REGIONAL GUIDELINES FOR AMBERGRIS CAYE PLANNING REGION

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MAIN CHARACTERISTICS OF THE COASTAL PLANNING REGION

Population: Approximately 15,500 (SIB, 2022)

Coastal communities and major population centers (highlighted): Boca del Rio, Escalante, San Juan, San Marcos, San Pablo, San Pedrito, **San Pedro Town** (SIB, 2022)

Cayes: Ambergris Caye, Cayo Frances, Punta Bajo, Cayo Rosario, Cayo Espanto, Cayo Romero, Cayo Cangrejo

Area Approximately 910 km²

Aquatic: 772 km² Cayes: 138 km²

Ecosystems: Seagrass beds, Coral reefs, Mangroves

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

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

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1 INTRODUCTION TO THE REGIONAL GUIDELINES

The management of the Ambergris Caye'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. The recent Strategic Plan for Ambergris Caye Sustainable Development was published (IDOM, IDB, May 2025) and represents an opportunity to move forward a more sustainable development of the area and shall be articulated with other studies and initiatives in this Coastal Planning Region and this Regional Guideline.

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. The Ambergris Caye 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; (ii) recommendations from the *National Sustainable Tourism Master Plan*, updated in 2023; (iii) a reference to the Strategic Plan for Ambergris Caye Sustainable Development was published (IDOM, IDB, 2025).

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 in San Pedro. The first meeting, held on December 6, 2024, focused on the identification of key challenges and needs in the Coastal Planning Region. The second meeting, held on March 29, 2025, focused on the validation of proposed key issues and recommendations and the prioritization of actions.





Figure 1. First meeting with local stakeholders (San Pedro, December 6, 2024).



Figure 2. Second meeting with local stakeholders (San Pedro, March 29, 2025).









2 THE AMBERGRIS CAYE PLANNING REGION

2.1 ECOSYSTEM SERVICES AND HABITAT RISK ASSESSMENT

In the Ambergris Caye region, most coral reefs are at high risk according to the Habitat Risk Assessment results from the InVEST model (Figure 3, Table 1). The main stressors affecting the majority of the coral reefs are development, recreation and transportation. Approximately half of the mangrove area is at high risk, while the other half is divided between low risk and high risk mangroves. The higher risk is mostly due to infrastructure development and dredging. Seagrass beds cover the entire western area of the region, where the depth is shallower. Most of the habitat is at medium risk (60%), with fishing, dredging, and infrastructure development being the stressors that make the difference and cause the high risk areas.

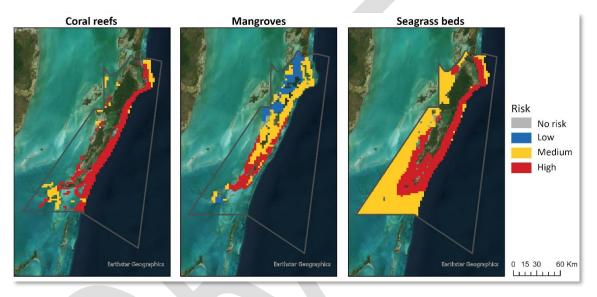


Figure 3. Coral Reef, mangroves and seagrass beds classified as high, medium and low risk for current human activity (2025) in Ambergris Caye.

Low Risk (km²) Habitat No risk (km²) High Risk (km²) **Coral Reefs** 104.5 0 0 30 **Mangroves** 0 44.75 87 42.25 **Seagrass** 0 0 212.75 136.25

Table 1. Habitat Risk Assessment InVEST model outputs for Ambergris Caye.

2.2 DISASTER RISK AND CLIMATE CHANGE ADAPTATION

Ambergris Caye Planning Region faces multiple hazards and risks related to coastal dynamics and climate change. Due to cayes conforming low lying areas, such regions are very highly exposed to tropical cyclone effects and storm surges. Flood mapping related to tropical cyclones (see Figure 4) indicates that Ambergris Caye is very directly impacted, with the entire CPR flooded under current and pessimistic climate change scenarios (IPCC AR5 RCP8.5 by 2050, resulting in a sea level rise of 0.275m). Under current conditions, flood heights reach 1.2 m





during 50-year return period events, while 500-year storms result in 2 m of flooding across the Coastal Planning Region (CPR) and up to 3 m in the southern area and Cangrejo Caye. However, under a pessimistic scenario, 50-year storms would already produce 2.4 m flood heights CPR-wide. San Pedro Town is highlighted as one of the most impacted areas, with flooding exceeding 3.2 m already for 100-year storms (Martínez et al., 2022).

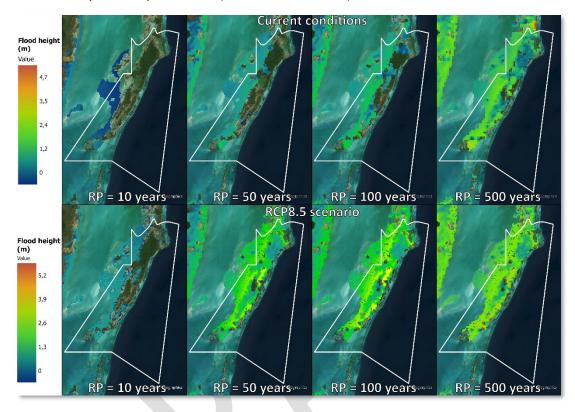


Figure 4. Maps with the 10, 50, 100 and 500 years return periods of extent and depth of flooding for current conditions and for the RCP8.5 climate change scenario by 2050 (SLR= 0.275 m) for Ambergris Caye Planning Region. (Source: Martínez, J. et al., 2022)

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 in the South of San Pedro Town and around Bacalar Chico below 0.24 m under both current and pessimistic scenarios. However, in sandy coastal areas along the entire eastern side of the CPR, 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 reach 18 m for 50-year return period storms under current conditions. In a pessimistic scenario, erosion is expected to reach 27 meters for the same return period, with coastal retreats extending up to 30 meters during 500-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 Ambergris Caye suffer some of the highest individual human and infrastructure risk in the country.









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 the CACs on December 6, 2024, and March 29, 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:

- Rich biodiversity and marine resources that support fishing, sportfishing, and ecotourism.
- Mayan archaeological sites, such as Marco Gonzalez and Bacalar Chico, contribute to both cultural preservation and economic opportunities.
- High ecological and environmental value due to habitats such as mangroves, seagrass beds and coral reefs (Hol Chan Marine Reserve and Bacalar Chico National Park) and great diversity of marine life (turtle nesting areas like Cantena Lagoon)
- Strong local fishing traditions (like flats-fishing), which can be protected through targeted policies.
- Local economy enhanced through recreational industries, like diving, snorkelling, and sport fishing.
- Recent publication of the Strategic Plan for Ambergris Caye Sustainable Development -Belize (IDOM, IDB, 2025).

Weaknesses:

- Uncontrolled tourism expansion harming natural resources and leading to illegal activities (e.g., illegal fishing, unregulated dredging, and mangrove clearance).
- Fragmented governance between land-use authorities and local councils increases private ownership of sensitive areas (e.g., Boca Ciega Lagoon, Cayo Rosario), enabling uncontrolled expansion.
- Illegal dock construction in marine reserves and tourist developments at places like Secret Beach displace local fishers and harm the environment.
- Weak accountability for environmental violations with no clear reporting structure.
- Insecure energy supply for growing tourism demand, increasing reliance on fossil fuels. Electricity and freshwater supply are inadequate for projected growth.
- Septic tank leaks and marine pollution from diesel boats cause significant ecosystem damage. Pollution in Cantena Lagoon, due to water pumping, along with poor waste management and eutrophication, leads to sargassum accumulation, disrupting beach access and bathing areas.
- Difficult navigation through shallow waters, combined with unregulated water taxi
 routes overlapping with swimming areas, not only creates safety risks but also
 damages sensitive ecosystems, such as seagrass and algae.









- Dredging for land reclamation and beach nourishment on Ambergris Caye's eastern side, without prior consultation, causes biodiversity loss and increased turbidity.
- Limited resources of enforcement authority/patrols (fishing, dredging and touristic development).
- Issues with fishing in protected areas, including problems with sportfishing licenses, regulation of fish size, and unclear demarcation of fly-fishing zones near the Mexico border, especially around the northern island.

Opportunities:

- Expanding low-impact tourism while enforcing sustainable fisheries zoning (including seasonal closures and size regulations) can drive economic growth and preserve critical habitats, like shoal areas vital for sportfishing.
- Public-private partnerships could enhance waste management, marine protection, and tourism sustainability efforts across the region.
- Establishing Ambergris Caye as a separate district would strengthen local governance, improve tax and permit management, and enable more effective enforcement of landuse policies. Public-private partnerships in governance could further improve coordination between local councils, the Lands Department, and stakeholders, fostering better planning and sustainable development.
- Including cayes west of Ambergris Caye to the CPR to improve proper management by stakeholders more directly impacted by the developments and activities in those cayes.
- Initiatives such as revegetation of turtle nesting sites (e.g., Eastern Cantena Lagoon) and green shoreline stabilization can counter erosion and boost coastal resilience against climate change.
- Collaborative projects between public and private sectors could support larger-scale climate adaptation strategies, integrating local communities and industries into these efforts.
- Working with Mexico to resolve fishing area disputes and promote shared marine conservation efforts could foster regional tourism, enhance fish stock management, and improve sustainability of marine resources across borders.
- Consolidating port facilities into a single, efficient hub, enforcing designated mooring
 areas with proper buoy signalization, and managing offshore boat traffic zones can
 reduce marine pollution and improve safety for navigation. Collaborative regulation
 efforts with neighbouring regions could help standardize maritime practices and protect
 the marine environment.

Threats:

- The rapid expansion of tourism, especially from cruise tourism, could displace local communities and disrupt traditional livelihoods such as fishing. Overcrowding and insufficient infrastructure would increase pollution and strain natural resources.
- Rising sea levels and more frequent storms, compounded by the loss of natural coastal barriers, will increase Ambergris Caye's vulnerability to coastal erosion and damage to ecosystems, further threatening local infrastructure and biodiversity.
- Continued unchecked development in sensitive regions could exacerbate environmental harm. The expansion of tourist resorts, residential areas, and infrastructure, without proper planning, could lead to habitat destruction and resource depletion.









- Unsustainable fishing methods, combined with weak enforcement, could deplete fish stocks and damage essential nursery areas, undermining the long-term viability of local fisheries.
- National-level policies made without meaningful local input could fail to address Ambergris Caye's unique environmental and social needs, preventing effective responses to emerging threats.









3 ICZM RECOMMENDATIONS

3.1 KEY ISSUES AND RECOMMENDATIONS

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

| TOPIC | KEY ISSUES | ID | RECOMMENDATIONS | S* |
|----------------|---|-----|--|-----|
| | Rapid increase in demand for tourism development exceeding carrying capacity, leading to waste management and pollution issues. | R1 | Monitor the implementation of the Strategic Plan for Ambergris Caye Sustainable Development. | N/L |
| Tourism | Insecure freshwater and energy supply for growing tourism demand, increasing reliance on fossil fuels. | R2 | Improve resource planning and invest in infrastructure and renewable energy solutions such as solar and wind power to support long-term sustainable growth. Decentralize energy supply and promote energy storage. | N/L |
| | Expansion of cruise tourism increasing pressure on local communities and traditional livelihoods. | R3 | Develop policies to limit cruise tourism expansion and ensure benefits for local communities and small businesses. | N |
| | Habitat destruction affecting sportfishing and commercial fisheries. | R4 | Strengthen enforcement to protect shoal habitats and critical spawning sites. | N/L |
| | Illegal fishing in Marine Protected Areas (MPAs). | R5 | Increase early morning patrolling efforts to deter illegal activities. | N/L |
| Fishing | Overfishing and lack of enforcement on fish size regulations, seasonal closures, and sportfishing licenses. | R6 | Promote the participation of local fishermen in enforcement with adequate incentives. | N/L |
| | Unclear demarcation of Mexico border. | R7 | Enhance international coordination to define fishing zones and improve signage and public awareness campaigns to ensure compliance with designated fishing zones. | N |
| | Water taxi routes overlap with leisure swimming areas, causing safety hazards. | R8 | Relocate water taxi docks to the lagoon side of the island and establish designated navigation lanes. | |
| Marine | Sargassum accumulation disrupting navigation and coastal activities. | R9 | Develop a training program to disseminate best practices for sargassum removal. | L |
| Transportation | Diesel boat pollution contributing to marine ecosystem damage | R10 | Promote cleaner energy alternatives for marine transport and regulate fuel emissions. | N |
| | Difficult navigation through shallow waters due to high number of docks, leading to safety | R11 | Establish mooring areas and marked, regulated navigation routes to minimize environmental impacts and improve safety. | N/L |







| | risks and habitat | | | |
|---------------------------|---|-----|--|-----|
| | destruction. Seagrass destruction due to unregulated vessel anchoring. | R12 | Install and maintain navigation buoys and signage to protect sensitive marine habitats. | N/L |
| | Increased shoreline erosion due to climate change. | R13 | Reinforce shoreline stabilization green infrastructure and revegetation techniques and soft coastal defence strategies, such as mangrove restoration and living shorelines while limiting the use of hard structures. | N/L |
| Marine Dredging & | Beach nourishment projects conducted without proper consultation and oversight. | R14 | Require Environmental Impact Assessment (EIA) for all dredging, mining, and reclamation projects and establish reinforcement measures. | N |
| Mining | Unregulated dredging on the eastern side of Ambergris Caye, damaging marine ecosystems. | R15 | Establish coordination mechanisms to incorporate CACs requirements into MSP policies. | N/L |
| | Increased turbidity and sedimentation harming coral reefs and seagrass beds. | R16 | Elaborate guidelines to designate restricted zones (as part of the MSP zoning), best environmental practices and erosion control plans. | N |
| | Shoreline access obstructed by private businesses. | R17 | Enforce the 66 ft. buffer reserve to ensure public access to beaches. | N |
| | Increasing construction of seawalls, piers and jetties (mainly on eastern coastline) leading to | R18 | Strengthen the role of Coastal Zone Management Authority and Institute (CZMAI) and local committees in the development of policies to regulate seawalls, piers and jetties construction and minimize environmental impacts. Enforce stricter regulations, with limited spacing and number of piers per property. | N/L |
| | habitat degradation. | R19 | Evaluation of existing structures contributing to erosion by evaluating historic and current shoreline conditions. Accountability assessments. | L |
| Land Use & Development | Illegal dock construction in marine reserves and unauthorized tourist developments in sensitive areas (e.g., Secret Beach). | R20 | Increase monitoring and enforcement of land-use policies, with stricter penalties for unauthorized construction. | N/L |
| | Private ownership and development in sensitive areas (e.g., Cayo Rosario) displacing local fishers and restricting access to natural resources. | | See R1 | |
| | Lack of awareness among developers and real estate agents regarding environmental regulations. | R21 | Improve relationships between local experts and developers and develop capacity-building programs for developers to ensure environmentally responsible planning and disaster preparedness. | L |







| | Septic tanks leaks in San Pedro and marine pollution from inadequate waste management. | R22 | Implement modern wastewater treatment facilities and stricter waste disposal regulations. | N/L |
|-------------------|--|-----|--|-----|
| Environment | Poor drainage and eutrophication leading to pollution in Cantena Lagoon and sargassum accumulation. | R23 | Develop a lagoon restoration plan, including improved water circulation and pollution control measures. | N/L |
| | Loss of mangroves due to uncontrolled coastal development. | R24 | Request developers to leave mangrove areas as part of the development. | N |
| DRM | Rising sea levels, increased storm intensity, and coral bleaching threatening ecosystem resilience and human lives (e.g., flooded wetland developments in western side) | R25 | Develop and implement climate adaptation strategies, such as nature-based coastal protection, coral reef restoration projects, and managed retreat policies to reduce long-term environmental risks. Restrict new constructions in flood-prone areas and enhance research initiatives and awareness campaigns led by National Emergency Management Organization (NEMO), regarding adaptation and evacuation, as defined by the National Climate Change Policy, Strategy and Master Plan (NCCPSMP). | N |
| | Climate change increasing water temperatures, algal blooms, and sargassum influx, reducing marine productivity | R26 | Strengthen ecosystem monitoring, support conservation initiatives, and regulate nutrient pollution sources. | L |
| | Limited resources for enforcement of environmental laws and regulations. | R27 | Strengthen enforcement agencies by increasing funding, personnel, and training for monitoring activities. | N |
| Governance | National policies do not adequately consider the local council and local environmental and social needs. | R28 | Create formal mechanisms to strengthen the participation of Coastal Advisory Committees (CACs) and local stakeholders in policy development and decision-making. | N/L |
| | Still unapplied proposal of expansion of CPR limits to include western cayes (Deer Caye, Blackadore Caye, Mosquito Caye and Savannah Caye, Swab Caye, Iguana Caye) | R29 | Establish a workgroup with relevant stakeholders from national government, Northern Planning Region and Ambergris Caye Planning Region to discuss the proposal. | L |
| S: Scale: Nationa | ıl (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. Monitor the implementation of the Strategic Plan for Ambergris Caye Sustainable Development.
- R6. Promote the participation of local fishermen in enforcement by adequate incentives.
- R28. Create formal mechanisms to strengthen the participation of Coastal Advisory Committees (CACs) and local stakeholders in policy development and decision-making.

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 | IMPLE Y1 | MENTA Y2 | TION P Y3 | E RIOD Y4 | PROGRESS INDICATOR | |
|---------|--|--|-------------|-------------|--------------|---------------------|--|--|
| R1: Mo | R1: Monitor the implementation of the Strategic Plan for Ambergris Caye Sustainable Development. | | | | | | | |
| 1.1 | Define a simple monitoring or reporting system to analyze the success and positive impact of the carrying capacity conducted. | CZMAI, Lands Department, Municipal Authorities | | | | | Number of meetings to discuss advances and lessons learnt. | |
| 1.2 | Develop a guideline for carrying capacity assessments in land use plans | CZMAI, Lands Department | | | | | The guideline is published. | |
| R6: Pro | mote the participation of local fishermen in enfor | cement with adequate incentives. | | | | | | |
| 6.1 | Create formal reporting mechanisms for illegal activities lead by a proper selection of fishermen and tour guides. | Fisheries Department, Hol Chan Marine Reserve, Tour operator, Sport fisher groups, Tour Guide Association | | | | | Reporting system launched; Number of reports submitted | |
| 6.2 | Develop a training program for the selected reporters as auxiliary enforcement, covering how and who to report to. | Fisheries Department | | | | | Number of participants trained | |
| 6.3 | Establish clear communication channels with enforcement agencies. | Fisheries Department, CZMAI | | | | | Communication protocol signed and functional | |
| R28: 0 | Create formal mechanisms to strengthen the partic | cipation of CACs and local stakehold | ers in po | licy dev | elopmen | t and de | cision-making. | |
| 28.1 | Formalize selection process for representatives of stakeholder groups in the Board of Trustees, ensuring they are appointed by all stakeholders. | Non-governmental organization (NGOs), CZMAI, SPTC | | | | | Selection process published and implemented | |
| 28.2 | Establish a mandatory protocol to report back meeting outcomes to the represented associations. | NGOs, CZMAI, San Pedro Town Council (SPTC) | | | | | Meeting reports published and shared | |
| 28.3 | Develop clear guidelines for representative responsibilities. | NGOs, CZMAI, SPTC | | | | | Guidelines drafted and signed by stakeholder groups | |
| 28.4 | Hold public meetings annually, reporting what has been done. | Tour Guide Association, Tour operators, Fly Fishing Association, Hol Chan Marine Reserve, | | | | | Number of public meetings held; attendance levels | |









| Government ministries, SPTC, | | | |
|------------------------------|--|--|--|
| Belize Tourism Board (BTB) | | | |











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. Finally, a summary of the scope of the Strategic Plan for Ambergris Caye Sustainable Development is presented.

4.1 RECOMMENDATIONS FOR COMMUNITY AND CAYE DEVELOPMENT

Table 4. Recommended land use for cayes in the Ambergris Caye Planning Region.

| COMMUNITY | RECOMMENDED DEVELOPMENT DENSITY | RECOMMENDED DEVELOPMENT STANDARDS |
|----------------|---------------------------------|-----------------------------------|
| Ambergris Caye | Low – Medium Density | Residential I and Commercial I |

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 Ambergris Caye Planning Region:

<u>Urban Settlement & Management</u>

- **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 (i.e., public realm quality, development standards, public transit) of urban areas.

Coastal Conditions & Resilience











- **2.1** Designate, protect and strengthen existing coastal/lagoon mangrove forests (and rehabilitate where required).
- **2.2** Identify and showcase locations for mangrove forest restoration for ecological and coastal fringe resilience.
- **2.3** Better understand the influence of climate change and sea level variation in coastal and lagoon settings (forecast mapping).
- **2.4** Support revegetation and enhancement of the coastal and lagoon edges through contiguous linear land planning.
- **2.5** Ensure development is well setback from the coastline/lagoon edge to avoid visual intrusion and potential harm from encroachment.
- **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.
- **2.8** Manage and monitor water quality (and waste management) in the coastal threshold and associated lagoons.
- **2.9** Improve the control and regulation of nautical recreation in the coastal and lagoon areas.
- **2.10** Establish a coordinated national response to sargassum infestation on coast and cayes with public and private input.

Marine, Reef and Caye Condition

- **3.1** Designate, protect and strengthen the UNESCO reef system and employ practices that minimize harm of tourism intervention/contact.
- **3.2** Undertake research and monitoring to better measure the impact of climate and water temperature change of reef systems.
- **3.3** Policing of illegal fishing and related behaviours that compromise reef & biosphere conditions.
- **3.4** Acknowledge the critical role of caye and reef management by NGO and seek a coordinated approach to tourism practices.
- **3.5** Control and monitor major boating (cruise and other private craft) routes to avoid harm to the reef network.
- **3.6** Better management of recreation air & boat traffic in and around the reef and cayes.
- **3.7** Apply carrying capacity measures to public cayes with the prospect of visitor quotas and seasonal limits.
- **3.8** Recognise the delicate environmental condition of cayes and establish common development regulations.











3.10 Promote and educate tourism industry (and visitors) on sensitivity of reef and biosphere conditions.

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.
- **4.3** Strengthen and unify national park and protected area management and tourism services (i.e., VIS/branding).
- **4.4** Develop hierarchy of national park and protected area status as Protected/Passive/Active.
- **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.
- **4.8** Explore the potential for a 'systems approach' to national parks and protected areas oriented around drainage catchments.

<u>Cultural Attractions and Archaeological Sites</u>

- **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.
- **5.4** Improve the visitor experience at archaeological sites with respectful and equitable controlled access, improved safety, and conveniences for all visitors.
- **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

- **6.5** Aim to increase potable water storage and sewage treatment in tourism destinations, including new sustainable systems.
- **6.6** Develop funding models (such as tourism development contributions) to improve investment and maintenance of infrastructure.
- **6.8** Enhance international-domestic shuttle services and frequency of access to regional destinations- assess the future role for the Municipal Airport and new suprastructures.
- **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.
- **7.2** Work with neighbouring countries to develop international tourism links and fluid crossborder road, sea, and air connections.
- **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.

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.
- **8.4** Avoid the privatization of cayes, islands, and beachfronts, and compulsorily acquire or buy back vulnerable land where possible.
- **8.6** Promote the use of clean energy and sustainable land and management for tourism development and services.
- **8.8** Build capacity within the education sector to deliver decentralized tourism training that can engender improved local jobs and services such as tourism training academy.
- **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.
- **8.13** Establish relationships between government and universities to grow GIS capability in support of resilient tourism development.
- **8.14** Restore tourism standards program to benchmark with other regions (i.e. ASEAN) and promote information technologies.

4.3 THE STRATEGIC PLAN FOR AMBERGRIS CAYE SUSTAINABLE DEVELOPMENT

In May 2025, the Strategic Plan for Ambergris Caye Sustainable Development was published (IDOM, IDB, 2025). Key components of the Strategic Plan include urban growth analysis, assessing natural risk vulnerabilities, and estimating current and future carrying capacity of the territory. Emphasizing sustainable urban development and climate change mitigation, the plan aims to identify projects enhancing the island's carrying capacity amidst urban growth and tourism demands. The consultancy aims to provide recommendations for efficient urban development, prioritizing the well-being of Ambergris Caye's residents with a special view to the northern area of the island. The recommendations are aimed at defining a realistic growth scenario, including plans and projects for land-use planning and necessary infrastructure investments, with the identification of possible sources of financing, proposed investment







schedules, and interinstitutional coordination, including public and private stakeholders. Given its status as a tourist destination, the Plan incorporates a carrying capacity model and tourism diagnosis, crucial for sustainable future development.

Therefore, the ICZM guidelines should take into account and actively promote alignment with the recommendations and initiatives outlined in this Strategic Plan.









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