treated effluent from wastewater treatment facilities into the marine environment, coastal waters, or associated ecosystems. |




**Map 10 Marine and Coastal Development Zone. Source: CZMAI**

**Table 18 Human Use Zone: Multiple Use Zone – Marine and Coastal Development Zone Description Summary**

| Zone Category | Zone Name | Spatial Objective | Zone Description |
|---|---|---|---|
| Human Use: Multiple Use Zone | Coastal and Marine Development Zone | To guide coastal infrastructure development in support of economic growth while minimizing environmental degradation, coastal erosion, and habitat loss along Belize's shoreline and nearshore waters. | This zone covers areas designated for and footprint related to overwater construction, offshore infrastructure, development and ports/harbour dredging, dredged materials disposal, land reclamation, sargassum management, and release of treated wastewater. |
| Permitted activities:<br>• Extraction or placement of sediments to maintain navigation channels, harbours and sediment balance for coastal resilience.<br>• Creation of new land of modification of shoreline geometry to accommodate development that is subject to environmental impact assessment and shoreline stabilization measures.<br>• Installation and maintenance of offshore platforms, cables, pipelines, and related structures, ensuring seabed protection, safety clearances and ecosystem considerations.<br>• Allow placement, containment, or processing of dredged materials in designated containment or beneficial use sites, with monitoring to prevent pollution and habitat disruption.<br>• Removal, relocation, or processing sargassum mats for coastal protection, tourism, or resource use, paired with habitat restoration and monitoring to minimize ecological impact. | | | |
| Restricted/Prohibited Activities:<br>• Unregulated dredging and sediment extraction<br>• Aggregated land reclamation beyond approved footprints<br>• Overwater construction without setbacks or permits<br>• Dredge spoil disposal outside designated sites<br>• Offshore infrastructure without decommissioning plan<br>• Sargassum removal without ecological safeguards | | | |

### Table 19 Coastal and Marine Development Human Use Zoning Typology

| | Human Use Zone: Single Use | Human Use Zone: Multiple Use Zones | | | | | Objective Based Zone | | |
|---|---|---|---|---|---|---|---|---|---|
| ***Coastal and Marine Development*** | *Coast Guard Operational* | *Fisheries and Mariculture* | *Tourism Zone* | *Energy Zone* | *Maritime Administration Zone* | *Community Use Zone* | *Seabed Mines and Minerals* | *Flat Fishing Zone* | *Marine Archaeological Zone* |
| **Overwater Construction** | P | R | R | R | R | R | R | R | P |
| **Ports & Harbour Dredging** | P | P | P | P | A | P | R | P | P |
| **Development Dredging** | P | R | R | R | R | R | R | R | P |
| **Dredged Material Disposal** | P | P | P | P | R | P | P | P | P |
| **Offshore Infrastructure** | R | R | P | A | R | P | A | P | P |
| **Land Reclamation** | P | R | R | R | R | R | R | R | P |
| **Sargassum Management** | P | A | R | A | R | A | R | R | R |
| **Treated Wastewater (Release)** | P | R | P | A | A | P | A | P | P |

*Legend: A: Allowed, R: Regulated, P: Prohibited*

#### 4.2.3.4 Energy

Overview:

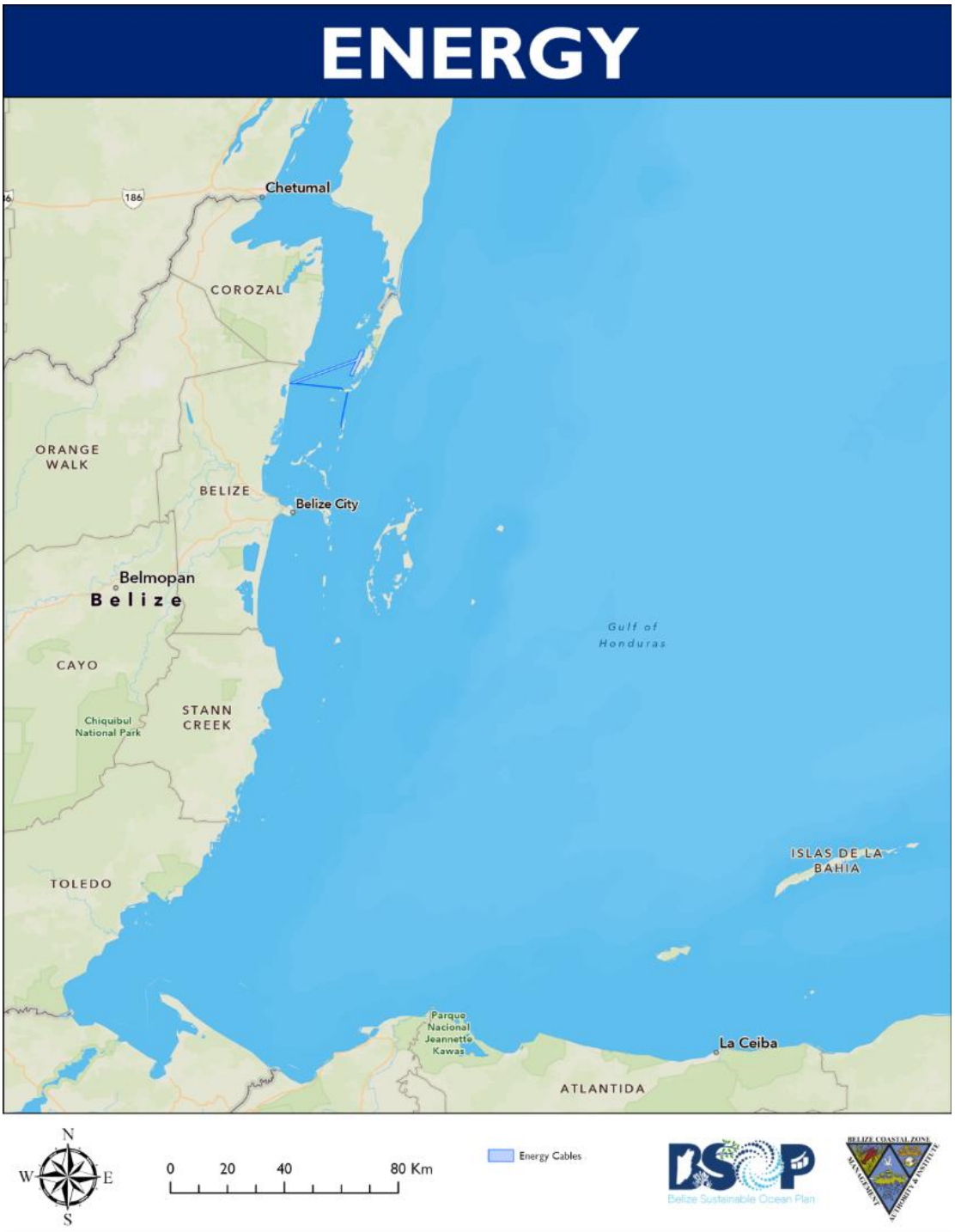
- The Belize energy sector is heavily dependent on imported energy, primarily derived from refined fossil fuels, and on electricity imports from Mexico, which leaves the country vulnerable to supply disruptions and price volatility (BEL, 2021).
- In 2022, Belize's total primary energy supply (TPES) amounted to 17,836.6 terajoules (TJ), of which 64.3% was imported, underlining the country's high dependence on external energy sources.
- Approximately, 36% (6,425 TJ) of national primary energy supply was produced from renewable energy sources (Energy Unit, 2023).
- There is growing interest in offshore and marine renewable energy (OMRE) given Belize's large marine domain. The Belize Maritime Economy Plan (2022) outlines two 10-year implementation tracks for OMRE: the first (years 1–5) aims to clarify the role and potential of offshore marine energy within the national energy mix, and the second (years 5–10) focuses on supporting private-sector research, development, and investment in OMRE technologies.
- In 2017, Belize imposed an indefinite moratorium on offshore oil exploration and production in its territorial seas and EEZ, partly to support the protection of the Belize Barrier Reef System World Heritage Site and its removal from the "danger list" (Gill et al., 2021).
- The findings from the MSP process confirmed that the Belize's Ocean is currently used by the energy sector almost exclusively for the placement of energy transmission cables and found no current offshore or marine renewable energy research, development, or demonstration projects.
- Creation of an energy zone presents the framework to support any future generation activities that may occur in the future.

Key issues

- Local generation is largely based on imported diesel and heavy fuel oil, meaning that fluctuations in global oil markets and cross-border electricity prices are directly passed through to consumers (Energy Unit, 2023).
- Offshore islands connected to the mainland electrical grid via underwater power cables face risks from severe storms, anchor damage, coastal erosion, and saltwater corrosion. Repairs to submerged electrical infrastructure are technically complex and costly.

**Table 20** Energy Zone Human Use Activities

| Human Use Activity | |
|---|---|
| **Submerged Energy Transmission Cables** | **Submarine electrical conduits that transmit power between offshore installations and onshore infrastructure.** |




**Map 11** Energy Zone. Source: CZMAI

**Table 21 Human Use Zone: Multiple Use Zone – Energy Zone Description Summary**

| Zone Category | Zone Name | Spatial Objective | Zone Description |
|---|---|---|---|
| Human Use: Multiple Use Zone | Energy Zone | To allocate marine areas for the exploration, development, and generation of energy resources while minimizing ecological disruption, visual impact, and conflicts with other marine users. | This zone encompasses areas allocated for energy distribution via underwater cables and renewable energy installations. |

Permitted activities:

- Laying, repair, and upgrade of submarine power and data cables, with requirements for route planning, burial depth, and protection from fishing and anchoring activities.
- Siting and construction of structures for potential future wind, wave, or tidal energy devices, including foundations, platforms, and substations, subject to environmental impact assessment and stakeholder consultation.
- Onshore energy conversion and grid connection facilities adjacent to the zone, ensuring proper land-use planning, noise controls, and visual/aesthetic protections.
- Designated transit and access corridors for cables and associated infrastructure, with requirements for disturbance minimization, permitting of trenching, and ongoing monitoring.

Restricted/Prohibited Activities:

- Installation, alteration, or repair of underwater cables without appropriate licensing, route approval, and safety clearances.
- Deployment of wind, wave, or tidal devices without environmental assessment, grid interconnection studies, and stakeholder consultation.
- Trenching or seabed disturbance in protected or high-value habitats without permits and mitigation plans.
- Leaving or partially removing infrastructure without an approved decommissioning plan and long-term monitoring.

**Table 22 Energy Human Use Zoning Typology**

| | **Human Use Zone: Single Use** | **Human Use Zone: Multiple Use Zones** | | | | | **Objective Based Zone** | | |
|---|---|---|---|---|---|---|---|---|---|
| ***Energy*** | *Coast Guard Operational* | *Fisheries and Mariculture* | *Tourism Zone* | *Coastal and Marine Development* | *Maritime Administration Zone* | *Community Use Zone* | *Seabed Mines and Minerals* | *Flat Fishing Zone* | *Marine Archaeological Zone* |
| **Underwater Cable** | R | R | R | R | R | R | P | P | P |

*Legend: A: Allowed, R: Regulated, P: Prohibited*

#### 4.2.3.5 Maritime Administration

Overview:

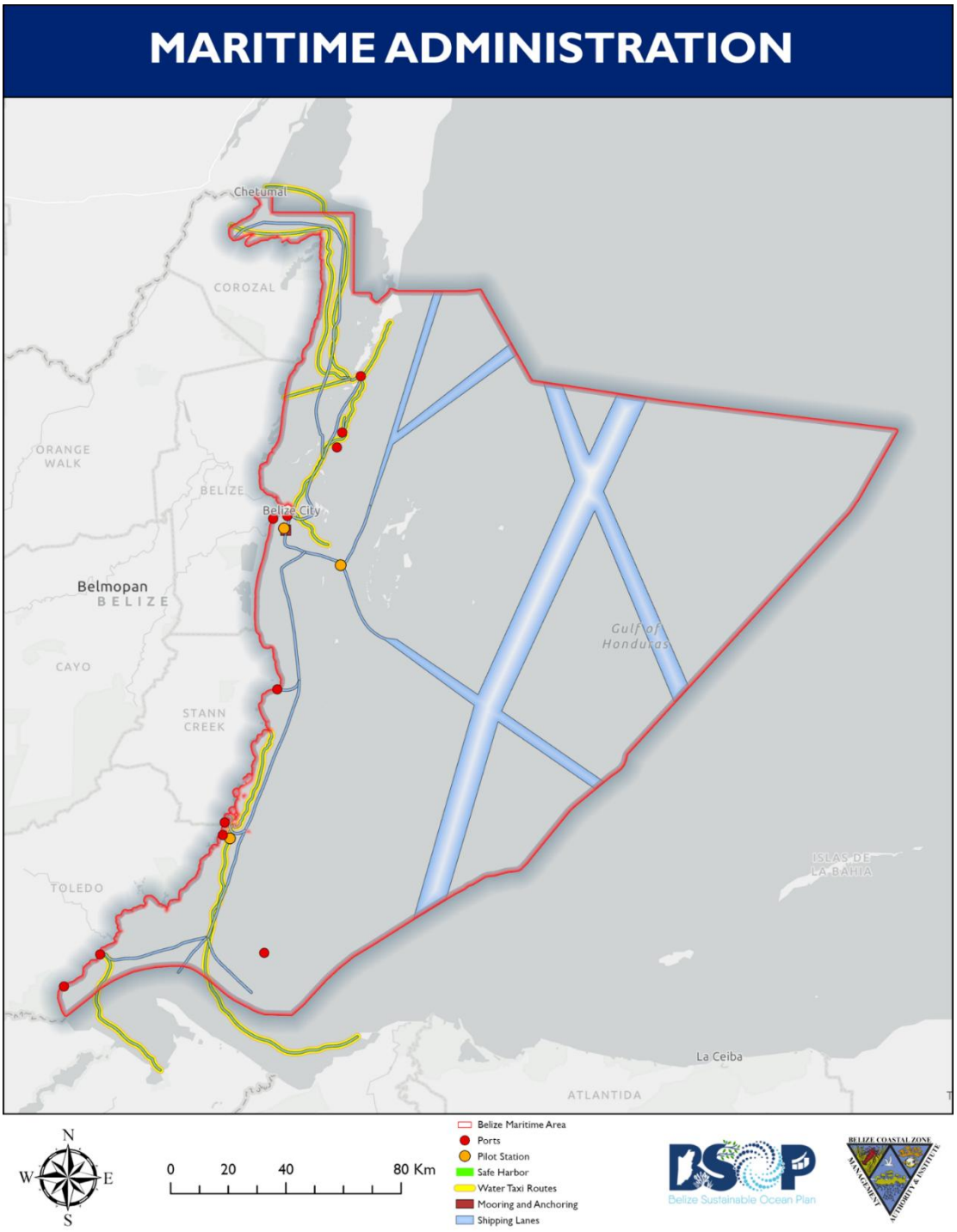
- Maritime Administration encompasses the wide range of maritime activities that take place in Belize's waters, including commercial shipping lanes, water taxi routes, and designated pilot sites.
- It also includes coast guard patrols safeguarding Belize's sovereignty and activities related to cruise ship and cargo vessel operations, ports, shipping routes and turning basins.
- There are no statistical figures available for the economic contribution and jobs of the maritime transport sector in Belize. However, transportation within Belize's Ocean is inter-related to the movement of goods, passengers, infrastructure, energy, and natural resources. The growth within cruise-based tourism and the agriculture sectors fuels an increase in maritime transport and related jobs and revenue. The marine transportation activity zone represents Belize's Ocean that are delineated for the use of watercraft to transport people, goods and cargo between multiple destinations.
- Mooring/Anchoring sites were identified which include the area at Harvest Caye and an area south of the Port of Belize. The Ocean Use Survey (OUS) identified safe harbor areas on the east of Little Placencia Caye and on the lagoon side of the Placencia Peninsula.

**Table 23 Maritime Administration Human Use Activities**

| Human Use Activities | |
|---|---|
| Ports and Harbor Operation<br>*(Vessel traffic management, pilotage, berthing, mooring, and channel maintenance)* | Day to day and long-term activities that enable port functionality, shipping mobility, cargo handling, safety management, and supporting services. |
| Water Taxi<br>*(Short-distance passenger transport, tender services)* | The use of small, fast, passenger vessels to transport people over short distances along coastlines, between harbours, or between nearby islands and shorelines. |
| Maritime Security & Enforcement<br>*(Deterrence and response to illicit activities)* | The governance, activities, and arrangements that protect maritime domains for illegal, unsafe, or destabilizing activities while ensuring lawful access and safe use of the sea. |
| Moorings<br>*(Fixed moorings for ships, buoys, and other larger vessels)* | Designated zones where vessels may anchor or secure moorings with approved infrastructure, aiming to manage seabed disturbance, navigating safety, and muti-use conflicts. |
| Navigational Aids<br>*(Beacons, buoys, channel markers, harbour entrance guidance, cues for safe navigation)* | Devices, structures, and systems that assist in the safe and efficient movement of ships and other vessels through marine areas. |

| | |
|---|---|
| Shipping<br>*(Domestic and International cargo ships, container vessels, bulk carriers, tugs, supply vessels)* | Movement of vessels for the transport of people and goods across marine areas, encompassing freight, passenger, and service vessel categories. |
| Ballast Water (Exchange) | The exchange or discharge of ships' ballast water at sea, managed to prevent the transfer of harmful aquatic organisms and pathogens in line with ballast water management requirements. |
| Recreational Boating<br>*(Kayaks, paddleboards, motorboats, sailboats)* | Leisure and non-commercial boating activities conducted on coastal waters, in harbours, and offshore areas. |

.




**Map 12** Maritime Administration Zone. Source: CZMAI

**Table 24 Human Use Zone: Multiple Use Zone – Maritime Administration Zone Description Summary**

| Zone Category | Zone Name | Spatial Objective | Zone Description |
|---|---|---|---|
| Human Use: Multiple Use Zone | Maritime Administration Zone | To ensure safe, efficient, and environmentally responsible port operations and vessel navigation while supporting Belize's trade, maritime transport, and Blue Economy goals through regulated access, designated shipping lanes, and protected anchorage areas. | This zone defines lanes and routes to support port/harbour operations, water taxi routes, mooring and navigational aids, shipping, recreational boating, maritime and security enforcement, and potential ballast water exchange. |
| Permitted activities:<br>• Commercial shipping<br>• Cargo loading/unloading<br>• Passenger vessel movement<br>• Anchorage areas; pilotage<br>• Maritime transport services<br>• Port security operations<br>• Dredging approved through EIA<br>• Vessel waste management under regulated systems<br>• Emergency navigation | | | |
| Restricted/Prohibited Activities:<br>• Unauthorized anchoring or berthing<br>• Illegal discharges or ballast water release<br>• Non-compliant vessel operations and unsafe maneuvering<br>• Fishing inside navigation lanes<br>• Unregulated dredging<br>• Obstruction of shipping channels<br>• Oil transfer outside designated areas<br>• Unauthorized tourism activities in high-traffic zones<br>• Unauthorized overwater structures | | | |

*Legend: A: Allowed, R: Regulated, P: Prohibited*

### Table 25 Maritime Administration Human Use Zoning Typology

| | Human Use Zone: Single Use | Human Use Zone: Multiple Use Zones | | | | | Objective Based Zone | | |
|---|---|---|---|---|---|---|---|---|---|
| ***Maritime Administration*** | *Coast Guard Operational* | *Fisheries and Mariculture* | *Tourism Zone* | *Coastal and Marine Development* | *Energy Zone* | *Community Use Zone* | *Seabed Mines and Minerals* | *Flat Fishing Zone* | *Marine Archaeological Zone* |
| **Ports and Harbour Operation** | P | R | R | R | A | P | R | P | P |
| **Water Taxi** | R | A | R | R | A | R | A | R | P |
| **Maritime Security Enforcement** | A | A | A | A | A | A | A | A | A |
| **Moorings** | R | A | R | R | R | R | R | R | R |
| **Navigational Aids** | R | A | R | R | R | R | R | R | R |
| **Shipping** | R | R | R | R | A | P | A | P | P |
| **Ballast Water (Exchange)** | P | R | P | R | A | P | R | P | P |
| **Recreational Boating** | R | A | A | R | A | A | A | A | P |

#### 4.2.3.6 Community Use Zone

This human use zone serves as the default classification for Belize's Ocean that covers a broad spectrum of traditional and recreational uses for primarily non-commercial purposes

**Table 26 Community Use Zone Human Use Activities**

| Human Use Activities: | |
|---|---|
| Traditional<br>*(Customary fishing practices, harvesting routines, cultural activities, and seasonal livelihoods)* | Practices, rights, and livelihoods that have been passed down within communities over long timeframes, shaping how people interact with coastal and marine environments. |
| Recreational<br>*(Beachgoing, sunbathing, swimming, kayaking, other shore-based leisure)* | Leisure-based activities in coastal, nearshore, and offshore marine spaces that are non-commercial or lightly commercial, undertaken for enjoyment, relaxation, or personal fulfilment. |




**Map 13 Community Use Zone. Source: CZMAI**

### Table 27 Human Use Zone: Multiple Use Zone – Community Use Zone Description Summary

| Zone Category | Zone Name | Spatial Objective | Zone Description |
|---|---|---|---|
| Human Use: Multiple Use Zone | Community Use Zone | To designate areas that prioritizes safe, equitable, and culturally significant activities for coastal communities across Belize. | This zone serves as the default classification for marine areas that covers a broad spectrum of religious, cultural, traditional, recreational, and medicinal uses for primarily non-commercial purposes. |
| Permitted activities:<br>• All sustainable community-based activities that form the fabric of the people and community that utilize the area.<br>• All recognized traditional, cultural, religious, recreational, and medicinal activities. | | | |
| Restricted/Prohibited Activities:<br>• Industrial dumping<br>• Destructive gear use<br>• Unregulated extraction of coastal/marine resources.<br>• Activities that negatively affect or impacts the marine environment.<br>• Dredging and Land reclamation activities<br>• Oil and gas extraction | | | |

### Table 28 Community Use Zone Human Use Zoning Typology

| | Human Use Zone: Single Use | Human Use Zone: Multiple Use Zones | | | | | Objective Based Zone | | |
|---|---|---|---|---|---|---|---|---|---|
| ***Community Use*** | *Coast Guard Operational* | *Fisheries and Mariculture* | *Tourism Zone* | *Coastal and Marine Development* | *Energy Zone* | *Maritime Administration Zone* | *Seabed Mines and Minerals* | *Flat Fishing Zone* | *Marine Archaeological Zone* |
| **Traditional** | P | A | A | R | A | R | P | A | R |
| **Recreational** | P | A | A | R | A | R | P | A | R |

*Legend: A: Allowed, R: Regulated, P: Prohibited*

## 4.2.4 Objective Based Zones

### 4.2.4.1 Seabed Mines and Minerals

Overview:

- The designated zone allows for seabed mineral extraction (e.g., sand, nodules) pending environmental approval and protects these sites from interference by other sectors.
- The Mines and Minerals Act (2020) places all mineral resources under State ownership, giving the government full authority to issue licenses, collect royalties, and enforce strict safety and environmental standards.
- There is currently no commercial interest in deep-sea mining; activity is mostly limited to small-scale sand dredging for island development.
- Any future large-scale seabed extraction will strictly require a full Environmental Impact Assessment (EIA) and clearance from the Department of the Environment.
- Management requires coordination between the Geology and Petroleum Department, Mining Unit, Belize Port Authority, and environmental agencies to approve sites and monitor activities.
- Responsible regulation is vital for Belize's Blue Economy—while multi-agency coordination successfully managed dredging in Caye Caulker, poorly planned dredging in Placencia has severely damaged coastal ecosystems.

### Table 29 Objective Based – Seabed Mines and Minerals Description Summary

| Zone Category | Zone Name | Spatial Objective | Zone Description |
|---|---|---|---|
| Objective Based | Seabed Mines and Minerals | To manage and regulate the exploration and extraction of seabed minerals in Belize's ocean space in a manner that safeguards marine ecosystems, promotes environmental integrity, and ensures equitable national benefit. The zone supports scientific and economic activities aligned with the BSOP principles of precaution, sustainability, and ecosystem-based management. | This zone defines areas to be used primarily for the extraction of seabed minerals (e.g. sand, phosphorite, metallic nodules) under an approved Environmental Impact Assessment or Low-Level Environmental Assessment. |

Permitted activities:

- Geological and geophysical surveys for resource assessment.
- Controlled exploration and extraction of seabed minerals (e.g., sand, gravel, phosphorite, metallic nodules) under approved Environmental Impact Assessments (EIAs), Low Level Environmental Assessments or no objection letter depending on the scope.
- Environmental clearance for small beach restoration.
- Environmental baseline and monitoring programs.
- Research on seabed geology, sediment transport, and ecosystem impacts.
- Use of best available technology and environmentally responsible mining methods.
- Dredging for navigation purposes.
- Burrow sites may serve as navigation channels

Restricted/Prohibited Activities:

- Unregulated or unauthorized mineral extraction.
- Activities that cause significant habitat loss, sedimentation, or water pollution.
- Exploration or extraction within Marine Protected Areas, spawning aggregation sites, or cultural heritage zones.
- Dumping of tailings or waste materials in marine waters.
- No recreation post dredging in burrow sites e.g. has caused drowning and can cause drowning in some areas
- No mariculture near dredging areas or borrow sites

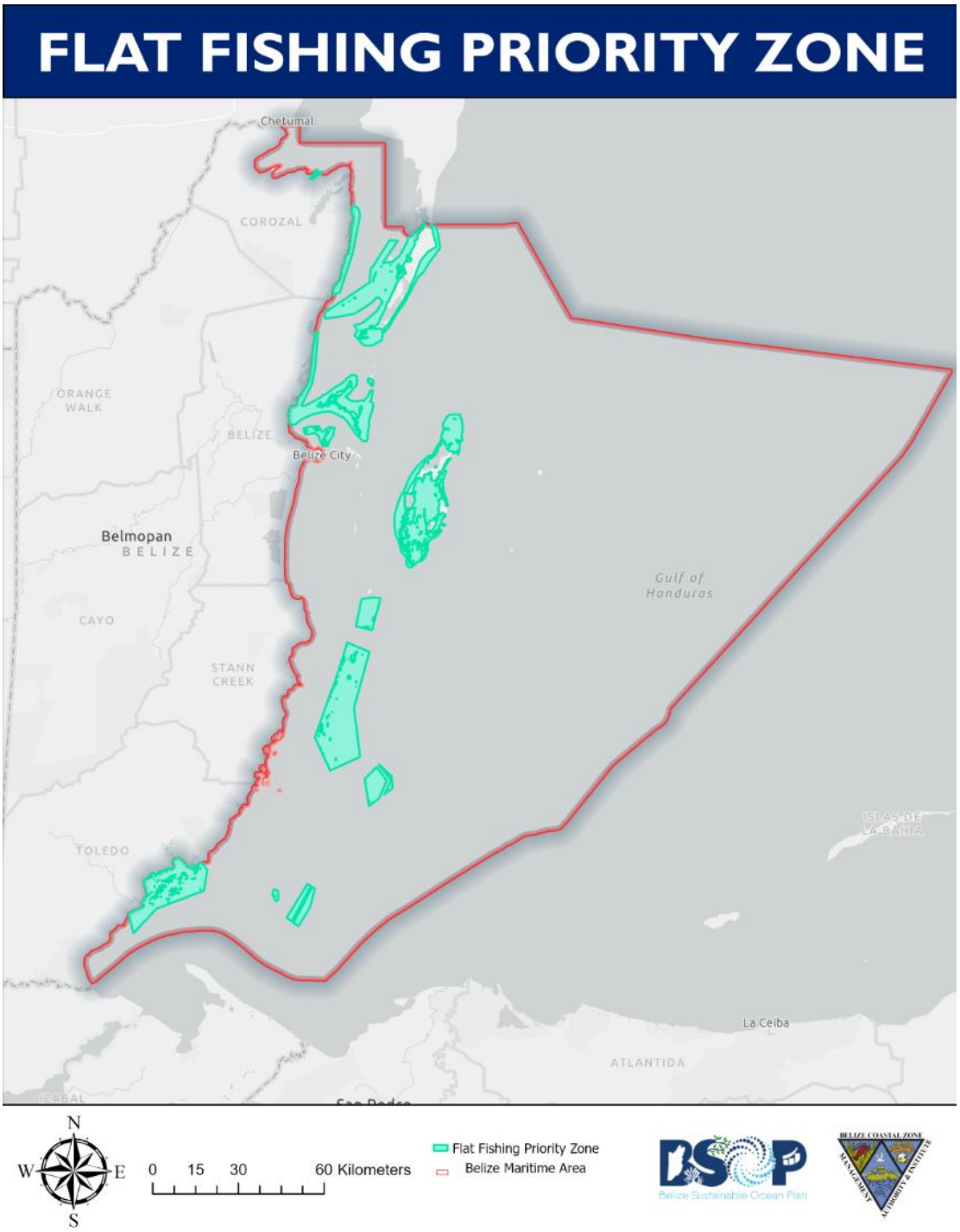
#### 4.2.4.2 Flat Fishing Priority Zone

Overview:

- Officially designated as "Flat Fishing Priority Zone" this initiative focuses strictly on the management and protection of vital flats habitats.
- The protected areas are extensive, covering approximately 1,934.36 km² (5.8%) of Belize's ocean space from the northern border down to the southern coast.
- A Flat Fishing Technical Working Group was established in March to map, identify, and zone these habitats. The group was comprised of a broad coalition, including government agencies (CZMAI, Fisheries Department, Blue Economy Unit, Mining Unit, Lands Department, Department of the Environment) and local flat fishing stakeholders. Crucially, it includes the Belize Flat Fishing Association (BFFA), ensuring that the voices of over 90 local fishing guides are integrated into the ocean management strategy.
- The zone strictly prohibits activities known to cause habitat degradation including dredging, over-water development, mangrove deforestation, jet skiing, and other unsustainable non-commercial fishing-related activities.
- Privately held lands located within the Flat Fishing Zones are exempt from these restrictions *only* if they already possess proper legal authorization for limited dredging, over-water construction, jet skiing, or mangrove clearing.
- Dock construction that requires limited hand dredging, are permitted if they secure an approved Environmental Impact Assessment (EIA).
- In sensitive areas like the Turneffe Atoll Marine Reserve, any proposed dredging requires the relevant MPA Co-Manager and the Department of Mining to carefully assess and approve environmentally suitable "borrow sites" for the material.

- Specific Geographic Designations
    - Northern offshore and Lagoon Areas (Corozal and Ambergris Caye)
        - Zones have been designated in front and along the back lagoon of Ambergris Caye, and along the coast of Corozal south of Sarteneja Village
    - Central Offshore and Cayes
        - Turneffe Atoll has three zones for the flats, namely zone 1, zone 2, and zone 3. Additionally, essential flats from St. George's Caye to flats south of Caye Caulker have been designated. Flats along the coast from the Northern River Lagoon to Midwinter's Lagoon
    - South Central Barrier Reef and Cayes (Stann Creek Region)
        - Essential flats have been identified in front of Stann Creek, which includes a zone in front of Dangriga and another zone along the South Water Caye Marine Reserve. Additionally, the flats at Gladen Spit and Silk Cayes were also identified as essential flats.
    - Southern Coastal and Border Region (Toledo Region)

- The essential flat zones for southern Belize are located in front of Punta Gorda Town and Expands up to areas within the Port Honduras Marine Reserve.




**Map 14 Flat Fishing Priority Zone. Source: CZMAI**

### Table 30 Objective Based - Flat Fishing Priority Zone Description Summary

| Zone Category | Zone Name | Spatial Objective | Zone Description |
|---|---|---|---|
| Objective Based | Flat Fishing Priority Zone | To protect critical flats & maintain healthy populations of bonefish, tarpon, permit, & other recreational species, while supporting high-quality catch-and-release tourism & sustainable livelihoods for local guides and communities. | This zone defines areas to support catch and release fishing, guided recreational fishing, poling, and fly-fishing activities. |
| Permitted activities:<br>• Catch-and-release sport fishing<br>• Guided recreational fly-fishing<br>• Scientific monitoring; & guide training or certification.<br>• Sustainable non-commercial and commercial fishing | | | |
| Restricted/Prohibited Activities:<br>• High density commercial fishing<br>• Illegal harvesting of bonefish, permit, or tarpon<br>• Use of banned gillnets, traps, longlines, or destructive fishing gear.<br>• Dredging<br>• Mangrove removal<br>• Use of Jet Skis<br>• Construction of over water structures without a permit.<br>• Destructive anchoring<br>• Conducting Sportfishing tours without proper licenses and permits.<br>• Activities causing habitat degradation.<br>• Unsustainable non-commercial fishing | | | |

#### 4.2.4.3 Marine Archaeological Sites

- This objective-based zone is designed for controlled, non-extractive activities to preserve Belize's Underwater Cultural Heritage (UCH) while supporting regulated heritage tourism, such as guided dives.
- While existing Archaeological Reserves are mostly land-based, Belize's oceans contain significant assets from the Paleo-Indian, Archaic, Maya, and historic periods, including shipwrecks and submerged cave systems (e.g., near Caye Caulker).
- Although a national inventory exists, many marine cultural assets remain undocumented or lack formal boundaries, limiting effective management.
- Artifacts over 100 years old automatically fall under the jurisdiction of the IA and the National Institute of Culture and History (NICH) as protected "ancient monuments."
- For culturally significant items less than 100 years old, the Minister of Culture holds discretionary authority to protect them under the National Cultural Heritage Preservation Act (2020).
- Integrating marine heritage into the Belize Sustainable Ocean Plan (BSOP) supports the country's commitment to ratify the UNESCO 2001 Convention on the Protection of the Underwater Cultural Heritage.
- NICH holds the legal authority to declare marine Archaeological Reserves, even within existing Marine Protected Areas (MPAs). In these cases, NICH manages the cultural aspects while other agencies manage the ecological aspects.
- Declaring an underwater site as a formal Archaeological Reserve allows for controlled public visitation.
- NICH can temporarily or permanently restrict access if a site is at risk and enforces strict preservation and safety protocols for divers and tour operators.

**Table 31 Objective Based – Marine Archaeological Sites Description Summary**

| Zone Category | Zone Name | Spatial Objective | Zone Description |
|---|---|---|---|
| Objective Based | Marine Archaeological Sites | Protect and conserve underwater cultural heritage, including shipwrecks, submerged caves, artifacts, and historic sites, while supporting responsible research, education, and culturally sensitive tourism. | This zone defines areas to support controlled, non-extractive uses consistent with preserving cultural artifacts found within Belize's ocean. |
| Permitted activities:<br>• Scientific research with permits; controlled heritage tourism (e.g., guided dives) at selected sites; non-extractive documentation; monitoring by authorized agencies. | | | |
| Restricted/Prohibited Activities:<br>• Artifact removal, treasure hunting, dredging, destructive anchoring, trawling, salvage without authorization, disturbance of human remains, unauthorized diving. | | | |

#### 4.2.4.4 Marine Protected Areas

The Belize Marine Protected Area Zoning Framework was developed over time to facilitate conservation objectives within the Belize's ocean space. This is accomplished through the implementation of a multi-zone framework that helps to balance conservation goals with sustainable use by rationalizing and clarifying where activities are allowed, restricted, or prohibited. These zones developed to align with the various IUCN categories, however, with the signing of the Conservation Funding Agreement, there was the introduction of new categories. The following Table 32 shows the alignment of all relevant frameworks and general activities allowed:

**Table 32** Alignments of Relevant Frameworks and General Activities

| Belize MPA Zoning Categories | CFA Defined Category | IUCN category | Activities Allowed |
|---|---|---|---|
| General Use Zone (MR) | Medium Protection for Biodiversity Zone | VI – protected area with sustainable use of natural resources | - Artisanal and subsistence fishing<br>- Sport fishing<br>- Tourism<br>- Any other regulated sustainable use |
| Special Management Zone (MR) | Medium or High Protection for Biodiversity Zone | Assigned according to zone objective. | Assigned according to zone objective. |
| Conservation Zone I (MR) | High Protection for Biodiversity Zone | II - national park | - Tourism<br>- Sport fishing<br>- Science and research |
| Conservation Zone II (MR) | High Protection for Biodiversity Zone | II - national park | - Sport fishing<br>- Tourism<br>- Subsistence fishing<br>- Science and research |
| Preservation Zone (MR) | High Protection for Biodiversity Zone | Ia - Strict nature reserve | None |
| Wilderness Zone (MR) | High Protection for Biodiversity Zone | Ia - Strict nature reserve | None |
| Seasonal closure (MR) | Medium Protection for Biodiversity Zone | VI – protected area with sustainable use of natural resources | - Artisanal and subsistence fishing<br>- Sport fishing<br>- Tourism<br>- Science and Research |
| Wildlife Sanctuary 1 | High Protection for Biodiversity Zone | II- national park | - Tourism |

| Belize MPA Zoning Categories | CFA Defined Category | IUCN category | Activities Allowed |
|---|---|---|---|
| Wildlife Sanctuary 2 | High Protection Biodiversity Zone | for Ib – Wilderness area | - Subsistence fishing<br>- Tourism<br>- Science and Research |
| National Park | High Protection Biodiversity Zone | for II - national park | - Tourism |
| Natural Monument | High Protection Biodiversity Zone | for III - National Monument | - Tourism |
| Spawning aggregation sites | High Protection Biodiversity Zone | for Ib - Wilderness area | - Tourism |

The MPA categories include different types, status, purpose and defines use management within the specific zone. See Appendix 7 for the full list of all MPAs, designation type, management and legislation. The Marine Reserves overall are governed by subsidiary regulations under the Fisheries Resources Act (2020); co-managed by BFiD and local co-managers. NPAS-based MPAs (Sanctuaries, National Parks, Monuments) are managed under the NPAS Act (2020); use defined by permitted/prohibited activities rather than internal sub-zones.

Following the delivery of Milestone 6 Belize's MPA network covers 10,011.47 $km^2$ or 30% of Belize's ocean space. There are six co-managers organizations responsible for the management of several of the MPAs within Belize MPA network. The co-managers include Belize Audubon Society (BAS), Sarteneja Alliance for Conservation and Development (SACD), Southern Environmental Association (SEA), Toledo Institute for Development and Environment (TIDE), Friends of Swallow Caye (FOSC) and the Turneffe Atoll Sustainability Association (TASA).

**Table 33 Objective Based – Marine Protected Areas Description Summary**

| Zone Category | Zone Name | Spatial Objective | Zone Description |
|---|---|---|---|
| Objective Based Zone | Marine Protected Areas | To conserve, restore, and promote ecological connectivity, climate resilience, and sustainable use of marine resources, ensuring that MPAs advance national conservation goals, sustain fisheries productivity, and enhance the cultural, recreational, and economic value of Belize's ocean and coastal environments. | This zone defines multiple or single use areas that support activities aligned with the environmental objectives of the various zones designated within MPAs. |
| Permitted activities:<br>• Activities that align with each MPA zoning designation as per IUCN Protected Area Category status (e.g. scientific research, environmental education, & responsible ecotourism under permit).<br>• Sustainable artisanal or subsistence fishing in designated zones consistent with MPA management plans.<br>• Cultural documentation, conservation, and interpretation under permit.<br>• Scientific monitoring, habitat and reef restoration, and enforcement patrols.<br>• Community co-management and conservation initiatives that enhance local stewardship and heritage awareness, such as citizen science & community education.<br>• Mariculture in designated MPA zones as per the legislation and developed site-specific management plans. | | | |
| Restricted/Prohibited Activities:<br>• Mining & dredging (Restricted depending on zone and scope)<br>• Use of destructive, unregulated, or banned fishing methods e.g. trawling, explosives, poisons, and gill nets.<br>• Coral, shell, or sand removal and other habitat destruction.<br>• Industrial development, seabed mining, or coastal reclamation within MPA boundaries without conducting an Environmental Impact Assessment or Limited Level Environmental Study.<br>• Petroleum exploration or extraction.<br>• Unauthorized disturbance, removal, or trade of underwater cultural or archaeological artifacts found within MPAs.<br>• Any unpermitted activity that compromises ecological or cultural integrity, including but not limited to water sports, sports fishing, recreational fishing.<br>• Use of unauthorized or incompatible fishing gear types.<br>• No anchoring in channels and seagrass areas within MPAs.<br>• Avoid establishment of permanent high volume transportation lanes (taxi, cargo) within MPA, specifically in areas deemed highly sensitive. | | | |

## Table 34 Marine Protected Areas Zoning Typology

| | | General Use Zone | Conservation Zone I | Conservation Zone II | Preservation Zone | Wilderness Zone | Seasonal Closure | Wildlife Sanctuary I | Wildlife Sanctuary II | National Park | Natural Monument | SPAGS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Coastal and Marine Development | Overwater Construction | R | R | R | P | P | R | P | R | R | P | P |
| | Ports & Harbour Dredging | P | P | P | P | P | P | P | P | P | P | P |
| | Development Dredging | R | R | R | P | P | R | P | R | P | P | P |
| | Dredged Material Disposal | P | P | P | P | P | P | P | P | P | P | P |
| | Offshore Infrastructure | R | P | P | P | P | R | P | P | P | P | P |
| | Land Reclamation | R | P | R | P | P | R | P | R | P | P | P |
| | Sargassum Management | R | R | R | P | P | R | R | R | R | P | R |
| | Treated Wastewater (Release) | R | P | R | P | P | R | P | R | P | P | P |
| Fisheries inclusive of Mariculture | Commercial Fishing | R | P | P | P | P | R | P | P | P | P | P |
| | Sportfishing | R | R | R | P | P | R | P | P | P | P | P |
| | Non-Commercial Fishing | A | P | R | P | P | R | P | R | P | P | P |
| | Traditional Fishing | A | P | R | P | P | R | P | R | P | P | R |
| | Seaweed Farming | R | P | P | P | P | P | P | P | P | P | P |
| | Sea Cucumber Farming | R | P | P | P | P | P | P | P | P | P | P |
| | Aquarium Trade Fishing | R | P | P | P | P | R | P | P | P | P | P |
| | Recreational Fishing | R | P | P | P | P | R | P | R | P | P | P |
| | Cultural Fishing | R | P | R | P | P | R | P | R | P | P | R |
| | Deep Sea/Slope Fishing | R | P | P | P | P | R | P | P | P | P | P |
| Maritime Administration | Ports and Harbour Operation | P | P | P | P | P | P | P | P | P | P | P |
| | Water Taxi | R | P | R | P | P | R | R | R | R | R | R |
| | Maritime Security Enforcement | A | A | A | A | A | A | A | A | A | A | A |
| | Moorings | A | R | R | P | P | R | P | R | R | R | P |
| | Navigational Aids | A | R | R | P | P | R | R | R | R | R | R |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Shipping | P | P | P | P | P | P | P | R | R | P | P |
| | Ballast Water (Exchange) | P | P | P | P | P | P | P | P | P | P | P |
| | Recreational Boating | A | R | R | P | P | R | P | R | R | R | R |
| Tourism | Swimming | A | R | A | P | P | R | R | R | R | A | R |
| | Snorkelling/Scuba | A | A | A | P | P | R | A | R | R | A | R |
| | Educational | A | A | A | P | P | R | A | R | R | A | R |
| | Animal Watching | A | A | A | P | P | R | A | R | R | A | R |
| | Cultural/Historical | R | R | R | P | P | R | R | R | R | R | R |
| | Water Sports | R | P | P | P | P | P | P | P | P | P | P |
| | Nautical Tourism | R | P | P | P | P | P | P | P | R | R | P |
| | Cruise Tourism | R | P | P | P | P | P | P | R | R | P | P |
| Energy | Underwater Cables | R | P | P | P | P | R | P | P | P | P | P |
| Community Use | Traditional | A | R | R | P | P | R | R | R | R | R | R |
| | Recreational | A | R | R | P | P | R | R | R | R | R | R |

*Legend: A: Allowed, R: Regulated, P: Prohibited*

SECTION

5

# BSOP Implementation Framework



©Terg/Adobe Stock

# 5 BSOP Implementation Framework

IN THIS CHAPTER

5.1 Background

5.2 Implementation Roadmap for the BSOP

## 5.1 Background

The BSOP positions Belize as a global leader in ocean governance and environmental stewardship, delivering on Blue Bonds commitments, UNCLOS, CBD obligations, and SDG 14 while fostering a resilient Blue Economy for future generations. It brings together the legal, policy, ecological, and governance elements needed to guide marine and coastal decision-making. It shows that effective ocean planning must be grounded in a strong understanding of Belize's jurisdictional framework, existing sectoral laws, coastal management instruments, and the spatial reality of competing ocean uses. It also demonstrates that the success of the plan depends not only on technical analysis, but on coordinated governance, stakeholder participation, and a shared commitment to sustainable development.

The BSOP further highlights that Belize's ocean space is shaped by multiple pressures and opportunities, including climate change, coastal development, port expansion, fisheries, conservation priorities, and a growing blue economy. These dynamics make integrated planning essential, especially where activities overlap or create conflict in sensitive areas. By linking MSP with integrated coastal zone management, disaster risk reduction, and climate resilience, the BSOP supports a more adaptive and ecosystem-based approach to ocean governance. The BSOP was developed based on a stakeholder framework, which clarifies the roles of key players, context setters, active observers, and other groups involved in the BSOP process. This structured approach strengthens transparency, supports meaningful engagement, and helps ensure that affected communities, and institutions are appropriately involved in shaping the plan. In doing so, it creates the conditions for broader legitimacy and more durable implementation.

Under the BE CLME+ Project: *"Promoting National Blue Economy Priorities Through Marine Spatial Planning in the Caribbean Large Marine Ecosystem (CLME) Plus"* a data driven, inclusive and gender responsive Implementation and Monitoring Plan is being developed for the BSOP (BSOP Implementation and Monitoring Plan). The BSOP-I&MP

will move the vision and goals of the BSOP into action and will provide a clear, structured roadmap that outlines the specific tasks, timelines, responsibilities, and resources needed to implement the MSP. It will set the foundations for organizing and managing plan implementation efforts effectively. The implementation plan will include all essential and necessary information for administration, operations, budgets, research and monitoring, enforcement and management of zones, building capacity and awareness, policy and legal instruments and education. The plan should also address both operational and adaptive needs to ensure that management actions are effective, coordinated and sustainable.

The Monitoring Plan will establish a systematic approach for how the BSOPs' implementation and outcomes will be tracked to ensure goals and objectives are met and to inform adaptive management. It should be grounded in clear objectives, defined indicators, robust data management, and stakeholder participation. Both quantitative and qualitative indicators should track environmental, economic, governance, and social dimensions realistically, accounting for external influences such as political and socio-economic changes. Detailed methods for consistent and systematic monitoring, including frequency, geographic scope, and responsible parties should be set out, alongside roles and responsibilities of relevant agencies, institutions, or stakeholder groups for data collection, analysis, reporting, and review.

These next steps will help finalize the BSOP and ensure that the BSOP becomes a practical tool for balancing conservation, sustainable use, and long-term resilience in Belize's marine and coastal environment. See Appendix 8 - Implementation and Monitoring Plan Outline.

## 5.2 Implementation Roadmap for the BSOP

The Implementation Roadmap for the BSOP was developed to support the necessary revisions required to deliver the complete ten-year I&MP. It includes the structure and foundations (pillars) deemed necessary for BSOP success. Its purpose is also to present immediate actions/activities (under each pillar) that are deemed critical within the first 24 months of the BSOP implementation process (commencing from Q3 2026). This involves translating the already endorsed vision and goals of the BSOP into action through a clear and operationally focused Roadmap that outlines the specific tasks, timelines, responsibilities, and resources (human and financial) needed to set the foundations for organising and managing plan implementation efforts effectively.

The Implementation Roadmap (covering months 1-24 from BSOP endorsement) represents the precursor to the ten-year BSOP I&MP as defined within the ICOM Act (2025) It specifies outcomes, along with clear short-term actions, broad estimated

budgets required, and responsible parties. All the details of which shall be used for discussion purposes with key parties identified to support the BSOP I&MP ahead of a separate task designed to embellish the Implementation Roadmap to cover expected monitoring needs over the legally defined 10-year period through to 2036 (I&MP).

The relationship between the elements of this Implementation Roadmap can be defined as a single logical chain. The four BSOP Goals and 13 specific objectives express the long-term impact of the BSOP. The BSOP directs Belize toward a coherent national ocean zoning system that is built on four pillars as follows:

1 Ecological: Protection and restoration of biodiversity, cultural heritage, and ecological processes through MPAs and marine Archaeological Zones
2 Social: Sustainable use and livelihoods through Fishing Areas, Tourism Zones, and designated Multi-Use areas
3 Cultural: Security, safety, and sovereignty through Coast Guard Operational Zones, Navigation Corridors, and Maritime Areas defined by national law
4 Economic: Resource governance and environmental safeguards through regulated seabed mineral use and the national offshore oil moratorium.

Five new management focused pillar "titles" are proposed and explained in more detail within Section 5.2.4. They complement those presented in the BSOP but are better oriented to help the BSOP Implementing Agency with an improved means of delivery, each contributing towards one combined intermediate outcome (Table 35). The gap clusters map directly onto these pillars (see Section 5.2.4), so that each pillar closes a defined set of deficits. The cross-cutting theme of international reporting and outreach runs through all five.

**Table 35 Gap Cluster, New Pillar titles and Intermediate Outcomes.**

**The gap clusters flow through the five pillars to their intermediate outcomes, with the regulatory cluster feeding both Pillars 2 and 3 and the I&MP's impact, with international reporting and outreach running through all five as the cross-cutting theme.**

| Gap cluster | Addressed by new pillar (see Section 5.2.4) | Intermediate outcome |
|---|---|---|
| **Institutional** | Pillar 1 *(Institutional Foundation and Governance)* | A constituted, capable, impartial BSOP Implementing Agency |
| **Coordination** | Pillar 2 *(Coordination and Regulatory Integration)* | A working coordination architecture, with the BSOP embedded in sectoral licensing and authorisation |
| **Regulatory** ***(feeds two pillars)*** | Pillar 2 & 3 *(Implementation of Protected Areas Management)* | BSOP is delivered across the zones, with sustainable use areas (within the National Zoning Framework) being operationally defined |

| Gap cluster | Addressed by new pillar (see Section 5.2.4) | Intermediate outcome |
|---|---|---|
| **Science and monitoring** | Pillar 4 *(Scientific Capacity for Monitoring and Adaptive Management)* | A functioning evidence and MEL system |
| **Financing** | Pillar 5 *(Financing and Sustainability)* | Durable, diversified financing |
| **Cross Cutting Pillar Communication** | Cross-cutting *(Communication – International reporting and outreach). This runs through all the above 5 pillars, the BSOP Implementing Agency feeds the reporting of the Ministry where it holds information, and communication of the BSOP, the I&MP and its own role to government and the public.* | The BSOP Implementing Agency and the BSOP understood; obligations met |

### 5.2.1 Theory of Change

The Theory of Change (ToC) for the BSOP explains how the I&MP is expected to work to support its implementation. It is especially useful here because the CZMAI (as defined BSOP Implementing Agency) must deliver largely with support from other parties: making the causal links and their assumptions explicit is what keeps an integrative, partner-dependent strategy honest about what it can and cannot control. It also provides the backbone for BSOP-related monitoring and evaluation.

The causal logic

If the BSOP Implementing Agency (CZMAI) is properly constituted and resourced (see Pillar 1), and if the coordination architecture works (see Pillar 2), then it can oversee coherent delivery through partners (see Pillar 3), backed by science and reporting (see Pillar 4) and sustained by financing (see Pillar 5). The result is a marine environment that is genuinely managed rather than merely zoned on paper, delivering conservation, climate resilience and a sustainable and inclusive blue economy for all.

**THE CHAIN, FROM INPUTS TO IMPACT**

Inputs and governance (Pillar 1) → coordination and integration (Pillar 2) → delivery across the zones (Pillar 3) → evidence and adaptation (Pillar 4), sustained throughout by financing (Pillar 5) and carried by reporting and outreach (cross-cutting) → a managed marine estate delivering conservation, climate resilience and a sustainable and inclusive blue economy across Belize.

### 5.2.2 Gender, Youth and Social Inclusion

The Implementation Roadmap attempts to demonstrate how best to embed gender and youth inclusion as a cross-cutting principle rather than a separate programme, that is consistent with the BSOP gender inclusion strategy (as part of the BSOP Stakeholder Engagement Plan 2026), the National Gender Policy (2024-2030)[4], the pending National Youth Development Policy[5], the GEF Gender Policy and Targets 22 and 23 of the Kunming-Montreal Global Biodiversity Framework (KMGBF). In practice this means four commitments for Belize:

1. Meaningful representation of women and youth is actively sought in stakeholder engagement and, as appointment cycles allow, across the governance organs[6] of the BSOP Implementing Agency.
2. Recruitment to the BSOP Implementing Agency adopts inclusive language and encourages applications from women, vulnerable populations, and young professionals.
3. The social indicators developed under Pillar 4 include sex-age-disability-location-livelihood disaggregated measures of participation, risk-sharing as well as benefits.
4. The design of financing under Pillar 5 considers access for and by women-, vulnerable populations and youth-led enterprises including those that represent all three of these features.

These commitments above shall all be pursued in collaboration with the Ministry of Tourism, Youth, Sports and Diaspora Relations which is a core supporting partner under new Pillars 4 and 5 in particular (see Table 35) as well as the Ministry of Human Development, Family Support and Gender Affairs.

### 5.2.3 Critical Preconditions for BSOP Implementation

The Rapid Situational Assessment (RSA) produced as a precursor to the Implementation Roadmap presented some key strategic observations that helped to guide the design of the 5 “pillars” that are proposed for the I&MP. It concluded that Belize possesses a strong foundation for BSOP implementation, but implementation readiness remains uneven. The ICOM Act (2025) provides a statutory foundation for implementation, monitoring and review, while the BSOP, existing marine spatial planning policy, Blue Bonds commitments and related national frameworks establish a substantial body of objectives, actions and institutional responsibilities.

[4] https://specialenvoyofbelize.com/blogs/b/national-gender-policy-2024-2030
[5] led by the Ministry of Tourism, Youth, Sports and Diaspora Relations
[6] defined as any appropriate or relevant institutional body or equivalent

The work identified a significant gap between having the necessary policy architecture and being operationally prepared to implement it. Institutional responsibilities remain distributed across multiple agencies, with overlapping mandates, unclear delineation between lead and supporting roles, fragmented coordination and uneven decision-making authority. Data sharing and institutional memory are also weak in several areas, while differences in institutional mandates, technical capacities and planning processes may impede consistent implementation, enforcement and monitoring.

The central requirement is therefore not simply the creation of additional structures or legislation, but the operationalisation of the existing governance framework through clearer responsibilities, decision rights, coordination protocols, reporting arrangements and accountability mechanisms. Stakeholder findings particularly support using existing institutions wherever feasible, while strengthening inter-agency collaboration and aligning sectoral plans and operational procedures with the BSOP and ICOM framework.

To this end, a series of potential preconditions need attention and are aligned to specific pillars which are developed further within Section 5.2.4 :

- Governance framework established (Pillar 1);
- Roles and responsibilities of implementing parties assigned (Pillar 2);
- Coordinating mechanism operationalized (Pillar 2);
- Regulatory gaps identified and prioritized (Pillar 2);
- Zoning inconsistencies reconciled[7] (Pillar 3);
- Monitoring framework established (Pillar 4);
- Data-sharing agreements finalized (Pillar 4);
- Funding mechanisms identified (Pillar 5).

### 5.2.4 New Pillars to Support I&MP Success and Short-Term Actions

Each new *management-focused* pillar presented in Table 35 is set out below in more detail. A consistent structure for each is adopted: its goal, the outcome sought by 2036, priority objectives, early actions for the first two years (captured within this Implementation Roadmap), the lead and partners, candidate indicators with baselines and targets, and the dependencies and risks. Actions are deliberately time-bound so that short-term priorities are legible to members, donors and partners. It is stated below that the BSOP Implementing Agency is the Coastal Zone Management Authority and Institute (CZMAI). The Outcomes for each Pillar target delivery by the end of the I&MP period (ten years) as 2036[8].

At this stage (Implementation Report), “candidate” indicators are proposed only. This represents the early phase of creating the required monitoring architecture that is demanded within the Draft I&MP. When complete, additional SMART information shall be offered to include improved details on the following parameters:

- who owns the data/information needed to sustain the indicator,

[7] Stakeholder requests made to simplify the zoning framework, reducing the number of zone categories and zone types

[8] This Implementation Roadmap shall embrace the proposed framework approach (pillars) and adhere to the 2036 end outcome date despite it focusing on the first 2 years only

- who manages the data/information needed to sustain the indicator
- who is expected to report on the data/information needed to sustain the indicator,
- who validates the data/information needed to sustain the indicator
- who produces annual implementation reports to help indicator reporting

Candidate indicators currently proposed shall therefore be updated accordingly during production of the I&MP. Likewise, "dependencies and risk" (per Pillar) are identified. These shall be enhanced further in the detailed I&MP.

## PILLAR 1: Institutional Foundation and Governance

*Support and where needed, enhance the CZMAI's role as being the credible, capable and impartial institution tasked with implementing the BSOP, with a suitable functioning governance structure, an adequately resourced Secretariat and retained institutional knowledge.*

**OUTCOME BY 2036**

**By 2036 the CZMAI is fully operational, constituted and adequately staffed to implement the BSOP, its legally defined governance structures all function to schedule, institutional knowledge is retained through transitions, and the CZMAI's impartiality and role are understood and trusted across government and by stakeholders.**

### PRIORITY OBJECTIVES

This Pillar is required to identify lead and supporting institutions for each action, establish decision-making and escalation arrangements, and strengthen coordination through practical mechanisms such as inter-agency protocols, working arrangements, decision matrices and, where appropriate, Memoranda of Understanding. This will be essential to reduce duplication, institutional silos and implementation delays. In addition, Environmental and Social Safeguards (ESS) including screening, social-risk management, grievance arrangements, mitigation responsibilities and indicator setting must be incorporated directly into institutional arrangements, implementation actions, budgets and the monitoring frameworks. This Pillar shall propose that safeguarding shall be treated as mutually reinforcing elements of BSOP implementation. Specific objectives are as follows:

Identify and operationalise the most appropriate governance structures for BSOP implementation in phased priority: the BSOP Steering Committee, followed by the BSOP Core Team and supporting Technical Working Groups.

- Build the Secretariat as a functional establishment and retain founding knowledge as people move.
- Establish and safeguard the CZMAI's impartiality and clarity of role within the marine governance system.

- Upscale core BSOP-relevant systems, safeguards, policies, memoranda of understanding and standard operating procedures.
- Deliver gender-responsive and participatory engagement, meaningful representation, inclusive mechanisms, collaborative decision-making and participatory monitoring approaches.

### EARLY ACTIONS (YEARS 1–2)

- **[Year 1]** Create a "Relevant Plan" Alignment Matrix (in collaboration with all responsible parties) that focuses on whether parallel implementation "systems" or "action plans" are in place and where overlaps/synergies align (e.g.: BSOP, ICZM Plan, Maritime Economy Plan, National Blue Economy Strategy, NBSAP, MPA Management Plans (Milestone 8), etc).
- **[Year 1]** Adopt Terms of Reference, delegation and decision protocols for each committee; develop standard operating procedures and MoUs for administration and put in place a means of retaining founding knowledge, including an advisory role for departing officers etc.
- **Year 1]** Strengthen implementation readiness (in a collaborative manner) through the production of Standard Operating Procedures to determine (for each legally defined activity) approval authority, consultation roles, technical review roles, reporting responsibilities and escalation pathways (as required).
- **[Year 1]** Identify and approve revisions to the CZMAI organogram through CZMAI's strategic planning process; advertise and fill the approved establishment posts during 2027.
- **[Years 1–2]** Ensure the BSOP governance framework has capacity to request legislative amendments plus the opportunity to review and propose amendments to regulations, policy instruments, performance indicators,
- **[Years 1–2]** Align governance related efforts, leverage resources, and avoid duplication of effort through exploring synergistic approach with existing projects (such as the World Bank-funded Blue Cities and Beyond Project[9] etc).
- **[Year 2]** Phase in a Scientific Research Technical Working Group (TWG) and adopt the remaining corporate systems and policies.
- **[Year 2]** Initiate BSOP programmes of work that offer **meaningful and transformative** opportunities for women, coastal communities and other underrepresented groups on governance, monitoring, risk sharing as well as benefit-sharing matters supported by the required capacity building and coordination frameworks.

### LEAD AND PARTNERS

- **Lead:** CZMAI
- **Partners:** MBEMC and relevant Government agencies

**Table 36 Candidate Indicators**

[9] https://blueeconomy.gov.bz/belize-blue-cities-and-beyond-project-approved-by-the-world-bank/

### CANDIDATE INDICATORS

| Indicator | Baseline | Target |
|---|---|---|
| Updated BSOP governance structure approved and meetings held to schedule | BSOP Steering Committee | Updates to governance approved and implemented by end 2027 |
| Scientific Research TWG established | TWGs established | Established (phased) by 2028 |
| Core governance instruments adopted; knowledge-retention mechanism in place | None adopted | All core instruments adopted by 2028 |

**Table 37 Dependencies and Risks**

### DEPENDENCIES AND RISKS

| Risk / dependency | Management response |
|---|---|
| Delay in appointment of the organs stalls the entire sequence. | Maintain interim arrangements; keep appointment readiness (terms of reference, nominations) prepared in advance. |
| A small labour market and thin institutional memory constrain staffing and expertise. | Phase recruitment against priority; use advisory roles and short-term secondments or from implementing and research partners to retain founding knowledge. |
| Role confusion undermines the CZMAI's impartiality and standing. | Deliver the Year 1 role-clarity communication (see Pillar 2 and cross-cutting theme). |

## PILLAR 2: Coordination and Regulatory Integration

*Make the CZMAI's integrative mandate work in practice, formalising a workable coordination architecture and embedding the BSOP into sectoral licensing and authorisation without a power to compel.*

### OUTCOME BY 2036

**By 2036 a formalised, workable coordination architecture is operational, the BSOP is embedded in sectoral licensing and authorisation processes, and the CZMAI's coordinating role is exercised through clear protocols (including MoUs) and reporting rather than through direct regulation.**

### PRIORITY OBJECTIVES

Relevant actions and obligations are currently distributed across the BSOP, ICOM framework, marine spatial planning policy, sectoral instruments and conservation commitments. This Pillar needs to consolidate, sequence and assign timelines, responsible institutions, resources and measurable outputs. The focus should be on identifying what can be implemented under existing authority, while distinguishing any targeted regulatory or legislative measures that remain necessary. Specific objectives are as follows:

- Formalise a consolidated coordination mechanism, building on the BSOP Steering Committee and existing platforms with clear protocols that align with the intentions of the Data Protection Act and the Public Sector Data Sharing Act.
- Integrate the BSOP into sectoral licensing and authorisation processes, covering licences, permits and approvals (e.g.: fisheries, tourism, ports, maritime safety licensing and vessel approvals, and others) through the sectoral integration mechanism.
- Clarify the CZMAI's coordinating role relative to the sectoral authorities under the ICOM Act (2025) and communicate it clearly across government.
- Engage wider stakeholders (sectoral, thematic-focused, community-level) through targeted workshops rather than through new standing committees.

### EARLY ACTIONS (YEARS 1–2)

- **[Year 1]** Undertake an assessment of ICOM Section 27(11) and (12) which additional clarity offered on the implications for BSOP accountability, reporting requirements, implementation coordination and monitoring responsibilities.
- **[Year 1]** Negotiate and conclude the update process to the Memorandum of Understanding on BSOP sectoral integration and coordination proposed within the ICOM Act.
- **[Year 1]** Map sectoral licensing and authorisation processes against the BSOP and identify the integration points and referral steps.
- **[Year 1-2]** Strategy /SOP that focuses on improving data capture consistency, mapping standards, data governance framework, data-sharing agreements, metadata standards and proposed update schedules.
- **[Years 1–2]** Develop model data-sharing agreements with the relevant agencies advising on technical content and the monitoring and data standards themselves set under Pillar 4; and agree on standing coordination protocols. This is an existing CZMAI function.
- **[Years 1–2]** Finalise and disseminate the BSOP Stakeholder Engagement Plan and supporting safeguarding documentation.
- **[Year 2]** Adopt a gender responsive and socially inclusive communication and engagement approach for coordination and regulatory integration, including the targeted sectoral workshops. The area committees are established under Pillar 3, where they sit as delivery structures.

### LEAD AND PARTNERS

- **Lead:** CZMAI. The extent of other entities' lead roles to be determined by the sectoral integration outcome.
- **Partners:** MBEMC; CZM Advisory Council/agencies included in the updated BSOP governance structure

**Table 38 Candidate Indicators**

### CANDIDATE INDICATORS

| Indicator | Baseline | Target |
|---|---|---|
| Consolidated coordination mechanism formalised and operating to schedule | Informal (2026) | Formalised and operating by 2028 |
| Share of sectoral licensing and authorisation processes with an agreed BSOP-consistency step | 0% | Priority processes covered by 2030 |
| Model data-sharing agreements and reporting formats established | None/0 | In place by 2028 |
| Number of coordination protocols or instruments concluded with sectoral authorities | 0 | Priority agencies covered by 2029 |

**Table 39 Dependencies and Risks**

### DEPENDENCIES AND RISKS

| Risk / dependency | Management response |
|---|---|
| Inability to negotiate and subsequently sign the recommended MoU with the implementing agencies. | Take the recommended MoU forward bilaterally and multilaterally; use BSOP Steering Committee and CZM Advisory Council to support coordination in the interim and keep legislative reform under review through a gap log if administrative tools prove insufficient. |
| ICOM Act (2025) preserves sectoral powers, so cooperation is voluntary and coordination failure is a dominant threat. | Anchor coordination in signed protocols and the BSOP Executive Committee's powers to direct and recommend; sustain partner relationships. |
| Dependency: custody and hosting of marine data, which is owned and resolved under Pillar 4. | Tracked and managed in Pillar 4 and in the consolidated register; the model data-sharing agreements under this pillar depend on its resolution. |

# PILLAR 3: Implementation of the National Ocean Zoning Framework and Protected Areas Management

*Deliver the BSOP across the zones through the implementing agencies, support the regular review of the National Ocean Zoning Framework and monitor the overall picture, so that the Belizean marine estate is genuinely managed rather than only zoned on paper.*

**OUTCOME BY 2036**

**By 2036 the BSOP is actively implemented across all defined zones by the responsible agencies, the National Zoning Framework is operationally defined, functioning and regularly reviewed, protected area management effectiveness is tracked and improving, and the CZMAI monitors delivery by collating implementing-agency reports.**

## PRIORITY OBJECTIVES

- Embed the National Ocean Zoning Framework (and any subsequent updates to allowable-activity provisions) into the operations of the implementing agencies, with clear compliance and enforcement responsibilities per zone.
- Establish and improve protected area management effectiveness across the network.
- Establish the CZMAI's function to monitor implementation by collating implementing-agency reports.

## EARLY ACTIONS (YEARS 1–2)

- **[Year 1]** Identify timeline, process and outputs required to reconcile zoning irregularities and standardize zoning typology across Belize's marine area as part of implementing the BSOP *(which may include a new zoning review, harmonization of allowable uses, standardization of objectives by zone type and subsequent reconciliation of legacy MPA zoning inconsistencies etc).*
- **[Year 1]** Identify the timeline for legal enforcement of Gazetted Biodiversity Protection Zones, including key milestones (regulation finalization, gazettement, enforcement readiness, and commencement of enforcement).
- **[Years 1–2]** Continue to implement, update and report using the established tracking approach (National Protected Areas System Management Effectiveness Evaluation (NPAS-MEE) to help build upon known baseline for all MPA sites in the network.
- **[Year 2]** Advance existing Marine Managed Area (including all defined within the National Ocean Zone Framework) regulations for priority sites through their finalisation, legal review, approval and assent stages.

- **[Year 2]** Establish the area committees as the co-management structures for the priority sites and the sustainable use areas, consistent with the co-management and delegated-authority arrangements above.
- **[Years 1–2]** Complete operational enforcement steps including the implementation of the Fisheries Enforcement and Conservation Monitoring Strategy and Action Plan (NFECMSAP) to support implementation of enforcement and compliance related activities within the different zones as outlined in the BSOP.; place the MPA coordinates on navigational charts; establish the mechanism for implementing agencies to report on implementation to the CZMAI.

**Lead and Partners**

- **Lead:** Implementing agencies (MBEMC, tourism) for delivery; MBEMC with Fisheries Department and other regulatory agencies along with CZMAI for coordinating and monitoring.
- **Partners:** Protected area managers (BAS, APAMO, SEA, PACT and others).

**Table 40 Candidate Indicators**

**CANDIDATE INDICATORS**

| Indicator | Baseline | Target |
|---|---|---|
| Share of implementing agencies reporting on BSOP implementation to the CZMAI | 0% | CZM Advisory Council/agencies included in the updated BSOP governance structure<br><br>by 2030 |
| Management effectiveness baseline completed and trend tracked | No baseline exists | Baseline completed for all agreed sites by 2029; positive trend by 2036 |
| Number of BPZ site regulations promulgated; compliance actions reported | 0 promulgated | Priority sites promulgated by 2030 |

**Table 41 Dependencies and Risks**

**DEPENDENCIES AND RISKS**

| Risk / dependency | Management response |
|---|---|
| Delivery depends on implementing agency capacity and cooperation. | Agree realistic per-zone expectations; use co-management and delegated, overseen delivery where appropriate. |
| The CZMAI has no direct enforcement powers of its own. | Rely on enforcement by the relevant Government agencies and partners, including co-managers within their defined remits, backed by clear reporting. |

## PILLAR 4 Scientific Capacity for Monitoring and Adaptive Management

*Build the capacity to drive forward evidence based monitoring, evaluation and learning systems that measures what works, keeps the evidence current, and drives adaptive management and the BSOP's regular review.*

### OUTCOME BY 2036

**By 2036 a functioning, standardised monitoring and evaluation system consolidates partner data, tracks the BSOP's outcomes including social indicators, resolves marine data hosting, and drives documented adaptive-management adjustments and the review of both the BSOP and this I&MP.**

### PRIORITY OBJECTIVES

This Pillar targets priority capacity needs[10] to help sustain the delivery of the BSOP over time. Likewise, to address the matter of existing monitoring and data initiatives, quality, interoperability, ownership, accessibility and long-term institutional capacity remaining uneven, this Pillar also needs to support the establishment of shared data standards, institutional data-sharing arrangements, reporting frequencies, responsibilities, indicators and adaptive-management triggers. Strengthening of institutional memory is required to help ensure that BSOP indicators link, where practicable, to broader national outcome and impact indicators. Specific objectives are as follows:

- Develop and adopt the monitoring, evaluation and learning framework and a core indicator set, including social indicators with sex- age-disability-location-livelihood disaggregated measures, anchored in the BSOP monitoring system (updating ICZM indicators to better address climate resilience metrics, social, socio-environmental, governance, equity and participation imperatives).
- Build on the minimum standardised monitoring criteria and protocols already developed, secure their adoption by the implementing agencies and develop the standardised reporting format and schedule with assigned institutional responsibilities.
- Categorise and integrate existing baseline science and data, incorporating existing findings and recommendations into the monitoring protocols before commissioning new monitoring.

[10] RSA highlighted priory topics including marine spatial planning, GIS and spatial analysis, ocean and socioeconomic data management, monitoring and evaluation, stakeholder engagement and facilitation, project coordination, adaptive management and sustainable financing

- Embed adaptive management: use evidence to adjust management measures and inform the BSOP's review and that of this SAP.

### Early Actions (Years 1–2)

- **[Year 1]** Formalise the recommendations set out in the BSOP I&MP with regards to training needs to support delivery of the BSOP I&MP
- **[Year 1]** Agree on reporting formats, budget estimates and long-term resourcing requirements for monitoring, data management, and reporting activities, other requirements and timelines with the implementing agencies and secure their adoption of the standardised monitoring criteria and protocols already developed, harmonising reporting timelines with MBEMC as per the ICOM Act (2025)[11].
- **[Years 1–2]** Decision-support tools and spatial data platforms should be supported by appropriate training, including opportunities for Training of Trainers approaches to build institutional sustainability.
- **[Years 1–2]** Develop and adopt the monitoring, evaluation and learning framework and core indicator set, including social, gender and socio-environmental indicators, recognising advice that development of the framework (possibly taking up to 18 months).
- **[Years 1–2]** Categorise and integrate existing baseline science and data, incorporating existing findings and recommendations into the monitoring protocols before commissioning new monitoring.
- **[Years 1–2]** Integrated the centralized BSOP implementation dashboard and monitoring repository into CZMAI's centralized database (as per the ICOM Act, 2025). This process should also aim to resolve any concerns regarding marine data hosting through other Government agencies. Data-storage exploration consolidating the data storage and repository is needed to support the BSOP's I&MP review .
- **[Year 2]** Establish annual reporting as per the requirement of the ICOM Act 2025 and biennial traffic-light reporting to the CZM Advisory Council/updated BSOP governance structure.

#### LEAD AND PARTNERS

- **Lead:** CZMAI (coordination and standardisation).
- **Partners:** All data-holding agencies, including Belize Ports Authority for maritime safety and navigational data; research partners and Academia (University of Belize); MBEMC; MPSCPRRA; and, for the social indicators, the Ministry of Human Development, Family Support and Gender Affairs and the Ministry of Tourism, Youth, Sports and Diaspora Relations.

**Table 42 Candidate Indicators**

**CANDIDATE INDICATORS**

[11] The protocols can be adopted ahead of the wider MEL framework because the technical criteria already exist; the framework adds the indicator set and the learning loop around them

| Indicator | Baseline | Target |
|---|---|---|
| MEL framework and core indicator set (including social) adopted | Not finalised (2026) | Adopted by mid-2028 |
| Standardised monitoring protocols agreed and adopted by implementing agencies | Minimum criteria and protocols developed (2026); reporting format and schedule outstanding | Adopted by implementing agencies by 2027 |
| Existing baseline data consolidated; share of indicators with a current data source | Currently Fragmented | Consolidated; majority of indicators sourced by 2029 |
| Annual and biennial reports produced on schedule; management adjustments made on evidence | 0 | Reports on schedule from 2028; adjustments documented |

**Table 43 Dependencies and Risks**

**DEPENDENCIES AND RISKS**

| Risk / dependency | Management response |
|---|---|
| Depends on partner data flows and standardisation, and on resolving custody of marine data. | Use model data-sharing agreements (Pillar 2) and progress the MPSCPRRA hosting option. |
| Risk that everything reads as ongoing and nothing is sequenced. | Break steps down and time-bind them; front-load framework and baseline consolidation. |
| Capacity constraints on analysis and coordination. | Draw on research partners; prioritise a core indicator set over comprehensive monitoring. |

# PILLAR 5: Financing and Sustainability

*Secure durable, diversified financing for the BSOP Implementing Agency and for continued implementation of the BSOP, positioning it to attract external climate and biodiversity finance as required. This is the pillar on which the others depend.*

**OUTCOME BY 2036**

**By 2036 the BSOP Implementing Agency is financially sustainable, a well-governed mechanism finances BSOP implementation across partner agencies, and the CZMAI is positioned to attract external climate and GBF-linked finance.**

## PRIORITY OBJECTIVES

This Pillar focuses on connecting individual actions and institutional responsibilities to realistic financial and human-resource requirements so that a diversified financing approach may be considered that incorporates national budgets, conservation finance, blue economy investment, climate and biodiversity finance, donor resources and private-sector investment. Importantly, financing for stakeholder participation, gender-responsive actions, safeguards, monitoring and institutional capacity shall be explicitly recognised rather than treated as ancillary costs. Specific objectives are as follows:

- Sustain the CZMAI's core operational financing and plan it on a multi-year basis, kept distinct from financing needs for implementation of BSOP-specific technical tasks.
- Support definition of the allocation mechanism for financing implementation of the BSOP across responsible authorities.
- Establish a clear separation between the CZMAI's core operational financing and financing for BSOP implementation and position the CZMAI to attract external climate and KMGBF-linked finance.
- Build financial management and resource-mobilisation capacity proportionate to the foundational years.
- Support growth of the Barrier Reef Foundation to receive gifts and donations and to raise funds to promote the conservation and management of the coastal resources of Belize, including the implementation of the BSOP.

## EARLY ACTIONS (YEARS 1–2)

- **[Year 1]** Develop a bespoke costed BSOP multi-year financing plan to demonstrate and communicate the financing needs of BSOP implementation, updating it as higher-resolution financial information becomes available and acknowledging its stated limitations.
- **[Years 1–2]** Support definition of the allocation mechanism for implementation funding, meaning the route by which funds would reach the authorities responsible for implementing the BSOP.
- **[Years 1–2]** During the foundational years, the CZMAI's role is to position itself to attract external climate and KMGBF-linked finance. Sustainable financing mechanisms and instruments need to be established to support long-term implementation and effective governance. These may be trialled within the I&MP period, drawing on experiences from existing and donor pipeline work.
- **[Year 2]** Undertake a renewed review of current Blue Bond commitments
- **[Year 2]** Use capacity gap analyses to cost BSOP related capacity needs and incorporate this into the BSOP specific multi-year financing plan.

### Lead and Partners

- **Lead:** CZMAI (CZM Advisory Council/updated BSOP governance structure with MBEMC and the Ministry of Finance for the allocation mechanism.
- **Partners:** Development partners and blue and climate finance actors; TNC; and, for access by women- and youth-led enterprises with the Ministry of Tourism, Youth, Sports and Diaspora Relations.

**Table 44 Candidate Indicators**

**CANDIDATE INDICATORS**

| Indicator | Baseline | Target |
|---|---|---|
| Cost model used to demonstrate implementation financing needs | system-level cost model complete (2026) | cost model updated as higher-resolution information becomes available |
| Allocation mechanism for implementation funding defined | Not defined (Ministry-level) | Defined by 2029 |
| CZMAI positioned to attract external climate and KMGBF-linked finance; instruments identified | In investigation (Marine 30x30 Finance) | Instruments identified; at least one progressed from 2028 |

**Table 45 Dependencies and Risks**

**DEPENDENCIES AND RISKS**

| Risk / dependency | Management response |
|---|---|
| Financing shortfall is the dominant threat; reliance on sectoral or ministry support alone is a recognised shortfall. | Diversify toward blue bonds/debt conversions, climate finance, project finance for permanence (PFP) and the Marine 30x30 Finance initiative. |
| External instruments may be premature before 2028; a small labour market may limit finance expertise and concessional access. | Sequence instruments realistically; lean on exist partner mandates and expertise. |

## 5.2.5 Cross-Cutting Theme: International Reporting and Outreach

This theme runs through all five pillars rather than standing alone. On reporting, the CZMAI shall offer new information to feed into MBEMC's reporting on international commitments (for example the Global Biodiversity Framework) where it holds the information; it is not the direct reporter, since other bodies such as the Belize Port Authority report to the IMO.

The CZMAI should also align any agreed marine indicators it collects with those required for Target 3 of the KMGBF, for the monitoring, reporting and verification under Belize's NDC, and for the relevant marine targets of the Global Goal on Adaptation (GGA). The purpose is practical: one set of marine data, collected once, able to serve biodiversity, climate adaptation and mitigation reporting rather than three separate exercises. This also strengthens the CZMAI's contribution to marine-related adaptation reporting as well as to biodiversity reporting. Special focus is placed on ensuring continued partnerships with the Fisheries Department, Coast Guard, Belize Tourism Board, Belize Port Authority and Co-managers, in relation to reporting on matters relating to fisheries surveillance, monitoring, and enforcement etc. Social and ESS related indicators will align with the Sustainable Development Goals (SDGs) and the Belem Gender Action Plan (UNFCCC).

On outreach, the CZMAI communicates the BSOP, this I&MP, and its own role to the system and the public. Concrete actions already programmed include the BSOP branding guidelines, the BSOP annual reporting process, any digital media relaunch proposed by CZMAI and sector-specific stakeholder sensitisation workshops, which deliver the workshops-rather-than-committees approach the Committee endorsed for reaching wider groups such as fishers. Outreach events also need to be designed so that women, coastal communities and young people (and those persons or groups that are represented across all of these groups) can take part in practice, with attention to timing, access. power, location and format. The Year 1 priority of clarifying and communicating the BSOP Implementing Agencies' role sits within this theme.

### 5.2.6 Training and Implementation Sequencing

Not everything can happen at once, and the sequence is itself part of the strategy. The BSOP Implementing Agency itself and its near-term budget need to be settled first; coordination runs throughout; and delivery and science grow as the baseline allows. Financing is split so that the BSOP Implementing Agency near-term budget is secured immediately while external instruments are developed over the following years.

#### 5.2.6.1 Training Needs (Short Term)

As presented in Pillar 4, training and capacity needs shall be an important matter to implement. This shall be presented within the I&MP in more detail by implementation function (e.g., planning, enforcement, monitoring, GIS, stakeholder engagement, M&E, communication, adaptive management) with corresponding training/capacity needed for each function. The RSA captured some initial priorities, though the small questionnaire response rate received is deemed not statistically relevant enough to promote or propose immediate short-term needs. For completeness, the initial focus was placed on the following training needs:

- Collaboration and Coordination
- Legal, Regulatory, and Policy Framework
- Monitoring & Evaluation

#### 5.2.6.2 Implementation Sequencing

Per Pillar, the following "cells" names the state from which that pillar should ideally be reached by the end of each specific year. For this Implementation Roadmap, a red "box" is included to indicate sequencing priorities through to the end of 2027. The more detailed Draft I&MP shall consider stakeholder views on this, plus then develop the details for the remaining years accordingly.

**Table 46 Implementation Sequencing Roadmap**

| Pillar / stream | 2027 | 2028 | 2029 | 2030–36 |
|---|---|---|---|---|
| **P1 Institutional foundation** | Establish | Consolidate | Sustain | Sustain |
| **P2 Coordination & integration** | Begin | Formalise | Operate | Operate |
| **P3 Implementation of PAM** | Prepare | Build | Deliver | Deliver |
| **P4 Science & monitoring** | Protocols | Framework | Monitor | Review |
| **P5 Financing (CZMAI)** | Secure | Sustain | Sustain | Sustain |
| **P5 Financing (external)** | Identify and trial | First instrument | Scale | Scale |

### Priorities for Years 1 and 2

1. Collectively agree on which BSOP implementation actions cannot proceed under existing authority and those that require new legislation, regulations, or statutory instruments in order to succeed.
2. Constitute the governance structures (CZM Advisory Council/updated BSOP governance structure) and staffing needs to the approved establishment.
3. Identify the financing needs of BSOP implementation for the duration of the I&MP.
4. Clarify and communicate the role of the BSOP Implementing Agency across government and to the public.

These four priorities are deemed critical foundations on which every other pillar depends; if only these are achieved in Year 1, the I&MP will be placed on a good footing for success.
Once agreement is reached on the Year 1 and 2 priorities, the Draft I&MP shall draft the following "tools" to support Year 1 task delivery:

- Implementation pathway template;
- Implementation matrix template;
- Monitoring framework template;
- Stakeholder and political economy mapping tool;
- Implementation readiness assessment tool;
- Institutional roles and decision-rights matrix;

- Governance options assessment;
- Action prioritization tool;
- Dependency mapping tool;
- Risk register;
- Costing and budget screening template;
- Gender and ess integration checklist;
- Stakeholder validation questions;
- Communication product checklist; and
- Adaptive management review template.

### 5.2.7 Next Steps

This Implementation Roadmap is designed to give CZMAI a clear basis for the BSOP's delivery given its role as the national lead agency to oversee and coordinate the BSOP's implementation and monitoring plan. Engaging implementing agencies and building consistent practice across sectors is critical for success. To that end, it is proposed that, in tandem with, and in alignment with the ICOM Act (2025), the supporting MoU may be developed and adopted to help support cross-sector collaboration where agencies retain their own mandates. They may use the MoU as a structured basis for cooperation, information-sharing, referral, monitoring and escalation.

To move forward the debate on the structure, detail and ultimate usefulness of the MoU, the BSOP Implementing Agency (namely the CZMAI) in tandem with the BSOP Steering Committee should consider how best to proceed with the MoU as the immediate administrative mechanism for sectoral integration, while keeping legislative and policy reform under structured review.

# References & Bibliography

Ancient Monuments and Antiquities Act. (2000). *Chapter 330. Revised Edition 2000.*

Barzuna, C., P. Haugan, J. Barbière, A. Swift, M. Khan, J.O. Ansong, P.A.S. James, M. Scherer, T. Thiele, K. von Schuckmann, A. Abramic, D. Barrowclough, A. Cisneros-Montemayor, A. Girón, L. Heaps, S. Koirala, M. Lyons, K. Paul, A.T. Priyanto, M. Randone, S. Rosado, C.F. Santos, C. Savoldelli, A.K. Spalding, M. Strand, U.R. Sumaila, A. Swaddling, J. Turner, O. Vestergaard, and I. Yulianto. (2025). Handbook on Sustainable Ocean Plans: A practitioners' guide. Washington, DC: World Resources Institute. https://oceanpanel.org/publication/SOPhandbook/ DOI: https://doi.org/10.69902/8a3c346d.

Belize Blue Economy Development Policy, Strategy and Implementation Plan. (2022). Government of Belize. *Blue Economy Development Policy, Strategy and Implementation Plan 2022–2027.* Ministry of Blue Economy and Civil Aviation.

Belize City Port Acquisition and Settlement Deeds. (2023). *Belize City Port Acquisition and Settlement Deeds.*

Belize Constitution. (2021). *Chapter 4.*

Belize Maritime Economy Plan. (2022). Government of Belize. *Belize Maritime Economy Plan.* Ministry of Blue Economy and Civil Aviation.

Belize National Integrated CZM Strategy. (2003). Coastal Zone Management Authority and Institute. *National Integrated Coastal Zone Management Strategy for Belize.* Prepared by Halcrow Group.

Belize Port Authority (Pilotage) Regulations. (2023). *Belize Port Authority (Pilotage) Regulations.*

Belize Port Authority Act. (2020). *Chapter 223. Revised Edition 2020.*

BSOP Technical Working Groups. (2023). Coastal Zone Management Authority and Institute.

Caye Caulker Coastal Zone Management Guidelines. (2016). Coastal Zone Management Authority and Institute. *Belize Integrated Coastal Zone Management Plan.*https://www.coastalzonebelize.org/wp-content/uploads/2021/01/Caye-Caulker-CoastalZone-Management-Guidelines.pdf

Climate Resilient ICZM Indicators. (2020). Inter-American Development Bank. *Climate-Resilient Integrated Coastal Zone Management Performance Indicators: Application in Belize*https://dx.doi.org/10.18235/0003033

Coast Guard Act. (2020). *Chapter 131:01. Revised Edition 2020.*

Coastal Zone Management Authority and Institute. (2025a). *Belize Integrated Coastal Zone Management Plan.* Belize City: CZMAI.

Coastal Zone Management Authority and Institute (2025b). *National Marine Spatial Planning Policy*. Belize City: CZMAI.

Coastal Zone Management Authority and Institute. (2021). *Evaluation of the Implementation of the Belize Integrated Coastal Zone Management Plan (2016).* Evaluation Report (D3).

Coastal Zone Management Authority and Institute. (2016). *Belize Integrated Coastal Zone Management Plan.* https://ambergriscaye.com/art4/BELIZE-Integrated-Coastal-Zone-Management-Plan.pdf

Coastal Zone Management Authority and Institute. (2024*). BSOP Existing Conditions Report.*

Conservation Funding Agreement. (2021). *Conservation Funding Agreement.*

Cooper, E., L. Burke and N. Bood. (2008). Coastal Capital: Economic Contribution of Coral Reefs and Mangroves to Belize. Washington DC: World Resources Institute.

Cruise Ship Port Development Project Act. (2020). *Chapter 278:04. Revised Edition 2020.*

Ehler, C., & Douvere, F. (2009). *Marine spatial planning: a step-by-step approach toward ecosystem-based management.* UNESCO-IOC https://unesdoc.unesco.org/ark:/48223/pf0000186559

Energy Unit. (2023). *Belize Annual Energy Report*. Ministry of Public Utilities, Energy, Logistics, and E-Governance. Belmopan City, Belize.

Environmental Protection Act. (2020a*). Chapter 328. Revised Edition 2020.*

Environmental Protection Act. (2020b). *Chapter 328. Revised Edition 2000.*

Fisheries Resources Act. (2020). *Revised Edition 2020.*

GEF. (2016). *GEF Small Grants Programme South Africa.*https://www.thegef.org/sites/default/files/publications/South-Africa-GEF-Small-Grants-Programme-March-2017.pdf

GEF. (2017). *Global Environment Facility (GEF): The people's reef: Community stewardship of marine heritage in Belize.* https://www.thegef.org/news/peoplee28099s-reef-communitystewardship-marine-heritage-belize

GEF. (2024). *Resilient Bold Belize: Stakeholder Engagement Plan.* WWF US / Blue Bond and Finance Permanence Unit. https://files.worldwildlife.org/wwfcmsprod/files/Publication/file/8r8phh011x_Annex_F_SEP_Resilient_Bold_Belize_WWF_GEF.pdf

Gerven, A. V., Kerkhove, T. R. H., Lago, M., Araujo, A., Berge, M., Mashkina, O., Ziemba, A., El Serafy, G., Tamis, J., Jongbloed, R., Piet, G., Rozemeijer, M. J. C., & Degraer, S. (2025). Facilitating an integrated assessment of impacts in marine multi-use: The Ocean Multi-use Assessment Framework (OMAF). *Marine Policy, 173,* 106570. https://doi.org/10.1016/j.marpol.2024.106570

Harbours and Merchant Shipping Act. (2020). *Chapter 234. Revised Edition 2020.*

High Seas Fishing Act. (2020). *Chapter 210:01. Revised Edition 2020.*

ICZM Plan. (2016). Coastal Zone Management Authority and Institute. *Belize Integrated Coastal Zone Management Plan.*

ICZM Plan. (2020–2025). Coastal Zone Management Authority and Institute. *Interim National Integrated Coastal Zone Management Plan 2020–2025.*

ID&M. (2021). *Belize National Mariculture Policy.*

Institute of Archaeology. (2025). *Our Caves. Protect, manage, explore. Belize Cave Management Policy.* National Institute of Culture and History.

Integrated Coastal and Ocean Management. (2025). *Belize.*

Maritime Areas Act. (2020). *Chapter 11. Revised Edition 2020.*

McCann, J., Hodson, C., Walsh, J. P., Freeman, P., Lukic, I., Tephany, J. G., Trouillet, B., Thomas, J.-B., Juell-Skielse, E., Gröndahl, F., Rebours, C., Diederichsen, S., Scherer, M., Weiss, C. V. C., & Lima, F. A. V. dos Santos, B. A. Q. (2023). Ocean Multi-Use Assessment Approach (MUAA). @MULTIFRAME Project. ISBN 979-8-218-17554-2. https://www.submarinernetwork.eu/multi-frame-publication-page

McField, M., Soto, M., Martinez, R., Giró, A., Guerrero, C., Rueda, M., Kramer, P., Roth L., Muñiz I. (2024). *2024 Mesoamerican Reef Report Card. Healthy Reefs for Healthy People*.

Mines and Minerals Act. (2000). *Revised Edition 2000*

Mines and Minerals Act. (2020a). *Chapter 226. Revised Edition 2020.*

Mines and Minerals Act. (2020b). *Revised Edition 2020.*

Ministry of Blue Economy and Civil Aviation. (2022). *Blue Economy Policy, Strategy and Implementation Plan.*

Ministry of Foreign Affairs. (2025). *Who we are.* https://mfa.gov.bz/mission-vision/

MMO. (2019). Marine Management Organisation: Corporate report. *Evidence strategy 2015 to 2020.* https://www.gov.uk/government/publications/evidencestrategy-for-the-marine-managementorganisation-mmo/evidence-strategy-2015to-2020

Moreno, A., & Revenga, C. (2014). *The System of Territorial Use Rights in Fisheries in Chile.* The Nature Conservancy. https://www.nature.org/media/chile/system-of-TURFs-in-Chile.pdf

Mulekom, L. V. (2008). *Reflections on Community Based Coastal Resources Management (CB-CRM) in the Philippines and South-East Asia.*https://oxfamilibrary.openrepository.com/bitstream/10546/112453/1/fp2p-csreflections-community-based-coastalresources-philippines-south-east-asia-140608-en.pdf

National Cultural Heritage Preservation Act. (2020). *Revised Edition 2020.*

National Fisheries Enforcement and Conservation Monitoring Strategy and Action Plan (2026). The Ministry of Blue Economy and Marine Conservation. *National Fisheries Enforcement and Conservation Monitoring Strategy and Action Plan*

National Institute of Culture and History. (2016). *Belize National Cultural Policy.*

National Institute of Culture and History Act. (2020). *Chapter 331. Revised Edition 2020.*

National Lands Act. (2020). *Chapter 191. Revised Edition 2020.*

National Protected Areas System Act. (2015). *Chapter 215. Revised Edition.*https://www.nationalassembly.gov.bz/wp-content/uploads/2016/09/Act-No.-17-of-2015National-Protected-Areas-System-Act-2015.pdf

National Protected Areas System Act. (2020). *Revised Edition 2020.*

Nthane, T. T., Saunders, F., Gallardo Fernández, G. L., & Raemaekers, S. (2020). Toward sustainability of South African small-scale fisheries leveraging ICT transformation pathways. *Sustainability, 12(*2), 743. https://doi.org/10.3390/su12020743

Petroleum Act. (2020). *Chapter 225. Revised Edition 2020.*

Petroleum Operations (Maritime Zone Moratorium) Act. (2020). *Chapter 330. Revised Edition 2020.*

Schupp, M. F., Bocci, M., Depellegrin, D., Kafas, A., Kyriazi, Z., Lukic, I., Schultz-Zehden, A., Krause, G., Onyango, V., & Buck, B. (2019). Toward a common understanding of ocean multi-use. *Frontiers in Marine Science.* https://doi.org/10.3389/fmars.2019.00165

SI No. 54 of 2012. (2012). *Regulation 24A. Belize Managed Access Fishing Zones.*

Southern Deep Port Development Facility. (2024). *Southern Deep Port Development Facility.*

TNC. (2021). *Case Study: Belize Blue Bonds for Ocean Conservation.*https://www.nature.org/content/dam/tnc/nature/en/documents/TNC-Belize-DebtConversion-Case-Study.pdf

TNC. (2023). *Belize Blue Bonds Impact Report.*https://www.nature.org/content/dam/tnc/nature/en/documents/Belize-Blue-Bonds-2023-Impact-Report.pdf

TNC. (2024). *Strategies for Indonesia's Seaweed Aquaculture Policy to Enhance an EstablishedIndustry.*https://www.aquaculturescience.org/content/dam/tnc/nature/en/documents/aquaculture/PolicyRecommendations_Indonesia_Phase3.pdf

Trade in Endangered Species (CITES) Act. (2023). *Trade in Endangered Species (CITES).*

UNESCO-IOC/European Commission. (2021). *MSPglobal International Guide on Marine/Maritime Spatial Planning.* UNESCO. https://unesdoc.unesco.org/ark:/48223/pf0000379196

UNESCO. (2025). *Convention on the Protection of the Underwater Cultural Heritage.*https://www.unesco.org/en/legal-affairs/convention-protection-underwater-cultural-heritage

Wildlife Protection Act. (2020). *Chapter 220. Revised Edition 2020.*

Wrecks and Salvage Act. (2020). *Chapter 237. Revised Edition 2020.*

WTTC. (2023). *Travel & Tourism Economic Impact 2023.* https://assets-global.website-files.com/6329bc97af73223b575983ac/647ef2a0b3c577febd45f170_EIR2023-Belize.pdf

WWF. (2022). *Belize Mangrove Alliance Action Plan 2022–2027.*https://www.mangrovealliance.org/wp-content/uploads/2022/09/BMA-ActionPlan_Final.pdf

# Appendix 1: BSOP Governance Framework

The governance framework for the BSOP includes the following committees, organizations and bodies.

## Executive Committee

The Executive Committee is responsible for high-level decision-making based on information provided by the MSP Steering Committee, TWGs, and public workshops. This Chief Executive Officer (CEO)-level group includes:

- Chair: CEO, Office of the Prime Minister
- Members:
  - Ministry of Blue Economy and Marine Conservation
  - Ministry of Sustainable Development, Climate Change, and Solid Waste Management
  - Ministry of Natural Resources, Petroleum and Mining
  - Attorney General's Ministry
  - Financial Secretary
  - Ministry of National Defence and Border Security

## BSOP Steering Committee (SC)

The BSOP Steering Committee provides leadership and oversight of outputs and the timeline to complete the MSP. Its functions include reviewing outputs, providing technical, policy, and legislative input, and working to find agreement on these outputs from all relevant sectors engaged in the BSOP process. The Steering Committee provides their recommendations on outputs via the Blue Bond and Finance Permanence (BBFP) Unit for consideration and approval by the Executive Committee before outputs are presented to MSP Stakeholder Workshops and for public engagement.

- Chair: CEO, CZMAI
- Co-Chair: Vice President, University of Belize
- Secretary: MSP Process Lead, CZMAI
- Recording Secretary: MSP Coordinator, CZMAI
- Members include representatives from:
  - Ministry of Blue Economy and Marine Conservation
  - Ministry of Sustainable Development, Climate Change, and Solid Waste Management

- Ministry of Tourism, Youth, Sports, and Diaspora Relations
- Ministry of Finance, Investment, Economic Transformation, Civil Aviation, and e-Governance
- Ministry of Natural Resources, Petroleum and Mining
- CZMAI
- BBFP Unit, Office of the Prime Minister
- TNC
- Belize Network of NGOs (BNN)
- Belize Port Authority (BPA)
- Energy Unit, Ministry of Public Utilities, Energy and Logistics
- University of Belize (UB)
- Belize National Coast Guard
- Belize Fisheries Department (BFiD)
- Belize Forest Department (BFD)
- Department of Environment (DOE)
- Chairs of 4 TWGs: Finance and Investment (Belize Chambers of Commerce and Industry); Fisheries (inclusive of Aquaculture) (Belize Fishermen Cooperative Association); Marine and Coastal Ecosystems (Wildlife Conservation Society); and Tourism (Belize Tourism Industry Association).

## BSOP Core Team (CT)

The BSOP Core Team utilizes information to generate spatial and non-spatial outputs to inform the BSOP. The Core Team facilitates an interactive process that provides stakeholders with several opportunities to provide input.

- Chair: MSP Process Lead, CZMAI
- Secretary: MSP Process Lead, CZMAI
- Recording Secretary: MSP Coordinator, CZMAI
- Members include representatives from:
  - BBFP Unit
  - CZMAI
  - BFiD
  - Ministry of Blue Economy and Marine Conservation
  - TNC (The Belize Program and Global Team)
  - World Wildlife Fund (WWF)

## Technical Working Groups (TWGs)

The Technical Working Groups (TWGs) provide technical and sectoral information, local knowledge, and topic expertise to inform the development of planning tools and draft outputs during the BSOP process. This includes the provision of all relevant data,

knowledge, and information that can be used to ensure that relevant ecological and socio-economic matters for each sector are appropriately addressed within the BSOP. As per the governance framework for the development of the BSOP, the following seven Technical Working Groups were established:

**Maritime Administration**

- Belize Coast Guard
- Harvest Caye
- The Belize High Seas Fisheries Unit (BHSFU)
- San Pedro Belize Express Water Taxi Limited
- Port Coral
- Port of Belize
- Belize Port Authority

**Finance and Investment**

- Belize Chamber of Commerce and Industry (BCCI)
- Climate Finance Unit
- Ministry of Finance, Investment, Economic Transformation, Civil Aviation and e-Governance
- Protected Areas Conservation Trust (PACT)
- Inter-American Development Bank (IDB)
- Belize Fund for a Sustainable Future
- Environmental Defense Fund (EDF)

**Fisheries inclusive of Aquaculture**

- Northern Fishermen Cooperative Society Ltd.
- Belize Fishermen Cooperative Association
- The Nature Conservancy – Fisheries Improvement Program as an NGO
- Aquaculture Unit, Ministry of Agriculture
- Caribbean Network for Fisherfolk Organization
- Caribbean Regional Fisheries Mechanism
- Belize Federation of Fishers
- The Belize Fisheries Department
- Turneffe Atoll Sustainability Association

**Marine and Coastal Development**

- Mining Unit, Ministry of Natural Resources Petroleum & Mining
- Physical Planning Section, Ministry of Natural Resources Petroleum & Mining
- Department of Environment
- Belize Network of NGOs (BNN)
- Institute of Archaeology (AI-NICH) Belize, National Institute of Culture and History
- Ministry of Sustainable Development, Climate Change and Solid Waste Management
- Association of Real Estate Brokers of Belize

**Marine and Coastal Ecosystems**

- Wildlife Conservation Society (WCS)
- National Biodiversity Office (NBIO)
- Belize Forest Department
- University of Belize / Environmental Research Institute (UB-ERI)
- Belize Fisheries Department
- Hol Chan Marine Reserve
- Crocodile Research Coalition
- Clearwater Marine Aquarium Belize
- The University of the West Indies Open Campus Belize (UWI)
- Fragments of Hope

**Energy**

- Energy Unit, Ministry of Public Utilities, Energy and Logistics
- Belize Electricity Limited (BEL)
- PUMA Energy
- Belize Natural Energy (BNE)

**Tourism**

- Belize Local Association of Stakeholders in Tourism (BLAST)
- Belize Tourism Industry Association (BTIA)
- Belize Tourism Board (BTB) (inactive)
- Fort Street Tourism Village
- Belize Island Holding Limited
- CZMAI Sports Fishing Unit
- Ministry of Tourism, Youth, Sports & Diaspora Relations

### Public Stakeholders

Public stakeholders, including local communities, civil society organizations, and the public, play a crucial role in the MSP process. Their participation ensures that the BSOP reflects the needs and aspirations of all users of the ocean space. Engagement is facilitated through public consultations, community meetings, and participatory mapping activities.

# Appendix 2: Stakeholder Engagement and Communication

The Stakeholder Engagement Plan was developed to guide the methods, strategies, and safeguards used to engage stakeholders in the planning and design of the BSOP. Stakeholders were identified and systematically analyzed, resulting in a stakeholder map with four categories, including key players, context setters, active observers and stakeholders to be monitored to inform the development of the Stakeholder Engagement Plan (Figure 2A).

Key players are those critical, dedicated stakeholders with high levels of influence and interest in the BSOP; they were engaged closely and meaningfully through co-design workshops and through representation on the BSOP Steering Committee. This category includes coastal communities, the wild capture fishing industry, government actors, marine protected area (MPA) co-managers, and organizations representing coastal and marine tourism and recreation industries. Context setters are stakeholders with a lower level of interest in the BSOP than key players but still have a high influence over the process. This category includes shipping and transportation, and coastal development. Active observers have a high level of interest in the BSOP, but a lower level of influence over the process. All other stakeholders are categorized as stakeholders to be monitored. The Stakeholder Engagement Plan also established a gender inclusion strategy, social safeguards, and conflict resolution processes.

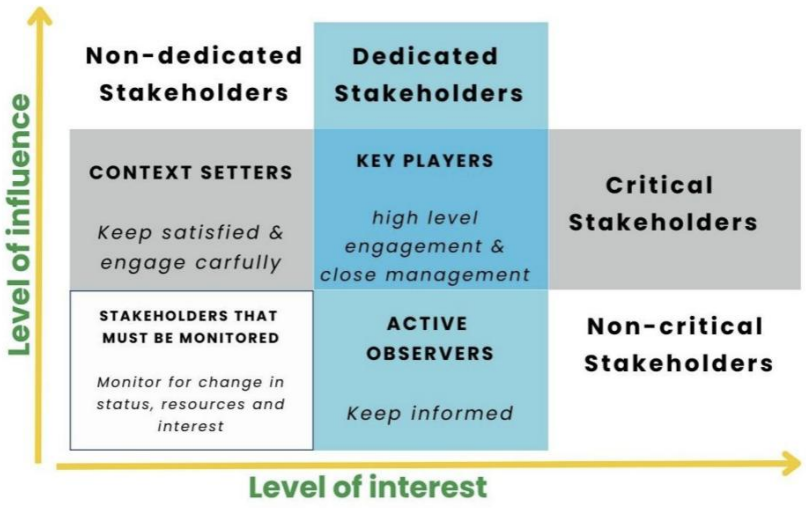



**Figure 2A** Framework for mapping stakeholders and informing engagement. This framework was used in the development of the BSOP Stakeholder Engagement Plan

Since its launch in October 2022, the BSOP process has organized 317 stakeholder events while engaging approximately 9,442 participants (34% female, 48% male and 18% not specified), figure subjected to duplicated count, through educational and public outreach, community consultations, workshops, TWG, sector specific, subgroup, Core Team and Steering Committee meetings (Figure 2B).

Each engagement type catered to different stakeholder groups to raise awareness, assess public knowledge of the BSOP or to strengthen technical collaboration. Educational and public outreach events, such as school visits and informational booths at different public events, targeted the wider public, students and teachers to raise awareness of the BSOP and its importance. In addition, traditional media streams such as TV and radio ads also assisted in widening the reach for the public to engage with BSOP. Community Consultations provided an opportunity for community members to share concerns, perspectives and knowledge. While workshops, TWG and other internal meetings facilitated technical exchange and sector-specific dialogue to inform the BSOP. About 132 engagements were community-based conducted across 27 coastal communities (Figure 2C).

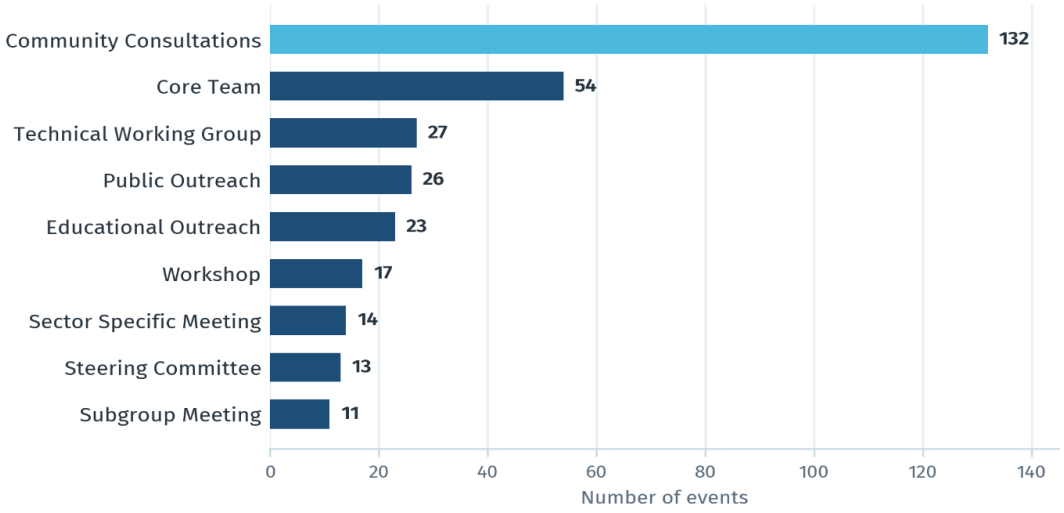



**Figure 2B** BSOP stakeholder engagement types and number of events

Community consultations were integral in advancing the decision-making process of BSOP milestones. Consultations provided a platform for dialogue, information sharing, and feedback gathering for the expansion of Biodiversity Protection Zones and the BSOP future planning approach. These consultations were held with critical stakeholders and the public in coastal communities. They included structured discussions, presentations, and question-and-answer sessions, with a specific focus on understanding the human uses and activities and to spatially map these uses.

Stakeholders were invited to propose alternatives and suggest appropriate impact avoidance, management, and mitigation measures. During each consultation, the BSOP team took notes and collected feedback from participants. Summary reports of all consultations were then published to the BSOP website for public records.

The BSOP Stakeholder Engagement Dashboard was used to track upcoming and completed community engagements and to map the distribution of consultations across the country. There was a total of 317 stakeholder engagement activities undertaken throughout the BSOP process.

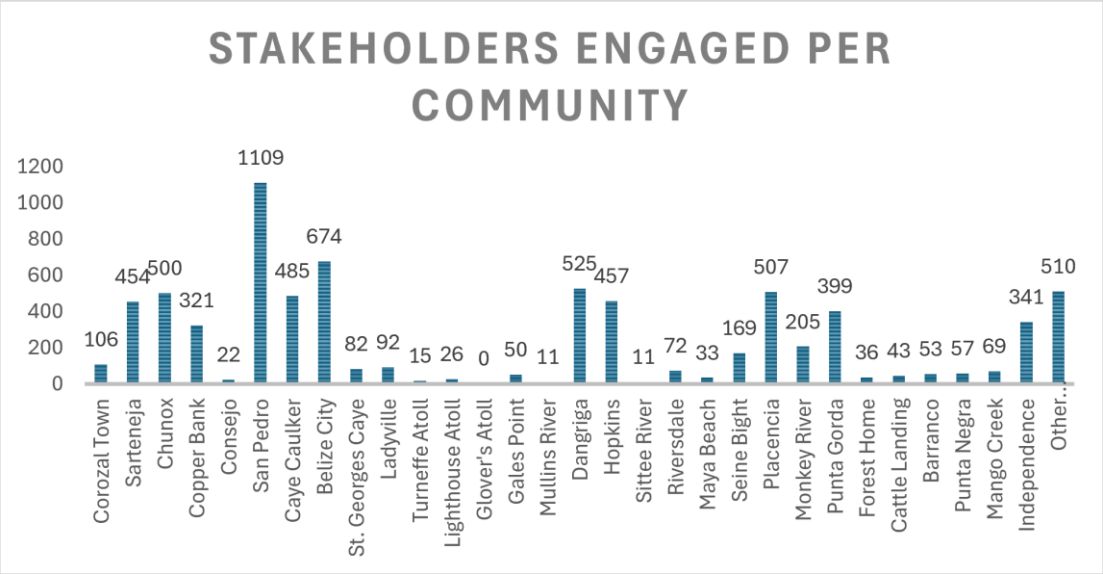



**Figure 2C** BSOP community consultations

To uphold the guiding principles of the BSOP, a feedback mechanism was introduced that features impartial and diverse methods of communication where stakeholders provide their feedback. This included but is not limited to verbal communication following engagement activities, email, social media platforms, text message, telephone calls and written communication submitted via a suggestion box placed in meeting venues, providing stakeholders with the option to anonymously share feedback without fear of retribution. Feedback was captured, stored and considered to be actionable by the implementing agency using a feedback log.

Diverse, socio-culturally appropriate, and gender-sensitive channels of communication were established to ensure that stakeholders can safely and freely submit their grievances. CZMAI provided several mechanisms outside of traditional face to face engagement for stakeholders to provide feedback and grievances. Any grievance received was noted, addressed and included in a stakeholder log. This approach ensures that there is transparency about the activities of the BSOP, feedback and grievances of stakeholders.

Beyond proving mechanics for stakeholders to submit feedback and grievances, stakeholder engagement also played a direct role in shaping the development of the BSOP. Inputs gathered though various engagement types outlined to identify existing and future ocean uses, refine sector priorities, assess compatibility among uses, adjust proposed zoning boundaries, and strengthen management considerations (Table 2A). This helped to ensure that stakeholder knowledge, concerns and recommendations were considered in both the spatial design of the Plan and the development measures intended to guide implementation and reduce potential conflicts among ocean users.

**Table 2A** Summary of Stakeholder Inputs

| Engagement Activities | Stakeholder contributions to the BSOP |
|---|---|
| Ocean Use Surveys (OUS) | Identified and spatially mapped existing ocean uses and areas of importance for ocean users |
| Community Consultations | Identified local priorities, concerns, areas of use and community-specific considerations |
| Sector Consultations and Technical Working Groups (TWGs) | Refined sector requirements, compatibility considerations and management needs |
| Biodiversity Protection Zone (BPZ) Consultations | Informed proposed protection areas and support refinement of zone boundaries |
| Future Planning Consultations | Identified potential future uses, opportunities, conflicts and community priorities |
| Public Inspection Period | Provide an opportunity for stakeholders and the wider public to review the draft Plan and provide feedback for revision |
| National Validation | Final review and refinement of the zoning, management direction and contents of the draft Plan |

# Appendix 3: Public Information Systems and Decision Support Tools

The BSOP website, data viewer, and social media platforms provide key participatory tools for transparency, information sharing, and public engagement in the BSOP process.

**SeaSketch Platform**: The SeaSketch online platform gives direct online access to spatial data on key ecosystems and priority ocean use areas in Belize, allowing users to visualize datasets related to sectors that depend on marine resources and ocean space. By making spatial information more accessible, the data viewer helps stakeholders and the public understand proposed measures and, through the associated online forum, provide feedback that can inform the BSOP process.

**The BSOP Website:** The BSOP website serves as a dedicated platform for regularly updated information about the MSP process. It houses a knowledge library including technical resources, meeting documents, and interactive maps. It also shares communication materials such as flyers, factsheets, brochures, videos, pictures, and infographics, and provides a channel for the public to submit anonymous comments, questions, or concerns about the BSOP or related issues.

**Social media:** Social media is used to share key messages, announce upcoming community meetings, and circulate infographics, short videos, flyers, and factsheets. Interactive features such as comment threads help drive engagement and gather feedback, while reach and interaction metrics are monitored to assess public response.

Decision-support tools are software applications that assist with environmental decision-making and long-term planning. They also support participatory processes by facilitating dialogue and information exchange, helping non-experts explore policy options, and documenting the reasoning behind decisions, thereby improving transparency and fairness (Turschwell et al., 2022). Because the MSP process seeks to understand and rationalize both the current and future use of ocean space, a range of decision-support tools were identified and applied to support the identification and designation of new BPZs.

**SeaSketch Ocean Use Survey and Ocean Planning Tool:** The SeaSketch Ocean Use Survey (OUS) was used to support participatory mapping of priority use areas with stakeholders at the national level. The survey produced heatmaps of priority use areas,

which were then used to assess potential impacts from proposed zones and evaluate their compatibility with the draft plan. The SeaSketch Ocean Planning Tool was used to rationalize and validate zone boundaries developed with stakeholders. Its output provided real-time information on the representation of ecosystems, use areas, and demographics within the proposed zones, helping stakeholders assess whether the boundaries were feasible in relation to the stated objectives. Finally, the Online Forum was used to facilitate open discussion on the spatial layers produced. This allowed all stakeholders the opportunity to provide feedback, including recommended changes or concerns.

**Marxan:** To support training and initiate scenario development for the BSOP, a preliminary Marxan analysis was conducted using draft parameters. The analysis created a planning unit file containing 34,410 planning units of 1 $km^2$ each, covering Belize's internal waters, territorial sea, and Exclusive Economic Zone. The features included in the analysis were ecosystem datasets such as coral, mangrove, and seagrass, as well as seafloor geomorphology features including sills, shelf valleys, plateaus, escarpments, canyons, abyss, slopes, shelves, and terraces. All features were assigned a target of 30% of their respective cover. In the preliminary scenario, existing protected areas were locked in, meaning they were assumed to remain in place and were counted toward meeting the conservation targets. No additional cost layer was included, so all planning units were treated as equally costly in terms of implementation. The scenario also included a target of protecting 30% of Belize's ocean space, and outputs could include both shallow and deep-water habitats. It should be noted that these results did not incorporate the full set of input datasets, especially those from the OUS, because they were not yet complete at the time. Later in the process a second analysis was done which included the finalized OUS outputs as well as a finalized set of MPA Design Criteria. The outputs were used to assess the degree to which the proposed Biodiversity Protection Zones to meet the Milestone 6 targets aligned with the Design Criteria identified.

**Smart Coasts ROOT Tool:** Through the Smart Coasts Project, priority areas for adaptation strategies were identified using the Restoration Opportunities Optimization Tool (ROOT), developed by the Natural Capital Project at Stanford University. ROOT is an optimization tool designed to identify where investments in adaptation measures will generate the greatest return in ecosystem services. In Belize, the analysis used spatial decision units of 10 $km^2$ and assessed coastal and marine adaptation strategies such as mangrove protection, mangrove restoration, coral protection, coral restoration, and seagrass protection. The analysis considered Belize's Nationally Determined Contribution and the national target of protecting 30% of Belize's Ocean. The highest-priority areas were those expected to deliver the greatest return on investment while enhancing ecosystem services such as coastal protection, fish biomass, lobster catch,

and visitation. Outputs from ROOT have been used in the BSOP development process to help assess the relative priority of areas for protection based on ecosystem service benefits.

**Marine InVEST Habitat Risk Assessment Tool:** The InVEST habitat risk assessment (HRA) model allows users to assess the risk posed to coastal and marine habitats by human activities and the potential consequences for the delivery of ecosystem services. Outputs from the model are useful for understanding the relative risk of human activities and climate change to habitats within a study region and among alternative future scenarios. Model outputs can help identify areas on the seascape where human activities may create trade-offs among environmental services by posing a risk high enough to compromise habitat structure and function. The model can help to prioritize areas for conservation and inform the design and configuration of spatial plans.

# Appendix 4: Rationale: Milestone 6 – Biodiversity Protection Zones

## Gap Analysis

After Milestone 4, a gap analysis assessed how well coastal and marine ecosystems are represented in the MPA network, to identify which ecosystems Milestone 6 should target. Ecosystems in internal waters, such as coral reefs and seagrass beds, already exceed 30% representation (Figure 4A), consistent with stakeholder views that nearshore areas have enough MPAs. Several deep-sea features, however, remain highly underrepresented (Figure 4B), so increasing their representation became a design criterion for Milestone 6.




**Figure 4A** Results of gap analysis showing representation of coral reefs and seagrass beds following Milestone 4 designation.

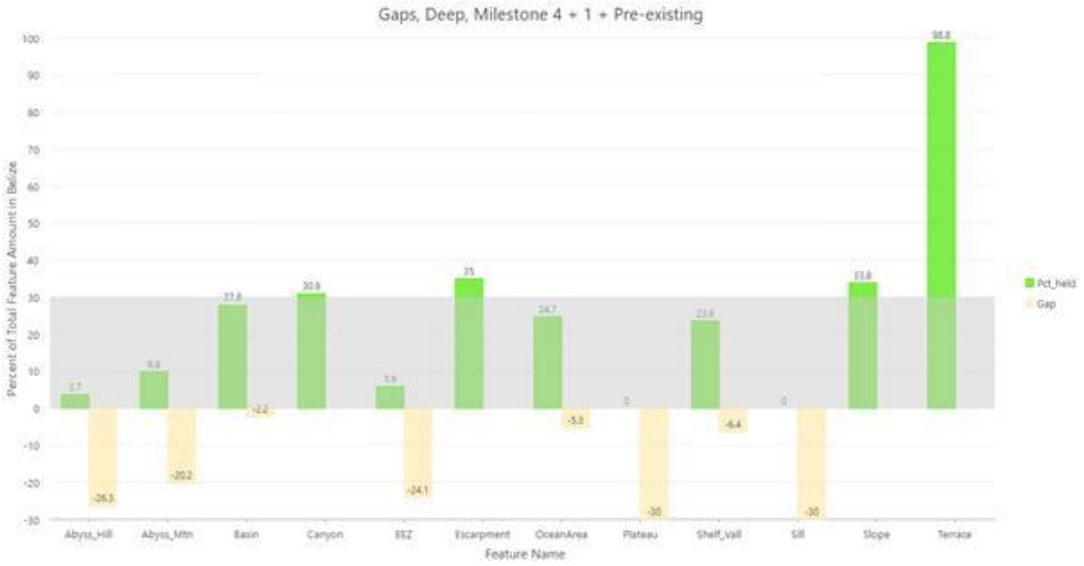



**Figure 4B** Results of gap analysis showing underrepresented deep-sea features

## MPA Design Criteria

Clear, transparent and nationally consistent design criteria help ensure that MPAs are ecologically effective, socially equitable, legally sound and aligned with international best practice. The criteria for Milestone 6 were developed through a consultancy (October–December 2025; to produce MPA design criteria and a national zoning framework for the Belize Sustainable Ocean Plan (BSOP). They provide a science-based, stakeholder-grounded "rulebook" for identifying, designating, zoning, expanding and evaluating MPAs in line with the BSOP, national legislation and global commitments, and set a minimum national standard across four pillars: Ecological, Economic, Social and Cultural (Table 4A).

**Table 4A:** Qualitative MPA design criteria to inform the remaining BPZs for Milestone 6.

| Pillar | Criteria | Description |
|---|---|---|
| **Ecological** | 1. Represent the full range of biodiversity | • Protection of 20-30% of key marine ecosystems. |
| | 2. Include ecologically significant areas | • Secure the long-term sustainability of fisheries by permanently protecting larval source populations, spawning aggregations sites, etc<br>• Employ seasonal closures to safeguard predictable breeding and nesting cycles. |
| | 3. Maintain long-term protection | • Design for biomass buildup and spillover into surrounding fisheries, tourism, culture and other sectors outside MPA boundaries.<br>• Adaptive management framework that utilizes early warning indicators and legal flexibility to adjust boundaries. |
| | 4. Ensure ecological linkages | • Plan for connectivity (migration routes, reef-mangrove-seagrass systems).<br>• Transboundary connectivity (Meso American Reef). |
| | 5. Maximize each MPA's contribution | • Prioritizing large MPAs (>25 km²).<br>• MPA depth gradients (intertidal-lagoon-reef slope).<br>• Compact shapes aligned with natural features to minimize fragmentation. |
| | 6. Recognize effective Locally Managed Marine Areas (LMMAs) | • Formally recognizing Locally Managed Marine Areas (Tarpon Cove, Iguana Reserve, etc). |
| **Economic** | A national sustainable financing strategy | • Dedicated budget lines for core operations. |
| | Diversified revenues | • Tourism/user fees, research permits. |
| | Cost-sharing frameworks | • Tourism operators and local enterprises (moorings, ranger support, compliance). |
| | Clear policies for revenue retention and reinvestment | • Consistent auditing and reporting. |
| | Compensation and livelihood transition support | • Communities that are affected by no-take zones. |

| Pillar | Criteria | Description |
|---|---|---|
| **Social & Cultural** | Recognition of Indigenous and Community Rights | • MPA design must recognize indigenous, traditional, and local community rights, including customary marine tenure, ancestral fishing areas, and community governance system. |
| | Integration of Traditional Ecological Knowledge (TEK) | • TEK protocols integrated into planning tools and monitoring. |
| | Protection of Cultural and Marine Heritage | • Cultural mapping.<br>• Recognition of marine archaeological sites within MPA planning. |

## Urgent Policy Directives for MPA Expansion or Re-gazetting Existing MPAs

Stakeholders used the qualitative criteria to set the quantitative targets that defined the scenario explored in Marxan.

### A. Minimum national design standards (adopt as policy)

- 20–30% of each habitat protected, with ≥3 replicates per habitat across regions.
- Core no-take designation for irreplaceable/spawning/source areas.
- Connectivity rules (20–50 km preferred spacing; max 100 km), aligned with currents and habitats.
- Size thresholds (≥25 km² minimum; prioritize larger MPAs where feasible).
- Enforceable shapes (compact, contiguous, simple boundaries).

### B. Enablers that determine success (funding, governance)

- Approve a national MPA financing strategy and revenue reinvestment rules.
- Mandate co-management standards (participation protocols, equity safeguards, grievance mechanism).
- Require adaptive management clauses and early-warning ecological indicators in regulations.

### C. Integration requirements (BSOP delivery)

Every new or expanded MPA proposal must include:

(i) ecological rationale and datasets used;
(ii) socioeconomic impact and mitigation;
(iii) financing plan;
(iv) governance/co-management arrangements;
(v) cultural mapping/heritage considerations;
(vi) monitoring plan with indicators.

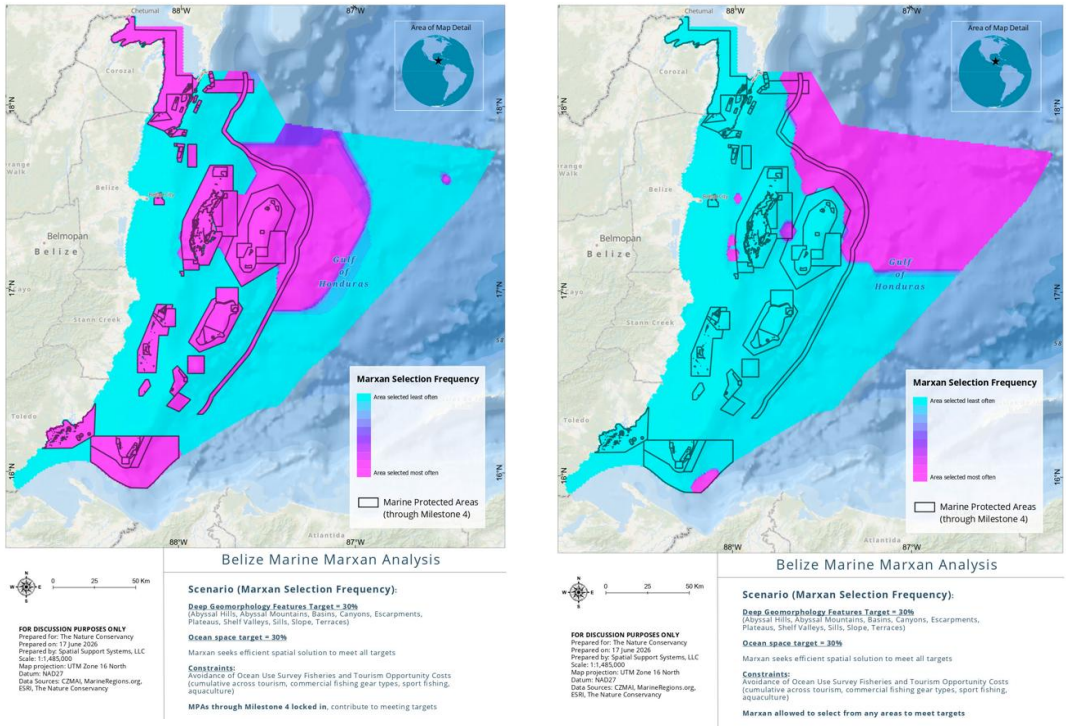
## Scenarios for Marxan Analysis

Marxan was used as a tool to help stakeholders identify areas for protection. SeaSketch data show that key ecosystems are well represented in the current MPA network, but the deep sea and the Exclusive Economic Zone (EEZ) remain gaps, and features such as the deep sea, seamounts and flats were not assessed in earlier Marxan analyses. The scenario therefore targets deep-sea features unrepresented in the current MPA system while accounting for livelihoods across Belize's ocean space (Table 4B).

**Table 4B:** Marxan deep-sea scenario.

| Criteria | Pillar | Suggested Criteria |
|---|---|---|
| **EEZ Targets** | Ecological 1 & 5 | No MPA in our EEZ, Target EEZ for selection of new MPA 4% ocean Space |
| **Deep Sea Targets** | Ecological 1 & 5 | >200 Meters Depth, Lack of protection in deep waters, all protection are on the atolls and lagoon areas of Belize 1.2%-2% of ocean space. |
| **Connectivity** | Ecological 4 | 20-50 km from existing MPA. MPA in Belize 3km to 26km. |
| **Deep Sea Geomorphology** | Ecological 1 & 5 | Protection for deep sea features including shelf, abyss, plateau, seamounts etc. |
| **Livelihood** | Social Criteria | Utilize Ocean Use Survey (OUS) Data to avoid displacement of livelihood; using the OUS results as a cost layer, in particular the tourism and fisheries. |

Using the finalized design criteria, both Marxan scenarios selected areas extending from Lighthouse Reef Atoll to the EEZ boundary (Figure 4C). On this basis, the team finalized the boundaries for the expansion of HBPZ 3 and the creation of HBPZ 8.




**(Left) Scenario 1: Locked to existing MPA network** **(Right) Scenario 2: Unlocked**

**Figure 4C:** Marxan selection frequency across two scenarios. (Left) Locked to cluster around the existing MPA network. (Right) Unlocked to identify all areas that meet criteria. (Yellow) Proposed area for BPZs.

## Milestone 6 Outcomes

Milestone 6 increases protection of deep-sea geomorphological features and the EEZ, and brings Belize to 30% of ocean space protected:

- **Ocean space protected:** 25.05% → 30.00%.
- **EEZ protection:** 5.9% → 15%.
- **Deep-sea features:** all gained protection, including abyssal hills, abyssal mountains, basins, canyons, escarpments and plateaus (Figure 4D). The largest gain is Plateau, from no representation after Milestone 4 to 34.1%.
- **Sill:** still unrepresented. It lies at the far eastern edge of the EEZ, about 78 km (48 mi) from the territorial sea, making protection impractical (Figure 4E).

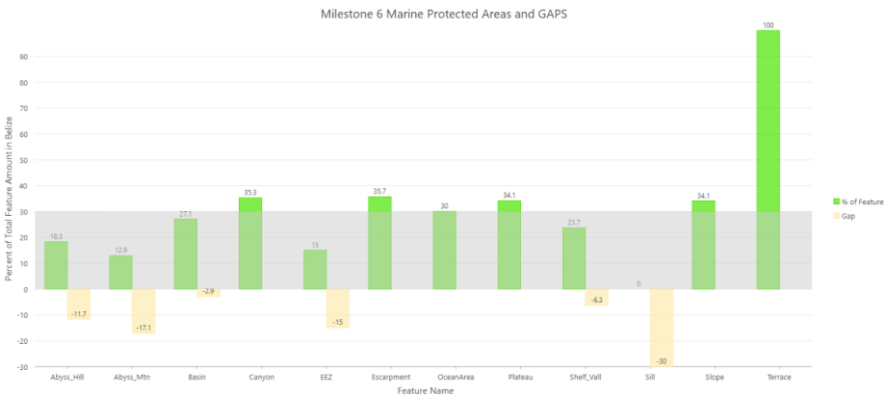



**Figure 4D:** Representation of deep-sea features following the Milestone 6 designations.

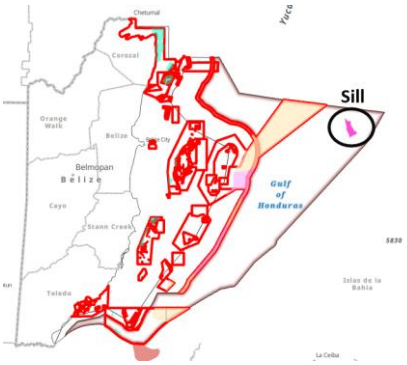



**Figure 4E:** Location of the Sill within Belize's ocean space.

HBPZ 8 and the HBPZ 3 expansion account for most of the new deep-sea area, and the Sapodilla Caye Marine Reserve's Conservation Zone IV was extended east along the EEZ boundary. Table 4C lists the deep-sea features added by each area.

**Table 4C:** Deep-sea geomorphology captured in the Milestone 6 proposal.

| Marine Protected Area | Ecosystem | Area (km²) |
|---|---|---|
| **High Biodiversity Protection Zone 8** | Abyssal Hills | 1,220.15 |
| | Basins | 66.77 |
| | Plateau | 78.55 |
| **High Biodiversity Protection Zone 3 (Expansion)** | Abyssal Hills | 216.36 |
| | Abyssal Mountain | 99.79 |
| | Canyons | 125.07 |
| | Escarpment | 39.52 |
| **Sapodilla Cayes Conservation Zone IV (Expansion)** | Abyssal Hills | 127.86 |

# Appendix 5: Zoning Typology

*Legend: A: Allowed, R: Regulated, P: Prohibited*

*Note: Appendix 5 reproduces the zoning typology developed through the NOZF consultancy. The "Mariculture Zone" and "Coastal & Marine Ecosystems" columns, and the Coastal and Marine Ecosystems activity rows, are kept for reference only. In the final National Ocean Zoning Framework (Section 4.2 and Appendix 6), mariculture is managed within the Fisheries and Mariculture Zone and ecosystem protection through the Marine Protected Areas objective-based zone. Values for the zones and activities common to both have been aligned with the Section 4.2 typology tables.*

| | | Fisheries Zone | Tourism Zone | Mariculture Zone | Coastal & Marine Ecosystems | Coastal & Marine Development | Energy Zone | Maritime Administration | Community Use Zones | Coast Guard Operational | Seabed Minerals and Minerals | Marine Archaeological Sites | Flat Fishing Zones |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Coastal and Marine Development | Overwater Construction | R | R | R | R | A | R | R | R | P | R | P | R |
| | Ports & Harbour Dredging | P | P | P | P | A | P | A | P | P | R | P | P |
| | Development Dredging | R | R | P | R | A | R | R | R | P | R | P | R |
| | Dredged Material Disposal | P | P | P | P | A | P | R | P | P | P | P | P |

| | | Fisheries Zone | Tourism Zone | Mariculture Zone | Coastal & Marine Ecosystems | Coastal & Marine Development | Energy Zone | Maritime Administration | Community Use Zones | Coast Guard Operational | Seabed Minerals | Marine Archaeological Sites | Flat Fishing Zones |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Offshore Infrastructure | R | P | P | R | A | A | R | P | R | A | P | P |
| | Land Reclamation | R | R | P | R | A | R | R | R | P | R | P | R |
| | Sargassum Management | A | R | R | R | A | A | R | A | P | R | R | R |
| | Treated Wastewater (Release) | R | P | P | P | A | A | A | P | P | A | P | P |
| Coastal and Marine Ecosystems | Ecosystem Restoration | A | P | R | A | P | P | R | A | R | P | A | P |
| | Habitat Protection | R | R | R | A | P | P | R | R | R | P | A | R |
| | Science and Research | A | R | R | A | P | P | R | R | R | P | A | R |
| | **Marine Protected Areas** | R | R | R | A | R | R | R | R | A | P | A | R |
| Fisheries inclusive of Mariculture | **Commercial Fishing** | A | R | R | R | A | A | R | R | P | P | P | R |
| | **Sportfishing** | A | A | A | R | R | A | R | A | P | P | P | A |
| | **Non-Commercial Fishing** | A | A | R | R | A | A | R | A | P | P | P | R |

| | | Fisheries Zone | Tourism Zone | Mariculture Zone | Coastal & Marine Ecosystems | Coastal & Marine Development | Energy Zone | Maritime Administration | Community Use Zones | Coast Guard Operational | Seabed Minerals | Marine Archaeological Sites | Flat Fishing Zones |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **Traditional Fishing** | A | A | R | R | R | A | R | A | P | P | R | A |
| | **Seaweed Farming** | A | R | A | R | P | P | P | P | P | P | P | R |
| | **Sea Cucumber Farming** | A | R | A | R | P | P | P | P | P | P | P | R |
| | **Aquarium Trade Fishing** | A | A | R | R | R | A | R | A | P | P | P | R |
| | **Recreational Fishing** | A | A | R | R | R | A | R | A | P | P | P | A |
| | **Cultural Fishing** | A | A | R | R | R | A | R | A | P | P | R | A |
| | Deep Sea/Slope Fishing | A | A | A | R | A | A | R | R | P | P | P | R |
| Maritime Administration | Ports and Harbour Operation | R | R | P | R | R | A | A | P | P | R | P | P |
| | **Water Taxi** | A | R | P | R | R | A | A | R | R | A | P | R |
| | Maritime Security Enforcement | A | A | R | R | A | A | A | A | A | A | A | A |
| | Moorings | A | R | R | R | R | R | A | R | R | R | R | R |
| | Navigational Aids | A | R | R | R | R | R | A | R | R | R | R | R |

| | | Fisheries Zone | Tourism Zone | Mariculture Zone | Coastal & Marine Ecosystems | Coastal & Marine Development | Energy Zone | Maritime Administration | Community Use Zones | Coast Guard Operational | Seabed Minerals | Marine Archaeological Sites | Flat Fishing Zones |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **Shipping** | R | R | R | R | R | A | A | P | R | A | P | P |
| | Ballast Water (Exchange) | R | P | P | R | R | A | A | P | P | R | P | P |
| | Recreational Boating | A | A | R | R | R | A | A | A | R | A | P | A |
| Tourism | *Swimming* | A | A | A | A | R | A | P | A | P | P | R | A |
| | *Snorkeling/ Scuba* | A | A | A | A | R | R | R | A | P | P | R | A |
| | *Educational* | A | A | A | A | R | A | R | A | P | P | R | A |
| | *Animal Watching* | A | A | R | R | R | A | R | A | P | P | R | A |
| | *Cultural/ Historical* | A | A | P | A | R | R | P | A | P | P | A | A |
| | *Water Sports* | R | A | P | R | R | A | R | R | P | R | P | P |
| | *Nautical Tourism* | R | A | P | R | A | A | A | R | P | A | P | P |
| | *Cruise Tourism* | R | A | P | R | A | A | A | P | P | A | P | P |
| Energy | **Underwater Cables** | R | R | P | R | R | A | R | R | R | P | P | P |
| Community Use | Religious | A | A | R | R | R | A | R | A | P | P | R | A |
| | Cultural | A | A | R | R | R | A | R | A | P | P | R | A |

| | Fisheries Zone | Tourism Zone | Mariculture Zone | Coastal & Marine Ecosystems | Coastal & Marine Development | Energy Zone | Maritime Administration | Community Use Zones | Coast Guard Operational | Seabed Minerals | Marine Archaeological Sites | Flat Fishing Zones |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Traditional | A | A | R | R | R | A | R | A | P | P | R | A |
| Recreational | A | A | R | R | R | A | R | A | P | P | R | A |

# Appendix 6: BSOP National Ocean Zoning Framework

| Zone Category | Zone Name | Spatial Objective | Zone Description |
|---|---|---|---|
| **Human Use Zone** *Single Use* | Coast Guard Operational Zone | To designate offshore training areas for weapons and tactical exercises., used to support national security, patrol deployment, surveillance, readiness, and tactical training. These areas require controlled and restricted access to protect assets and personnel. | This zone defines areas to support military training and live firing ranges (temporal) at sea and restricts any other uses, especially during activation periods. |
| **Human Use Zone** *Multiple Use* | Fisheries and Mariculture Zone | iii) To promote sustainable and equitable fisheries management, ensuring responsible use of Belize's marine resources while safeguarding the livelihoods and food security of traditional fishers. Ultimately, it contributes to the long-term ecological integrity and economic sustainability of Belize's fisheries sector.<br>iv) To allocate suitable marine and coastal areas for environmentally responsible mariculture operations that diversify Belize's blue economy, reduce pressure on wild fish stocks, and meet food security goals. | This zone delineates areas open to support sustainable fishing in Belize and identifies priority areas for commercial, traditional, Aquarium Trade, recreational, cultural, deep-sea fishing, sportfishing. Additionally, this zone designates areas suitable for mariculture activities of fish or other aquatic organisms in open water or enclosed systems, whether located in fisheries waters or land based. |
| | Tourism Zone | To allocate space to support high-quality, sustainable tourism experiences that enhance Belize's competitiveness while protecting natural and cultural assets, maintaining carrying capacity, and generating economic benefits for local communities. | This zone identifies areas allocated for reef-based snorkeling and diving, swimming, educational and cultural/historical tours, animal watching, water sports, and nautical and cruise tourism. |

| | | | |
|---|---|---|---|
| | Coastal and Marine Development Zone | To guide coastal infrastructure development in support of economic growth while minimizing environmental degradation, coastal erosion, and habitat loss along Belize's shoreline and nearshore waters. | This zone covers areas designated for and footprint related to overwater construction, offshore infrastructure, development and ports/harbour dredging, dredged materials disposal, land reclamation, sargassum management, and release of treated wastewater. |
| | Energy Zone | To allocate marine areas for the exploration, development, and generation of energy resources while minimizing ecological disruption, visual impact, and conflicts with other marine users. | This zone encompasses areas allocated for energy distribution via underwater cables and renewable energy installations. |
| | Maritime Administration Zone | To ensure safe, efficient, and environmentally responsible port operations and vessel navigation while supporting Belize's trade, maritime transport, and Blue Economy goals through regulated access, designated shipping lanes, and protected anchorage areas. | This zone defines lanes and routes to support port/harbour operations, water taxi routes, mooring and navigational aids, shipping, recreational boating, maritime and security enforcement, and potential ballast water exchange. |
| | Community Use Zone | To designate areas that prioritizes safe, equitable, and culturally significant activities for coastal communities across Belize. | This zone serves as the default classification for marine areas that covers a broad spectrum of religious, cultural, traditional, recreational, and medicinal uses for primarily non-commercial purposes. |

| | | | |
|---|---|---|---|
| | Seabed Mines and Minerals Zone | To manage and regulate the exploration and extraction of seabed minerals in Belize's ocean space in a manner that safeguards marine ecosystems, promotes environmental integrity, and ensures equitable national benefit. The zone supports scientific and economic activities aligned with the BSOP principles of precaution, sustainability, and ecosystem-based management. | This zone defines areas to be used primarily for the extraction of seabed minerals (e.g. sand, phosphorite, metallic nodules) under an approved Environmental Impact Assessment or Low-Level Environmental Assessment. |
| **Objective Based Zone** | Marine Protected Areas | To conserve, restore, and promote ecological connectivity, climate resilience, and sustainable use of marine resources, ensuring that MPAs advance national conservation goals, sustain fisheries productivity, and enhance the cultural, recreational, and economic value of Belize's ocean and coastal environments. | This zone defines multiple or single use areas that support activities aligned with the environmental objectives of the various zones designated within MPAs. |
| | Flat Fishing Priority Zone | To protect critical flats & maintain healthy populations of bonefish, tarpon, permit, & other recreational species, in support of high-quality catch-and-release tourism & sustainable livelihoods for local guides and communities. | This zone defines areas to support catch and release fishing, guided recreational fishing, poling, trolling, and fly-fishing activities. |
| | Marine Archaeological Sites | To protect and conserve underwater cultural heritage, including shipwrecks, submerged caves, artifacts, and historic sites, while supporting responsible research, education, and culturally sensitive tourism. | This zone defines areas to support controlled, non-extractive uses consistent with preserving cultural artifacts found within Belize's ocean. |

# Appendix 7: List Of MPA Zones, Types, Legislation and Management

| No | Name | Designation Type | Protection Status | Size ($Km^2$) | IUCN Category | No Take | Year Designated | Si No. | Legislation | Legislated Regulations |
|---|---|---|---|---|---|---|---|---|---|---|
| **National Parks** | | | | | | | | | | |
| 1 | Laughing Bird Caye | National Park | High Protection for Biodiversity Zone | 40.94 | II | All | 1996 | 94 of 1996 | Forest Act Chap 213 | Non extractive recreational activities |
| **Natural Monuments** | | | | | | | | | | |
| 2 | Blue Hole | Natural Monument | High Protection for Biodiversity Zone | 4.14 | III | All | 1996 | 96 of 1996 | Forest Act Chap 213 | Non extractive recreational activities |
| 3 | Halfmoon Caye | Natural Monument | High Protection for Biodiversity Zone | 39.47 | III | All | 1982 | 30 of 1982 | Forest Act Chap 213 | Non extractive recreational activities |
| **Wildlife Sanctuaries** | | | | | | | | | | |
| 4 | Corozal Bay | Wildlife Sanctuary | High Protection for Biodiversity Zone | 728.94 | II | All | 1998 | 48 of 1998 | Forest Act Chap 213 | Non extractive recreational activities |

| No | Name | Designation Type | Protection Status | Size ($Km^2$) | IUCN Category | No Take | Year Designated | Si No. | Legislation | Legislated Regulations |
|---|---|---|---|---|---|---|---|---|---|---|
| 5 | Swallow Caye | Wildlife Sanctuary | High Protection for Biodiversity Zone | 32.34 | II | All | 2002 | 102 of 2002 | Forest Act Chap 213 | Non extractive recreational activities |
| **Marine Reserves** | | | | | | | | | | |
| 6 | Bacalar Chico Marine Reserve | | | | VI | Part | 2001 | 136 of 2001 | Fisheries Act Chap 210 | Bacalar Chico Marine Reserve |
| | Bacalar Chico Preservation Zone | Marine Reserve (Zone) | High Protection for Biodiversity Zone | 2.80 | Ia | All | 2001 | 136 of 2001 | Fisheries Act Chap 210 | Non extractive, no tourism / motorized boat access |
| | Bacalar Chico Conservation Zone I | Marine Reserve (Zone) | High Protection for Biodiversity Zone | 6.36 | II | All | 2001 | 136 of 2001 | Fisheries Act Chap 210 | Non extractive recreational activities |
| | Bacalar Chico Conservation Zone II | Marine Reserve (Zone) | High Protection for Biodiversity Zone | 5.26 | II | All | 2001 | 136 of 2001 | Fisheries Act Chap 210 | Non extractive recreational activities |
| | Bacalar Chico Conservation Zone II | Marine Reserve (Zone) | High Protection for Biodiversity Zone | 0.55 | II | All | 2001 | 136 of 2001 | Fisheries Act Chap 210 | Non extractive recreational activities |
| | Bacalar Chico General Use Zone | Marine Reserve (Zone) | Medium Protection for | 43.86 | VI | None | 2001 | 136 of 2001 | Fisheries Act Chap 210 | Commercial fishing / subsistence fishing |

| No | Name | Designation Type | Protection Status | Size ($Km^2$) | IUCN Category | No Take | Year Designated | Si No. | Legislation | Legislated Regulations |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Biodiversity Zone | | | | | | | |
| | Bacalar Chico General Use Zone (Expansion) | Marine Reserve (Zone) | Medium Protection for Biodiversity Zone | 179.99 | VI | None | 2024 | 131 of 2024 | Fisheries Resources Act of 2020 | Commercial fishing / subsistence / sport fishing / recreational use (Considerations for Seabed alteration/extraction) |
| 7 | Caye Caulker Marine Reserve | Marine Reserve | | | VI | Part | 2008 | 115 of 2008 | Fisheries Act Chap 210 | Caye Caulker Marine Reserve |
| | Caye Caulker Preservation Zone | Marine Reserve (Zone) | High Protection for Biodiversity Zone | 5.83 | Ia | All | 2008 | 115 of 2008 | Fisheries Act Chap 210 | Non extractive, no tourism or motorized boat access |
| | Caye Caulker Conservation Zone | Marine Reserve (Zone) | High Protection for Biodiversity Zone | 8.21 | II | All | 2008 | 115 of 2008 | Fisheries Act Chap 210 | Non extractive recreational activities |
| | Caye Caulker General Use Zone | Marine Reserve (Zone) | Medium Protection for Biodiversity Zone | 24.91 | VI | None | 2008 | 115 of 2008 | Fisheries Act Chap 210 | Commercial fishing / subsistence, sport fishing |
| 8 | Gladden Spit and Silk Cayes Marine Reserve | | | | VI | Part | 2000 | 68 of 2000 | Fisheries Act Chap 210 | Gladden Spit and Silk Cayes Marine Reserve |
| | Gladden Spit and Silk Cayes Conservation Zone I | Marine Reserve (Zone) | High Protection for Biodiversity Zone | 1.53 | II | All | 2000 | 68 of 2000 | Fisheries Act Chap 210 | Non extractive recreational activities |

| No | Name | Designation Type | Protection Status | Size ($Km^2$) | IUCN Category | No Take | Year Designated | Si No. | Legislation | Legislated Regulations |
|---|---|---|---|---|---|---|---|---|---|---|
| | Gladden Spit and Silk Cayes Conservation II (Restoration Area) | Marine Reserve (Zone) | High Protection for Biodiversity Zone | 9.44 | II | All | 2000 | 68 of 2000 | Fisheries Act Chap 210 | Non extractive recreational activities within the restoration area SI 95 of 2003 |
| | Gladden Spit and Silk Cayes General Use Zone | Marine Reserve (Zone) | Medium Protection for Biodiversity Zone | 88.91 | VI | None | 2000 | 68 of 2000 | Fisheries Act Chap 210 | Commercial fishing / recreational sport fishing |
| 9 | Glover's Reef Marine Reserve | Marine Reserve (Zone) | | | VI | Part | 2001 | 137 of 2001 | Fisheries Act Chap 210 | Glover's Reef Marine Reserve |
| | Glover's Reef Wilderness (Protection) Zone | Marine Reserve (Zone) | High Protection for Biodiversity Zone | 1.94 | Ia | All | 1993 | 137 of 2001 | Fisheries Act Chap 210 | Non extractive, no tourism / motorized boat access |
| | Glover's Reef Conservation Zone | Marine Reserve (Zone) | High Protection for Biodiversity Zone | 70.19 | II | All | 1993 | 137 of 2001 | Fisheries Act Chap 210 | Non extractive recreational activities |
| | Glover's Reef Seasonal Closure Zone | Marine Reserve (Zone) | High Protection for Biodiversity Zone | 10.19 | IV | Part | 1993 | 137 of 2001 | Fisheries Act Chap 210 | Closed to fishing 1st Dec to the 31st March- specifically to address nassau grouper. License to fish in this area required as per SI |
| | Glover's Reef General Use Zone 1 | Marine Reserve (Zone) | Medium Protection for Biodiversity Zone | 207.11 | VI | None | 1993 | 137 of 2001 | Fisheries Act Chap 210 | Commercial fishing / recreational fishing / sport fishing |

| No | Name | Designation Type | Protection Status | Size ($Km^2$) | IUCN Category | No Take | Year Designated | Si No. | Legislation | Legislated Regulations |
|---|---|---|---|---|---|---|---|---|---|---|
| | Glover's Reef General Use Zone 2 | Marine Reserve (Zone) | Medium Protection for Biodiversity Zone | 30.77 | VI | None | 1993 | 137 of 2001 | Fisheries Act Chap 210 | Commercial fishing / recreational fishing / sport fishing |
| | Glover's Reef General Use-(Expansion) | Marine Reserve (Zone) | Medium Protection for Biodiversity Zone | 261.65 | VI | None | 2024 | 133 of 2024 | Fisheries Resources Act of 2020 | Shark Fishing |
| 10 | Hol Chan Marine Reserve | Marine Reserve (Zone) | | | VI | Part | 2015 | 18 of 2015 | Fisheries Act Chap 210 | Hol Chan Marine Reserve |
| | Hol Chan Channel Zone A | Marine Reserve (Zone) | High Protection for Biodiversity Zone | 2.73 | II | All | 2015 | 18 of 2015 | Fisheries Act Chap 210 | Non extractive recreational use |
| | Hol Chan Sea Grass Beds Zone B | Marine Reserve (Zone) | Medium Protection for Biodiversity Zone | 21.68 | VI | None | 2015 | 18 of 2015 | Fisheries Act Chap 210 | Commercial fishing, sport fishing |
| | Hol Chan Mangrove Islands Zone C | Marine Reserve (Zone) | Medium Protection for Biodiversity Zone | 22.60 | VI | None | 2015 | 18 of 2015 | Fisheries Act Chap 210 | Commercial fishing, sport fishing, recreational activities |
| | Hol Chan Coral Reef Zone D | Marine Reserve (Zone) | Medium Protection for Biodiversity Zone | 3.76 | VI | None | 2015 | 18 of 2015 | Fisheries Act Chap 210 | Commercial fishing, sport fishing (except in Exclusive Recreation Area) |

| No | Name | Designation Type | Protection Status | Size ($Km^2$) | IUCN Category | No Take | Year Designated | Si No. | Legislation | Legislated Regulations |
|---|---|---|---|---|---|---|---|---|---|---|
| | Hol Chan Zone D, Exclusive Recreational Area (ERA) | Marine Reserve (Zone) | High Protection for Biodiversity Zone | 1.46 | II | All | 2015 | 18 of 2015 | Fisheries Act Chap 210 | Non extractive recreational use |
| | Bajos General Use Area Zone E Zone I: Bajos General Use Zone | Marine Reserve (Zone) | Medium Protection for Biodiversity Zone | 251.57 | VI | None | 2015 | 18 of 2015 | Fisheries Act Chap 210 | Commercial fishing, only catch and release sport fishing in conservation areas |
| | Bajos General Use Area Zone E Zone 2: Cayo Pajaros Conservation Zone | Marine Reserve (Zone) | High Protection for Biodiversity Zone | 12.05 | II | All | 2015 | 18 of 2015 | Fisheries Act Chap 210 | Non extractive recreational activities |
| | Bajos General Use Area Zone E Zone 3: Bajos Conservation Zone | Marine Reserve (Zone) | High Protection for Biodiversity Zone | 2.86 | II | All | 2015 | 18 of 2015 | Fisheries Act Chap 210 | Non extractive recreational activities |
| | Bajos General Use Area Zone E Zone 4: Cayo Rosario Conservation Zone | Marine Reserve (Zone) | High Protection for Biodiversity Zone | 3.94 | II | All | 2015 | 18 of 2015 | Fisheries Act Chap 210 | Non extractive recreational activities |
| | Bajos General Use Area Zone E Zone 5: Blackadore Caye Conservation Zone | Marine Reserve (Zone) | High Protection for Biodiversity Zone | 17.37 | II | All | 2015 | 18 of 2015 | Fisheries Act Chap 210 | Non extractive recreational activities |

| No | Name | Designation Type | Protection Status | Size ($Km^2$) | IUCN Category | No Take | Year Designated | Si No. | Legislation | Legislated Regulations |
|---|---|---|---|---|---|---|---|---|---|---|
| | Bajos General Use Area Zone E Zone 6: Los Saolnes Conservation Zone | Marine Reserve (Zone) | High Protection for Biodiversity Zone | 38.82 | II | All | 2015 | 18 of 2015 | Fisheries Act Chap 210 | Non extractive recreational activities |
| | Hol Chan Cayo Frances Conservation Area Zone F | Marine Reserve (Zone) | High Protection for Biodiversity Zone | 6.68 | II | All | 2015 | 18 of 2015 | Fisheries Act Chap 210 | Non extractive recreational activities |
| | Hol Chan Mexico Rocks General Use Area Zone G | Marine Reserve (Zone) | Medium Protection for Biodiversity Zone | 12.10 | VI | None | 2015 | 18 of 2015 | Fisheries Act Chap 210 | Commercial and sport fishing |
| | Hol Chan Mexico Rocks No-Take Zone H | Marine Reserve (Zone) | High Protection for Biodiversity Zone | 2.57 | II | All | 2015 | 18 of 2015 | Fisheries Act Chap 210 | Non extractive, recreational activities |
| 11 | Port Honduras Marine Reserve | Marine Reserve (Zone) | | | VI | Part | 2000 | 9 of 2000 | Fisheries Act Chap 210 | Port Honduras Marine Reserve |
| | Port Honduras Preservation Zone, Middle Snake Cayes | Marine Reserve (Zone) | High Protection for Biodiversity Zone | 3.31 | Ia | All | 2000 | 9 of 2000 | Fisheries Act Chap 210 | Non extractive, no tourism / motorized boat access |
| | Port Honduras Conservation Zone I, East Snake Cayes | Marine Reserve (Zone) | High Protection for | 2.01 | II | All | 2000 | 9 of 2000 | Fisheries Act Chap 210 | Non extractive recreational activities |

| No | Name | Designation Type | Protection Status | Size ($Km^2$) | IUCN Category | No Take | Year Designated | Si No. | Legislation | Legislated Regulations |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Biodiversity Zone | | | | | | | |
| | Port Honduras Conservation Zone II, Wild Cane Caye | Marine Reserve (Zone) | High Protection for Biodiversity Zone | 4.40 | II | All | 2000 | 9 of 2000 | Fisheries Act Chap 210 | Non extractive recreational activities |
| | Port Honduras Conservation Zone III, West and South Snake Cayes | Marine Reserve (Zone) | High Protection for Biodiversity Zone | 5.20 | II | All | 2000 | 9 of 2000 | Fisheries Act Chap 210 | Non extractive recreational activities |
| | Port Honduras General Use Zone | Marine Reserve (Zone) | Medium Protection for Biodiversity Zone | 382.31 | VI | None | 2000 | 9 of 2000 | Fisheries Act Chap 210 | Commercial fishing / subsistence, sport fishing |
| 12 | Sapodilla Cayes Marine Reserve | Marine Reserve (Zone) | | | VI | Part | 2020 | 107 of 2020 | Fisheries Resources Act of 2020 | Sapodilla Cayes Marine Reserve |
| | Sapodilla Cayes Preservation Zone 1 | Marine Reserve (Zone) | High Protection for Biodiversity Zone | 2.22 | Ia | All | 2020 | 107 of 2020 | Fisheries Resources Act of 2020 | Non extractive, no tourism / motorized boat access |
| | Sapodilla Cayes Conservation Zone I | Marine Reserve (Zone) | High Protection for Biodiversity Zone | 2.60 | II | All | 2020 | 107 of 2020 | Fisheries Resources Act of 2020 | Non extractive recreational activities |

| No | Name | Designation Type | Protection Status | Size ($Km^2$) | IUCN Category | No Take | Year Designated | Si No. | Legislation | Legislated Regulations |
|---|---|---|---|---|---|---|---|---|---|---|
| | Sapodilla Cayes Conservation Zone II | Marine Reserve (Zone) | High Protection for Biodiversity Zone | 17.08 | II | All | 2020 | 107 of 2020 | Fisheries Resources Act of 2020 | Non extractive recreational activities |
| | Sapodilla Cayes General Use Zone | Marine Reserve (Zone) | Medium Protection for Biodiversity Zone | 119.60 | VI | None | 2020 | 107 of 2020 | Fisheries Resources Act of 2020 | Commercial fishing |
| | Sapodilla Cayes CZIIIA | Marine Reserve (Zone) | Medium Protection for Biodiversity Zone | 207.42 | VI | None | 2020 | 107 of 2020 | Fisheries Resources Act of 2020 | Commercial fishing |
| | Sapodilla Cayes CZIIIB | Marine Reserve (Zone) | Medium Protection for Biodiversity Zone | 11.42 | VI | None | 2020 | 107 of 2020 | Fisheries Resources Act of 2020 | Commercial fishing |
| | Sapodilla Cayes CZIV | Marine Reserve (Zone) | High Protection for Biodiversity Zone | 926.56 | II | All | 2020 | 107 of 2020 | Fisheries Resources Act of 2020 | Non extractive recreational activities |
| | Sapodilla Cayes CZIV (Expansion) | Marine Reserve (Zone) | High Protection for Biodiversity Zone | 128.30 | II | All | 2026 | X of 2026 | Fisheries Resources Act of 2020 | Non extractive recreational activities |
| 13 | South Water Caye Marine Reserve | Marine Reserve (Zone) | | | VI | Part | 2022 | 70 of 2022 | Fisheries Resources Act of 2020 | South Water Caye Marine Reserve |

| No | Name | Designation Type | Protection Status | Size ($Km^2$) | IUCN Category | No Take | Year Designated | Si No. | Legislation | Legislated Regulations |
|---|---|---|---|---|---|---|---|---|---|---|
| | South Water Caye Preservation Zone | Marine Reserve (Zone) | High Protection for Biodiversity Zone | 1.03 | Ia | All | 2022 | 70 of 2022 | Fisheries Resources Act of 2020 | No fishing or recreational use, permitted motorized boats only |
| | South Water Caye Conservation Zone I | Marine Reserve (Zone) | High Protection for Biodiversity Zone | 90.60 | II | All | 2022 | 70 of 2022 | Fisheries Resources Act of 2020 | Non extractive recreational activities |
| | South Water Caye Conservation Zone II | Marine Reserve (Zone) | High Protection for Biodiversity Zone | 19.66 | II | All | 2022 | 70 of 2022 | Fisheries Resources Act of 2020 | Non extractive recreational activities |
| | South Water Caye Conservation Zone III | Marine Reserve (Zone) | High Protection for Biodiversity Zone | 7.60 | II | All | 2022 | 70 of 2022 | Fisheries Resources Act of 2020 | Non extractive recreational activities |
| | South Water Caye General Use Zone | Marine Reserve (Zone) | Medium Protection for Biodiversity Zone | 385.80 | VI | None | 2022 | 70 of 2022 | Fisheries Resources Act of 2020 | Commercial fishing / subsistence / sport fishing / recreational use |
| 14 | Turneffe Atoll | Marine Reserve (Zone) | | | VI | Part | 2022 | 71 of 2022 | Fisheries Resources Act of 2020 | Turneffe Atoll Marine Reserve |
| | Turneffe - Preservation Zone VII | Marine Reserve (Zone) | High Protection for Biodiversity Zone | 9.19 | Ia | All | 2022 | 71 of 2022 | Fisheries Resources Act of 2020 | Non extractive, no tourism / motorized boats |

| No | Name | Designation Type | Protection Status | Size ($Km^2$) | IUCN Category | No Take | Year Designated | Si No. | Legislation | Legislated Regulations |
|---|---|---|---|---|---|---|---|---|---|---|
| | Turneffe - Maugre Caye Conservation Zone I | Marine Reserve (Zone) | High Protection for Biodiversity Zone | 41.09 | II | All | 2022 | 71 of 2022 | Fisheries Resources Act of 2020 | Non extractive, recreational activities |
| | Turneffe - Dog Flea Caye and Blackbird Caye Zone IIA | Marine Reserve (Zone) | High Protection for Biodiversity Zone | 253.76 | II | All | 2022 | 71 of 2022 | Fisheries Resources Act of 2020 | Non extractive, recreational activities |
| | Turneffe - Cockroach-Grassy Caye Special Mangement Area Zone IIB | Marine Reserve (Zone) | Medium Protection for Biodiversity Zone | 8.68 | VI | None | 2022 | 71 of 2022 | Fisheries Resources Act of 2020 | Commercial fishing (with exception of conch) |
| | Turneffe - Vincent's Lagoon Special Management Area Zone III | Marine Reserve (Zone) | High Protection for Biodiversity Zone | 26.00 | Ib | All | 2022 | 71 of 2022 | Fisheries Resources Act of 2020 | Non extractive /recreational activities |
| | Turneffe - Calabash Reef Zone IV | Marine Reserve (Zone) | High Protection for Biodiversity Zone | 1.65 | II | All | 2022 | 71 and 75 of 2022 | Fisheries Resources Act of 2020 | Non extractive recreational activities |
| | Turneffe - Long Bouge Conservation Zone V | Marine Reserve (Zone) | High Protection for Biodiversity Zone | 3.86 | II | All | 2022 | 71 of 2022 | Fisheries Resources Act of 2020 | Non extractive recreational activities |

| No | Name | Designation Type | Protection Status | Size ($Km^2$) | IUCN Category | No Take | Year Designated | Si No. | Legislation | Legislated Regulations |
|---|---|---|---|---|---|---|---|---|---|---|
| | Turneffe - Caye Bokel Conservation Zone VI | Marine Reserve (Zone) | High Protection for Biodiversity Zone | 52.31 | II | All | 2022 | 71 of 2022 | Fisheries Resources Act of 2020 | Non extractive recreational activities |
| | Turneffe - General Use Zone VIII | Marine Reserve (Zone) | Medium Protection for Biodiversity Zone | 961.39 | VI | None | 2022 | 71 of 2022 | Fisheries Resources Act of 2020 | Commercial / recreation / sport fishing |
| | High Protection for Biodiversity Marine Reserve | Marine Reserve (Zone) | | | II | All | 2022 | 69 of 2022 | | High Protection for Biodiversity Marine Reserve |
| 15 | High Biodiversity Protection Zone 1 | High Protection for Biodiversity Marine Reserve | High Protection for Biodiversity Zone | 75.42 | II | All | 2022 | 69 of 2022 | Fisheries Resources Act of 2020 | Non extractive recreational activities/ scientific research with license from Fisheries Administrator |
| 16 | High Biodiversity Protection Zone 2 | High Protection for Biodiversity Marine Reserve | High Protection for Biodiversity Zone | 53.37 | II | All | 2022 | 69 of 2022 | Fisheries Resources Act of 2020 | Non extractive recreational activities/ scientific research with license from Fisheries Administrator |
| 17 | High Biodiversity Protection Zone 3 | High Protection for Biodiversity Marine Reserve | High Protection for Biodiversity Zone | 230.11 | II | All | 2022 | 69 of 2022 | Fisheries Resources Act of 2020 | Non extractive recreational activities/ scientific research with license from Fisheries Administrator |
| 18 | High Biodiversity Protection Zone 4 | High Protection for Biodiversity Marine Reserve | High Protection for Biodiversity Zone | 120.33 | II | All | 2022 | 69 of 2022 | Fisheries Resources Act of 2020 | Non extractive recreational activities/ scientific research with license from Fisheries Administrator |

| No | Name | Designation Type | Protection Status | Size ($Km^2$) | IUCN Category | No Take | Year Designated | Si No. | Legislation | Legislated Regulations |
|---|---|---|---|---|---|---|---|---|---|---|
| 19 | High Biodiversity Protection Zone 5 | High Protection for Biodiversity Marine Reserve | High Protection for Biodiversity Zone | 106.39 | II | All | 2022 | 69 of 2022 | Fisheries Resources Act of 2020 | Non extractive recreational activities/ scientific research with license from Fisheries Administrator |
| 20 | High Biodiversity Protection Zone 6 | High Protection for Biodiversity Marine Reserve | High Protection for Biodiversity Zone | 86.65 | II | All | 2022 | 69 of 2022 | Fisheries Resources Act of 2020 | Non extractive recreational activities/ scientific research with license from Fisheries Administrator |
| 21 | High Biodiversity Protection Zone 7 | High Protection for Biodiversity Marine Reserve | High Protection for Biodiversity Zone | 621.68 | II | All | 2022 | 69 of 2022 | Fisheries Resources Act of 2020 | Non extractive recreational activities/ scientific research with license from Fisheries Administrator |
| 22 | High Biodiversity Protection Zone 3 (Expansion) | High Protection for Biodiversity Marine Reserve | High Protection for Biodiversity Zone | 316.15 | II | All | 2026 | X of 2026 | Fisheries Resources Act of 2020 | Non extractive recreational activities/ scientific research with license from Fisheries Administrator |
| 23 | High Biodiversity Protection Zone 8 | High Protection for Biodiversity Marine Reserve | High Protection for Biodiversity Zone | 1219.56 | II | All | 2026 | X of 2026 | Fisheries Resources Act of 2020 | Non extractive recreational activities/ scientific research with license from Fisheries Administrator |
| 24 | Lighthouse Reef Atoll Marine Reserve | Marine Reserve | | | | | | | | |
| | Lighthouse Reef General Use Zone II | Marine Reserve (Zone) | Medium Protection for Biodiversity Zone | 720.56 | VI | None | 2024 | 134 of 2024 | Fisheries Resources Act of 2020 | |

| No | Name | Designation Type | Protection Status | Size (Km²) | IUCN Category | No Take | Year Designated | Si No. | Legislation | Legislated Regulations |
|---|---|---|---|---|---|---|---|---|---|---|
| | Lighthouse Reef General Use Zone I | Marine Reserve (Zone) | Medium Protection for Biodiversity Zone | 507.45 | VI | None | 2024 | 134 of 2024 | Fisheries Resources Act of 2020 | |
| Spawning Aggregation Sites | | | | | | | | | | |
| 1 | Rocky Point, Ambergris Caye | Spawning Aggregation Site Reserves | High Protection for Biodiversity Zone | 5.67 | Ib | All | 2003 | 161 of 2003 | Fisheries Act Chap 210 | Non-Extractive, Scientific Research, recreational activities |
| 2 | Dog Flea Caye, Turneffe Atoll | Spawning Aggregation Site Reserves | High Protection for Biodiversity Zone | 5.76 | Ib | All | 2003 | 161 of 2003 | Fisheries Act Chap 210 | Non-Extractive, Scientific Research, recreational activities |
| 3 | Caye Bokel, Turneffe Atoll | Spawning Aggregation Site Reserves | High Protection for Biodiversity Zone | 5.58 | Ib | All | 2003 | 161 of 2003 | Fisheries Act Chap 210 | Non-Extractive, Scientific Research, recreational activities |
| 4 | Sandbore, Lighthouse Reef | Spawning Aggregation Site Reserves | High Protection for Biodiversity Zone | 4.47 | Ib | All | 2003 | 161 of 2003 | Fisheries Act Chap 210 | Non-Extractive, Scientific Research, recreational activities |
| 5 | South Point, Lighthouse Reef | Spawning Aggregation Site Reserves | High Protection for Biodiversity Zone | 5.29 | Ib | All | 2003 | 161 of 2003 | Fisheries Act Chap 210 | Non-Extractive, Scientific Research, recreational activities |

| No | Name | Designation Type | Protection Status | Size ($Km^2$) | IUCN Category | No Take | Year Designated | Si No. | Legislation | Legislated Regulations |
|---|---|---|---|---|---|---|---|---|---|---|
| 6 | Emily or Caye Glory | Spawning Aggregation Site Reserves | High Protection for Biodiversity Zone | 5.47 | Ib | All | 2003 | 161 of 2003 | Fisheries Act Chap 210 | Non-Extractive, Scientific Research, recreational activities |
| 7 | Northern Glover's Reef, Glover's Reef Atoll | Spawning Aggregation Site Reserves | High Protection for Biodiversity Zone | 6.38 | Ib | All | 2003 | 161 of 2003 | Fisheries Act Chap 210 | Non-Extractive, Scientific Research, recreational activities |
| 8 | Gladden Spit | Spawning Aggregation Site Reserves | High Protection for Biodiversity Zone | 5.25 | IV | PART | 2003 | 161 of 2003 | Fisheries Act Chap 210 | Non extractive / Commercial Traditional Fishing under limited access license between April to June and is limited to the site of the fish aggregation. Outside of this localized fishing area and period, the area is closed to fishing during the other months of the year. This site is also one of the most important protection sites for multispecies aggregation and protection site for the Whale Shark |
| 9 | Rise and Fall Bank, Sapodilla Cayes | Spawning Aggregation Site Reserves | High Protection for Biodiversity Zone | 17.21 | Ib | All | 2003 | 161 of 2003 | Fisheries Act Chap 210 | Non-Extractive, Scientific Research, recreational activities |
| 10 | Nicholas Caye, Sapodilla Cayes | Spawning Aggregation Site Reserves | High Protection for Biodiversity Zone | 6.73 | Ib | All | 2003 | 161 of 2003 | Fisheries Act Chap 210 | Non-Extractive, Scientific Research, recreational activities |
| 11 | Seal Caye, Sapodilla Cayes | Spawning Aggregation Site Reserves | High Protection for Biodiversity Zone | 6.48 | Ib | All | 2003 | 161 of 2003 | Fisheries Act Chap 210 | Non-Extractive, Scientific Research, recreational activities |

| No | Name | Designation Type | Protection Status | Size ($Km^2$) | IUCN Category | No Take | Year Designated | Si No. | Legislation | Legislated Regulations |
|---|---|---|---|---|---|---|---|---|---|---|
| Nassau Grouper Protection Sites | | | | | | | | | | |
| 12 | Maugre Caye, Turneffe Atoll | Nassau Grouper & Species Protection | Medium Protection for Biodiversity Zone | 7.85 | Ib | ALL | 2009 | 49 of 2009 | Fisheries Act Chap 210 | Non-Extractive, Scientific Research, recreational activities (This site when initially declared allowed for fishing via a license from the administrator as per the SI but since 2010 no licenses have been granted and not expected to be granted. Will consider placing as High Biodiversity protection for Milestone 4. |
| 13 | Northern Two Cayes, Lighthouse Reef | Nassau Grouper & Species Protection | Medium Protection for Biodiversity Zone | 3.76 | Ib | ALL | 2009 | 49 of 2009 | Fisheries Act Chap 210 | Non-Extractive, Scientific Research, recreational activities (This site when initially declared allowed for fishing via a license from the administrator. or as per the SI but since 2010 no licenses have been granted and not expected to be granted. Will consider placing as High Biodiversity protection for Milestone 4. |

# Appendix 8: Annotated Outline of the Implementation and Monitoring Plan

This annotated outline sets out an Implementation Roadmap to guide the design and development of the Belize Sustainable Ocean Plan Implementation and Monitoring Plan (BSOP I&MP). In terms of timelines, it is proposed that: the Implementation Roadmap covers months 0-24 - as soon as the BSOP is approved. The full I&MP beyond this time (over years 3-10) in line with the wording of new legislations (ICOM) which states *"the BSOP shall be revised during the period of ten years commencing from the date of coming into operation, with a mid-cycle (five-year) assessment to identify necessary adjustments".*

This framework identifies the analytical building blocks, governance questions, decision points, design standards, stakeholder inputs, monitoring requirements, and operational tools needed to convert the BSOP into a practical, institutionally grounded, gender-responsive, ESS-informed, and monitorable implementation plan. Of note, there is no one-size-fits-all for MSP Implementation and Monitoring Plans and best practice is still being developed globally. As stated within the Belize Exhibit A: Conservation Commitments document:

*"At a minimum, the I&MP should contain all essential and necessary information for administration, operations, budgets, research and monitoring, enforcement and management of zones, building capacity and awareness, policy and legal instruments, and education".*

Part of this process will be defining a series of BSOP I&MP's strategic pillars. The architecture is, however, sufficiently foreseeable to set out indicatively, both to share early insights on how the structure of the final document is being approached and to provide a cross-check against existing BSOP ideas and discussions on implementation priorities and next steps. The pillars below will be further refined in the upcoming months.

| Indicative pillar | Operational / Implementation concerns |
|---|---|
| **I. Governance and institutional development** | Establishment of Sub-Committees under the Coastal Zone Management Advisory Council; CZMAI staffing arrangements, etc |

| Indicative pillar | Operational / Implementation concerns |
|---|---|
| **II. MSP implementation, compliance and adaptive management** | Sectoral integration of MSP compliance into licensing and permitting; oversight of prohibited activities; integration of zoning into licensing processes; |
| **III. Legal coherence and regulatory development** | Development of specific BSOP regulations (zoning, review, etc.) |
| **IV. Science, monitoring and information management** | Standardised monitoring protocols; standardised reporting formats; MEL framework including KPIs; PA Management Effectiveness Tracking Tools; baseline data for monitoring and reporting; MSP national biennial reporting with traffic-light scoring |
| **V. Stakeholder engagement and communications** | Updating and implementation of the Communications and PR strategy; coordination interfaces with implementing agencies, NGOs, and the private sector; |
| **VI. Financing and sustainability** | Update and review of the cost model; engagement with donor partners; diversification of revenue streams |

Proposed Table of Contents

| | |
|---|---|
| Abbreviation and Acronyms | |
| **Executive Summary** | This shall be a very concise overview of the Implementation Roadmap and how it will support the design of the BSOP I&MP. The Executive Summary shall explain the framework's function as a bridge between the strategic content of the BSOP and the detailed implementation plan. It identifies and starts to address the core questions to be answered: what must be implemented, by whom, through which governance arrangements, in what sequence, with what resources, monitored through which indicators, and adapted through which review mechanisms. The summary shall also highlight the framework's focus on implementation readiness, institutional feasibility, stakeholder legitimacy, gender and ESS integration, and practical use by national implementation actors. |
| 1. Introduction | **This section shall introduce the I&MP, defining what the Implementation Roadmap will do in support of the BSOP I&MP (in the first 24 months). It should provide a structured basis for identifying immediate implementation priorities, assessing readiness, mapping responsibilities, defining coordination arrangements, sequencing actions, estimating resources, designing monitoring indicators, and identifying risks and mitigation measures. It should not replace the BSOP or predetermine final policy decisions; rather, it should create a transparent method for turning BSOP content, stakeholder inputs, institutional realities, and evidence into a coherent implementation and monitoring plan.** |
| 1.1. The Wider Context | |
| 1.2. The Belize Sustainable Ocean Plan (BSOP) | |
| 1.3. Structure of the BSOP-I&MP | |
| 2. Context for a Blue Economy Transition | **This section shall briefly "thumb nail" the selected sub-header topics as much information already exists and has been produced as Appendices to the BSOP (such as socio-economic drivers completed by CDL). This includes a brief summary of** |
| 2.1. Current Macro-economic Situation | |
| 2.2. Legislation, Policies and Plans | |
| 2.3. Institutions, Agencies and Key Stakeholders | |
| 2.4. Society and Poverty Alleviation | |
| 2.5. Gender and Social Inclusion | |

| Abbreviation and Acronyms | |
|---|---|
| 2.6. Disaster Risk Resilience<br>2.7. Blue Carbon Opportunities<br>2.8. Challenges | **Belize's marine and coastal governance context including fragmented sector-based planning, cumulative pressures on marine space, competing uses, institutional overlap, and the need for integrated decision-making.**<br><br>**The Implementation Roadmap shall offer a structured method for translating BSOP priorities into immediately implementable actions (0-24 months maximum), clarifying institutional mandates, identifying gaps and dependencies, and ensuring that future implementation arrangements are realistic, coordinated, equitable, and legally and institutionally grounded.** |
| 3. Vision, Mission and Principles<br>3.1.A New Blue Pathway<br>3.2. Vision<br>3.3. Mission<br>3.4. Guiding Principles | This section defines the principles that guide how the implementation plan will be designed. There may need to be some adjustments to the current language used within the BSOP for the goals and specific objectives already developed to make them more "future proof" since, in its current form, they speak to the completion of the BSOP "process". Thought needs to be put into that language as a part of aligning implementation actions.<br><br>Core principles shall be revisited to ensure they : keep the framework practical and decision-useful; build from existing governance structures wherever possible; distinguish strategic oversight, technical coordination, and operational delivery functions; define decision rights and accountability early; sequence actions realistically; connect coordination mechanisms to action tracking; link priorities to budget and capacity requirements; embed monitoring responsibilities from the outset; and integrate gender, ESS, social risk, and inclusion considerations across all components of implementation plan design. |
| 4. BSOP I&MP Implementation Roadmap | |

Abbreviation and Acronyms

4.1. Enablers for Blue Growth (links to Horizon 2030) .....

4.2. Blue Growth Pillars for Belize .....

**This Roadmap shall be a simple framework document to guide the Implementation Plan in the first 24 months of the process. Beyond this time period (up to 10 years) shall be more fully addressed in the Implementation Plan and shall be used to address longer-term actions..(2-5 or 2-10 years depending on the timeframe agreed upon) The Implementation Roadmap details shall include activities required from start up to 24 months in the future only, which may consider:**

- ..... implementation readiness assessment;
- ..... institutional mandate and coordination analysis;
- ..... policy, legal, and regulatory alignment review;
- ..... stakeholder and political economy analysis;
- ..... capacity and systems assessment;
- ..... data and monitoring readiness assessment;
- ..... gender, ESS, and social risk analysis;
- ..... resource and budget scan; and
- ..... identification of dependencies between BSOP actions.

Each analytical building block seek to produce clear design inputs for the implementation matrix, governance model, monitoring framework, risk register, and costing structure.

| | |
|---|---|
| 5. Implementation Pathways and Actions (Governance and Institutional Arrangements) | **This section shall describe the governance questions (implementation pathways) that must be resolved to design a credible BSOP I&MP. This section should identify the roles of national focal point agencies, BSOP governance structures, CRFM and other regional and institutional partner agencies, technical actors, sector ministries, marine and coastal institutions, and stakeholder platforms in shaping, validating, and later using the implementation plan. It should clarify which bodies provide strategic direction, which provide technical review, which are responsible for operational delivery, and how decisions, feedback, and revisions will be documented and incorporated into the plan design.**<br><br>The section shall set out how BSOP priorities will be organized into implementation pathways for the I&MP. The framework shall define criteria for grouping actions, such as common objectives, lead institutions, enabling conditions, timing, dependencies, and resource needs. Indicative pathways may include governance and coordination; administration and operational delivery; management of zones and biodiversity protection areas; research, data, and monitoring; surveillance and enforcement; capacity building and awareness; policy, legal, and regulatory instruments; education and communication; and stakeholder engagement and learning. For each pathway, the framework should specify the minimum design fields required in the implementation plan: objective, priority actions, outputs, lead and supporting actors, sequencing, dependencies, budget implications, risks, and monitoring linkages.<br><br>To inform Section 6, this section shall define how gender equality, ESS, and social risk considerations will inform the BSOP I&MP implementation framework. It shall identify design questions related to inclusive participation, differentiated access to marine resources and benefits, potential exclusion from decision-making, impacts on local communities, gendered roles in fisheries and coastal livelihoods, youth participation, stakeholder conflict, grievance or feedback channels, and mitigation of social risks. It shall also specify how these considerations will be reflected in |

| Abbreviation and Acronyms | |
|---|---|
| | implementation actions, governance arrangements, indicators, disaggregation requirements, risk registers, and validation materials. |
| 6. Model for Implementation<br>6.1. Measuring Progress<br>6.2. Implementation Programme | **This section is likely to be divided into 2 parallel parts, one for implementation and one for monitoring. For both parts, where financing details are to be provided, a detailed excel budget table shall be provided.** |

6.3.Financing the Way Forward .....

**For implementation, a clear method for sequencing and prioritising actions in the BSOP I&MP shall be set out. The framework shall distinguish enabling actions, early wins, short-term priorities, medium-term institutionalisation measures, and longer-term adaptive management actions. Prioritisation criteria may include urgency, mandate clarity, feasibility, cost, dependency on other actions, contribution to BSOP objectives, risk reduction, stakeholder support, gender and ESS relevance, and monitoring readiness. The sequencing method should help ensure that the implementation plan is realistic and avoids overloading institutions at the start of implementation.**

**It shall also describes how the draft implementation plan shall be tested for usefulness, legitimacy, and feasibility before finalisation. The framework shall identify validation questions for stakeholders, including whether proposed actions are clear, roles are realistic, sequencing is feasible, monitoring responsibilities are practical, gender and ESS risks are addressed, and the plan can be used by implementation actors.**

**For monitoring, the section shall set out the design requirements for the monitoring component of the BSOP I&MP, defining clearly how the framework should define how BSOP objectives will be translated into key result areas, indicators, baselines where available, data sources, collection methods, geographic scope, reporting frequency, institutional responsibilities, data quality checks, review processes, and adaptive management triggers. It shall include environmental, economic, governance, and social dimensions and identify where indicators should be disaggregated by sex, stakeholder**

**group, location, or other relevant categories. Monitoring should be designed for use in decision-making, not only reporting.**

**The section shall also identify the capacity and systems information needed to design feasible implementation actions. This should include technical capacities for marine spatial planning, institutional capacities for coordination and decision-making, operational capacities for zoning management and enforcement, data management capacities, monitoring and reporting capacities, and capacities for stakeholder engagement, gender integration, ESS application, and adaptive management. The framework should distinguish between gaps that can be addressed through training, gaps requiring institutional systems or tools, and gaps requiring policy, mandate, budget, or staffing decisions.**

**Importantly, this section shall also define how stakeholder information should inform implementation plan design. The framework should map institutional and governance actors; sectoral and economic actors, including fisheries, tourism, conservation organisations, private sector actors, and emerging blue economy stakeholders; and rights-holders and underrepresented groups, including local coastal communities, women, youth, and other relevant groups. It should identify stakeholder roles, interests, influence, potential vulnerabilities, participation barriers, coordination dynamics, and areas of conflict or misalignment. These findings shall directly shape implementation actions, governance arrangements, risk mitigation measures, monitoring indicators, and validation questions.**

| Abbreviation and Acronyms | |
|---|---|
| | Regarding financing matters, this section shall specify how each priority action will be screened for start-up and recurrent costs, staffing implications, technical assistance needs, operational requirements, data and monitoring costs, enforcement and surveillance needs, stakeholder engagement costs, gender and ESS measures, communication needs, and potential funding sources. It should also provide a basis for distinguishing actions that can be implemented within existing mandates and budgets from those requiring new financing, policy decisions, or partner support. |