

Protecting the Marine Environment from Pollution



Government
of Saint Lucia



UNEP
United Nations
Environment
Programme



Caribbean
Environment
Programme



**Cartagena Convention & Protocol on
Land-Based Sources of Marine Pollution**

Saint Lucia's Coastal Zone



*View from top of
Moule à Chique in the
district of Vieux Fort*

Town of Vieux Fort



Praslin Bay

*Base of Gros Piton in the
district of Soufriere*



What is the Cartagena Convention?

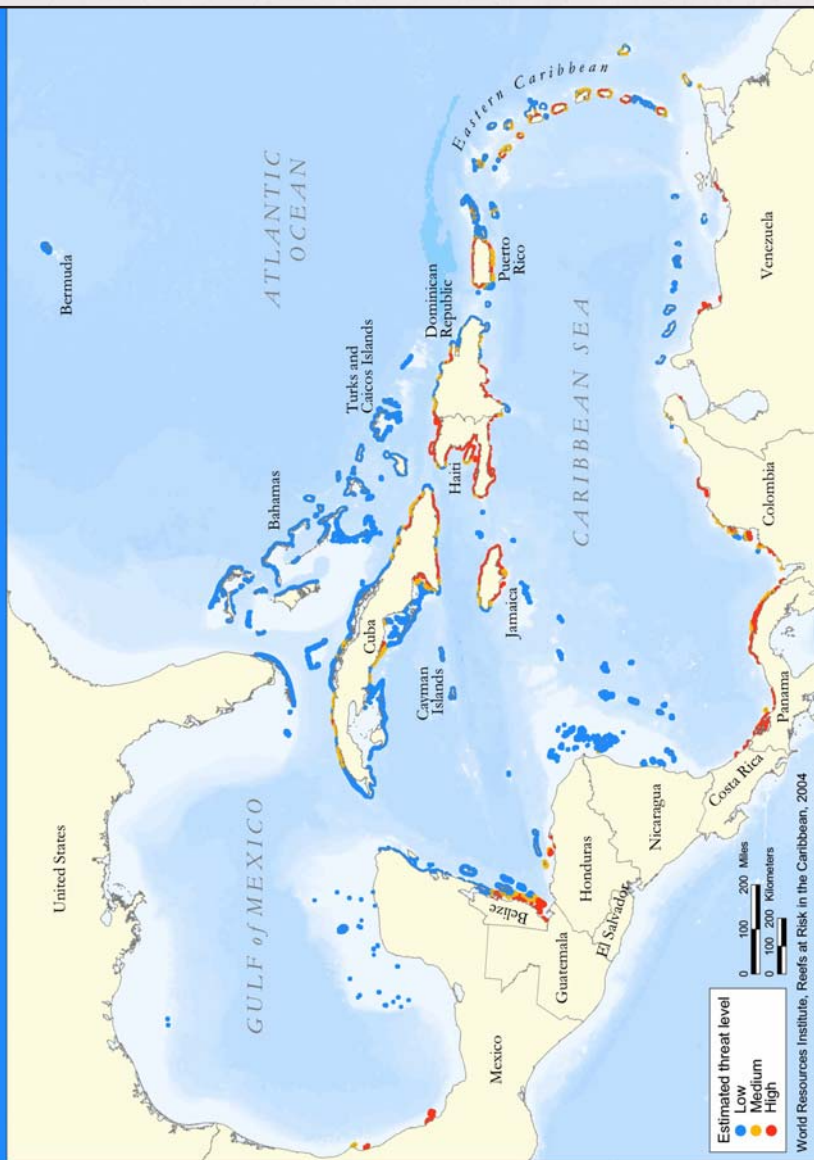
The Cartagena Convention is a legally binding, regional agreement for the protection and development of the Wider Caribbean Region. It was developed by the countries of the Wider Caribbean* and is the only regional legally binding agreement for the protection of the Caribbean Sea.

The Convention was adopted in 1983 and entered into force in 1986. A total of 21 countries have signed the Convention, with Saint Lucia signing on the 24th of March, 1983

*The Wider Caribbean Region includes Antigua and Barbuda, Bahamas, Barbados, Belize, Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, France, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Kingdom of the Netherlands, Nicaragua, Panama, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago, United Kingdom, United States of America and Venezuela



REEFS THREATENED BY SEDIMENTATION AND POLLUTION FROM INLAND SOURCES



What is the Cartagena Convention?

(cont'd)

The specific areas of focus of the Convention include:

- Pollution from ships
- Dumping of wastes at sea
- Land-based sources of pollution
- Sea-bed activities
- Airborne pollution
- Specially protected areas

To deal comprehensively with these issues, three protocols have been developed to assist countries in implementing this agreement:

- Oil Spills Protocol – Adopted in 1983; entered into force in 1986; Saint Lucia ratified 1984;
- Specially Protected Areas and Wildlife Protocol (SPAW); Adopted in 1990; entered into force in 2000, Saint Lucia ratified in 2000; and
- Land-based Sources of Marine Pollution Protocol (LBSMP) – Adopted in 1999; not yet entered into force; Saint Lucia is not yet a signatory.

What is the LBSMP Protocol?

The LBSMP protocol is a set of procedures developed under the Cartagena Convention to respond to the need to protect the marine environment from land-based point and non-point sources of marine pollution.

The protocol provides a list of priority source categories, activities and associated pollutants of concern. These priority sources are further defined in a series of technical Annexes. Although the initial annexes focus on domestic wastewater and agricultural non-point sources of pollution, additional annexes may be developed as deemed appropriate by parties to the Protocol. The protocol also provides a list of factors to be used to determine the types of control and management responses required for particular land-based sources and/or activities resulting in marine pollution.



Why Do We Need a Protocol?

The Caribbean Sea is an important natural resource for tourism, fisheries and general recreation. The associated coastal and marine ecosystems are extremely fragile and vulnerable to human activities, especially those that take place on land. Regional and national actions are urgently needed to protect these vital marine resources and overall public health in Saint Lucia and the Wider Caribbean region.

The main sources of point or direct sources of pollution to the Caribbean Sea are:

- Domestic Sewage
- Oil refineries
- Sugar factories and distilleries
- Food processing
- Beverage manufacturing
- Pulp and paper
- Chemical industries

The single largest point source category of pollution is domestic sewage and the main non-point source of pollution is run-off from the land.

Why Do We Need a Protocol? (cont'd)

The LBSMP protocol provides the framework for addressing pollution based on national and regional needs and priorities. The protocol adopts an approach that focuses on addressing the sources of pollution, and includes the application of the most appropriate technologies and best management practices. It also promotes the establishment of pollution standards and schedules for implementation.



Various Land Based Sources of Marine Pollution

What are the Pollution Standards?

To reduce the impacts caused by sewage to the marine environment, the following standards have been proposed for sewage effluent:

Class 1 and Class 2 waters will be designated by each country depending on individual local circumstances, including the risk of discharges to human health and sensitive marine ecosystems in those waters.

Effluent Limitations for Class I* Waters	
Parameter	Effluent Limitation
Total Suspended Solids	30 mg/l
BOD ₅	30 mg/l
pH	5 – 10 pH units
Fats, Oil and Grease	15 mg/l
Pathogens	Faecal Coliforms: 200mpn/100 ml or E coli (freshwater): 126 org/100 ml Enterococci (saline): 35 org/100ml
Floatables	Should not be visible

Effluent Limitations for Class II* Waters	
Parameter	Effluent Limitation
Total Suspended Solids	150 mg/l
BOD ₅	150 mg/l
pH	5-10 pH units
Fats, Oil and Grease	50 mg/l
Floatables	Should not be visible

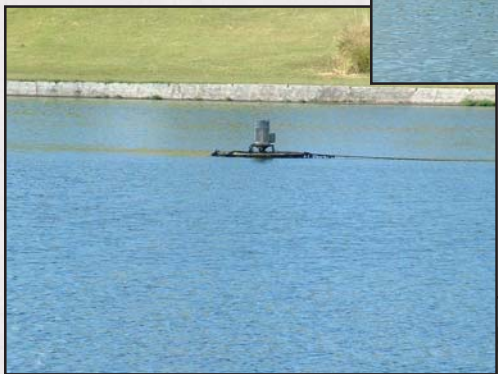
*Note that Class I waters are those that, because of their unique environmental characteristics, fragile biological or ecological characteristics, or human use, are particularly sensitive to the impacts of domestic wastewater.

*While Class II waters are those where the oceanographic, hydrologic, climatic or other factors make them less sensitive to the impacts of domestic wastewater, and where humans or living resources are not adversely affected by discharges.

Who Must Comply After The Protocol Enters Into Force For Saint Lucia?

Years after entry into force	Effluent Sources required to comply with standards
0	All new domestic wastewater systems – public and private
10	Existing domestic wastewater systems other than community wastewater systems
15	Communities with more than 50,000 inhabitants with existing collection systems
20	Communities with more than 50,000 inhabitants without collection systems
20	All other communities except those relying exclusively on household systems

*Sewage Treatment Plant
Northern Saint Lucia*



Some Actions Recommended Under the LBSMP Protocol

- Classify water bodies at the national level as Class I or Class II;
- Establish legally binding standards for sewage effluent and discharges;
- Develop a National Programme of Action for Coastal Zone Management;
- Conduct training in wastewater treatment;
- Identify and assess major sources and activities contributing to pollution of the marine environment; and
- Develop management plans and demonstration projects to reduce pollution of the marine environment.



What Will Implementing the LBSMP Protocol Achieve?

- Sustainable development of the marine and coastal resources in Saint Lucia and the Wider Caribbean Region;
- Promote more integrated and effective management of natural resources that allows economic development, especially in the areas of tourism and fisheries;
- Strengthen legal and regulatory capacities of national agencies; and
- Provide for a more integrated approach to national development planning.



Choiseul Village

What can we do?

- Get Involved – in your school, community and work place to reduce pollution of the marine environment;
- Dispose of garbage properly and not in rivers, drains or on beaches;
- Promote reuse and reduce the use of disposable plastic bags and bottles;
- Practice integrated pest management and reduce use of pesticides and fertilizers.



Threats to Saint Lucia's Coastal Zone



FOR FURTHER INFORMATION CONTACT THE:



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