

# Tourism and Recreation

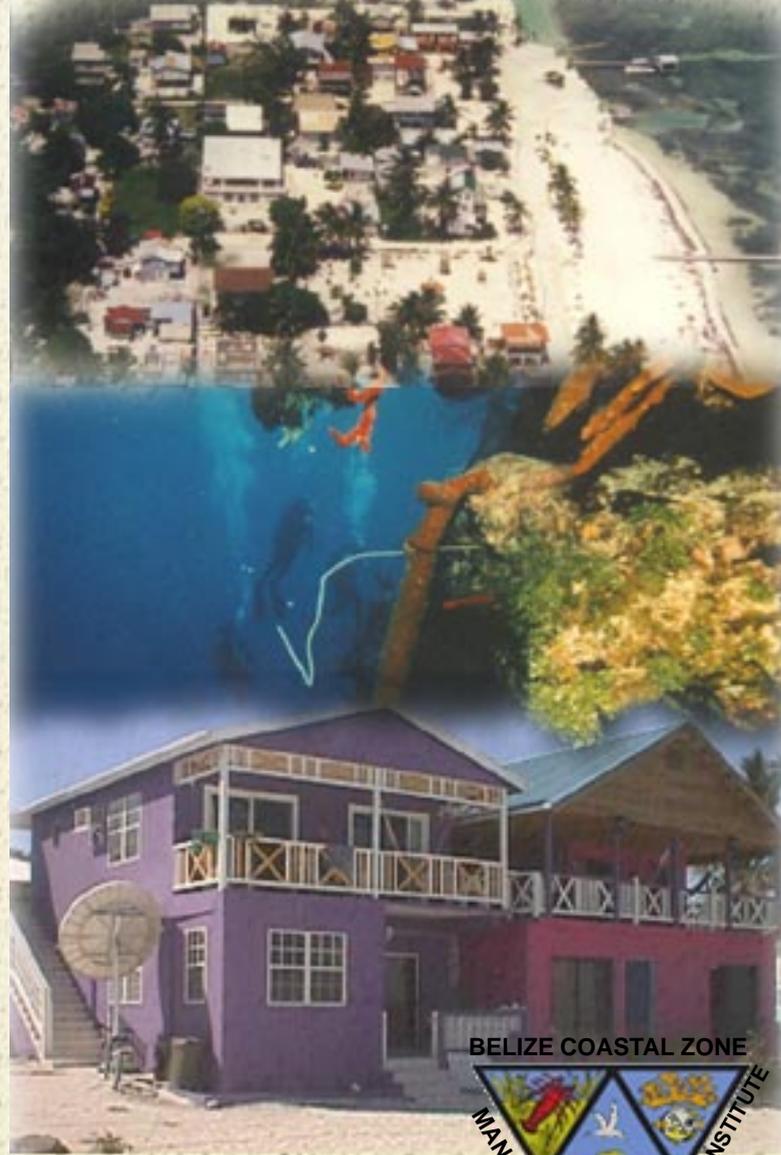
## **BEST PRACTICE**

### for Coastal Areas in Belize

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## Reference

Blackstone Incorporated (1998). Tourism Strategy Plan for Belize: *A Draft Document for Discussion Purposes Only*.

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## Best Practice-what and why?

Tourism has become the leading income earner in Belize and qualifies as the fifth largest employment sector. Tourists from all over the world visit Belize primarily to experience our pristine environment. In essence, the natural resources and environment play an important role in Belize's tourism product development and sustainability. This is true particularly for the coastal areas of Belize where tourism on the cayes and atolls alone accounted for 103,380 or 60% of the total tourism visitors in 1999.



*Aerial view of Caye Caulker Village (H. Gamboa)*

The fragile and interconnected ecosystems in Belize's coastal area however, are experiencing increased stress due to direct and indirect impacts of tourism, recreation and related developments, human settlements, and natural phenomena and hazards. Therefore, it is paramount that sustainable utilization of our natural resources takes place so that the people and economy of Belize may continue to benefit whilst maintaining our resource base. One key component in the sustainability equation is the practicing of the best-known method of operating a tourism and recreation venture so that a **high level of enjoyment** is achieved but only **minimal impact** to the coastal resources and environment occurs. This concept is called "**Best Practice**" (BP).



*Fringe reef at South Water Caye (Tony Rath, Naturalight)*

fully adopt Best Practices and consequently contribute more positively to the sustainable development of Belize's coastal resources.



*The Southern tip of Caye Caulker. (S. Cruz)*

## Benefits of Implementing Best Practice

Best Practice can produce immediate, tangible and beneficial results. Implementing BP for tourism and recreational operations will not only benefit the environment, but will also lead to better business for all operators. Moreover, it is apparent that tourists are increasingly supporting environmentally friendly operations.

Business benefits include:

*Reduced consumption = reduced costs:* BP includes conservation measures that are aimed at reducing consumption (energy, water, etc.), which would also serve to reduce your business costs.

*Customer loyalty & enhanced public image:* Tourists are increasingly taking an interest in the environment. If you can show that you care for the environment as well as their comfort, you will gain their respect and customer loyalty. They will also spread the word about your operations.

*Improved competitive position:* By implementing BP you will have an advantage over competitors who are not taking any action to protect the environment. You will be able to attract customers who are environmentally aware.

and management of our coastal resources. These components include the need for coordinated approaches to management, information gathering and sharing, and the need for land use planning and disaster preparedness. When



*Coastal Planner and Data Analyst discussing the Caye Caulker Planning Programme with a Caye Caulker resident. (T. Williams)*

these are added to the availability of instructional materials and supporting services, a sound awareness and education programme, and incentives for the sector to invest in



*The CZMAI display at the National Agriculture and Trade Show 2001.*

the programme, (e.g. technical assistance, tax concessions, etc.,) tourism operations will be more confident to success-

*Long term business benefits:* By working with others in the industry and demonstrating BP, you will help secure the protection of the local environment on which the long-term future of your business depends.

*Attracting trained and enthusiastic staff:* If staff see that careful consideration and regard is given for the environment, such that the success of the business is not compromised, there will be increased motivation, loyalty and staff effectiveness -all leading to reduced staff turnover.

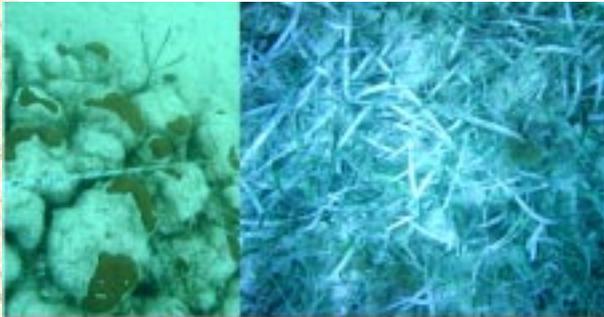
## **General Principles for Tourism & Recreation Best Practice**

The following are some basic principles for BP in the tourism and recreation industry. These should guide activities as far as possible and serve as the overarching framework for the guidelines that follow in the next section.

- *Adequate tourism planning*
- *Responsible promotion and marketing*
- *Compliance with legislation, Tourism and Coastal Zone Management (CZM) Strategies and related CZM Policies*
- Reducing tourism impact
- Investigating and investing appropriate technologies
- *Local community involvement*
- Working with and supporting coastal and marine protected areas

## Operation of Facilities

The tourism activities that impact the coastal resources can be grouped into three broad categories: construction, operational and recreational. This guide focuses on the operational (and planning) aspects of tourism ventures.



*Reef and seagrass beds under siltation (N. Bood)*

### *Siting and Development of Facilities*

Careful and prudent site selection is necessary to ensure that the building of facilities does not cause the loss and degradation of coastal habitats adjacent to reefs such as mangroves and seagrass beds. The appropriate siting (or placement) of facilities is also crucial to avoid loading the marine environment with high levels of silt before and after the construction phase. Siltation and sedimentation can kill seagrass and corals and detract from the beauty of the marine and reef environment. Furthermore, the siting and development of facilities need to consider and complement the prevailing social and cultural conditions to ensure long-term viability. Key elements in site selection and development are:

#### Areas to avoid:

- Limit facilities to highland areas, well away from sensitive habitats and resource components such as turtle nesting beaches and mangrove areas.

### Wastewater

- Keep gray water (effluent from washing operations) and black water (effluent from toilets) separate. Recycle and re-use gray water after it is filtered and disinfected, for non-consumptive purposes (e.g. flushing toilets).

## Integrated Coastal Zone Management and Best Practice

Many maritime countries experience some form of impact from coastal tourism. Impacts, however, often originate from outside coastal areas and may have long-term effects. These impacts and subsequent degradation of the coastal resources are increased by institutional and administrative inadequacies and the low sensitivity of users. In addition, other sectors within the coastal areas of Belize, directly or indirectly linked to tourism, may also contribute to coastal resources degradation (e.g. speculative land development, over-fishing, etc.). For example, some of these sectors may be in decline, and with increasing demands to supply the tourism industry, unsustainable harvesting and extracting practices are often the end result.

In view of the above, Best Practice plays an important and integral role in minimizing impacts and degradation to Belize's valuable coastal resources. However, to manage activities and their impacts on coastal resources effectively, it is important to operate within a broader framework of Integrated Coastal Zone Management (ICZM) as seen in the Coastal Zone Management Strategy for Belize. The Strategy document identifies some of the key ingredients necessary to achieve sustainable and rational development

sewage adequately, if possible up to tertiary level, which would remove all organic matter and nutrients.

- Plan for the appropriate siting of sewage tanks, especially if these are near sources of water and run-off.
- Make sure septic tanks are up to Public Health Standards and are placed at appropriate distances and gradients away from wells to avoid contaminating freshwater supply.
- Monitor septic tanks for efficiency and ensure sludge is pumped out at intervals.



*Coral showing overgrowth of algae (N. Bood)*

### Alternative Technology

- Explore appropriate and clean technologies for sewage treatment and disposal.
- If possible, use dry toilets (e.g. composting toilets where the waste is turned into compost or burnt and converted into fertilizer).

### Outfalls

- Final effluent that is discharged should be well within the prescribed standards.
- If there are sewage outfalls, ensure that they are located in well-flushed areas.

- Avoid development on very small islands or rugged coasts.
- Establish buffer zones at beach areas, with an ideal minimum setback of 66' from the high watermark, beyond which building construction may take place.
- If development is long term, establish additional buffer zones that will consider the effects and range of influence for sea level rise and storm events.
- No development should occur in water catchment areas (whether seasonally inundated or otherwise).
- Avoid breaching cultural and social norms (e.g. limit nuisances such as noise).
- No development should occur in or around areas such as beaches, where turtles and other endangered species nest or roost.



*Mexico Rocks (S. Wells)*

### Erosion Control:

- Interfere as little as possible with the natural environment.
- Leave beach strand vegetation, as it is important for shore stabilization.
- Maintain and replant vegetation as a practical erosion control measure. Plant trees, especially deep rooting species such as sea grape and West Indian almond (Hammons), for shade, beauty and the stability of our

beaches.

- Use soft engineering techniques (such as mangrove planting) where possible.
- Do not dredge on the **windward sides** of islands.
- Make allowances (setbacks) for hurricanes and beach changes when planning coastal developments.
- Consult with the relevant authorizing agency and other experts before designing or commencing any coastal development.
- Seek sources of sand other than from the beach, river, river mouth bars and sand dunes for construction and land filling.
- Maintain pollution free beaches and coastal waters (including rivers).
- Conserve our forests and other vegetation such as mangroves, shrubs, vines and grasses to help prevent sedimentation of our reefs and the accelerated erosion of beaches.



*Using mangroves to stabilize the beach, Turneffe Island Lodge (S. Cruz)*

#### Type of Development:

- Develop low-density and low-rise tourist accommodation, whilst still providing adequate services and amenities for tourists, e.g. thatched cabanas.



*Littering at Alligator Caye, South Water Cayes*

#### Litter Control

- Collect litter regularly and provide enough litterbins that are secure.
- Issuance of fines should be enforced.
- Make sure guests do not litter and never throw garbage in the water.
- Encourage visitors to also pick up litter left by other people—a bounty system can be introduced to encourage this e.g. discounts at souvenir shops or restaurants.
- Organize beach and underwater cleanups.
- Place staff to patrol the beaches, especially during peak times.

#### ***Sewage and Wastewater Management***

Sewage that is inadequately treated and disposed produces negative impacts on the coastal environment, contaminates groundwater and may even adversely affect humans. It is important to limit nutrients and organic matter, heavy metals and pathogens into our coastal waters.

#### Sewage Treatment

- Utilize a central system and do not allow discharge of sewage into the sea.
- Use self-contained sewage treatment systems and treat

## Waste Minimization

- Minimize waste at the source-reduce, reuse, recycle and repair whenever possible. Reducing waste volume makes treatment and disposal easier.
- Be selective when purchasing to reduce packaging and waste generation.
- Avoid Styrofoam and other disposable products such as disposable napkins, cutlery or crockery.
- Provide incentives for guests to return used glasses, plastic bottles and cans e.g. by offering small rewards or discounts.
- Provide bulk dispensers for shampoo, coffee, sugar etc. rather than packaged single serves.

## Waste Separation and Recycling

- Separate and sort waste into paper, other biodegradable materials, aluminum cans, plastics and glass, which could then be sold for reuse (or recycling) to obtain revenue.
- Compost organic waste that can then be used as fertilizer- make sure that this is actively managed, as compost that becomes anaerobic is smelly and generates methane.
- Invest or take part in appropriate recycling schemes.
- Use products made from recycled materials.

## Alternative Technology

- Explore appropriate and clean technology for solid waste disposal-burning waste is not a suitable long-term solution, while transporting waste back to the mainland is costly.

## Waste Removal

- Take all trash and debris back to shore after visiting reefs and dispose of it in an environmentally sound manner.

- Develop unobtrusive structures that do not dominate their natural surroundings nor detract from the intrinsic natural values of the area (e.g. building heights should not exceed the surrounding trees)
- If possible buildings should be screened, e.g. by trees.

## *Facilities and Management*

The over consumption of natural and other resources, such as the excessive use of water or wood, damages the local environment and is incompatible with the long term sustainability of the tourism industry.

## Landscaping:

- Avoid the use of exotic or introduced species for landscaping; instead use indigenous species.

## Use of Building Materials:

- Use locally available materials, wood from sustainably managed forests, and recycled and non-toxic materials where possible.
- Construction methods and materials should be designed to minimize impact on the environment.
- Make accurate estimates of materials required and avoid over-ordering.

## Energy Conservation:

- Limit energy use: use energy-saving devices and energy-efficient equipment.
- Investigate renewable energy resources, in particular solar and wind energy, which are cleaner and cheaper in the long run.
- Use natural cross-ventilation and ceiling fans, and try to avoid air-conditioning, which is highly energy-consumptive and noisy.
- If air-conditioning is used, setting it at a higher thermostat setting while running a ceiling fan will save energy.

- Use fluorescent lamps or energy-saving light bulbs for lighting.
- Switch off refrigerators when they are not needed e.g. in vacant rooms when no perishable items are in them.
- Promote the habit of saving electricity among guests e.g. use stickers on switches to remind guests to switch off lights and equipment when not in use.
- If batteries are used, ensure that all batteries are safely and cleanly disposed of.

#### Laundry:

- Encourage guests to use towels several times before putting them out for washing-provide information and ask guests to decide when and how frequently they desire their towels washed.

#### Use of Chemicals:

- Avoid using herbicides, pesticides and fertilizers; instead use organic alternatives.
- Use phosphate-free and biodegradable detergents and cleaning products.
- Switch to non-chlorine bleaches.

#### *Freshwater Management*

Water, especially on islands, is an increasingly precious resource that must be conserved. Wells dug to tap the freshwater lens reduce the amount of freshwater available to island vegetation and may lead to contamination of the lens as saline water seeps in from the sea to replace the freshwater. Wise use of the available water resources on islands will avoid the need for costly importing of freshwater, especially that needed for drinking purposes.



*Well water system at a tourism operation (S. Cruz)*

#### Groundwater

- Monitor any extraction of groundwater quality and quantity.
- Set limits on extraction based on the capacity of the freshwater lens.

#### Water Conservation

- Do not leave taps running when cleaning or washing.
- Catch and recycle rainwater and stream water.
- Provide low-flow toilets and low-flow showerheads.
- Use water-efficient showerheads.
- Check for leaky faucets or leaky tap washers regularly to prevent wastage.

#### Water Treatment

- Where water treatment is needed, use simple methods, such as sifting, sedimentation, filtration and boiling.

#### *Solid Waste Management*

Solid waste or litter that is inadequately disposed of can affect marine resources and also has a negative impact on the tourism industry. However, many problems can be avoided with adequate management of collection and disposal services, as well as waste reduction and recycling programmes that educate tourists and locals alike.