

# Environment Statistics and Climate Change Statistics for the CARICOM Region

St. Georges, Grenada  
4<sup>th</sup> – 8<sup>th</sup> November, 2019

# DOMINICA: Ocean Resources

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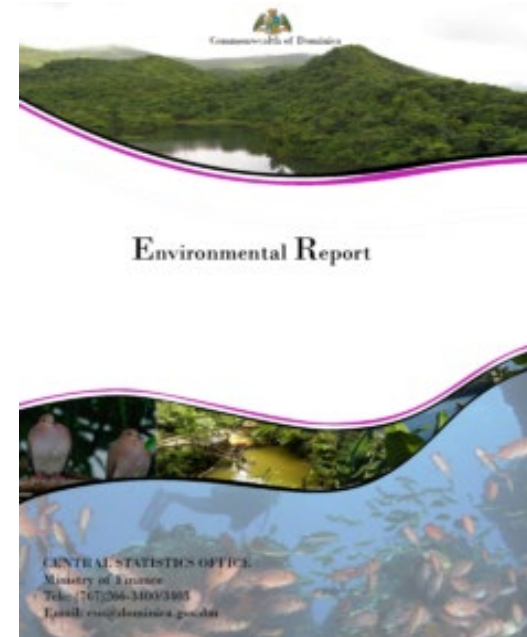


# Environmental Statistics Report

The Central Statistics Office of Dominica produces a report on Environmental Statistics.

11 Chapters are covered in the report:

1. Socio- Economic Background
2. Climate and Air
3. Land Use and Agriculture
4. Biodiversity
5. Coastal and Marine Resources
6. Energy
7. Water
8. Waste
9. Transport
10. Tourism and
11. Natural Disaster



# Measurement of Nutrients and Chlorophyll

Data was obtained from the Laboratory Technologist attached to the Dominica Water and Sewerage Company (DOWASCO)

Data was only available for the following periods:

July to December 2008;

March and April 2009;

Biochemical Oxygen Demand (BOD) Analysis was also available but only for May 2014 and April 2019

# Results of Analysis of BOD and other parameters in Coastal Water for 29<sup>th</sup> April, 2019

Site No.	Sampling Site	Date	Time	Nitrate mg/l NO <sub>3</sub> --N	Phosphate mg/l PO <sub>4</sub> <sup>3-</sup>	Suspended Solids mg/l
	<b>Guideline values</b>			<b>10</b>		<b>40 - 70</b>
1	Jimmit ten(20) feet from shore	29-Apr-19	10:54	0.02	0.07	<1
2	Canefield, Donkey Beach, ten(20) feet from shore	29-Apr-19	11:10	0.02	0.07	<1
3	Goodwill in front of DBMC, ten(20) feet from shore	29-Apr-19	11:31	0.01	0.08	<1
4	Roseau 100 ft from shore near Roseau River	29-Apr-19	11:45	0.02	0.04	<1
5	Newtown Bath Road ten(20) feet from shore	29-Apr-19	12:07	0.02	0.05	<1
6	Offshore (baseline) Sample 1000 ft from shore	29-Apr-19	12:50	0.01	0.05	<1

# Results of Analysis of BOD and other parameters in Coastal Water for 29<sup>th</sup> April, 2019 con't

Site No.	Sampling Site	Date	Time	BOD mg/l	E. Coli CFU/100ml	Enterococci CFU/100ml	pH	Conductivity mS/cm
	<b>Guideline values</b>			<b>30 - 60</b>	<1 CFU/100 ml	<1 CFU/100ml	6.5-8.5	
1	Jimmit ten(20) feet from shore	29-Apr-19	10:54	15	500	3	8.29	58.3
2	Canefield, Donkey Beach, ten(20) feet from shore	29-Apr-19	11:10	8	45	3	8.42	58.3
3	Goodwill in front of DBMC, ten(20) feet from shore	29-Apr-19	11:31	14	-	-	8.55	57.4
4	Roseau 100 ft from shore near Roseau River	29-Apr-19	11:45	20	0	0	8.56	58.3
5	Newtown Bath Road ten(20) feet from shore	29-Apr-19	12:07	13	0	0	8.57	58.0
6	Offshore (baseline) Sample 1000 ft from shore	29-Apr-19	12:50	2.2	0	0	8.58	58.0

# Summary of Water Quality Monitoring Programme, 2008 and 2009

2008	Temperature (oC)	Salinity (PPT)	Conductivity (ms/cm)	PH
Average for periods tested	29.4	33.9	51.9	8.0
2009				
Average for periods tested	29.6	34.4	54.3	7.8

Note: Testing done mainly where sewerage outfalls are located.

2008: July to December

2009: March, April and August

2014: May – Salinity 35.5, Conductivity 56.2 and  
PH8.2

# Coral Bleaching

- ▶ Information on coral bleaching could only be found in an article 'Commonwealth of Dominica Coral Reef Report Card 2016'.
  - According to the report there were two periods where mass coral bleaching occurred, 2005 and 2010.
  - Prior to the 2005 bleaching event, coral cover was high (10–53%).
  - Cover declined  $>28\%$  in 1 year,  $>75\%$  of corals were bleached.

(Source: Commonwealth of Dominica Coral Reef Report Card 2016)



# Marine Reserves

Presently there are two Marine Reserves in  
Dominica

Reserve	Year Established	Area (Acres)
Cabrits National Park	1986	1,053
Soufriere/Scottshead Marine Reserve (SSMR)	1998	1,606.28
<b>Total</b>		<b>2,659.28</b>

Source: Forestry, Parks and Wildlife Division and Fisheries Division



Soufriere/Scotts Head Marine Reserve



Cabrits National Park

# Protective Species

Species	Type of Season
Lobster	30th April - 1st September (Closed Season)
Turtles	1st June - 30th September (Closed Season)
Conch	Size of catch restricted

The period 1st June – 30th September (annually), is the official closed season for hunting turtles. Outside that period, the animals can be captured but only at sea. Land catch is prohibited since turtles come ashore to mate or hatch. With reference to conchs, the catch size is restricted to 18cm in length.

# Coastal and Marine Resources

## Fish Landed 2010– 2017

Year	Quantity '000kg
2010	559.7
2011	665.4
2012	561.0
2013	539.8
2014	803.0
2015	945.1
2016	907.6
2017	703.0

Source: Fisheries Division, Ministry of Agriculture

## Regional and International agreements to which Dominica is party (Stakeholders)

- ▶ Third UN Convention on the Law of the Sea (UNCLOS): (Fisheries Division for management of resources in EEZ, Coastguard for patrols in EEZ)
- ▶ UN Convention on International Trade in Endangered Species (CITES): (Environmental Coordination Unit (ECU) – but Fisheries Division is responsible for regulations on marine SPP)
- ▶ UNESCO Convention on the Protection of the World Cultural and National Heritage: (Forestry (land-based protected areas); Environmental Coordinating Unit)
- ▶ UN Framework Convention and Kyoto Protocol on Climate Change (Environmental Coordinating Unit – Fisheries Division responsible for managing climate change impacts and mitigation in marine environment)

## Regional and International agreements to which Dominica is party (Stakeholders) con't

- ▶ Cartagena Convention for the Protection and Development of the Marine Environment (Environmental Coordinating Unit – but Fisheries Division responsible for managing climate change impacts and mitigation in marine environment)
- ▶ UN Convention on Biological Diversity : (Fisheries Division (marine), Forestry (land), Physical Planning (EIAs etc.)
- ▶ Castries Declaration on IUU Fishing: (Fisheries Division, Coastguard for surveillance at sea)
- ▶ St George's Declaration for Principles of Environmental Sustainability in the OECS (for the marine environment)
- ▶ Agreement establishing common Fisheries Surveillance Zones of participating member states of the OECS: (Fisheries Division)

## Regional and International agreements to which Dominica is party

- ▶ International standards for fisheries policy – the FAO Code of Conduct: (19 General Principles)
- ▶ Caribbean Community Common Fisheries Policy (CCCFP)
- ▶ United Nations Framework Convention on Climate Change: (UNFCCC)
- ▶ CARICOM Master Plan
- ▶ OECS Fisheries Strategy
- ▶ International Convention for the Regulation of Whaling



## CHALLENGES RELATING TO DATA AVAILABILITY

- ▶ The main challenge encountered was that there was no central database or central location where data can be obtained.
- ▶ Data is not readily available at the sources when sought especially as specific as the indicators required
- ▶ Following the passage of Hurricane Maria, the laboratory attached to the Environmental Health Department was destroyed and to date has not been operational. The hard drive containing data collected was stolen and hard copies of reports were destroyed

## CHALLENGES RELATING TO DATA AVAILABILITY con't

- ▶ The Dominica Water and Sewerage company (DOWASCO) is the only entity at present doing water quality testing but their main concentration is that of fresh water. They however would do periodic sea water testing.
- ▶ Testing is not done on a regular basis and is done mainly at 'high point' areas where sewerage outfalls are located.

## CHALLENGES RELATING TO DATA AVAILABILITY con't

- ▶ Human resource to effectively gather data. This is one of the reasons why it was said that testing is not done on a regular basis.
- ▶ The lack of equipment was also noted as a challenge.

# Way Forward...

- ▶ To address the lack of data which exist presently in Dominica, the formation of a committee, comprising of key stakeholders in the area of environmental issues, should be looked into.
- ▶ Sensitization of stakeholders and top officials on the importance of data collection on the key indicators relating to environmental/climate change.
- ▶ Highlight the importance of such data in the area of effective decision making, as a negotiating tool, etc.



*Thank you  
from the nature Isle*