

CONTENTS

Executive Sur	mmary 1
Introduction	5
Overview of	Tourism in Cozumel 7
Assessment N	Methodology 11
Summary of	Key Findings and Recommendations 12
	Topics for Improvement, nmendations 15
Moderate-Pri	ority Risk Topics, and Recommendations 26
Action Plan f	or Sustainability, to Implement GSTC Recommendations 31
Conclusions	62
Annexes	
Annex 1:	Abbreviations and Acronyms 67
Annex 2:	Cozumel's Previous Tourism Strategies and Studies 68
Annex 3:	About CREST 69
Annex 4:	The Global Sustainable Tourism Council (GSTC) and The Global Sustainable Tourism Criteria for Destinations (GSTC-D) 71
Annex 5:	Stakeholder Mapping Instrument Completed for Cozumel 72
Annex 6:	Document Mapping Instrument Completed for Cozumel 78
Annex 7:	Itinerary for the On-Site Assessment in Cozumel 82
Annex 8:	Methodology and Chronology of Activities 84
Annex 9:	Findings of Good Practices 86
Annex 10:	High and Moderate Priority/Risk Topics: Additional Information 94
Annex 11:	Agenda of the Action Planning Workshop on March 26, 2018, in Cozumel 98
Annex 12:	Facilitation Materials / Handouts for the March 26 Workshop 100



Cozumel, Mexico 2018

EXECUTIVE SUMMARY

Between December 2017 and April 2018, the Center for Responsible Travel (CREST) applied the Global Sustainable Tourism Council Destination (GSTC-D) Criteria and assessment methodology, as well as WWF's Marine and Coastal Tourism Strategy, to identify issues that are undermining Cozumel's environmental, social, and economic sustainability and to recommend improvements for responsible tourism practices on the island. This assessment builds on earlier studies, including the 2012 *Rapid Sustainable Cruise Destination Diagnostic* (2012 Rapid Assessment), and is part of ongoing initiatives in Cozumel to

demonstrate that properly planned tourism can contribute to healthy livelihoods and ecosystems based on multi-sectoral partnerships. The principal collaborators in the GSTC assessment were WWF-US, WWF-México, GSTC, the Cozumel Municipality, GIZ, Royal Caribbean Cruises Ltd., and local stakeholders.



Performance

The four main themes for GSTC's Destination Criteria and Indicators are noted in Figure 1. GSTC's 41 criteria and the 113 indicators for meeting them are placed within these four categories. To determine the degree of compliance, the assessors evaluated and ranked each indicator according to four performance levels, designated by color: green, yellow, pink, and red.

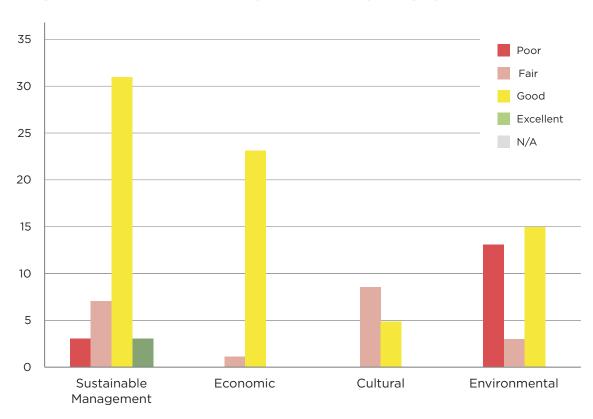


Figure 1: Destination Sustainability Performance by Category

Only three indicators were rated "green" for exemplifying best practices; a majority—74—were rated "yellow," demonstrating that documented policies exist and are being implemented in an acceptable manner, with some room for improvement noted; 20 were rated "pink," signifying either inadequate policies or performance; and 16 were rated "red," signaling that no policies or practices exist. For complete recommendations, please reference the full report.

High-Risk Topics and Recommendations

The destination assessors, based largely on stakeholder input and site visits, identified and made recommendations for the 12 most crucial high-risk sustainability issues. The top five risk topics as prioritized by Cozumel stakeholders are noted below, with the related GSTC Criteria indicated in parentheses. These top five risk areas are ripe for stakeholders to develop action projects to address, in line with GSTC's recommendations, to improve overall destination sustainability.

Hig	h-Risk	lopics

in Cozumel.

1. Build solid-waste management and reduction programs (D10): Only an estimated 7% of Cozumel's solid waste is recycled. Current facilities do not contain adequate record keeping nor do they have proper capacity in

relation to the volume of solid waste generated

Recommendations

- Develop integrated waste management system.
- Develop waste reduction incentive program for local enterprises.
- Seek infrastructure investment projects.
- 2. Increase safe water management and conservation (D6, D7, D8): Cozumel does not have a system to monitor its water resources to ensure that use by tourism enterprises is balanced with the water requirements of the host community. In addition, Cozumel does not have a management system to monitor drinking and recreational water quality using international quality standards.
- Develop a water distribution and use plan to balance present and future water consumption needs by residents and tourism enterprises.
- Conduct study on quantity and quality of the island's aquifer.
- Improve efficacy of aqueducts and water treatment plants and replace old pipes.
- Create water conservation program for local enterprises.
- **3. Develop a multi-year Strategic Plan and Vision for Sustainability** (At): Cozumel does not have an officially recognized multi-year destination strategy for sustainable tourism development
- Hold consultative forums to communicate GSTC-D assessment results and action plans.
- Begin to monitor resident and visitor satisfaction.
- Update and integrate various local, state and national tourism plans.
- **4. Create a destination management organization (DMO)** (A2): None exists at the moment in Cozumel.
- Identify and select the DMO model best suited for Cozumel, to include balanced representation.
- Consistently update management tools and plans.
- Establish best practices in sensitive sites.
- **5. Develop standards and training for tour operators and guides** (C₃): Tour guides do not receive periodic training on the use of interpretive information. Training on a local code of conduct would help to ensure proper tourism behavior by visitors and guides.
- Establish, maintain and track tour operator permits and licenses and make information publicly available.
- Establish a program to train tour guides in the techniques and content of effective interpretation.
- Develop a local code of conduct for tour guides, tour operators, and visitors and requirements for implementing it.

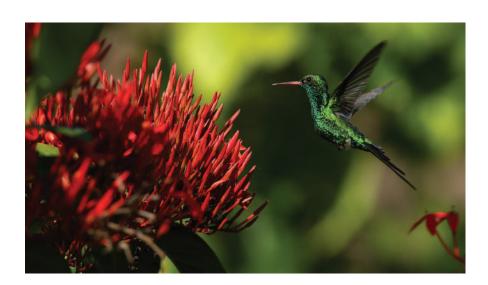
Remaining Recommendations for High-Risk Areas

In addition to the above high-risk areas prioritized by stakeholders for early action, the following additional sustainability issues also presented as risks for the destination to address toward full compliance with the GSTC Criteria for Destinations.

- 6. Strengthen sustainability standards through certification, branding and marketing of sustainable tourism (A11)
- 7. Create an energy management and conservation program (D5)
- 8. Expand use of low-impact transport (D12)
- 9. Enhance wastewater management programs (D9)
- 10. Develop an Integrated Monitoring System and public reporting of environmental, economic, social, cultural, human rights, and environmental issues related to tourism (A₃)
- 11. Establish programs to measure, monitor, minimize, publicly report and mitigate greenhouse gas (GHG) emissions from tourism enterprises and infrastructure (D4)
- 12. Encourage enterprises to follow guidelines and regulations to minimize noise and light pollution (D11)

It is expected that, over the coming months and years, the GSTC-D assessment and new Action Plan will assist Cozumel in addressing the identified risk areas and implementing key initiatives and projects through strategic partnerships and prioritized investments. Broader and deeper collective action remains critical to achieving the three primary destination stewardship goals: (1) provide sustainable livelihoods; (2) conserve the resource for future generations; and (3) create a high-quality visitor experience.

It is also important to note that this GSTC-D assessment report and Action Plan should not be beholden to any political party or government. The DMO and Strategic Plan are intended to transcend political parties and to carry over from one government administration to the next in Cozumel.



Introduction

Between December 2017 and April 2018, the Center for Responsible Travel (CREST) conducted a Global Sustainable Tourism Council Destination (GSTC-D) assessment of the Island of Cozumel, Mexico's leading port of call for cruise tourism. The assessment builds on earlier research, tools, studies, and field projects designed to assess and improve the sustainability of Cozumel's dominant tourism sector. In particular, it updates the 2012 *Rapid Sustainable Cruise Destination Diagnostic* conducted by Sustainable Travel International (STI) (see Annex 2: Cozumel's Previous Tourism Strategies and Studies). The overall objective of the 2018 GSTC assessment is to identify both risk areas that are undermining Cozumel's environmental, social, and economic sustainability and key initiatives and projects to improve responsible tourism management practices in Cozumel. The current assessment is part of an ongoing collaborative effort that seeks to demonstrate that properly planned tourism can contribute to healthy livelihoods and ecosystems based on multi-sectoral partnerships. The principal collaborators in the GSTC assessment are WWF-US, WWF-México, GSTC, the Cozumel Municipality, GIZ, Royal Caribbean Cruises Ltd., and local stakeholders.

Through a competitive process, the Center for Responsible Travel (CREST), an authorized GSTC Destination assessor, was selected to carry out the third-party assessment (see Annex 3: About CREST). Two CREST experts, Dr. Kennedy Obombo Magio, a CONACYT Research Fellow at the Technological Institute of Cancún, and Valerie Sera Fernández, a tourism lecturer at the University of Occidente and TecMilenio in Sinaloa, conducted the assessment, under the direction of CREST Executive Director Dr. Martha Honey. WWF engaged GSTC Director of Strategic Partnerships Kathleen Pessolano to ensure the

CREST assessors complied with GSTC methodology, and WWF and GSTC served as close advisors throughout the process. (See Annex 4: The Global Sustainable Tourism Council [GSTC] and The Global Sustainable Tourism Criteria for Destinations [GSTC-D]).

GSTC's Destination Criteria and Indicators facilitate systematic diagnostics of a destination and help determine the steps needed to meet internationally recognized "best practices" to improve the destination's positive environmental and social footprint. The criteria cover the four main categories of destination sustainability:

- 1. Sustainable management
- 2. Economic benefits to the host community
- 3. Community, visitor, and cultural well-being
- 4. Environmental protection

While a GSTC Destination Assessment is not a certification program, it is widely recognized as a critical tool for helping destinations to improve their sustainable practices and prepare them, should they choose, to undertake certification by a GSTC-accredited destination certification program. For the Cozumel assessment, GSTC criteria and indicators were edited and expanded to capture WWF's Marine and Coastal Tourism Priorities for 2013–2020. These include four strategic approaches:

- 1. Smart coastal planning and zoning
- 2. Support for marine protected areas and key species
- 3. Promoting alternative livelihoods in tourism or in businesses in the tourism supply chain
- 4. Adopting sustainability standards and certifications for tourism businesses and destinations



Overview of Tourism in Cozumel

The island of Cozumel, 30 miles long, is located off the eastern coast of Mexico's Yucatán Peninsula, opposite the coastal town of Playa del Carmen and near the Yucatán Channel. It has a population of about 86,000 permanent residents and some 4 million visitors annually. Cozumel is host to a mix of several types of visitor, including cruise ship "day trippers" who spend less than a day on the island; stay-over guests (some in all-inclusive resorts), mainly from the United States, who typically stay three to four days; domestic travelers, low-budget backpackers (both national and international), and long-stay expatriates and retirees with homes in Cozumel. There are three important tourism peaks in a year: Winter (December–March), Summer (June–August), and Holy Week (in March or April), when most people in Mexico have vacations. The slowest months are April and May (except for Holy Week) and September and October. Tourism and related commerce account for 78% of the island's economic activities, with the remaining 22% derived from fishing, agriculture, ranching, manufacturing and construction.

Cozumel's cruise infrastructure includes three piers, which receive about 1,600 ships a year. There is no carrying-capacity baseline (number of ships or passengers that Cozumel can accommodate in a day); however, stakeholders observed that the destination is usually overwhelmed when 8 docked and 4 anchored ships are present. This happens once a year during the month of December. Nearly all (96%) of Cozumel's cruise passengers come from the United States, the United Kingdom, and Canada. Cruise ships arrive at the island early in the morning, and approximately 85% of passengers disembark and spend from five to nine hours onshore. A 2014–2015 cruise season study by Business Research & Economic Advisors (BREA) found that many of the passengers did not venture beyond the cruise terminals, where they find restaurants, bars, and souvenir stores; only 51% of passengers tour the island and visit key tourist attractions.



In 2016, Cozumel set a record with 4,356,367 visitors, a 9.5% increase over 2015, according to SEDETUR, Secretary of Tourism in Quintana Roo. This included 3,637,321 cruise passengers who spent an average of 8 hours on the island, and 719,046 stay-over visitors with an average stay of 3 days. Most stay-over visitors fly by plane to Cancún International Airport and then travel to Playa del Carmen by bus or car to take a ferry to Cozumel; a smaller number fly directly to Cozumel via scheduled or charter flights. Day visitors arrive via ferry from Riviera Maya. There is no official record of day-use travelers; however, it is estimated that 12,500 passengers, including locals and workers, arrive by ferry every day; this number increases to about 17,000 during the high season.

Also during 2016, cruise passengers and stay-over visitors generated a combined total spending of US\$710.57 million, a 16.3% increase over 2015. A 2016 SECTUR study found that overnight visitors spent \$538 for an average stay of three days, while cruise passengers on average spent \$120 per passenger. The BREA study commissioned by the Florida-Caribbean Cruise Association (FCCA) found comparable results on cruise passenger expenditures. In other Mexican ports, cruise passengers on average spent only \$75. The expenditures for Cozumel are higher, SECTUR concludes, because of its "natural attractions and the growing number of providers of tourist services."

The BREA study calculated that Cozumel generated US\$366 million in direct cruise sector expenditures from passenger, crew, and cruise line purchases, making it the third highest among the 35 destinations covered in this study. The study identified three principal sources for the economic benefits Cozumel derives from cruise tourism: (I) onshore expenditures by passengers, including shore excursions and retail purchases of clothing and jewelry; (2) onshore spending by crew, which mainly comprises purchases of food and beverages, local transportation, and clothing and electronics; and (3) expenditures by the cruise lines for supplies, such as food and beverages, port services (navigation and utility services), and port fees and taxes, such as wharf and docking fees. The BREA study also calculated that cruise tourism in Cozumel generated direct employment for 6,114 persons, paying US\$37.9 million in annual wages, or just over US\$6,000 per employee. These were the highest employment numbers among the 35 destinations BREA studied.

Geography and Attractions

Cozumel, Mexico's longest island, lies about 12 miles off the mainland, surrounded by the Caribbean Sea. Edged with white sand beaches, the island is mostly flat and limestone based, with the highest point being only 20 meters above sea level. There are no aboveground aquifers (streams, rivers, or lakes) in Cozumel because of its highly porous surface. Most of the fresh water comes from rainwater captured by water wells in the center of the island, and its availability increases or decreases depending on rainfall. There are also several freshwater sink holes in the island.

Cozumel's fragile natural ecosystems include the Mesoamerican Barrier Reef, the Western Hemisphere's largest reef system, stretching from Isla Contoy at the tip of the Yucatán Peninsula down to Belize, Guatemala, and the Bay Islands of Honduras. The island's wild-life includes more than 700 animal and plant species (both marine and terrestrial) and 31 endemic species and subspecies, including the Cozumel fox (nearly extinct), the Cozumel raccoon (critically endangered), the Cozumel coati (endangered), and the splendid toadfish (endangered). Cozumel Island has five protected areas and was recently designated as a UNESCO Biosphere Reserve.

Cozumel offers a mix of cultural and natural activities in locations such as Mayan archaeological sites, white sand beaches, coral reefs, mangrove swamps, wetlands and salt marshes. Cozumel has become recognized worldwide as a destination for scuba diving and snorkeling. The main tourism sites and activities include:

- I. Arrecifes de Cozumel National Park, home of the world's second-largest coral barrier reef (scuba diving tourism)
- 2. Punta Sur Ecological Beach Park, with unique biodiversity (eco and nature tourism)
- 3. Archaeological site of San Gervasio, with Mayan temples and the sanctuary of the Mayan goddess Ixchel (cultural and archaeological tourism)
- 4. Town of San Miguel, renowned for music, crafts, local restaurants, and its small-town vibe (cultural tourism)
- 5. Chankanaab National Park (ecotourism)
- 6. Beach clubs (sun and sand tourism)
- 7. Souvenir and jewelry stores (shopping tourism)
- 8. A visit to the eastern, wild side of the Island, with breathtaking scenery

Accommodations include 45 hotels with 4,098 rooms, of which 18% are 5-star, 24% are 4-star, 26% are 3-star, 20% are 2-star, and 9% are 1-star. Overall occupancy is relatively high, with an annual average of 67.8%. There is no carrying-capacity baseline for accommodation establishments, and it is estimated that, in addition to hotels, Cozumel has about 300 establishments (mainly houses and apartments) offering lodging, with Airbnb an increasingly popular option. There are an estimated 86 food and beverage establishments/restaurants (Mexican and international cuisine), 10 nightclubs, and more than 14 bars. Other tourism service providers include 5 museums, 20 travel agencies, 101 car and scooter rentals, 37 scuba dive operators, 21 beach recreational areas, 12 beach clubs, 1 golf course, 1 convention center, 1 international airport, 1 tourism school, 2 marinas, 3 cruise ports, 2 ferry terminals for cars and passengers, 5 tourist information modules, 2 tourist transportation companies, 7 post offices, 155 tour operators (45 land and 130 aquatic), as well as banks, souvenir shops, and taxis. The island can be reached by air, through commercial (including direct flights from 8 North American cities) and charter flights, or by a 40-minute ferry ride, offered hourly, from Playa del Carmen.

Assessment Methodology

n conducting the assessment, CREST followed the GSTC's methodology of evaluating the destination's policies and practices against the GSTC Criteria for Destinations. The steps included: desk-based collection and analysis of destination policies and compilation of key government officials and other tourism stakeholders in the destination; an opening on-site stakeholder workshop to brief stakeholders about the GSTC assessment purpose, method, and criteria; focus groups and interviews to consult destination stakeholders on implementation of the destination policies and practices; writing of a draft report, and a closing workshop to discuss and validate the assessor's key findings and recommendations, to begin to create an Action Plan for implementing improvement. Some 60 stakeholders

from government, tourism businesses, NGOs, civil society, and academia were consulted during the initial focus groups and interviews, and some 50 participated in the final workshop. A complete list of stakeholders consulted during the GSTC assessment of Cozumel is included in Annex 5.



Summary of Key Findings and Recommendations

To determine the degree of compliance with each of the GSTC-D indicators, CREST evaluators analyzed the results according to four performance levels as indicated in Table 1. Of the 113 indicators analyzed, 3 (2.66%) were rated "green," 74 (65.48%) were rated "yellow," 20 (17.70%) were rated "pink," and 16 (14.16%) were rated "red." Indicators marked in red or pink should be understood as representing gaps or sustainability risks.

Table I provides a summary of the GSTC-D indicators according to the four categories of destination sustainability, and their performance levels, ranked by color.

As shown in Table 1, 74 indicators across all categories were rated yellow, demonstrating that policies exist for the majority of sustainability criteria and that they are being implemented in an acceptable manner (see Annex 9 for further details on findings of good practices). However, the findings also show that there is more work to be done to move the indicators from yellow to green, that is, to meet best practices. It is instructive that a similar result was found in the STI's 2012 Rapid Assessment, an indication that its recommendations were never implemented. Only three indicators in the GSTC analysis—tourism seasonality management (A4), respectful promotional messages (A14), and accurate promotional messages (A14)—were rated "green," demonstrating that policy exists and is being implemented in an exemplary manner.

The environmental category had the highest number of "red" or risk topics, including wastewater management, energy conservation, solid-waste management, low-impact transportation, water quality, water security, water management, use of plastic bottles, light and noise pollution, and greenhouse gas emissions. Two other important risk topics are the lack of a destination management organization (DMO) in Cozumel (A2), which was rated "red," and the lack of a strategic plan with special focus on tourism sustainability (A1), rated as

TABLE 1: Destination Sustainability Performance

Indicators by Categories (right) Performance Levels (below)	Sustainable Management	Economic Benefits	Community, Visitor, and Cultural Well-being	Environment	Indicators
Green = Documentation of policy exists, and it is being implemented in an exemplary manner—on a level with best practices	3	0	0	0	(3)
Yellow = Documentation of policy exists, and it is being implemented in an acceptable manner	31	23	5	15	(74)
Pink = Documentation of policy exists, but it is not being implemented—or vice versa	7	1	9	3	(20)
Red = No documentation of policy exists, and it is not being implemented	3	0	0	13	(16)
Overall Rating	Good (44)	Good (24)	Fair (14)	Poor (31)	113

FIGURE 2: Destination Sustainability Performance by Category

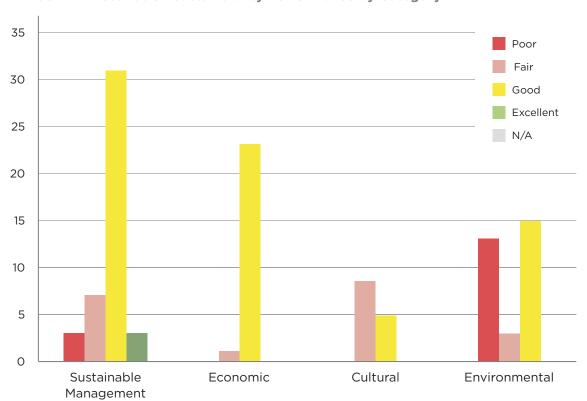
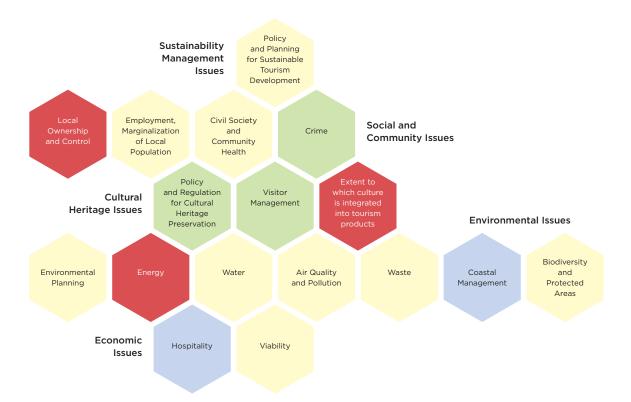


FIGURE 3: 2012 Destination Sustainability Performance





"pink." According to destination stakeholders, the lack of a DMO and a Strategic Plan, as the key institutional foundations for sustainable tourism in Cozumel, as well as limited budgetary allocation were the main reasons for the minimal implementation of the 2012 Rapid Assessment recommendations.

For purposes of comparison, we note that out of the 17 issues analyzed during the 2012 Rapid Assessment, 3 issues are rated "green," indicating a stable condition; 9 issues are rated "yellow," indicating further attention is needed; and 3 issues are rated "red," indicating attention is required. Information gaps precluded reporting on 2 issues marked "blue": coastal management and hospitality. Figure 3 illustrates Cozumel's performance per the 2012 Rapid Assessment. Comparisons can be made to the GSTC assessment. Some indicators, including water and solid-waste management, which rated "yellow" in the 2012 Rapid Assessment, scored "red" in the GSTC assessment. Energy conservation scored "red" in both assessments.

High-Priority Topics for Improvement, and Recommendations

The following is a summary of 12 high-risk topics and the key issues identified during the assessment process, particularly through the stakeholder workshops and site visits. All these high-risk topics were rated "red" except criteria A1: Sustainable Destination Strategy and C3: Visitor Behavior, which were rated "pink." These two are included as high-risk topics because stakeholders identified them as crucial for Cozumel's sustainability (see Annex 10 for additional details). The corresponding GSTC indicators for each topic are listed in parentheses after the title. These high-risk topics, along with the recommended actions, appear in the order of priority assigned by the stakeholders during the Action Planning workshop held in Cozumel on March 26, 2018.

1. Solid-Waste Reduction (D10)

Cozumel does not have a well-functioning system to encourage enterprises and institutions to reduce, reuse, and recycle solid waste. In addition, not all of its residual solid wastes are disposed of safely and sustainably.

Further, the waste collection system does not maintain public records of the amount of waste generated and how it is treated, although all waste collection trucks arriving at the sanitary landfill must be weighed. While Cozumel has not implemented a solid-waste management plan, it does have quantitative goals to minimize and ensure safe and sustainable disposal of waste that is not reused or recycled.

Although CAMAR (Centro de Acopio de Materiales Reciclables), a local municipal company, is making the best effort to store and transfer waste materials, only an estimated 7% of Cozumel's solid waste is recycled. In addition, the GSTC-D assessment did not find any

program to reduce and/or eliminate plastic bottled water used by enterprises and visitors. There are facilities for waste disposal and recycling managed by Promotora Ambiental de La Laguna, S.A. de C.V. (PASA); however, their capacity is not adequate, and the sanitary landfill is relatively small in relation to the volume of solid waste generated in Cozumel. According to the participants, the concession given to PASA for waste management (sanitary landfill) services is expensive for the municipality but not as efficient as expected.

In some cases, the Municipal Government's Department of Public Services (La Dirección de Servicios Públicos Municipales) gives guidance to residents and tourists on minimizing and separating waste in public locations. In addition, there are guidelines for the collection, transport, treatment, and final disposal of solid waste in Cozumel (Reglamento para la Prestación del Servicio Público de Recolección, Transporte, Tratamiento y Disposición Final de Residuos Sólidos en el municipio de Cozumel). However, the GSTC-D assessment found that implementation of these regulations is problematic.

RECOMMENDATION: Build Solid-Waste Management and Reduction Programs

- Develop an integrated system for waste management that will implement strategies
 for improving waste management and environmental quality in Cozumel. The system will enable the destination to optimize the available resources and attract funding for short-term and long-term projects in waste management.
- 2. The destination should develop an incentive program to reduce waste generation by all sectors and encourage enterprises and institutions to reduce, reuse, and recycle solid waste.
- 3. The destination should seek investments in infrastructure projects to guarantee 100% efficient waste management (solid waste, wastewater, and polluting gases), taking into account its volume and impact.

2. Water Management (D6), Water Security (D7) and Water Quality (D8)

Cozumel does not have a system to encourage enterprises to measure, monitor, reduce, and publicly report water usage. Also, there is no evidence that the impacts of tourism on local water sources are tracked, or that goals for reducing water consumption within the tourism sector are in place.

Cozumel does not have a system to monitor its water resources to ensure that use by tourism enterprises is balanced with the water requirements of the host community. The GSTC-D assessment did not find evidence of regular, reliable, and publicly available information on the water usage by either the host community or tourism service providers, such as hotels, whose operations require large quantities of water. The assessment found

no evidence of efforts to measure and publicize information about the impact of tourism activities on the local aquifer or of efforts to reduce water usage by the tourism sector.

In addition, Cozumel does not have a management system to monitor drinking and recreational water quality using international quality standards. Although the Water Commission (Comisión de Agua Potable y Alcantarillado [CAPA]) conducts water quality studies at the source, the results of these monitoring exercises are not regularly available to the public. Consequently, the island does not have a system to respond in a timely manner to water quality issues. The most recent information about water quality and management on CAPA's website dates from 2016, and none of the government's published information, which starts from the third trimester of 2014, refers to the specific sustainability indicators outlined in the GSTC criteria.

RECOMMENDATION: Increase Safe Water Management and Conservation

- I. Develop a water distribution and use plan to balance the present and future water consumption needs of Cozumel's residents and tourism enterprises. This should be based on a study to determine the water that can be available for tourism, without reducing the supply required by residents.
- 2. Conduct and publish a study on the quantity and quality of the island's aquifer, since there has been no diagnosis in the last 10 years. This should include techniques and costs for ensuring safe drinking water for the growing numbers of both residents and tourists in Cozumel and should draw lessons from successful initiatives in other similar destinations.
- 3. Develop strategic projects to improve the efficacy of aqueducts and water treatment plants and to replace old pipes in the municipality.
- 4. Create a program for water conservation in collaboration with international and federal organizations. This program should highlight the important financial savings to businesses that conserve water.

3. Sustainable Destination Strategy (A1)

Cozumel does not have an officially recognized multi-year destination strategy for sustainable tourism development. There are, however, short-term plans, strategies, and programs that partially incorporate aspects of sustainable tourism and address environmental, economic, social, cultural heritage, quality, health, safety, and protected-area issues.

RECOMMENDATION: Develop a Multi-Year Strategic Plan and Vision for Destination Sustainability

- 1. Develop an up-to-date Strategic Plan for Sustainable Tourism in Cozumel. Existing management plans, including the Sustainable Tourism Strategic Plan (PETSIC) 2014–2032, do not adequately address all components of sustainable destination management identified in the GSTC Criteria. Additionally, PETSIC was not formally adopted by the Municipal Government to guide destination management. It should be updated and integrated into this overall Sustainable Destination Strategy, which should include a vision for the development of the destination, the GSTC-D recommendations, and all key issues covered in the GSTC Criteria.
- 2. Additionally, the plan should be developed to integrate with other management plans at the state and national level. These include:
 - National Agreement for Tourism (Acuerdo Nacional por el Turismo)
 - National Development Plan
 - Sectorial Program for Tourism (*Programa Sectorial de Turismo*, 2013–2018). (A new one for 2019–2024 will be developed after the forthcoming presidential elections.)
 - The State Development Plan for Quintana Roo (*Plan Estatal de Desarrollo—Quintana Roo, 2016–2022*) and the Master Plan for Sustainable Tourism Development—Quintana Roo (*Agenda para el Turismo Sustentable—Quintana Roo*), which seeks balanced development in state destinations.

NOTE: While these recommendations may require longer-term planning to implement, concrete actions that could be accomplished immediately as the destination builds up to these larger initiatives are:

- Hold multi-stakeholder *consultative forums* to communicate GSTC-D results and the proposed Action Plan.
- Establish mechanisms to monitor resident and visitor satisfaction and make this information available as part of a tourism observatory to be housed under the "Smart Destination" platform (Cozumel's innovative program based on Spain's strategy for upgrading destinations, which uses SECTUR's proposed methodology).

4. Destination Management Organization (DMO) (A2)

Cozumel does not have a Destination Management Organization (DMO) as outlined by GSTC Criterion A2. Existing collaborative work among stakeholders (public, private, and civil) provides a strong basis for the creation of a DMO, and Cozumel's Municipal Government has already taken steps toward creating a DMO, as this was one of the recommendations from the 2012 Rapid Assessment.

RECOMMENDATION: Create a Destination Management Organization (DMO)

- 1. The DMO must be sufficiently funded, with the responsibility to steer Cozumel toward sustainability consistent with the GSTC Criteria.
- 2. The DMO would be responsible for developing and implementing the above-mentioned Sustainable Destination Strategy and vision. Tourism development is a dynamic economic sector in Mexico, comprising the political landscape, where leadership changes at the municipal level every three years; incomplete or inconsistent management plans, policies, and regulations; and insufficient resources for implementation. Granting the DMO permanent jurisdiction and authority with regard to destination planning and implementation would help ensure continuity across changes in government administrations.
- 3. The DMO should establish best practices in sensitive sites, develop strategies to mitigate seasonal variability, and focus on new forms of tourism and economic activity.
- 4. There is a need to achieve balanced representation and participation of all relevant stakeholders in the process, including the Mexican Tourism Secretary (SECTUR), which does not have an office in Cozumel, representatives of the municipal government, tourism business sector, NGOs, civil society, and academia. It is recommended that the organization's structure and functions be established by consensus.
- 5. To be effective, the DMO should have juridical personality and legal authority, and its members should possess decision-making and implementation powers.

NOTE: While the above recommendations may require longer-term planning to implement, concrete actions that could be accomplished quickly are:

- Share sustainable management information via the "Smart Destination" virtual platform.
- Consistently update important management tools: risk atlases, urban management plans, climate change management plans, protected area management plans, etc.

5. Visitor Behavior (C3)

The assessment revealed that tour guides do not receive periodic training (at least every two or three years) on the use of interpretive information. However, during the last five years, some tour operators have conducted trainings for tourism guides in customer service and foreign languages, among other topics. Cozumel also requires a code of conduct for tour guides and tour operators as well as cultural and environmental guidelines for visitor behavior in all sites. These codes and guidelines should be developed with community input, be consistently updated, and made publicly available.

RECOMMENDATION: Develop Standards and Training for Tour Operators and Guides

I. Establish a program to train tour guides in the techniques and content of effective interpretation. It is recommended that a team of specialists, particularly biologists and historians, be consulted to develop interpretive content and material for Cozumel to facilitate accurate interpretation for the tour guides. This information should be available digitally for tour guides as well as visitors, and be written in Spanish, English, and other appropriate languages.



- Develop a local code of conduct for tour guides, tour operators, and visitors, taking into account the specific characteristics of Cozumel's fragile ecosystem and cultural heritage.
- After developing the code of conduct for tour guides and tour operators, tie its
 implementation to the licensing process—consider, for example, requiring that in
 order to achieve and maintain a license, guides and operators implement the code
 of conduct.

NOTE: While the above recommendations may require longer-term planning to implement, a concrete action that could be accomplished immediately is:

- Establish and maintain a record of required tour operator permits and concession procedures and guidelines.
- Track permits and licenses that have been granted as well as registered tour operators and guides and make this information publicly available on the "Smart Destination" platform.

6. Sustainability Standards (A11)

The participation of tourism businesses in certification programs and environmental management systems should be monitored. There is no publicly available list of sustainability certified tourism businesses, although online travel sites such as Expedia do classify some hotels in Cozumel as sustainable.

RECOMMENDATION: Strengthen Certification, Branding and Marketing of Sustainable Tourism

- 1. Promote and incentivize the adoption of sustainability standards for tourism enterprises consistent with the GSTC Criteria.
- 2. Make publicly available the list of enterprises that have been certified or verified to GSTC Recognized standards, and ideally certified by GSTC-Accredited programs.
- 3. Consider creating a "Brand Cozumel" and logo guided by the principles of sustainability and based on the unique characteristics of the destination, including its diverse natural and cultural heritage and its recent designation as a biosphere reserve by UNESCO. The brand could promote hotels and tour operators certified by GSTC-Accredited programs, and sustainable tourism providers that also conform to Mexican certification programs (quality certification "El Programa de Calidad Moderniza—Distintivo M," food handling certification "Manejo Higiénico de Alimentos—Distintivo H" and quality/good practice certification "El Sello de Calidad—Punto Limpio").

- 4. Consider working with existing hotels and developers of new hotels, as well as with tour operators, to secure corporate commitments to obtain certification under a GSTC Accredited Program.
- 5. Offer incentives, including licensing preferences, tax breaks, differentiated promotion, etc., to tourism businesses that demonstrate good practices in their activities.

NOTE: While the above recommendations may require longer-term planning to implement, concrete actions that could be accomplished immediately are:

- Publish a detailed inventory of tourist attractions and assets on "Smart Destination."
- Leverage Grupo EPTE to promote cultural and responsible tourism.

7. Energy Conservation (D5)

The GSTC-D assessment rated energy conservation as "red" because the destination does not have a system to reduce reliance on fossil fuels; improve energy efficiency; invest in renewable energy technologies; and encourage tourism enterprises to measure, monitor, reduce, and publicly report energy consumption. Similarly, the 2012 Rapid Assessment rated energy usage as a high-priority issue. It recommended that energy consumption could be improved in the near-term through widespread adoption of energy-saving measures by hotels and other tourism businesses, as well as by the local government's continued pursuit of alternative energy sources.

RECOMMENDATION: Create an Energy Management and Conservation Program

- In collaboration with international and federal organizations, develop a program for the destination to reduce reliance on fossil fuels. The program should aim to improve energy efficiency, invest and convert the destination to renewable energy technologies, and incorporate measurement, monitoring, reduction, and public reporting of energy consumption by source.
- 2. This program should include incentives for businesses to engage in the above-mentioned practices and should point out the significant financial savings to businesses that conserve energy and utilize renewable energy. This energy management program would have the collateral effect of reducing greenhouse gas emissions that contribute to climate change.

8. Low-Impact Transportation (D12)

Cozumel does not have a program to increase the use of low-impact transportation, including public transport and active personal transport such as walking and cycling. There is also minimal information for tourists on the use of active and environmentally friendly transport. Further, the GSTC-D assessment did not find any program to teach transport safety. This assessment instead found information on the use of taxis, motorcycles, trucks, buses, freight vans, and passenger vehicles, all of which depend on fossil fuels and contribute to the emission of greenhouse gases, global warming, and noise and visual pollution. It is estimated that 50% of these vehicles are more than five years old and therefore are less energy efficient. Stakeholders identified the need for cheap, efficient, and sustainable public transport services, for the entire island.

RECOMMENDATION: Expand Low-Impact Transport

- I. Increase the use of and teach the safety of low-impact transportation by offering incentives such as licensing preferences and tax breaks to transport companies.
- 2. Adequate investment in infrastructure is required to make visitor sites more accessible for environmentally friendly transportation.

9. Wastewater (D9)

Cozumel lacks programs that assist enterprises in effectively treating wastewater; ensuring the proper treatment of wastes; and releasing wastes with minimal adverse impacts on the local population and environment. Stakeholders who participated in GSTC-D discussions pointed out that at least 30% of the island's wastewater is not properly treated, reused or discharged safely. Runoff and leakage of untreated wastewater is the main source of underground contamination in Cozumel's aquifer, coastal waters and reef zone. This could also be one of the main causes of the recent accelerated growth of macroalgae, or eutrophication. While Cozumel's regulations to ensure wastewater treatment are adequate, there is no reliable evidence that these regulations are enforced. One of the problems identified by stakeholders is the insufficient budgetary allocation.

RECOMMENDATION: Enhance Wastewater Management

- 1. In the short term, enforce Cozumel's current directives and laws and increase its budgetary allocation for wastewater treatment.
- 2. Seek investments in infrastructure through strategic projects to guarantee 100% efficient management of wastewater, taking into account its volume and impact.

10. Monitoring (A3)

Although the assessment found evidence of active monitoring and public reporting of environmental, economic, social, cultural, and human rights issues related to tourism, these efforts are not implemented in the systematic manner that conforms to the GSTC-D Criteria. Not all stakeholders are involved in active monitoring; the main players include the academic community from the University of Quintana Roo and other institutions in the state; civil and non-governmental organizations such as SustenTur, the National Commission for Protected Areas (CONANP); international organizations like GIZ and WWF; and the local Municipal Government through consultants contracted by the Technical Secretariat. Most of the information available does not include details on biodiversity, climate impact, habitat trends, protected areas such as Marine Protected Areas (MPAs), and key species. Because no monitoring system exists, it is not possible to claim that the periodic reviews provide a baseline of data.



RECOMMENDATION: Develop an Integrated Monitoring System

- 1. An integrated monitoring system will collect and process the information needed for decision-making in Cozumel, as well as strengthen research, planning, regulation, and enforcement of institutions to determine the environmental risks that affect tourism. An observation and oversight body should be included within the DMO structure that includes experts from academic, private and civil sectors to conduct comprehensive monitoring and public reporting of sustainability-related issues.
- 2. The system should be accessible to the public and its information should be consistently reviewed and updated.

11. Greenhouse Gas Emissions (D4)

The GSTC Criteria relating to greenhouse gas (GHG) emissions were given a "red" rating because Cozumel does not have a system to ensure that tourism enterprises and service providers measure, monitor, minimize, publicly report, and mitigate GHG emissions from all aspects of their operations. The GSTC-D assessment found no evidence that statistical information on GHG emissions in Cozumel is published regularly. Additionally, the destination does not have a system to assist enterprises to mitigate GHG emissions.

RECOMMENDATION: Establish Air Quality Monitoring System

- Research the best type of air quality measurement methods and low-cost technology in order to begin monitoring and reporting on air quality (including emission levels) regularly; develop baseline data and ensure that air quality complies with national air quality standards.
- Implement a program to manage GHG emissions. A monitoring system placed near the facility (tourism enterprises and infrastructure, including cruise lines, hotels, restaurants, industrial plants, a motorized park, and service providers) could monitor air pollutants.
- 3. Establish a system to encourage tourism enterprises to measure, monitor, minimize, publicly report, and mitigate their greenhouse gas emissions.

12. Light and Noise Pollution (D11)

The GSTC-D assessment found that, while Cozumel has guidelines and regulations to minimize light and noise pollution, their enforcement is weak. There is evidence that the local Municipal Government encourages enterprises to follow the guidelines and regulations to minimize noise and light pollution, particularly in areas where it could affect key species, such as nesting turtles. But there was no evidence of strict enforcement, and compliance is not monitored to determine how many enterprises follow the regulations. This indicator was therefore rated "red." This finding is particularly true in waterfront recreation areas where light and noise levels often exceed illumination and sound thresholds.

RECOMMENDATION

Enforce guidelines and regulations to minimize noise and light pollution.

Moderate-Priority Risk Topics, and Recommendations

The following topics were ranked as moderate priorities and were rated "pink," indicating that, while documentation of policy exists, it is not being implemented. Recommendations made here are important for Cozumel's sustainability; however, they are not as high a priority for the destination as the 12 areas listed above.

1. Climate Change Adaptation (A5)

Cozumel does not have a current system for climate change adaptation and risk assessment. While there are laws and policies to mitigate climate change, their focus is not on the use of technologies to combat climate change. This indicator was, therefore, rated "pink."

It is recommended that the local government update its climate change adaptation policies and strictly enforce design and building regulations covering building height limits, installation of alternative sources of energy for generators and other important equipment, safe storage of harmful or hazardous substances, and appropriate design and siting of waste treatment plants. The assessment determined that Cozumel also does not have a specific program to educate and raise awareness among the public, tourism enterprises, and visitors about climate change. This information is, however, partially included in the Municipal Communication Plan that seeks to engage the local community on a range of issues affecting the island.

Discussions with some stakeholders, including Cozumel residents and visitors, revealed that they are not sufficiently aware of the potential impacts that climate change could have on the island, including on its tourism sector.

RECOMMENDATION

Create a Climate Change Management Unit (CCMU) or Coastal Zone Management Unit (CZMU) within the DMO, bringing together experts, planners, and adequate budgetary allocation from the local government or outside. As a model, Cuba has succeeded in integrating coastal tourism management with climate change mitigation strategies. Cuba has teams of technicians, scientists, and environmentalists dedicated to management and monitoring of the country's 3,000 miles of coastline. It has also committed resources to create the appropriate legal, institutional, and political frameworks to forecast and mitigate impacts associated with climate change.

2. Inventory of Tourism Assets and Attractions (A6)

There are several efforts in Cozumel, mainly by local researchers, to document and classify tourism assets and attractions, including natural and cultural sites, but this does not constitute the up-to-date type of inventory envisaged in the GSTC Criteria. The existing Cozumel inventories are not up-to-date or as detailed as other municipalities in Mexico. In most cases, they lack specific and useful details, such as characteristics, accessibility, status (well established/currently in use or potential), conditions, potential impact from tourism, etc. The Directorate of Tourism in the Municipal Government has a list of attractions and tourism service providers on file, but this information is not publicly available.

RECOMMENDATION

Create a regularly updated inventory of tourism assets and attractions, including details of their locations, characteristics, etc., and make it accessible to the public as part of the tourism observatory to be housed under the "Smart Destination" platform.

3. Attraction Protection (C1)

Cozumel does not have an integrated system to evaluate, rehabilitate, and conserve natural and cultural sites, including built heritage (historical and archaeological) sites and rural and urban scenic views; however, there are well-documented partial sub-systems aimed mainly at preserving protected areas and archaeological sites. The assessment did not find any information on urban architectural heritage from the National Institute of Anthropology (INAH). Similarly, the destination does not have a management system to monitor, measure, and mitigate tourism impacts on sites and attractions; however, the National Commission for Protected Areas (CONANP) has structured sub-systems (Programas de Manejo) to guide conservation of Cozumel's protected areas. The Federal Attorney's Office for Environmental Protection (Procuraduría Federal de Protección al Medio Ambiente [PROFEPA]) is not

locally represented. Stakeholders opined that PROFEPA does not deal with environmental cases in a prompt, transparent and adequate manner; several cases related to environmental abuse have not been resolved. Local tourism operators are involved in conservation initiatives, sometimes participating with international organizations. Recent studies carried out on the island's terrestrial and marine ecosystems show damage, for example, on coral reefs.

RECOMMENDATION

Develop an integrated management system to protect natural and cultural sites, including built heritage, rural and urban scenic views, and protected areas. The destination should pay special attention to sensitive sites and fragile ecosystems.

4. Visitor Management (C2) and Visitor Behavior (C3)

The destination does not have a visitor management system for attraction sites that includes measures to preserve, protect, and enhance natural and cultural assets. However, a few initiatives are carried out by some tourism service providers and stakeholders—cruise lines, tour operators and marine/underwater service providers—in relation to visitor management. In 2009, the Intersectorial Group (GI) launched a one-minute video in three languages (English, Spanish and Maya) to create awareness among the tourists about the island's fragile ecosystem and to influence their behavior toward it. This video was widely circulated to local operators, such as hotels, restaurants, ferries and tour companies. It is also important to note that visitor management actions by service providers are not uniform; some operators allow direct interaction with wildlife in sensitive sites. The evidence found in the assessment does not constitute an effective administrative mechanism that is responsible for implementing visitor management plans and operations, including wildlife and sensitive sites.

There are isolated cases where tour operators and service providers have codes of conduct to guide visitor behavior in all sites. In particular, for wildlife observation and interaction, their aim is to minimize and mitigate negative impacts in sensitive and fragile sites. Most of these best-practices companies have sustainable-management certification and regularly monitor compliance with their codes of conduct. The two ferry companies in Cozumel play short video clips on their vessels with messages about the importance of acting in a responsible way to protect the fragile island ecosystems. On the government side, the National Commission for Protected Areas (CONANP) has a code of conduct for the island's parks; however, there is no evidence of regular monitoring and compliance.



RECOMMENDATION

Develop a visitor management system for attraction sites that includes measures to preserve, protect, and enhance natural and cultural assets. The system should include guidelines on physical carrying capacity. On a normal day, there are at least 3,000 cruise passengers walking or moving around the main town during the 5 to 8 hours they are there; another significant number of travelers, including stay-over tourists, visit various attraction sites that are mostly sensitive and fragile. Therefore, setting an ecological carrying capacity for protected areas and coral reefs is required. Enforcement is also required in cases where the carrying capacity already exists. For example, Chankanaab National Park has a carrying capacity of 3,500 visitors per day and receives between 800 and 1,000 during high season; however, these numbers increase to 3,000 when cruise tourists are included. The development of a code of conduct for tour guides and operators and cultural and environmental guidelines for visitor behavior is recommended in all sites, and should include destination endorsement for wildlife viewing and interaction standards for both marine and terrestrial species. This information should be developed with community input, be consistently updated, and made publicly available.

5. Cultural Heritage Protection (C4)

Cozumel has laws governing the proper sale, trade, display, or gifting of historical and archaeological artifacts, including those located underwater; however, there is no sufficient and publicly available evidence of enforcement. Based on individual stakeholder opinions, There are few signs of sales related to archaeological artifacts. However, the assessment found evidence of street vendors selling items from the island's marine life—skeletons, shells and snails.

RECOMMENDATION

Enforce laws governing the proper sale, trade, display, or gifting of historical and archaeological artifacts.

6. Wildlife Protection (D3)

The destination does not have a system to ensure compliance with local, national, and international laws and standards for the harvest or capture, display, and sale of wildlife (including plants and animals). There is documented evidence that Quintana Roo and the Cozumel Municipality adhere to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Additionally, Cozumel has scientifically based regulations and standards for controlling, harvesting, display, and sale of plants and animals. However, the level of compliance does not meet standards of known international best practices for reasons mentioned earlier: lack of enforcement by government institutions, limited financial capacity, and so on.

There is evidence of formal and informal business on the island involving the harvesting, capturing and sale of marine and terrestrial plants and animal species. There is no evidence (except for a few operators who are known for their best practices) that visitors are informed of regulations concerning wildlife harvesting, consumption and trade, and of the need to avoid buying illegal products and souvenirs derived from threatened species of wildlife, as listed by IUCN or CITES.

RECOMMENDATION

Establish a system to ensure compliance with local, national, and international laws and standards for the harvest or capture, display, and sale of wildlife (including plants and animals).

Action Plan for Sustainability, to Implement GSTC Recommendations

n March 26, 2018, CREST, with support from the Cozumel Municipality's Technical Secretariat, held an Action Planning Workshop in Cozumel, in which some 50 key tourism stakeholders participated. During this final workshop, CREST briefly presented the GSTC-D assessment of key findings and recommendations (see Annex 11). Then CREST facilitated a stakeholder engagement session in which participants identified the five highest-priority recommendations for Cozumel:

- 1. Build solid-waste management programs
- 2. Increase safe water management and conservation
- 3. Develop a Multi-Year Strategic Plan and Vision for destination sustainability
- 4. Create a Destination Management Organization (DMO)
- 5. Develop standards and training for tour operators and guides

Stakeholders with responsibility for each of these topics designed an action project addressing each one. These projects constitute the beginning of an Action Plan for Sustainability in Cozumel. which is presented in the tables below, with notes from each of the March 26 workshops.

These five tables provide the starting point for five action projects. Resources will need to be determined and funding sought for the destination of Cozumel to begin implementing these recommendations.



1. RECOMMENDATION

Build Solid-Waste Management and Reduction Programs (D10)

Cozumel has no program to assist enterprises to reduce, reuse, and recycle solid waste, does not safely and sustainably dispose of residual solid wastes, and does not maintain public records of the amount of waste generated and how it is treated. The destination should develop an incentive program to reduce waste generation by all sectors and encourage enterprises to reduce, reuse, and recycle solid waste. It should seek investments in infrastructure projects to guarantee 100% efficient waste management (solid waste, wastewater, and polluting gases), considering its volume and impact.

General objective

To develop a system that encourages enterprises to reduce, reuse, and recycle solid
waste and to ensure that any residual solid waste that is not reused or recycled is
disposed of safely and sustainably.

Specific objectives

- To develop a waste collection system that maintains public records on the amount of waste generated.
- To develop and implement a solid-waste management plan that has quantitative goals
 to minimize waste and ensure the safe and sustainable disposal of waste that is not
 reused or recycled.
- To develop a program that assists enterprises to reduce, reuse, and recycle waste.
- To develop a program that reduces and/or eliminates the use of plastic bottled water by enterprises and visitors.
- To invest in facilities for waste disposal and recycling.
- To ensure that guidance is given to community members and tourists on minimizing and separating waste in public locations.

Description of concrete actions

- Responsible organizations and individuals
- Participating stakeholders

Resources needed to implement the projects, including budget

ACTION 1

Create a multi-sectoral and inclusive round table for prioritization and monitoring of implementation.

Centro de Acopio de Materiales Reciclables (CAMAR) (in charge of storing recyclable materials), La Zona Federal Marítimo Terrestre (ZOFEMAT), Technical Secretariat, Secretariat of Ecology and Environment, members of the Planning Committee for Municipal Development (Comité de Planeación para el Desarrollo Municipal [COPLADEMUN]) in charge of environmental planning, and all participants in the Workshop with the GIZ Energy Recovery from Urban Waste in Mexico Program (GIZ Aprovechamiento energético de residuos urbanos [GIZ-EnRes]), TAAF Consultants (Grupo TAAF—Tierra, Aire, Agua y Fuego), and Centro Mexicano de Derecho Ambiental (CEMDA).

Space for various meetings of the multi-sectoral round table.

ACTIVITY/TASK 1

Define work priorities in the short and medium term, and initiate actions that generate low and high impact, such as environmental education and the dissemination of information in all strata (shipping companies, piers, restaurants, etc.). CAMAR, ZOFEMAT, Technical Secretariat, Secretariat of Ecology and Environment.

All members of the Planning Committee for Municipal Development (COPLADEMUN) in charge of Environmental Planning.

All participants of the Workshop with GIZ-EnRes Program, GIZ-EnRes consultants, TAAF Consultants, and CEMDA.

N/A

ACTIVITY/TASK 2

Develop an Action Plan based on the Municipal Plan for Integrated Management of Solid Waste (PMPGIRS) with specific tasks to achieve the main objectives and clearly defined steps to follow. CAMAR, Technical Secretariat, TAAF Consultants

N/A

Potential sources of finance	Clear indicators to measure progress/success during the implementation of actions	Timeframe: Start and completion dates
Resources from: Banco Nacional de Obras y Servicios Públicos (BANOBRAS), Secretaría de Medio Ambiente y Recursos Naturales (SEMARNAT), Fomento Ecológico Banamex	An established multi-sectoral round table. This should lead to the formation of a follow-up committee to look into solid-waste management in Cozumel.	End of April 2018
Resources from Municipal Government, environmental sector, tourism businesses, and others.	Have a schedule of activities defined by consensus.	May 2018
Resources from the Municipal Government	Broader and deeper collective action is critical to achieving the three primary destination stewardship goals: (1) provide sustainable livelihoods; (2) conserve the resource for future generations, and (3) create a high-quality visitor experience. It is hoped this sustainability assessment will allow Cozumel to build collaborative partnerships with national and international organizations and other destinations in the region that have gone through similar exercises. These include initiatives like Sustainable Mexico, a public-private partnership by two GSTC members: the state of Guanajuato and GSTC Destination Criteria early adopter, Sustainable Riviera Maya. Other tourism destinations, like Belize and Roatán, Honduras, may join ranks with Cozumel in defining joint actions and sharing management experiences.	May 2018

Description of concrete actions	Responsible organizations and individualsParticipating stakeholders	Resources needed to implement the projects, including budget
ACTIVITY/TASK 3 Review of all municipal legislation on solid-waste issues.	CAMAR, Technical Secretariat, and legal department of the Municipal Government	A comparative table/ mapping of the current legislation on solid-waste management
ACTIVITY/TASK 4 Explore funding opportunities and initiate the procurement of funds from BANOBRAS, with the participation of Promotora Ambiental (PASA), the Municipal Government, and CAMAR.	GIZ-EnRes offers to establish and maintain communication between the involved parties.	Funding proposal
Establish neighborhood waste management groups in the various parts of the island and a municipal waste management committee that includes all concerned stakeholders.	All members of the Planning Committee for Municipal Development (COPLADEMUN) in charge of environmental planning, and civil society organizations	Support from the Municipal Government to create the municipal waste management committee and neighborhood groups.
ACTIVITY/TASK 1 Define priorities and viability.	CAMAR, Ecology Department at Municipal Government (ECOLOGÍA), and the academic community	Classrooms or public spaces for conducting educational workshops.
ACTIVITY/TASK 2 Present a classification of waste, separation strategies, routes, and collection schedules according to the type of waste.	CAMAR, Ecology Department at ECOLOGÍA	
ACTION 3 Update the solid-waste management strategy in the Municipal Plan for Integrated Management of Solid Waste (PMPGIRS).		
ACTIVITY/TASK 1 Review, update, and make available to the round table.	CAMAR, Technical Secretariat, GIZ-EnRes consultants, TAAF Consultants	Analysis and characterization of waste.

Potential sources of finance	Clear indicators to measure progress/success during the implementation of actions	Timeframe: Start and completion dates
N/A	Submit a proposal on waste regulation in Cozumel and a list of the current legislation.	May 2018
N/A	CAMAR should be one of the beneficiaries of funds procured for waste management and reduction programs. They should purchase machinery and transport so that the collection of recyclable waste is efficient and covers all parts of Cozumel.	Start of May 2018
N/A	Schedule of waste management activities in the different neighborhoods of Cozumel.	May 2018
N/A	Schedule of waste management activities in the different neighborhoods of Cozumel.	May 2018
Resources from Municipal Government, environmental sector, tourism businesses, and others.	Record of activities carried out, people trained, and institutions visited.	
N/A	Municipal Plan for Integrated Management of Solid Waste (PMPGIRS) proposal with current data on the waste generated on the island.	May 2018

Description of
concrete actions

- Responsible organizations and individuals
- Participating stakeholders

Resources needed to implement the projects, including budget

ACTION 4

Implement a permanent waste separation campaign and ensure its continuity.

ACTIVITY/TASK 1

Define specific strategies for a permanent waste separation campaign.

CAMAR, ZOFEMAT, Technical Secretariat, Secretariat of Ecology and Environment, members of the Planning Committee for Municipal Development (COPLADEMUN) in charge of environmental planning, participants in the Workshop with the GIZ-EnRes Program, GIZ-EnRes consultants, TAAF Consultants, and CEMDA Definition of priority issues to combat.
Disposable materials,
Unicel, plastic
bags, polyethylene
terephthalate
(PET), etc.

ACTIVITY/TASK 2

Establish alternative collection points or centers.

CAMAR, Departments of Ecology, and public services

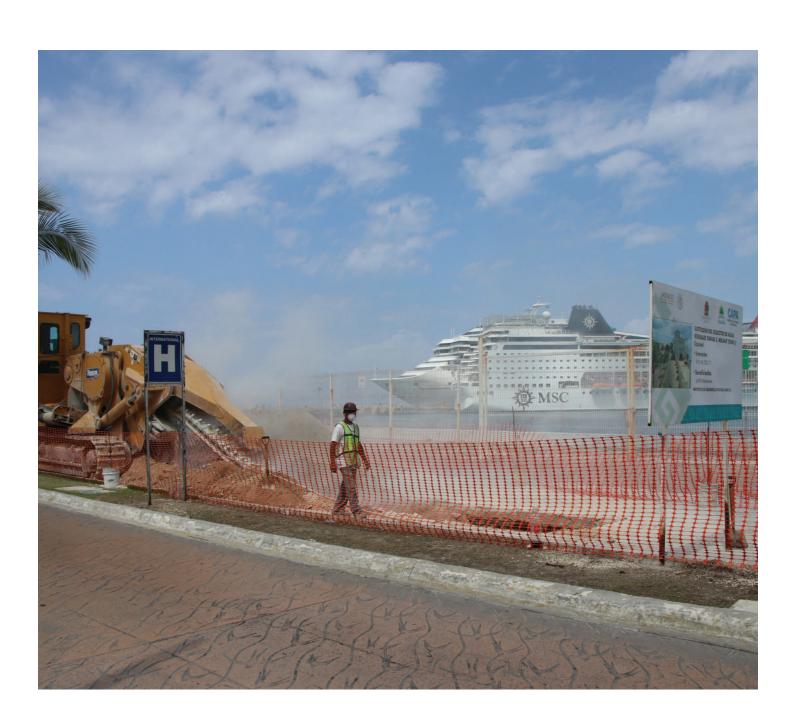
Have a vehicle park with the necessary equipment to collect recyclable waste. Have adequate containers for the collection and storage of waste.

ACTIVITY/TASK 3

Dissemination of waste collection activities.

CAMAR, Department of Ecology, ZOFEMAT, Technical Secretariat, and a small panel to come up with appropriate content for dissemination Social networks used by Municipal Council, support from the Systems and Social Communication Department at the Municipal Government, and the Smart Destination platform.

Potential sources of finance	Clear indicators to measure progress/success during the implementation of actions	Timeframe: Start and completion dates
Resources from Maharaja, Municipal Government, environmental sector, tourism businesses, and others.	Have a practical waste separation guide that is distributed to each of the waste generators. Hand out the guideline upon receipt of payment for waste collection services. The guidelines should also be distributed in various public spaces and forums.	June 2018
Resources from BANOBRAS, SEMARNAT, Fomento Ecológico Banamex	Established alternative collection points or centers with adequate containers and specific days for waste collection.	June 2018
	Information flyers in Spanish and English, video and audio spots, dissemination of materials (brochures, flyers, etc.) with a striking, clear, and concise message that meets the objectives and intended audiences.	End of April 2018



Increase Safe Water Management and Conservation (D6)

Develop a water distribution and use plan to balance the present and future water consumption needs of residents and tourism enterprises in Cozumel. There has not been an in-depth diagnosis for the last decade. This should include techniques and costs for ensuring safe drinking water for both residents and tourism enterprises. Also develop strategic projects both to improve the efficiency of water distribution lines and water treatment plants and to replace old pipes in the municipality. Develop a program for water conservation in collaboration with GSTC-recognized certifiers, as well as international and federal organizations. Point out the important financial savings to those businesses that conserve water.

General objective

• To establish a system that encourages enterprises to measure, monitor, reduce, and publicly report water usage.

- To develop a program that assists enterprises to measure, monitor, reduce and publicly report water usage.
- To ensure that impacts of tourism on local water sources are tracked, and goals and targets for reducing water consumption within the tourism industry are in place.

Description of concrete actions	 Responsible organizations and individuals Participating stakeholders 	Resources needed to implement the projects, including budget
ACTION 1 Conduct a study of water availability in the Cozumel Island aquifer and project future growth based on this study.	 Instituto Mexicano de Tecnología del Agua (IMTA) Universidad de Quintana Roo (UQROO) Centro de Investigación Científica de Yucatán, A.C. (CICY) Comisión de Agua Potable y Alcantarillado (CAPA) The Municipal Government, Department of Urban Development Comisión Nacional del Agua (CONAGUA) Amigos de Sian Ka'an Water Sentinels Secretaría de Turismo del Estado de Quintana Roo (SEDETUR) (State Ministry of Tourism) Secretaría de Ecología y Medio Ambiente (SEMA) (State Ministry of Ecology and Environment) College of Engineers and Architects 	 Estimated quality and quantity of water available Estimated ~US\$48,995 for initial study
ACTIVITY/TASK 1 Develop Terms of Reference for the study	Technical Team at the Municipal Government	

ACTION 2

Improve wastewater management practices and water conservation in the tourism sector and among the island community.

- Comisión de Agua Potable y Alcantarillado (CAPA)
- Municipal Government
- State and Federal governments

CAPA intervention plan:

- Drainage System
- Adjustments to Reservoirs
- Maintenance of the San Miguelito Plant

Budget CAPA: MX\$48 million

Potential sources of finance	Clear indicators to measure progress/success during the implementation of actions	Timeframe: Start and completion dates
 MARTI (Mesoamerican Reef Tourism Initiative) The Municipal Government, which could provide up to US\$51,000 for the initial study Consejo Nacional de Ciencia y Tecnología (CONACYT) 	 Information about water quality Water reserve locations Data on the amount of water Mapping of the absorption rate Critical details: Pilot survey: Identify available monitoring points. Define monitoring protocol/process. Prepare a diagnosis based on results. Proposal of an executive project for water inventory with an adequate budget consideration. Secure and mobilize financing. 	April to August 2018
Municipal Government	Publication of the Terms of Reference for the study and the hiring of an expert	April 2018
 State and Federal governments Rio Arronte Foundation World Bank Inter-American Development Bank (IDB/BID) 	 Meters of sanitary drainage repaired Number of rehabilitated reservoirs Efficacy of the treatment plant 	March to December 2018



Develop a Multi-Year Strategic Plan and Vision for Sustainability (A1)

This plan will include key GSTC-D recommendations and will update the 2012 destination assessment with specific areas, such as climate change, coastal zone management, visitor management, carrying capacity, visitor and community satisfaction, visitor education, and site interpretation. It should be developed through active participation of tourism stakeholders and designed to ensure continuity even if governments change.

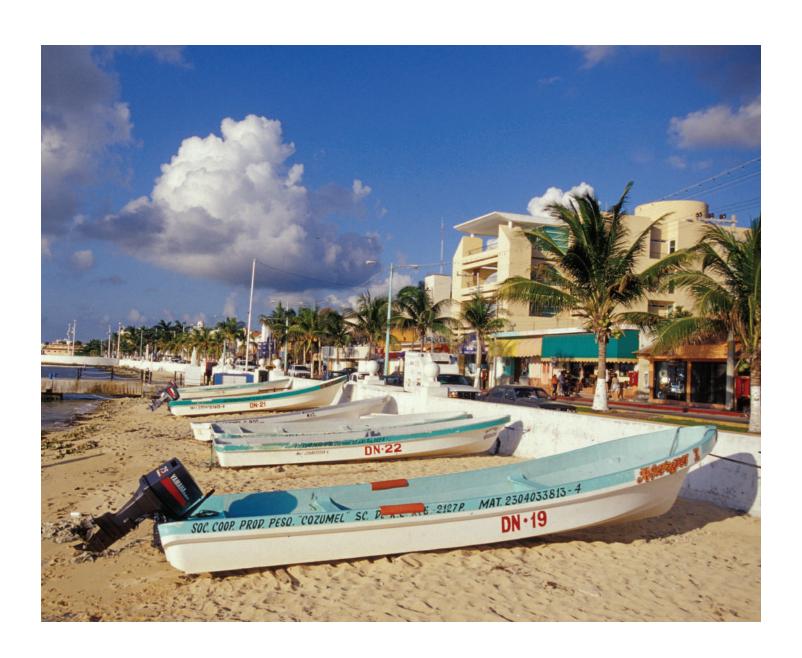
General objective

 To establish and implement a multi-year destination strategy that is publicly available; suited to scale and size of the island; considers environmental, economic, social, cultural heritage, quality, health and safety, and aesthetic issues; and developed with public participation.

- To establish a multi-year destination strategy that includes a focus on sustainability and sustainable tourism and includes environmental, economic, social, cultural heritage, quality, health and safety, and protected-area issues.
- To ensure that the multi-year destination plan or strategy is developed through public participation and is up-to-date and publicly available.
- To ensure political commitment, institutional alignment, and coordination to implement the multi-year destination plan and demonstrate evidence of implementation.
- To ensure that the strategy incorporates the principles of climate-smart coastal development and incorporates adequate measures of habitat and biodiversity protection and management.

Description of concrete actions	Responsible organizations and individualsParticipating stakeholders	Resources needed to implement the projects, including budget
ACTION 1 Update the comprehensive sustainable development plan for Cozumel Island 2014–2034 (PETSIC), taking into account environmental, economic, social, cultural and aesthetic issues.	Municipal Government/Technical Secretariat	Internal
ACTIVITY/TASK 1 Revise <i>PETSIC</i> , connect to 2018 GSTC assessment results and GSTC Criteria for Destinations, and develop an updated multi-year destination strategy.	Municipal Government/Technical Secretariat (Karola Tippman, Felipe Rubí Gonzalez, designers at the Municipal Government)	Internal
ACTION 2 Share documentation in different forums so that stakeholders can know the new plan's vision as established by the Municipal Planning Committee.	Municipal Government/Technical Secretariat	Internal
ACTIVITY/TASK 1 Based on the requirements and processes set by the Planning Committee for Municipal Development (Comité de Planeación para el Desarrollo Municipal [COPLADEMUN]): Carry out seven consultative forums with specific stakeholders, groups that are modeled around COPLADEMUN committees. This allows the exercise and the resulting plan to transcend one government or political grouping.	Identify key stakeholders for this process: • Municipal Government/Technical Secretariat • COPLADEMUN Councils • Municipal Insular Council (Consejo Insular)	Internal
ACTIVITY/TASK 2 Based on the requirements and processes set by the Planning Committee for Municipal Development (COPLADEMUN): Hold a general forum where the results of each of the seven forums are presented to be integrated into a single document.	Identify key stakeholders for this process: • Municipal Government/ Technical Secretariat • Municipal Insular Council (Consejo Insular)	Internal
ACTIVITY/TASK 3 An updated multi-year destination strategy/plan that is approved by the relevant organizations (Council of Municipal Ministers) and published in five copies. This should be widely shared through the Municipal Council website and any other means that are considered appropriate.	Municipal Government	Design and printing: US\$255

Potential sources of finance	Clear indicators to measure progress/success during the implementation of actions	Timeframe: Start and completion dates
Internal	An updated multi-year destination strategy/plan	June 2018
Internal	Work plan for the review and design of the updated multi-year destination strategy/plan	April–June 2018
Internal	Agenda/Process of presenting the updated plan to the Council Ministers for formal approval and adoption	June 2018
Internal	Requirements and processes set by COPLADEMUN: Minutes for all consultative forums.	July 2018
Internal	Requirements and processes set by COPLADEMUN: Minutes for all consultative forums.	July 2018
Municipal Government		August 2018



Create a Destination Management Organization (DMO) (A2)

The DMO must be sufficiently funded, with the responsibility to steer the destination toward sustainability consistent with the GSTC Criteria. Existing collaborative work among stakeholders (public, private, and civil) provides a strong basis, and Cozumel's Municipal Government has already taken steps toward creating the new DMO, which was recommended in the 2012 destination assessment. The DMO should follow best practices in sensitive sites, develop strategies to mitigate seasonal variability, and focus on new forms of tourism and economic activity.

General objectives

- To establish an effective organization responsible for a coordinated approach to sustainable tourism, with involvement by the private and public sectors and appropriate funding.
- To ensure that this group is suited to the size and scale of the destination and has defined responsibilities, oversight, and implementation capability for the management of environmental, economic, social, and cultural issues.

- To establish an organization that has responsibility for a coordinated approach to the management of sustainable tourism.
- To ensure that the public and private sectors are involved in the organization and coordination of tourism.
- To ensure that individuals within the tourism organization have assigned responsibilities for implementing sustainable tourism.
- To ensure that the tourism organization is appropriately funded.

Description of concrete actions	Responsible organizations and individuals Participating stakeholders	Resources needed to implement the projects, including budget
ACTION 1 Formation of a DMO initiative group		
Creation of a small group (derived from the stakeholders who worked on the DMO during the March 26 Action Planning Workshop).	Vicente Ferreyra; Melisa Mendoza Díaz; Anja María López; Isauro Cruz; Álvaro Novella Martin; Alejandra Téllez; Luisa Mariela Ramos Sosa (Explora Caribe); Academic community (to be defined).	Identify a central place for the meeting
The group will meet to agree on a proposal for the creation of a DMO. The proposal will be developed by GIZ and coordinated by Alejandra Téllez (GIZ consultant).	Vicente Ferreyra; Melisa Mendoza Díaz; Anja María López; Isauro Cruz; Álvaro Novella Martin; Alejandra Téllez	Identify a central place for the meeting. GIZ Report and a PowerPoint presentation with an Executive Summary.
Discussion about pending elements for the creation of the DMO: e.g., legal structure, business model, financing strategy, list of key stakeholders for each section, selection of a consultant to develop the DMO, etc. Experiences of other destinations that have DMOs and the initial proposal/project by GIZ will be taken into account.	Vicente Ferreyra; Melisa Mendoza Díaz; Anja María López; Isauro Cruz; Álvaro Novella Martin; Alejandra Téllez	Identify a central place for the meeting
Define Terms of Reference: "Creation of a DMO in Cozumel Island" in coordination with GIZ.	Karola Tippman and Ruth Herrera (GIZ) / Technical Secretariat, Cozumel Municipal Government	GIZ will facilitate the definition of the Terms of Reference.
Search for financing other than GIZ: Royal Caribbean, private sector, international organizations, Fundación de Parques y Museos de Cozumel (FPMC) (Parks and Museums Foundation), Administración Portuaria Integral de Quintana Roo (APIQROO), Tourism Promotion Trust, hotels, etc.	Individuals designated by the small working group, Technical Secretariat, Cozumel Municipal Government	Consultancy fees (to be determined in the Terms of Reference)

Potential sources of finance	Clear indicators to measure progress and success during the implementation of actions	Timeframe: Start and completion dates
N/A	Preliminary distribution of responsibilities and roles.	April 9, 2018
N/A	All participants have read the proposal and have given their input/comments.	April 9–16, 2018
N/A	A list of pending actions for the creation of the DMO. A manager assigned the responsibility of looking for funds/ resources that will in turn be used to hire an external consultant to guide the execution of pending actions.	April 23–31, 2018
N/A	Established Terms of Reference for the project involved in the creation of a DMO.	June 20–25, 2018
To be defined by the small working group	An established list of financing options for the creation of the DMO.	June 20–31, 2018

Description of concrete actions	Responsible organizations and individuals Participating stakeholders	Resources needed to implement the projects, including budget
Work plan developed by a consultant(s) to guide the creation of the DMO and define roles and activities of the small working group.	Consultant hired to guide the creation of the DMO; The small working group on DMO/ Technical Secretariat, Cozumel Municipal Government	Consultancy fees (to be determined in the Terms of Reference)
ACTION 2 Define the vision of the destination and in	vite key stakeholders	
Mapping and invitation of key stakeholders to incorporate their interests in the proposal for the creation of the DMO. The DMO structure defined by the small working group will be taken into account, as well as recommendations from the 2018 GSTC assessment. The final structure will be appropriate to the context of Cozumel as an island (base study by GIZ).	Consultant for the DMO project and the small working group / Technical Secretariat, Cozumel Municipal Government	 Identify a central place for the meeting Stakeholder Mapping Tool (list of key stakeholders) Send out invitations
Articulate DMO structure (vision, legal structure, operation, financial aspect) in alignment with the <i>PETSIC</i> , UNESCO Man and Biosphere Program (UNESCO MAB), Insular Council of Cozumel, and other relevant planning instruments.	Consultant for the DMO project, the small working group, and the key stakeholders	Consultancy fees (to be determined in the Terms of Reference)
ACTION 3 Creation of the DMO based on consensus		
Selection of representatives from each sector to form working groups (three levels of government, academia, business sector, civil society organizations, international and national partnerships).	Consultant for the DMO project, the small working group, and the key stakeholders: Cozumel Cruise Excursions (CCE), Cámara Nacional de la Industria de Restaurantes y Alimentos Condimentados (CANIRAC), AHC, Grupo EPTE, Federación Mexicana de Asociaciones Turísticas (FEMATUR), UQROO, Comisión Nacional de Áreas Naturales Protegidas (CONANP), etc.	Consultancy fees (to be determined in the Terms of Reference)

Potential sources of finance	Clear indicators to measure progress and success during the implementation of actions	Timeframe: Start and completion dates
To be defined by the small working group	The small working group approves the consultant's work plan. Specific roles are assigned to members of the group.	June 30–July 8, 2018
	 Attendance lists—key stakeholders Additional input to the DMO project proposal to include visions of key stakeholders 	July 18–22, 2018
To be defined by the small working group	The DMO is horizontally and vertically aligned with other key programs such as UNESCO MAB, Insular Council of Cozumel, the Planning Committee for Municipal Development (Comité de Planeación para el Desarrollo Municipal [COPLADEMUN]), and long-term planning instruments, especially the <i>PETSIC</i> .	July 1–31, 2018
	There is a clear vision shared by the stakeholders from all sectors, who are committed to collaborate in the working groups for the different sections of the DMO.	August 1–15, 2018

Description of concrete actions	Responsible organizations and individualsParticipating stakeholders	Resources needed to implement the projects, including budget
Definition of a work plan for the working groups, and a joint business/operational model for each section of the DMO.	Consultant for the DMO project, DMO working group (drawn from key stakeholders)	Consultancy fees (to be determined in the Terms of Reference)
Define final DMO organizational chart	Consultant for the DMO project, DMO working group (drawn from key stakeholders)	Consultancy fees (to be determined in the Terms of Reference)
Legal constitution of the DMO	Consultant for the DMO project, DMO working group (drawn from key stakeholders)	Consultancy fees (to be determined in the Terms of Reference)
Communication of the DMO work plan to the community in general.	Official representatives of the DMO	Organize presentation of the work plan.



Potential sources of finance	Clear indicators to measure progress and success during the implementation of actions	Timeframe: Start and completion dates
To be defined by the small working group	There is a work plan defined for five years and a business/operational model and short-term financing plan that allows the execution of the actions.	August 15– September 30, 2018
To be defined by the small working group	There is a solid DMO structure agreed on by all participants.	Date to be defined depending on progress
To be defined by the small working group	The DMO is legally constituted and firmly aligned to strategic planning instruments.	Date to be defined depending on progress
	The communities in general and particularly prospective candidates for the Municipal Presidency know the plan and the work put into its creation.	Date to be defined depending on progress





Develop Standards and Training for Tour Operators and Guides (C3) and (C5)

A program to train guides in the techniques and content of interpretation should be established. It is recommended that a team of specialists, particularly biologists and historians, be consulted to develop interpretive content and material for the destination to facilitate accurate interpretation by guides. This information should be available digitally, for both guides and visitors, and in Spanish, English, and other appropriate languages. Develop a local code of conduct for guides and tour operators, taking into account specific characteristics of Cozumel's fragile ecosystem.

General objectives

- To establish and publish guidelines for proper visitor behavior at sensitive sites. Such guidelines will be designed to minimize adverse impacts on sensitive sites and strengthen positive visitor behaviors.
- To provide accurate interpretive information at natural and cultural sites. The information will be culturally appropriate, developed with community collaboration, and communicated in languages used by visitors.

- To establish with community input and publish cultural and environmental guidelines
 for visitor behavior at all sites, including destination endorsement for wildlife viewing
 and interaction standards for both marine and terrestrial species.
- To develop and publish a code of conduct for tour guides and tour operators.
- To provide accurate interpretive information to visitors in tourist offices and at natural and cultural sites.
- To ensure that interpretive information is culturally appropriate.
- To ensure that interpretive information is developed with relevant stakeholders, including site and attraction managers, protected areas, NGOs, and communities.
- To ensure that interpretive information is available in languages used by visitors.
- To provide regular tour guide training in the use of interpretive information.

Description of concrete actions	Responsible organizations and individuals Participating stakeholders	Resources needed to implement the projects, including budget
ACTION 1 Develop regulations/ a code of Good Environmental Practices for the different ecosystems on Cozumel (reefs, hiking, bird watching, nesting of turtles, fishing, etc.) consistent with the GSTC Criteria.	 Municipal authorities (Directorates of Tourism and Ecology) with possible support from: NGOs (Mesoamerican Reef Tourism Initiative [MARTI], Coral Reef Alliance, WWF, GIZ) Fundación de Parques y Museos de Cozumel (FPMC) (Parks and Museum Foundation) Secretaría de Ecología y Medio Ambiente (SEMA) (State Ministry of Ecology and Environment) Secretaría de Turismo del Estado de Quintana Roo (SEDETUR) (State Ministry of Tourism) Comisión Nacional de Áreas Naturales Protegidas (CONANP) (National Commission for Protected Natural Areas) 	- US\$12,759 for design and printing of materials.
ACTIVITY/TASK 1 Identify local and international funding opportunities	 Municipal authorities (Directorates of Tourism and Ecology) with possible support from: NGOs (MARTI, Coral Reef Alliance, WWF, GIZ) FPMC SEMA SEDETUR CONANP 	US \$510 for professional services— proposal preparation
ACTIVITY/TASK 2 Carry out an ongoing standardized exit survey regarding the level of awareness shown by both the guides and tourists.	Associations of Tour Operators of the Island	US\$7,655 for design and printing of materials (a similar amount will be needed for future surveys).
ACTIVITY/TASK 3 Promote the Code of Good Environmental Practices at the state	Tourism Directorate at the Municipal Government	

and federal level.

F	Potential sources of finance	Clear indicators to measure progress/success	Timeframe:
		during the implementation of actions	Start and completion dates
1	To be identified in the next task— National and international funding opportunities	Established and printed regulations/ a code of Good Environmental Practices for the different ecosystems of Cozumel	June–October 2018
1	Municipal Government	A list of potential local and international funding opportunities (in order of preference)	June–July 2018
	Local and international funding opportunities	Survey results	First survey: June–July 2018 Future surveys: dates will be determined
1	Municipal Government	Publication	August 2018– August 2019

Description of concrete actions	Responsible organizations and individuals Participating stakeholders	Resources needed to implement the projects, including budget
ACTION 2 Establish a register of tour operators/operator associations (land, marine, local, state and federal) whose services use the ecosystem of Cozumel.	Tourism Directorate at the Municipal Government in collaboration with other state and federal agencies like SEDETUR and CONANP	US\$11,738
ACTIVITY/TASK 1 Collect relevant information, including the existing register of local operators, to establish a master directory of tour operators and operator associations (land, marine, local, state and federal) whose services use the ecosystem of Cozumel.	Consultant in collaboration with the Tourism Directorate at the Municipal Government and other state and federal agencies like SEDETUR and CONANP.	US\$1,531
ACTIVITY/TASK 2 Workshops aimed at raising awareness of the code of good practice among tour operators	CONANP	US \$2,551
ACTIVITY/TASK 3 Train all tour operators in cultural and environmental issues and interpretive information.	CONANP	US\$7,655

Potential sources of finance	Clear indicators to measure progress/success during the implementation of actions	Timeframe: Start and completion dates
Municipal Government and other state and federal agencies like SEDETUR and CONANP	A register of tour operators/operator associations (land, marine, local, state and federal) whose services use the ecosystem of Cozumel. Train tour operators on cultural and environmental issues and interpretive information.	June–August 2018
Municipal Government and other state and federal agencies like SEDETUR and CONANP	A register of tour operators and operator associations (land, marine, local, state and federal) whose services use the ecosystem of Cozumel.	June–July 2018
Municipal Government and other state and federal agencies like SEDETUR and CONANP	 Calendar of activities and work plan Invitation of capable trainers Lists of participants 	August 2018
Municipal Government and other state and federal agencies like SEDETUR and CONANP	 Calendar of activities and work plan Certificates of participation and successful completion of the courses 	Permanent

Conclusions

The GSTC-D assessment of Cozumel's tourism sector generated mixed results. Of the 113 GSTC-D indicators analyzed, 3 (2.66% of total) were rated green (excellent), 74 (65.48%) were rated yellow (good), 20 (17.70%) were rated pink (fair), and 16 (14.16%) were rated red (poor). Indicators marked in red (poor) or pink (fair) should be understood as representing gaps or sustainability risks. Only three indicators rated green (excellent), demonstrating best practice and improving trends: tourism seasonality management (A4), respectful promotional messages (A14) and accurate promotional messages (A14). The environmental category had the highest number (13) of indicators that scored red (poor); these 13 indicators are represented by nine GSTC criteria. They include key areas found to be at risk: wastewater management (D9), energy conservation (D5), solid-waste management (D10), low-impact transportation (D12), water quality (D8), water security (D7), water management (D6), greenhouse gas emissions (D4), and light and noise pollution (D11).

A majority of the indicators across all categories (74) were rated yellow (good). While this demonstrates positive progress on sustainability issues, it also signals that there is more work to be done to move these indicators into the green, or compliance with best practices, category. A similar result was found in the 2012 Rapid Assessment. In fact, some indicators that were favorably rated in 2012 received a lower rating in the GSTC-D assessment. This included wastewater management (D9). The variation can be explained by increasing resource pressures as Cozumel's resident population grew from 79,500 in 2010 to about 86,400 in 2015. In addition, urban sprawl in Cozumel is estimated to increase 38 hectares per year due to the migration of people attracted to Cozumel by job prospects in tourism. Also, the number of tourism enterprises and tourists has grown tremendously since the last assessment in 2012.

The Cozumel Municipality, through its Technical Secretariat and the wide range of stakeholders who participated in this assessment, demonstrated a personal and professional commitment to the GSTC process and outcomes. It is expected that the assessment results, which include partial development of an Action Plan, will assist Cozumel in addressing the identified risk areas and implementing key initiatives and projects through strategic partnerships and prioritized investments. The outcomes should be communicated widely and used to inform and shape policy and planning in other Mexican destinations as well as those throughout the Mesoamerican Barrier Reef. It is also important to note that this GSTC-D assessment report and Action Plan should not be beholden to any political party or government. The DMO and Strategic Plan, as the two key institutional foundations on which other reforms can be built, are designed to transcend political parties and to carry over from one government administration to the next in Cozumel.

Broader and deeper collective action remains critical to achieving the three primary destination stewardship goals: (1) provide sustainable livelihoods; (2) conserve the resource for future generations; and (3) create a high-quality visitor experience. It is hoped this sustainability assessment will allow Cozumel to build collaborative partnerships with national and international organizations and other destinations in the region that have gone through similar exercises. These include initiatives like Sustainable Mexico, a public-private partnership by two GSTC members: the state of Guanajuato and the GSTC Destination Criteria early adopter "Sustainable Riviera Maya." Additionally, Southern Sinaloa, whose GSTC Destination assessment was recently completed by CREST, could offer valuable insights about their experience in forming a DMO and a multi-year strategic plan. Other cruise destinations, such as Belize and Roatán, Honduras, may join ranks with Cozumel in defining joint actions and sharing management experiences.





ANNEXES Cozumel, Mexico 2018







CONTENTS

Annex 1:	Abbreviations and Acronyms 67
Annex 2:	Cozumel's Previous Tourism Strategies and Studies 68
Annex 3:	About CREST 69
Annex 4:	The Global Sustainable Tourism Council (GSTC) and The Global Sustainable Tourism Criteria for Destinations (GSTC-D) 71
Annex 5:	Stakeholder Mapping Instrument Completed for Cozumel 72
Annex 6:	Document Mapping Instrument Completed for Cozumel 78
Annex 7:	Itinerary for the On-Site Assessment in Cozumel 82
Annex 8:	Methodology and Chronology of Activities 84
Annex 9:	Findings of Good Practices 86
Annex 10:	High and Moderate Priority/Risk Topics: Additional Information 94
Annex 11:	Agenda of the Action Planning Workshop on March 26, 2018 in Cozumel 98
Annex 12:	Facilitation Materials / Handouts for the March 26 Workshop 100

ANNEX 1

ABBREVIATIONS AND ACRONYMS

AHC Cozumel Hotels Association

BMZ Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung

(Federal Ministry of Economic Cooperation and Development)

BREA Business Research & Economic Advisors
CAPA Comisión de Agua Potable y Alcantarillado

CFE Comisión Federal de Electricidad

CITES Convention on International Trade in Endangered Species of Wild Fauna and Flora

COFEPRIS Comisión Federal para la Protección contra Riesgos Sanitarios

CONANP Comisión Nacional de Áreas Naturales Protegidas

CONDUSEF La Comisión Nacional para la Protección y Defensa de los Usuarios

de Servicios Financieros

CREST Center for Responsible Travel

DMO Destination Management Organization
EPTE Empresarios Por el Turismo Europeo

GHG greenhouse gas
GI Grupo Intersectorial

GIZ Deutsche Gesellschaft für Internationale Zusammenarbeit

GSTC Global Sustainable Tourism Council

GSTC-D Global Sustainable Tourism Council Criteria for Destinations

GSTC-HTO Global Sustainable Tourism Council Criteria for Hotels and Tour Operators

INAH Instituto Nacional de Antropología e Historia
INEGI Instituto Nacional de Estadística y Geografía
IUCN International Union for Conservation of Nature

MAB Man and the Biosphere Programme

MPA Marine Protected Area

PACMUN Plan de Acción Climática del Municipio de Cozumel PETSIC Plan Estratégico de Turismo Sostenible Isla Cozumel

POEL Programa de Ordenamiento Ecológico Local del Municipio de Cozumel

PLAC Programa de Liderazgo Ambiental para la Competitividad
PMD Plan Municipal de Desarrollo (Municipal Development Plan)

PROFECO Procuraduría Federal del Consumidor

PROFEPA Procuraduría Federal de Protección al Medio Ambiente

RCL Royal Caribbean Cruises Ltd.

SECTUR Secretaría de Turismo (Mexican Federal Ministry of Tourism)

SEDETUR Secretaría de Turismo del Estado de Quintana Roo (State Ministry of Tourism)

SEMARNAT Secretaría de Medio Ambiente y Recursos Naturales

STI Sustainable Travel International

UNESCO United Nations Educational, Scientific and Cultural Organization

WWF World Wildlife Fund

ANNEX 2

COZUMEL'S PREVIOUS TOURISM STRATEGIES AND STUDIES

Over the last six years, a number of studies have been carried out to assess tourism sustainability and competitiveness on the island of Cozumel. Two in particular are most relevant for the GSTC-D assessment. The first is the 2012 Rapid Sustainable Cruise Destination Diagnostic, a comprehensive destination-level sustainable tourism diagnostic conducted by Sustainable Travel International (STI). This Rapid Assessment drew on many lessons from prior studies, and interviews were done with more than 40 leaders from local government, private sector, civil society and academia. The key findings provided a snapshot of sustainable tourism by rating four key categories using a color code (similar to the GSTC-D coding system): green (stable), yellow (needs to be addressed), red (requires urgent intervention), and blue (information gaps).

This Rapid Assessment concluded that, while some areas (crime prevention, visitor management, and policies and regulations for cultural preservation) were doing well, many other categories needed to be addressed, including sustainability management issues, water quality and quantity, waste management, air pollution, and biodiversity projection. Three areas (energy efficiency, local ownership, and culture as part of tourism products) were rated red and required intervention, and two areas (hospitality reporting on visitors and coastal management) were rated blue because information about them was lacking. Although the 2012 Rapid Assessment findings were intended to "inform priorities, policy and local action," we found that, unfortunately, this Assessment has had little impact in shaping sustainable tourism in Cozumel, mainly because no funds were allocated to implement most of the recommendations. However, the STI findings did provide a good foundation on which to build the rigorous GSTC-D assessment in 2018.

In 2012, Cozumel's Technical Secretariat

(Secretaría Técnica del Hon. Ayuntamiento de Cozumel) worked on a long-term plan for sustainable tourism, *Plan Estratégico de Turismo Sostenible Isla Cozumel 2012–2032 (PETSIC)*. However, the Plan was not formally adopted to guide tourism development on the island. The current Municipal Government is coordinating efforts to update the Plan and to have it formally approved by the Cabinet. This could be a good starting point for the long-term strategic plan that is one of the recommendations of the current GSTC-D assessment.

In 2013, the Mexican Federal Ministry of Tourism (SECTUR) financed yet another study of Cozumel. This MXN\$1 million project, carried out by researchers from the University of Quintana Roo in Chetumal, analyzed the state of tourism competitiveness and developed a master plan for Cozumel, Estudio de Competitividad Turística del Destino Cozumel, 2013–2018 (Cozumel Tourism Competitiveness Master Plan, 2013-2018). However, Cozumel's Municipal Government raised a number of concerns and concluded that this Master Plan was poorly done, failed to capture the realities of tourism sustainability and competitiveness on the island, and did not include key stakeholders as participants.

Other recent development plans include the *Agenda 21—Isla Cozumel* and the Municipal Development Plan compiled by the current administration (*Plan Municipal de Desarrollo [PMD], 2016–2018*). Finally, in 2017, prior to the GSTC-D assessment, the Municipal Government funded a small study carried out by SustenTur on behalf of CONANP (*Plan de Acción: Isla Cozumel hacia un modelo de Turismo Sustentable Insular*) to propose strategies and actions for sustainable tourism in Cozumel. All of these studies were reviewed, and, when pertinent, their findings have been incorporated into the GSTC-D assessment and recommendations.

ABOUT CREST

The Center for Responsible Travel (CREST), founded in 2003 and based in Washington, DC, is a unique nonprofit organization devoted to increasing the positive global impact of responsible tourism. CREST provides interdisciplinary analysis and innovative solutions through research, field projects, publications, video documentaries, consultancies, conferences and courses. Recognizing tourism's potential as a tool for poverty alleviation and biodiversity conservation, CREST's mission is to promote responsible tourism policies and practices so that local communities may thrive and steward their cultural resources and biodiversity.

CREST's core programs and projects have focused on sustainable destination management, analyzing ecotourism and sustainable tourism, eco-certification programs, cruise tourism, climate change and coastal tourism, tourism trends and consumer demand, tools for financing sustainable tourism projects, and cost benefit analyses of different types of tourism. CREST identifies and promotes innovative and replicable models of sustainable tourism. In addition, CREST has conducted a range of strategic tourism plans, market analysis, business plans, and sustainable tourism standards for specific destinations, as well as cost/ benefit analysis of different types of tourism, and sustainable development and design for specific tourism projects. CREST has built an international network of academic affiliates and tourism experts from a wide range of disciplines to assist with field research and project implementation in destination countries.

CREST is an authorized GSTC assessor and, in 2015–2016, collaborated with GSTC and local Mexican institutions to successfully complete a GSTC destination assessment of five municipalities in southern Sinaloa state. CREST carried out this third-party assessment for Sinaloa's business council (CODESIN) and a local environmental NGO (CONSELVA) as part of a multi-year, sustainable tourism project

in Sinaloa that CREST conducted with local institutions and stakeholders.

CREST has organized and hosted a series of international conferences for practitioners of travelers' philanthropy and innovators in coastal and marine tourism, as well as a think tank on climate change and coastal and marine tourism. CREST has also produced three educational documentaries and has published books, reports, peer-reviewed articles, studies, handbooks, fact sheets and study guides.

CREST has led or been involved in projects funded by international agencies (World Bank, USAID, Inter-American Development Bank, United Nations Environment Programme, UN Development Programme, etc.), philanthropic foundations (including Ford, Rockefeller Brothers, MacArthur, Packard, Christopher Reynolds, Christensen, Tinker, Flora Family, and Overbrook), national governments (Costa Rica, Mexico, Grenada, etc.), private businesses, and other NGOs (including WWF, Environmental Defense Fund, Rainforest Alliance, and Audubon International).

For this GSTC Destination Assessment in Cozumel, three CREST assessors were involved:

I Martha Honey, Ph.D., is co-founder (2003) and Executive Director of the Center for Responsible Travel (CREST). Over the last two decades, she has written and lectured widely on ecotourism, travelers' philanthropy, cruise and resort tourism, climate change, and certification issues. Her books include Coastal Tourism, Sustainability, and Climate Change in the Caribbean, vols. 1 & 2, and Marine Tourism, Climate Change, and Resilience in the Caribbean, vols. 1 & 2, which she co-edited and wrote a number of chapters for (Business Expert Press, 2017), Ecotourism and Sustainable Development: Who Owns Paradise? (Island Press, 1999, 2008, 2010) and Ecotourism and Certification: Setting Standards in Practice (Island Press, 2002). She is Executive

Producer of CREST's film, Caribbean 'Green' Travel: Your Choice Makes a Difference, released in May 2016. She is currently writing and editing a book on Lessons Learned for Destinations from 50 Years of Cruise Tourism, which will be published in Spanish by Temas in Cuba and in English by Island Press. Over the past two decades, she has been involved in tourism projects in 32 countries, including many in Mexico, and has managed and led projects and studies for the Inter-American Development Bank, USAID, UN Foundation, US Institute of Peace, UN Environment Programme, and UN Development Programme, as well as leading NGOs and philanthropic foundations.

2 Kennedy Obombo Magio, Ph.D., is a CONACYT Research Fellow at the Technological Institute of Cancún. He is a distinguished member of the National System of Researchers in México (SNI Level 1) and holds a Ph.D. in Tourism Management from the University of Occidente in Sinaloa. His current focus is on research on tourism sustainability in the Mexican Caribbean, including small-scale and nature-based tourism,

certification, climate change, tourism impact assessment, and destination management. He has more than 20 publications in international journals, government reports, books, book chapters, and monographs. Originally from Kenya, Magio now resides permanently in Cancún, Mexico.

3 Valerie Sera Fernández is a tourism professor at the University of Occidente and TecMilenio in Sinaloa. He has worked on a range of research and field projects with CODESIN (the Sinaloa business council), the Ministry of Tourism, NGOs, and various universities. Originally from Holguín, Cuba, Sera is now a naturalized Mexican who has lived in Mazatlán, Sinaloa since 2002. In Cuba, he completed his postgraduate studies at the Center for Tourism Studies and the School of Advanced Studies in Hospitality and Tourism and served as Director of Hotels for Horizontes Hotels, a leading government-owned hotel corporation focused on the international market. He was also a Researcher at the Academy of Sciences of Cuba.



THE GLOBAL SUSTAINABLE TOURISM COUNCIL (GSTC) AND THE GLOBAL SUSTAINABLE TOURISM CRITERIA FOR DESTINATIONS (GSTC-D)

The Global Sustainable Tourism Council (GSTC) is the global standard-setting and accreditation body for sustainability of tourism businesses and destinations. GSTC came into being through efforts by the United Nations Foundation, together with the World Tourism Organization (UNWTO), the United Nations Environment Programme (UNEP), and the private sector.

As of the date of this report, the GSTC has established three sustainability standards: the GSTC Criteria for Hotels, the GSTC Criteria for Tour Operators, and the GSTC Criteria for Destinations. All GSTC standards, and further information about the GSTC, are available at http://www.GSTCouncil.org.

The GSTC Criteria for Destinations consists of 41 minimum policies and practices for a tourism destination to minimize negative impacts and maximize positive outcomes from tourism. The GSTC Criteria for Destinations are divided into four themes:

- A. Demonstrating sustainable destination management
- B. Maximizing economic benefits to the host community and minimizing negative impacts
- Maximizing benefits to communities, visitors, and culture; minimizing negative impacts
- D. Maximizing benefits to the environment and minimizing negative impacts

The GSTC Criteria are accompanied by specific recommended indicators that measure the degree of performance or compliance. The GSTC offers training for any business or destination stakeholders interested in learning about sustainable tourism or application of the GSTC Criteria.

The GSTC also offers destination sustainability assessments to provide tourism communities with an evaluation of their current compliance with the GSTC Criteria, and recommendations for improvement to increase local community benefits from tourism while protecting natural and cultural assets and providing a top-quality visitor experience. At the time of this report, Cozumel joins more than 20 destinations worldwide that have undergone GSTC destination sustainability assessments, including Jackson Hole, Wyoming, USA; Mt. Huangshan, China; St. Kitts and Nevis, West Indies; Fjord Norway; Lanzarote, Spain; Okavango Delta, Botswana; Cuzco and Sacred Valley, Peru; Lago Llanquihue, Chile; Southern Sardinia, Italy; Mara Naboisho Conservancy, Kenya; St. Croix, US Virgin Islands; Sierra Gorda, Mexico; Samoa, South Pacific; Riviera Maya, Mexico; Lombok, Indonesia; Sieman, Indonesia; Pangandaran, Indonesia; Wakatobi, Indonesia; The Cayman Islands; Sinaloa Sur, Mexico; Sedona, Arizona, USA; Hwaseong Fortress, Suwon City, Republic of Korea; CocoCay, Bahamas; Chelenko, Chile; and Labadee, Haiti.

STAKEHOLDER MAPPING INSTRUMENT COMPLETED FOR COZUMEL

The following stakeholders were invited to attend GSTC workshops and interviews in Cozumel. Most of these people either attended themselves or sent someone else from their organizations. In total, about 60 stakeholders participated in the initial workshop and meetings, and about 50 took part in the final workshop on March 26, 2018. Many people participated in more than one meeting.

Stakeholders Invited to Participate in GSTC Assessment, Cozumel, MX

ORGANIZATION	NAME	EMAIL
Administración Portuaria Integral de Quintana Roo	Alicia Ricalde Magaña	aricalde@apiqroo.com.mx
Aeropuertos y Servicios del Sur	CP. Jorge Carlos Campos Romero	jcampos@asur.com.mx
Agencia Consignataria del Sureste	Juan Jose Cortés Tejero	Jcortes@aconsur.com
Agencia Consignataria TMM	Israel Suarez	Israel.Suarez@SSAMexico.com
Agencia de Proyectos Estratégicos de Quintana Roo	Eduardo Ortiz Jasso and Manuel Martín Mendoza	manuel.martin@qroo.gob.mx
Amigos de Sian Ka'an, A.C.	Gonzalo Merediz	gmerediz@amigosdesiankaan.org
AMMJE	Juanita González	presidencia@ammjecozumel.org
Asociación de Hoteles de Cozumel	Marcos Rojas Morales	presidencia@ahcozumel.com.mx
Asociación de Tour Operadores de Cozumel	Luis Mendez	Lmendez@atlantissubmarines.com
Asociación Mexicana de Agencias de Viajes	Ivonne Opalin	iopalin@prodigy.net.mx
Asociación Mexicana de Profesionales Inmobiliarios (AMPI)	Rita Sheese	rita@cozumelcapital.com
Aviomar S.A. de C.V.	Jose Sempere	pepesempere@hotmail.com

Cámara Nacional de la Industria de Restaurantes y Alimentos Condimentados	Lic. Josefa López Castillo	gerenciacozumel@canirac.org.mx
CANACO	Lic. Eduardo Morales Rivas	info@canacocozumel.com.mx
Carnival Cruises Corp.	Fernando Pérez	
Centro de Acopio Materiales Reciclables (CAMAR)	Biól. Lemuel Mena Vega	camar@islacozumel.gob.mx
Centro de Salud, Secretaría de Salud, Quintana Roo	Alejandra Aguirre Crespo	sesa.chetumal.qroo@gmail.com
Cielo Mar y Tierra A.C.	Guadalupe Alvarez	citymarcozumel@hotmail.com
CIMAC	Noemì Guadalupe Martìn Cab	cimac_cozumel@hotmail.com
Club Rotario	Lic. Alioth Álvarez Estrada	chocoamargo@yahoo.com.mx
CMC TURISMO MEDICO	Dr. Ricardo Segovia	ricardo.segovia@costamed.com.mx
Colegio de Biólogos A.C.	Sergio Suárez de los Cobos	ssdlc1959@hotmail.com
Colegio de Ingenieros y Arquitectos	Sergio Soria Ximello	Arqssoriax@gmail.com
Comisión de Agua Potable y Alcantarillado (CAPA)	Gerardo Mora	gmora@capa.gob.mx
Comité Pro Defensa de La Isla de Cozumel, A.C.	Enrique Zetina Garcia	enzega@hotmail.com
CONANP, Parque Nacional Arrecifes de Cozumel, APFF	Cristopher González	cristopher.gonzalezb@conanp.gob .mx
Consejo Coordinador Empresarial de Cozumel	Lic. Jose Becerra Ruiz	joseebecerra@hotmail.com
Cooperativa de Transportes del Aeropuerto Andres Quintana Roo	Manuel Vidal Alcocer Angulo	socoope@hotmail.com

Cooperativa Pesquera Isla de la Pasión	Enrique Nemias Tec	
COPARMEX	Arq. Eduardo Gonzalez	direccion@coparmexcozumel .org.mx / egonzalezcid@ coparmexcozumel.org
Cozumel Amazing Race	Scott Helikson	cozumelrace@gmail.com
Cruceros Marítimos del Caribe	Trino Molina, Jr.	tmolina@aviomar.com.mx
Dirección de Turismo Municipal, Hon. Ayuntamiento de Cozumel	Lic. Anja Maria López	turismo@islacozumel.gob.mx
Dirección de Zona Federal Marítimo Terrestre (ZOFEMAT)	Luz Polanco	
Dirección Municipal de Desarrollo Económico	Arely Gómez	desarrolloeconomico@islacozumel .gob.mx
Dirección Municipal de Desarrollo Urbano	Arq. David Paredes	desarrollourbano@islacozumel .gob.mx
Director de Salud Municipal	Carlos Ake	
Discover Mexico	Jose Villalvazo	joev@discovermexico.org
Dolphin Discovery	Didier Canto	dcanto@dolphindiscovery.com
Dolphinaris	Franco Martinez	fmartinez@dolphinaris.com
Explora Caribe	Sergio Briseño	sergiobv@explora-tours.com
Federación de Asociaciones Turísticas de Quintana Roo	Margarita Carbajal	cozumelbarhop@hotmail.com
Fideicomiso de Promoción Turística de Cozumel	Lic. Pablo Aguilar Torres	paguilar@cozumel.travel
Fundación Comunitaria Cozumel, IAP	Octavio Rivero Gual	ctavioriverog@gmail.com
Fundación Orbe	Lic Martha Lugo	fundorbe@hotmail.com
Fundación Parques y Museos de Cozumel	Lic. Pedro Joaquín Delbois	beatriz.estrella@cozumelparks.org

Fundación Plan Estratégico de Cozumel	Rita Sheese	rita@cozumelcapital.com
Fury Catamarans Cozumel	Gerardo Portocarrero	info@fury-catamarans.com
GIZ/RIO PLUS	Karola Tippman and Ruth Herrera	karola.tippmann@gmail.com
Grupo Intersectorial Isla Cozumel	Isauro Cruz	cliczm@gmail.com
Healthy Reefs Initiative (HRI)	Melina Soto	soto@healthyreefs.org
ISLA MED	Dra. Wilma Padilla Barbosa	wilmapb@prodigy.net.mx
Isla Pasión	Andreiv Pérez	andreivperez@gmail.com
Medica San Miguel	Dr. Fernando Negron	frontdesk@medicasanmiguel.com .mx
Meso American Tourism Initiative (MARTI)	Sarah Connor	sarahc@mesoamericanreef.org
Mexico Adventures Guides	Valeria Puente	cozumel@mexicoadventureguides .com
Organización Becerra	Noemi Ruiz	noemiruiz56@hotmail.com
PASA	Alfonso Gomez Teniente	aegomez@pasa.mx
Playa Mia	Jose Luis Cervantes	Jlcervantes@playamia.com
Presidente Municipal, Hon. Ayuntamiento de Cozumel	Perla Cecilia Tun Pech	presidencia@islacozumel.gob.mx
Rancho Buenavista	Ramon Villanueva	ramon@buenavistaranch.com
Red de Organizaciones de la Sociedad Civil	Lic. Octavio Rivero Gual	octavioriverog@gmail.com
Royal Caribbean Cruises Ltd.	Rob Zeiger	
Sand Dollar Sports	John Flynn / Danirel Álvarez	Jflynn@sanddollar.com
Secretaría de Ecologia y Medio Ambiente del Estado	Alfredo Arellano Guillermo	alfredo.arellano@qroo.gob.mx

Secretaría de Infraestructura y Transporte (SINTRA)	Ing. Jorge Portilla	jorge.portilla@qroo.gob.mx
Secretaría de Marina, Capitanías de Puerto	Cap. José Angel Suárez Vallejo	cp.cozumel@semar.gob.mx
Secretaría de Marina, Sector Naval Cozumel	Cmdte. Carlos Manuel Bandala González	navcoz@semar.gob.mx
Secretaría de Turismo del Estado de Quintana Roo	Mtra. Marisol Vanegas	marisolvanegas.sedetur@gmail .com
Secretaría General	Lic. Dora Uribe Jimenez	secretariageneral@islacozumel.gob .mx
Secretaría Técnica Ayuntamiento de Cozumel	Francisco Javier Pizaña Alonso	secretariatecnica@islacozumel.gob .mx
Secretario General Sindicato de Taxistas	Miguel Alonso Marrufo	taxicozumel@hotmail.com
Sociedad Cooperativa de Producción Pesquera Cozumel, S.C. de R.L.	José Ángel Canto	pezczm@prodigy.net.mx
Sub Dirección Municipal de Ecología	L.M.N.R. Elsa Arcila	ecologia@islacozumel.gob.mx
Sub Dirección Municipal de Desarrollo Económico	Arely Gomez	desarrolloeconomico@islacozumel .gob.mx
Sub Directora Ecología	Elsa Arcila	ecologia@islacozumel.gob.mx
Sub Secretaria Técnica de Sustentabilidad	Melisa Mendoza Díaz	sustentabilidad@islacozumel.gob .mx
Sub Secretario Técnico de Desarrollo Institucional	Felipe Rubí	subsecretariatecnica@islacozumel .gob.mx
Sub Secretario Técnico de Planeación	Arq. Sergio Castillo	planeacion@islacozumel.gob.mx
Subsecretaría de Protección Ambiental y Planeación técnica; Director de Residuos Sólidos SEMA Quintana Roo	Yafith Abdiel Montalvo Pérez	yafith.montalvo@semaqroo.gob.mx

Terminal de Cruceros Punta Langosta	Francisco Saenz Carrillo	fsaenz@puntalangosta.com.mx
Terminal Marítima del Sureste	Rodolfo Barrón	Rodolfo.barron@ssamexico.com
Terminal Marítima Puerta Maya	José Ramirez Nueto	Jramirez5@carnival.com
TMM	Bernardo Varela	bernardo.varela@tmm.com.mx
Tropical Tours	Isauro Cruz	cliczm@gmail.com
Ultramar	Germán Enrique Orozco Sarro	
Universidad de Quintana Roo, Unidad Cozumel	Ing. Genny Vanessa Gracia Aguilar	vanessa.gracia@uqroo.edu.mx
Universidad Nacional Autónoma de México ICMYL Puerto Morelos	Dr. Lorenzo Alvarez Filip	lorenzo@cmarl.unam.mx / lorenzoaf@gmail.com
WWF-México (Strategic Projects Coordinator, Mesoamerican Reef)	Judith Adriana Morales Lopez	jamorales@wwfmex.org
Xtrem Adventure Park SA de CV	Daniel Cortes	danielcortesgr@hotmail.com

DOCUMENT MAPPING INSTRUMENT COMPLETED FOR COZUMEL

- Alfonso, A. R. G. D., and Macías Ramírez (2017). 'Modelo Conceptual de los Marcos Primarios de la Experiencia Turística Mediada por Tecnología', *Rosa dos Ventos—Turismo e Hospitalidade*, 9(II), pp. 159–178. doi: http://dx.doi.org/10.18226/21789061.v9i2p159.
- Anaya-Ortiz, J. S.. and Palafox-Muñoz, A. (2010). 'El perfil del turista internacional de Cozumel a partir de la construcción de su capital simbólico', *Teoría y Praxis*, (8), pp. 171–185.
- Anaya-Ortiz, J. S., and Palafox-Muñoz, A. (2015). 'Perfil del excursionista de cruceros que visita la isla de Cozumel', El Periplo Sustentable, (28), pp. 166–185. doi: 10.21854/eps.voi28.818.
- Ayuntamiento de Cozumel; Plan de Acción Climática Municipal (2011). 'Características: Municipio de Cozumel', p. 18.
- Ayuntamiento de Cozumel (2011). 'Plan Municipal de Desarrollo Rural', (2008), pp. 1–63.
- Business Research & Economic Advisors (2012a). 'Economic Contribution of Cruise Tourism to the Destination Economies', Florida-Caribbean Cruise Association and Participating Destinations, I (September), p. 194. Available at: http://www.f-cca.com/downloads/2012-Cruise-Analysis-vol-2.pdf.
- Business Research & Economic Advisors (2012b). 'Economic Contribution of Cruise Tourism to the Destination Economies', Florida-Caribbean Cruise Association and Participating Destinations, II (September), p. 194. Available at: http://www.f-cca.com/downloads/2012-Cruise-Analysis-vol-2.pdf.
- Business Research & Economic Advisors (2015a). 'Economic Contribution of Cruise Tourism to the Destination Economies', Florida-Caribbean Cruise Association and

- Participating Destinations, I, p. 194. Available at: http://www.f-cca.com/downloads/2012-Cruise-Analysis-vol-2.pdf.
- Business Research & Economic Advisors (2015b). 'Economic Contribution of Cruise Tourism to the Destination Economies', Florida-Caribbean Cruise Association and Participating Destinations, II, p. 293. Available at: http://www.f-cca.com/downloads/2012-Cruise-Analysis-vol-2.pdf.
- Canbal Ruiz, C. (2015). 'Resumen Ejecutivo. Proyecto: Instalación y Funcionamiento del proceso de Osmosis Inversa'.
- Canul, M. M., et al. (2016). 'Estimación de la Propensión Marginal al Consumo del Visitante de Cruceros en Cozumel', *El Periplo Sustentable*, 0(30), pp. 106–126. doi: 10.21854 /eps.voi30.1686.
- Centro de Estudios Superiores en Turismo; Secretaria de Turismo Federal (2010). 'Perfil y Grado de Satisfacción del Turista Objetivos'.
- Comisión Nacional del Agua (2009). 'Actualización de la disponibilidad media anual de aguas subterránea: Acuífero (3105) Península de Yucatán', p. 23.
- Consejo Coordinador Empresarial; Ayuntamiento de Cozumel; Red de Organizaciones Social Civil (2016). 'Ratificación Pública del Acuerdo San Gervasio e Instalación del Comité Mixto', p. 13.
- Coronado, Lourdes; Gutiérrez, Martha; Cervantes, A. (2011). 'Water Quality in Wells from Cozumel Island, Mexico', 13(2), pp. 233– 241. doi: 10.4090/juee.2008.v2n2.033040.
- Cozumel, A. de (2016). 'Plan Municipal de Desarrollo', pp. 1–57.
- Crye, M., Plott, A., and Rossman, L. (2006). 'From Ship to Shore: Sustainable Stewardship in Cruise Destinations', *Conservation International*, p. 56.

- Diario Oficial de la Federación (2012). 'Acuerdo por el que se dan a conocer los estudios técnicos de aguas nacionales subterráneas del acuífero isla de Cozumel, clave 2305, Estado de Quintana Roo.'
- Estado de Quintana Roo (2017). 'Plan Estatal de Desarrollo', p. 494.
- Ettenger, K., Honey, M., and Hogenson, S. (2017). *Marine Tourism, Climate Change, and Resilience in the Caribbean, Volume II: Recreation, Yachts, and Cruise Ships.* Available at: https://books.google.com/books?id=GMV ADwAAQBAJ.
- Nicolás Carrillo Fajardo, N.C. (2011). Risk Atlas for Cozumel (Atlas de Riesgos del Municipio de Cozumel). Licitación No. LO-823001999-N3-2011. Numero de obra 123001PP03811. Número de expediente P11/23001/AE/1/031. Municipio de Cozumel, Estado de Quintana Roo & Secretaría de Desarrollo Social, Gobierno Federal.
- Fundación Plan Estratégico Isla Cozumel, Universidad para la Cooperación Internacional, A. de C. (2011). 'Agenda 21 Local para la Participación Integral Participativa: La Sustentabilidad y el Desarrollo Municipal—Cozumel', p. 234.
- García González, E. D. (2017). 'Influencia del Comportamiento de los Tripulantes de Cruceros en la Gestión Sustentable de Cozumel, México', Universidad de Quintana Roo, p. 148.
- Gobierno del estado de Quintana Roo (2011). 'Programa Institucional de Infraestructura Hidráulica y Sanitaria, 2011–2016', p. 74.
- Grupo EPTE (2016a). 'Organización, funcionamiento y Logros'.
- Grupo EPTE (2016b). 'Organización y el Funcionamiento'.
- Haro-Zea, K. L., Alcázar-Zamacona, J. P., and González Damián, A. (2017). 'Análisis de las Estrategias Actuales de Turismo Sustentable en Cozumel, Quintana Roo', *Investigaciones que contribuyen al desarrollo de las empresas*, (October), pp. 832–847.

- Martínez, O. F., Ihl, T., and Rojas López, J. (2016). 'Risk Atlas for Cozumel Island (Atlas de Riesgos de la Isla de Cozumel, México)'. *Teoría y Praxis*. Núm. Especial, pp. 74–93.
- Martínez, O. F., Ihl, T., and Rojas López, J. (2016). Programa de Ordenamiento Ecológico Local del Municipio de Cozumel, Gobierno del Estado e Estado de Quintana Roo 2005–2011. A program on Local Ecological Regulation, Cozumel.
- Moo Canul, M. de J., et al. (2015). 'Estudio de un destino de cruceros a partir de la estimación del efecto multiplicador: Caso Cozumel (México)', Études caribéennes. Université des Antilles, (31–32). doi: 10.4000/etudescaribeennes.7522.
- Municipio de Cozumel (2013a). 'Reglamento de Protección Civil del Municipio de Cozumel', p. 31.
- Municipio de Cozumel (2013b). 'Reglamento del Servicio Profesional de Carrera Policial del Municipio de Cozumel, Quintana Roo', p. 57.
- Municipio de Cozumel (2013c). 'Reglamento para el Ejercicio del Comercio en la Vía Pública en el Municipio de Cozumel', p. 13.
- Official Federal Bulletin—DOF (2013). Special Program on Climate Change 2014–2018 (Programa Especial de Cambio Climático—PECC, 2014–2018). http://www.semarnat.gob.mx/sites/default/files/documentos/transparencia/programa_especial_de_cambio_climatico_2014-2018.pdf.
- Palafox, Alejandro; Aguilar, Arturo; Escalera, A. (2014). 'Turismo de cruceros en el caribe', Revista Iberoamericana de Turismo— RITUR, 2(2), pp. 40–53.
- Palafox, Alejandro; Aguilar Arturo; Anaya, J. (2015). 'Cozumel y la transformación de su paisaje por el turismo de cruceros', *Revista de Ciencias Sociales*, 0(149), p. 103. doi: 10.15517 /rcs.voi149.22684.
- Palafox Muñoz, A. G. T. A. (2013). 'Cambio climatico y desarrollo turístico. Efectos de los huracanes en Cozumel, Quintana Roo y

- San Blas, Nayarit'. Universidad Autónoma de Aguascalientes, p. 11.
- Plan de Acción Climática Municipal; Turismo Sustentable; Ayuntamiento de Cozumel (2017). 'Diagnóstico de Sustentabilidad del Destino y Plan de Acción Contenido'.
- Rodríguez, L. C. (2015). 'Expropiación de tierras ejidales como estrategia gubernamental para el desarrollo del turismo de masas en la isla de Cozumel, México', PASOS Revista de Turismo y Patrimonio Cultural, p. 27.
- Santander, L. C., et al. (2012). 'Evaluación del impacto ambiental de arrecifes artificiales para uso turístico en Cozumel, México', Investigación y Ciencia de la Universidad Autónoma de Aguascalientes, 20(56), pp. 18–26.
- Secretaría de turismo (2017). 'Perfil y Comportamiento del Turista Chetumal Julio—Septiembre de 2017', p. 25. Available at: http://caribemexicano.travel/ARCHIVOS/TURISTA CHETUMAL JUL-SEP 2017-.pdf.
- Secretaría de Turismo (2017). Indicadores Turísticos. Available at: http://qroo.gob.mx /sedetur/indicadores-turisticos (Accessed: 7 May 2018).
- Secretaría de Turismo del Estado de Quintana Roo (2016). Padrón de Prestadores de Servicios Turísticos de Quintana Roo Inscritos en el Registro Nacional de Turismo.
- SECTUR; Gobierno del Estado de Quintana Roo; Ayuntamiento de Cozumel; UNESCO México (2012). Plan Estratégico de Turismo Sustentable Isla Cozumel (PETSIC), 2012– 2032, p. 7.
- Segrado Pavón, Romano Gino; González Baca, Cristopher Arturo; Arroyo Arcos, L.; and

- García Quiroga, B. A. (2017). 'Capacidad de carga turística y aprovechamiento sustentable de Áreas', 24(2), pp. 164–172.
- Sistema Nacional de la Información Estadística del Sector Turismo de México—DATATUR (2015). Actividades en Crucero. Available at: http://www.datatur.sectur.gob.mx/SitePages/ Actividades en Crucero.aspx (Accessed: 7 May 2018).
- State Government of Quintana Roo (2011).
 State Development Plan (Plan Quintana Roo, 2011–2016). Available at: http://www.sefiplan.qroo.gob.mx/coplade/subidos/1450281127
 _Revitalizacion_Plan_QRoo_20112016_final
 _logo_institucional.pdf.
- Sustainable Travel International; Ayuntamiento del Municipio de Cozumel (2012). 'Diagnóstico rápido de sustentabilidad para un destino de cruceros: Cozumel Mexico'.
- Susten Tur; Kybernus; The Aspen Institute México (2016). 'Agenda de Turismo Sustentable en Quintana Roo, 2016–2030', p. 20.
- Tippmann, K. (2015). 'Informe Preliminar. Fomento al Desarrollo Sustentable mediante Turismo—Isla Cozumel', pp. 1–15.
- Universidad de Quintana Roo; SECTUR (2013). 'Agendas de Competitividad de los Destinos Turísticos de México', p. 467.
- Visit México (2018). 'Guía Turística Destinos México de Cozumel'.
- Weber, F., et al. (2017). 'Tourism Destinations under Pressure', p. 214.
- Zizumbo Villarreal, L. (2016). Configuración Capitalista de Paisajes Turísticos. 01 edn. Ediciones EON.

Additional Documents Consulted

- I. Three documents related to the creation/ declaration of "Selvas y Humedales de Cozumel" as a Protected Area (State Reserve). Tres documentos relacionados con la creación/establecimiento de la Reserva Estatal/Programa de Manejo "Selvas y Humedales de Cozumel" Quintana Roo, México (2011–2015).
- 2. Three documents related to the creation/ declaration of "Área de Protección de Flora y Fauna—Norte de la Isla de Cozumel" as a Protected Area. Tres documentos relacionados con la creación/establecimiento del Programa de Manejo/Área de Protección de Flora y Fauna la porción norte y la franja costera oriental, terrestres y marinas de la Isla de Cozumel.
- 3. One document related to the creation/ declaration of "La Laguna de Chankanaab" as a Natural Park. Un documento relacionado con la creación/establecimiento y declaración de la Laguna de Chankanaab, Cozumel, como Parque Natural.
- 4. Two documents related to the creation/ declaration of "Arrecifes de Cozumel" as a Protected Area (Marine Park). Dos documentos relacionados con la creación/ establecimiento y declaración de la zona Arrecifes de Cozumel como Área Natural Protegida/Programa de Manejo, con el carácter de Parque Marino Nacional.
- 5. Two documents related to the creation/declaration of "Laguna Colombia" as a Protected Area. Dos documentos relacionados con la creación/establecimiento y declaración de la región "Laguna Colombia" como Área Natural Protegida, con la categoría de Zona Sujeta a Conservación Ecológica, Refugio Estatal



- de Flora y Fauna con una superficie total de 734.59 hectáreas, ubicadas en su totalidad en la isla de Cozumel del municipio de Cozumel.
- 6. CONAGUA (2012). Presentación de los resultados de los estudios técnicos del acuífero Isla de Cozumel, Estado de Quintana Roo. Subdirección General Técnica.
- Cozumel Venderá Sus Atractivos en Europa: CONCANACO SERVYTUR MÉXICO. Boletín Turismo, VII(92), (2016). Cozumel Will Sell Its Attractions in Europe. Tourism Bulletin, 2016. Available at: http://www.concanaco.com.mx/wp -content/uploads/2016/boletines/Turismo -Febrero-2016.pdf.
- 8. CONANP (2017). Plan de Acción: Isla Cozumel hacia un modelo de Turismo Sustentable Insular: Diagnóstico de Sustentabilidad del Destino y Plan de Acción 2017–2022. A study financed through Programa de Conservación para el Desarrollo Sustentable (PROCODES), and carried out by SustenTur—Turismo Responsable.

ITINERARY FOR THE ON-SITE ASSESSMENT IN COZUMEL

Itinerary for On-Site Assessment in Cozumel: January 22-26, 2018

DAY	ACTIVITIES/DETAILS	TIME
Day 1 22 Jan Monday	Arrival of GSTC assessor	8:00-10:00
22 Jan Monday	Meeting and Document Review with Destination Liaison	10:00–15:00 (with meal breaks)
	Meeting between the assessor (CREST), GSTC and WWF to review the state/progress made in preparations	15:00–17:00
Day 2	Initial meeting with host agencies	8:00–9:00
23 Jan Tuesday	Introductory workshop with stakeholder consultation group (presentation of GSTC, assessment process, objectives, expectations, etc.)	9:00–12:00 (Lunch break and possible site visits)
	Stakeholder focus group meetings (meetings on TOURISM, CULTURE criteria)	15:00–18:00
Day 3 24 Jan Wednesday	Stakeholder focus group meetings (meetings on ECONOMIC DEVELOPMENT, PRIVATE SECTOR criteria)	9:00–12:00 (Lunch break and possible site visits)
	Stakeholder focus group meetings (meetings on ENVIRONMENT criteria)	14:00–17:00
	Stakeholder focus group meetings (additional as needed) SUSTAINABLE DESTINATION MANAGEMENT/ACADEMIA	17:00–19:00
	Site visit (time permitting)	19:00

Day 4 25 Jan Thursday	Stakeholder focus group meetings (additional as needed) SUSTAINABLE DESTINATION MANAGEMENT/ACADEMIA	9:00–12:00
	Site visit (time permitting)	12:00–14:00 (Lunch break)
	Time for assessor to tabulate preliminary findings and final presentation	14:00–19:00
Day 5 26 Jan Friday	Brief meeting with host agencies reviewing preliminary findings—call in WWF	8:00–10:00 (1 hour set aside for any possible changes)
	Final workshop with stakeholder consultation group (presentation and validation of preliminary findings with same stakeholder group that participated in introductory workshop)	12:00–15:00
	Departure of GSTC assessor/Additional site visits on 27 Jan Saturday as needed	



METHODOLOGY AND CHRONOLOGY OF ACTIVITIES

A methodology devised by WWF and GSTC was used to implement the abridged assessment of tourism sustainability in Cozumel using the GSTC Destination Criteria. The criteria and methodology of the assessment took into account WWF Marine and Coastal Tourism priorities. As shown in the results, each one of the 41 GSTC Criteria covering the four main GSTC themes of sustainable destination management, economic benefits to the host community, cultural benefits, and environmental benefits, was evaluated, scored and coded using a points and color method—the traffic light system—in which I and red indicate no documentation related to policies and no implementation; 2 and pink indicate documentation related to policies, but no implementation—or vice versa; 3 and yellow indicate documentation related to policies, and implementation; 4 and green indicate documentation on policies, implementation, and improving trends to the extent of best practice; and N/A is assigned when the indicator is not applicable in the destination. The methodology entails four main steps: 1. Desk-based assessment; 2. On-site assessment; 3. Reporting; and 4. Post-assessment implementation workshop. Throughout the entire process, the CREST assessors provided ongoing updates to WWF and GSTC. Any adjustments to the original scope of work were collectively agreed upon by the main partner institutions in order to produce an assessment that would be of most value to all the stakeholders.

The desk-based assessment was conducted before the on-site evaluation and stakeholder meetings. During the first month (December 2017), CREST's assessor team (Kennedy Obombo Magio and Valerie Sera, guided by Martha Honey) worked with the destination

liaison (Javier Pizaña with his Technical Secretariat team) to provide guidance in completing the preparation work. During this period, they collected relevant literature for the assessment, building on the documents used in the 2012 Rapid Assessment. They also completed the GSTC mapping tool that identifies key stakeholders and documents.

Magio and Sera then undertook a desk-based review of the documents and key stakeholders, as well as of the destination liaison's short desktop survey of progress made in addressing gaps since the 2012 Rapid Assessment. The two CREST assessors worked with Pizaña's team to review the collected materials and determine the itinerary and meetings that would be needed during the on-site assessment. The assessors and the team at the Technical Secretariat jointly invited participants to the GSTC-D meetings and focus groups in Cozumel. Magio and Sera, together with Martha Honey, prepared for the on-site assessment, including outlining the objectives, identifying gaps and other components that needed to be ground tested, and preparing PowerPoint presentations for the introductory workshop.

The on-site assessment took five to six field days between January 22 and 27, 2018. It was conducted by the CREST assessors, together with the team from the Technical Secretariat. The main objectives were to conduct site visits of key infrastructure and assets and to hold group and individual meetings with key stakeholders in order to ground-test the information, documentation, and preliminary conclusions and identify gaps in the desk-based research, including in the 2012 Rapid Assessment. This process began with a one-day workshop in Cozumel on January 23, 2018, where 60 stakeholders participated in thoroughly reviewing the purpose of the GSTC assessment

and the preliminary desk-based conclusions. They then laid the ground for the assessment activities during the week.

This workshop was vital to ensure that there is local understanding and support for the GSTC assessment and the Action Plan that is currently being developed. Both during the opening workshop and in subsequent interviews, focus groups, and site visits, CREST assessors ground-tested and validated the desk-based information. On the final day (January 26, 2018), the assessors worked in the morning to review and tabulate all the preliminary findings and conclusions and to prepare a preliminary presentation. Participants included those who had participated in the opening workshop and in the meetings throughout the week.

After the on-site assessment, CREST assessors started writing the report that includes their

informed assessment based on the GSTC criteria and WWF edits. This report outlines the critical actions that need to be taken to ensure that Cozumel meets international standards as a sustainable destination. This draft assessment report, prepared in Spanish and English, was reviewed and edited by Martha Honey. Since then, the preliminary report has been reviewed by the destinations liaison and the host team in Cozumel's Municipal Government to correct factual inaccuracies, but not to change any of the assessors' findings and conclusions. On March 9, 2018, a draft was presented to WWF-US, GSTC, and the local WWF representative for feedback. The assessors reviewed the feedback and presented their final findings and recommendations at the Action Planning Workshop on March 26, 2018.



FINDINGS OF GOOD PRACTICES

This section includes two indicators rated "green" that are included within the following two criteria—A4: Tourism Seasonality
Management and A14: Tourism Promotion—
indicating that documentation of policy
exists and implementation is exemplary, on a
level with international best practices. It also
includes 19 indicators rated "yellow," indicating
that documentation of policy exists, and
implementation is acceptable. The observations
below are based on information collected during
the assessment (both desk-based and on-site,
including stakeholder meetings and site visits)
and are categorized by criteria that can contain
multiple indicators.

A4 Tourism Seasonality Management (green)

Cozumel has exemplary measures for mitigating the seasonal variability of tourism. These include efforts to balance the needs of the local economy, community, cultures, and environment and to identify year-round tourism opportunities. The results of the Rapid Assessment in 2012 brought to the fore many opportunities for tour operators and investors. Tapping into that, the Riviera Maya Promotion Trust (Fideicomiso de Promoción Turística de la Riviera Maya) works on diversifying tourism offerings and marketing off-season events year-round. For instance, Cozumel has experienced growth in the number of cultural tourists and bird watchers. GIZ is also supporting an initiative called Businesses for European Tourism (Empresarios Por el Turismo Europeo, or EPTE), which seeks to increase the number of European tourists visiting Cozumel. It does so by working on specific components of the tourism offer that attract, for example, cultural tourism. In the 2012 Rapid Assessment, cultural tourism as part of the product was rated red. Although these efforts do not form part of a specific marketing strategy envisaged in the GSTC criteria, they have been significant

in mitigating seasonal variability in tourism. All Promotion Trusts in Quintana Roo will be dissolved by the end of 2018 to form the new Tourism Promotion Council, Quintana Roo, in which all municipalities will have a permanent seat. It will be necessary to approach the new council with a long-term marketing strategy for Cozumel that is guided by the principles of sustainability and based on the unique natural and cultural heritage characteristics of the destination—and its recent designation as a biosphere reserve by UNESCO.

A14 Tourism Promotion (green)

Cozumel's promotional messages are both accurate in their description of products and services and respectful of the island's cultural and natural heritage and resources. In addition, the promotional material and programs for the state of Quintana Roo include tourism activities in Cozumel. Cozumel is part of the Riviera Maya and therefore benefits from the worldwide promotion done by the Fideicomiso de Promoción Turística de la Riviera Maya. The Fideicomiso promotes the Riviera Maya in national and international fairs, events, trade shows, and road shows; it also produces printed and electronic materials to attract more visitors (http://rivieramaya.com/).

A7 Planning Regulations (yellow)

Good practice was found in relation to planning and regulation (rated "yellow"). The destination has planning guidelines, regulations and/or policies that require environmental, economic, and social impact assessment and that integrate sustainable land use, design, construction, and demolition. Some of these guidelines, regulations and policies designed to protect natural and cultural resources are local, while others are state and federal. The main challenge facing these regulations and policies is enforcement. Most impressive is the existence of five protected

areas (three marine, one terrestrial and one marine/terrestrial), with each one having its own management plan (plan de manejo). Also, Cozumel has an Ecological Zoning Plan (Programa de Ordenamiento Ecológico Local del Municipio de Cozumel—POEL). Recently, Cozumel was designated as a Biosphere Reserve by UNESCO under the Man and Biosphere Program. This recognition comes with adequate planning to ensure that development and conservation objectives are integrated. There is a need to harmonize the existing Ecological Zoning Plans (Urban Development Plan—PDU, Risk Atlas, Laws on Human Settlement, POEL) with Management Plans for the Protected Areas. Sustainable land, marine, coastal, and freshwater use, design, construction, and demolition, are guided by the Ecological Zoning Plan for Cozumel (POEL) and the Construction Regulation (Reglamento de Construcciones para El Municipio de Cozumel del Estado de Quintana Roo).

Training programs do not yet exist to teach communities about the sustainable use and management of their natural resources for commercial purposes. However, there are initiatives to promote local handicrafts based on sustainable use of natural resources. Awareness campaigns have been carried out over the last four years to promote, for example, the eradication of lionfish, reduction in the use of drinking straws, and reducing the use of plastic bags.

A8 Access for All (yellow)

Cozumel has policies supporting access to tourist sites and facilities for individuals with disabilities or other specific needs. Again, enforcement is a challenge. The Rapid Assessment in 2012 identified a growing demand for accessible sites and facilities, as well as for authentic travel experiences that connect travelers to the people and culture in tourism destinations. The destination does appear to have made significant progress. This assessment found evidence of accessibility solutions designed to take the integrity of sites into account while making reasonable accommodations for people with disabilities. A number of tourism establishments and operators specialize in assisting people with disabilities. In

some cases, however, the design of access points (including public ones) is not done in accordance with accepted international standards.

A9 Property Acquisitions (yellow)

It was found that laws and regulations regarding property acquisitions exist and are enforced in most parts of the island. In a small part of the island—community land known as "ejido," enforcement is inadequate. There are families and residents living on small subdivided pieces of land without title deeds. Additionally, the assessment found an irregular settlement to be problematic. There is policy or legislation that considers indigenous rights and authorizes resettlement only when there is free, prior and informed consent based on documented consultation with local and indigenous communities and/or reasonable compensation. The user, access rights for key resources (including land and water), and ownership and tenure rights are documented in a public registry.

A10 Visitor Satisfaction (yellow)

The assessment found evidence of the collection and public reporting of data on visitor satisfaction, including community tourism offerings shared with tourism stakeholders; however, this data does not include interactions with wildlife and/or marine species. Periodically, the Municipal Government's Tourism Directorate prepares technical reports for filing; this information is not accessible to the public. Additionally, the state Ministry of Tourism (SECTUR) carries out studies on tourism profiles and satisfaction in the major destinations, including Cozumel; the last study was done in 2017 and is accessible to the public. There is no system that takes action to improve visitor satisfaction based on monitoring information; however, there is evidence that individual service providers are working to improve service quality and delivery.

A11 Sustainability Standards (yellow)

Cozumel has industry-supported sustainable tourism certification or environmental management systems; some tourism service providers—particularly hotels and diving shops—have



sustainability certifications and environmental management systems, but not all. Some of those sustainable tourism certifications or environmental management systems are recognized by the GSTC (Control Union, EarthCheck, Rainforest Alliance and Ecotourism Australia). About 17 beaches have Clean Beach Program Certification; 19 establishments have health and hygiene certification for food and beverage establishments (Distintivo H); 16 restaurants, 1 hotel, 9 travel agencies and 24 other tourism establishments have service quality certification (Distintivo M); and 31 local tour guides have been certified to NOM-09-TUR-2002 by the federal Ministry of Tourism (SECTUR). While there is a need to monitor tourism business participation in tourism certification or environmental management systems, there is no publicly available list of sustainability certified or verified entities.

A12 Safety and Security (yellow)

The assessment found evidence of ongoing compulsory inspections of fire, food hygiene, and electricity safety for tourism properties; there are heath inspections by COFEPRIS and the Ministry of Health (SESA). The Civil Protection Department (Protección Civil) carries out mandatory electric security inspections in all tourism properties, depending on the area of service provision; they check lighting, gas pipes and cylinders, fuel, and so on. Some stakeholders expressed concern over the growing numbers of security incidents, particularly house robberies; however, the Municipal Government has a system in place to prevent and respond to crime. There is public reporting of safety and security: the Municipal Government security department has a Facebook account where security updates are made and members of the public can comment and report incidents. The director of security has radio sessions every Friday to discuss the security situation on the island and answer any security-related questions from the public. A taxi licensing system known as "concesión" has clear pricing and an organized taxi dispatch system at points of tourist entry, but the prices are not always respected.

A13 Crisis and Emergency Management (yellow)

Cozumel has crisis and emergency response plans that consider the tourism sector and are publicly available. For island destinations, crisis management aimed at hydrometeorological phenomena is crucial, and Cozumel's crisis and emergency response plans for hurricanes have been praised by experts in the field as some of the best in the entire country. However, similar plans should be made for all likely threats to the destination, including health crises. There is financial and human capital to implement the crisis and emergency response plan, but it is minimal. There is evidence that the crisis and emergency response plans for hurricanes were developed with input from the tourism private sector and include communication procedures for during and after such a crisis or emergency.

B1 Economic Monitoring (yellow)

The direct and indirect economic contributions of tourism to the destination's economy are constantly monitored and published. To whatever extent is feasible, this information should include visitor expenditures, revenue per available room, and employment and investment data. Information on tourism and related topics comes mainly from institutions such as DATATUR, the State Ministry of Tourism (SEDETUR; see http://www.groo.gob .mx/sedetur/indicadores-turisticos), MARTI, GIZ, and Business Research & Economic Advisors (BREA). The Municipal Government's Directorate of Tourism collects relevant information from the different players, mainly the Cozumel Hotels Association, and sends this information to SEDETUR for compilation and publication. It is also important to recognize the significant contribution of the academic community, mainly researchers from Quintana Roo University, who carry out research on different aspects of tourism and the economy. There is no specific system to ensure compliance with regulations about licenses and permits; however, municipal and state laws require all businesses to get permits, and noncompliance

is punishable. There are few cases of fake or unlicensed service providers in the destination. SEDETUR has a list of licensed service providers in all state tourist destinations that is publicly available on its website.

B2 Local Career Opportunities (yellow)

There are adequate laws supporting equal opportunities in employment, occupational safety, and fair wages for all, including women, youth, disabled people, minorities, and other vulnerable populations. The main challenge remains in enforcement; for example, there is only one case where legislation and policies involving concession grants to communities who are engaged or willing to engage in natural resource management were implemented. There are training programs that provide equal access to women, youth, disabled people, minorities, and other vulnerable populations; however, there is a need for increased support for people with disabilities. The Rapid Assessment in 2012 identified local ownership and control as a high-priority issue rated "red" and recommended creating an enabling environment for local ownership and control through federal and state incentives that ensure the continued and meaningful participation of native islanders and Mexican nationals in Cozumel's tourism sector. This issue remains a major challenge, but, in general terms, tourism in Cozumel has provided a significant number of jobs and economic development to the island residents as well as revenue for the government. However, the biggest winners have been those who are directly involved in cruise tourism, in particular, tourism service providers on the main streets (Avenida Melgar and 5a Avenida Sur [also known as Calle 5 by locals]); the cruise terminal operators, such as restaurants, bars and shops; foreign and local hotel chains; and diving operators. It has also been argued that most of the jobs are entry-level positions and temporary, in a destination where the cost of living has increased dramatically in recent years. Stakeholders from the private sector pointed to the high rate of job change, especially among young employees who do not keep an employment opportunity for long. Despite the available job opportunities,



some have left the island in search of a "more fulfilling life" on the mainland, where they can supposedly interact more with people from other regions of the country.

B3 Public Participation (yellow)

Cozumel has mechanisms for involving public, private, and community stakeholders in destination management planning and decision-making on an ongoing basis; however, this does not happen in a systematic manner. It is important to recognize that a plethora of stakeholders actively participate in the monitoring and management of tourism activities in Cozumel. They regularly participate in public meetings to discuss destination management issues; the majority of them have taken part in previous assessments or diagnostics, including the present GSTC assessment. An NGO called Intersectorial Group Cozumel Island (GI), with representatives from several sectors of the tourism industry, was formed to implement sustainable tourism strategies. This group's results have been minimal due to financial constraints. Several

other groups are involved in the sustainable management of tourism, and the impact of their programs, activities, or initiatives is significant; however, the effort among different groups of stakeholders is not integrated. These groups include Businesses for European Tourism (Empresarios Por el Turismo Europeo [EPTE]), spearheaded by GIZ; and the Network of Civil Society Organizations of Cozumel Island (Red de Organizaciones de la Sociedad Civil de Isla Cozumel), which was formed in 2005 to unite stakeholders from the social sector in improving community well-being. There are more than 40 non-governmental organizations on the island, many of which work toward cultural and environmental protection. The Cozumel Hotels Association (AHC) works on improving the tourist experience and contributes to increasing Cozumel's sustainability and competitiveness as a destination by, among others, promoting diving, ecotourism, sports, and culture tourism. The Municipal Government has a Technical Secretariat and a Tourism Directorate that work in coordination with Fideicomiso de Promoción

Turística de la Riviera Maya, the Secretariat of Tourism of Quintana Roo (SEDETUR), the Parks and Museums Foundation, tour operators, food and beverage establishments, cruise companies, ferry companies and individual taxis, and airport operators to manage and promote tourism in Cozumel. SEDETUR is particularly in charge of establishing, implementing, and supervising tourism development and promotion of the state's destinations and serves as a link with other tourism-related organizations in the country. WWF-México worked on a proposal with SECTUR to formally designate Cozumel as a Sustainable Tourism Zone (Zona de Desarrollo turístico sustentable), but the process did not start due to lack of financing

B4 Local Community Opinion (yellow)

The destination scored well in the regular and timely collection, monitoring, recording, and public reporting of data on residents' aspirations, concerns, and satisfaction with destination management. The Municipal Government has a designated office where members of the public can air their views and aspirations about the island's economic, environmental and social well-being. The Municipal president periodically holds public forums to discuss different issues and seeks public opinion about the services offered by the government. These initiatives are not carried out in the form of a system envisaged by the GSTC criteria; however, their impact is significant. Some actions have been implemented as a result of these opinions to improve resident satisfaction.

B5 Local Access (yellow)

The destination has programs to monitor, protect, rehabilitate and restore public access by locals and domestic visitors to natural and cultural sites. There are also efforts to monitor the behavior and characteristics of local, domestic and foreign visitors to tourist sites and attractions. SECTUR, through the Riviera Maya Promotion Trust, carries out periodic studies and surveys of tourist profiles, characteristics, and satisfaction. The most recent study was done in 2017, and it was found that stay-over

tourists visited Cozumel for a variety of reasons: recreation and leisure—beach tourism (81.4%), honeymoon (4.9%), business (2.7%), wedding (1.9%), special events (1.9%), visiting friends and family (1.6%), Maya culture (0.5%), incentive travel (0.5%), conferences and conventions (0.3%), and other reasons (4.1%). Most of the visitors (31.4%) bought their packages through online travel agencies, and 83.9% stayed in hotels. Most excursionists (13.7%) participated in aquatic activities.

B6 Tourism Awareness and Education (yellow) and B7 Preventing Exploitation (yellow)

The assessment found evidence of programs that were held in communities, schools, institutions of higher education, and business communities in order to raise awareness of tourism's role and potential contributions, including a focus on conservation. Some organizations involved in these awareness campaigns include EPTE, GIZ, Intersectorial Group (GI), Civil Society Network (Red OSC), and so on, and all of them actively participated in the present assessment. There were proposals to introduce and integrate awareness campaigns in the education system, starting from primary school, so that Cozumel residents can begin to value tourism's role and potential contribution at a young age. There are publicly communicated laws and programs to prevent commercial, sexual, or any other form of exploitation, discrimination, or harassment of visitors or residents—for example, Quintana Roo's penal code (Código Penal para el Estado Libre y Soberano de Quintana Roo).

B8 Support for Community (yellow) and B9 Supporting Local Entrepreneurs and Fair Trade (yellow)

Provided mainly by the Civil Society Network, there are programs for enterprises, visitors, and the public to contribute funding through tourism revenues to community and biodiversity conservation initiatives and/or infrastructure development. The assessment found evidence of programs that support and build the capacity of local and small and medium-sized enterprises; and encourage enterprises to purchase goods and

services locally following fair-trade principles. This is a common practice among several tourism service providers. The Municipal Government and the Conservation for Sustainable Development Program (Programa de Conservación para el Desarrollo Sostenible [PROCODES]) promote the development of local sustainable products based on local nature and culture. The destination requires an Entrepreneurship Policy Framework and Implementation Guidance to overcome obstacles faced by local artisans who are eager to enlarge their small businesses.

C5 Site Interpretation (yellow)

The assessment found that accurate but not adequate interpretive information is provided to tourists in Cozumel. Individual tour operators provide tourists with pamphlets containing interpretive information about natural and cultural attraction sites; these pamphlets are also available in several tourism information offices (Módulos de Información Turística) and attraction sites. It is not clear whether tour guides provide quality information to the tourists, because the descriptions given during the tours are not documented or even reviewed by experts, such as historians, biologists, archaeologists, or ethnographers. Stakeholders opined that some tour guides operate illegally; in this case, it is difficult to ascertain whether they give quality interpretive information to tourists or not. The assessment did not find evidence to show that tour guides are regularly trained (at least every two or three years) in the use of interpretive information. However, training for tourism guides has been carried out by some tour operators during the last five years in topics such as customer service and foreign languages, among others.

The interpretive information is mainly communicated in Spanish and English, and sometimes Maya, limiting its usefulness to tourists who speak other languages. We interviewed guides who speak French and German, and they acknowledged that interpretive information is always given in English, which is the native language for the majority of the tourists visiting Cozumel

(Americans and Canadians) and commonly used by the rest of the tourists.

Overall, the information provided is culturally appropriate and, in some cases, it is developed with relevant stakeholders, including site and attraction managers, protected areas, NGOs and communities. In 2009, CONANP and the Intersectorial Group (GI) brought together tourism service providers in Cozumel and developed guidelines for best practices. This information was widely shared in print and digital form, and made available in boats, ferries and diving shops. In 2009, a separate initiative, spearheaded by GI, came up with guidelines for the sustainable use of natural and cultural resources; the information was widely distributed in hotels and restaurants. In the future, it will be necessary to develop an Environmental Interpretation Manual, particularly for protected areas and cultural heritage sites, and to adequately involve the local community and specialists such as environmentalists, historians, biologists, archaeologists, ethnographers, sociologists.

D1 Environmental Risks (yellow)

Cozumel has successfully identified the majority of environmental risks in both terrestrial and marine sites through sustainability assessments carried out by third parties over the last few years. This is a major improvement from 2012, when the Rapid Assessment was carried out by STI; at that point, stakeholders though that not all risks had been sufficiently identified and evaluated. However, there is no system in place to address identified risks. It is also important to recognize the amount of work done on the subject in the last 20 years by the academic community: for example, the Risk Atlas for Cozumel recently published in a scientific journal ("Atlas de Riesgos de la Isla de Cozumel, México," Teoría y Praxis, Núm Especial, pp. 74-93) and the Risk Atlas prepared by local biologist Nicolás Carrillo Fajardo (Atlas de Riesgos del Municipio de Cozumel, 2011). The public sector, as well as local nongovernmental and civil organizations, and national and international organizations such

as BMZ-GIZ have done an equally great job identifying and managing environmental risks in Cozumel. There is a growing social awareness, and interest and commitment among key stakeholders; many recognize this criterion as one of the most important for Cozumel, because the main attractions of the island are totally dependent on the good health of the fragile ecosystem. During the workshops, participants expressed concerns over risks that are caused by contaminating wastes (solid, liquid and gas) on the underground, aquifer and reefs. These risks have not been adequately identified and evaluated to know their frequency and impact size. In addition, the destination does not have an integrated system in place to address them. Equally, participants expressed concern over the possible impacts of secret dump sites, untreated water, used oil and emissions of contaminant gases, whose effects have been partially measured by the academic community.

D2 Protection of Sensitive Environments (yellow)

The destination has largely succeeded in various aspects of conservation, in part because almost half of the island is covered by five legally recognized protected areas:

- I Cozumel Reef National Park—II,988 hectares, federal protection (Zona Arrecifes de Cozumel—Área Natural Protegida/Programa de Manejo)
- 2 Chankanaab Lagoon National Park— 14 hectares, state protection (Laguna de Chankanaab, Cozumel—Parque Natural)
- 3 Colombia Lagoon—1,131 hectares, state protection (Laguna Colombia—Área Natural Protegida, con la categoría de Zona Sujeta a Conservación Ecológica, Refugio Estatal de Flora y Fauna)
- 4 Jungles and wetlands of Cozumel (Selvas y humedales de Cozumel)—37,829 hectares, federal protection
- 5 Flora and Fauna Protection Area for Northern Cozumel (Área de Protección de Flora y Fauna-Norte de la Isla de Cozumel)

In 2016, Cozumel was designated as a Biosphere Reserve, joining the prestigious list of areas recognized by UNESCO under the Man and Biosphere Program (MAB) for balancing conservation and development objectives. Despite this significant progress, protection of sensitive ecosystems is not totally guaranteed, owing to the growing pressure from tourism development. The urban sprawl in Cozumel is estimated to be 38 hectares per year, mainly caused by the migration of people attracted by job prospects in tourism. The destination has maintained an inventory of sensitive, threatened, and protected status of wildlife, marine life and habitats; in the case of Cozumel's marine and terrestrial protected areas, the inventory is a complete one. Overall, there is a need to integrate and regularly update similar information generated by different organizations: public and private sector, the academic community, NGOs and civil organizations.

The assessment did not find a management system to monitor impacts and to protect ecosystems, sensitive environments, and species. However, there are significant efforts by CONANP, NGOs and civil organizations who work together with WWF-México, local cooperatives, the community, the Municipal Government and some tourism service providers. The main challenges in this aspect include limited financial resources to monitor the well-being of ecosystems, the absence and sometimes inefficiency of government institutions whose responsibility is to enforce conservation and protection laws (PROFEPA), and the lack of civic awareness of the local community to monitor, report, and demand punishment for those who break the law.

The destination does not have an integrated system that prevents the introduction of invasive species, but there are successful initiatives and programs aimed at combating invasive species. For example, efforts to eradicate the invasive lionfish has been largely successful; but efforts to eradicate the invasive species of the Australian pine tree (*Casuarina equisetifolia*) have not enjoyed similar success rates.

HIGH AND MODERATE PRIORITY/RISK TOPICS: ADDITIONAL INFORMATION

This annex contains additional details on high and moderate risk areas; it includes key issues identified during the assessment process. The extra information could not be included in the main body of the report for purposes of clarity. It is important to note that all these highrisk areas were rated "red" except criteria AI: Sustainable Destination Strategy and C3: Visitor Behavior, which were rated "pink."

High Priority/Risk Topics

D10 Solid-Waste Reduction (red)

- There have been reports of secret solidwaste dump sites on the island, where non-recyclable parts of domestic electronic equipment are dumped, leading to contamination, a situation that is made worse by rain and the runoff/filtration of contaminated water to the underground. There are difficulties in transporting solid waste out of the island, particularly, those kinds that cannot be leached; additionally, it is not cost-effective to take out partially recycled waste, due to the low added value and the high cost of maritime transport.
- 2 Despite the available sanitary landfill area of 8,900 square meters compared to the surface currently occupied/used (5,243 square meters), waste managers have warned of the probable shortening of the useful life of the facility, given the increasing amount of solid waste generated in Cozumel. Recently the governor of Quintana Roo announced two major investments in Cozumel: completion of the San Miguelito wastewater treatment plant and replacement of the current wastewater collector on Avenida Rafael E. Melgar (second phase).

3 Certain tourism businesses, particularly hotels, with a reputation of best practice in sustainable management, have initiatives aimed at adequate management of solid waste, and in some cases these efforts have been carried out collectively; for example, the clean destination initiative "Destino Turístico Limpio," in which 18 hotels participated.

D6 Water Management (red), D7 Water Security (red) and D8 Water Quality (red)

I Initiatives have bee carried out by the local government, NGOs, and civic organizations to create awareness among residents about the need for the rational use of water. Similar initiatives are implemented by businesses, whose best practices have earned them eco-certifications. These businesses have sustainability programs and implement concrete actions to reduce water use. It is important to note that 100% of drinking water in Cozumel comes from underground wells in the center of the island. The availability of fresh water increases or decreases in relationship to annual rainfall. In 2014, the system lost an estimated 26% of the drinking water (18% was attributed to technical losses and 8% commercial losses). Residents in irregular settlements (a significant percentage of the island's population) do not have access to communal services offered by the municipality, including water and sewage services. Cozumel Island's drinking water comes entirely from its underground aquifer; there are no aboveground aquifers (streams, rivers, or lakes) due to the high porosity of its surface. The water supply

- system is so concentrated that continuous monitoring is needed to assess its quantity and quality and lay out mechanisms for efficient water management.
- 2 From the assessment, it is clear that water is the most important resource for the destination not only because it satisfies the drinking, recreational and industrial needs of the island's residents and businesses but also because it plays an essential role in maintaining healthy ecosystems.
- The assessment found some important initiatives and steps taken by individual tourism service providers to reduce water use. These steps are based on realistic economic objectives established by the businesses and are part of a sustainable management approach that has earned some of them internationally recognized certifications. Some water security challenges include illegal artisanal wells that are operated without control; the fact that Cozumel's water table is saline; and the recent partial studies showing major decreases in the quantity of water extracted. Recently the governor of Quintana Roo announced major investments to rehabilitate the hydraulic infrastructure at the island's pumping stations for drinking water.
- 4 The Comisión de Agua Potable y Alcantarillado (CAPA), using scientific methods, is supposed to monitor all aspects of water quality from the primary source, through the distribution network, and the final destination where it is used (domestic, commercial etc.), and publish the results periodically.

A1 Sustainable Destination Strategy (pink)

- The most popular management plans in Cozumel include:
 - Sustainable Tourism Strategic Plan 2014–2032 (Plan Estratégico de Turismo Sostenible Isla Cozumel [PETSIC], 2014–2034)
 - Municipal Development Plan



- (*Plan Municipal de Desarrollo [PMD],* 2016–2018 del H. Ayuntamiento del Municipio de Cozumel)
- Cruise Destination Shared Management Action Plan, designed to manage the environmental impacts caused by cruise tourism and identify priorities for sustainable tourism management of the island
- Agenda 21—Cozumel Island (Agenda 21—Isla Cozumel)
- Action Plan for Cozumel (*Plan de Acción: Isla Cozumel hacia un modelo de Turismo Sustentable Insular*)
- Rapid Sustainable Cruise Destination Diagnostic: Cozumel, Mexico, carried out by Sustainable Travel International in 2012
- 2 The local government has demonstrated its political commitment, institutional alignment, and coordination to implement the multi-year destination plan. The present assessment is one of those initiatives aimed at identifying areas of opportunity for Cozumel to achieve tourism sustainability.

A2 Destination Management Organization (DMO) (red)

From the current initiative, we propose the following outline for the possible structure and functions of the Cozumel DMO.

The creation of a DMO with legal character appears indispensable in order for the destination to make significant progress toward sustainability. It should be presided over by the private sector, coordinated by the Municipal Government's Technical Secretariat, and include influential representatives from the following sectors (as indicated in the Stakeholders' Mapping Instrument, Annex 5):

- Public: state and municipal government, including the state secretary of tourism, state secretary of economic and social development, the municipal president (even if delegated to tourism directors or coordinators), municipal technical secretary, municipal secretary of economic and social development, municipal director of tourism, and protected area authorities
- Private: hotel, restaurant, and travel agency representatives, tour guide associations, and chambers of commerce, represented by the sector's major entrepreneurs
- Civil: tourism NGOs, producer associations, environmental NGOs, citizen councils, prominent figures and leaders, and the academic community (drawn mainly from local institutions of higher education)

Survival of the DMO through election cycles will be guaranteed by the private and civil sectors and the administrative coordination by the Municipal Government's Technical Secretariat.

The DMO must serve as a "Tourism Monitoring and Oversight Entity" to ensure that all the needed information for decision-making at the destination level will be concentrated within a single entity. The DMO will have permanent staff and functions so that it can transcend and maintain the necessary data, institutional knowledge, and systems across government administrations.

The DMO may participate as an additional entity represented on the New Council for Tourism Promotion, Quintana Roo, through the

Municipal President (whose seat in the council is guaranteed), as well as through the Tourism Consultative Council (TCC) at the state level (TCCs are stipulated in the Federal Tourism Law).

D5 Energy Conservation (red)

For incentives to reduce reliance on fossil fuels, improve energy efficiency, and encourage the adoption and use of renewable energy technologies, the only evidence of implementation is provided by energy cost subsidies given by the federal energy production and supply company (Comisión Federal de Electricidad [CFE]) during certain periods of the year or by businesses that save energy. It is also important to recognize public awareness campaigns carried out by the local government and businesses with sustainable certifications, such as the sustainable hotel business program. These programs focus on the important economic aspect of reducing the costs of operation by saving both electric and fossil fuel energy. The environmental leadership training program carried out by specialists from PROFEPA has helped to create awareness.

D4 Greenhouse Gas Emissions (red)

Only 53 businesses under the banner "Grupo Cozumel" and sponsored by SEMARNAT-PROFEPA were found to have actions aimed at minimizing greenhouse gas emissions. Most of these businesses participated in an environmental leadership training program (Programa de Liderazgo Ambiental para la Competitividad [PLAC]) offered by specialists from PROFEPA. The objective of this program was to train and equip participants with adequate skills and methods to manage materials, energy efficiency, greenhouse gas emissions, and other aspects of the environment. In addition, some of the businesses participated in a study carried out by the Amigos de Sian Ka'an and EarthCheck to assess levels of greenhouse gas emissions. This study estimated that one tourist produces more than 31 kilograms of greenhouse gas emissions per day.



GSTC Criterion D4 recommends a system to encourage enterprises to measure, monitor, minimize, publicly report, and mitigate their greenhouse gas emissions from all aspects of their operation (including emissions from service providers).

Moderate Priority/Risk Topics

A5 Climate Change Adaptation (pink)

The most popular policy on climate change in Cozumel is the Climate Change Action Plan for Cozumel (*Plan de Acción Climática del Municipio de Cozumel (PACMUN), 2014–2034*). The majority of the actions set out in this policy have not been implemented. The Municipal Government has set out a number of objectives related to climate change adaptation in its Municipal Development Plan (*PMD 2016–2018*), and the Technical Secretariat is working toward their implementation.

C4 Cultural Heritage Protection (pink)

Even though Cozumel does not have a program to protect and celebrate intangible cultural heritage (for example, song, music, drama, skills, and crafts), the assessment found documents and evidence of activities developed by recent municipal governments, with wide stakeholder participation to protect and celebrate cultural heritage festivities.

- I El Carnaval (Mardi Gras) in February
- 2 Santa Cruz and El Cedral Fair at the end of April or beginning of May. This is a fiveday, 150-year-old fair that celebrates the anniversary of the first Roman Catholic mass in Mexico.
- 3 Sacred Mayan Journey (established 2007; every May). This event recreates one of the oldest traditions of the Mayan culture: the annual canoe pilgrimage to worship the goddess Ixchel.

AGENDA OF THE ACTION PLANNING WORKSHOP ON MARCH 26, 2018, IN COZUMEL

Activity/Element of the Workshop	Description/Details of the Activity	Time
Presentation of the findings and recommendations from the GSTC Assessment	CREST will briefly present the GSTC assessment findings and recommendations from the prepared PowerPoint	9:00–9:30
Stakeholder engagement to prioritize the recommendations	CREST will facilitate a stakeholder engagement session in which participants will be asked to prioritize recommendations. Blank sheets of paper (big enough for this purpose) will be taped to the wall and each paper will have one of the recommendations written on it. Each stakeholder will be given three Post-its/stickers. They will be required to vote with their stickers for their top three—most urgent/important/ low-hanging fruit—(high, medium and low) priorities for the destination.	9:30-9:45

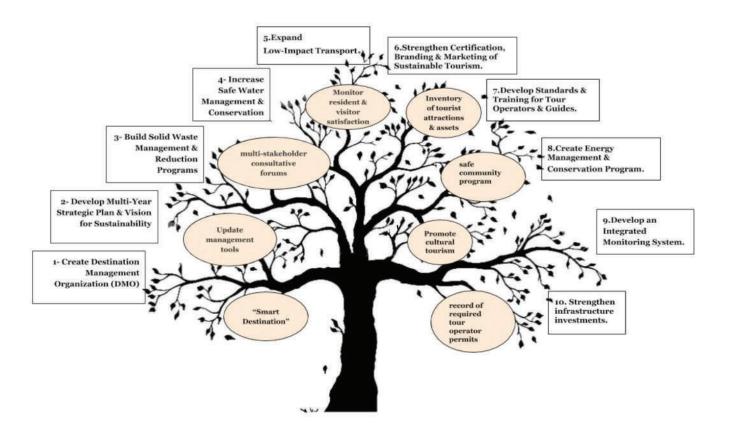


SHORT BREAK During the short break, CF to identify the top five prio	9:45–10:00	
Stakeholder engagement to design action projects	Stakeholders will be given one hour to design action projects for the top five priorities. They will be split into five groups, and each will focus on one of the priority areas. The groups will be made up of at least some persons with responsibility for the priority area. CREST will give the groups criteria to design an action project for their assigned priority. Objectives – the goals to be achieved Task – what is needed to achieve the goals Success criteria – how success will be identified or measured Time frame – by when the tasks should be completed Resources – what or who can help Cozumel to achieve the goals	IO:00-II:00
Groups present action projects	Each of the five groups will have 15 minutes to present the action project: 5 minutes for the presentation and 10 minutes for a brief discussion among all participants.	II:00–I2:I5
Closing Discussions/ Way forward	CREST will engage stakeholders in an open discussion to wrap up the exercise and set out the next steps/way forward.	12:15–1:00

FACILITATION MATERIALS/HANDOUTS FOR THE MARCH 26 WORKSHOP

Cozumel's Sustainable Tourism Tree

Key Projects and "Low Hanging Fruit" identified by the GSTC Destination Assessment



The Global Sustainable Tourism Council Destination (GSTC-D) assessment of Cozumel was carried out by the Center for Responsible Travel (CREST) between December 2017 and April 2018. The ten numbered projects on this tree represent key findings identified through the GSTC-D assessment, which are areas of major risk to the sustainability of Cozumel. They need to be addressed, but it will take time, planning, and, in many cases, new infrastructure and investment to do so. The recommendations (in circles) are classified as "low-hanging fruit." They are examples of important tasks or projects identified in the GSTC-D report that can be implemented rather quickly and without great expense.

GLOBAL SUSTAINABLE TOURISM COUNCIL DESTINATION ASSESSMENT

Cozumel, Mexico

Guide for Action Planning Workshop, March 26, 2018

Between December 2017 and April 2018, the Center for Responsible Travel (CREST) conducted a Global Sustainable Tourism Council Destination (GSTC-D) assessment of Cozumel, Mexico. Its overall objective is to identify risk areas and key initiatives and projects to improve sustainable tourism management practices in Cozumel, applying the GSTC Criteria for Destinations and World Wildlife Fund's Marine and Coastal Tourism Strategy.

To conduct the assessment, CREST followed the GSTC's methodology evaluating the destination's policies and practices against the GSTC Criteria for Destinations, including: thorough analysis of destination policies; prior assessments and scientific reports; on-site stakeholder workshop to orient stakeholders to the assessment method and GSTC Criteria; focus groups and interviews to consult destination stakeholders on implementation of the destination policies and practices; and a closing workshop validating the assessor's findings and preliminary recommendations for improvement. Some 60 stakeholders were consulted from across sectors of Cozumel to derive the assessment findings and recommendations.

The following are the main recommendations of the GSTC assessment for Cozumel, based on sustainability risks identified by gaps between Cozumel's current policy and practice and best practice as set forth in the GSTC Criteria for Destinations—the internationally recognized standard for sustainable destination management. During the March 26 Action Planning Workshop, stakeholders will be asked to identify their 5 highest priority recommendations from this list of 10, and to create action projects based on concrete steps to implement them.

1. Create a Destination Management Organization (DMO)

The DMO must be sufficiently funded with the responsibility to steer destination towards sustainability consistent with the GSTC Criteria. Existing collaborative work among stakeholders (public, private, and civil) provides a strong basis and Cozumel's Municipal Government has already taken steps towards creating the new DMO, which was recommended in the 2012 destination assessment. The DMO should follow best practices in sensitive sites, develop strategies to mitigate seasonal variability, and focus on new forms of tourism and economic activity.

NOTE: While the above may require longer-term planning, concrete actions that could be accomplished quickly are:

- Share sustainable management information via "Smart Destination" virtual platform.
- Constantly update **important management tools:** risk atlases, urban management plans, climate change management plans, Protected Area Management Plans, etc.

2. Develop a Multi-Year Strategic Plan and Vision for Sustainability

This will include key GSTC-D recommendations and will update the 2012 destination assessment with specific areas like climate change, coastal zone management, visitor management, carrying capacity, visitor and community satisfaction, visitor education, and site interpretation. It should be developed through active participation of tourism stakeholders and designed to ensure continuity even if governments change.

NOTE: While the above may require longer-term planning, a concrete action that could be accomplished immediately are:

- Hold multi-stakeholder consultative forums to communicate GSTC-D results and the proposed Action Plan.
- Establish a system to monitor resident and visitor satisfaction.

3. Build Solid-Waste Management & Reduction Programs

Cozumel has no program to assist enterprises to reduce, reuse, and recycle solid waste, does not safely and sustainably dispose of residual solid wastes, and does not maintain public records of the amount of waste generated and how it is treated. The destination should develop an incentive program to reduce waste generation by all sectors, and encourage enterprises to reduce, reuse, and recycle solid waste. It should seek investments in infrastructure projects to guarantee 100% efficient waste management (solid waste, wastewater, and polluting gases), taking into account its volume and impact.

4. Increase Safe Water Management & Conservation

Develop a water distribution and use plan to balance the present and future water consumption needs for inhabitants and tourism enterprises in Cozumel. There has not been an integral diagnosis for the last decade. This should include techniques and costs for ensuring safe drinking water for both inhabitants and tourism enterprises. Also develop strategic projects to improve the efficiency of aqueducts and water treatment plants, and to replace old pipes in the municipality. Develop a program for water conservation in collaboration with GSTC recognized certifiers, as well as international and federal organizations. Point out the important financial savings to businesses that conserve water.

5. Expand Low-Impact Transport

Increase the use and safety of low-impact transportation by offering incentives such as licensing preferences and tax breaks to transport companies. Adequate investments in infrastructure and systems are required (through strategic projects) to make sites of visitor interest more accessible to active, environmentally friendly transportation (e.g., walking and cycling).

6. Strengthen Certification, Branding

& Marketing of Sustainable Tourism

Promote and incentivize adoption of sustainability standards for enterprises consistent with the GSTC Criteria. Make publicly available the list of enterprises certified or verified by GSTC-recognized standards. Consider creating a "Brand Cozumel" and logo guided by the principles of sustainability and based on the unique characteristics of the destination, including its diverse natural and cultural heritage and the recent designation as a biosphere reserve by UNESCO. The Brand could promote GSTC certified hotels, tour operators, and sustainable tourism providers that also conform with the Mexican Certification Programs. Consider working with existing hotels and developers of proposed new hotels, as well as tour operators, to secure corporate commitments to obtain certification to a GSTC Accredited program. Offer incentives including licensing preferences, tax breaks, differentiated promotion, etc. to tourism businesses that demonstrate good practice in their activities.

7. Develop Standards & Training for Tour Operators & Guides

A program to train guides in the techniques and content of interpretation should be established. It is recommended that a team of specialists, particularly biologists and historians, be consulted to develop interpretive content and material for the destination to facilitate accurate interpretation by guides. This information should be available digitally, both for guides as well as for visitors, and in Spanish, English, and other appropriate languages. Develop a local code of conduct for guides and tour operators taking into account specific characteristics of Cozumel's fragile ecosystem.

NOTE: While the above may require longer-term planning, a concrete action that could be accomplished immediately is:

 Establish and maintain a record of required tour operator permits and concession procedures and guidelines.

8. Create Energy Management & Conservation Program

Develop a program for energy conservation in collaboration with GSTC-recognized certifiers, as well as international and federal organizations. It should include incentives to progressively implement renewable energy, pointing out the important financial savings to businesses that conserve energy and utilize renewable energy solutions. This would have the collateral effect of controlling greenhouse gas emissions.

9. Develop an Integrated Monitoring System

This will collect and process information needed for decision making in Cozumel as well as strengthen research, planning, regulation, and enforcement of institutions to determine the environmental risks that affect tourism. An observation and oversight entity should be included within the DMO structure that includes experts from universities and from the private and civil sectors to conduct comprehensive monitoring, public reporting, and response to sustainability related issues.

10. Strengthen infrastructure investments

This is essential to facilitate and guarantee the delivery of all basic services to the entire population of the island, including residents of irregular settlements.

Short Term Actions: "Low-Hanging Fruit"

The GSTC-D assessment also identified several dozen recommendations that can be implemented quickly, while the DMO, Strategic Plan, and other major projects listed above are being developed. These include:

- Hold multi-stakeholder consultative forums to communicate GSTC-D results and proposed action plan.
- Share sustainable management information via "Smart Destination" virtual platform.
- Publish detailed **inventory of tourist attractions and assets** on "Smart Destination," using SECTUR's proposed methodology.
- Constantly update **important management tools**: risk atlases, urban management plans, climate change management plans, Protected Area Management Plans, etc.
- Create a safe community program for Cozumel with broad citizen participation.
- Leverage "Grupo EPTE" to promote cultural and responsible tourism.
- Establish a system to monitor resident and visitor satisfaction.
- Maintain a record of required tour operator permits and concession procedures and guidelines.

The Way Forward: Action Plan

At the March 26, 2018 Workshop in Cozumel, key tourism stakeholders will identify their 5 highest-priority recommendations based on the areas of risk identified during the GSTC Destination Assessment. Stakeholders will design action projects to implement these 5 priority recommendations, including identifying concrete steps, responsible organizations and individuals, resources, and timing needed to complete these projects. These stakeholder-designed projects will be compiled into an Action Plan for Cozumel that will then be presented in the GSTC Destination Assessment Report.

The Partnership

The principal collaborators in the GSTC-D assessment are WWF-US, WWF-México, GSTC, the Cozumel Municipality, GIZ, Royal Caribbean Cruises Ltd., and local stakeholders.

