



# REGIONAL GUIDELINES FOR CENTRAL PLANNING REGION

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## MAIN CHARACTERISTICS OF THE COASTAL PLANNING REGION

**Population:** Approximately 77,000 (SIB, 2022)

**Coastal communities and major population centers:** Belize City, Gales Point, Ladyville, Lord’s Bank Mullins River (SIB, 2022)

**Cayes:** Alligator Caye, Austin Caye, Bannister Bogue Caye, Bluefield Range Caye, Brown Caye, Coffe Caye, Colson Caye, Curlew Spit, Drowned Cayes, Eiley Caye, English Caye, Foreman Caye, Frances Cayes, Frenchman Caye, Goff Caye, Grennel Caye, Hens & Chickens Cayes, Hicks Caye, Holmes Caye, Horseshoe Caye, Long Caye #1, Long Caye #2, Lovers Ranch Caye, Mapp Caye, Middle Long Caye, Moho Caye, Montego Caye, North Drowned Caye, Paunch Caye, Pigeon Caye, Ramsey Caye, Rendezvous Caye, Riders Caye, Robinson Point Caye, Sergeant Caye, Shag Caye, Spanish Caye, Spanish Lookout Caye, St. Georges Caye, Stake Bank Caye, Swallow Caye, Triangles Caye, Unnamed N of Long Caye, Unnamed S of Goring Bogue, Unnamed W Holmes Caye, Water Caye.

**Area** Approximately 2530 km<sup>2</sup>

**Aquatic:** 2183 km<sup>2</sup>      **Continental:** 289 km<sup>2</sup>      **Cayes:** 58 km<sup>2</sup>

**Ecosystems:** Seagrass beds, Coral reefs, Mangroves

**Major Sources of Income:** Tourism and hospitality, Shipping, Sport Fishing and Commercial Fishing

**Main topics:** Tourism, Fishing, Marine Transportation, Marine Dredging and Mining, Land Use and Development, Disaster Risk Management.

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# 1 INTRODUCTION TO THE REGIONAL GUIDELINES

The management of the Central Region’s coastal zone should follow the recommendations and action lines proposed in the National Integrated Coastal Zone Management (ICZM) Plan and be linked to the goals and aspirations of the local community. This region includes very different territories such as Belize City, the most populated municipality of the country, with an intense tourist traffic due to international connections, and a group of cayes, where a local way of life is preserved and with great historical value.

This Regional Guideline has been developed to:

- Present updated information on Habitat Risk Assessment (HRA), a useful tool for assessing potential impacts and informing environmental conservation decision-making.
- Present updated information on the disaster risk profile to contribute to a more resilient development of the coastal zone.
- Summarize the key issues and challenges of the region, by identifying the strengths, weaknesses, opportunities and threats (SWOT analysis) and collecting feedback from Coastal Advisory Committees (CAC).
- Formulate a set of recommendations to be developed in the region, in collaboration with local committees and stakeholders.
- Provide information on sectoral recommendations for development standards.

To this end, this document is structured in the following sections:

- Section 1. Central Planning Region: presents information on ecosystem services and HRA, disaster risk and SWOT analysis
- Section 2. ICZM recommendations: this section presents the key issues identified combining literature review and stakeholder consultations and informs the formulation of a set of recommendations and actions, supported by a four-year implementation, monitoring, and evaluation plan.
- Appendix: including (i) recommendations for community and caye development, as outlined in the *Interim National Integrated Coastal Zone Management Plan: 2020-2025*, align with the *National Guidelines for the Subdivision and Consolidation of Land* from the Lands Department; and (ii) recommendations from the *National Sustainable Tourism Master Plan*, updated in 2023.

The information presented in this document has been prepared using a combination of technical and participatory approaches. The technical process included the review of existing studies and previous ICZM Plans and the performance of the Habitat Risk Assessment model. The participatory approach included the organization of two rounds of consultation with the CAC. The first meeting, held on December 4, 2024, focused on the identification of key challenges and needs in the Coastal Planning Region. The second meeting, held on March 27, 2025, focused on the validation of proposed key issues and recommendations and the prioritization of actions.



Figure 1. First meeting with local stakeholders (CZMAI Conference Room, December 4, 2024).



Figure 2. Second meeting with local stakeholders (CZMAI Conference Room, March 27, 2025).

## 2 THE CENTRAL PLANNING REGION

### 2.1 ECOSYSTEM SERVICES AND HABITAT RISK ASSESSMENT

In the Central Region, most coral reefs are at high risk (87%) (Figure 3, Table 1). The most widespread stressors are agricultural runoff, fishing, recreation, and transportation. In this region mangroves are at low, medium and high risk, being agriculture runoff, development and dredging the stressors that caused the small areas at high risk (22%). Seagrass bed habitats, which occupy extensive areas, are mostly at medium risk (74%). The stressors that pose a high risk to this habitat include agricultural runoff, development, dredging, fishing, recreation, and transportation.

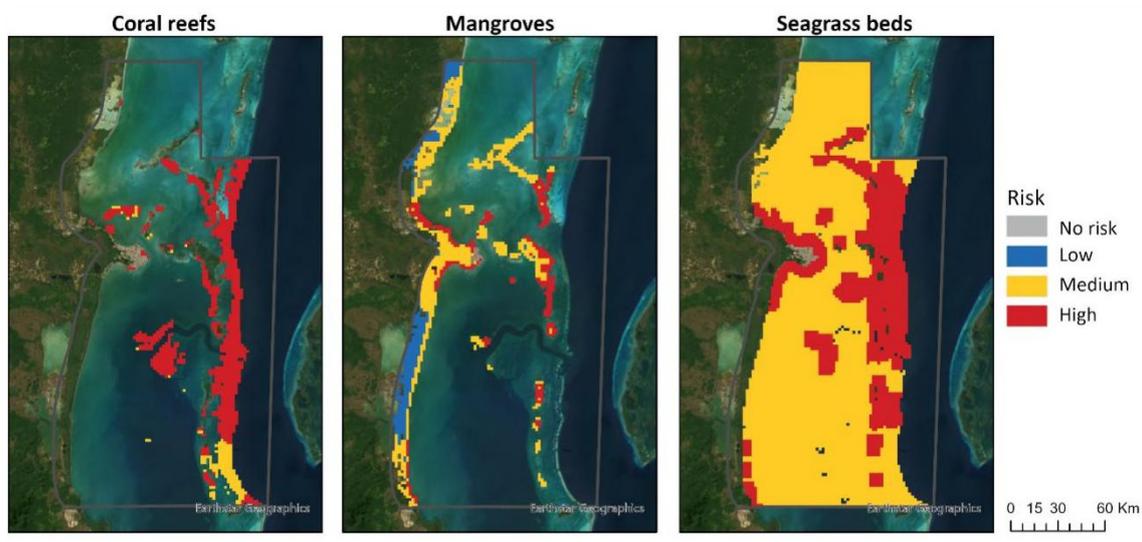


Figure 3. Coral Reef, mangroves and seagrass beds classified as high, medium and low risk for current human activity (2025) in Central Region.

Table 1. Habitat Risk Assessment InVEST model outputs for Central Region.

Habitat	No risk (km <sup>2</sup> )	Low Risk (km <sup>2</sup> )	Medium Risk (km <sup>2</sup> )	High Risk (km <sup>2</sup> )
<b>Coral Reefs</b>	0	0	37.5	250
<b>Mangroves</b>	0	78.75	200.75	81
<b>Seagrass</b>	0	0	1382.75	491.25

### 2.2 DISASTER RISK AND CLIMATE CHANGE ADAPTATION

Central Planning Region faces multiple hazards and risks related to coastal dynamics and climate change. Belize District's most critical threats are tropical cyclone winds, storm surges and floods, with a 100%, 37.6% and 22.8% of the population and capital exposed to each hazard respectively (Pacific Disaster Center, 2021). Most of those impacted populations and infrastructures are likely to be located in great proximity to coastal areas. Flood mapping related to tropical cyclones (see Figure 4) consistently highlights Northern and Central Belize as the most affected areas in the

country. Within the Coastal Planning Regions (CPR), Belize City experiences the greatest impacts in terms of population and infrastructure vulnerability. Under current conditions, flood heights exceeding 2.5 m occur only during events with 100-year return periods. However, under a pessimistic climate change scenario (IPCC AR5 RCP8.5 by 2050, resulting in a sea level rise of 0.275m), similar flood heights are reached with return periods as short as 50 years. The flood extension covers, under most scenarios and return periods, areas mainly northward of George Price Highway and the cayes. Under storms with 500-years return periods, most parts southward of the highway also gets flooded (Martínez et al., 2022).

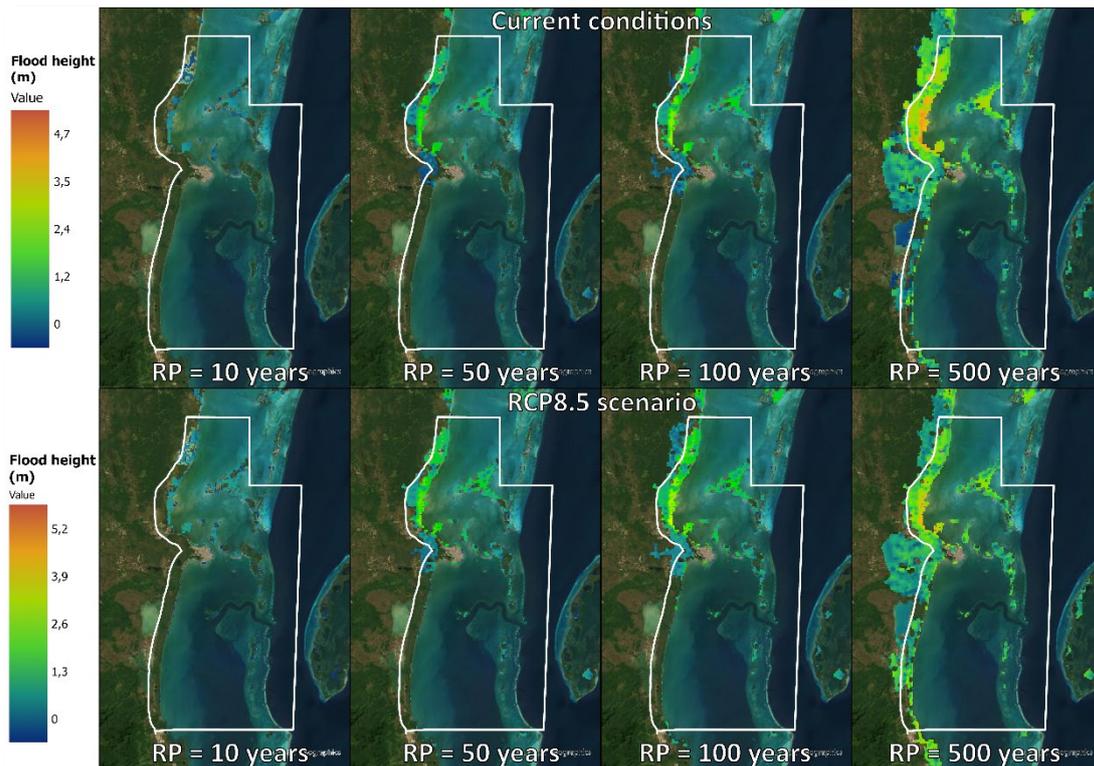


Figure 4. Maps with the 10, 50, 100 and 500 years return periods of extent and depth of flooding for current conditions and for the RCP8.5 climate change scenario by 2050 (SLR= 0.275 m) for Central Planning Region. (Source: Martínez, J. et al., 2022)

Coastal erosion is another critical concern, but mangroves play a key role in mitigating its effects, by providing a natural shield for these areas. According to Martínez et al. (2022), Belize’s mangroves significantly reduce erosion caused by tropical cyclones, maintaining shoreline retreat in Belize City below 0.12 m under both current and pessimistic scenarios. However, in sandy coastal areas like Belize City, shoreline erosion (without considering beach resilience, i.e., the ability of a beach to recover naturally from erosion caused by storms or climate change effects) is projected to reach up to 0.9 m for 100-year storms under current scenarios, but under a pessimistic scenario, the same retreat is already expected for 50-year storms.

Given the CPR’s high exposure to tropical cyclone-related hazards and the estimates on serious injuries/loss of life of the population as well as on damage to households and associated replacement costs, it is considered that the populated areas in Central Region, mainly Belize City, suffer some of the highest individual human and infrastructure risk in the country.

The region's vulnerability is primarily driven by poor health status and high environmental stress (e.g., high land productivity loss). Additionally, transportation and governance rank among the lowest sectors in terms of coping capacity. Nevertheless, Central Planning Region's resilience is very high compared to other CPRs leading to very low multi-hazard risks, mainly composed by storm surges and tropical cyclone winds (Pacific Disaster Center, 2021).

## 2.3 SWOT ANALYSIS

The following section presents a SWOT analysis of the CPR identifying elements or processes that need to be improved or strengthened (Weaknesses), mitigated (Threats), maintained (Strengths), and leveraged (Opportunities), which in turn help define coastal management objectives and recommendations. This analysis results from a careful assessment, including an in-person consultation process with local stakeholders and the CACs on December 4, 2024, and March 27, 2025; a review of existing studies of the coastal area available and the analysis of previous ICZM Plans, together with the review of sectoral policies and plans.

### Strengths:

- Belize City serves as a key gateway with a strategically advantageous location that provides easy access to key tourism hubs such as Caye Caulker, San Pedro, and the Blue Hole.
- The CPR is home to relevant habitats that support biodiversity and of relevant species such as manatees or snook. Additionally, the region's coral reefs are vital for marine biodiversity and support fisheries and tourism activities.
- Existence of protected areas such as the Swallow Caye Wildlife Sanctuary.
- St. George's Caye, an area of significant archaeological interest, adds cultural and historical value, contributing to Belize's diverse tourism offerings.
- Traditional and sustainable lifestyle in the cayes.

### Weaknesses:

- Uncontrolled recreational marine activities in sensitive areas, such as the MPA along the reef from St. George's Caye to Middle Long Caye.
- Complex tourism fee system hinders the efficient management of the tourism sector.
- Lack of enforcement for illegal fishing activities.
- Conflicts among fishermen who use shed traps on the sea floor.
- Conflicts between fishing and shipping activities due to the placement of fishermen in navigation channels.
- Marine species (e.g., manatees) harmed due to speeding boats.
- Stakeholders report decline of snook.
- Uncontrolled dredging activities close to sensitive areas.
- The lack of awareness regarding MPAs in navigation maps contributes to accidental damage.
- Intense levels of marine traffic from cruise vessels, cargo ships, ferries and recreational boats.

### Opportunities:

- Access to financing for local entities for sustainable community development.
- Implementing green infrastructure, such as shoreline stabilization, could protect vulnerable areas from climate impacts, ensuring long-term resilience and supporting eco-tourism.
- Sustainable and regulated historical and cultural tourism (lighthouse in English Caye, St. George's Caye).

### Threats:

- The development of three cruise ports (Port Coral Belize, Port of Belize and Port Magical Belize) without strategic planning may cause cumulative environmental impacts, overwhelm local infrastructure, strain resources, and damage coastal ecosystems.
- The development of the maritime causeway would cause severe environmental damage.
- Potential negative impact of MPA designation extension on fishermen.
- Rising demand for dredging and dredge spoils due to increased development (e.g., new port facilities).
- Potential cumulative impacts due to lack of tools and procedures to prevent them, especially when application for EIA of large developments are split in small projects.
- Increasing dredging activities for land reclamation, particularly around Belize City, Montejo Caye, and proposed cruise port sites, cause turbidity, sedimentation, and long-term damage to marine habitats, such as those in Swallow Caye Wildlife Sanctuary.
- A sand bank close to Montego Caye may potentially be interesting for development purposes. Dredging activities could disrupt natural coastal dynamics and ecosystems: Miami Beach is an important tarpon fishing area and the sand bank serves as natural protection for the coast.
- Development pressures are threatening ecologically sensitive nesting beaches along the coast.
- Dredging activities in inland lagoons near protected areas pose risks to sensitive ecosystems and biodiversity.
- Accumulation of sargassum along the central coastline affects livelihoods, public health, and coastal access.
- Severe coastal erosion along beaches south of Belize City, with failed attempts to stabilize shorelines using natural barriers.

## 3 ICZM RECOMMENDATIONS

### 3.1 KEY ISSUES AND RECOMMENDATIONS

Table 2. Key issues and recommendations. ID refers to the code of each recommendation. S refers to the scale implementation of each recommendation: National (N), Local (L).

TOPIC	KEY ISSUES	ID	RECOMMENDATIONS	S*
Tourism	Tourism pressure on traditional residential areas in St. George's Caye, an area of significant archaeological interest.	R1	Establish tourism regulations for the cayes based on carrying capacity assessments in collaboration with Village Councils. Confine land use assignments for resort type development to those areas where they already exist with minimal scope for intensification or new development.	N/L
	Low environmental awareness (tourist and operators)	R2	Develop raising awareness campaigns for operators and tourism, especially regarding marine recreational activities.	N/L
Fishing and aquaculture	Habitat destruction and overexploitation of fisheries resources	R3	Strengthen zoning protections for spawning grounds and traditional fishing areas, and enforce management of Fisheries Priority Areas (FPAs) and Aquatic Reserves under the National Fisheries Policy.	N
	Impact of MPA expansion to local fishermen	R4	Promote dialogue between fishermen and responsible entities to raise awareness of sustainable marine activities and identify mutually beneficial solutions.	N/L
	Lack of enforcement against illegal fishing activities	R5	Strengthen inter-agency collaboration to improve compliance, monitoring, and enforcement.	N/L
	Security on navigation channels	R6	Implement capacity-building and awareness campaigns for fishermen, port authorities and tour operators to enhance mutual understanding and safety.	N/L
	Decline of snook populations	R7	Enact protection measures for snook, including seasonal restrictions and habitat conservation initiatives.	N
	Aquaculture as a source of income, but may cause impacts on the marine environment	R8	Assess the environmental impacts of shrimp farms and implement improved waste and water management practices.	L
Marine Transportation	Increased cruise port development and cargo expansion affecting sensitive areas	R9	Conduct strategic planning and apply rigorous EIA procedures to mitigate environmental and social impacts.	N
	Lack of mooring buoys, navigational aids, and MPAs on marine charts.	R10	Implement a National Mooring Buoy Plan and integrate MPAs into navigation applications (e.g., Navionics).	N

	Increased marine traffic from Belize City to tourism hubs (Caye Caulker, San Pedro) impacting manatee areas, mainly small boats in shallow waters			N/L
<b>Marine Dredging &amp; Mining</b>	High dredging activity around Belize City and Swallow Caye Wildlife Sanctuary causing biodiversity loss due to turbidity and sedimentation	R11	Elaborate guidelines to designate restricted zones (as part of the MSP zoning), best environmental practices and erosion control plans.	N
	Weak oversight and unclear permitting processes for dredging in and around protected areas threaten the ecological integrity of lagoons.	R12	Establish a community-based reporting mechanism to monitor and report unauthorized dredging activities.	N
<b>Land Use &amp; Development</b>	Lack of strategy for EIAs when cumulative impacts arise from multiple projects.	R13	Develop a Strategic Environmental Impact Assessment (SEIA) framework to address cumulative impacts.	N
	Residential areas and marinas along Belize river (between Lady Ville and Belize City) transitioning to commercial uses.	R14	Create coordination mechanism between DoE, CZMAI and Land Use Dpt. to assess impacts on land use changes. Prohibit selling land in protected areas.	N
	Limited access to sustainable development funding by local entities	R15	Support local entities to obtain funding from national and international sources.	N
	Lack of awareness among developers and real estate agents regarding environmental regulations.	R16	Improve relationships between local experts and developers and establish capacity-building programs for developers to ensure environmentally responsible planning and disaster preparedness.	N/L
		R17	Develop Protection Guidelines for developments in cayes	L
	Seawall construction and beach replenishment projects without proper assessments	R18	Mainstream coastal processes assessments into EIA procedures	N
		R19	Elaborate comprehensive coastal erosion management strategies	N/L
	Lack of zoning and protection for ecologically important coastal areas, including nesting beaches, increases the risk of	R20	Establish zoning designations for nesting beaches and other ecologically important areas, and implement a community-based reporting mechanism to monitor and report threats or illegal activities.	N/L

	habitat loss and biodiversity decline.			
	Ineffective erosion control measures and lack of a comprehensive beach management strategy are contributing to continued shoreline degradation in southern coastal communities.	R21	Conduct technical assessments to identify and implement effective, nature-based solutions for controlling erosion in high-risk areas like Mullins River.	L
		R22	Develop a community-inclusive beach management plan that integrates erosion monitoring, mangrove restoration, and regulated shoreline interventions.	N
<b>DRM</b>	Coral bleaching affecting reef ecosystems	R23	Strengthen climate resilience strategies through coral protection initiatives and ongoing monitoring and research programs.	N/L
	Coastal erosion	R24	Conduct coastal morphology and evolution studies	N
	Unplanned coastal development, including pier construction and mangrove removal, is accelerating beach erosion and sedimentation, increasing vulnerability to climate change impacts.	R25	Conduct an assessment of the cumulative impacts of coastal structures (e.g., piers, seawalls) to guide future development and inform regulatory updates.	N
		R26	Establish a national beach erosion monitoring program to systematically track shoreline changes and inform climate adaptation and disaster risk planning.	N
<b>Environmental conservation</b>	Sargassum buildup hampers fishing activities, deters recreational use of beaches, and negatively impacts tourism and community well-being.	R27	Include sargassum as a priority coastal threat in the Central Planning Region, and develop targeted control and management strategies in partnership with affected communities.	L
	Visible degradation of coastal ecosystems, including mangrove die-off and frequent occurrences of dead animals washing ashore.	R28	Establish a community-based reporting mechanism for environmental incidents such as fish kills and wildlife strandings to support timely response and data collection.	N
S: Scale: National (N) and local (L)				

### 3.2 IMPLEMENTATION, MONITORING AND EVALUATION PLAN

The implementation plan aims to establish priority recommendations to address the key issues of the CPR, as well as to define the actions needed to implement them. To this end, three recommendations have been prioritized, considering their relevance to local stakeholders, their feasibility of implementation during the four years of the ICZM plan, their potential to be applicable to other CPRs and their urgency in terms that have not been addressed during previous ICZM cycles. The selection of recommendations focuses on those at the CPR level, as national recommendations are addressed in the National ICZM Plan.

Following this approach, the prioritized recommendations for this CPR are:

- R1. Establish tourism regulations for the cayes based on carrying capacity assessments in collaboration with Village Councils.
- R6. Implement capacity-building and awareness campaigns for both fishermen and port authorities to enhance mutual understanding and safety.
- R10. Implement a National Mooring Buoy Plan and integrate Marine Protected Area (MPAs) into navigation applications (e.g., Navionics).

The table below outlines the most relevant actions to be carried out for each priority recommendation. This implementation plan covers a four-year implementation period, specifying the stakeholders involved, progress indicators to track each action, and the baseline for comparison. To ensure effective implementation, a biannual report at the CPR level is required.

Table 3. Implementation plan for the prioritized recommendations.

ID	ACTION	STAKEHOLDERS INVOLVED	IMPLEMENTATION PERIOD				PROGRESS INDICATOR
			Y1	Y2	Y3	Y4	
<b>R1: Establish tourism regulations for the cayes based on carrying capacity assessments in collaboration with Village Councils.</b>							
1.1	Create an Advisory Committee with village council, DOE, CZMAI, and community members.	Village Council, DOE, CZMAI, Fisheries Department, BTB, Local Community Representatives					Committee established; frequency of meetings
1.2	Develop a long-term vision for the island.	Advisory Committee					Vision document completed and publicly endorsed
1.3	Seek funding from sources like Blue Bond Fund, IDB, and local universities.	CZMAI, Village Council, Blue Bond Unit, IDB, Ministry of Finance, BTB					Number of proposals submitted/funded
1.4	Conduct a Land Use Plan with analysis of compilation of existing and new data, carrying capacity studies and zonation schemes (including the surrounding cayes).	Lands Department, CZMAI, DOE, Institute of Archeology, Local Village Council					Land Use Plan completed and approved
1.5	Declaration of a MPA around St. George's Caye and Gallow's Point.	Fisheries Department, DOE, CZMAI, Village Council					Legal declaration of MPA
1.6	Develop an interpretive center and a walking tour highlighting cultural and historical significance of the caye.	Institute of Archeology, Ministry of Education, Culture, Science and Technology, Village Council, BTB					Construction and development of interpretive center; establishment of informative posts around the caye; number of visitors
<b>R6: Implement capacity-building and awareness campaigns for fishermen, port authorities and tour operators to enhance mutual understanding and safety.</b>							
6.1	Develop a comprehensive communication strategy.	Fisheries Department, Port Authority, BTB, Coast Guard, CZMAI					Communication strategy document developed and shared
6.2	Create materials in English and Spanish.	Fisheries Department, BTB, Local Community Organizations, CZMAI					Number and distribution of multilingual materials
6.3	Organize workshops between fishermen, tour operators, local communities and government entities.	Fisheries Department, Port Authority, Coast Guard, Fishermen Associations, Tour Operators, CZMAI					Number of workshops held; participation rate
6.4	Provide safety information about navigation channels.	Port Authority, BTB, CZMAI					Safety signage installed; outreach campaigns conducted
<b>R10: Implement a National Mooring Buoy Plan and integrate MPAs into navigation applications (e.g., Navionics).</b>							

10.1	Establish designated navigation channels, mainly in areas like Gallow's Point	Port Authority, Coast Guard					Channels designated and mapped; compliance monitored
10.2	Develop a maintenance program for mooring buoys.	Port Authority, Local Fishing Communities					Maintenance schedule adopted; buoy condition reports
10.3	Implement signage in Marine Protected Areas.	Port Authority, Fisheries Department					Number of signs installed and maintained
10.4	Create digital resources (like apps) with navigation information.	Port Authority, BTB, Fisheries Department					App downloads/usage stats; data updates
10.5	Provide information campaigns.	Port Authority, CZMAI					Outreach materials produced; number of public sessions held

## 4 APPENDIX

The sectoral recommendations for development standards in terrestrial zones and cayes, as outlined in the *Interim National Integrated Coastal Zone Management Plan: 2020-2025*, align with the *National Guidelines for the Subdivision and Consolidation of Land* from the Lands Department. The following sections present these recommendations in detail.

### 4.1 RECOMMENDATIONS FOR COMMUNITY AND CAYE DEVELOPMENT

Table 4. Recommended tourism development for major population centers in the Central Planning Region

COMMUNITY	RECOMMENDED TOURISM DEVELOPMENT
Belize City	Cruise and nautical tourism, hotel development
Gale's Point	Low density tourism
Ladyville	Medium density tourism
Mullins River	Very low density tourism

Table 5. Recommended land use for cayes in the Central Planning Region

COMMUNITY	RECOMMENDED DEVELOPMENT DENSITY	RECOMMENDED DEVELOPMENT STANDARDS
Hicks Caye, Portions of Frances Cayes, Most of Cayo Sucio, Montego Caye, Frenchman Caye, Hens & Chickens Cayes, Riders and Coffee Cayes, Drowned Cayes, Long Caye #2, Crayfish and Simmonds Caye, Middle Long Caye, Alligator Cayes, E of Frenchman's Caye	Not suitable for development	Conservation I & II
S Frances Cayes, N Central & N Hicks Caye, NE portions of S Hicks Caye, W of cayes S of Porto Stuck, N and W of Long Caye, N & S of E Hens & Chickens Caye, S of Riders Caye, N tips of Mapp Caye, Most of Shag Caye, Austin Caye Bannister Bogue, Farl and Goring Bogue Cayes, Spanish Lookout Caye, SE portion of Water Caye, Robinson Point, Ramsey Cayes, N & SW portions of Middle Long Caye, N Alligator Caye, Bluefield Range	Low impact development	Conservation II
SW portion of N Hicks Caye, E coast of Long Caye, NW coast of N Riders Caye, Mid-portion of E Hens & Chickens Cayes, Portions of Drowned Caye, St. George's Caye, Moho Cayes, English Caye	Scope to support major developments	Residential I, III, Commercial I, II

### 4.2 NSTMP RECOMMENDATIONS

The *National Sustainable Tourism Master Plan*, updated in 2023, provides an overarching tourism policy and strategic planning instrument. It spans a 20-year period (2010-2030) and highlights 8 contemporary themes regarding tourism. The following themes and actions are established for the Central Planning Region:

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### Urban Settlement & Management

- 1.1** Achieve carefully managed and sequential urban growth and/or tourism development of cities, towns and tourism centres.
- 1.2** Better control new tourism development within towns in visually sensitive locations.
- 1.3** Address traffic congestion and pedestrian comfort and amenity in tourism destinations.
- 1.4** Improve reticulated utilities, services and infrastructure in urban and tourism growth areas.
- 1.5** Enhance provision of and access to public space, parklands and natural experiences in urban precincts.
- 1.6** Enhance the resilience of established urban settlements in vulnerable (low lying, coastal or floodplain) locations.
- 1.7** Ensure the (real and perceived) safety and security of all visitors (at day and night) in tourism towns is prioritised.
- 1.8** Showcase distinctive urban-historic-cultural-natural assets and experiences in tourism township areas.
- 1.10** Improve the image, presentation and functional attributes (ie. public realm quality, development standards, public transit) of urban areas.

### Coastal Conditions & Resilience

- 2.3** Better understand the influence of climate change and sea level variation in coastal and lagoon settings (forecast mapping).
- 2.6** Encourage uninterrupted public accessibility to beachfronts and the coastal/lagoon fringe for improved tourism amenity and activation.
- 2.7** Minimize the intervention of structures (jetties, groins and other projections) into coastal or lagoon flats.

### Marine, Reef and Caye Condition

- 3.3** Policing of illegal fishing and related behaviours that compromise reef & biosphere conditions.
- 3.5** Control and monitor major boating (cruise and other private craft) routes to avoid harm to the reef network.
- 3.7** Apply carrying capacity measures to public cayes with the prospect of visitor quotas and seasonal limits.

### National Parks and Protected Areas (Terrestrial Areas)

- 4.2** Improve visitor access (roads or alternative river, lagoon, or sea craft) to national parks and protected areas for greater convenience.
- 4.5** Highlight opportunities for Adventure Tourism (for multiple day guided visits to mountain peaks, ridges and passes).
- 4.6** Avoid erosion of national park and protected areas environmental or ecological values through incursion by development.

### Cultural Attractions and Archaeological Sites

- 5.2** Develop a 'systems' approach with designated regional tourism linkages between a hierarchy of Maya (historic and living cultural) sites.
- 5.3** Strengthen 'national' standards for archaeological rehabilitation/restoration and associated tourism interpretation/information.

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- 5.4** Improve the visitor experience at archaeological sites with respectful and equitable controlled access, improved safety, and conveniences for all visitors.
  - 5.6** Grow visitor awareness/education of other living cultures across regions with opportunities to share traditional practices.
  - 5.7** Carefully plan pathways to (and between) archaeological assets, site parking, and infrastructures judiciously.
  - 5.8** Update site planning and tourism development controls for Maya archaeological sites identifying viewsheds, buffers, and wayfinding.

#### Trunk Infrastructure and Connectivity -Accessibility

- 6.4** Advance new connecting main and local road linkages to destinations and ‘circuits’ enabling alternative access (for tourism and resilience).
- 6.6** Develop funding models (such as tourism development contributions) to improve investment and maintenance of infrastructure.
- 6.7** Advance new connecting main and local road linkages to destinations and ‘circuits’ enabling alternative access (for tourism and resilience).
- 6.9** Expand the capability and service of National Information & Technology (Internet) to support wider tourism market and aid communications, emergency management, and climate threats.

#### Regional Linkages and Frontier Interfaces

- 7.1** Enhance regional tourism connections to cayes and interior through improved public/private transit– unlocking potential market growth.
- 7.4** Strengthen national tourism bus network and services with hub and node terminal locations, supported by roadside stops/amenities.
- 7.5** Develop new products based on regional road/trail ‘circuits’ which connect destinations for visitors to stay longer/spend more.
- 7.6** Encourage sensitively sited and designed marina facilities at coastal nodes only for regional nautical recreation and aquaculture tourism.
- 7.9** Work with cruise industry to encourage longer stay or overnight visitor options for wider touring of the region.

#### Tourism Governance Management and Marketing

- 8.1** Adopt the Spatial Tourism Framework as a national network of hubs, nodes, and corridors to aid decision-making on planning and investment.
- 8.6** Promote the use of clean energy and sustainable land and management for tourism development and services.
- 8.7** Focus on development control and compliance by authorities, lifting the standard of tourism development, facilities, and infrastructure.
- 8.9** Increase capacity of local tourism authorities to manage operator compliance (noise, behaviour, waste).
- 8.10** Lead a national program for tourism resilience preparedness with focus on hubs, nodes, and corridors.
- 8.12** Tighten Environmental Effect Statement and like assessment procedures to ensure prioritisation of natural values and climate change issues.
- 8.14** Restore tourism standards program to benchmark with other regions (i.e. ASEAN) and promote information technologies.

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## 5 BIBLIOGRAPHY

- Belize Tourism Board. (2024). *National Sustainable Tourism Master Plan for Belize 2022-2030*. Belize Tourism Board.
- Coastal Zone Management Authority and Institute (2016). *Belize Integrated Coastal Zone Management Plan*.
- Coastal Zone Management Authority and Institute (2023). *Interim National Integrated Coastal Zone Management Plan: 2020-2025*
- Intergovernmental Panel on Climate Change (IPCC) (2014). *Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* [Core Writing Team, R.K. Pachauri and L.A. Meyer (eds.)]. IPCC, Geneva, Switzerland, 151 pp.
- Lands and Surveys Department, Ministry of Natural Resources and the Environment (2010). *National Guidelines for Subdivision and Consolidation of Land in Belize*.
- Martínez, J., Medina, R., Aguirre-Ayerbe, I., Pellón, E., Ramírez, M., Menéndez, P., Casal, C., Cánovas, V., Delgado, D., Jiménez, J., & Suarez, G. (2022). *Coastal Disaster Risk Profile and Adaptation Recommendations Considering Climate Change Scenarios for Belize*. <https://doi.org/10.18235/0004181>.
- Pacific Disaster Center (2021). *National Disaster Preparedness Baseline Assessment: Belize. District Risk Profiles*
- Statistical Institute of Belize (2022). *Population and Housing Census 2022*. <https://sib.org.bz/census/2022-census/>