

The Restoration and Preservation of Pointe Sable Beach

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The Pointe Sable area has been described as comprising of a unique set of natural, ecological, cultural and historical assets. In recognition of its multifaceted value, it has gained national and international attention. The mangrove forest found in the Pointe Sable ecosystem, which comprises of Savannes Bay Mangrove and Mankôtè Mangrove, were declared Ramsar sites in 2002, and the off-shore islands, namely Scorpion Island and Maria Islands, were declared wildlife reserves. In 2001 the government declared the four square miles or 2565 acres of the coastal strip that includes Pointe Sable Beach as a protected area—Pointe Sable Environmental Protection Area (PSEPA)—and ceded its management to the St. Lucia Natural Trust, the official protector and conservator of the nation’s natural and cultural heritage. The government’s 2007 Southern Quadrant Development Plan pinpoint the PSEPA as an area that can contribute to the development of the Vieux Fort district in that it can support a range of activities that can “provide direct social and economic livelihoods to the immediate and surrounding communities.” However, lying next to the second largest town on the island, and being one of the more popular beaches, Pointe Sable Beach is under threat by man and nature. Factory re-

fuse flowing into the Atlantic represents a potential harm to both humans and coral reef and other marine organisms. The sand mining activities of poachers and motorized methods of clearing the beach of seaweed are denuding the beach of sand and damaging turtle nests. Vehicular traffic at Pointe Sable Beach is also undermining the integrity of the beach and its plant life and is intensifying beach erosion. Debris generated from port activities is polluting coastal waters thus reducing its appeal for swimming and other water sporting activities.

Nature too is taking its toll. River silt deposited into the Caribbean Sea, seemingly after every downpour, which then spreads into the Atlantic Ocean, is likely killing coral reef systems. The silting phenomenon has become worst in recent years due to the advent of several weather systems, which, in their aftermath, left the island’s waterways clogged with silt. The bashing of Atlantic waves against the shoreline continues to erode parts of the Vieux Fort Castries Highway, and the manner in which boulders were placed to serve as a breakwater appeared to have been ill-conceived and may be contributing to the damage they were intended to control. Coconut Bay Resort’s breakwater may also be contributing to beach erosion.

The Trough of 2014 may represent nature’s worse damage to the beach in living memory. The Trough washed away the sand dunes that formed the outer perimeter of the beach. It gorged out the sand in several areas leaving behind several large pits that give the appearance that the beach had been bombed. By denuding the beach of vegetative cover and leaving worn-out tracks, vehicular traffic on the beach created areas of least resistance which intensified the Trough damage. In several areas the gutting of sand followed the vehicular tracks. Inadequate drainage and blocked drains in areas adjacent to the beach, and the leveling of sand dunes across the highway from the beach next to a playing field may have also exacerbated the situation.

As one of the island’s premiere recreation beaches, the damage in the form of unsightly pits and gorges that the Trough left in its wake have robbed the beach of its aesthetics and natural appeal and thus have undermined its recreational value. The Trough



scored the beach of vegetative cover, which served to reduced sand erosion, thus leaving the beach more susceptible to inclement weather. The sand dunes acted as sand, wind, and water breakers, in the process helping to mitigate sand erosion, flooding, and water damage to road and airport infrastructure, thus their disappearance have also left the beach and its surroundings compromised and more vulnerable to future acts of nature.

Proposed Conservation/Preservation/Restoration Measures

Several measures need to be taken to restore and protect Pointe Sable Beach. Laboratory test is required to examine the toxicity of refuse flowing into the Atlantic and to assess its harm to human



and marine life. If lab results show that refuse poses unacceptable risk to human health and the wholesomeness of the ecosystem, then discussions need to be held with the entities causing the pollution to explore alternative methods of disposal.

To address the issue of the sand mining effects of and damage to nesting turtles of motorized methods of clearing the beach of seaweed, discussions need to be held with the operators to alert them of the damage to the beach and to nesting turtles of their activities and to explore other more environmentally friendly methods of seaweed removal.

To address the siltation of the Caribbean and Atlantic, a feasibility study is required to ascertain the cost and best method of clearing the Vieux Fort River of silt and debris, the best method of disposing of the silt, and reforestation and other measures to reduce river siltation.

The problem of beach vehicular traffic can be addressed by creating zones where vehicles can park and move about, and using logs and/or duns to disallow entrance to areas where vehicular traffic is not sanctioned. A team should meet to conduct/design the demarcations.

Regarding the ill-conceived breakwater intended to protect the shoreline and the highway from the bashing of waves, but which is accelerating the very erosion it was meant to arrest, the advice of an environmental engineer is needed to create an alternative sand building/accretion structure. Similar engineering analysis and action is also needed in the case Coconut Bay Resort's

breakwater.

Meetings with SLASPA will be required to alert them of the environmental effects of its port activities, and to encourage SLASPA to establish beach and coastal water cleanup and monitoring systems and help fund ongoing environmental cleanup campaigns in and around Vieux Fort.

Considering the recreational, ecological, and economic value of Pointe Sable Beach and the PSEPA, and also the importance of a well maintained beach to flood mitigation and maintenance of road and airport infrastructure, it is imperative that Pointe Sable Beach be restored to its pre-Trough state, and to implement measures to maintain its integrity.

Restoration measures would include beach nourishment (refilling the gorges or pits with appropriate material, rebuilding the sand dunes, creating sand buns or banks along the edges of the beach), unclogging drains, replanting trees and other vegetation, and restricting / controlling vehicular traffic on the beach.

Given the complexity and environmental sensitivity of a beach restoration project, a feasibility and environmental impact study would be needed before work can begin. A grant proposal should be prepared to seek funding for the feasibility study and the restoration project. The feasibility studies and grant proposals should also address the appropriateness or effectiveness of the breakwater constructed to protect parts of the Vieux Fort - Castries Highway.

