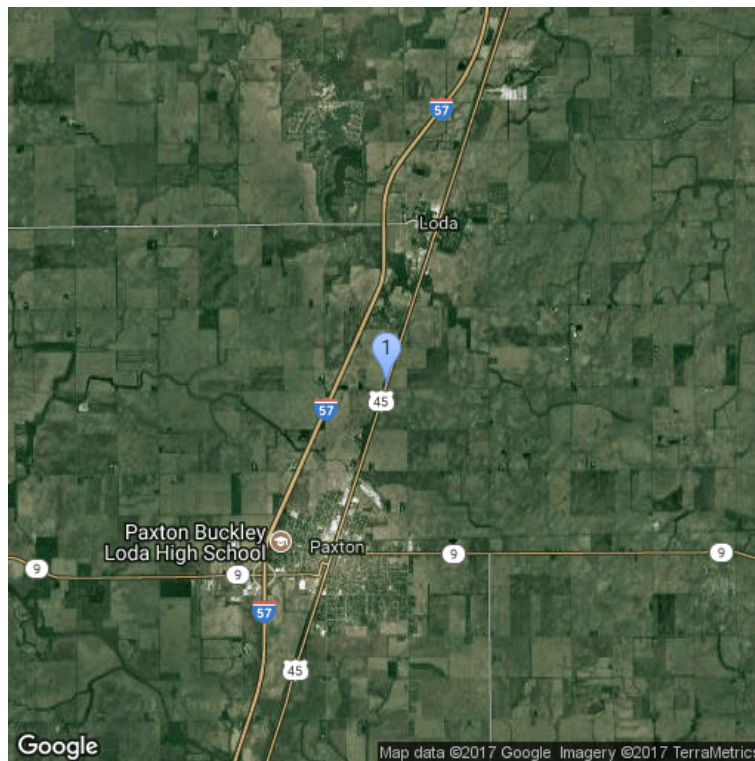




### Moliniere-Beausejour Marine Protected Area



**Short Name**

Moliniere-Beausejour Marine Protected Area

**Country**

Grenada

**Ecoregion location**

EasternCaribbean

**Boundaries**

Coordinates of seaward boundaries, from North to South: N 12.05.960, W 61.45.160 N 12.05.919, W 61.45.274 N 12.05.674, W 61.45.459 N 12.05.347, W 61.45.725 N 12.05.135, W 61.45.868 N 12.04.961, W 61.45.895 N 12.04.856, W 61.45.790 N 12.04.858, W 61.45.613 N 12.04.887, W 61.45.585 The seaward boundary is defined by the outer edge of the continental shelf and the seaway for North-South maritime traffic to Carriacou Island. The landward boundary extends to the high water mark. The MPA stretches from Moliniere point up to Brizan, including Dragon, Flamingo and Beausejour bays.

**Map URL**

<http://www.grenadampa.org/frontpage-a.html#>

**Total Surface area**

0.6

**Site national category**

Marine Protected Area

**IUCN category**

II

**Designation**

none

**Date established**

2001/12/28

**Legal citation**

Fisheries (Marine Protected Areas) Order 2001 (SPO No 77 of 2001)

**Other legal designations**

Fisheries (Marine Protected Areas) Regulations (SRO No 78 of 2001) apply in this area. The Moliniere/Beausejour MPA co-management group was launched on Feb 11, 2009.

**Primary responsible institution**

Fisheries Division, Ministry of Agriculture, Forestry and Fisheries

**Primary contact**

Roland Baldeo, MPA Coordinator, Fisheries Division

**Phone number**

(473) 440-2708

**Email**

rolandbaldeo@hotmail.com

**Web site**

<http://www.grenadampa.org/frontpage-a.html>

**Climate**

Grenada is characterized by humid tropical climate: warm and humid in the rainy season and cooled by northeast trade winds in the dry season. Temperatures are relatively constant throughout the year averaging 26°C, dropping by only a few degrees or so in the cooler months of December to February. The mean maximum temperature is 31.4 °C while the mean minimum is 24.0°C. Total mean annual rainfall varies from about 13 feet (4000 mm) in high mountains to less than 4 feet (1000 mm) in the southwest and northeast ends of the country (see Figure 2). The MPA is one of the most showered coastal areas. The driest months are typically from January to May with a monthly mean rainfall ranging between 100 and 150 mm, and the wettest months are from June to December with a monthly mean rainfall between 300 and 350 mm.

**Geological features**

cliffs, beaches, rocky shores, rocky shores

**Hydrological features**

rivers drainage

**Other hydrological features**

Two rivers run into the MPA coastal waters: the Beausejour River which opens into the northern part of Beausejour Bay and the Molinière River which flows into Dragon Bay. While the latter drains a small watershed not extending further than Mt. Moritz and Molinière settlements, the Beausejour River has a large catchment area extending up to the

Annandale forest.

### **Marine habitats**

Coral Reefs Seagrass beds Sandy beach

### **Marine flora**

In the Molinière-Beausejour MPA, a seagrass bed dominated by an exotic invasive species, *Halophila stipulacea* is located in Flamingo Bay at depths over 10 m and only 15 m from the reef.

### **Marine invertebrates and fishes**

**Corals** According to the 2008 report on the status of coral reefs of the Lesser Antilles<sup>1</sup>, surveys conducted in Grenada in 2006 and 2007 identified 33 hard coral species, the most common being *Porites porites* followed by *P. astreoides* and *Montastraea annularis*. **Reef Fish** (by family) Damselfish, wrasse, pufferfish, squirefish, grunt, snapper, grouper, parrotfish, bigeyes, boxfish, goatfish, filefish, butterflyfish, triggerfish, trumpetfish, surgeonfish

### **Marine mammals, birds and sea turtles**

**Marine Turtles** Three species occur in Grenada: the leatherback turtle (*Dermochelys coriacea*) globally critically endangered, the green turtle (*Chelonia mydas*) globally endangered, and the hawksbill turtle (*Eretmochelys imbricata*) globally endangered. The presence of turtles in the MPA is suggested by anecdotal evidence of turtles nesting on beaches, mostly in Beausejour (sightings by fishermen and scientists, from interviews). Turtles used to be harvested in Flamingo Bay. Marine turtles nest between April and August and hatching is occurring six weeks later.

### **Endangered species**

Boulder star coral (*M. annularis*) Green turtle (*C. mydas*) Leatherback turtle (*D. coriacea*) Hawksbill turtle (*E. imbricata*)

### **Primary management institution**

Fisheries Division, Ministry of Agriculture, Forestry and Fisheries

### **Other institutions that participate in management**

Sustainable Grenadines Inc. (SusGren) is a local transboundary NGO that works collaboratively with MPAs in this region to foster improved management capacity.

### **Personnel**

Roland Baldeo, MPA Coordinator, Fisheries Division; Steve Nimrod, Chair of MBMPA Stakeholder Committee;

### **Management objectives**

species protection, ecosystem protection, fisheries management, user conflict resolution, recreational tourism use

### **Management framework**

Yes

### **Date of establishment of management framework**

2010/09/30

### **Last update of management framework**

2012/12/31

### **Management programmes**

advisory committee, co management with private sector, enforcement program, fisheries regulations, monitoring program, mooring bouys, on site staff, tourism regulations

### **Other zone types**

1. Fishing Priority Area 2. Marine Park 3. Recreation Area (Beaches) 4. Yacht Mooring Area 5. Rocky Shore \*spearfishing, motorized water sports, dredging, sand mining and Alteration of the natural environment construction/ erection of building or any structure on/over land or water are prohibited in all zones

### **Funding sources**

Fisheries Division, Ministry of Agriculture, Forestry and Fisheries

### **Cultural resources**

Shipwreck; Petroglyphs; Under water sculpture park

### **Fisheries resources**

Main fishign targets include: tuna, snapper, hind and couvali jack Main types of fish landed on a typical fishing trip by fishermen in the MPA (based on fishing groundings): -tuna -snapper -hind -couvali -dolpin fish -jacks -ocean gar -butterfish -marlin -bonita -swordfish -kingfish -robin -grunt -barracuda -sailfish

### **Fisheries regulations**

Fisheries Act No. 15, 1986 and the Fisheries (Marine Protected Areas) Regulations of 2001 Fisheries (Marine Protected Areas) Order, 2001 (SRO No 77 of 2001) Fisheries (Marine Protected Areas) Regulations (SRO No 78 of 2001) Fisheries Regulations (SRO No. 9, 1987) Fisheries Amendment Regulations (SRO No. 24, 1996) Fisheries (Marine Protected Areas) Regulations (SRO No. 78, 2001)

### **Coastal development**

Alteration of the natural environment Construction/ erection of building or any structure on/over land or water is prohibited in all zones. In accordance with SRO 78 s.6(1)m Mandatory EIA (under the Physical Planning Unit) for any coastal development that might impact the MPA and its resources “ to ensure that whatever is done outside MPA boundaries must not contribute to alter the MPA natural environment “ MPA and Fisheries Division representatives must be involved in the review process.

### **Monitoring programmes**

reefcheck

### **Issues or threats for accomplishing management objectives**

Coral reef threats -low abundance of grazers -high nutrients concentrations -anchoring -storm surges and hurricanes Sea turtles -illegal hunting and lack of enforcement

### **Role of site in network**

Member of the Grenadines Network of MPAs