# **FINAL**

















# Regional Strategic Environment & Social Assessment

# **OECS CROP**

# OCTOBER 2018

# Final edit November 2018

Prepared By
Valma Jessamy, PhD
Environmental Engineering Scientist/Policy Analyst
JECO Caribbean Inc

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# 1.0 EXECUTIVE SUMMARY

#### 1.1 Scope

While the outcomes of Component 1(a) of the CROP are spatial plans, large emphasis is placed on the planning process itself. Planning as a process involves participation across sectors and interests and is multi-objective and multi-dimensional.

The CMS planning process results in the identification of areas most suitable for various types or classes of activities to reduce conflicts among uses, reduce environmental impacts, facilitate compatible uses, and preserve critical ecosystems. It is therefore a public policy process for society to better determine how marine and coastal resources are sustainably used and protected now and for future generations.

#### 1.2 Background

In response to the outcomes of the ECROP, the OECS with the World Bank have prepared the Caribbean Regional Oceanscape Project (CROP) that responds to such demand for spatial planning initiatives, through the adoption of coastal and marine spatial plans to coordinate management across sectors and resources and integrate environmental management directly with economic development. These plans will build upon early national marine planning efforts<sup>1</sup> and will help Eastern Caribbean countries better understand and then reform governance of the diversity of ocean uses and economic activities, resulting in a more secure framework for sustained investment in the blue economy.

CROP is being implemented in five participating OECS Member States (MS): Dominica, Grenada, St. Kitts and Nevis, Saint Lucia, St Vincent and the Grenadines. As a precursor to the development of Marine and Coastal Spatial Plans to improve ocean governance, a Regional Strategic Environmental and Social Assessment (SESA) is required. Each CROP country, except for Grenada, has yet to clearly articulate their own vision and national policy direction for coastal and marine spatial plans for their country, which will align with the regional project vision.

#### 1.3 Legal Framework for Coastal and Marine Resources Management

The policy, legal, institutional and regulatory framework for coastal and marine spatial planning in the OECS was analysed across several levels of influence, international, regional, national and sub-national.

<sup>&</sup>lt;sup>1</sup> National Ocean Policies in St. Vincent and the Grenadines, and St. Kitts and Nevis (draft); Integrated Coastal Zone Management (ICZM) policies in Grenada and St. Lucia

- From the review it can be concluded that there is a robust regulatory framework for Caribbean ocean's governance at the international and regional level. There is a lack of clarity or coherence in some of the conventions and in many cases repetition of provisions.
- States have been slow in ratifying agreements after signing and even slower in
  effecting implementation at the national level. It is noted that independent States are
  quicker to ratify agreements than dependent territories who are lagging behind. The
  recommendation is made for a common legal framework for Caribbean oceans
  governance, to rationalize the various MEAs and develop coordinating mechanisms
  for their implementation
- Annex I provides a comprehensive listing of all the policies, legislation, regulations, conventions and MEAs for coastal and marine spatial planning in OECS MS.
- National policies, strategies and programs of action for emerging environmental management issues such as climate change, conservation of biological diversity and marine resources are influenced by international conventions and multi-lateral environmental agreements. Most of the national laws pre-date these international agreements.
- The legal framework for management of the Kalinago Territory is a vertical hierarchy of government with power aligned accordingly. The rights of the Kalinago Community are not provided for at the level of the Constitution of Dominica. Their rights to participation is the same as for all people of the Commonwealth of Dominica. While Section 29 of the By-Laws of the Kalinago Territory Act provides responsibilities to the Council for the management of the territory, according to Section 48 of the same Act, the overall responsibility for development and planning in the Territory is retained by the Government of Dominica.

#### 1.4 Objectives of the SESA

In keeping with the terms of reference (TOR) for this consultancy, the main objectives of this Strategic Environmental and Social Assessment are:

- To support the understanding and further inclusion of priority environmental and social considerations in Coastal and Marine Spatial Planning (CMSP) in the CROP and contribute relevant information to Component 1 of the CROP.
- To provide specific inputs for the implementation of the regional Strategic Environmental and Social Assessment (SESA).
- To further examine the vulnerabilities as well as opportunities for the Kalinago indigenous community of Dominica as related to CMSP. An Indigenous People's Planning Framework (IPPF) will therefore need to be embedded into the SESA.

- To gather and validate risk and impact data as well as to put forward suitable and feasible recommendations intended to avoid, manage and/or attenuate these impacts;
- To facilitate the integration of these measures into coherent plans and policies and to ensure its application;
- To build strong stakeholder fora for the project's benefit. Through the fora, the
  concerns and interests of 'weak and vulnerable' stakeholders can influence the
  decision-making processes fostering in addition, increased accountability for
  policy makers; and
- To support the setting-up of an enabling framework for sustainable coastal and marine spatial planning in a participatory manner involving all key stakeholders.

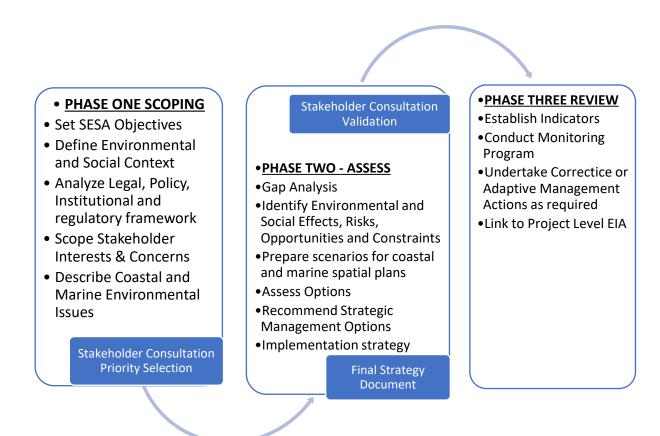


Figure 1.1 Phases and Outcomes on the SESA Process

To fulfil the objectives of the consultancy the following iterative tasks outlined in the flow diagram below are being undertaken (Figure 1.2):

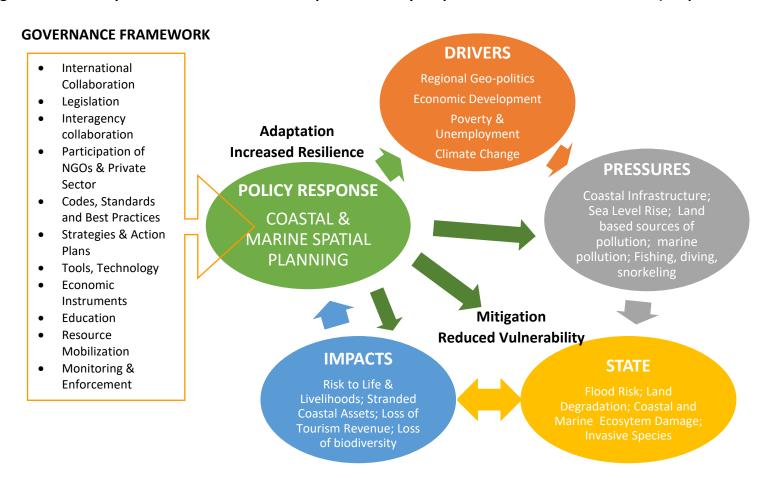
- **Inception Report**
- Situation and Stakeholder Analysis
- **Priority Selection**
- Political Economy and Gap Analysis
- Indigenous Peoples Planning Framework
- Recommendations for the SESA
- **Final Report**



Figure 1.2 Tasks of Consultancy – Regional SESA for OECS CROP

Lessons learned during the assignment; and d) any limitations to the outputs and their intended use.

Figure 1.3 Summary of Drivers Pressures State Impact and Policy Responses for CSMP in OECS States (adopted from JECO 2016)



# 1.5 Critical Factors for Decision-Making for CSMP

Member States is setting the vision and objectives for CMSPs must determine the limits of acceptable change, natural resource carrying capacity and the cumulative effects of interrelated impacts (example energy, wastewater management, solid waste management, air and water quality, and resilient critical infrastructure, roads, hospitals).

It is critical that plans do not lead to social amplification of risk through:

- a) Location of new facilities and/or increased development of critical infrastructure in hazard prone areas;
- b) Exceeding the capacity of critical infrastructure within towns and tourism development centers such as drainage, potable water networks, waste management and disposal facilities, road networks, hospitals, community centers, evacuation routes, shelters and disaster management resources;
- c) Failure to restore degraded ecosystems through rehabilitation projects;
- d) Failure to manage land-based sources of impact and pollution such as storm water run-off, construction, agriculture and upland watershed degradation;
- e) Lack of accounting for increased coastal flooding due to increased development of watersheds, climate change and future sea level rise scenarios.

The analysis of alternatives must be guided by Critical Factors for Decision Making (CFDM) which constitute the fundamental decision-making factors that underlie the focus of the SESA. They identify those aspects that must be considered in the decision process concerning the strategic design and the implementation of actions for effective management of environmental and social issues arising from development of coastal and marine spatial plans for OECS States.

These factors satisfy the scope of the SESA and are generated out of the situation and stakeholder analysis of the following:

- Objectives of the SEA;
- Legal, institutional and regulatory considerations;
- Environmental and social factors; and
- Current and future scenarios for development of coastal and marine spatial plans in OECS States

The critical factors for decision making and the reason for their inclusion are presented in Table 1.1.

**Table 1.1 Critical Factors for Decision Making in Development of Coastal and Marine Spatial Plans** 

CRITICAL FACTORS FOR DECISION MAKING	REASON FOR INCLUSION
Legal and Regulatory	Currently not fully developed in OECS States
Framework	<ul> <li>Incomplete regulations for management of coastal and marine resources</li> </ul>
	Conflicting and overlapping responsibility among various ministries
	No capacity for regulation or compliance
Institutional Capacity	<ul> <li>Conflicting roles and responsibilities for environmental protection and management</li> </ul>
	Poor inter-institutional coordination
	<ul> <li>Low technical capability for coastal and marine resources management</li> </ul>
	Unknown training requirements and capabilities
	Low Capacity for SESA implementation
Planning and Decision-	Environmental factors not included in economic planning
making Process	Sector approach to planning
	Short term planning cycles
	Ecosystem-based approach to planning needed
	<ul> <li>Decision support systems need to be adopted</li> </ul>
	Climate change modeling and future risk assessment
Stakeholder	Incomplete legal framework for stakeholder participation
Participation in	Low stakeholder capacity and action
Decision Making	Lack of stakeholder participation in setting development agenda
	Need for transparency of revenue flows and resource allocation
Contai	Mechanisms for community development limited
Social	<ul> <li>Protect vulnerable groups; Fisherfolk; Kalinago peoples in Dominica</li> <li>Recognize cultural diversity</li> </ul>
	Avoid resource conflicts and compulsory take of private lands
	Minimize expectations over benefits of exploitation of Blue Economy
Ecosystem Integrity and	Importance of marine parks and protected areas
Biodiversity	Importance of critical species
Conservation	Capacity for protection of protected areas and biodiversity is limited
	Resource assessment and monitoring lacking
	<ul> <li>Limits of acceptable change and ecosystem carrying capacity needs to be determined</li> </ul>
Risk Management	<ul> <li>Regional mechanism for collaboration, coordination of response and compliance needed</li> </ul>
	Planning for climate change, tsunamis and natural hazard risks
	Integration of environment with social and economic objectives
SESA Implementation	Success of SESA depends on its implementation
	Follow up measures, indicators needed

# 1.6 Program 1 - Mitigation Measures for Vulnerability Reduction

SECTOR/Main sources of Impact	PREDICTED IMPACTS AND RISKS	MITIGATION STANDARDS
Agriculture in/near coastal areas	<ul> <li>Relocation of farmers from low-lying coastal areas;</li> <li>Agriculture impacted by demands for fresh water (damming of rivers) and climate change;</li> <li>Demands for local food production to support increased tourism development;</li> <li>Increased agricultural activities in upland watersheds resulting harmful amounts of topsoil or pollutants to flow into estuaries and coastal waters</li> </ul>	<ul> <li>Climate Smart Agriculture with green technology; Silviculture best management practices for watershed management adopted in agricultural policy and forestry legislation;</li> <li>Agricultural riparian buffer zones created along farms;</li> <li>Coastal wetlands protected from developed activities;</li> <li>Buffer zones created between farms and coastal wetlands;</li> <li>Environmental Education Strategy for agricultural sector across all education levels</li> <li>World Bank Resettlement Policy</li> </ul>
Fisheries- Wild Capture and Aquaculture	<ul> <li>Reduced pressures on near shore fisheries due to investment in deep sea fishing fleets;</li> <li>Quota system reduce trends in over-exploitation;</li> <li>Potential for transboundary disputes due to increased utilization of the territorial seas and EEZ;</li> <li>The sustainability of coastal or offshore fisheries within the territorial waters of OECS MS must be assessed;</li> <li>Quota system need to be developed to manage exploitation of marine fish stocks;</li> <li>Increased utilization of coastal flat lands for aquaculture;</li> <li>Management of wastewater is a critical issue to be addressed;</li> <li>Reduced conflicts between fishing grounds and shipping lanes or other offshore economic activities, through the use of marine spatial plans/use zones.</li> </ul>	<ul> <li>Monitoring of fish catch and stock assessment;</li> <li>Economic instruments implemented for resource management;</li> <li>Quota system developed based on stock assessment;</li> <li>Definition of No-go areas and buffer zones to preserve protected areas</li> <li>Implementation of Regional Fisheries Policies</li> <li>Policies for aquaculture</li> <li>Integrated waste management policy</li> <li>Coastal Master Plans and Marine spatial plans</li> </ul>
Infrastructure	• Existing infrastructure located in the coastal zone date back to 1950s and as such do not consider changes in sea level or	<ul> <li>Coastal development setback guidelines with climate change and sea level rise scenarios adopted;</li> <li>Relocation of critical infrastructure from the coastal zone;</li> </ul>

SECTOR/Main	PREDICTED IMPACTS AND RISKS	MITIGATION STANDARDS
sources of Impact		
	storm surge scenarios must be incorporated into the CMS plans;  Increased generation of stormwater and wastewater resulting in negative impacts on coastal water quality, coral reefs and marine life; reduction in goods and services from coastal and marine ecosystems;  Solid waste landfills exhausted; increased land degradation from non-biodegradable and hazardous wastes;  Planned expansion of infrastructure in the coastal zone will stress ecosystem services or cause other negative environmental or social impacts;  At present OECS MS exploit only nearshore fisheries. Exploitation of ocean resources will likely present a future risk of conflict or damage to undersea infrastructure (pipelines, communications cables, etc.) from other economic activities (e.g. fishing trawlers that drag the ocean bottom, subsea mining, etc.)	<ul> <li>Wastewater discharge permit system based on appropriate standards for industries;</li> <li>Wastewater treatment facilities with land-based options for final treatment and discharge of water;</li> <li>Implement waste management plan</li> <li>Possible requirements for oil and gas waste landfill;</li> <li>Waste to energy plants to reduce demands in limited coastal lands;</li> <li>Adopt international best practices</li> <li>Establish operational standards</li> <li>Investment in off-shore fishing fleets</li> </ul>
Urban planning and development	<ul> <li>OECS cities and towns were developed more than a century ago. As such urban planning in coastal areas have not accounted for climate and coastal disaster risks related to extreme weather events, sea level rise and coastal flooding.</li> <li>The CMSP must include planning for climate change future risk scenarios, sea level rise, storm surges and increased coastal flooding;</li> <li>Most of the fisherfolk in OECS MS live in informal coastal settlements on public lands. Poor infrastructure results in pollution of nearshore areas from domestic wastewater and runoff from the land;</li> <li>Relocation of fishermen and coastal communities in areas targeted for development of marina and coastal villages;</li> <li>Government of Grenada has no lands in Petit-Martinique and forced acquisition of lands from islanders has been</li> </ul>	<ul> <li>Adopt abandon and retreat policy;</li> <li>Allocation of green spaces for healthy living, conservation of biodiversity; cultural heritage;</li> <li>Allocation of space for waste management facilities;</li> <li>New high tide and base scenarios for setback guidelines;</li> <li>Coastal wetland parks designed to allow for coastal flooding from both stormwater runoff, storm surge and sea level rise;</li> <li>Enforcement of coastal development setback guidelines;</li> <li>World Bank resettlement policy;</li> <li>Legal framework and policy for Public Participation in Development;</li> </ul>

SECTOR/Main sources of Impact	PREDICTED IMPACTS AND RISKS	MITIGATION STANDARDS
sources of impact	historically problematic; Compensation for lands remains a contentious matter  • Communities vulnerable to natural disasters are targets for involuntary resettlement in Dominica.;  • Displacement of communities by government backed private-sector investment projects.	Impact benefit agreements so that communities can benefit from investments in the Blue Economy and share in benefits of oil and gas development.
Housing & Settlement	<ul> <li>Loss of coastal forests and associated wildlife for residential development;</li> <li>Housing development is driven by the private sector and due to the lack of area management plans infrastructure development is inadequate for stormwater and wastewater management;</li> <li>Increased housing development in coastal locations with high natural hazard risk exposure;</li> <li>Dependence on public shelters and not included as part of development infrastructure.</li> </ul>	<ul> <li>Protected areas of representative coastal forests created;</li> <li>EIAs for housing development;</li> <li>Hazard risk assessment and disaster management plans for housing development (typically not done);</li> <li>Wastewater treatment facilities integrated into housing development projects</li> </ul>
Water Use and Resources	<ul> <li>Groundwater supplies in coastal communities at risk from overuse pollution from development and saline intrusion due to sea level rise;</li> <li>Increased extraction of surface fresh water will negatively impact agriculture, ecology of watersheds and nutrient upwelling in coastal zones;</li> <li>OECS MS have developed water policies or and watershed management plans in place to encourage sustainable and equitable access to water resources. Enforcement of these policies has been lacking.</li> <li>Increasing freshwater availability in coastal areas (e.g. via desalinization) will have positive impact on future development opportunities however brine and wastes from the process will contribute to further destruction of coastal ecosystems. Renewable energy (e.g. solar PV) will offset the huge energy demand for desalinization.</li> </ul>	<ul> <li>Create buffer zones to prevent development of civil works in upland water recharge and lowland extraction zones;</li> <li>Implement watershed management and water policies;</li> <li>Update water quality standards</li> <li>Monitor discharge zones</li> <li>Adopt policy for use of renewable energy for desalination projects and grid connect arrangements</li> </ul>

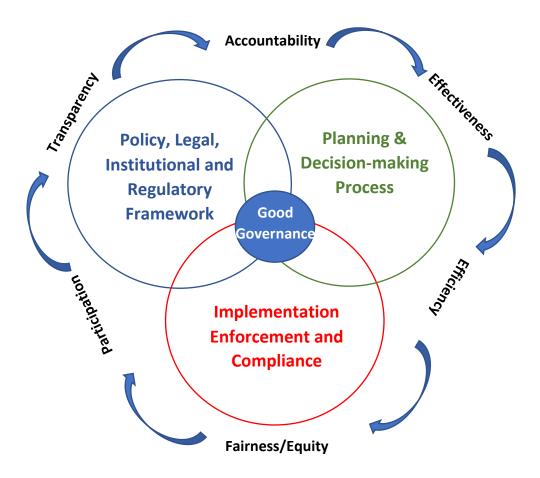
SECTOR/Main sources of Impact	PREDICTED IMPACTS AND RISKS	MITIGATION STANDARDS
Extractives (Oil, gas and mining)	<ul> <li>There are exploratory subsea mining activities already underway for Grenada</li> <li>There is no offshore or coastal onshore oil, gas or mining exploration or production activities already present and plans are not available for review</li> <li>At present there are no sector-related infrastructure or facilities located in ecologically sensitive coastal zones (e.g. refinery, LNG storage terminal, mineral port, loading/unloading facilities and associated road, rail and power and water supply infrastructure)</li> <li>Sand and gravel mining, although illegal in most cases, have negative effect on shoreline stability or sea-floor ecosystems in all OECS MS.</li> </ul>	<ul> <li>Adequate mining regulatory framework to include standards and best management practices for ecosystem restoration;</li> <li>Ban on resource extraction from vulnerable areas under intense coastal erosion</li> <li>Petroleum regulatory framework</li> <li>Climate change modelling and sea level rise risk maps</li> <li>Adequate cadaster</li> <li>Need national policies for development of the oil and gas sector to include coastal and marine resources management</li> </ul>
Renewable and other Energy Development	<ul> <li>Existing power plants located in low-lying coastal areas</li> <li>There are feasibility studies to determine the viability of new onshore or offshore energy projects (solar, wind, geothermal, etc.). Results are not yet finalized. In the case of solar farms their potential footprints overlap existing uses of coastal spaces. Marine windfarms are proposed however there is no available feasibility studies on same at present;</li> <li>Competition for agricultural lands as areas with highest solar insulation overlap with best arable flat lands;</li> <li>Roof mount PV solar must integrate hurricane risk exposure in design life.</li> </ul>	<ul> <li>Long term environmental studies to determine migratory routes of faunal species;</li> <li>EIAs regulatory framework developed</li> <li>Policies for public participation in Planning Process</li> <li>Environmental monitoring framework and indicators</li> <li>Caribbean Union Building Code (CUBIC) OECS Building Code</li> </ul>
Maritime Transport to include marinas, boatyards and yachting sector	<ul> <li>Increased pollution of coastal and marine zones from oil spills, ballast water and wastewater/sewerage;</li> <li>Pollution from chemicals used in boat repair and maintenance;</li> <li>Potential for increase conflicts between fisher folk, government and investors in marina, tourism projects; Areas in Petit-Martinique targeted for development is used by fishermen.</li> </ul>	<ul> <li>IMO environmental guide for marina and boatyards in the Caribbean</li> <li>The location of shipping lanes and sensitive ecological areas must be mapped on marine spatial plans to determine where they intersect and to zone uses appropriately for better management;</li> </ul>

SECTOR/Main sources of Impact	PREDICTED IMPACTS AND RISKS	MITIGATION STANDARDS
	Increased piracy in OECS MS.	<ul> <li>The impact of piracy on shipping or other uses of ocean and coastal space needs to be assessed and included as part of regional maritime security agenda.</li> </ul>
Tourism	<ul> <li>In OECS MS there are planned and existing tourist facilities in low-lying coastal areas, which have operations or guest activities (boating, scuba-diving, etc.) which pose risks to local ecosystems (wildlife, coral reefs, mangroves) – over use of recreational areas; disposal of untreated sewage; generation of large volumes of solid waste)</li> <li>Other existing or planned economic activities in coastal or marine areas which could pose a threat to or compete for resources with tourism activities include oil and gas exploration; development of marine wind farms; aquaculture.</li> <li>Capacity assessment of coastal and marine resources to keep pace with the fast-growing rate of tourism sector is necessary.</li> </ul>	<ul> <li>Definition of No-go areas and buffer zones to preserve protected areas;</li> <li>Introduce the precautionary principle</li> <li>Establish regulatory system that excludes oil&amp; gas activities in the proximity of protected cultural heritages and marine protected areas</li> <li>Establish limits of acceptable change and carrying capacity for marine parks and conservation zones</li> </ul>
The inter- relationship between the issues	<ul> <li>Multiple effects – biodiversity and faunal effects         associated with habitat disturbance; contamination of         soils, and groundwater; oil spill risks</li> <li>Cumulative effects</li> <li>Implications for Spatial Land Planning</li> <li>Waste management</li> <li>Potential pollution of remote uncontaminated areas</li> </ul>	<ul> <li>Develop a cumulative effects management framework</li> <li>Decision-support system for ecosystem-based approach to coastal and natural resources management;</li> <li>Inter-agency collaboration;</li> <li>Integrated development planning (multi-sector);</li> </ul>

# 1.7 Program 2 - Good Governance Framework for CMSP

Weak or poor governance has been cited as a significant contributor to over-exploitation of marine resources, environmental pollution and degradation of the Caribbean Sea. A framework for good governance was developed as a means of conducting an analysis of institutional capacities in OECS Member States. Measures to improve governance are provided in sections 1.8 and 1.9 below.

There are three key components of the framework for good governance: 1) Legal, regulatory and Institutional Framework; 2) Planning and Decision-Making Process; and 3) Implementation, Compliance and Monitoring.



# 1.8 Regional Priority Areas for Action

While the outcomes of the CROP CMSP are specific, to ensure success in implementation action is needed to improve governance as well as to mitigate impacts of environmental degradation. Several priorities to improve the governance framework for management of marine and coastal resources at the regional level, were among the key findings of the situation and stakeholder analysis and the recommendations from the CROP feasibility study. They include:

#### 1.8.1 Immediate to Short Term Actions (2018-2020)

- The terms of reference and composition of the regional Ocean's Governance Team must be reviewed to ensure that there is full stakeholder participation in MSP processes;
- For a regional MSP to be effective, the World Bank and the OECS Commission must solicit the buy-in and participation from as many countries sharing the island chain as possible;
- Regional agencies and projects should be engaged to help encourage participation from non-CROP countries;
- The regional Ocean Governance Team should play a key role in guiding the work of the national and regional MSP to ensure that decisions are aligned with international best practice;
- A regional data base of persons qualified in MSP relevant fields should be created to allow for exchange and utilization of national and regional technical experts in the planning and implementation of MSP;
- The key activities that should be completed prior to the final approval by the GEF and project kick-off include concluding boundary delimitation discussions with neighboring countries, soliciting buy-in and participation from other countries that are not part of the CROP, and mobilizing additional financial resources;
- A regional Legal Advisory Task Force with representation by the Attorney General from each OECS country should be created very early in the process to provide legal guidance for the MSP.

#### 1.8.2 Medium to Long Term Actions (2020-2022)

 Collaboration mechanisms with potential regional partners should be promoted as there are several ways that they can support CROP implementation including mobilizing finances, providing training, undertaking project work, supporting stakeholder participation, and guiding the development of the required legislative and operational framework;

- Establish a regional environmental protection agency to provide support for national agencies in areas such as monitoring, baseline ecosystems surveys and assessments, research, environmental information management systems and data management;
- Establish a regional environmental commission, tribunal or court at the CCJ to address matters related to management of the Caribbean Sea, territorial boundaries and EEZ, compliance with regional environmental standards and laws;
- Develop regional oversight mechanism for public authorities with responsibility for environment, coastal and marine resources management;
- Develop regional oversight mechanism for transparency, accountability and combating corruption in allocation of resources from exploitation of natural resources;

#### 1.9 National Priorities for Action

The areas for action are grouped based on the findings presented for analysis of the Governance Framework in Section 2 above. Separate attention is also given to prioritizing action for reducing the environmental pressures that result in degradation of the coastal and marine resources in OECS MS. A general requirement is the need to develop indicators for tracking progress in governance of coastal and marine resources.

Each member state was required to provide national priority selection to feed in the SESA process. Responses were provided by Dominica, Grenada and St. Lucia and these are attached as annexes to the report. The following is the ranking developed by the consultant which will apply for St. Kitts and Nevis and St. Vincent and the Grenadines, as informed by the situation analysis.

Priority 1: Immediate Action (2019-2019)

Priority 2: Short-term Action (2020-2020)

Priority 3: Medium to long term (2020-2022)

# 1.9.1 Legal and Regulatory Framework

# Table 1.2 Recommended Actions for improvement of Legal and Regulatory Framework in OECS MS

Sub-Components		RECOMMENDATIONS FOR ACTION	PRIORITY
	Laws, policies and	Enact Environmental Management Act and supporting regulations	1
	strategies related to coastal and marine	Enact Regulations for Physical Planning Act to include regulations for EIAs	1
	management	Adopt international MEAs into domestic legislation	2
RK		Revise Forestry and Fisheries Legislation to include coastal zone management	1
EOW		Revise and update Beach Protection Act to include coastal erosion and sea level rise	2
ONE REGULATORY FRAMEOWRK		Develop National Ocean Governance Policy	1
¥	Legal framework to	Develop legal framework for user rights of public lands, forests, beaches, mangroves, coastal and marine spaces	2
TOR	support and protect	Revise user rights and fee structures for national parks and protected areas	1
l i	land tenure, ownership and use rights	Kalinago Territory need to improve framework and develop by-laws to protect communal natural resources	1
ONE	and use rights	Geographic coordinates for Kalinago Territory to be legally defined for spatial plans	1
	Integration of Development Policies with CMSP	National Physical Development Plans integrate Climate Change Adaptation Plans	2
COMPONENT TIONAL AND		Tourism Master Plan integrate climate change and sea level rise	1
P IP		Forestry Policy and Action Plans; include mangroves and protection of coastal wetlands	2
≥ <u>5</u>		Housing Policy and Settlement Plan integrate into CMSP	2
° 5		Multi-hazard risk assessment	1
STI		Develop linkages with national development plans and poverty reduction strategies	1
AL, IN	Institutional Framework	Develop institutional framework to protect traditional resource rights for sustainable livelihoods of vulnerable and marginalized communities	
COMPONENT POLICY, LEGAL, INSTITUTIONAL AND		Kalinago Council needs to manage traditional practices for natural resources use; develop by-laws to manage land to reduce conflict between formal and informal	1
, IIC		Protect right of public access to the seashore and marine resources in CMSP	1
lo d	Financial Incentives, Economic Instruments	Revise tax regime and concessions for fishing and tourism sectors to correct distortions which contribute to environmental degradation	2
	and Benefits sharing	Introduce structured license fees for commercial fisherfolk and tourist sport fishing	2
		Develop quota system for extraction of natural resources for all users (private and commercial)	2
		Develop regime of economic instruments for resource management	2

# 1.9.2 Planning and Decision-making process

Table 1.3 Recommendations for Improvement of Planning and Decision-making process in OECS MS

	<b>Sub-Component</b>	RECOMMENDATIONS FOR ACTION	PRIORITY
	Planning	• Update Socio-economic development plans to include projects and actions for reduction of environmental pressures which lead to environmental degradation (see table 3.4 for areas for action)	1
	Context and Levels of	Conduct training in use of economic valuation, environmental assessments, hazard risk assessment and climate change scenarios to evaluate Public Sector Investment Projects	3
	Planning	Update Sectoral development plans to include provisions for protection of coastal and marine resources as appropriate	3
S		Promote integrated development planning	3
OCES	Planning Process &	• Improve participation of Private sector and citizens in the planning and decision-making process across all levels of planning	1
PR	Decision	Operationalize ecosystems-based approach in coastal and marine spatial planning process	1
COMPONENT TWO AND DECISION MAKING PROCESS	Support Systems	Develop decision support systems and integrate hazard risk and environmental analyses into the decision-making process	1
TWO	Public	• Institutionalize public participation; include standing citizen advisory groups in setting priorities for development plans	1
T	Participation	Enforce Freedom of Information Act	2
COMPONENT ND DECISION		Develop guidelines for public participation in environmental and social impact assessments; make stakeholder consultations for EIAs a mandatory requirement	1
MPO) DECI		Adopt principles and provisions of Regional Agreement on right to access to information public participation and environmental justice into national legislation	2
		Develop indicators to track progress in implementation of policies, projects, plans etc and evaluate impact	1
AA	Transparency & Accountability	Improve transparency of CBI Projects which utilize public coastal and marine resources	2
Ğ		Make public all lease, licenses, permits, quotas, concessions granted for coastal and marine resource use/development	2
		Develop indicators to track progress in implementation of Freedom of Information Act	1
		Develop regional oversight mechanism for public authorities	
PLANNING	G. 1 1 11	Correct public policy failures which limit stakeholder action in development planning and decision-making process	3
	Stakeholder Capacity and	Create program of action to build capacity for stakeholder action in Kalinago Territory	1
	actions	Develop national environmental education strategy for all levels of decision-makers	2
		A well-funded and comprehensive communications strategy should be developed that engages all stakeholders, and utilizes diverse media outlets (e.g., web, public lectures, and stakeholder meetings) to reach the public.	1

# 1.9.3 Implementation, Monitoring and Compliance

Table 1.4 Recommendations to Improve Implementation, Monitoring and Compliance in OECS MS

Sub-Component		RECOMMENDATIONS FOR ACTION	PRIORITY
H H	Administration of	Improve capacity of ministries charged with responsibility for management of coastal and marine resources (human, technical, financial)	1
COMPLIANCE	coastal and marine	Develop participatory approach for monitoring of coastal and marine ecosystems	1
	resources	Publish state of the environment reports (annual)	1
		• (see list of environmental issues requiring action)	
		Indicators and benchmarks for tracking environmental quality must be developed	1
<b>□</b> 9		Improve capacity of judiciary for enforcement of laws and regulations	3
REI 3 A	Law enforcement	Develop incentives for public participation in enforcement	3
ΞΞ		Develop financial and tax incentives for voluntary compliance	2
F &	Administration of	Develop regional environmental commission, tribunal or court	3
COMPONENT THREE IMPLEMENTATION, MONITORING AND	land tenure and property rights	• Improve access to judiciary; educate citizens on rights and process for judicial intervention in resolving conflicts	2
		Kalinago Council - Develop land and property administration system for Territory	2
ATI		Develop regional environmental protection and management authority	3
Ę	Cooperation and	Develop standing committee, citizen development commissions for CMSP	1
LEME	coordination	Institutionalize roles and responsibilities of regional coordinating agencies	2
Σ	Measures to address	Develop regional oversight mechanism for combating corruption	3
_	corruption		

# 2.0 SCOPE

While the outcomes of Component 1(a) of the CROP are spatial plans, large emphasis is placed on the planning process itself. Planning as a process involves participation across sectors and interests and is multi-objective and multi-dimensional.

Coastal and marine spatial (CMS) planning is a comprehensive, adaptive, integrated, ecosystem-based, and transparent spatial planning process, based on sound science, for analyzing current and anticipated uses of marine and coastal, areas.

An ecosystem-based approach to planning requires systems thinking be applied to the decision-making process. Decision support systems have been developed for integrated coastal zone management (ICZM) and are applicable for the CROP project.

The CMS planning process results in the identification of areas most suitable for various types or classes of activities to reduce conflicts among uses, reduce environmental impacts, facilitate compatible uses, and preserve critical ecosystems. It is therefore a public policy process for society to better determine how marine and coastal resources are sustainably used and protected now and for future generations.

It involves the basic difficulty, even impossibility, of predicting future events; the interaction of decisions made in different policy spheres; conflicts of values which cannot be fully resolved by rational decision or by calculation; the clash of organized pressure groups and the defence of vested interests; and the inevitable confusions that arise from the complex interrelationships between decisions at different levels and at different scales, at different points in time.

# 3.0 BACKGROUND

#### 3.1 Sector Programme justification and purpose

To promote a common approach to ocean governance (i.e.: pursue a blue economy), the OECS has taken a first step through the adoption of the Eastern Caribbean Regional Ocean Policy (ECROP) and its Strategic Action Plan. Endorsed by the OECS' Heads of Government in 2013, ECROP guides the future use of the region's marine waters and provides a basis for enhanced coordination and management of ocean resources within the Eastern Caribbean. The OECS Commission operates within the regional mandate of ECROP which encourages the collaborative formulation of well-integrated governance frameworks capable of addressing marine user conflicts and protect the fragile legacy of their marine environment. With few spatial planning initiatives of smaller scale adopted so far, ECROP calls for multiple-use ocean planning and integrated management techniques for better decision-making over transboundary marine systems.

In response to the outcomes of the ECROP, the OECS with the World Bank have prepared the Caribbean Regional Oceanscape Project (CROP) that responds to such demand for spatial planning initiatives, through the adoption of coastal and marine spatial plans to coordinate management across sectors and resources and integrate environmental management directly with economic development. These plans will build upon early national marine planning efforts<sup>2</sup> and will help Eastern Caribbean countries better understand and then reform governance of the diversity of ocean uses and economic activities, resulting in a more secure framework for sustained investment in the blue economy.

CROP is being implemented in five participating OECS Member States (MS): Dominica, Grenada, St. Kitts and Nevis, Saint Lucia, St Vincent and the Grenadines.

As a precursor to the development of Marine and Coastal Spatial Plans to improve ocean governance, a Regional Strategic Environmental and Social Assessment (SESA) is

<sup>&</sup>lt;sup>2</sup> National Ocean Policies in St. Vincent and the Grenadines, and St. Kitts and Nevis (draft); Integrated Coastal Zone Management (ICZM) policies in Grenada and St. Lucia

required. The SESA will facilitate the incorporation of priority environmental and social considerations into CROP outputs and outcomes particularly as related to indigenous communities where relevant, and to concerns associated with natural habitats, especially mangroves, coral reefs and sea grass beds and their associated biodiversity at a Regional level. The SESA will identify environmental investment opportunities and promote environmentally sustainable and socially responsible development from a regional perspective. In this way, the Regional SESA is expected to promote long-term integrated development planning for sustainable economic growth and poverty reduction within the region.

#### 3.2 Coastal and Marine Spatial Plans in the OECS

Each CROP country, except for Grenada, has yet to clearly articulate their own vision and national policy direction for coastal and marine spatial plans for their country, which will align with the regional project vision. This vision statement should be realistic, credible, and attractive such that it attracts commitment and energizes people, while creating meaning to stakeholders.

It is recognized that broad-based stakeholder participation is a critical aspect to the planning process to achieve consensus and ensure that plans are sustainable, can lead to economic growth and equitably share those benefits.

Examples of stakeholder action to formulate coastal and marine spatial plans can be found in Dominica and St. Kitts and Nevis. In the case of Dominica stakeholder action led to the creation of the Portsmouth Citizens Planning Commission to resolve problems with rapid unplanned development of the town.

For St Kitts and Nevis, stakeholders participated in developing the first marine spatial plan in the region. Figure 3.1 presents a summary of the main lessons learnt from the process.

#### Figure 3.1 LESSONS LEARNT FROM ST. KITTS & NEVIS MARINE ZONING PLAN

- The importance of establishing strong relationship with stakeholders (users, government and private sector). The project team invested a great deal of time and resources in forging relationships with government Ministries, their respective agencies, and stakeholders of St. Kitts and Nevis. A steering committee with membership across agency staff and user groups was established to guide the Marine Spatial Planning process. These relationships were instrumental for many activities from project management to collection of data during field surveys.
- The challenge of representing habitat and uses at the edges (for example off-shore and watershed areas). Although the country indicated the desire for a zoning plan that extends out to the EEZ the project team was not able to address this due to the lack of clear methodology for the collection of spatial information for habitats extending beyond the 30-meter depth contour line, and the scope of resources for the project.
- The challenge of representing the future vision for marine systems in quantitative and analytical tools
  deployed in a marine zoning process. The project team dedicated considerable effort to helping citizens
  of St. Kitts and Nevis to define a shared vision for their marine space. The challenge was then spatially
  representing this shared vision and explicitly incorporating the vision into quantitative and analytical
  tools.
- The important yet challenging task of effectively integrating socio-economic and ecological data. Prioritizing the collection of a wide variety of information across both the socio-economic and ecological spectrum and integrating this information can be challenging. Making balanced decisions on investments of data resources, acknowledging the mismatch in scale between types of data, and making transparent choices to overcome this challenge is essential.
- The importance of careful and thoughtful use of systematic conservation planning tools.

  The systematic conservation-planning tool applied in this project (Marxan with Zones) helped organize a wide range of information and assign actions to specific locations across the seascape. Like any modeling tool, Marxan with Zones presents a set of challenges and opportunities. There is a danger of such tools becoming a "black box" with choices and assumptions unclear to stakeholders, setting up a negative chain reaction against other decision support products. In order for these tools to be useful, it is important that they are applied in the most transparent manner, with stakeholder involvement in the definitions of key assumptions and parameters.
- The challenge of effectively matching the scale of the problem with the solutions. There is a fundamental dilemma in ocean management: the scale at which we can readily practice effective management and the scales at which marine ecosystems operate are very different (Agardy 2010). This is a very common problem in small island developing states. Successfully achieving sustainable ocean use will require recognition of this problem, mobilization of resources to develop solutions, and leadership in driving change.

The draft marine zoning design and all of the project activities leading up to it have built a strong foundation for marine zoning in St. Kitts and Nevis. The next phase of this work involves continuing the work with government and stakeholders of St. Kitts and Nevis to finalize and implement the existing draft marine zoning plan. Moving the marine zoning design generated for St. Kitts and Nevis to a fully implemented marine zoning plan will take a concerted effort on the part of government, user groups, NGOs, and the international community.

Source: http://www.marineplanning.org/Case\_Studies/StKittsNevisZoning.html

"Toward a Blue Economy: A promise for Sustainable Growth in the Caribbean" provides a framework within which OECS States can articulate their vision and national policy direction.

The Grenada Blue Growth Master Plan is considered an exemplar and therefore used as the future scenario upon which to provide environmental and social guidelines for the SESA on coastal and marine spatial planning in OECS States. The CROP CMSP will also develop a *refined* Grenada Blue Growth Master Plan which is a desired outcome of the Planning process.

Annex 3 of "Towards a Blue Economy: A Promise of a Sustainable Caribbean" present a detailed overview, spatial representation and portrayal of a future scenario for marine/coastal development in Grenada, Carriacou and Petit Martinique.

The key features of the coastal and marine spatial plans are summarized on the following page (excerpt from document). This information on Grenada's Blue Growth Master Plan (BGMP) is based on what has been made available to the consultant from the OECS Commission for use in the SESA. The consultant has no other knowledge of any updates or changes to the BGMP.

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#### GRENADA BLUE GROWTH MASTER PLAN

- 1. **MARINE SERVICES** Development of new full-service marinas on Petite Martinique and Carriacou will enhance their strategic location as a 'Gateway to the Grenadines' and southern safe haven during the hurricane season. New jobs will help to boost the economy in those areas and allow residents to pursue work without having to leave the islands.
- BOUTIQUE TOURISM New smaller-scale resort hotels with high-end amenities will help increase the international tourism business to northern Grenada, Carriacou, and Petite Martinique. The relocation of the existing Lauriston Airport in Carriacou to Dumfries, with a longer runway that will accommodate commercial airlines, will open the door for new tourism opportunities.
- 3. MARINE RESEARCH Northern Grenada, with access to the pristine ocean waters surrounding Ronde Island, the Leatherback Turtle nesting area near Levera, and the submerged volcano—Kick Em Jenny just off shore—should establish itself as the base of operations for significant marine research into the potential benefits from the ocean's biological resources and unique environment. Facilities that foster research activities by academic, private, government, and international institutions could include: Ocean Life Research, Turtle Research, and expanded Submarine Volcano Research.
- 4. **ECOTOURISM** With its close proximity to Mount St. Catherine, the highest mountain peak in Grenada, and to numerous waterfalls, Victoria is a prime location to promote Ecotourism in Grenada. The scenery is breath taking and the flora and fauna of the rainforest will be major draws for hikers. Development will highlight activities centered on Healthy People and a Healthy Planet, including Renewable and Efficient Energy.
- 5. FISHERIES/AQUACULTURE The village of Gouyave is the 'Fishing Capital of Grenada' and host to weekly 'Fish Friday' festivals. Development here will further promote the fishing industry in Grenada with increasing exports to North America and Europe. CRFM members were also recently urged to reverse the decline in aquaculture. In addition to the promotion of the fishing industry, new development should advance Gouyave as a Fisheries and Aquaculture leader in the region.
- 6. **GLOBAL TOURISM** The southwest quadrant of Grenada, with the international airport and cruise ship terminal will further promote development with a focus on Grenada as a world-class tourism center for hospitality, education, medical care, and sports. New facilities that will enhance the global market image include a Grand Anse Tourism Center, Medical Tourism Hospital, and Wellness Campus, Hotel/Casino, Regional Sports Center and Village, and the site for the proposed Blue Growth and Oceans Governance Institute.
- 7. **SCIENCE AND TECHNOLOGY** This area, with proximity to the airport, major businesses in St. George's, and St. George's University, is envisioned as a high-tech knowledge corridor for new international ventures and services in concert with the proposed new Google partnership.
- COASTAL RESIDENTIAL The southeast coast of Grenada, with numerous peninsulas and protected coves, is ideal for the development of marina communities for residents as well as retired expats. The developments will range from individual homes to villas and multi-family apartment complexes.
- SHIPPING AND INDUSTRY Relocation of the port to Grenville, in conjunction with a free trade industrial zone and cargo air terminal, will increase Grenada's role in the shipping industry while allowing the development of light industrial activities and other new economic opportunities for Grenada's east coast.

#### **Notes on the Plan** (excerpt from document)

Land within each of the proposed development zones was identified along with a list of potential projects that would be provided special Blue Growth Incentive Packages by the government.

Potential strategic projects were discussed based on the following criteria:

- The plan must consider conservation and protection of the environment.
- The plan must reflect the 'Pure Grenada' brand.
- The plan must integrate with Grenada's strategic plan and coastal zone management plan.
- The plan should be 'transformative' and address the economic, environmental, and social impact.
- The plan should allow opportunities for local investment.

From the list of strategic projects, the following criteria was used to determine priority projects:

- The project is sustainable.
- The project promotes economic, environmental, and social goals.
- The project addresses a global and/or Caribbean market.
- The project does NOT require a government infrastructure investment.
- The project has a high potential for private investment.
- The project creates both short-term and long-term jobs.
- The project is likely to create 'spin-off' projects and opportunities.

Preliminary design concepts were developed for the priority projects to best convey the vision to investors. These diagrams and benchmark images are indicative of the desired project scope and scale but are not final designs. The investor is invited to discuss alternative concept plans and/or a project scale that may better meet the investor's financial pro forma.

# 3.3 Environmental policy, legislative and planning framework

The policy, legal, institutional and regulatory framework for coastal and marine spatial planning in the OECS must also be analysed across several levels of influence, international, regional, national and sub-national (Figure 3.1). In this analysis "institutions" is distinguished from "organizations" and used in its broadest application to include: customs, behaviour patterns, rules - cultural norms and practices which shape the political economy, rights, access, duties, use and allocation of coastal and marine resources and the stakeholders involved in management of those relationships. This definition of institutions is of significance given that it is necessary to examine customary practices for coastal and marine planning for the indigenous Kalinago community of Dominica.

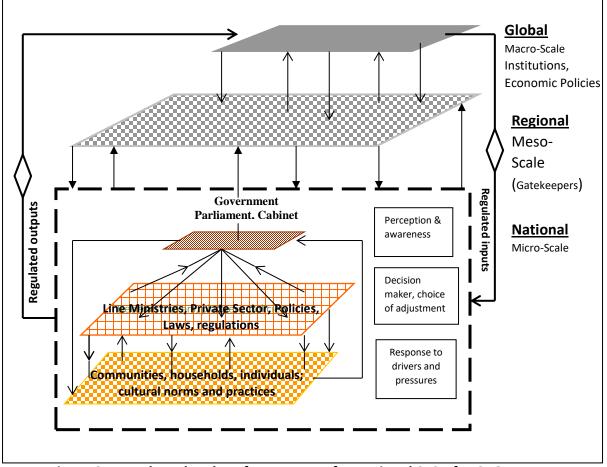


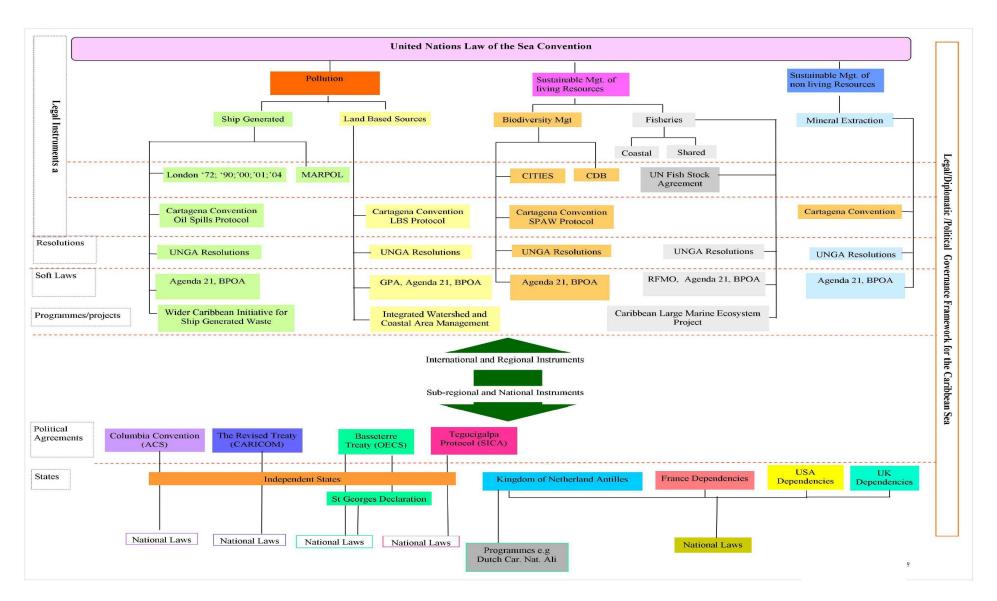
Figure 3.1 Levels and scales of assessment for Regional SESA for CROP

#### (a) International & Regional Laws and Agreements for CMSP

Singh (2008) conducted a comprehensive review of the policy, legal and regulatory framework for governance in the Caribbean Sea at the international and regional level but did not delve into the national level (Figure 3.1). The review provides a thorough treatment of international conventions and laws, multilateral environmental agreements, UN general agreements, regional treaties and agreements and "soft laws", resolutions and diplomatic agreements. Dr. Singh provided details on the provisions of the various conventions across three themes, pollution, sustainable management of living resources and sustainable management of non-living resources. From the review it can be concluded that there is a robust regulatory framework for Caribbean ocean's governance at the international level (Figure 3.2; Annex I).

A work plan was formulated by the Association of Caribbean States (ACS) and UNECLAC to track progress in implementation of the obligations under the various resolutions and agreements. Following from the work of the ACS, Singh concludes that "large cohort of responses have been undertaken by States and it shows that actions are being taken in the region. For example, projects were undertaken to address integrated coastal zone management, upgrading contingency plans for port States, addressing oil pollution and information and training for oil spill response among others". Singh notes however that there is a lack of clarity or coherence in some of the conventions and in many cases repetition of provisions. States have been slow in ratifying agreements after signing and even slower in effecting implementation at the national level. It is noted that independent States are quicker to ratify agreements than dependent territories who are lagging behind. The recommendation is made for a common legal framework for Caribbean oceans governance, to rationalize the various MEAs and develop coordinating mechanisms for their implementation.

Figure 3.2 Conventions, MEAs, Policies and Programs of Action for Management of the Caribbean Sea (Singh, 2008)



- .(c) National policies, legislation, and regulations for CMSP
  - Annex I provide a comprehensive listing of all the policies, legislation, regulations,
     conventions and MEAs for coastal and marine spatial planning in OECS MS.
  - National policies, strategies and programs of action for emerging environmental management issues such as climate change, conservation of biological diversity and marine resources are influenced by international conventions and multilateral environmental agreements. Most of the national laws' pre-date these international agreements.
  - A striking observation is the fact that despite the signing or ratification of several of the international and regional conventions and agreements, countries have been slow in adopting them into national legislation to effect implementation. The ability to translate global, regional and national policies all the way through to the community and individual level where actual resource utilization takes place, explains the ongoing challenge for achieving sustainable development in the region.
  - OECS MS are presently taking action to legally define their territorial boundary and there are boundary conflicts to be resolved. This is of critical significance given the wealth of marine resources to be exploited. In addition to fisheries, whaling, recreation, tourism and yachting there are potential petroleum and other geological natural resources.
  - The OECS Marine Research Strategy is designed to allow MS take advantage of this wealth of resources including the potential for marine medicine and ocean energy. It is clear though that these resources are presently undervalued and underutilized, and the policy framework must be updated to fill this gap. As is the case for their territorial boundary, the exclusive economic zone (EEZ) is not yet legally defined for all OECS MS.

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#### 3.2.2 Legal Framework to protect Land tenure and resource rights

- In OECS MS the upper watersheds and catchments are typically Crown lands (state owned) with very limited area being privately owned. These have been declared as protected watersheds or national parks and managed by the Forestry or National Park Departments. Privately owned lands in upper watersheds are utilized mainly for agriculture and to a lesser extent residential purpose
- In most States there are customary resource use rights such that resources on state lands are considered *de facto* common property except in the case of Dominica where natural resources are legislated as property of the State and every person requires a permit or license to extract resources (fish, hunt, gather).
- In other territories licenses and permits are required only where resource extraction is for commercial purposes. Marine resources are also customary de facto common property and people have rights for access to the coast and marine space.
- The OECS Protected Areas and Associated Livelihoods Project (OPAAL, 2004-2010)
  resulted in the development of management plans for protected watersheds in
  Member States. Economic valuation was undertaken for some watersheds. There
  has been a trend to establish marine parks and protected areas in OECS MS and
  each island now has at least two areas formally declared and managed.
- Protected watersheds are forested areas and the non-timber forest products including eco-tourism services have traditionally been treated as de facto common property resources. The impact of the trend [to apply market

mechanisms to manage traditional common property assets] on the sustainable livelihoods of natural resource dependent communities has yet to be assessed.

- One of the most successful MPA has been the Soufriere MPA in St. Lucia. The
  lessons learnt from this management regime informed the development of a
  similar arrangement for Grand Anse Beach Grenada. Only St. Kitts and Nevis has
  a Marine Zoning Policy for the entire Island. This policy was formulated based on
  a combination of natural resource assessment and trade-off analysis among
  various stakeholders.
- The marine policy does not include a seamless database integrating the land with the sea and no clear pathway for management of land-based sources of pollution.

#### 3.2.3 Broader Development Policies Integrated with Coastal & Marine Policies

- OECS Member States have recently participated in a regional Integrated Watershed and Coastal Area Management Project (IWCAM) which resulted in the formulation of draft watershed management strategies and water resources management policies for participating member states. Implementation of these strategies and policies has not yet fully commenced and there remains the need for both protection of water production regions and for managing the yield of water for human consumption.
- In the drier low-lying islands in the Northern Caribbean this is of crucial importance as groundwater reserves must also be protected and managed as well. A good database is now available of the natural resources and institutional framework for watershed management (Annex VII) The challenges with management of small steep watersheds with relatively high rainfall frequencies are well documented in the list of country reports reviewed for this synthesis. (See Section 5).

- All of the OECS MS have developed National Land Policies and Zoning Plans which are in various stages of implementation and or formal approval by the Cabinet of Ministers and adoption into the legal framework. St. Lucia proposed a revised National Land Policy in 2015; St. Kitts and Nevis has several national Physical Development Zones and accompanying plans; Dominica in 2016 formulated a National Physical Development Plan which takes into account the impacts of Hurricane Erica in 2015. This plan must be revisited to account for the lessons learnt from the impacts of Hurricane Maria; St. Vincent and the Grenadines in 2014 formulated a National Physical Development Plan; in 2016 Grenada formulated a national land policy which has been approved by the Cabinet of Ministers.
- The ECROP provides a framework for redressing these challenges.
   Implementation has not yet begun as the recommended action plans have not yet been fully translated into national programs of action.
- The OECS Oceans Governance and Fisheries Unit is presently developing codes and policies for data management and marine research that will drive action at the national level. It is envisaged that implementation of the Strategic Action Plan of the ECROP will lead to a transition in integrated management of new marine resources which are currently to some extent un-assessed and under-utilized.
- In all OECS Member States over 70% of human settlement and development
  activities take place within the narrow low-lying coastal belt. Most of these lands
  are privately owned and because of market forces this zone is mainly targeted for
  tourism, commercial development, fisheries infrastructure and high-income
  residential neighborhoods.
- Tourism development policies favor coastal, beach tourism and the trend for the
  OECS is that most of the infrastructure for this sector is located within the direct
  impact zone for storm surge, tsunamis, coastal erosion and sea level rise. In
  writing this report (August 2018) the consultant's work was interrupted by an
  earthquake originating of the coast of Venezuela (7.9 lasting for 60 seconds with

impact zone radiating 200 miles outward from the epicenter) A tsunamis alert was issued for Venezuela, Trinidad and Grenada. This makes urgent the proposal for a for a regional response mechanism to the threats (Robin 2007).

#### 3.2.4 Institutional Framework

An historical analysis will reveal that most of the national legislation pre-date the OECS Member States achieving independence from Britain in the 1970s. There are no provisions in the constitutions of any of the OECS MS for environmental and natural resource rights and for citizens participation in protection of those rights. In most cases the laws are not supported by regulations and rules to allow for implementation, monitoring and compliance. Traditional norms and cultural practices influence the manner in which resources are utilized resulting in conflicts, exploitation of resources and environmental degradation.

Empirical work undertaken by Jessamy (2003, 2005, 2006) reveals that the interaction of formal and informal institutions and organizations often leads to conflict situations and poor governance. Informal institutions and organizations predominate at the micro-level, the policy space referred to as social capital. These relationships are played out in the case of the Kalinago Territory where there are no regulations for utilization of forest resources and traditional "slash and burn" practices have resulted in resource exploitation and land degradation.

The Kalinago Territory in Dominica was established by an Act of Parliament and the rights of the people are not enshrined in the constitution of Dominica. Laws and regulations for natural resource management such as the Fisheries Act and Forest Act do not include any provisions for the management of the resources of the Territory by the Kalinago Council.

Given that the policy process is driven from the Organizational/ministerial level, there are inadequate formal provisions for the empowerment and inclusion of resource users in the management of natural resources. As a result, informal cultural norms and practices predominate and there are limited procedures for regulating natural resource use

resulting in environmental degradation in most cases. There is a historical vector to the social context as exemplified by present circumstances, which were set by repetitive patterns over time. As such customary norms and traditional practices often dominate individual options and decision making in the absence of rules, codes of practice and guidelines for land, coastal and marine resource management. The role that social, institutional and political factors play in determining resource use and adoption of best management practices is paramount.

#### 3.2.5 Financial Incentives, economic instruments & benefits sharing

- The private sector in the OECS MS are provided with duty free concessions and tax holidays as incentives to operate businesses. Tourism investment laws, Fisheries Legislation, Custom Tariffs for Agriculture, Manufacturing and Industrial Sectors have been developed to facilitate economic development.
- There are few quota systems or fees for resource extraction and there are few economic instruments or tradeable permits for managing user rights. Markets are therefore able to exploit natural resource assets for capital gains with the benefits flowing largely to private individuals. Social benefits is mainly through job creation which means civil society carries the bulk of the weight for paying taxes on income and for goods and services. There are no financial incentives or requirements for environmental protection measures to manage the externalities of economic development such as wastewater management. This burdens rests with the government and civil society as a whole.
- After a thorough search of the existing literature only limited information was gathered on the economic valuation of marine ecosystems in OECS MS (WRI, 2008). There is evidence that fisheries are important for sustainable livelihoods and make a significant contribution to national GDP (ECCB).

• The externalities of tourism and human development activities are not included in assessments of the economic benefits of that sector and no one accounts for the cost of environmental degradation. There are only limited examples of use of economic instruments such as licenses, user fees and tradeable permits to manage protected watersheds in OECS Member States (St. Kitts and Nevis Dominica, St. Lucia, Bequia, Grenada – have limited user fee system for tourists to access national parks, eco-trails and attractions).

#### 3.2.6 Kalinago Territory Dominica

During consultations members of the Kalinago Council expressed the strong view that the Territory is an autonomous government on the same level as the Government of Dominica and not subservient to the Government and Ministry of Kalinago Affairs. To the Council, the Ministry of Kalinago Affairs is viewed as a liaison between the two entities. The relationship as explained by Councilman Hill, is shown in Figure 3.4.

In reality the legal framework for management of the territory is different, a vertical hierarchy of government with power aligned accordingly. As noted earlier the rights of the Kalinago Community are not provided for at the level of the Constitution of Dominica. Their rights to participation is the same as for all people of the Commonwealth of Dominica. While Section 29 of the By-Laws of the Kalinago Territory Act provides responsibilities to the Council for the management of the territory, according to Section 48 of the same Act, the overall responsibility for development and planning in the Territory is retained by the Government of Dominica.

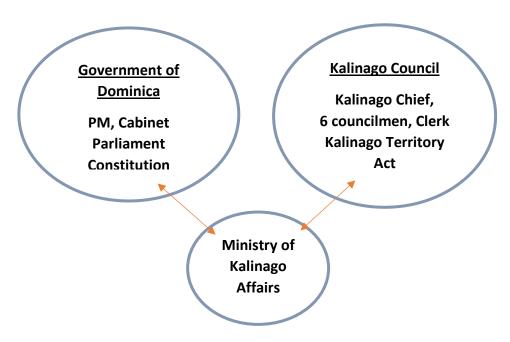


Figure 3.4 Perceived Relationship between the Government and Kalinago Council

The Ministry of Kalinago Affairs is considered "a specialized organization responsible for the people of the Salybia Constituency, and has the responsibility for coordinating the public services provided by the government while being subordinate to the Cabinet and Prime Minister".

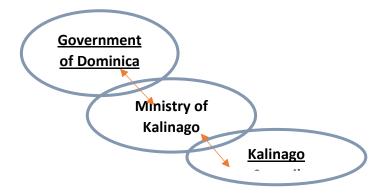


Figure 3.5 Vertical Relationship between Government and Kalinago Council

None of the laws of Dominica with respect to participation in natural resources management makes specific mention to the rights of the Kalinago Council to manage its

Territory. The recently completed National Physical Development Plan (2016) and National Land Use Policy has no demarcation of the Territory. No mention is made of specific plans or mechanisms to provide support for the effective management of the use and development of the Kalinago territorial lands.

Within this framework it is difficult for the Kalinago people to assert their rights to participation in the development process. There is dire need for substantive review of the Kalinago Territory Act as well as other legislation to provide the legal framework for participation and protection of the rights of the Indigenous people. Several potential conflicts are to be resolved or given due consideration in order to ensure equity and fairness during participation in the CMSP process:

- The exact physical boundaries of the Territory have not been formalized and there
  are long-standing disputes on same. This is important to facilitate spatial mapping
  and planning for the Territory;
- 2. The marine (land as below sea) boundaries of the Territory have not be identified and it is a desire of the Kalinago people that it is demarcated;
- 3. Plans for the Territory developed in consultation with the Kalinago people should be subsumed into the national CMSP

During the development of CMSP for Dominica separate consultations and project planning is recommended to ensure that plans are developed based on the aspirations and needs of the community and not the wider national socio-economic drivers and pressures.

# 4.0 APPROACH AND METHODOLOGY

### 4.1 General approach

In keeping with the terms of reference (TOR) for this consultancy, the main objectives of this Strategic Environmental and Social Assessment are:

- To support the understanding and further inclusion of priority environmental and social considerations in Coastal and Marine Spatial Planning (CMSP) in the CROP and contribute relevant information to Component 1 of the CROP.
- To provide specific inputs for the implementation of the regional Strategic Environmental and Social Assessment (SESA).
- To further examine the vulnerabilities as well as opportunities for the Kalinago indigenous community of Dominica as related to CMSP. An Indigenous People's Planning Framework (IPPF) will therefore need to be embedded into the SESA.
- To gather and validate risk and impact data as well as to put forward suitable and feasible recommendations intended to avoid, manage and/or attenuate these impacts;
- To facilitate the integration of these measures into coherent plans and policies and to ensure its application;
- To build strong stakeholder for a for the project's benefit. Through the for a, the
  concerns and interests of 'weak and vulnerable' stakeholders can influence the
  decision-making processes fostering in addition, increased accountability for
  policy makers; and
- To support the setting-up of an enabling framework for sustainable coastal and marine spatial planning in a participatory manner involving all key stakeholders.

### 4.2 What is Strategic Environment and Social Impact Assessment

Several key stakeholders in participating member states requested clarifications on what is a strategic environment and social assessment (SESA) and how it differs from an environmental impact assessment (EIA).

# SESA is a procedural tool to identify and evaluate: policies, plans, or programmes

EIA is a process to identify and evaluate:

# projects

that may have significant environmental and social impacts to ensure environmental and social considerations and objectives are integrated into the decision-making process at an early stage.

- SESA applied at the policy level requires focus on the political, institutional and governance context underlying decision-making processes.
- EIA differs from SESA as the objective is to decide whether a project should proceed and under what circumstances. The process involves consideration by a designated decision-making authority of a wide variety of factors, alternatives, mitigation measures, and public comments (In OECS States the authority is the Land Development Control Authority through the Physical Planning Unit).

SESA does not replace the role of EIA in the project planning process and can provide guidelines for strengthening the EIA process. Guidance documents on both EIAs and SESA are available from the World Bank and other development agencies such as UNDP, IUCN, OECD and can be consulted for further details.

Table 4.1 Differences between SESA and EIA (source: IUCN Policy Brief, 2015)

	SEA	EIA
Nature of action	Strategy, visions, concepts	Construction/operation actions
Focus	Critical decision moments along	Products of decision processes (final
	decision processes	outcomes)
Level of decision	Policy, planning	Project
Alternatives	Spatial balance of location,	Specific alternative locations, design,
	technologies, fiscal measures,	construction, operation
	economic, social or physical	
	strategies	
Scale of impacts	Macroscopic (mainly global,	Microscopic (mainly local)
	national, regional)	
Scope of impacts	Sustainability issues, economic and	Environmental with a sustainability
	social issues may be more tangible	focus, physical or ecological issues,
	than physical or ecological issues	and also social and economic
Time scale	Long to medium-term	Medium to short-term
Types of data	State of the environment reports,	Field work, sample analysis, statistical
sources	statistical data, policy and planning	data
	instruments	
Assessment	Sustainability benchmarks (criteria	Legal restrictions and best practice
benchmarks	and objectives)	
Outputs	Broad	Detailed
Post-evaluation	Other strategic actions or project	Objective evidence/construction and
	planning	operation

#### 4.3 SESA Methodology

OECS MS have yet to adopt a general policy regarding coastal and marine spatial planning and marine resource use in general. As already noted in Section 1.1 above there have been early efforts to develop marine policies and integrated coastal zone management plans. However, none of these plans or programs have yet to be fully adopted or are in the process of being adopted to implement these policies and therefore cannot be evaluated.

For this reason, the SESA methodology has been modified to consider the lack of specific sectoral plans and programs, using ECROP as the overarching policy on which to base the SESA process. In this context, the Regional SESA for the OECS CROP is considered strategic, as it attempts to evaluate important factors, risks, opportunities, and constraints related to coastal and marine resource development, which could have implications for

environmental and social management. The process is also informed by the Oceans CEA guidance note (2017), OECD Guidelines, SEA Reports from other countries and the TOR for this consultancy.

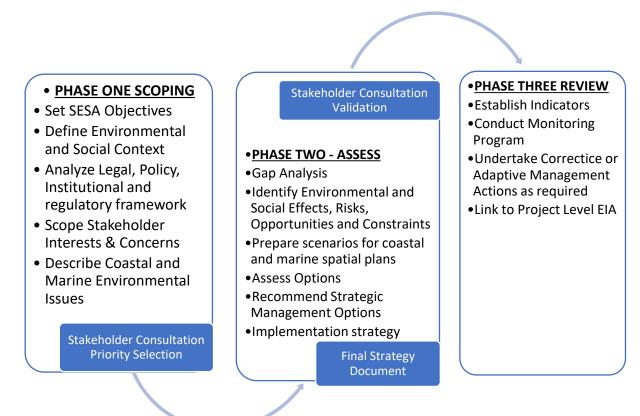


Figure 4.1 Phases and Outcomes on the SESA Process

#### 4.3.1 Tasks of the Consultancy

To fulfil the objectives of the consultancy the following iterative tasks outlined in the flow diagram below are being undertaken (Figure 1.2):

- Inception Report
- Situation and Stakeholder Analysis
- Priority Selection
- Political Economy and Gap Analysis
- Indigenous Peoples Planning Framework
- Recommendations for the SESA
- Final Report



Figure 4.2 Tasks of Consultancy – Regional SESA for OECS CROP

#### 4.4 PHASE ONE SCOPING

#### 4.4.1 Four Broad Themes of Inquiry

From the TOR, a broad range of issues were presented for inquiry in the situation analysis. The consultant was not only required to provide an analysis on the requirements for coastal and marine spatial plans (CMSP) but also the planning process itself. To provide a coherent document that contributes to the other outcomes of the consultancy and CROP, the issues were mapped into four broad themes: (Figure 1.3).

- Economic Drivers and Pressures in the Coastal and Marine resources
- 2. Current State of coastal and marine resources
- 3. Impact of drivers and pressures on Coastal and Marine Resources

#### 4. Policy Responses:

- a. Governance Framework for CMSP
  - i. Legal and regulatory framework (global/regional/national;MEAs etc.)
  - ii. Formal and informal organizational arrangements and coordinating mechanisms
  - iii. Informal Customary Planning processes
  - iv. Institutional frameworks including indigenous people's governance structure, monitoring and enforcement, public participation
- b. Tools and resource capacity for CMSP;
- C. Development planning, level of awareness, disaster risk reduction and climate change.

#### 4.4.2 Literature Review

Commencing June 2018 and continuing, the consultant reviewed more than 150 relevant documents spanning a period over twenty-five years. Documents included legislation, policies, strategies and action plans, consultant project reports, and news articles from open online sources, focal points, OECS and the library of JECO Caribbean.

From the review it is evident that a large body of information exists on the framework for management of coastal and marine resources in the region. As such no attempt is made in this assessment to repeat this process or repeat the findings of previous studies. Instead this assessment offers a deeper insight into the multi-dimensional and multi-objective planning process required for the CROP by focusing on the governance framework, political economy and public participation plan.

# Key documents that provide up-to-date background information on coastal and marine resources management in the Caribbean Sea

- The Caribbean Region Oceanscape Project (CROP). Assessment of Marine Spatial Planning Feasibility Report. The Nature Conservancy. World Bank Group, 2017.
- Caribbean Fisheries Legal and Institutional Study: Findings of the Comparative Assessment and Country Reports Food and Agriculture Organization of the United Nations Bridgetown, Barbados, 2016
- CLME+: Catalyzing Implementation of the Strategic Action Programme for the Sustainable Management of shared Living Marine Resources in the Caribbean and North Brazil Shelf Large Marine Ecosystems (2015-2025), UNDP
- Governance arrangements for marine ecosystems of the Wider Caribbean Region. Mahon et al, 2013. Centre for Resource Management and Environmental Studies (CERMES), Caribbean Sea Large Marine Ecosystem (CLME) and Adjacent Regions (CLME Project).
- Situational Analysis: Development of OECS Model Coastal Zone Management Policy and Model Coastal Development Setback Guidelines. JECO Caribbean Inc, 2016 OECS Commission USAID Funded RRACC Project

#### 4.4.3 One-to-one Interviews and Consultations

Following from the outcome of the comprehensive literature review, the consultant began engagement with key stakeholders with a clear understanding of the imperatives operating at the regional and national levels with regard coastal and marine spatial planning. The purpose of the stakeholder interactions was therefore to elicit responses on the TOR inquiry into the level of awareness of decision-makers on the need for spatial planning in the development process, and requirements for the public participation plan. A listing of stakeholders, meeting agenda, power point presentation and comments from the various interactions are provided in Annex II to VI of the full report on the Situation and Stakeholder Analysis.

The engagements were undertaken during the period July 16 to 27 2018 as follows:

Dominica
 Grenada
 St Vincent & the Grenadines
 St. Lucia
 St Kitts and Nevis
 July 16 – 20, 2018
 July 24, 2018
 July 25, 2018
 July 26, 2018
 July 27, 2018

A regional consultation was conveyed September 20, 2018 to review the outcomes of the Situational and Stakeholder Analysis and to select priorities for further assessment in the SESA. The Priority Selection is presented as a stand-alone report and summarized in Section 2 of this report. To finalize the draft Indigenous Peoples Planning Framework (IPPF), a second consultation was held in Dominica with members of the Kalinago Council on October 16, 2018. The IPPF is also presented as a stand-alone report with annexes containing the discussions from the consultations.

Table 4.2. Categorizes of stakeholders engaged

Stakeholder Category	Dominica	Grenada	St K & N	St Lucia	St V & G
Public Sector	15	7	13	10	8
Private Sector	1	5	2	0	2
M & E Officer	1	1	5	0	2
Statutory Body	1	3	1	0	1
Fisher folk	0	1	1	0	0
NGO	0	9	0	0	0
СВО	1	2	0	0	0
Academia	0	0	0	0	0
Kalinago Council	5	0	0	0	N/A
Regional/development agency*	3	3	0	2	1
<b>Total Number</b>	27	31	22	12	14
Female	6	13	7	11	6
Male	21	18	15	1	8

#### 4.4.4 Expert Judgment

The consultant is required to also use her *expert judgment* in performing the analysis on the current governance framework for coastal and marine spatial planning in OECS MS. The Feasibility study and the CLME+ SAP identified weak governance as one of the root causes for current trends in environmental quality and marine spatial planning in the Caribbean and CROP OECS member states. A framework for assessing governance, why it is weak, determining what is good governance and identification of the gaps to be filled was absent in these analyses.

From the literature reviewed there is consensus on key attributes and processes which constitute "good governance" both in general and for natural resources sectors (forest, fisheries, marine etc). Therefore, to fulfil the TOR requirements of this situational analysis and to perform the gap analysis, a framework for assessing governance in coastal and marine spatial planning was developed.

### 4.5 Geographical or environmental mapping units

Spatial management of coastal and marine resources also requires that the geographic boundaries or limits be defined. The OECS MS have made significant progress in recent times towards formalization of their maritime boundaries and exclusive economic zones (EEZ).

The feasibility study for the CROP presented the results from inquiry amongst a wide range of stakeholders in the OECS on the definition of the geographic boundaries for coastal and marine spatial planning. There was unanimous agreement among stakeholders that planning should encompass the entire coastal zone, that is the coastal catchment continuum, out to the limits of the EEZ.

Figure 4.1 presents a map of the Caribbean region showing the EEZ (established and virtual boundaries) for the various jurisdictions.

### 4.6 Assumptions, uncertainties and constraints

#### 4.6.1 Assumptions

Several underlying key assumptions were made at the initiation of the SESA process as follows:

- Strategic objectives and priorities for the SESA have been agreed by key stakeholders;
- There is willingness and commitment by stakeholders to participate in the SESA process;
- 3. The implementation and follow-up of SESA recommendations will be critical to the success of its adoption by OECS participating States.

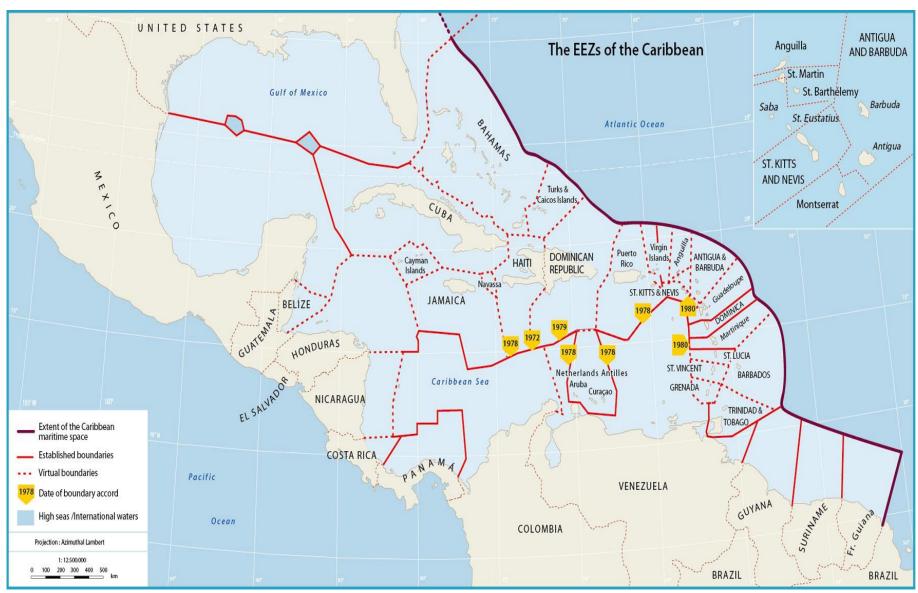


Figure 4.3 EEZs of the Caribbean States (source: <a href="http://atlas-caribe.certic.unicaen.fr/en/">http://atlas-caribe.certic.unicaen.fr/en/</a>)

#### 4.6.2 Uncertainties

Member States have yet to clearly articulate the national vision for coastal and marine spatial planning. The frameworks utilized in the SESA provide the tools for continuous assessment as the planning process evolves.

Given that the GBGMP is an investment promotion tool and not the national development strategy for 2030, no particular aspects are assessed as their implementation will be driven by private investments and likely to change in scope and location. Further development of these proposals for actual implementation must be guided by detailed environmental and social impact assessments, including scenarios for climate change, sea level rise and natural hazard risk exposure.

The environmental, social risk and development scenarios for exploitation of oil/gas sector in the OECS are purely speculative.

#### 4.6.3 Constraints

This assessment is informed by a companion situation and stakeholder analysis report. The study is informed largely by literature review of secondary data with consultations limited to key stakeholders from national focal point agencies, organized groups, community based and non-governmental organizations. Further engagement with wider stakeholder audiences will be required during the implementation of the CROP so that priorities can be further streamlined to suit specific issues and interest groups. Also, as national objectives for coastal and marine spatial plans become finalized, it will be necessary to use the mitigation standards to finalize projects for implementation.

Investments will be required for both short term mitigation measures and programs to improve the governance framework for natural resources management in OECS States. National governments will be required to integrate the recommendations into their medium to long term socio-economic development strategies.

# 5.0 ENVIRONMENTAL BASELINE STUDY

As noted in Section 4.4 the DPSIR Framework of analysis was utilized to scope the existing situation in participating OECS States.

#### 5.1 Socio-Economic Drivers and Pressures

OECS economies are small, highly open and vulnerable to external shocks from the global economy. Trade typically exceeds 100% of GDP (OECS, 2018). The islands have yet to recover from the impacts of the 2008 global economic crisis. Their economy is highly dependent on tourism which accounts for more than 25% of GDP, except for Grenada and St. Vincent, however the trend is for continued growth of the sector to over 35% GDP by 2025 (CDB, 2018, WTTO, 2018). Table 5.1 provides a summary of the contribution of tourism to the OECS member states.

Table 5.1 Contribution of Tourism to GDP in OECS Member States

OECS Country	Tou	Tourism		ables
OECS Country	% GDP	Employment	Export	Investment
Dominica	26.4	24.0	48.0	15.8
Grenada	24.2	22.1	47.8	13.7
St Kitts & Nevis	25.5	24.2	34.7	17.4
St. Lucia	39.5	44.1	59.2	20.5
St Vincent & G	19.9	18.2	49.1	15.9

Unemployment rates range from a low of 5.1% in St Kitts and Nevis (2008) to a high of 25% in St. Vincent and the Grenadines (CDB, 2018). Governments are under severe pressure to grow the economy and reduce poverty, and together with partners such as the OECS, CDB, World Bank have developed growth and poverty reduction strategies. Table 5.2 provides summary data on poverty rates in OECS States (CDB, 2018). The debt to GDP ratio of OECS States ranges from a low 64.6% for St Kitts and Nevis to a high of 77.2% for St Vincent & the Grenadines (CDB, 2018).

**Table 5.2 Poverty Rates for OECS Member States** 

Country	Year	Population % poor	Vulnerable % pop	Indigent % pop	Poverty Gap Index	Gini coefficient (0=equality)
DOM	2009	28.8	11.5	3	8.9	44
GRE	2008	37.7	14.6	2.4	10.13	37
SK*	2008/09	23.7	-	1.4	6.4	38
NEV	2008/09	15.9	-	0	2.7	38
SLU	2005	28.8	40.3	2	9	42
SVG	2007/08	30.2	48.2	2.9	7.5	40
WORLD	2013	22.3				

<sup>\*</sup>St Kitts is presently conducting an update

#### 5.2 Environmental Pressures

The Country Environmental Profile for OECS States date back to 1990, and only St. Lucia has produced recent Statement of the Environment Reports (2006 and 2016). Data on the status of the Islands' natural resource base can be gleaned from project documents such as the Plan System Report for Protected Areas and Parks in Grenada (OPAAL 2010).

There are conclusive evidence that coastal and marine ecosystems of the Caribbean Sea are under pressure from both natural and anthropogenic factors (CLME+ 2017). Due to their location along an active continental plate and position north of the equator, the OECS islands have high natural hazard risk exposure to earthquakes, tsunamis, volcanic eruptions, tropical cyclones as well as drought.

The islands are known to experience regular extreme weather events resulting in flooding of coastal areas, landslides, storm surges that cause heavy social and economic impacts. The recent hurricane events (Erica 2015, Irma, 2016, Maria, 2017) and earthquake (August 2018) which affected the region give a constant reminder of the vulnerability of these small island states.

The main anthropogenic factors that contribute to environmental degradation include:

- Overfishing according to an FAO report (2009) fisher folk in OECS States tend to exploit mainly nearshore and reef fisheries and only few islands have long-line fisher folk who exploit pelagic stocks. None of the islands have home-based high seas fishing fleet. During consultations in St Kitts and Nevis fisherfolk expressed grave concern about the declining status of the fish stock and the fact that the effort has increased considerably to catch fish. He noted "I now have to go out more than 30 miles to fish and sometimes I don't catch the same amount. It is now a free for all and too many persons have license to fish. On an island of 15,000 people we have 400 licensed fisherfolk" There was also great concern that there are no barriers for entry into the sector as licenses are free, there are no quotas and tax-free concessions are given on all fishing gear, equipment and fuel. This trend has been observed throughout the region.
- in coastal areas and the economic infrastructure is located within the coastal zone. Mangroves, coastal wetlands and flats are being transformed into major hotel development projects and marinas despite the commitment made by governments to protect these habitats. Beaches and coral reefs are also underpressure from extensive use for cruise and dive tourism. For the 2017/2018 cruise tourism season St Kitts and Nevis celebrated the milestone of having accepted 1,000,000 cruise visitors to the Island. A senior official in the Ministry of Tourism participating in the stakeholder consultation noted "We had intense erosion of the beach at Frigate Bay so everyone is now going to Cockshell Beach. This beach is also showing signs of stress as all the cruise tourists go to that beach; it is full when the ships are in. We are looking for assistance to do a beach restoration project. I need help to make argument about carrying capacity of natural resources."

- Pollution from both marine and land-based sources in OECS States there is urgent need to regulate the fast-growing yachting sector and treatment facilities are needed to manage sewage from both land and sea sources. Non-point sources of pollution from drainage, agriculture, industries, stormwater runoff continues to be a huge challenge and the negative impact of these on the coastal and marine ecosystems has been documented (IWCAM, 2016; CLME, 2014). Stakeholders from St Kitts and Nevis and Grenada discussed the current situation with management of sewage from yachts. In St Kitts only one marina has the facility to accept and treat waste, recycling the water for irrigation.
- Climate change and ocean acidification the CARIBSAVE Climate Change Risk
  Atlas for each OECS State provides assessment and baseline for climate and sealevel rise data. While the impacts are not yet clear there is evidence of increased
  variability in weather patterns in the region. OECS States have developed climate
  change adaptation strategies and are working to become climate resilient
  countries.
- Invasive species and exotics: New and emerging trends such as the invasion of Caribbean coral reef fisheries by the "lionfish" and pollution of excessive growth of marine algae (seaweed) are major issues that Caribbean States must address.

#### 5.2.1 Cross sectoral Issues

There are several cross-sectoral environmental issues which must be taken into consideration during the development of coastal and marine spatial plans:

- Watershed Management
  - Land clearing for agriculture
  - Housing development, particularly on steep slopes
  - Water production (quantity and quality)
- Stormwater management
  - Drains and outfalls
  - o Detention systems; swales, infiltration trenches
  - Retention systems, ponds and wetlands

- Wastewater management
  - Collection systems
  - Treatment systems (primary, secondary, tertiary)
- Space allocation for:
  - o Sanitary and hazardous waste landfills
  - Wastewater treatment plants
  - o Cemetery and burial grounds
  - o Parks and green spaces
  - o Parking
- Protected Areas and seascapes
  - o Mangroves and wetlands
  - Littoral woodlands and dry forests
- Marine Protected Areas
  - (impact of land-based sources of pollution)
  - o Management of multiple stakeholder uses
  - Traditional use
  - o Algal growth; seaweed management
- Ship generated waste
  - Solid waste
  - o Liquid waste
  - Ballast water and exotic species
- Oil spill Prevention and management

#### **5.2.2** Sector Specific Considerations

SECTOR	ENVIRONMENTAL ISSUES AND CHALLENGES
Agriculture	• Coastal forests are being replaced with formal or informal agricultural
in/near coastal	activities in low lying areas.
areas	<ul> <li>The OECS Ministries of Agriculture, as part of national climate change adaptation plans, have begun initiatives to climate proof farmland and crops; Lessons learnt needs to be replicated by farmers.</li> <li>Current agricultural activities in upland watersheds cause harmful amounts of</li> </ul>
	topsoil or pollutants to flow into estuaries and coastal waters
Fisheries- Wild	• Fisherfolk receive tax free incentives to invest in the sector. There is no quota
Capture and	systems and licenses are free in most OECS states. Fisherfolk pay for
Aquaculture	registration of their fishing vessel.
	<ul> <li>The sustainability of coastal or offshore fisheries within the territorial waters of OECS MS must be assessed;</li> </ul>

SECTOR	ENVIRONMENTAL ISSUES AND CHALLENGES
	<ul> <li>Quota system need to be developed to manage exploitation of marine fish stocks.</li> <li>There are policies for aquaculture, however no largescale projects have been undertaken as yet; lessons from past projects in Telescope Grenada suggests that management of wastewater is a critical issue to be addressed;</li> <li>There any potential conflicts between fishing grounds and shipping lanes or other offshore economic activities, and these must be resolved through the use of marine spatial plans/use zones.</li> </ul>
Infrastructure	<ul> <li>Existing infrastructure located in the coastal zone date back to 1950s and as such do not consider changes in sea level or storm surge.</li> <li>Predictions for sea level rise and future storm surge scenarios must be incorporated into the CMS plans;</li> <li>There is evidence that the current practice of disposal of pollutants from stormwater and wastewater marine outfall negatively impacts coastal water quality, coral reefs and marine life; reduction in goods and services from coastal and marine ecosystems;</li> <li>Planned expansion of infrastructure in the coastal zone will stress ecosystem services or cause other negative environmental or social impacts;</li> <li>At present OECS MS exploit only nearshore fisheries. Exploitation of ocean resources will likely present a future risk of conflict or damage to undersea infrastructure (pipelines, communications cables, etc.) from other economic activities (e.g. fishing trawlers that drag the ocean bottom, subsea mining, etc.)</li> </ul>
Urban planning and development	<ul> <li>OECS cities and towns were developed more than a century ago. As such urban planning in coastal areas has not taken into account climate and coastal disaster risks related to extreme weather events, sea level rise and coastal flooding.</li> <li>The CMSP must include planning for climate change future risk scenarios, sea level rise, storm surges and increased coastal flooding;</li> <li>Most of the fisherfolk in OECS MS are from informal coastal settlements on public lands. Poor infrastructure results in pollution of nearshore areas from domestic wastewater and runoff from the land. There have been efforts to formalize these settlements through land titling. Communities vulnerable to natural disasters are targets for involuntary resettlement in Dominica.</li> </ul>
Housing & Settlement  Water Use and	<ul> <li>Loss of coastal forests and associated wildlife for residential development;</li> <li>Housing development is driven by the private sector and due to the lack of area management plans infrastructure development is inadequate for stormwater and wastewater management;</li> <li>Groundwater supplies in coastal communities at risk from overuse pollution</li> </ul>
Resources	from development and saline intrusion due to sea level rise;

SECTOR	ENVIRONMENTAL ISSUES AND CHALLENGES
	<ul> <li>OECS MS have developed water policies or and watershed management plans in place to encourage sustainable and equitable access to water resources. Enforcement of these policies has been lacking.</li> <li>Increasing freshwater availability in coastal areas (e.g. via desalinization) will have positive impact future development opportunities however brine and wastes from the process will contribute to further destruction of coastal ecosystems. Renewable energy (e.g solar PV) will offset the huge energy demand for desalinization.</li> </ul>
Extractives (Oil, gas and mining)	<ul> <li>Are there coastal or subsea mining activities planned or already underway?</li> <li>Are there offshore or coastal onshore oil, gas or mining exploration or production activities planned or already present?</li> <li>Are there sector-related infrastructure or facilities located in ecologically sensitive coastal zones (e.g. refinery, LNG storage terminal, mineral port, loading/unloading facilities and associated road, rail and power and water supply infrastructure)</li> </ul>
	• Sand and gravel mining, although illegal in most cases, have negative effect on shoreline stability or sea-floor ecosystems in all OECS MS.
Renewable and other Energy Development	<ul> <li>Existing power plants are located in low-lying coastal areas</li> <li>There are feasibility studies to determine the viability of new onshore or offshore energy projects (solar, wind, geothermal, etc.). Results are not yet finalized. In the case of solar farms their potential footprints overlap existing uses of coastal spaces. Marine windfarms are proposed however there is no available feasibility studies on same at present.</li> </ul>
Maritime Transport	<ul> <li>The location of shipping lanes and sensitive ecological areas must be mapped on marine spatial plans to determine where they intersect and to zone uses appropriately for better management;</li> <li>There is anecdotal information on piracy in OECS MS. The impact on shipping or other uses of ocean and coastal space needs to be assessed.</li> </ul>
Tourism	<ul> <li>In OECS MS there are planned and existing tourist facilities in low-lying coastal areas, which have operations or guest activities (boating, scuba-diving, etc.) which pose risks to local ecosystems (wildlife, coral reefs, mangroves) – over use of recreational areas; disposal of untreated sewage; generation of large volumes of solid waste)</li> <li>Other existing or planned economic activities in coastal or marine areas which could pose a threat to or compete for resources with tourism activities include oil and gas exploration; development of marine wind farms; aquaculture.</li> <li>Capacity assessment of coastal and marine resources to keep pace with the fast-growing rate of the tourism sector is necessary.</li> </ul>

#### 5.4 Policy Responses

Recently OECS states have developed long-term national development plans in keeping within the UN 2030 global agenda - 17 sustainable development goals (SDGs). Although there exists public sector driven regional development plans in the OECS MS, there are no examples of any of these plans having been executed in the OECS. New developments are driven by private sector projects in the tourism and residential sectors (hotels, marinas, golf course, sub-divisions). Public sector socio-economic development objectives are delivered on a project by project basis financed largely by grants, overseas development assistance and concessionary loans. Considering the socio-economic drivers, OECS governments, except for St. Vincent & the Grenadines, have also developed investment promotion strategies largely led by citizen by investment (CBI) programs with the aim of providing jobs for nationals. Current national plans include:

- Dominica's development agenda is driven by recovery following the passage of Hurricanes Erica is 2015 and Hurricane Maria in 2016 which had a significant impact on GDP and setback progress for more than a decade. The Government sees this however as an opportunity to build back better and has set a trajectory to become the first climate resilient country in the world. Backed by donor and development agencies, reconstruction will be coordinated through the Climate Resilient Execution Agency for Dominica (CREAD).
- Grenada has developed a National 2030 development plan as well as a Blue Growth Master Plan with the intention of becoming a center of excellence for the blue economy. The Government of Grenada, with support of US\$300 million from the Global Climate Fund, is also pursuing plans to become the home of the first climate resilient city in the world.
- St Kitts and Nevis has aligned its development agenda with the SDGs and has
  completed a national adaptation strategy in 2016 which provides the framework
  for sustainable development of the twin island state. The Government is in the
  process of finalizing a post 2017 development agenda.

- St Lucia the government has formulated a medium-term development and strategic plan which focuses on the "institutional framework for macroeconomic management and for the formulation of macroeconomic policy advice." There are also national climate change strategy and action plans (SAP) which guides current development planning.
- St Vincent the 2013-2025 national economic and social development plan considers comprehensive sectoral plans with "a vision, philosophy, a strategic economic outlook, a good governance framework, and a quest to ennoble, further, in material and non-material respects, the Vincentian component of our Caribbean civilization". Central to the plan is the requisite of building a modern, competitive, many-sided, post-colonial economy which is at once national, regional and global.

It is envisioned that investment in the "blue economy" presents an opportunity for OECS States to take advantage of their ocean wealth given that their territorial waters are more than 30 times larger than their land mass.

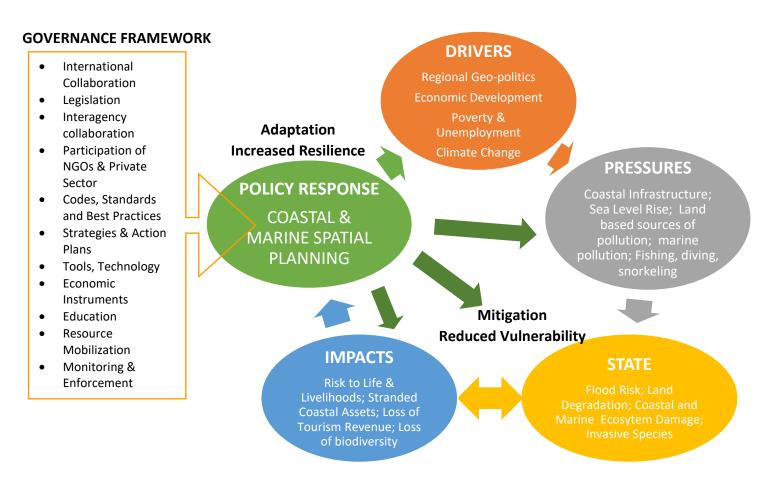
Country	Ratio
St. Kitts and Nevis	1:44
Dominica	1:60
Saint Lucia	1:32
St. Vincent and the Grenadines	1:68
Grenada	1:64

Source: CROP Feasibility Study pg7

#### 5.4 Summary

From the foregoing it is evident that two distinct but supporting programs of action are required to support successful implementation of the CROP (Figure 5.1). Program 1 addresses mitigation measures and standards to reduce environmental pressures contributing to reduction of vulnerability, Sections 6, 7 and 8 of this report. Program 2 addresses the governance framework for management of coastal and marine resources leading to adaptation and increased resilience, Sections 9, 10 and 11 of this assessment.

Figure 5.1 Summary of Drivers Pressures State Impact and Policy Responses for CSMP in OECS States (adopted from JECO 2016)



# 6.0 IMPACT IDENTIFICATION & EVALUATION

#### 6.1 Base-case Scenario – Situation in OECS States

From the review of socio-economic drivers and environmental pressures operating within OECS Member States it is critical that existing challenges be addressed as these have implications for development of the Blue Economy. The base case scenario is assessed for key sectors and coastal management zones.

These challenges can potentially have large negative impacts if proper management actions are not adopted in a timely manner. Mitigation measures to reduce the impacts are presented for each sector and for coastal management zone in Tables 6.1 and 6.2 respectively. Priority ranking of the issues and mitigation standards in Table 6.2 were provided by key stakeholders from Grenada and St. Lucia and provided in the SESA consultancy report on priority selection. The situational and stakeholder analysis must also be consulted as this report presents additional information on the capacity of environmental management agencies in member states to effectively manage coastal and marine resources.

It must be noted that mitigation standards must be further developed based on the actual spatial plans which are created for each member state and must be guided by detailed assessments at the project implementation level. Assessments should include resource and stock assessments, ESIAs, natural hazard risk assessment (tropical cyclones, wind exposure, flooding, landslides, storm surges, earthquakes, volcanoes, tsunamis etc), climate change modelling and sea level rise scenarios.

Table 6.1 Base Case Scenario – Assessment of issues and challenges with Mitigation Standards for Key Sectors

SECTOR/Main sources of Impact	ISSUES AND CHALLENGES	MITIGATION STANDARDS
Agriculture in/near coastal areas	<ul> <li>Coastal forests are being replaced with formal or informal agricultural activities in low lying areas.</li> <li>The OECS Ministries of Agriculture, as part of national climate change adaptation plans, have begun initiatives to climate proof farmland and crops; Lessons learnt needs to be replicated by farmers.</li> <li>Current agricultural activities in upland watersheds cause harmful amounts of topsoil or pollutants to flow into estuaries and coastal waters</li> </ul>	<ul> <li>Silviculture best management practices for watershed management adopted in agricultural policy and forestry legislation</li> <li>Agricultural riparian buffer zones created along farms</li> <li>Coastal wetlands protected from developed activities</li> <li>Buffer zones created between farmlands and coastal wetlands</li> <li>Environmental Education Strategy for sector</li> </ul>
Fisheries- Wild Capture and Aquaculture	<ul> <li>Fisherfolk receive tax free incentives to invest in the sector. There is no quota systems and licenses are free in most OECS states. Fisherfolk pay for registration of their fishing vessel.</li> <li>The sustainability of coastal or offshore fisheries within the territorial waters of OECS MS must be assessed;</li> <li>Quota system need to be developed to manage exploitation of marine fish stocks.</li> <li>There are policies for aquaculture, however no largescale projects have been undertaken yet; lessons from past projects in Telescope Grenada suggests that management of wastewater is a critical issue to be addressed;</li> <li>There any potential conflicts between fishing grounds and shipping lanes or other offshore economic activities, and these must be resolved using marine spatial plans/use zones.</li> </ul>	<ul> <li>Monitoring and fish catch and stock assessment;</li> <li>Economic instruments developed for resource management;</li> <li>Quota system developed based on stock assessment;</li> <li>Definition of No-go areas and buffer zones to preserve protected areas</li> </ul>

SECTOR/Main sources of Impact	ISSUES AND CHALLENGES	MITIGATION STANDARDS
Infrastructure	<ul> <li>Existing infrastructure located in the coastal zone date back to 1950s and as such do not consider changes in sea level or storm surge.</li> <li>Predictions for sea level rise and future storm surge scenarios must be incorporated into the CMS plans;</li> <li>There is evidence that the current practice of disposal of pollutants from stormwater and wastewater marine outfall negatively impacts coastal water quality, coral reefs and marine life; reduction in goods and services from coastal and marine ecosystems;</li> <li>Planned expansion of infrastructure in the coastal zone will stress ecosystem services or cause other negative environmental or social impacts;</li> <li>At present OECS MS exploit only nearshore fisheries. Exploitation of ocean resources will likely present a future risk of conflict or damage to undersea infrastructure (pipelines, communications cables, etc.) from other economic activities (e.g. fishing trawlers that drag the ocean bottom, subsea mining, etc.)</li> </ul>	<ul> <li>Coastal development setback guidelines with climate change and sea level rise scenarios adopted;</li> <li>Wastewater discharge permit system based on appropriate standards for industries;</li> <li>Wastewater treatment facilities with land-based options for final treatment and discharge of water;</li> <li>Implement waste management plan</li> <li>Possible requirements for oil and gas waste landfill</li> <li>Adopt international best practices</li> <li>Establish operational standards</li> <li>Investment in off-shore fishing fleets</li> </ul>
Urban planning and development	<ul> <li>OECS cities and towns were developed more than a century ago. As such urban planning in coastal areas have not accounted for climate and coastal disaster risks related to extreme weather events, sea level rise and coastal flooding.</li> <li>The CMSP must include planning for climate change future risk scenarios, sea level rise, storm surges and increased coastal flooding;</li> </ul>	<ul> <li>Adopt abandon and retreat policy;</li> <li>New high tide and base scenarios for setback guidelines;</li> <li>Enforcement of coastal development setback guidelines;</li> <li>Coastal wetland parks designed to allow for coastal flooding from both stormwater runoff, storm surge and sea level rise;</li> <li>World Bank involuntary resettlement policy</li> </ul>

SECTOR/Main sources of Impact	ISSUES AND CHALLENGES	MITIGATION STANDARDS
	<ul> <li>Most of the fisherfolk in OECS MS live in informal coastal settlements on public lands. Poor infrastructure results in pollution of nearshore areas from domestic wastewater and runoff from the land;</li> <li>Coastal communities in Soubise and Marquis Grenada have been relocated away from the areas vulnerable to storm surges and flooding;</li> <li>There have been efforts to formalize these settlements through land titling;</li> <li>Communities vulnerable to natural disasters are targets for involuntary resettlement in Dominica.</li> </ul>	Impact benefit agreements so that communities can benefit from investments in the Blue Economy and share in benefits of oil and gas development.
Housing & Settlement	<ul> <li>Loss of coastal forests and associated wildlife for residential development;</li> <li>Housing development is driven by the private sector and due to the lack of area management plans infrastructure development is inadequate for stormwater and wastewater management;</li> </ul>	<ul> <li>Protected areas of representative coastal forests created;</li> <li>EIAs for housing development;</li> <li>Wastewater treatment facilities integrated into housing development projects</li> </ul>
Water Use and Resources	<ul> <li>Groundwater supplies in coastal communities at risk from overuse pollution from development and saline intrusion due to sea level rise;</li> <li>OECS MS have developed water policies or and watershed management plans in place to encourage sustainable and equitable access to water resources. Enforcement of these policies has been lacking.</li> <li>Increasing freshwater availability in coastal areas (e.g. via desalinization) will have positive impact future development opportunities however brine and wastes from the process will contribute to further destruction</li> </ul>	<ul> <li>Create buffer zones to prevent development of civil works in upland water recharge and lowland extraction zones;</li> <li>Implement watershed management and water policies;</li> <li>Update water quality standards</li> <li>Monitor discharge zones</li> <li>Adopt policy for use of renewable energy for desalination projects and grid connect arrangements</li> </ul>

SECTOR/Main sources of Impact	ISSUES AND CHALLENGES	MITIGATION STANDARDS
	of coastal ecosystems. Renewable energy (e.g. solar PV) will offset the huge energy demand for desalinization.	
Extractives (Oil, gas and mining)	<ul> <li>There are exploratory subsea mining activities already underway for Grenada</li> <li>There is no offshore or coastal onshore oil, gas or mining exploration or production activities already present and plans are not available for review</li> <li>At present there are no sector-related infrastructure or facilities located in ecologically sensitive coastal zones (e.g. refinery, LNG storage terminal, mineral port, loading/unloading facilities and associated road, rail and power and water supply infrastructure)</li> <li>Sand and gravel mining, although illegal in most cases, have negative effect on shoreline stability or sea-floor ecosystems in all OECS MS.</li> </ul>	<ul> <li>under intense coastal erosion</li> <li>Petroleum regulatory framework</li> <li>Climate change modelling and sea level rise risk maps</li> </ul>
Renewable and other Energy Development	<ul> <li>Existing power plants are in low-lying coastal areas</li> <li>There are feasibility studies to determine the viability of new onshore or offshore energy projects (solar, wind, geothermal, etc.). Results are not yet finalized. In the case of solar farms their potential footprints overlap existing uses of coastal spaces. Marine windfarms are proposed however there is no available feasibility studies on same at present.</li> </ul>	<ul> <li>Long term environmental studies to determine migratory routes of faunal species;</li> <li>EIAs regulatory framework developed</li> <li>Environmental monitoring framework and indicators</li> </ul>
Maritime Transport	<ul> <li>The location of shipping lanes and sensitive ecological areas are not mapped on existing marine navigation charts;</li> <li>There is anecdotal information on piracy in OECS MS.</li> </ul>	<ul> <li>The location of shipping lanes and sensitive ecological areas must be mapped on marine spatial plans to determine where they intersect and to zone uses appropriately for better management;</li> </ul>

SECTOR/Main sources of Impact	ISSUES AND CHALLENGES	MITIGATION STANDARDS
Tourism	<ul> <li>In OECS MS there are planned and existing tourist facilities in low-lying coastal areas, which have operations or guest activities (boating, scuba-diving, etc.) which pose risks to local ecosystems (wildlife, coral reefs, mangroves) – over use of recreational areas; disposal of untreated sewage; generation of large volumes of solid waste)</li> <li>Other existing or planned economic activities in coastal or marine areas which could pose a threat to or compete for resources with tourism activities include oil and gas exploration; development of marine wind farms; aquaculture.</li> <li>Capacity assessment of coastal and marine resources to</li> </ul>	<ul> <li>The impact of piracy on shipping or other uses of ocean and coastal space needs to be assessed and included as part of regional maritime security agenda.</li> <li>Definition of No-go areas and buffer zones to preserve protected areas;</li> <li>Introduce the precautionary principle</li> <li>Establish regulatory system that excludes oil&amp; gas activities in the proximity of protected cultural heritages and marine protected areas</li> <li>Establish limits of acceptable change and carrying capacity for marine parks and conservation zones</li> </ul>
The inter-	keep pace with the fast-growing rate of tourism sector is necessary.	Dovolon a cumulativo offects management
relationship between the issues	<ul> <li>Multiple effects – biodiversity and faunal effects associated with habitat disturbance; contamination of soils, and groundwater; oil spill risks</li> <li>Cumulative effects</li> <li>Implications for Spatial Land Planning</li> <li>Waste management</li> </ul>	Develop a cumulative effects management framework
	Potential pollution of remote uncontaminated areas	

Table 6.2 Base Case Scenario - Critical Issues and Mitigation Standards for coastal management zones

COASTAL ZONE	KEY ISSUES AND CHALLENGES	MITIGATION STANDARDS & RECOMMENDATIONS
Terrestrial Zone – upper catchment	<ul> <li>Protected areas</li> <li>Deforestation</li> <li>Natural Hazards         <ul> <li>Bush fires</li> <li>Landslides</li> <li>Wild pigs</li> </ul> </li> <li>Erosion and pollution due to land clearing for Agricultural production</li> <li>Invasive Species</li> <li>Climate Change</li> <li>Decrease water levels in watershed areas (damming of water above watershed)</li> <li>Settlements along watershed</li> </ul>	<ul> <li>Watershed management plans for all major watersheds (ridge to reef)</li> <li>Habitat Survey and Assessment (Forestry)</li> <li>Permanent Sample plots (Forestry)</li> <li>Habitat mapping</li> <li>River stream flow assessment</li> <li>Develop stream/surface water quality standards</li> <li>Establish silviculture practices, conservation buffer zones for watershed development</li> <li>Improve/develop climate data collection and management system</li> <li>Integrate future climate/environment scenarios in management plans and policies</li> </ul>
Terrestrial Zone	<ul> <li>Quarrying</li> <li>Slash and burn agriculture</li> <li>Commercial and residential development</li> <li>Pig farms</li> <li>Infrastructural development (roads, utilities)</li> <li>Liquid and solid waste pollution (agriculture, factory industries, etc.)</li> </ul>	<ul> <li>Develop regulations, codes of best practice for each sector</li> <li>Ban on burning steep slopes, dry forests and sensitive areas</li> <li>EIAs, Land Development Code; Land Use Policy</li> <li>Waste water discharge standards and permits for industries</li> <li>Future planning, space allocation for municipal facilities (landfills; wastewater treatment plants)</li> </ul>

COASTAL ZONE	KEY ISSUES AND CHALLENGES	MITIGATION STANDARDS & RECOMMENDATIONS
Coastal zone (immediate land sea interface)	<ul> <li>Coastal communities</li> <li>Urban developments</li> <li>Infrastructure</li> <li>High density of human activities</li> <li>Solid waste disposal</li> <li>Waste water management</li> <li>Protected areas (conflict with private land ownership)</li> <li>Agricultural activities</li> <li>Sand mining</li> <li>Storm surges</li> <li>Climate change</li> <li>Local communities lack proper sanitary facilities</li> </ul>	<ul> <li>Develop regulations, codes of best practice for each sector</li> <li>Ban on burning steep slopes, dry forests and sensitive areas</li> <li>EIAs, Land Development Code; Land Use Policy</li> <li>Waste water discharge standards and permits for industries</li> <li>Future planning, space allocation for municipal facilities (landfills; wastewater treatment plants)</li> <li>Integrate housing policies and plans into coastal master plans;</li> <li>Allocate space for cemeteries, parks,</li> <li>Allocate space for storage of fishing vessels during storm surges, hurricanes;</li> <li>Plan for Tsunamis</li> </ul>
3 nautical miles	<ul> <li>Solid and liquid waste management</li> <li>Yachts, ships and marina (no holding tanks, anchoring damage to seabed)</li> <li>Ballast water exchange</li> <li>Marine invasive species</li> <li>Heavy sedimentation</li> <li>Climate change</li> <li>Marine biodiversity destruction</li> <li>Super structural development (marinas, jetties, water-based type accommodations)</li> </ul>	<ul> <li>Improve disposal and treatment facilities for accepting marine wastes</li> <li>Monitoring and enforcement of IMO codes of best practice for marinas and boatyards</li> <li>Monitoring of sea level rise (mean high tide gauges)</li> <li>Improve watershed management;</li> <li>Create stormwater retention and detention systems as feature in landscape as part of CMSP</li> </ul>
Territorial Boundary	<ul><li>Oil spills</li><li>Liquid and solid waste disposal</li></ul>	<ul> <li>Strengthen national oil spill response capability (public/private partnership)</li> </ul>

COASTAL ZONE	KEY ISSUES AND CHALLENGES	MITIGATION STANDARDS & RECOMMENDATIONS
	<ul> <li>IUU Fishing</li> <li>Tourism water-based activities (pollution-exhaust fumes)</li> <li>Waste water management</li> <li>Climate change (increase SST, Coral bleaching)</li> <li>Ballast water exchange</li> </ul>	<ul> <li>Create regional oil spill response mechanism</li> <li>Improve landside disposal and treatment facilities for accepting marine wastes</li> <li>Monitoring and enforcement of IMO codes of best practice for marinas and boatyards</li> <li>Monitoring of sea level rise (mean high tide gauges)</li> <li>Regional coral reef monitoring program</li> <li>Fish stock and marine resource assessment</li> <li>zone marine tourism activities; develop codes and best practices</li> </ul>
EEZ	<ul> <li>Oil spills</li> <li>Liquid and solid waste disposal</li> <li>IUU Fishing</li> <li>Tourism water-based activities (pollution-exhaust fumes)</li> <li>Waste water management</li> <li>Climate change (increase SST, Coral bleaching)</li> </ul>	<ul> <li>Strengthen national oil spill response capability (public/private partnership)</li> <li>Create regional oil spill response mechanism</li> <li>Improve land side disposal and treatment facilities for accepting marine wastes</li> <li>Monitoring and enforcement of IMO codes of best practice for marinas and boatyards</li> <li>Monitoring of sea level rise (mean high tide gauges)</li> <li>zone marine tourism activities; develop codes and best practices</li> </ul>

### 7.0 ANALYSIS OF ALTERNATIVES

As noted in Section 3.2, the participating OECS Member States have yet to clearly define their national objectives for coastal and marine spatial plans. The Grenada Blue Growth Master Plan is an investment promotion strategy and does not represent the national 2030 development strategy which is still in the formulation stage. Further, public consultation was limited to selected stakeholder groups and did not involve those communities or stakeholder groups who are most likely to be directly affected by the proposals.

Increased socio-economic development through increased utilization of coastal and marine resources will result in negative externalities that must be managed. Member States in setting the vision and objectives for the Blue Economy and CMSPs must determine the limits of acceptable change, natural resource carrying capacity and the cumulative effects of interrelated impacts (example energy, wastewater management, solid waste management, air and water quality, and resilient critical infrastructure, roads, hospitals).

It is critical that plans do not lead to social amplification of risk through:

- f) Location of new facilities and/or increased development of critical infrastructure in hazard prone areas;
- g) Exceeding the capacity of critical infrastructure within towns and tourism development centers such as drainage, potable water networks, waste management and disposal facilities, road networks, hospitals, community centers, evacuation routes, shelters and disaster management resources;
- h) Failure to restore degraded ecosystems through rehabilitation projects;
- Failure to manage land-based sources of impact and pollution such as storm water run-off, construction, agriculture and upland watershed degradation;
- j) Lack of accounting for increased coastal flooding due to increased development of watersheds, climate change and future sea level rise scenarios.

For instance, in a practical way the GBGMP should be revisited accounting for the above factors. Plans for development of coastal marine villages at the mouth of the St. John's River and the Victoria Town should consider integration of *soft* ecological engineering design approaches such as coastal wetland parks that can mitigate the impact of coastal flooding and protect marine resources.

As noted in the CROP Feasibility Study "the goals for the MSP should be guided by:

- 1. The possible threats to the marine environment in the country;
- 2. The social, environmental, economic, and cultural policy direction of the country;
- 3. Build upon national policies and regional and international commitments; and
- 4. Be guided by proposed future uses of the marine space".

The analysis of alternatives must be guided by Critical Factors for Decision Making (CFDM) which constitute the fundamental decision-making factors that underlie the focus of the SESA. They identify those aspects that must be considered in the decision process concerning the strategic design and the implementation of actions for effective management of environmental and social issues arising from development of coastal and marine spatial plans for OECS States. These factors satisfy the scope of the SESA and are generated out of the situation and stakeholder analysis of the following:

- Objectives of the SEA;
- Legal, institutional and regulatory considerations;
- Environmental and social factors; and
- Current and future scenarios for development of coastal and marine spatial plans in OECS States

The critical factors for decision making and the reason for their inclusion are presented in Table 7.1 on the following page.

Table 7.1 Critical Factors for Decision Making in Development of Coastal and Marine Spatial Plans

CRITICAL FACTORS FOR DECISION MAKING	REASON FOR INCLUSION
Legal and Regulatory Framework	<ul> <li>Currently not fully developed in OECS States</li> <li>Incomplete regulations for management of coastal and marine resources</li> <li>Conflicting and overlapping responsibility among various ministries</li> </ul>
Institutional Capacity	<ul> <li>No capacity for regulation or compliance</li> <li>Conflicting roles and responsibilities for environmental protection and management</li> <li>Poor inter-institutional coordination</li> <li>Low technical capability for coastal and marine resources management</li> <li>Unknown training requirements and capabilities</li> </ul>
Planning and Decision- making Process	<ul> <li>Low Capacity for SESA implementation</li> <li>Environmental factors not included in economic planning</li> <li>Sector approach to planning</li> <li>Short term planning cycles</li> <li>Ecosystem-based approach to planning needed</li> <li>Decision support systems need to be adopted</li> </ul>
Stakeholder Participation in Decision Making	<ul> <li>Climate change modeling and future risk assessment</li> <li>Incomplete legal framework for stakeholder participation</li> <li>Low stakeholder capacity and action</li> <li>Lack of stakeholder participation in setting development agenda</li> <li>Need for transparency of revenue flows and resource allocation</li> </ul>
Social	<ul> <li>Mechanisms for community development limited</li> <li>Protect vulnerable groups; Fisherfolk; Kalinago peoples in Dominica</li> <li>Recognize cultural diversity</li> <li>Avoid resource conflicts and compulsory take of private lands</li> <li>Minimize expectations over benefits of exploitation of Blue Economy</li> </ul>
Ecosystem Integrity and Biodiversity Conservation	<ul> <li>Importance of marine parks and protected areas</li> <li>Importance of critical species</li> <li>Capacity for protection of protected areas and biodiversity is limited</li> <li>Resource assessment and monitoring lacking</li> <li>Limits of acceptable change and ecosystem carrying capacity needs to be determined</li> </ul>
Risk Management	<ul> <li>Regional mechanism for collaboration, coordination of response and compliance needed</li> <li>Planning for climate change, tsunamis and natural hazard risks</li> <li>Integration of environment with social and economic objectives</li> </ul>
SESA Implementation	<ul><li>Success of SESA depends on its implementation</li><li>Follow up measures, indicators needed</li></ul>

### 8.0 MITIGATION OR OPTIMISING MEASURES

Critical Risks and Mitigation Standards for Future Scenario

Under the future scenario, critical risks and mitigation standards are provided for the key sectors which were identified in the base-case scenario in Tables 6.1 and 6.2. Feedback from stakeholders at the Grenada SESA Stakeholder Consultation on July 23, 2018 as well as those from previous consultations are also utilized in this assessment.

Given that the GBGMP is an investment promotion tool and not the national development strategy for 2030, no particular aspects are assessed as their implementation will be driven by private investments and likely to change in scope and location. Further development of these proposals for actual implementation must be guided by detailed environmental and social impact assessments, including scenarios for climate change, sea level rise and natural hazard risk exposure.

The environmental, social risk and development scenarios for exploitation of oil/gas sector in the OECS are purely speculative due to the following reasons:

- There is a lack of a clear understanding of actual and proposed government programs with regard development of the sector (Grenada in particular);
- Unavailability of official or other scientific public data concerning the hydrocarbon potential estimates of both onshore basin and coastal basin in terms of hydrocarbon generation potential, expected products (liquid vs. gaseous hydrocarbons), possible field size distribution (from other play type analogue studies);
- At present there is no license offshore acreage or areas identified for oil and gas exploration in the OECS States;
- There are no indications where future activities are likely to develop; and
- There are no policies for development of the oil and gas sector in OECS States.

Table 8.1 Future Scenario – Assessment of critical impacts and risks with Mitigation Standards for Key Sectors

SECTOR/Main sources of Impact	PREDICTED IMPACTS AND RISKS	MITIGATION STANDARDS
Agriculture in/near coastal areas	<ul> <li>Relocation of farmers from low-lying coastal areas;</li> <li>Agriculture impacted by demands for fresh water (damming of rivers) and climate change;</li> <li>Demands for local food production to support increased tourism development;</li> <li>Increased agricultural activities in upland watersheds resulting harmful amounts of topsoil or pollutants to flow into estuaries and coastal waters</li> </ul>	<ul> <li>Climate Smart Agriculture with green technology; Silviculture best management practices for watershed management adopted in agricultural policy and forestry legislation;</li> <li>Agricultural riparian buffer zones created along farms;</li> <li>Coastal wetlands protected from developed activities;</li> <li>Buffer zones created between farms and coastal wetlands;</li> <li>Environmental Education Strategy for agricultural sector across all education levels</li> <li>World Bank Resettlement Policy</li> </ul>
Fisheries- Wild Capture and	<ul> <li>Reduced pressures on near shore fisheries due to investment in deep sea fishing fleets;</li> </ul>	<ul> <li>Monitoring of fish catch and stock assessment;</li> <li>Economic instruments implemented for resource</li> </ul>
Aquaculture	<ul> <li>Quota system reduce trends in over-exploitation;</li> <li>Potential for transboundary disputes due to increased utilization of the territorial seas and EEZ;</li> <li>The sustainability of coastal or offshore fisheries within the territorial waters of OECS MS must be assessed;</li> <li>Quota system need to be developed to manage exploitation of marine fish stocks;</li> <li>Increased utilization of coastal flat lands for aquaculture;</li> <li>Management of wastewater is a critical issue to be addressed;</li> </ul>	management; • Quota system developed based on stock assessment; • Definition of No-go areas and buffer zones to preserve

SECTOR/Main	PREDICTED IMPACTS AND RISKS	MITIGATION STANDARDS
sources of Impact		
	<ul> <li>Reduced conflicts between fishing grounds and shipping lanes or other offshore economic activities, through the use of marine spatial plans/use zones.</li> </ul>	
Infrastructure	<ul> <li>Existing infrastructure located in the coastal zone date back to 1950s and as such do not consider changes in sea level or storm surge scenarios must be incorporated into the CMS plans;</li> <li>Increased generation of stormwater and wastewater resulting in negative impacts on coastal water quality, coral reefs and marine life; reduction in goods and services from coastal and marine ecosystems;</li> <li>Solid waste landfills exhausted; increased land degradation from non-biodegradable and hazardous wastes;</li> <li>Planned expansion of infrastructure in the coastal zone will stress ecosystem services or cause other negative environmental or social impacts;</li> <li>At present OECS MS exploit only nearshore fisheries. Exploitation of ocean resources will likely present a future risk of conflict or damage to undersea infrastructure (pipelines, communications cables, etc.) from other economic activities (e.g. fishing trawlers that drag the ocean bottom, subsea mining, etc.)</li> </ul>	<ul> <li>Coastal development setback guidelines with climate change and sea level rise scenarios adopted;</li> <li>Relocation of critical infrastructure from the coastal zone;</li> <li>Wastewater discharge permit system based on appropriate standards for industries;</li> <li>Wastewater treatment facilities with land-based options for final treatment and discharge of water;</li> <li>Implement waste management plan</li> <li>Possible requirements for oil and gas waste landfill;</li> <li>Waste to energy plants to reduce demands in limited coastal lands;</li> <li>Adopt international best practices</li> <li>Establish operational standards</li> <li>Investment in off-shore fishing fleets</li> </ul>
Urban planning	• OECS cities and towns were developed more than a	Adopt abandon and retreat policy;
and development	century ago. As such urban planning in coastal areas have not accounted for climate and coastal disaster risks related to extreme weather events, sea level rise and coastal flooding.	<ul> <li>Allocation of green spaces for healthy living, conservation of biodiversity; cultural heritage;</li> <li>Allocation of space for waste management facilities;</li> </ul>

SECTOR/Main sources of Impact	PREDICTED IMPACTS AND RISKS	MITIGATION STANDARDS
sources of impact	<ul> <li>The CMSP must include planning for climate change future risk scenarios, sea level rise, storm surges and increased coastal flooding;</li> <li>Most of the fisherfolk in OECS MS live in informal coastal settlements on public lands. Poor infrastructure results in pollution of nearshore areas from domestic wastewater and runoff from the land;</li> <li>Relocation of fishermen and coastal communities in areas targeted for development of marina and coastal villages;</li> <li>Government of Grenada has no lands in Petit-Martinique and forced acquisition of lands from islanders has been historically problematic; Compensation for lands remains a contentious matter</li> <li>Communities vulnerable to natural disasters are targets for involuntary resettlement in Dominica.;</li> <li>Displacement of communities by government backed private-sector investment projects.</li> </ul>	<ul> <li>New high tide and base scenarios for setback guidelines;</li> <li>Coastal wetland parks designed to allow for coastal flooding from both stormwater runoff, storm surge and sea level rise;</li> <li>Enforcement of coastal development setback guidelines;</li> <li>World Bank resettlement policy;</li> <li>Legal framework and policy for Public Participation in Development;</li> <li>Impact benefit agreements so that communities can benefit from investments in the Blue Economy and share in benefits of oil and gas development.</li> </ul>
Housing & Settlement	<ul> <li>Loss of coastal forests and associated wildlife for residential development;</li> <li>Housing development is driven by the private sector and due to the lack of area management plans infrastructure development is inadequate for stormwater and wastewater management;</li> <li>Increased housing development in coastal locations with high natural hazard risk exposure;</li> <li>Dependence on public shelters and not included as part of development infrastructure.</li> </ul>	<ul> <li>Protected areas of representative coastal forests created;</li> <li>EIAs for housing development;</li> <li>Hazard risk assessment and disaster management plans for housing development (typically not done);</li> <li>Wastewater treatment facilities integrated into housing development projects</li> </ul>

SECTOR/Main sources of Impact	PREDICTED IMPACTS AND RISKS	MITIGATION STANDARDS
Water Use and Resources	<ul> <li>Groundwater supplies in coastal communities at risk from overuse pollution from development and saline intrusion due to sea level rise;</li> <li>Increased extraction of surface fresh water will negatively impact agriculture, ecology of watersheds and nutrient upwelling in coastal zones;</li> <li>OECS MS have developed water policies or and watershed management plans in place to encourage sustainable and equitable access to water resources. Enforcement of these policies has been lacking.</li> <li>Increasing freshwater availability in coastal areas (e.g. via desalinization) will have positive impact on future development opportunities however brine and wastes from the process will contribute to further destruction of coastal ecosystems. Renewable energy (e.g. solar PV) will offset the huge energy demand for desalinization.</li> </ul>	<ul> <li>Create buffer zones to prevent development of civil works in upland water recharge and lowland extraction zones;</li> <li>Implement watershed management and water policies;</li> <li>Update water quality standards</li> <li>Monitor discharge zones</li> <li>Adopt policy for use of renewable energy for desalination projects and grid connect arrangements</li> </ul>
Extractives (Oil, gas and mining)	<ul> <li>There are exploratory subsea mining activities already underway for Grenada</li> <li>There is no offshore or coastal onshore oil, gas or mining exploration or production activities already present and plans are not available for review</li> <li>At present there are no sector-related infrastructure or facilities located in ecologically sensitive coastal zones (e.g. refinery, LNG storage terminal, mineral port, loading/unloading facilities and associated road, rail and power and water supply infrastructure)</li> </ul>	<ul> <li>Adequate mining regulatory framework to include standards and best management practices for ecosystem restoration;</li> <li>Ban on resource extraction from vulnerable areas under intense coastal erosion</li> <li>Petroleum regulatory framework</li> <li>Climate change modelling and sea level rise risk maps</li> <li>Adequate cadaster</li> <li>Need national policies for development of the oil and gas sector to include coastal and marine resources management</li> </ul>

SECTOR/Main sources of Impact	PREDICTED IMPACTS AND RISKS	MITIGATION STANDARDS
	• Sand and gravel mining, although illegal in most cases, have negative effect on shoreline stability or sea-floor ecosystems in all OECS MS.	
Renewable and other Energy Development	<ul> <li>Existing power plants located in low-lying coastal areas</li> <li>There are feasibility studies to determine the viability of new onshore or offshore energy projects (solar, wind, geothermal, etc.). Results are not yet finalized. In the case of solar farms their potential footprints overlap existing uses of coastal spaces. Marine windfarms are proposed however there is no available feasibility studies on same at present;</li> <li>Competition for agricultural lands as areas with highest solar insulation overlap with best arable flat lands;</li> <li>Roof mount PV solar must integrate hurricane risk exposure in design life.</li> </ul>	<ul> <li>Long term environmental studies to determine migratory routes of faunal species;</li> <li>EIAs regulatory framework developed</li> <li>Policies for public participation in Planning Process</li> <li>Environmental monitoring framework and indicators</li> <li>Caribbean Union Building Code (CUBIC) OECS Building Code</li> </ul>
Maritime	• Increased pollution of coastal and marine zones from	IMO environmental guide for marina and boatyards in
Transport to	oil spills, ballast water and wastewater/sewerage;	the Caribbean
include marinas,	Pollution from chemicals used in boat repair and     maintenance:	• The location of shipping lanes and sensitive ecological areas must be mapped on marine spatial plans to
boatyards and yachting sector	<ul> <li>maintenance;</li> <li>Potential for increase conflicts between fisher folk, government and investors in marina, tourism projects; Areas in Petit-Martinique targeted for development is used by fishermen.</li> <li>Increased piracy in OECS MS.</li> </ul>	determine where they intersect and to zone uses appropriately for better management;  The impact of piracy on shipping or other uses of ocean and coastal space needs to be assessed and included as part of regional maritime security agenda.
Tourism	• In OECS MS there are planned and existing tourist facilities in low-lying coastal areas, which have operations or guest activities (boating, scuba-diving, etc.) which pose risks to local ecosystems (wildlife, coral	<ul> <li>Definition of No-go areas and buffer zones to preserve protected areas;</li> <li>Introduce the precautionary principle</li> </ul>

SECTOR/Main	PREDICTED IMPACTS AND RISKS	MITIGATION STANDARDS
sources of Impact		
	reefs, mangroves) — over use of recreational areas; disposal of untreated sewage; generation of large volumes of solid waste)  Other existing or planned economic activities in coastal or marine areas which could pose a threat to or compete for resources with tourism activities include oil and gas exploration; development of marine wind farms; aquaculture.  Capacity assessment of coastal and marine resources to keep pace with the fast-growing rate of tourism sector is necessary.	<ul> <li>activities in the proximity of protected cultural heritages and marine protected areas</li> <li>Establish limits of acceptable change and carrying capacity for marine parks and conservation zones</li> </ul>
The inter- relationship between the issues	<ul> <li>Multiple effects – biodiversity and faunal effects associated with habitat disturbance; contamination of soils, and groundwater; oil spill risks</li> <li>Cumulative effects</li> <li>Implications for Spatial Land Planning</li> <li>Waste management</li> </ul>	<ul> <li>Develop a cumulative effects management framework</li> <li>Decision-support system for ecosystem-based approach to coastal and natural resources management;</li> <li>Inter-agency collaboration;</li> </ul>
	Potential pollution of remote uncontaminated areas	<ul> <li>Integrated development planning (multi-sector);</li> </ul>

### 9.0 INDICATORS, INSTITUTIONAL CAPACITIES AND GAP ANALYSIS

### 9.1 Indicators

Weak or poor governance has been cited as a significant contributor to over-exploitation of marine resources, environmental pollution and degradation of the Caribbean Sea. A framework for good governance was developed as a means of conducting an analysis of institutional capacities in OECS Member States. An indicator is a quantitative, qualitative or descriptive attribute that, if measured or monitored periodically, could indicate the direction of change in governance.

There are three key components of the framework for good governance: 1) Legal, regulatory and Institutional Framework; 2) Planning and Decision-Making Process; and 3) Implementation, Compliance and Monitoring. The principles which underpin these components or pillars of good governance are:

- Transparency
- Accountability
- Fairness/Equity
- Participation
- Effectiveness
- Efficiency

The framework utilized in this assessment does not specify indicators since they are necessarily country, context and situation-specific. Instead, a structure for contextualizing the many governance indicators already in existence or under development and the areas where there are constraints or gaps to be filled, is provided. According to their aims and areas of interest and the constraints they face concerning data and resource availability, stakeholders in OECS Member States are encouraged and expected to choose from the Framework's subcomponents and develop new indicators or adopt or modify existing indicators for the subcomponents as needed and appropriate.

### 9.2 Framework for Good Governance

The three main components of good governance were applied in the Situation and Stakeholder Analysis:

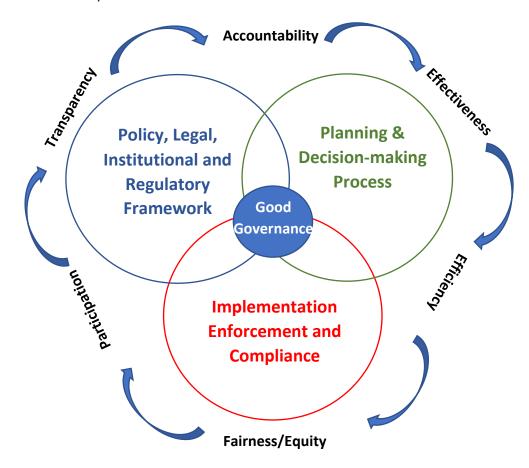


Figure 9.1 Components and Principles for Good governance (compiled/drawn by author)

- Component 1: Policy, Legal, Institutional and regulatory frameworks. This considers the long-term systems of policies, laws, rules and regulations for management of coastal and marine resources within the various sectors that impinge upon the coastal zone. An analysis of this component of good governance must address the clarity and coherence of these frameworks and how they interact to define the overall context for use, management and decision-making with regards resources in the coastal zone.
- Component 2: Planning and Decision-making processes: is concerned with the degree of transparency, accountability and inclusiveness of key natural resources management process and institutions. This component of good governance

explores the characteristics of these process and institutions, the operation of key agencies, the space they create for the participation of stakeholders, the accountability of power holders and decision makers.

Component 3: Implementation, enforcement and compliance. This component of
good governance examines the extent to which the policy, legal, institutional and
regulatory frameworks are implemented. It further considers the level of
effectiveness, efficiency and equitability of implementation.

These three components are mutually exclusive yet re-enforcing of each other so that failure across one component will affect effective governance, maintaining environmental quality and sustainable development. They are underpinned by the principles of accountability, effectiveness, efficiency, fairness/equity, participation and transparency.

### 9.3 Regional Gap Analysis - Political Economy Constraints

### 9.3.1 Independent Small Island States

- Regional treaties and agreements have no direct effect at the national level and must first be adopted into domestic legislation and policies to enter into force.
- Spatial management of coastal and marine resources also requires that the geographic boundaries or limits of territories be defined. The OECS MS have made significant progress in recent times towards formalization of their maritime boundaries and exclusive economic zones (EEZ).
- All the territories within the marine space do not belong to the OECS Union which
  introduces another layer of complexity for negotiating transboundary matters.
  Dominica for instance shares its EEZ boundaries with Martinique and Guadeloupe
  which are both French overseas territories. On issues related to fisheries and ocean
  governance directives of the European Union take effect.
- The disparity in political and economic status thus means that small states are often disadvantaged in negotiations on trade.

- Competition among territories for trade, tourism arrivals and private sector investment opportunities. Each OECS Member State has some form of citizen by investment (CBI) program.
- OECS States are required to meet standards which when compared to larger states do not have the human, technical and financial resources to enable their compliance.

However, there is progress towards improving transboundary management of the common marine space as Martinique has achieved observer status within the OECS Union and Guadeloupe has indicated interest to follow. Other territorial interest in the eastern Caribbean region include the USA, Britain, the Netherlands, Trinidad and Tobago, Barbados and Venezuela. OECS States have common economic and social partnership with Barbados, Trinidad and Tobago through their membership in CARICOM, ACS and OAS.

### 9.3.2 Governance arrangements

#### 9.3.2.1 Legal and Regulatory Framework

From the review conducted by Singh 2008, it can be concluded that there is a robust regulatory framework for Caribbean ocean's governance at the international level (See Figure 3.1 and Annex I this Report). A work plan was formulated by the Association of Caribbean States (ACS) and UNECLAC to track progress in implementation of the obligations under the various resolutions and agreements. Following from the work of the ACS, Singh concludes that "large cohort of responses have been undertaken by States and it shows that actions are being taken in the region.

For example, projects were undertaken to address integrated coastal zone management, upgrading contingency plans for port States, addressing oil pollution and information and training for oil spill response among others".

There is need for a common legal framework for Caribbean oceans governance, to rationalize the various MEAs and develop coordinating mechanisms for their implementation.

### 9.3.2.2 Planning and Decision-Making Process

Regional planning is sectoral and there is no lead regional environmental management or protection agency to coordinate planning across sectors and organizations. With few exceptions, planning results in policy and strategy formulation with limited direct implementation of results-oriented pilot projects. There is need for greater involvement in stakeholder participation in development planning and decision-making process. OECS States have yet to fully implement policies and legal framework for public participation. They have recently agreed to/signed the "Regional Agreement on Access to Information, Participation and Justice in Environmental Matters". However, there is no clear regional mechanism for implementation of this agreement which must first be adopted into domestic legislation to take effect.

### 9.3.2.4 Implementation, Monitoring and Compliance

Implementation of regional policies, programs of action and or projects takes place at the national level. This is often delivered in collaboration with public sector ministries or through direct contracting with private sector consultants, non-governmental and community-based organizations. Regional organisations therefore tend to operate in a project management mode coordinating delivery of outcomes to national stakeholders.

The framework for regional corporation for fisheries is provided for in the various Fisheries Regulations of the individual Member States. The project document for the CLME+ provides a thorough situation and baseline analysis on the regional mechanisms for CSMP in the Caribbean (2015). A regional Transboundary Diagnostic Analysis (TDA) was also undertaken for Caribbean Large Marine Ecosystems in 2011. These reports present details on the nature of the regional mechanisms, mainly advisory, which are important for marine resources management especially fisheries.

In addition to OECS and CARICOM, the regional arrangements which support efforts at the national level through collaboration on training, research, monitoring and other areas of technical cooperation include:

UNEP Caribbean Environment Programme (UNEP CEP)

- Western Central Atlantic Fisheries Commission (FAO-WECAFC)
- Caribbean Community Common Fisheries Policy (CARICOM-CCCFP) and CARICOM
   Regional Fisheries Mechanism (CRFM)
- OSPESCA Regional Fisheries & Aquaculture Policy
- CRFM-OSPESCA Memorandum of Understanding (MoU) and Joint Action Plan
- Regional Environmental Framework Strategy for Central America (ERAM-CCAD)
- European Marine Strategy Framework Directive (MSFD)
- European Water Framework Directive (WFD)
- USA Ocean Policy and Implementation Plan
- NOAA Caribbean Strategy

There is no regional mechanism for monitoring and ensuring compliance with environmental conventions, treatise and multi-lateral environmental agreements.

- 9.4 National Gap Assessment
- 9.4.1 Component 1: Policy, Legal, Institutional and Regulatory Framework

The policy legal, institutional and regulatory framework for coastal and marine spatial planning addresses five key issues or sub-components:

- 1. Laws, policies and strategies related to coastal and marine management
- 2. Legal framework to support and protect land tenure, ownership and use rights
- 3. Broader development policies integrated with coastal and marine policies
- 4. Institutional frameworks
- 5. Financial incentives, economic instruments and benefits sharing

Table 9.1 provides the findings of the Situation and Stakeholder Analysis on the five subcomponents above. The main recommendations are:

 Outdated legislation which must be modernized to suit current and emerging trends in resource management. Annex I provides a comprehensive listing of the legal framework for each participating OECS Member State.

Table 9.1 Summary of Environmental Policy, Legal, Institutional and Regulatory Framework for CMSP in OECS MS

Componen	t	DOMINICA	GRENADA	ST. KITTS & NEVIS	ST LUCIA	ST VINCENT & G
	Laws, policies and strategies	Robust policy and legal				
×	related to coastal and	framework; need				
×   ×	marine management	updating with codes &				
Ó		regulations; MEAs need				
Ş		to be adopted into local				
FRAMEOWRK		legislation; need				
		environmental law				
ONE	Legal framework to support	Laws for private property				
₹	and protect land tenure,	rights; need to develop				
ONE	ownership and use rights	framework for public				
_		lands, forests, user fees	lands, forests, marine	lands, forests, marine	lands, forests, marine	lands, forests, marine
COMPONENT UTIONAL AND		for forest and eco-trails;	spaces; limited	spaces; limited	spaces; User fees for	spaces; limited
N A		marine spaces; limited	arrangements for	arrangements for	some forests and eco-	arrangements for
PA IA		arrangements for	national parks and	national parks and	trails; limited	national parks and
≥ 5		national parks and	protected areas;	protected areas; User	arrangements for	protected areas;
- <b>-</b>		protected areas; Kalinago		fees for some forest	national parks and	
INSTITU		Territory need to		trails.	protected areas;	
2		improve framework and				
Ļ		develop by-laws to				
LEGAL,		protect communal				
, ii		natural resources				
<u>5</u>	Integration of Development	National Physical				
POLICY,	Policies with CMSP	Development Plans; Land				
_		Use Policy; Forest Policy	Use Policy; Forest Policy;			
			ICZM Policy	Marine Policy and Zoning	ICZM Policy	Marine Policy

Instituti	ional Framework	Cultural norms and practices influence the use of natural resources; Kalinago Territory traditional practices determine how natural resources are managed	Cultural norms and practices influence the use of natural resources; Conflict with implementation of formal rules and regulations for natural resources management	Cultural norms and practices influence the use of natural resources; Conflict with implementation of formal rules and regulations for natural resources management,	Cultural norms and practices influence the use of natural resources; Conflict with implementation of formal rules and regulations for natural resources management	Cultural norms and practices influence the use of natural resources; Conflict with implementation of formal rules and regulations for natural resources management
Econom	al Incentives, nic Instruments and s sharing	Tax free concessions fishing and tourism sector; no license fees; no quotas; limited use of economic instruments for resource management	Tax free concessions fishing and tourism sector; no license fees; no quotas; limited use of economic instruments for resource management	Tax free concessions fishing and tourism sector; no license fees; no quotas; limited use of economic instruments for resource management	Tax free concessions fishing and tourism sector; no license fees; no quotas; limited use of economic instruments for resource management	Tax free concessions fishing and tourism sector; no license fees; no quotas; limited use of economic instruments for resource management

- International conventions and MEAs must be incorporated into national legislation during the process of modernization.
- Framework for public participation needs to be developed with the entry into force of
   Freedom of Information Act and supporting legislation.
- Financial incentives such as concessions are distortionary resulting in overexploitation of natural resources; there is need for review and overhaul of Government duty free and tax incentive regimes;
- Economic instruments must be used to manage coastal and marine resources.

### 9.4.2 Component 2: Planning and Decision-making Process

To provide an analysis of the second component of governance, five sub-components were considered:

- 1. The Planning Context and Levels of Planning
- 2. Planning Process
- 3. Stakeholder Participation
- 4. Transparency and accountability
- 5. Stakeholder capacity and action

Table 9.2 provides a summary of the assessment of the five-subcomponents. The key findings and recommendations from the Situation and Stakeholder Analysis are:

- Planning in the OECS MS is driven by current socio-economic factors so that planning
  is focused on short term responses to provide jobs, reduce the debt to GDP ratio and
  sustain economic growth. Environmental considerations are not factored into the
  planning context resulting in degradation of natural assets. OECS MS must integrate
  natural resources management into the economic planning context to achieve
  sustainable development.
- The planning process needs to evolve to include decision support systems to make operational an ecosystems-based approach to coastal and marine spatial planning;
- The legal framework for stakeholder participation must be improved to allow for meaningful participation in the planning and development process.

Table 9.2 Component 2 Governance Framework – Planning and Decision-Making Process for CMSP in OECS MS

Componer	nt	Dominica	Grenada	St. Kitts and Nevis	St Lucia	St. Vincent & Grenadines
	Planning Context and Levels of Planning	Socio-economic drivers (job creation and economic growth); project driven; sectoral development plans	Socio-economic drivers (job creation and economic growth); project driven	Sector and project basis in response to socio-economic drivers (job creation and economic growth)	Sector and project basis in response to socio-economic drivers (job creation and economic growth)	Sector and project basis in response to socio-economic drivers (job creation and economic growth)
COMPONENT TWO PLANNING AND DECISION MAKING PROCESS	Planning Process & Decision Support Systems	Public sector; lack of decision support systems and integration of hazard risk and environmental analysis	Public sector; lack of decision support systems and integration of hazard risk and environmental analysis	Public sector; Private active; lack of decision support systems and integration of hazard risk and environmental analysis	Public sector; lack of decision support systems and integration of hazard risk and environmental analysis	Public sector; lack of decision support systems and integration of hazard risk and environmental analysis
	Public Participation	Low participation on setting objectives for development; Legal framework needs improvement; EIA, Fisheries Committee, no mechanism to track implementation and evaluate impact	Low participation on setting objectives for development; Legal framework needs improvement; EIA, Fisheries Committee, no mechanism to track implementation and evaluate impact	Low participation on setting objectives for development; Legal framework needs improvement; EIA, Fisheries Committee, no mechanism to track implementation and evaluate impact	Low participation on setting objectives for development; Legal framework needs improvement; EIA, Fisheries Committee, no mechanism to track implementation and evaluate impact	Low participation on setting objectives for development; Legal framework needs improvement; EIA, Fisheries Committee, no mechanism to track implementation and evaluate impact
	Transparency & Accountability	No publication of CBI data; indicators need to be developed to track progress; No Freedom of Information Act (draft)	No publication of CBI data; Investigations into mis- management of statutory bodies; indicators need to be developed to track progress; No Freedom of Information Act (draft)	Low; Issues with CBI and management of Frigate bay development funds; Sugar diversification funds; indicators need to be developed to track progress; No Freedom of Information Act enforced	Moderate and improving; indicators need to be developed to track progress; No Freedom of Information Act enforced.	Low-stakeholders demanding information on large projects; indicators need to be developed to track progress; No Freedom of Information Act enforced
	Stakeholder Capacity and actions	High capacity: low action Constrained by public policy and lack of financial capital to undertake development projects; Low capacity and action in Kalinago Community	High capacity: low action Constrained by public policy and lack of financial capital to undertake development projects	High capacity: low action Constrained by public policy and lack of financial capital to undertake development projects	High capacity: low action Constrained by public policy and lack of financial capital to undertake development projects	High capacity: low action Constrained by public policy and lack of financial capital to undertake development projects

- Greater transparency and accountability are needed in the planning and decisionmaking process. Oversight mechanisms must be developed at the national and regional level to control allocation and use of coastal and marine resource rights.
- Stakeholder capacity (private sector/civil society) and action needs to be encouraged and strengthened in the planning and decision-making process, to achieve sustainable development;

#### 9.4.3 Component 3: Implementation, monitoring and compliance

The third component of governance relates to implementation, monitoring and compliance with the policy, legal and regulatory framework for coastal and marine resources management. There are five areas of analysis in determining adequacy of governance with respect to this component:

- 1. Administration of coastal and marine resources
- 2. Law enforcement
- 3. Administration of land tenure and property rights
- 4. Cooperation and coordination
- 5. Measures to address corruption
- Administrative arrangements for natural resources management are disjointed and there is need for a central coordinating environmental management and protection agency to act as a network administrative organization. This NAO can be a regional body which will function to:
  - Serve as a commission or authority staffed with the region's best professionals to provide independent oversight,
  - Conduct research, provide support to formulate policies, legislation and management strategies,
  - Monitor and track progress in implementation.
- The authority will reduce the need to deliver technical support to member states through short term disjointed consulting engagements; The NAO will improve the law

- enforcement capabilities in OECS member states, reduce duplication of efforts and strengthen national capacity for environmental management;
- Legal land registry needs to be improved; a system for benefits sharing of public natural resource rights must be developed to avoid conflict especially with marine spatial planning;
- A regional oversight mechanism is needed to provide measures for dealing with corruption. Arrangements made with private interests' groups and CBI investors to use public lands for development must be made transparent.

Table 9.3 Component 3 Governance Framework: Implementation, monitoring and Compliance for CMSP in OECS MS

Componer	nt	Dominica	Grenada	St. Kitts and Nevis	St Lucia	St. Vincent & Grenadines
COMPLIANCE	Administration of coastal and marine resources	Fisheries Division; maritime administration office; no ICZM unit; limited capacity; GIS and Physical Planning Unit with hardware & software for planning; urban development unit	Fisheries Division; maritime administration officer duties merged with Port Authority although distinct legal functions; ICZM task force; limited capacity; Physical Planning Unit has limited	Strong Fisheries Division; strong maritime administration office; no ICZM; limited capacity; Strong GIS and Physical Planning Unit with hardware & software for planning;	Fisheries Division; Strong maritime administration office; functioning coastal zone management unit; limited capacity; GIS and Physical Planning Unit with hardware & software for	Fisheries Division; Strong maritime administration office; no coastal zone management unit; limited capacity; GIS and Physical Planning Unit with hardware & software for planning
<u> </u>			capacity hardware & software for planning; Land Use Dept has GIS capability	urban development unit	planning	
IT THREE	Law enforcement	Low – needs to improve; Coast guard; MPA officers; no environmental wardens	Low – needs to improve; Coast guard; MPA officers; no environmental wardens	Low – needs to improve; Coast guard; MPA officers; no environmental wardens	Low – needs to improve; Coast guard; MPA officers; no environmental wardens	Low – needs to improve; Coast guard; MPA officers; no environmental wardens
COMPONENT THREE 'ATION, MONITORING AN	Administration of land tenure and property rights	Land registry; no legal cadastral data; land and property taxes; judicial system; mediation and dispute resolution; no taxes in Kalinago Territory	Land registry; no legal cadastral data; land and property taxes; judicial system; mediation and dispute resolution;	Land registry; no legal cadastral data; land and property taxes judicial system; mediation and dispute resolution;	Land registry; no legal cadastral data; judicial system; mediation and dispute resolution;	Land registry; no legal cadastral data; judicial system; mediation and dispute resolution;
COI IMPLEMENTATION,	Cooperation and coordination	Lack of coordinating mechanisms for coastal and marine management; strong regional mechanisms	Lack of coordinating mechanisms for coastal and marine management; strong regional mechanisms	Lack of coordinating mechanisms for coastal and marine management; strong regional mechanisms	Lack of coordinating mechanisms for coastal and marine management; strong regional mechanisms	Lack of coordinating mechanisms for coastal and marine management; strong regional mechanisms
	Measures to address corruption	Need watch dog and oversight mechanism	Need watch dog and oversight mechanism	Need watch dog and oversight mechanism	Need watch dog and oversight mechanism	Need watch dog and oversight mechanism

### 10.0 CONCLUSIONS AND RECOMMENDATIONS

#### 10.1 General Conclusion

From the strategic assessment of current trends in governance and management of coastal and marine resources in OECS States, two programs of actions are required to enable successful implementation of the CROP. Section 8 of this report provides Program 1 - mitigation measures and standards to address the existing and predicted pressures contributing to vulnerability reduction.

Program 2 addresses the CMS planning process which will be constrained by the existing weak governance framework for coastal and marine resources management in OECS States. Member States are at various points along the continuum from weak to good governance therefore different priorities are given to the areas requiring action. Recommendations are provided in sections 10.2 to address the gaps and constraints identified in Section 9 of this report. These policy responses or "soft approaches" address factors operating at the level of the political economy, contribute to adaptation and building resilience. A combination of both Program 1 and Program 2 responses are therefore required for successful CMSP in OECS States.

#### 10.2 Program 2 - Priority Areas for Action to improve Governance in OECS MS

The areas for action are grouped based on the findings presented for analysis of the Governance Framework in Section 2 above. Separate attention is also given to prioritizing action for reducing the environmental pressures that result in degradation of the coastal and marine resources in OECS MS. A general requirement is the need to develop indicators for tracking progress in governance of coastal and marine resources.

Each member state was required to provide national priority selection to feed in the SESA process. Responses were provided by Dominica, Grenada and St. Lucia and these are attached as annexes to the report. The following is the ranking developed by the consultant which will apply for St. Kitts and Nevis and St. Vincent and the Grenadines, as informed by the situation analysis:

### 10.2.1 Recommendations—Policy, Legal, Institutional and Regulatory Framework

### Table 10.1 Recommended Actions for improvement of Legal and Regulatory Framework in OECS MS

Priority 1: Immediate Action (2018-2019)
Priority 2: Short-term Action (2020-2020)
Priority 3: Medium to long term (2020-2022)

Su	b-Components	RECOMMENDATIONS FOR ACTION	PRIORITY
	Laws, policies and	Enact Environmental Management Act and supporting regulations	1
<b>≿</b>	strategies related to	Enact Regulations for Physical Planning Act to include regulations for EIAs	1
LATORY	coastal and marine management	Adopt international MEAs into domestic legislation	2
GULA	management	Revise Forestry and Fisheries Legislation to include coastal zone management	1
REG		Revise and update Beach Protection Act to include coastal erosion and sea level rise	2
E ND		Develop National Ocean Governance Policy	1
MPONENT ONE TITUTIONAL AN FRAMEOWRK	Legal framework to support and protect	<ul> <li>Develop legal framework for user rights of public lands, forests, beaches, mangroves, coastal and marine spaces</li> </ul>	
J S S S S S S S S S S S S S S S S S S S	land tenure,	Revise user rights and fee structures for national parks and protected areas	1
COMPONENT O NSTITUTIONAL FRAMEOWR	ownership and use rights	<ul> <li>Kalinago Territory need to improve framework and develop by-laws to protect communal natural resources</li> </ul>	1
o ≥		Geographic coordinates for Kalinago Territory to be legally defined for spatial plans	1
LEGAL	Integration of	National Physical Development Plans integrate Climate Change Adaptation Plans	2
LE	Development	Tourism Master Plan integrate climate change and sea level rise	1
ζ,	Policies with CMSP	• Forestry Policy and Action Plans; include mangroves and protection of coastal wetlands	2
OLICY		Housing Policy and Settlement Plan integrate into CMSP	2
ā		Multi-hazard risk assessment	1
		Develop linkages with national development plans and poverty reduction strategies	1

Institutional	Develop institutional framework to protect traditional resource rights for sustainable	
Framework	livelihoods of vulnerable and marginalized communities	
	Kalinago Council needs to manage traditional practices for natural resources use; develop by-laws to manage land to reduce conflict between formal and informal	1
	Protect right of public access to the seashore and marine resources in CMSP	1
Financial Incentives,	Revise tax regime and concessions for fishing and tourism sectors to correct distortions	2
Economic	which contribute to environmental degradation	
Instruments and	Introduce structured license fees for commercial fisherfolk and tourist sport fishing	2
Benefits sharing	Develop quota system for extraction of natural resources for all users (private and commercial)	2
	Develop regime of economic instruments for resource management	2

### 10.2.2 Recommendations – Planning and Decision-making process

### Table 10.2 Recommendations for Improvement of Planning and Decision-making process in OECS MS

Priority 1: Immediate Action (2018-2019)
Priority 2: Short-term Action (2020-2020)
Priority 3: Medium to long term (2020-2022)

	Sub-Component	RECOMMENDATIONS FOR ACTION	PRIORITY
TWO MAKING PROCESS	Planning Context and Levels of	• Update Socio-economic development plans to include projects and actions for reduction of environmental pressures which lead to environmental degradation (see table 3.4 for areas for action)	1
	Planning	<ul> <li>Conduct training in use of economic valuation, environmental assessments, hazard risk assessment and climate change scenarios to evaluate Public Sector Investment Projects</li> </ul>	3
		• Update Sectoral development plans to include provisions for protection of coastal and marine resources as appropriate	3
		Promote integrated development planning	3
OMPONENT D DECISION	Planning Process & Decision Support	<ul> <li>Improve participation of Private sector and citizens in the planning and decision- making process across all levels of planning</li> </ul>	1
COMPC PLANNING AND DEC	Systems	<ul> <li>Operationalize ecosystems-based approach in coastal and marine spatial planning process</li> </ul>	1
		Develop decision support systems and integrate hazard risk and environmental analyses into the decision-making process	1
	Public Participation	<ul> <li>Institutionalize public participation; include standing citizen advisory groups in setting priorities for development plans</li> </ul>	1
		Enforce Freedom of Information Act	2
		Develop guidelines for public participation in environmental and social impact assessments; make stakeholder consultations for EIAs a mandatory requirement	1

	Adopt principles and provisions of Regional Agreement on right to access to information public participation and environmental justice into national legislation	2
	Develop indicators to track progress in implementation of policies, projects, plans etc and evaluate impact	1
Transparency &	Improve transparency of CBI Projects which utilize public coastal and marine resources	2
Accountability	Make public all lease, licenses, permits, quotas, concessions granted for coastal and marine resource use/development	2
	Develop indicators to track progress in implementation of Freedom of Information Act	1
	Develop regional oversight mechanism for public authorities	
Stakeholder	Correct public policy failures which limit stakeholder action in development planning and decision-making process	3
Capacity and actions	Create program of action to build capacity for stakeholder action in Kalinago Territory	1
	Develop national environmental education strategy for all levels of decision-makers	2
	• A well-funded and comprehensive communications strategy should be developed that engages all stakeholders, and utilizes diverse media outlets (e.g., web, public lectures, and stakeholder meetings) to reach the public.	1

### 10.2.3 Recommendations – Implementation, Monitoring and Compliance

### Table 10.3 Recommendations to Improve Implementation, Monitoring and Compliance in OECS MS

Priority 1: Immediate Action (2018-2019)
Priority 2: Short-term Action (2020-2020)
Priority 3: Medium to long term (2020-2022)

	Sub-Component	RECOMMENDATIONS FOR ACTION	PRIORITY
COMPLIANCE	Administration of	• Improve capacity of ministries charged with responsibility for management of coastal and marine resources (human, technical, financial)	1
	coastal and marine	Develop participatory approach for monitoring of coastal and marine ecosystems	1
	resources	Publish state of the environment reports (annual)	1
		(see list of environmental issues requiring action)	
		Indicators and benchmarks for tracking environmental quality must be developed	1
ÄEE		Improve capacity of judiciary for enforcement of laws and regulations	3
COMPONENT THRE	Law enforcement	Develop incentives for public participation in enforcement	3
		Develop financial and tax incentives for voluntary compliance	2
	Administration of	Develop regional environmental commission, tribunal or court	3
	land tenure and property rights	<ul> <li>Improve access to judiciary; educate citizens on rights and process for judicial intervention in resolving conflicts</li> </ul>	2
		Kalinago Council - Develop land and property administration system for Territory	2
TAT		Develop regional environmental protection and management authority	3
IMPLEMEN'	Cooperation and	Develop standing committee, citizen development commissions for CMSP	1
	coordination	Institutionalize roles and responsibilities of regional coordinating agencies	2
	Measures to address	Develop regional oversight mechanism for combating corruption	3
	corruption		

### 10.3 General Recommendations for Implementation of CROP

Recommendations to guide the development of marine spatial plans were an output from the CROP Feasibility Study. Despite not being ranked in order of priority by Member States they are relevant and should be taken on board during the implementation of the five-year project. The recommendations, which have been incorporated into this SESA, are provided under the following categories below:

### 10.3.1 Stakeholder Participation

- To help strengthen support and buy-in for MSP, each CROP country should clearly articulate their own country needs for MSP and the benefits it will provide.
- A stakeholder analysis should be completed at the start of the process to determine who should be involved, the best ways to communicate with them, and when they should be brought into the process.
- A well-funded and comprehensive communications strategy should be developed that
  engages all stakeholders, and utilizes diverse media outlets (e.g., web, public lectures, and
  stakeholder meetings) to reach the public.
- A regional Stakeholder Advisory Committee should be created to provide guidance and recommendations to ensure full stakeholder participation in MSP processes.

### 10.3.2 Planning Context and Decision-making Process

- Each CROP country should clearly articulate their own vision for their country that will
  align with the regional project vision and match the national policy direction of their
  country. This vision statement should be realistic, credible, and attractive such that it
  attracts commitment and energizes people, while creating meaning to stakeholders.
- The guiding principles of the MSP should be: equitable, adaptive, holistic, transparent, knowledge driven, public and political buy-in and accountability, sustainability, ecosystem-based management, precautionary principle, integrated management, duty of care and accountability, multi-stakeholder participation, user pays and other economic instruments, and simplicity.

- The goals for the MSP should be guided by the possible threats to the marine environment in the country; the social, environmental, economic, and cultural policy direction of the country; build upon national policies and regional and international commitments; and be guided by proposed future uses of the marine space.
- The objectives of the MSP must be SMART and lead to the development of strategies that
  are clear, realistic, pragmatic, measurable, match the unique situation with the country,
  and should consider what worked and didn't under similar and related projects and
  initiatives.
- The geographic area of coverage should be from the coastal watershed / catchment area out to the furthest seaward boundary under the jurisdiction of the country.

#### 10.3.3 Regional Cooperation and Coordination

- For a regional MSP to be effective, the World Bank and the OECS Commission must solicit the buy-in and participation from as many countries sharing the island chain as possible.
- Regional agencies and projects should be engaged to help encourage participation from non-CROP countries.
- The regional Ocean Governance Team should play a key role in guiding the work of the national and regional MSP to ensure that decisions are aligned with international best practice.
- A regional data base of persons qualified in MSP relevant fields should be created to allow for exchange and utilization of national and regional technical experts in the planning and implementation of MSP.
- Collaboration mechanisms with potential regional partners should be promoted as there
  are several ways that they can support CROP implementation including mobilizing
  finances, providing training, undertaking project work, supporting stakeholder
  participation, and guiding the development of the required legislative and operational
  framework.
- The key activities that should be completed prior to the final approval by the GEF and project kick-off include concluding boundary delimitation discussions with neighboring

countries, soliciting buy-in and participation from other countries that are not part of the CROP, and mobilizing additional financial resources.

### 10.3.4 Project Implementation

- A financial management plan should be developed for the CROP that identifies the resources available, the funding gaps, and articulates a plan on how these gaps can be filled.
- The OECS Commission, the World Bank, and the governments of the CROP countries should work collectively to raise additional resources for the project from direct allocations from government budgets, bilateral and multilateral donors, private sector, and collaborations with other regional projects and initiatives.
- Considering the limited funding available, The World Bank, the OECS Commission, and the
  governments of the OECS countries must work assiduously to get additional project
  funding in a timely manner so that there are sufficient funds to do the required work and
  there is continuity to the CROP activities after the initial 4 years.
- The timeline for the planning stage of the MSP (CROP project timeline) should be a minimum of 3 5 years, but with the understanding that in some countries it may take longer (a phased-in approach may be needed in these countries).
- Although boundary delamination will not be a central theme during the implementation
  of CROP, it is critically important and should be conducted in parallel to CROP's
  implementation. Clearly defined boundaries will (i) allow countries jurisdiction to enforce
  legislation governing activities within their waters, (ii) help transboundary issues, and (iii)
  help assess the geographic area available for marine activities that extend beyond the
  12nm territorial sea (aligned with ECROP Policy 1).
- A phased-in approach should be followed for MSP planning in the CROP countries.
- The decision of which of the 5 options (pilot CROP in 2 or 3 OECS countries; complete the MSP process for only certain areas in each country; allow the MSP to extend out only to the 200m depth contour; design data collection activities to suit the available time and funding resources; and focus the MSP efforts on only a few key marine uses) to allow for

the implementation of a phased-in approach should be based on the amount of time and finances available for the CROP implementation and the current enabling conditions present in each country.

 Two implementation models are recommended for the CROP - one model proposing completion of most of the national level project activities by consultants and the other one proposing implementation of activities through local agencies with support from consultants.

### 10.3.5 Policy Legal and Regulatory

- A regional Legal Advisory Task Force with representation by the Attorney General from each OECS country should be created very early in the process to provide legal guidance for the MSP.
- New legislation should be created early in the MSP process to provide the authority to
  make the spatial management plans, which will be the outputs of the MSP, binding.
  However, in cases where the legislative process will be too lengthy, existing legislation
  should be used if available so as not to delay project activities.
- Institutional and legislative review will be needed to determine the most appropriate agency to lead the planning for MSP. For Saint Lucia and Grenada, the CZMUs should be strengthened to serve in this role. For Dominica, St. Kitts and Nevis and St. Vincent and the Grenadines creation of a new agency is advised but this may have to be conducted in parallel to the CROP.

### 10.3.6 Inter-sectoral coordination

• There are existing intersectoral committees present in Saint Lucia (Coastal Zone Management Advisory Committee), Grenada (Coastal Zone Task Force) that can be used to oversee the MSP. St. Vincent and the Grenadines (Ocean Governance Coordination Committee) and St. Kitts and Nevis (National Maritime Coordination Committee) once endorsed by cabinet can serve as this coordinating body. For Dominica, since there is no

- clear coordination committee that can serve in this role the Cabinet should appoint a new committee.
- Assessments should be completed to determine best practice for collaborative mechanisms among organizations in each country and this should be used to support MSP efforts in the countries.

#### 10.3.7 Data Collection

- Objectives for data collection should be well articulated at the start of the MSP planning process to help streamline data collection and management.
- The MSP process in the countries should rely on the best available science and information that is collected through well tested and documented methodologies that support data comparisons and sharing across countries.
- A regional Science Advisory Committee that informs data decisions should be constituted.
- MSP data collection activities must be guided by both current and future uses of the ocean.
- A comprehensive knowledge management system should be created to document best practices and pits falls of the CROP implementation at the national and regional levels.

### 10.3.8 Monitoring and Evaluation

- Monitoring and evaluation will be a critical process that should be completed throughout the MSP planning processes and should be implemented by an external monitoring and evaluation team.
- The MSP base year should be determined early in the process and should be based on the national goals and objectives of each country MSP effort and should be taken as the date when implementation starts.
- Contingencies must be built into CROP planning to allow the team to adapt to changing situations.

### 11.0 ACTION PLAN FOR IMPLEMENTATION OF THE SESA

The following are direct recommendations for consultants undertaking the preparation of ocean policies and strategies, and coastal and marine spatial plans to guide their activities. Several of these recommendations have already been brought out in previous deliverables including the IPPF for the Kalinago Territory in Dominica. Potential conflicts which may arise during implementation of the CMSP include:

- Vision for CMSP Member States have yet to clearly articulate their vision for coastal
  and marine spatial planning and this is a critical precursor to shape the outcomes of
  CROP. The Grenada Blue Growth Master Plan is an investment promotion strategy
  and needs to be aligned with national vision for coastal and marine resources
  management;
- National Physical Development Plan These may be outdated or do not include provisions for coastal zone management and therefore must be aligned with the coastal spatial plans to be developed under this project;
- National Socio-Economic Development Plan The 2030 development agenda for Member States must provide guidance for developing the overall vision for CMSP. This requires broad based involvement in shaping the outcomes of spatial plans that are socially acceptable and economically feasible.

### 11.1 Priorities for action at the regional level

Several priorities requiring action at the regional level were among the key findings of the situation and stakeholder analysis and the recommendations from the CROP feasibility study. They include:

### 11.1.1 Immediate to Short Term Actions (2018-2020)

- The terms of reference and composition of the regional Ocean's Governance Team must be reviewed to ensure that there is full stakeholder participation in MSP processes;
- For a regional MSP to be effective, the World Bank and the OECS Commission must solicit the buy-in and participation from as many countries sharing the island chain as possible;
- Regional agencies and projects should be engaged to help encourage participation from non-CROP countries;
- The regional Ocean Governance Team should play a key role in guiding the work of the national and regional MSP to ensure that decisions are aligned with international best practice;
- A regional data base of persons qualified in MSP relevant fields should be created to allow for exchange and utilization of national and regional technical experts in the planning and implementation of MSP;
- The key activities that should be completed prior to the final approval by the GEF and project kick-off include concluding boundary delimitation discussions with neighboring countries, soliciting buy-in and participation from other countries that are not part of the CROP, and mobilizing additional financial resources;
- A regional Legal Advisory Task Force with representation by the Attorney General from each OECS country should be created very early in the process to provide legal guidance for the MSP.

#### 11.1.2 Medium to Long Term Actions (2020-2022)

- Collaboration mechanisms with potential regional partners should be promoted as
  there are several ways that they can support CROP implementation including
  mobilizing finances, providing training, undertaking project work, supporting
  stakeholder participation, and guiding the development of the required legislative and
  operational framework;
- Establish a regional environmental protection agency to provide support for national agencies in areas such as monitoring, baseline ecosystems surveys and assessments, research, environmental information management systems and data management;
- Establish a regional environmental commission, tribunal or court at the CCJ to address matters related to management of the Caribbean Sea, territorial boundaries and EEZ, compliance with regional environmental standards and laws;
- Develop regional oversight mechanism for public authorities with responsibility for environment, coastal and marine resources management;
- Develop regional oversight mechanism for transparency, accountability and combating corruption in allocation of resources from exploitation of natural resources;

### 11.2 National Priority 1: Immediate Action (2018-2019)

The stakeholders from Member States have placed heavy emphasis on the planning and decision-making component of the governance framework, with more than 14 actions recommended for immediate action. These areas of attention are considered critical for successful coastal and marine spatial planning.

#### 11.2.1 Legal, Policy, Institutional and Regulatory Framework

- Enact Environmental Management Act and supporting regulations;
- Enact Regulations for Physical Planning Act to include regulations for EIAs;
- Revise Forestry and Fisheries Legislation to include coastal zone management (Grenada already completed);
- Develop National Ocean Governance Policy (completed for SVG; draft in SKN);
- Revision and enforcement of Fisheries marine related laws;
- Revise user rights and fee structures for national parks and protected areas;
- Kalinago Territory need to improve framework and develop by-laws to protect communal natural resources;
- Protect right of public access to the seashore and marine resources in CMSP.

### 11.2.2 Planning and Decision-making Process

- o Tourism Master Plan integrate climate change and sea level rise;
- Multi-hazard risk assessment for coastal development;
- Update Socio-economic development plans to include projects and actions for reduction of environmental pressures which lead to environmental degradation;
- Improve participation of Private sector and citizens in the planning and decisionmaking process across all levels of planning;
- Operationalize ecosystems-based approach in coastal and marine spatial planning process;
- Develop decision support systems and integrate hazard risk and environmental analyses into the decision-making process;

- Institutionalize public participation; include standing citizen advisory groups in setting priorities for development plans;
- Develop guidelines for public participation in environmental and social impact assessments; make stakeholder consultations for EIAs a mandatory requirement
- Develop indicators to track progress in implementation of policies, projects, plans
   etc and evaluate impact;
- Develop participatory approach in monitoring of coastal and marine ecosystem;
- Develop framework for engagement of CBI developers/business operators with local
   MPAs for conservation and preservation actions in Marine Protected Areas;
- Create program of action to build capacity for stakeholder action in Kalinago
   Territory;
- A well-funded and comprehensive communications strategy should be developed that engages all stakeholders, and utilizes diverse media outlets (e.g., web, public lectures, and stakeholder meetings) to reach the public;
- Develop capacity development program action for all communities and MPAs engaged in EbA (DOM)

#### 11.2.3 Implementation, Compliance and Monitoring

- Improve capacity of ministries and MPAs charged with responsibility for management of coastal and marine resources (human, technical, financial);
- Develop participatory approach for monitoring of coastal and marine ecosystems
- Publish state of the environment reports (annual); SLU most recent report 2016;
- Indicators and benchmarks for tracking environmental quality must be developed;
- Develop indicators to track progress in implementation of policies, projects, plans,
   etc and to evaluate impacts;
- Develop data collection and management systems;
- Training and capacity building of fisheries staff in news and developing technologies;
- Coral reef and fish stock monitoring .

### 11.3 Priority 2: Short-term Action (2019-2020)

### 11.3.1 Legal, Policy, Institutional and Regulatory Framework

- Adopt international MEAs into domestic legislation
- o Revise and update Beach Protection Act to include coastal erosion and sea level rise
- Develop legal framework for user rights of public lands, forests, beaches,
   mangroves, coastal and marine spaces
- o National Physical Development Plans integrate Climate Change Adaptation Plans
- Forestry Policy and Action Plans; include mangroves and protection of coastal wetlands
- Housing Policy and Settlement Plan integrate into CMSP
- Revise tax regime and concessions for fishing and tourism sectors to correct distortions which contribute to environmental degradation
- Revise the structure of license fees for fisher folk and marine related tourism
- Develop quota system for extraction of natural resources for all users (private and commercial)
- o Develop regime of economic instruments for resource management
- Waiver of Custom duties, and Vat on boats, equipment, machinery, hardware, software, for MPAs, CSOs and NGOs that are engaged in environmental, conservation and preservation efforts

### 11.3.2 Planning and Decision-making Process

- o Enforce Freedom of Information Act
- Adopt principles and provisions of Regional Agreement on right to access to information public participation and environmental justice into national legislation;
- Improve transparency of CBI Projects which utilize public coastal and marine resources
- Conduct training in use of economic valuation, environmental assessments, hazard risk assessment and climate change scenarios to evaluate Public Sector Investment Projects
- Develop national environmental education strategy for all levels of decision-makers

### 11.3.3 Implementation, Compliance and Monitoring

- Develop financial and tax incentives for voluntary compliance
- Make provision for MPAs, NGOs and CSOs engaged in environment conservation and preservation to place fines, penalties and other enforcement measures;
- Improve access to judiciary; educate citizens on rights and process for judicial intervention in resolving conflicts;
- o Kalinago Council Develop land and property administration system for Territory

### 11.4 National Priority 3: Medium to long term (2019-2022)

### 11.4.1 Planning and Decision-making Process

- Conduct training in use of economic valuation, environmental assessments, hazard risk assessment and climate change scenarios to evaluate Public Sector Investment Projects
- Update Sectoral development plans to include provisions for protection of coastal and marine resources as appropriate
- Promote integrated development planning
- Correct public policy failures which limit stakeholder action in development planning and decision-making process;

### 11.4.2 Implementation, Compliance and Monitoring

- o Improve capacity of judiciary for enforcement of laws and regulations
- o Develop incentives for public participation in enforcement
- Develop regional environmental commission, tribunal or court

Table 11.1a Action Plan for Priority One: Immediate (2018-2019)

Governance Component	Strategic Objectives	Implementation Actions	Responsible Agency	Time Frame
To modernize Laws, policies and strategies related to coastal and marine management  To develop a robust legal framework to support and protect land tenure, ownership and use rights  To integrate broader development policies i	·	<ul> <li>Enact Environmental Management Act and supporting regulations;</li> </ul>	Legal Affairs; Min of Environment; Sus Dev	6 months (in draft)
	<ul> <li>Enact Regulations for Physical Planning Act to include regulations for EIAs;</li> </ul>	Legal Affairs; Physical Planning	6 months (in draft)	
	<ul> <li>Revise Forestry and Fisheries Legislation to include coastal zone management (Grenada already completed);</li> </ul>	Legal Affairs; Forestry; Fisheries	1 year	
	<ul> <li>Develop National Ocean Governance Policy (completed for SVG; draft in SKN);</li> </ul>	National Committee; all sectors participate	6 months	
	<ul> <li>Revision [and enforcement] of Fisheries marine related laws;</li> </ul>	Legal Affairs; fisheries	6 months (in draft)	
	<ul> <li>Revise user rights and fee structures for national parks and protected areas;</li> </ul>	Fisheries; National Parks; Min of Finance	1 year	
] 	with coastal and marine policies	<ul> <li>Kalinago Territory need to improve framework and develop by-laws to protect</li> </ul>	Kalinago Council	1 year
Ϋ́	To create pathways for	communal natural resources;		
recognition of cultural norms and traditional rights in Institutional frameworks  To develop financial incentives, economic instruments and benefits sharing	<ul> <li>Protect right of public access to the seashore and marine resources in CMSP;</li> </ul>	National CMSP Committee	Immediate and ongoing	
	<ul> <li>Legally define geographical coordinates for Kalinago Territory to facilitate spatial</li> </ul>	Kalinago Council; Ministry of Kalinago	Immediate to 6 months	
	incentives, economic instruments and	planning.	Affairs; Legal Affairs	

Governance Component	Strategic Objectives	Implementation Actions	Responsible Agency	Time Frame

Table 11.1b Action Plan for Priority One: Immediate (2018-2019)

Gover nance Compo nent	Strategic Objectives	Recommended Actions for Implementation	Responsible Agency	Time Frame
	To integrate planning	Tourism Master Plan integrate climate change and sea level rise;	Min of Tourism; Environment; Sus Dev	1 year
ANNING AND	across all levels, national, regional (area), sectoral, projects  To utilize decision-	Multi-hazard risk assessment for coastal development; Update Socio-economic development plans to include projects and actions for reduction of environmental pressures which lead to environmental degradation	Physical Planning; Disaster Management Economic Planning; Finance; Environment;	6 months; part of budget cycle
support systems into planning framework  To increase Stakeholder Participation	Improve participation of Private sector and citizens in the planning and decision-making process across all levels of planning	All sectors; Economic planning; budget process	Immediate and Ongoing	
Δ	•	Operationalize ecosystems-based approach in coastal and marine spatial planning process	Fisheries and marine management agency; environment dept	Immediate and ongoing

Gover nance Compo nent	Strategic Objectives	Recommended Actions for Implementation	Responsible Agency	Time Frame
	To improve transparency and accountability  To increase stakeholder capacity and action	<ul> <li>Develop decision support systems and integrate hazard risk and environmental analyses into the decision-making process</li> <li>Institutionalize public participation; include standing citizen advisory groups in setting priorities for development plans</li> <li>Develop guidelines for public participation in environmental and social impact assessments; make stakeholder consultations for EIAs a mandatory requirement</li> </ul>	Economic & Finance;  Ministry of Finance; Economic Planning; all sectors Physical Planning	6 months-1 year & ongoing Immediate & ongoing 3-6 months
		<ul> <li>Develop indicators to track progress in implementation of policies, projects, plans etc and evaluate impact</li> </ul>	Ministry of Environment	Immediate and ongoing
		<ul> <li>Develop participatory approach in monitoring of coastal and marine ecosystem</li> </ul>	Ministry of Environment; Fisheries; NGOs	1 year
		<ul> <li>Develop framework for engagement of CBI developers/business operators with local MPAs for conservation and preservation actions in Marine Protected Areas. (DOM)</li> </ul>	Economic Planning; Fisheries	1 year
		<ul> <li>Create program of action to build capacity for stakeholder action in Kalinago Territory</li> </ul>	Kalinago Council & Ministry	Immediate & ongoing
		<ul> <li>A well-funded and comprehensive communications strategy should be developed that engages all stakeholders, and utilizes diverse media outlets (e.g.,</li> </ul>	Sus Dev; Ministry of Environment; Economic Planning, Finance;	Immediate and ongoing

Gover nance Compo nent	Strategic Objectives	Recommended Actions for Implementation	Responsible Agency	Time Frame
	•	web, public lectures, and stakeholder meetings) to reach the public Develop capacity development program action for all communities and MPAs engaged in EbA (DOM)	Fisheries; Ministry of Environment	1 year

**Table 11.1c Action Plan for Priority One: Immediate (2018-2019)** 

Gove rnanc e Comp onen t	Strategic Objectives	Recommended Actions for Implementation	Responsible Agency	Time Frame
To develop capacity for administration of coastal and marine	administration of	<ul> <li>Improve capacity of ministries and MPAs charged with responsibility for management of coastal and marine resources (human, technical, financial);</li> </ul>	Ministry of Finance; Fisheries; Min of Environment	Immediate and ongoing
MPLI	To develop capacity for administration of coastal and marine resources  To enhance Law enforcement  To improve administration of land tenure and property rights  To create mechanisms for cooperation and coordination  •	<ul> <li>Develop participatory approach for monitoring of coastal and marine ecosystems</li> </ul>	Fisheries;	6 months
A, CO		<ul> <li>Publish state of the environment reports (annual); SLU most recent report 2016;</li> </ul>	Sus Dev; Ministry of Environment	1 year and ongoing
MON		<ul> <li>Indicators and benchmarks for tracking environmental quality must be developed;</li> </ul>	Ministry of Environment	6 months and ongoing
ENTA		<ul> <li>Develop indicators to track progress in implementation of policies, projects, plans, etc and to evaluate impacts;</li> </ul>	Economic Planning; Ministry of Environment	6 months and ongoing
LEM		<ul> <li>Develop data collection and management systems;</li> </ul>	Ministry of Environment;	1 year
Σ		<ul> <li>Training and capacity building of fisheries staff in news and developing technologies;</li> </ul>	Fisheries; CRFM	6 months to 1 year
		<ul> <li>Coral reef and fish stock monitoring.</li> </ul>	Fisheries; CRFM	immediate

Table 11.2a Action Plan for Priority Two: Short to Medium Term (2020-2020)

<b>Governance Component</b>	Strategic Objectives	Recommended Actions for Responsible Implementation Agency	Time Frame
FGISLATIVE Component	To modernize Laws, policies and strategies related to coastal and marine management  To develop a robust legal framework to support and protect land tenure, ownership and use rights  To integrate broader development policies i with coastal and marine policies  To create pathways for		_
re n ri	recognition of cultural norms and traditional rights in Institutional frameworks	<ul> <li>Revise tax regime and concessions for fishing and tourism sectors to correct distortions which contribute to environmental degradation</li> <li>Ministry of Finance; fisheries, tourism</li> </ul>	1.5 years
	To develop financial incentives, economic	<ul> <li>Develop quota system for extraction of natural resources for all users (private and commercial)</li> <li>Ministry of Finance &amp; Relevant Ministry</li> </ul>	1.5 years

<b>Governance Component</b>	Strategic Objectives		Recommended Actions for Implementation	Responsible Agency	Time Frame
	instruments and benefits sharing	•	Develop regime of economic instruments for resource management	Ministry of Finance	1.5 years
		•	Waiver of Custom duties, and Vat on boats, equipment, machinery, hardware, software, for MPAs, CSOs and NGOs that are engaged in environmental, conservation and preservation efforts	Ministry of Finance	2 years

Table 11.2b Action Plan for Priority Two: Short to Medium Term (2020-2020)

Gove rnanc e Comp onen t	Strategic Objectives		Recommended Actions for Implementation	Responsible Agency	Time Frame
	To utilize decision- support systems into planning framework	•	Adopt principles and provisions of	Legal Affairs; Ministry of Information Legal Affairs; Ministry	1.5 to 2 years 1.5 years
ING AND ISION KING	To increase Stakeholder Participation To improve		Regional Agreement on right to access to information public participation and environmental justice into national legislation;	of Information; civil society participation	
PLANNING DECISIC MAKIN	transparency and accountability	•	Improve transparency of CBI Projects which utilize public coastal and marine resources	Ministry of Finance and Information;	1.5 years
	To increase stakeholder capacity and action	•	Conduct training in use of economic valuation, environmental assessments, hazard risk assessment and climate change scenarios to	Economic Planning; Ministry of Finance	1.5 to 2 years

evaluate Public Sector Investment
 Projects

 Develop national environmental
 education strategy for all levels of decision-makers
 Environment and Education

Table 11.2c Action Plan for Priority Two: Short to Medium Term (2020-2020)

<b>Governance Component</b>	Strategic Objectives	Recommended Actions for Implementation	Responsible Agency	Time Frame
IMPLEMENTATION, COMPLIANCE AND MONITORING	To develop capacity for administration of coastal and marine resources	<ul> <li>Develop financial and tax incentives for voluntary compliance</li> <li>Make provisions for MPAs, NGOs and CSOs engaged in environment conservation and preservation to place fines, penalties and other</li> </ul>	Ministry of Finance; min of environment Legal Affairs; Fisheries;	2 years 2 years
	To enhance Law enforcement  To create mechanisms for cooperation and coordination	<ul> <li>enforcement measures;</li> <li>Improve access to judiciary; educate citizens on rights and process for judicial intervention in resolving conflicts;</li> </ul>	NGOs, CBOs, Bar Association; Mediation Project	2 years
	To establish measures to address corruption	<ul> <li>Kalinago Council - Develop land and property administration system for Territory</li> </ul>	Kalinago Council	2 years

Table 11.3 Action Plan for Priority Three: Medium to Long Term (2020-2022)

<b>Governance Component</b>	Strategic Objectives	Implementation Actions	Responsible Agency	Time Frame
PLANNING AND DECISION MAKING	To integrate Planning across all levels, national, regional (area), sectoral, projects To utilize decision-support systems into	<ul> <li>Conduct training in use of economic valuation, environmental assessments, hazard risk assessment and climate change scenarios to evaluate Public Sector Investment Projects</li> </ul>	Economic Planning; Ministry of Finance	3 years
IG AND D MAKING	planning framework  To increase Stakeholder	<ul> <li>Update Sectoral development plans to include provisions for protection of coastal and marine resources as</li> </ul>	All sectors	3 years
N N N N N N N N N N N N N N N N N N N	Participation  To improve transparency and	<ul><li>appropriate</li><li>Promote integrated development planning</li></ul>	Economic Planning Dept.	3 to 4 years; ongoing
PLA	accountability  To increase stakeholder capacity and action	<ul> <li>Correct public policy failures which limit stakeholder action in development planning and decision- making process;</li> </ul>	Ministry of Finance; Economic Planning Dept; Physical Planning	3 years
AND AND AND	To enhance Law enforcement	<ul> <li>Improve capacity of judiciary for enforcement of laws and regulations</li> </ul>	Legal Affairs; Standing Stakeholder Committee	3 years and ongoing
IMPLEMENTATION, COMPLIANCE AND MONITORING	To create mechanisms for cooperation and coordination	<ul> <li>Develop incentives for public participation in enforcement</li> </ul>	Ministry of Environment; Legal Affairs	4 years
	To establish measures to address corruption	<ul> <li>Develop regional environmental commission, tribunal or court</li> </ul>	OECS	3 to 4 years

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# ANNEX I – ENVIRONMENTAL POLICY AND REGULATORY FRAMEWORK IN OECS STATES

Table 1a Terrestrial Zone – Environmental Policy Framework for resources management in OECS Member States

Coastal Zone	Dominica	Grenada	St. Kitts and Nevis	Saint Lucia	St. Vincent & the Grenadines
<b>Land Tenure</b>	Mainly Crown Lands; Private	Mainly Private; Crown Lands	Crown Lands	Mainly Crown Lands; Private	Mainly Crown Lands; private
Land use	National parks; rain forest; water catchment; agriculture; limited residential; telecommunication towers; eco-tourism; sustainable livelihoods	Forest Reserve; National parks; rain forest; water catchment; agriculture; limited residential; eco-tourism; telecommunication towers; sustainable livelihoods	National parks; rain forest; water catchment; agriculture; limited residential; telecommunication towers; eco-tourism; sustainable livelihoods	National parks; rain forest; water catchment; agriculture; limited residential; telecommunication towers; eco-tourism; sustainable livelihoods	National parks; rain forest; water catchment; agriculture; limited residential; telecommunication towers; eco- tourism; sustainable livelihoods
Legislation  Legislation	National Parks and Protected Areas Act 16, 1975. Chapter 42:02; Forestry and Wildlife Act Chapter 60:02 Act 12 of 1976; National Parks Regulations (S.R.O. No. 54 of 2003); Wild Birds Protection Ordinance. No. 7 of 1959; Crown Lands (Amendment) Regulations, 1963 (S.R.O. No. 13 of 1963); Crown Lands Ordinance (Cap. 169).1960; State Lands Act 27 of 1958 (Cap. 53:01); Forest Industries Development Corporation Act, 1977 (Cap. 85:01); Forests Act (Chapter 60:01); Water Catchment Rules 1995 (S.R.O. No. 11 of 1995).	Crown Lands Ordinance CAP. 78 of 1990 (1896); Crown Land Rules SRO No. 36 (1934); Crown Lands Rules (Amendments) SRO Nos. 3, 19, 39 (1965); Crown Lands Forest Produce Rules (1956) Protected Forest Rules SRO No. 87 (1952); Forest, Soil and Water Conservation Act. CAP. 116 (1949); Forest, Soil and Water Conservation (Amendment) Ordinance No. 34 (1984); National Parks and Protected Areas Act CAP. 206 (1990); Science and Technology Council Act CAP. 298 (1982); Botanical Gardens Act, No. 25 of 1968; National Botanical and Zoological Gardens Rules, SRO 55 of 1968; National Heritage Protection Act, No. 18 of 1990.	National Conservation and Environment Protection Act, 1987 (Act No. 5); Forestry Ordinance 1904;	Wildlife protection Act 1980; The Forest, Soil and Water Conservation Act (1984?); The Crown Lands Ordinance. 7/1945 (amended by Ordinance, 19/1960) and Regulations; World Heritage Convention Act (Act No. 49 of 1999). Water and Sewage Act, Physical Planning Act, Agriculture Act,	Forestry Act (1945); National Parks Act, 2002 (No. 33 of 2002); Forest Resource Conservation Act, 1992, No. 47 of 1992; Wildlife Protection Act, No. 16 of 1987; Plant Protection Act, No. 16 of 2005; Plant Protection Regulations, No. 9 of 1991; Botanical Garden Act, No. 20 of 1987; Botanical Gardens Rules, S.R.O. 9 of 1991 and S.R.O. 24 of 2005; Draft Environmental Management Act. 2009. National Parks Act 2000 and Amended Act 2010

Coastal Zone	Dominica	Grenada	St. Kitts and Nevis	Saint Lucia	St. Vincent & the Grenadines
Policies, Plans and Strategies	Commonwealth of Dominica Biodiversity Strategy and Action Plan 2001 – 2005; Dominica National Biodiversity Strategy and action plan 2014-2020; Integrated Water Resources Management Plan	National Forest Policy (1999) and Strategy (2000); Land Policy (draft); NEPs & NEMS; Climate Change Policy; Biodiversity Strategy and Action Plan; Water Resources Policy; Land & Marine Management Strategy; Integrated Water Resources Management Plan	National Environmental Management Strategy (NEMS); National Biodiversity Action Plan (NBSAP); Integrated Water Resources Management Plan	A National Water Policy of St. Lucia, 2004; National Land Policy, 2007; National Environment Policy (NEP)-National Environmental Management Strategy (NEMS) Revised 2014; Roadmap Towards the preparation of an Integrated Water Resources Management (IWRM) Plan (2010); Climate Change Adaptation Policy, Forestry Strategic Management Plan 2015- 2025, Waste Water Management Plan (not finalized), System Plan for Protected Areas	National Biodiversity Strategy & Action Plan for St. Vincent & the Grenadines 2000; GOSVG National Environmental Policy and Management Strategy 2004; Integrated Water Resources Management Plan; SVG National Social Economic Development Plan 2013 -2015  SVG National Parks and Protected Areas system plan 2010 -2014  Kings Hill Forest Management Plan SVG Parrot Conservation
Conventions & MEAs	<ul> <li>Convention to Combat         Desertification and Land         Degradation (1992)</li> <li>Cartagena Convention         (1983) and its Protocols         concerning SPAW</li> <li>Convention on         International Trade in         Endangered Species of         Wild Fauna and Flora         (CITES, 1973)</li> </ul>	<ul> <li>Convention to Combat         Desertification and Land         Degradation (1992)</li> <li>Cartagena Convention         (1983) and its Protocols         concerning SPAW</li> <li>Convention on         International Trade in         Endangered Species of         Wild Fauna and Flora         (CITES, 1973)</li> </ul>	<ul> <li>Convention to Combat         Desertification and Land         Degradation (1992)</li> <li>Cartagena Convention         (1983) and its Protocols         concerning SPAW</li> <li>Convention on         International Trade in         Endangered Species of         Wild Fauna and Flora         (CITES, 1973)</li> </ul>	<ul> <li>Convention to Combat         Desertification and Land         Degradation (1992)</li> <li>Cartagena Convention         (1983) and its Protocols         concerning SPAW</li> <li>Convention on         International Trade in         Endangered Species of         Wild Fauna and Flora         (CITES, 1973)</li> <li>Convention on Biological         Diversity</li> <li>Nagoya Protocol</li> </ul>	Plan  Convention to Combat Desertification and Land Degradation (1992)  Cartagena Convention (1983) and its Protocols concerning SPAW  Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES, 1973)

astal Zone	Dominica	Grenada	St. Kitts and Nevis	Saint Lucia	St. Vincent & the
Conventions & MEAs cont'd  National Agencies & Partners	<ul> <li>Tropical Forestry Action Plan (1985)</li> <li>Port of Spain Accord on Management and Conservation of the Caribbean Environment (CARICOM, 1989)</li> <li>OECS/SSDD St. George's Declaration: Principles on Environmental Sustainability</li> <li>UNFCC (1992, 1997);</li> <li>CCBD (1992)</li> <li>Ministry of; Agriculture, Health, Lands, Water Resource management, Works, Forestry</li> </ul>	<ul> <li>Tropical Forestry Action Plan (1985)</li> <li>Port of Spain Accord on Management and Conservation of the Caribbean Environment (CARICOM, 1989)</li> <li>OECS/SSDD St. George's Declaration: Principles on Environmental Sustainability</li> <li>UNFCC (1992, 1997);</li> <li>CCBD (1992)</li> <li>Forestry Division; NAWASA; Ministry of Agriculture; Valuation/tax office; Lands and Surveys; Development Control Authority; Ministry of Works; Ministry of Health; Grenada Bureau of Standards</li> </ul>	<ul> <li>Tropical Forestry Action Plan (1985)</li> <li>Port of Spain Accord on Management and Conservation of the Caribbean Environment (CARICOM, 1989)</li> <li>OECS/SSDD St. George's Declaration: Principles on Environmental Sustainability</li> <li>UNFCC (1992, 1997);</li> <li>CCBD (1992)</li> <li>Nevis Historical and Conservation Society (NHCS); Ministry of Agriculture, Lands and Survey, Forestry</li> </ul>	<ul> <li>Tropical Forestry Action Plan (1985)</li> <li>Port of Spain Accord on Management and Conservation of the Caribbean Environment (CARICOM, 1989)</li> <li>OECS/SSDD St. George's Declaration: Principles on Environmental Sustainability</li> <li>UNFCC (1992, 1997);</li> <li>CCBD (1992)</li> <li>Ministry of; Agriculture, Health, Physical Development; Sustainable Development, Legal Affair, SLNT</li> </ul>	■ Tropical Forestry Action Plan (1985) ■ Port of Spain Accord on Management and Conservation of the Caribbean Environment (CARICOM, 1989) ■ OECS/SSDD St. George's Declaration: Principles on Environmental Sustainability ■ UNFCC (1992, 1997); ■ CCBD (1992) The National Environmental Advisory Board (NEAB), Ministry of; Lands and Surveys, Physical Planning, Health, Environment, Forestry, Agriculture; National Parks, Rivers and Beaches Authority, Ministry of Economic
International & Regional Partners	<ul> <li>OECS/SSDD</li> <li>ACS</li> <li>CARICOM</li> <li>CEP/UNEP</li> <li>GEF</li> <li>UNDP AND UNEP</li> <li>DFID</li> <li>FAO (UN)</li> <li>USAID</li> </ul>	<ul> <li>OECS/SSDD</li> <li>ACS</li> <li>CARICOM</li> <li>CEP/UNEP</li> <li>GEF</li> <li>UNDP AND UNEP</li> <li>DFID</li> <li>FAO (UN)</li> <li>USAID</li> </ul>	<ul> <li>OECS/SSDD</li> <li>ACS</li> <li>CARICOM</li> <li>CEP/UNEP</li> <li>GEF</li> <li>UNDP AND UNEP</li> <li>DFID</li> <li>FAO (UN)</li> <li>USAID</li> </ul>	<ul> <li>OECS/SSDD</li> <li>ACS</li> <li>CARICOM</li> <li>CEP/UNEP</li> <li>GEF</li> <li>UNDP AND UNEP</li> <li>DFID</li> <li>FAO (UN)</li> <li>USAID</li> </ul>	Planning and Sustainable development  OECS/SSDD ACS CARICOM CEP/UNEP GEF UNDP AND UNEP DFID FAO (UN) USAID TNC FFI KFW

Table 1b Zone of Influence – Environmental Policy Framework for natural resources Management in OECS Member States

Coa	astal Zone	Dominica	Grenada	St. Kitts and Nevis	Saint Lucia	St. Vincent & the Grenadines
	Land Tenure	Mainly Private; limited crown lands	Mainly Private; limited crown lands	Mainly Private; limited crown lands	Mainly Private; limited crown lands	Mainly Private; limited crown lands
	Land use	Evergreen & Semi-deciduous Forests; Agriculture; Residential; eco- tourism; sustainable livelihoods	Evergreen & Semi-deciduous Forests; Agriculture; Residential; eco- tourism; sustainable livelihoods	Evergreen & Semi-deciduous Forests; Agriculture; Residential; eco- tourism; sustainable livelihoods	Evergreen & Semi-deciduous Forests; Agriculture; Residential; eco- tourism; sustainable livelihoods	Evergreen & Semi-deciduous Forests; Agriculture; Residential; eco- tourism; sustainable livelihoods; Subsistence Farming
Terrestrial Zone of Influence – T2	Legislation	National Parks and Protected Areas Act 16, 1975. Chapter 42:02; Land Management Authority Act 20, 1973 chapter 58:01; ); Development Levy Act (Cap. 67:10) 1987; Physical Planning Act, 2002 (Act No. 5 of 1992); Town and Country Planning Act (No. 17 of 1975); State Lands Act Act 27 0f 1958 (Cap. 53:01); Land Acquisition Act Chapter 53:02 Act 7 0f 1946; Solid Waste Management Act 2002 (No. 1 of 2002); Solid Waste Management Corporation Act 1996 (No. 17 of 1996); Solid Waste Management Corporation (Amendment) Act, 1999 (No. 10 of 1999); LITTER ACT CHAPTER 40:61 Act 4 of 1990; Public Health Act, 1986 (Act No.15 of 1968); Environmental Health Services Act (No. 8 of 1997).	Forest, Soil and Water Conservation Act. CAP. 116 (1949); Forest, Soil and Water Conservation (Amendment) Ordinance No. 34 (1984); Science and Technology Council Act CAP. 298 (1982); Land Development Control Regulations SRO No. 13 (1988); Physical Planning and Development Control Act 25 (2002); Grenada Building Codes and Standards (2000); Town and Country Planning Act CAP. 293 (1958) and Amendments Act 3 (1963), CAP. 339 (1990); Standards Act No. 6 (1989); (Several standards and codes of practice based on international codes e.g. ISO 14000 Series); National Heritage Protection Act, No. 18 of 1990; Public Health Act CAP. 263 (1925); Public Health Regulations Sec.15 (1958); Public Health Ordinance CAP. 237 (1925) and Amendments SRO No. 218 (1957); Abatement of Litter Act CAP. 1 (1974); Environmental Levy Act CAP. 5 (1997); Environmental Levy (Amendment) Act CAP. 2 (2000); Solid Waste Management Act CAP. 11 (1995)	National Conservation and Environment Protection Act, 1987 (Act No. 5); Development Control and Planning Act, 2000; Nevis Development Control and Planning Ordinance 2005; Public Health Act No. 22 of 1969; Agricultural Development Act 1973; Solid Waste Management Corporation Act (1996); Public Health Act No. 22 of 1969; Physical Planning Act 2000;	National Agricultural Policy 2009-2015; Town and Country Planning Ordinance, 10/1945; Environmental Protection Levy Act 15 of 1999; Land Conservation and Improvement Act (No. 10 of 1992).	National Parks Act, 2002 (No. 33 of 2002); Town and Country Planning Act (1992); Wildlife Protection Act, No. 16 of 1987; Litter Act, No. 15 of 1991; Waste Management Act, Act No. 31 of 2000; Environmental Health Services Act, No. 14 of 1991; Plant Protection Act, No. 16 of 2005; Plant Protection Regulations, No. 9 of 1991; Botanical Garden Act, No. 20 of 1987; Botanical Gardens Rules, S.R.O. 9 of 1991 and S.R.O. 24 of 2005; Environmental Health Services Act No. 34 of 1996; Town and Country Planning Chapter 334- Act 26 of 2008; Draft Environmental Management Act. 2009;

Coastal Zone	Dominica	Grenada	St. Kitts and Nevis	Saint Lucia	St. Vincent & the Grenadines
Policies, Plans and Strategies	National Integrated Water Resources Management (IWRM) Policy (2011);	National Forest Policy (1999) and Strategy (2000); Land Policy (draft); NEPs & NEMS; Climate Change Policy; Biodiversity Strategy and Action Plan; Water Resources Policy; National Physical Development Plan (Advisory roles and membership on National Heritage Protection Committee)	The National Physical Development Plan, 2006 (NPDP); Nevis Integrated Strategic Development Plan (2001 – 2005); Agricultural Strategic Plan (2005-2009); St. George's Declaration of Principles on Environmental Sustainability (2006); NATIONAL ACTION PROGRAMME FOR COMBATING DESERTIFICATION AND LAND DEGRADATION 2007;Integrated Planning and Land Use and Development Control Policy (2001-2005)	A National Water Policy of St. Lucia, 2004; National Land Policy, 2007; National Environment Policy (NEP)- National Environmental Management Strategy (NEMS) Revised 2014 - Saint Lucia; Roadmap Towards the preparation of an Integrated Water Resources Management (IWRM) Plan (2010);	GOSVG National Environmental Policy and Management Strategy 2004
Conventions & MEAs	<ul> <li>Port of Spain Accord on Management and Conservation of the Caribbean Environment (CARICOM, 1989)</li> <li>OECS/SSDD St. George's Declaration: Principles on Environmental Sustainability</li> <li>UNFCC (1992, 1997); CCBD (1992)</li> </ul>	<ul> <li>Port of Spain Accord on Management and Conservation of the Caribbean Environment (CARICOM, 1989)</li> <li>World Heritage Convention</li> <li>OECS/SSDD St. George's Declaration: Principles on Environmental Sustainability</li> <li>UNFCC (1992, 1997); CCBD (1992</li> </ul>	<ul> <li>Port of Spain Accord on Management and Conservation of the Caribbean Environment (CARICOM, 1989)</li> <li>OECS/SSDD St. George's Declaration: Principles on Environmental Sustainability</li> <li>UNFCC (1992, 1997); CCBD (1992</li> </ul>	<ul> <li>Port of Spain Accord on Management and Conservation of the Caribbean Environment (CARICOM, 1989)</li> <li>OECS/SSDD St. George's Declaration: Principles on Environmental Sustainability</li> <li>UNFCC (1992, 1997); CCBD (1992)</li> </ul>	<ul> <li>Port of Spain Accord on Management and Conservation of the Caribbean Environment (CARICOM, 1989)</li> <li>OECS/SSDD St. George's Declaration: Principles on Environmental Sustainability</li> <li>UNFCC (1992, 1997); CCBD (1992)</li> </ul>
National Agencies & Partners	Ministry of; Agriculture, Health, Lands, Water Resource management, Works, Forestry	Forestry Division; NAWASA; Ministry of Agriculture; Valuation/tax office; Lands and Surveys; Development Control Authority; Ministry of Works; Ministry of Health; Grenada Bureau of Standards	Department of Department of Physical Planning, National Resources and the Environment (DPPNRE) -Department Land and Surveys (DOLS) -Department of Economic Planning and Public Sector Investment Planning (DEPPSIP); Nevis Historical and Conservation Society (NHCS); Ministry of Agriculture, Lands and Survey, Forestry	Ministry of; Agriculture, Health, Physical Development	The National Environmental Advisory Board (NEAB), Ministry of; Lands and Surveys, Physical Planning, Health, Environment, Forestry, Agriculture;

Coastal Zone		Dominica	Grenada	St. Kitts and Nevis	Saint Lucia	St. Vincent & the Grenadines
	International &	OECS/SSDD	OECS/SSDD	OECS/SSDD	OECS/SSDD	OECS/SSDD
	Regional Partners	• ACS	• ACS	• ACS	• ACS	• ACS
	8	• CARICOM	CARICOM	CARICOM	• CARICOM	• CARICOM
		CEP/UNEP	CEP/UNEP	CEP/UNEP	CEP/UNEP	CEP/UNEP
		• GEF	• GEF	• GEF	• GEF	• GEF
		UNDP AND UNEP	UNDP AND UNEP	UNDP AND UNEP	UNDP AND UNEP	UNDP AND UNEP
		• DFID	DFID	• DFID	DFID	• DFID
		• FAO (UN)	• FAO (UN)	• FAO (UN)	• FAO (UN)	• FAO (UN)
		USAID	USAID	USAID	USAID	• USAID

Coastal Zone		Dominica Grenada		St. Kitts and Nevis	Saint Lucia	St. Vincent & the Grenadines	
•	Land Tenure	Private; State	Private; Limited state	State; development corporations; limited private	Limited private, state	Limited private, state	
•	Land use	Tourisms, Infrastructure, Boatyards, Ports, residential	Tourism, infrastructure, boatyards, jetties	Tourisms, Infrastructure, Boatyards, Ports, residential	Tourisms, Infrastructure, Boatyards, Ports, residential	Tourisms, Infrastructure, Boatyards, Ports, residential, Fisheries Landing Bay, Heritage Site Recreation Park	
strial Zone of Indirect and direct Impact T1	Legislation	Land Management Authority Act 20, 1973 chapter 58:01; Beach Control Act (Cap. 42:04); Beach Control (Prohibition) Order (SRO No. 19 of 1993); Development Levy Act (Cap. 67:10) 1987; Tourism Regulation and Standards Act (No. 19 of 2005); State Lands Act Act 27 of 1958 (Cap. 53:01); Land Acquisition Act Chapter 53:02 Act 7 of 1946; Water and Sewerage Act (Cap. 43:40); Sewerage Regulations (S.R.O. No. 61 of 1997).	<ul> <li>Land Development Control Regulations SRO No. 13 (1988)</li> <li>Physical Planning and Development Control Act 25 (2002)</li> <li>Grenada Building Codes and Standards (2000)</li> <li>Town and Country Planning Act CAP. 293 (1958) and Amendments Act 3 (1963), CAP. 339 (1990)</li> <li>Beach Protection Act, No. 67 of 1979</li> <li>National Parks and Protected Areas, No. 52 of 1991, No. 42 of 1990.</li> </ul>	Development Control and Planning Act, 2000; Nevis Development Control and Planning Ordinance 2005; The Beach Control Ordinance Cap. 281, 1961; Physical Planning Act 2000;	The Beach Protection Ordinance, 21/1963; Castries Water Supply Ordinance (Chapter 230). 1901; Public Health (Sewerage and Drainage) Ordinance. 1953; Litter Act (No. 24 of 1983); Environmental Protection Levy Act 15 of 1999; Establishment of the Greater St. Lucia Wetlands Park and Authority (Notice No. R. 4477 of 2000); Land Conservation and Improvement Act (No. 10 of 1992); Physical Planning And Development Act Chapter 5.21 (2005);	Town and Country Planning Act (1992); Marine Parks Act, No. 9 of 1997; Beach Protection Act, No. 10 of 1981; Draft Environmental Protection (Effluent Limitation) Regulations. 2009; Draft Environmental Management (Pollution) Regulations. 2009. Pollution Regulations; Environmental Health Services Act No. 34 of 1996; Town and Country Planning (Zoned Area Declaration) (Beaches Order). SRO 16 of 1994; Town and Country Planning Chapter 334- Act 26 of 2008; Draft Environmental Management Act. 2009; National Parks Act 2002 and 2010.	
Terrestr	Policies, Plans and Strategies	National Integrated Water Resources Management (IWRM) Policy (2011);	Biodiversity Strategy & Action Plan 2000; Grenada Protected Area System Plan Part 1 2009.	The National Physical Development Plan, 2006 (NPDP); Nevis Integrated Strategic Development Plan (2001 – 2005); The Medium Term Economic Strategy Paper (2003–2005); St. George's Declaration of Principles on Environmental Sustainability (2006); National Action Programme for Combating Desertification and Land Degradation 2007; Integrated Planning and	Coastal Zone Management in Saint Lucia: Policy, Guidelines and Selected Projects 2004; Coastal Zone Management Legislation and Strategic Action Plan 2008; National Environment Policy (NEP)- National Environmental Management Strategy (NEMS) Revised 2014 - Saint Lucia; The Saint Lucia Climate Change Adaptation Policy, 2013	GOSVG National Environmental Policy and Management Strategy 2004;  SVG Park and Protected Area System Plan 2010	

• Conventions & MEAs	<ul> <li>Convention on Wetlands of International Importance (RAMSAR, 1971)</li> <li>Convention on the Protection of Migratory Species of Wild Animals (1972)</li> </ul>	<ul> <li>Convention on Wetlands of International Importance (RAMSAR, 1971)</li> <li>Convention on the Protection of Migratory Species of Wild Animals (1972)</li> </ul>	Land Use and Development Control Policy (2001-2005)  Convention on Wetlands of International Importance (RAMSAR, 1971)  Convention on the Protection of Migratory Species of Wild Animals (1972)	<ul> <li>Convention on Wetlands of International Importance (RAMSAR, 1971)</li> <li>Convention on the Protection of Migratory Species of Wild Animals (1972)</li> </ul>	<ul> <li>Convention on Wetlands of International Importance (RAMSAR, 1971)</li> <li>Convention on the Protection of Migratory Species of Wild Animals (1972)</li> </ul>
• National Agencies & Partners	Ministry of; Agriculture, Health, Lands, Water Resource management, Works, Tourism, Fisheries	Grenada Port Authority, Valuation/tax office; Lands and Surveys; Development Control Authority; Ministry of Works; Ministry of Health; Grenada Bureau of Standards	-Department of Department of Physical Planning, National Resources and the Environment (DPPNRE) -Department Land and Surveys (DOLS) -Department of Economic Planning and Public Sector Investment Planning (DEPPSIP);	Ministry of; Physical Development, Tourism, Port services and Infrastructure, Fisheries	The National Environmental Advisory Board (NEAB), Ministry of; Lands and Surveys, Physical Planning, Environment, Fisheries - National trust - SUSGREN - National Parks, Rivers and Beaches Authority - SVG Hotel and Tourism Association
International & Regional Partners	<ul> <li>OECS/SSDD</li> <li>CEP/UNEP</li> <li>CFRAM</li> <li>GEF</li> <li>UNDP AND UNEP</li> <li>DFID</li> <li>FAO (UN)</li> <li>CARICOM</li> </ul>	<ul> <li>OECS/SSDD</li> <li>CEP/UNEP</li> <li>CFRAM</li> <li>GEF</li> <li>UNDP AND UNEP</li> <li>DFID</li> <li>FAO (UN)</li> <li>CARICOM</li> </ul>	<ul> <li>OECS/SSDD</li> <li>CEP/UNEP</li> <li>CFRAM</li> <li>GEF</li> <li>UNDP AND UNEP</li> <li>DFID</li> <li>FAO (UN)</li> <li>CARICOM</li> </ul>	<ul> <li>OECS/SSDD</li> <li>CEP/UNEP</li> <li>CFRAM</li> <li>GEF</li> <li>UNDP AND UNEP</li> <li>DFID</li> <li>FAO (UN)</li> <li>CARICOM</li> </ul>	<ul> <li>OECS/SSDD</li> <li>CEP/UNEP</li> <li>CFRAM</li> <li>GEF</li> <li>UNDP AND UNEP</li> <li>DFID</li> <li>FAO (UN)</li> <li>CARICOM</li> </ul>

Table.1d Sea Zone of Indirect and Direct Impact – Environmental Policy Framework for natural resources Management in OECS Member States

Coastal Zone		Dominica	Grenada	St. Kitts and Nevis	Saint Lucia	St. Vincent & the Grenadines
	Land Tenure	Permits and user rights; leases	Permits and user rights; leases	Permits and user rights; leases	Permits and user rights; leases	Permits and user rights; leases
+	Land use	Marinas, jetties, fisheries, Harbors	Marinas, jetties, fisheries, Harbors	Marinas, jetties, fisheries, Harbors	Marinas, jetties, fisheries, Harbors	Marinas, jetties, fisheries, Harbors
S1 – Zone of Indirect and Direct Impact	Legislation	National Parks and Protected Areas Act 16, 1975. Chapter 42:02; Dominica Air and Sea Ports Authority Act, 2006 (No. 8 of 2006); National Parks Regulations (S.R.O. No. 54 of 2003); Beach Control Act (Cap. 42:04); Beach Control (Prohibition) Order (SRO No. 19 of 1993); Registration of Ships Act (Cap. 48:01); Registration of Ships (Amendment) Act (No. 16 of 1996);	Oil Pollution Damage Compensation Fund (International Convention) Act, No. 6 of 1998; Fisheries (Fishing vessels safety) Regulations, No. 3 of 1990; Fisheries Act, No. 25 of 1989; Fisheries Regulations, No. 9 of 1987, Fisheries (Amendment); National Parks and Protected Areas, No. 52 of 1991, No. 42 of 1990.	Marine Pollution Management Act, 2002; The Fisheries Act No. 4, 1984;	The Shipping Act No. 10 of 1994 (Section 237 - Foreign ships in Saint Lucian waters); The Saint Lucia Air and Sea Ports Authority Act No. 10 of 1987; The Saint Lucia Air and Sea Ports Authority (Seaports) Regulation No. 92 of 1985; Fisheries Act 10 of 1984	The Maritime Areas Act (1983)  – Act No. 15 of 1993; The Fisheries Act (1986) and Regulation (1987); Fisheries Regulations: Statutory Rules and Orders 1 of 1987; Marine Parks Act, No. 9 of 1997; Dumping at Sea Act, 2002; Management of Ship Generated Solid Waste Act, No. 16 of 2002; Draft Environmental Protection (Effluent Limitation) Regulations. 2009; Draft Environmental Management (Pollution) Regulations. 2009. Pollution Regulations; National Parks Act 2002 and amended Act 2010.
Sea zone	Policies, Plans and Strategies	OECS Fisheries Management and Development Strategy; OECS Regional Ocean Policy	Fisheries Policy; OECS Fisheries Management and Development Strategy; OECS Regional Ocean Policy	OECS Fisheries Management and Development Strategy; Marine Zoning Policy for St Kitts and Nevis; OECS Regional Ocean Policy	Coastal Zone Management in Saint Lucia: Policy, Guidelines and Selected Projects 2004; Coastal Zone Management Legislation and Strategic Action Plan; OECS Fisheries Management and Development Strategy OECS Regional Ocean Policy	OECS Fisheries Management and Development Strategy; OECS Regional Ocean Policy; SVG National Social, Economic Developments Plan 2013-2025.

astal Zone	Dominica	Grenada	St. Kitts and Nevis	Saint Lucia	St. Vincent & the Grenadines
Conventions & MEAs	United Nations Convention on the Law of the Sea; Cartagena Convention;  International Convention for the Prevention of Pollution from Ships (MARPOL Convention); London Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter	United Nations Convention on the Law of the Sea; Cartagena Convention;	United Nations Convention on the Law of the Sea; Cartagena Convention; International Convention for the Prevention of Pollution from Ships (MARPOL Convention)	United Nations Convention on the Law of the Sea; Cartagena Convention; International Convention for the Prevention of Pollution from Ships (MARPOL Convention); London Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter	United Nations Convention on the Law of the Sea; Cartagena Convention; International Convention for the Prevention of Pollution from Ships (MARPOL Convention); London Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter
National Agencies & Partners	Port Authority; Fisheries Division; MPA; Coast Guard; Legal Affairs; Fishermen cooperatives and associations; dive associations	Port Authority; Fisheries Division; MPA; Coast Guard; Legal Affairs; Marine and Yachting Association; Fishermen Cooperatives	Port Authority; Fisheries Division; MPA; Coast Guard; Legal Affairs; Fishermen cooperatives and associations; dive associations	Port Authority; Fisheries Division; MPA; Coast Guard; Legal Affairs; Fishermen cooperatives and associations; dive associations	Port Authority; Fisheries Division; MPA; Coast Guard; Legal Affairs; Fishermen cooperatives and associations; dive associations
International & Regional Partners	OECS; UWI; IMO, TNC	OECS, UN, IMO, TNC	OECS, UN, IMO, WB, TNC	OECS, UN, IMO, TNC	OECS, UN, IMO, TNC CRFM, UWI, CERMES

Table VII - Sea Zone Territorial Boundary – Policy Framework for Integrated Coastal Zone Management in OECS Member States

Coastal Zone Dominica		Grenada	St. Kitts and Nevis	Saint Lucia	St. Vincent & the Grenadines		
	•	Land Tenure	State	State	State	State	State
	•	Land use	Shipping, Trading, Fishereies	Shipping, Trading, fisheries	Shipping, Trading, Fisheries	Trading, Shipping	Trading, Shipping
2 – Territorial Boundary	•	Legislation	Dominica Air and Sea Ports Authority Act, 2006 (No. 8 of 2006); Registration of Ships Act (Cap. 48:01); Registration of Ships (Amendment) Act (No. 16 of 1996) Territorial Sea, Contiguous Zone, Exclusive Economic and Fishery Zones Act 26 of 1981 (Cap. 1:11); International Maritime Act, 2000 (No. 9 of 2000);	Oil Pollution Damage Compensation Fund (International Convention) Act, No. 6 of 1998; Civil Liability for Oil Pollution Damage (International Convention) Act, No. 7 of 1998; Fisheries (Fishing vessels safety) Regulations, No. 3 of 1990; Fisheries Act, No. 25 of 1989; Fisheries Regulations, No. 9 of 1987, Fisheries (Amendment). Grenada Territorial Seas and Maritime Boundaries Act, 1989, Act Number 25 of July 13, 1989	<ul> <li>Territorial Sea and Maritime Boundaries Act CAP. 318</li> <li>Oil in Navigable Waters Act CAP. 218 (1928)</li> <li>LDCA Act (1968) and Amendments (1983)</li> </ul>	The Saint Lucia Air and Sea Ports Authority Act No. 10 of 1987; The Saint Lucia Air and Sea Ports Authority (Seaports) Regulation No. 92 of 1985;	The Maritime Areas Act (1983) – Act No. 15 of 1993; The Fisheries Act (1986) and Regulation (1987); The High Seas Fishing Act of 2001; Dumping at Sea Act, 2002; Aboriginal Subsistence Whaling Regulations, 2003
Sea S	•	Policies, Plans and Strategies	Agreement on Maritime Delimitation between the Government of French Republic and the Government of Dominica. 1987; Agreement on fisheries between the European Economic Community and the Government of the Commonwealth of Dominica. 1993; Fisheries Policy for Dominica, 2012- 2037	OECS Fisheries Management and Development Strategy; OECS Regional Ocean Policy	National Maritime Policy and Action plan 2015 OECS Fisheries Management and Development Strategy; OECS Regional Ocean Policy	OECS Fisheries Management and Development Strategy; OECS Regional Ocean Policy; Castries Declaration on IUU Fishing	OECS Fisheries Management and Development Strategy; OECS Regional Ocean Policy

Coastal Zone	Dominica	Grenada	St. Kitts and Nevis	Saint Lucia	St. Vincent & the Grenadines
Conventions & MEAs	United Nations Convention on the Law of the Sea; Cartagena Convention;  International Convention for the Prevention of Pollution from Ships (MARPOL Convention); London Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter	United Nations Convention on the Law of the Sea; Cartagena Convention;	United Nations Convention on the Law of the Sea, 1982; Convention on the Protection and Development of the Marine Environment in the Wider Caribbean, 1983 (Cartagena Convention); Protocol Concerning Cooperation in Combating Oil Spills in the Wider Caribbean, 1983; International Convention on the Prevention of Marine Pollution by Dumping Wastes and Other Matter, 1972, (London Convention); International Convention for the Control and Management of Ship Ballast Water and Sediment, 2004 (BWM, 2004);	United Nations Convention on the Law of the Sea; Cartagena Convention; International Convention for the Prevention of Pollution from Ships (MARPOL Convention); London Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter	United Nations Convention on the Law of the Sea; Cartagena Convention; International Convention for the Prevention of Pollution from Ships (MARPOL Convention); London Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter
National Agencies &     Partners	Ports Authority; Legal Affairs	Port Authority; Legal Affairs	SLSPAA	Port Authority	Port Authority
• International & Regional Partners	OECS, UN IMO	OECS, UN, CEP, IMO, ACS,	OECS, UN IMO	OECS, UN IMO	UNCLOS MARPOL

### ANNEX II – FRAMEWORK FOR INVOLUNTARY SETTLEMENT

### A2.1 Objectives for Involuntary Resettlement Framework

As noted in the assessment of critical impacts and risks for the Grenada Blue Growth Future Scenario, it is likely that households and businesses will need to be resettled to facilitate re-development of the coastal areas. This will trigger the World Bank's (WB) Involuntary Resettlement Policy (OP 4.12). The policy objectives of OP 4.12 are to assist affected persons in their efforts to improve their standards of living or at least to restore them, in real terms, to pre-displacement levels or to levels prevailing prior to the beginning of project implementation, whichever is higher. The policy specifically covers direct economic and social impacts that result from WB assisted investment projects that are caused by: -

- (a) The involuntary taking of land resulting in:-
  - 1. Relocation or loss of shelter
  - 2. Loss of assets or access to assets
  - 3. Loss of income sources or means of livelihood, whether the affected person must move to another location
- (b) The involuntary restriction of access to legally designated parks and protected areas resulting in adverse impacts on the livelihoods of the displaced persons.

#### A2.2 Existing Legislation and Policy

There is not a comprehensive written policy on standard procedures for resettling and compensating persons who are affected by development projects such as marine villages and resorts. However, OECS Governments have had to resettle and compensate persons affected by public development projects in the past. There is no legal basis for resettlement of communities to facilitate private sector investment projects such as those proposed in the Grenada Blue Growth Master Plan. Legal guidance for the acquisition of lands is provided in the Land Acquisition Act No. 159 in the Revised Laws of Grenada, 1990.

This Act has similar provisions to that for land acquisition legislation in other OECS Territories which allows the Government to exercise its rights of compulsory purchase of property where negotiations with private land owners prove futile. Compensation for lands is guided by negotiations between the private party and the government. A "Crop Compensation Schedule" is available for compensation of crops cleared from an area which will be used to facilitate a development project.

### A2.3 Recommended Procedure for Involuntary Resettlement

There are no case studies of incidences where households were relocated to facilitate coastal master plans. Based on information gathered from interviews with Government Ministries and literature review, the following is recommended: 1) The consultant during finalization of project and detailed design work must identify households to be relocated; 2) owners of households must be approached by representatives from the Government (Ministry of Works in this case) for discussions on the proposal for relocation. Both owners and the government will identify locations where the households will be resettled. Where there are disagreements a compromise must be reached between both parties on the cost for relocation and sites where households will be resettled; 3) Householders must be restored to similar or better conditions to that which they previously enjoyed.

#### A2.4 Recommended Procedure for Compensation

There are two levels at which compensation will be necessary:

#### A2.4.1 Compensation for Land

The first is compensation for lands which must be acquired for a) road widening; b) to obtain aggregates and stones for road work; and c) to set up construction site and storage sheds. It is the responsibility of the consultant and contractors to identify lands which will be needed during road improvement and rehabilitation. The Chief Technical Officer (CTO) in the Ministry of Works, Physical Planning Unit, Lands Division or Ministry of Agriculture will review the recommendations. Land ownership must be legally vetted and private owners contacted for purchase or lease of property. If owners are not cooperative, compulsory purchase of the land can take place under provisions set forth

in the Land Acquisition Act. In such case this action for compulsory purchase of land must be gazetted.

Negotiations between land owners and the government will result in the determination of a price for the property. There are no set standards on the price of lands in OECS States. Real Estate Prices are determined by market forces and land owners have the right and freedom to set land prices during a sale. However, the Ministry of Agriculture, Valuations and Lands Departments typically have guidelines on the price of agricultural and stateowned (crown) lands.

### A2.4.2 Compensation for Crops

The second level at which compensation takes place is for crops which must be cleared to facilitate road works or similar types of infrastructural development. After identifying areas to be cleared, the consultant must provide this information to the Extension Office of the Ministry of Agriculture. An Extension Officer will accompany the consultant and the landowner to examine the plot which must be cleared. The Officer will examine the plot, not the type and number of trees, their age, fruit bearing potential and health condition. A listing of plants and their associated costs will be developed by the Extension Officer. The Contractor is then responsible to pay the land owner the amount determined to be the fair value after the field survey. Reimbursement is provided to the Contractor after presentation of invoices and bills to the Government.

#### A2.5 Guidelines for Involuntary Resettlement Plan

The plan should provide details on the following:

- 1. Details of events leading to activation of OP 4.12
- Census survey of project affected people (PAP);
- 3. Inventory of adverse impacts on PAP's assets;
- 4. Description of compensation packages offered to PAP and option selected by PAP;
- 5. Consultations with PAP about acceptable compensation alternatives;
- Institutional responsibilities for implementation of Resettlement Action Plan (RAP);
   and timetable for implementing RAP;
- 7. Arrangements and timetable for monitoring and implementation of RAP;

- 8. Procedures for grievance redress;
- 9. Source of funding and estimated cost for implementation of RAP.

## A2. 6 Grenada Land Acquisition Act No. 159, 1990

# Arrangement of Sections Section

- 1 Short title
- 2. Interpretation

#### ACQUISITION OF LAND AND ABANDONMENT OF ACQUISITION

- 3. Acquisition of land
- 4. Preliminary notification and power to enter land
- 5. Power to apply land to purposes of acquisition without waiting for formal vesting
- 6. Authorized officer to treat with landowner
- 7. Boundaries of land and issue of notice of acquisition
- 8. Authorized officer to treat with landowner
- 9. Claim of person interested to have land acquired or abandoned
- 10. Abandonment of acquisition

#### APPOINTMENT AND POWER OF BOARD OF ASSESSMENT

- 11. Determination of questions by Board of Assessment
- 12. Appointment of Board of Assessment
- 13. Documents, etc., to be forwarded to the Board
- 14. Inquiry by Board
- 15. Procedure at inquiry
- 16. Power of entry for purpose of inquiry
- 17. Award of Board

#### **DETERMINATION OF SMALL CLAIMS FOR COMPENSATION**

18. Procedure where claim for compensation does not exceed certain amounts

### Section

### PROVISIONS GOVERNING ASSESSMENT OF COMPENSATION

- 19. Rules for assessment of compensation
- 20. Special rule as to severance
- 21. Interest
- 22. Rules as to costs

#### **MISCELLANEOUS**

- 23. Absentee owners
- 24. Compensation to persons interested in adjacent land
- 25. Special provisions as to leases
- 26. Persons in possession to be deemed owners
- 27. Fees and expenses of Board
- 28. Conveyancing, etc., costs to be paid by authorized officer
- 29. Payment of compensation, etc.
- 30. Exemption from stamp duty and fees
- 31. Limitation of time for making claims
- 32. Assaulting or obstructing authorized officer, etc.

### **CHAPTER 159**

AN ACT to authorize the acquisition of land for public purposes [6th October, 1945]

1. This Act may be cited as the

#### LAND ACQUISITION ACT.

- 2. (1) In this Act-
- "authorized officer" means any person who may from time to time be appointed as such by Governor General for the purposes of this Act;
- "person interested" means every person claiming, or entitled to claim, compensation under this Act:
- (2) In this Act, every function to be performed by the Governor-General (whether or not expressly or by implication its due performance by him requires an exercise of discretion or judgement or the formation of an opinion) shall be deemed to require for its due performance that he shall act in accordance with the advice of the Cabinet except where otherwise provided.

### ACQUISITION OF LAND AND ABANDONMENT OF ACQUISITION

**3.** (1) If the Governor-General considers that any land should be acquired for a public purpose he may cause a declaration to that effect to be made in the manner provided by this section and the declaration shall be conclusive evidence that the land to which it relates is required for a public purpose.

- (2) Every declaration shall be published in two ordinary issues of the Gazette and copies thereof shall be posted on one of the buildings (if any) on the land or exhibited at suitable places in the locality in which the land is situate, and in the declaration shall be specified the following particulars relating to the land which is to be acquired -
- (a) the parish or district in which the land is situate;
- (b) a description of the land, giving the approximate area and such other particulars as are necessary to identify the land;
- (c) in case where a plan has been prepared, the place where, and the time when, a plan of the land can be inspected;
- (d) the public purpose for which the land is required.
- (3) Upon the second publication of the declaration in the Gazette as aforesaid the land shall vest absolutely in the Crown.
- (4) Nothing in this section shall be deemed to prevent the acquisition of lands for public purposes by private treaty.
  - **4.** If it appears to the Governor-General that any land is likely to be required for any purpose which in the opinion of the Governor-General a public purpose and it is necessary to make a preliminary survey or other investigation of the land, he may cause a notification to that effect to be published in the Gazette and thereupon it shall be lawful for the authorized officer (and his agents, assistants and workmen) to do all or any of the following things, that is to say-
- (a) to enter upon and survey and take levels of any land in any locality to which the notification relates;
- (b) to dig or bore into the sub-soil of such land;
- (c) to do all other acts necessary to ascertain whether the land is adapted to such purpose;
- (d) to set out the boundaries of the land intended to be taken, and the intended line of the work, if any, proposed to be done thereon;
- (e) to mark levels and lines by placing marks and cutting trenches;
- (f) where otherwise the survey cannot be completed, the levels taken or the boundaries or line of the work set out, to cut down and clear away any standing crop, fence, tree or bush;

(g) to do all such other acts as may be incidental to, or necessary for, any of the purposes aforesaid:

Provided that the authorized officer shall not enter into any building, or into or upon any enclosed, court, or garden attached to a dwelling-house, except at all reasonablehours and, except with the consent of the occupier thereof, without previously giving to such occupier at least seven days notice in writing of his intention to do so:

Provided further that compensation shall be paid to the persons interested in the land so entered for any actual damage or injury resulting to them by reason of the exercise of the powers conferred by his section and shall be assessed and paid-

- (i) in so far as it relates to land the acquisition of which is subsequently deemed to be abandoned under section 9 or under section 10, as though it were compensation payable under this Act for the acquisition of the land;
- (ii) in so far as it related to land the compulsory acquisition of which is subsequently complete under section 3, as though it were part of the compensation for the acquisition of the land.
- **5**. If, at any time after the publication of a notification in accordance with the provisions of section 4, it appears to the Governor-General that the land or some parcel of the land to which it refers should be acquired but that for any reason it not possible to make an immediate declaration to that effect, it shall be lawful for the Governor-General to direct the authorized officer to do any work on the land is intended to be put on it acquisition, and thereupon the authorized officer may proceed with the execution of the work:

Provided that compensation shall be paid to the persons interested for any actual damage or injury resulting to them by reason of the exercise of the powers conferred by this section and shall be determined in the same way as compensation for actual damage or injury resulting from the exercise of the powers conferred by section 4.

- **6**. (1) As soon as a declaration has been published in accordance with the provisions of section 3, the authorized officer shall, without delay, enter into negotiations (or further negotiations) for the purchase of the land to which the declaration relates upon reasonable terms and conditions, and by voluntary agreement with the owner of the land.
- (2) It shall not be necessary for the authorized officer to await the publication of the declaration before the endeavours to ascertain from the owner the terms and conditions on which he is willing to sell the land, but no negotiations or agreement shall be deemed

to be concluded unless and until the conditions of sale and acquisition have been approved in writing by the Governor-General.

- **7**. (1) As soon as may be after land has been acquired compulsorily, the authorized officer shall, if the boundaries of the land have not been set out or if they cannot be identified by reference to a plan, cause the same to be set out, and he shall also issue a notice of acquisition in accordance with the provisions of this section.
  - (2) Every notice of acquisition under this section shall-
- (a) state the decision of the Governor-General to acquire and take possession of the land compulsorily;
- (b) contain the particulars which, in relation to the land, were included in the declaration provided for by subsection (2) of section 3; and
- (c) require all persons interested, as soon as is reasonably practicable, either -
  - (i) to appear personally or by attorney or agent before the authorized officer to state the nature of their respective interests in the land and the amounts and full particulars of their claims to compensation in respect of those interests, distinguishing the amounts under separate heads and showing how the amount claimed under each head is calculated; or
  - (ii) to render to the authorized officer a statement in writing, signed by them or by their attorneys or agents, setting for the like matters.
- (3) The authorized officer shall cause a copy of the notice of acquisition to be served either personally on, or by post addressed to the land known place of abode or business of, every person who is known or believed by the authorized officer to be entitled to compensation in respect of the acquisition, and whose whereabouts are known to the authorized officer:

Provided that where the whereabouts of any such person are not known, the authorized officer shall cause copies of such notice to be posted on one of the buildings (if any) on the land or exhibited at suitable places in the locality in which the land is situated.

(4) A person who, without lawful authority or excuse, removes or destroys any landmark placed, or removes or defaces or destroys any notice posted or exhibited, by the authorized officer in or upon the land or any building thereon in accordance with the provisions of this Act, shall be guilty of an offence and liable, on summary conviction, to a fine of one thousand dollars and to imprisonment for three months.

- **8**. (1) The authorized officer may, by notice served personally, or by post addressed to the last known place of abode or business of the person concerned, require the owner or occupier of, or any person interested in, any land, or in any part thereof, in respect of which a declaration or a notification has been published in the Gazette under section 3 or section 4 respectively, to deliver to him within a time to be specified in the notice, a statement in writing containing, so far as may be within his own knowledge, the name of every person possessing any interest in the land, or any part thereof, whether as partner, mortgagee, lessee, tenant or otherwise, and the nature of such interest.
- (2) Every person who is required to make and deliver a statement under this section and who, without reasonable excuse, refuses to make or deliver such statement, or wilfully makes any such statement which is false or incomplete in any material particular, shall be guilty of an offence and liable, on summary conviction, to a fine of one thousand dollars and to imprisonment for three months.
- **9.** If within three months after entry has been made on any land under the provisions of section 4 such land shall not be acquired or abandoned, any person interested in the land or any part thereof may serve a notice on the authorized officer requiring that the acquisition of the land or part thereof be completed or abandoned, and, if within one month thereafter, the acquisition of such land or part thereof be not completed or abandoned in accordance with the provisions of this Act, the acquisition of the land or part thereof shall be deemed to have bee abandoned.
- **10**. (1) At any time before land has been acquired compulsorily the Governor-General may, by notification published in the *Gazette*, declare that the intended acquisition of such land is abandoned.
- (2) When the acquisition of land is abandoned in accordance with the provisions of this section, or in deemed to have been of this Act shall, in default of agreement, be assessed as though it was compensation payable under this Act for the acquisition of land.
- (3) No compensation shall be payable in any such case for loss of bargain or for damages for breach of contract.

#### APPOINTMENT AND POWERS OF BOARD OF ASSESSMENT

- **11**. (1) All questions and claims relating to the payment of compensation under this Act and to the appointment of such compensation shall, save as is hereinafter provided, by submitted to a Board of Assessment to be appointed in each case in accordance with the provisions of section 12.
- (2) A Board of Assessment shall have full power to assess, award and apportion compensation in such cases, in accordance with the provisions of this Act.

- **12.** (1) As soon as it becomes necessary to do so the Governor-General shall cause a Board of Assessment (hereinafter referred to as "a Board" or "the Board") to be appointed.
  - (2) A Board for the purpose of this Act shall in every case consist of-
- (a) a Judge of the High Court who shall be the chairman of the Board (hereinafter referred to as "the chairman");
- (b) a member to be appointed by the Governor-General; and
- (c) a member to be nominated by the owner of the land to be acquired:

Provided that where in any case the Governor-General is satisfied that the owner of the land has refused to exercise his right to nominate a member of the Board, or has unreasonably delayed such nomination, or where the persons interested in the land have failed to agree upon such nomination, the Governor-General, by order in writing, may direct the chairman to proceed with the inquiry notwithstanding that there has been no such nomination by the owner, and in every such case the Board shall be deemed to be lawfully constituted without the presence of such member, and, if there is any difference of opinion as to the amount of compensation that should be awarded, the decision of the chairman shall be deemed to be the decision of the Board.

- **13**. (1) Upon the appointment of a Board, or where proceedings are taken before a magistrate for the determination of any question relating to the payment of compensation, the authorized officer shall forward to the chairman, or to the magistrate, as the case may be, those of the following documents and particulars which relate to the acquisition or the intended acquisition of the land, as the case may be-
  - (a) a copy of any notification and declaration which has been published in the Gazette;
  - (b) a copy of the notice of acquisition;
  - (c) a copy of any notice issued or received by him;
  - (d) a copy of all statements received by him in compliance with any notice issued by him;
  - (e) the names and addresses of the persons whom the authorized officer has reason to believe are interested in the land; and
  - (f) a copy of the report required by this section.
- (2) The report to be sent to the Board shall state the opinion of the authorized officer, and his reasons for such opinion, upon each of the following matters-
- (a) what is a fair and proper description of the land acquired, including particulars of any building, tree or standing crops thereon;

- (b) the approximate acreage of the land;
- (c) the value of the land, for the purposes of compensation under this Act;
- (d) the amount of provisional compensation which should be paid for the land, including any damage payable in respect of entry into possession; (e) the apportionment of the provisional compensation among the persons interested in the land, in respect of their interests.
- (3) The authorized officer, in assessing the amount of any compensation for the purpose of a report under this section, shall have regard to the rules prescribed by this Act which may or may not be taken into consideration in assessing compensation.
- **14**. Where a Board has been appointed under this Act, the Board shall hold an inquiry at a place, date and time to be fixed by the chairman, of which not less than fourteen clear days' notice shall be given to the parties concerned, and every such inquiry shall be conducted in public.
- **15.** The procedure at an inquiry before a Board, the summoning and remuneration of witness for attendance thereat, and all questions incidental to the inquiry shall be governed by the provisions of the Civil Procedure Act, and the procedure of the High Court in civil proceedings, so far as the same are applicable, shall apply to such inquiry:
- **16**. The Board, or any person authorized by them, may at any time before, during or after an inquiry under this Act, enter upon and inspect any land for any purpose connected with such inquiry.
- **17.** (1) At the conclusion of the inquiry the Board shall decide upon the claims for compensation and apportionments submitted to them and shall make an award under the hand of the chairman who shall cause the same to be filed in the High Court.
- (2) The decision of the majority of the members of the Board with respect to the compensation to be paid shall be deemed to be the decision of the Board and, if all the members of the Board differ, the mean between the amount decided upon by the chairman and that one of the amounts decided upon by the two other members of the Board which approximates most nearly to the amount decided upon by the chairman shall be deemed to be the compensation awarded by the Board.
  - (3) An appeal shall lie against a decision of the Board to the Court of Appeal.

### DETERMINATION OF SMALL CLAIMS FOR COMPENSATION

**18.** (1) Anything in any Act to the contrary notwithstanding, in any case in which the compensation claimed does not exceed two hundred and fifty dollars, and in any case in

which the compensation claimed does not exceed five hundred dollars and, in the latter case, the parties agree in writing to the settlement of the claim by a magistrate, the amount of the compensation to be paid in any such case shall be determined by a magistrate.

- (2) It shall be lawful for any magistrate, upon the application of either party with respect to any question of disputed compensation in either of the cases mentioned in the proceeding subsection, to summon the other party to appear before him at a time and place be named in such summons and to hear and determine such question of disputed compensation.
  - (3) For the purposes of any proceeding under this section-
- (a) the procedure to be followed thereat, the summonding and remuneration of witnesses and all questions incidental to such proceeding shall be governed by any Act for the time being in force relating to the recovery of claims before a magistrate and all the provisions of any such Act shall apply *mutatis mutandis* to any such proceeding; and
- (b) the provisions of sections 103 to 121 of the Civil Procedure Act shall apply with such verbal alteration (not affecting the substance)as may be necessary to make the same applicable.
- (4) An appeal shall lie against the determination by a magistrate of any question of disputed compensation under this section in like manner as if such determination was given in the exercise of the summary jurisdiction of a magistrate in a civil matter under the provisions of the Magistrates Judgements (Appeals) Act, and for the purposes of such appeal the determination of the magistrate under this section shall be deemed to be a judgement of the magistrate within the meaning of section 2 of the same Act.

### PROVISIONS GOVERNING ASSESSMENT OF COMPENSATION

- **19.** Subject to the provisions of this Act, the following rules shall apply to the assessment and award of compensation by a Board for the compulsory acquisition of land-
- (a) the value of the land shall, subject as hereinafter provided, be taken to be the amount which the land, if sold in the open market by a willing seller, might have been expected to have realized at a date twelve months prior to the date of the second publication in the Gazette of the declaration under section 3:

Provided that this rule shall not affect the assessment of compensation for any damage sustained by the person interested by reason of severance, or by reason of the acquisition injuriously affecting his other property or his earnings, or for disturbance, or any other property or his earnings or for disturbance, or any other matter not directly based on the value of the land;

- (b) the special suitability or adaptability of the land for any purpose to which the land could be applied only in pursuance of statutory powers, or for which there is no market apart from the special needs of a particular purchase or the requirements of any Ministry or Government department;
- (c) where the value of the land is increased by reason of the use thereof or of any premises thereon in a manner which could be restrained by any court, or is contrary to law, or is detrimental to the health of the inmates of the premises or to public health, the amount of that increase shall not be taken into account;
- (d) where land is, and but for the compulsory acquisition would continue to be, devoted to a purpose of such a nature that there is no general demand or market for land for that purpose, the compensation may, if the Board is satisfied that reinstatement in some other place is *bona fide* intended, be assessed on the basis of the reasonable cost of equivalent reinstatement;
- (e) no allowance shall be made on account of-
  - (i) the acquisition being compulsory or the degree or urgency or necessity which has led to the acquisition;
  - (ii) any disinclination of the person interested to part with the land acquired;
  - (iii) any damage sustained by the person interested which, if caused by a private person, would not render such person liable to an action;
  - (iv) any damage, not being in the nature of deprivation of or interference with a easement or legal right, which, after the time of awarding compensation, is likely to be caused by or in consequence of the use to which the land acquired will be put;
  - (v) any increase in the value of the land acquired likely to accrue from the use to which the land acquired will be put;
  - (vi) any outlay or improvement of such land which shall have been made, commenced or effected within twelve months before the publication of the declaration under section 3 with the intention of enhancing the compensation to be awarded therefor in the event of such land being acquired for public purposes.
- **20**. As to severance, compensation may be assessed on the footing that any specified works, crossings, or access agreed to shall be erected, provided, and allowed, and any such agreement shall be reduced into writing and be signed by the chairman and shall be valid and effectual and binding on the parties.
- **21.** The Board, in awarding compensation, may add thereto interest at the rate of five per cent per annum, calculated from the date upon which the authorized officer entered into

possession of the land acquired until the date of the payment of the compensation awarded by the Board.

- 22. (1) The authorized officer shall pay to the claimant the reasonable costs incurred by him in or about the preparation and submission of his claim, unless the chairman considers that the claimant has failed to put forward a proper claim within a reasonable time after the service of the notice under section 7 or that the claim put forward is grossly excessive or that he has been a party to some deceit or fraud in respect of his claim.
- (2) Subject to the provisions of subsection (1), where as unconditional offer in writing of any amount as compensation has been made to any claimant by or on behalf of the authorized officer and the sum awarded as compensation does not exceed the amount offered, the chairman shall, unless for special reasons he thinks it proper not to do so, order the claimant to bear his own costs and to pay the costs of the authorized officer so far as the costs of the authorized officer were incurred after the offer was made, and, where the claimant has failed to put forward a proper claim in sufficient time to enable the authorized officer to make a proper offer, the foregoing provisions of this section shall apply as if an unconditional offer has been made by or on behalf of the authorized officer at the time when, in the opinion of the chairman, a proper claim should have been put forward and the claimant had been awarded a sum not exceeding the amount of such offer.
- (3) Subject to the provisions of subsection (1), where a claimant has made an unconditional offer in writing to accept in sufficient time to enable the authorized officer to make a proper offer, and the sum awarded in equal to or exceeds that amount, the chairman shall, unless for special reasons he thinks it proper not to do so, order the authorized officer to bear his own costs and to pay the costs of the claimant so far as the cost of the claimant were incurred after the offer was made.
- (4) Subject to the provisions of the preceding subsections of this section, the costs shall be in the discretion of the chairman who may direct to any by whom and in what manner those costs or any part thereof shall be paid, and he may in any case direct such costs to be taxed by the Registrar of the Supreme Court.
- (5) The mode of enforcing an order as to costs shall be in the manner prescribed by the practice of the High Court.
- (6) Where the chairman orders the claimant to pay the costs or any part of the costs of the authorized officer, the authorized officer may deduct the amount so payable by the claimant from the amount of any compensation which may be payable to him.

#### **MISCELLANEOUS**

- **23.** (1) Where there is no person competent to alienate land or to receive or to give a sufficient discharge for any compensation awarded, or where any person interested in land, by reason of his absence from Grenada and of his not being represented therein by a duly authorized attorney, does not submit a statement to or appear before the authorized officer as required by section 7 and where such a person, after diligent injury, cannot be found, the authorized officer may pay the compensation into the High Court to the credit of the person entitled thereto.
- (2) Any compensation paid into the High Court by virtue of this section may, on the subsequent application of a person claiming to be entitled thereto, be paid out to such person on the order of a Judge of the Court.
- (3) All moneys paid into the High Court under the provisions of this section which remain unclaimed for twelve years after such payment shall be transferred to the Consolidated Fund, and all claims thereto shall be forever barred.
- **24.** A person interested in any land which, without any portion thereof being compulsorily acquired, has been injuriously affected by the erection or construction on land compulsorily acquired of any works in respect of which the land was acquired, shall be entitled to compensation in respect of such injurious affection:

Provided that compensation shall not be payable under this section in respect of any injurious affection which, if caused by a private person, would not render such person liable to an action.

- **25.** (1) If any land shall be comprised in a lease for a term of years unexpired and part only of such land shall be acquired compulsorily, the rent payable in respect of the land comprised in such lease may, on the application of the lessor or the lessee to a Judge of the High Court, be appointed between the land acquired and the residue of the land.
- (2) After such apportionment the lessee shall, as to all future accruing rent, be liable to pay only so much of the rent as shall be so apportioned in respect of the residue of the land, and as to the residue of the land, and as against the lessee, the lessor shall have all the same rights and remedies for the recovery of such portion of the rent as previously to such apportionment he had for the recovery of the whole rent reserved by such lease, and all the covenants, conditions an agreements of such lease, except as to the amount of rent to be paid, shall remain in force with regard to the residue of the land in the same manner as they would have done in case the residue of the land only had been included in the lease.
- **26**. Where any question shall arise touching the title of any person to any land which may be entered upon or acquired for the purposes of this Act or touching any estate or interest therein, the person having the ostensible possession or enjoyment of the rents

and profits of such land shall, for the purposes of this Act, be deemed to be the owner of the same until the contrary is proved.

- **27**. (1) Every assessor shall receive for his services such fee as the Governor-General on the recommendation of the chairman, may direct.
- (2) The Governor-General may authorize the reimbursement of the travelling and subsistence expense incurred by the chairman and members of a Board appointed under this Act.
- **28.** All reasonable costs, charges, and expenses incurred by the owners of lands or persons interested therein for all conveyances, and assurances of any lands purchased or acquired, and of any outstanding terms of interest therein, and of deducing, evidencing and producing title to such lands, terms or interest, and of making out such abstracts and attested copies as the authorized officer may require, shall be paid by the authorized officer.
- **29.** All amounts which have been awarded by way of compensation under this Act, including interest and costs to be paid by the authorized officer, and all other costs, charges and expenses which shall be incurred under the authority of this Act shall be charged upon the Consolidated Fund.
- **30.** Anything in any Act to the contrary notwithstanding, no instrument or document relating to anything lawfully done under, or for the purposes of, this Act shall be chargeable with any stamp duty, registration or recording fee.
- **31.** Except with the approval of the Governor-General in any case in which he considers that injustice may otherwise be done, no claim for compensation which may be made under the provisions of this Act shall be admitted or entertained unless on which entry has been made on the land under section 4 a similar period after the date of the second publication of such declaration.

#### 32. A person who-

- (a) assault or obstructs or aids and abets any person in assaulting or obstructing the authorized officer or any of his agents, assistants or workmen in the execution of his or their duty under this Act; or
- (b) Opposes or impedes the lawful occupation or taking of possession of any land under the provisions of this Act, shall be guilty of an offence and liable, on summary conviction, to a fine of three thousand dollars and to imprisonment for three months.

# ANNEX III – Record of Stakeholder Consultations

# NOTES FROM DOMINICA (JULY 15-20, 2018)

### Day 1 - July 15, 2018

3:00pm - Arrive in Dominica

7:30 pm – Meeting with National Focal Point, Mr Sebastien, OECS Team – David Robin and Susanna Scott, Valma Jessamy

Discuss plans for one-to-one interviews with key stakeholders Meetings arranged with:

- Dr. Reginald Thomas, Permanent Secretary, Ministry of Fisheries and Agriculture; senior officers of Fisheries
- Senior officers of fisheries
- Lloyd Pascal Director Environmental Coordinating Unit (ECU)

# Comments from focal point:

LAMA – local area management authority, manage marine reserves Water sports associations involved in management in marine reserves Cabrits National Park

Comments from VJ- Persons of interest to meet:

- Coreen Prevost, PS Environment
- Physical Planning re Physical Development Plan:
  - Ms Lyn Baron and Mrs Annie Edwards
  - Need copies of final documents 2017: National Physical Development Plan and National Land Use Policy

### Comments from DRobin:

- OECS Council of Ministers meeting recently concluded
- OECS "on the front lines of climate change"
- CROP project unlocking ocean wealth
- Formalized boundaries/treaty

#### Need to visit:

- OECS Commissioner
- Coast Guard, Inspector Simon Edwards

### Sebastien on lessons learnt post hurricane Maria

- Need to ID places for fishing boat storage during hurricanes
- ICE/storage of fish: Space; Availability where to put what
- food security; loss of earners
- Insurance needed; put money in a fund

# **Day 2 - Monday 7/16/2018**

# #1 - Meeting with PS Ministry of Agriculture

Introductions by David Robin

- Theme of recnet Meeting of OECS Ministers of Environment sets context for our work
- Recent hurricane events;
- Overview on CROP
  - \$6.3 million for 5 participating states
  - World Bank/GEF, OECS Commission; consent of member states for project
  - Mrs Scott/project coordinator
  - Dr Jessamy/consultant for SESA

Food production } tremendous resilience post hurricane Lots of fish }

- Interesting to note that Dominica had 160,000 seedlings pre hurricane to donate to another island
- Owe it to farmers & fisher folk /facilitating role of Min of Agric
- CROP: Focus on planning in the marine space (similar to what is done in lands);
  - 2 countries have ocean governance policies; project will assist other MS to develop national ocean policies;
  - Producing coastal master plan & marine spatial plans for MS
  - Plans have ability to assist with spatial planning/ places to store vessels etc
  - Capacity building to update & maintain plans'
  - Blue economy / think blue (virtual education) [presently empty]....will put info onto that platform
  - Mapping ocean wealth/TNC –built platform

# **PS Agriculture Question** re governance policies

- -developing plans/policies or going through entire system, taking it all the way;
- -road map to take it through to adoption & implementation
- "Bring people in pay them well & then?"

### Robin answer:

"do not be weary in well doing"

- -full engagement, what turns out will be as good as national input
- -national ocean governance committee needs to be established
- ECROP will be aligned with 2030 development agenda

# Eg St. Vincent: 20+agencies 44+ legislation re oceans sectoral approach

• Linkage of CROP with resilience e.g. issue with storage of vessels

# PS Agriculture

- "has to be another way"
  - Every event boats are moved etc
  - Why not move inland? Ocean is there but risky;
  - \*\*issue of micro insurance
  - o 5% of food security & put inland aquaculture

### Robin:

-CREF/ COAST regional insurance

"from the frontlines of climate change" Comments by Hon R. Skeritt to the UN

Consultant Observation: Need to Document Lessons Learned from recent hurricane events

# PS Agriculture: Move inland?

- Where would these lands be?
- Near to the coast?
- Environmental /social issues

# Robin - ECROP -project implementing a small part of the policy

- -land based planning
- -orderly development

# Comments by PS Agriculture

- -tamarind trees & skin-up trees } can withstand impact of hurricanes
- used before along banks of rivers
- pattern interventions <u>before</u> to rebuild *houses on banks of rivers*
- dredging rivers; risk reduction point of view makes sense
- removing stones open up self for greater risk

# Comment by consultant VJ

UWI –volcanic hazard maps; seismic unit; available for Dominica

# **#2 Meeting with Maritime Administration Office**

Harold Guiste, Albert Peter} Maritime Administration Officer, Assistant Maritime
Officer(accredit surveyor Masters level)

#### David Robins Overview

- ECROP: integrated approach to dealing with ocean
- 2013 received approval by Heads of Govt
- UN 15 areas identified under ocean affairs including shipping
- Migration at sea, security
- Protection of the marine environment

# **IMO Audit** – Mandatory for compliance with 29 IMO mandatory list

4 conventions; 6 Protocols; 19 Codes

Responsibility in 3 areas; objective evidence of its compliance in these 3 areas:

- Ocean state;
- Coastal state;
- Port state

IMO implementation Code

IMO Regional Advisor to Caribbean: Colin Young TNT }

- Dominica in need of support
- Measures to ensure full compliance

Managing relationship/flight risk

Dominica Maritime Registry Inc / contribute to effort of resilience building

#### 2016 amendment to IMO facilitator conference

-electronic window for clearing of ships & provision for info on ships International Technical Corporation Training Initiative

- Antigua & Barbuda leading prototype tested for use by other states;
- Funded by Norway only developing states where it is being tested –rolled out globally
- need cruise ships to be coming; may want to bypass if there are no measures in place for e-clearance etc

# \*\*project support for Dominica in light of recent events Mandatory by 19<sup>th</sup> April 2019 \*tacit acceptance of regulations

- Formation of National Ocean governance committees
   Draft TOR; Composition (High Level)
- Integrated / inter sectoral; coordinated approach
  - Sargassum plan for region
  - Oil spill response plan

Lessons learnt from passage of Hurricane Marina

- catrotrostrophic unprecedented
  - \*LAND Management & how it affects the coast & marine space

Tonnes of virgin forest slide down slopes

Millions of tons of wood; bed of ocean

- Several rivers become great cause of concern; volume of water
  - Severe erosion of rivers;
  - Silt, new beaches
  - Ocean currents carried away
  - Flooding in places where never expected
  - State of reefs
  - dredging of rivers as far up as possible to increase carrying capacity

## Peter comment

- DVRP doing lydar/coastal mapping
- What kind of mitigation measures should be put in place?

e-mail address: maritime@akvdom.dm; maritime@dominica.gov.dm

# #3 Meeting with Michael Savrin – Ministry of Planning & Economic Development Planning (impromptu brief in hallway)

- Low carbon climate resilient development Strategy-NDC;
- Integrated Coastal management Framework (ICMF): GCF funding for project
   -specific request for ICMF

\*shuakiamichael@gmail.com 767-265-3027

- Relevant past/present, planned plans & projects
- Concept note stage
- Need info on scope/focal points output reports etc for CROP

# **#4 Meeting with Physical Planning Department:**

Shillingford and Kelvin Rolle physicalplanning@dominica.gov.dm

Website: physicalplanning.gov.dm

- National Physical Development Plan (NPDP) informed by Erica of 2015
- National physical development plan (very general); local area plans needed
- Interior/ safer zones:
- more flooding than ever previously

- Only 12% of land available for development; based on composite hazard risk assessment in NPDP; rest of land include:
  - Buffers;
  - slope;
  - protected areas
  - Mountains
  - Government has no lands
  - 72 / 73 divided into estates
  - Always looking for lands; but none available
- Private lands
  - Cannot control legal subdivision of land
  - -nothing to prevent sale & subdivision and passing of title
  - Development Planning Corporation Board approves application for development
  - Ministry of Planning & Economic Development (Physical planning part of ministry)
  - Building Code 2015 Revised OECS
  - Can't implement physical planning Act
    - -procedure too long
    - -stop orders
    - -issues fines
    - Can't do preventive measures \*49 days
    - Change of use
  - Banks check for planning permission to build
  - Other agencies linked in implementation of Act
    - Need trigger mechanism across agencies
    - o services, water, electricity etc
    - ownership of land requirement for services
  - Link to other licenses
    - -fisheries harmonized legislation
    - -enforcement officers of other agencies
  - flooding risk maps available; will look at more closely for planning approval of development applications

- Ministry of Housing aware of maps
- Lands & Survey has Cadastral data for island; physical planning does not have GIS for cadastral

# Quarries present environmental problems in the marine space

- Quarry Regulations not yet approved
- o VJ question: Any rehabilitation/restoration of quarries?
  - Most quarries not yet exhausted
- Legislation & regulations in draft
- Private ownership monitoring team every 3 months
- o Reports on quarry
- Legislation & Regulations
- Planning permission and EIAs: use as guidelines for monitoring
- sedimentation ponds/protect siltation of marine space
- Igneous rocks; Dominica export stones
- Note: French group with better management practice;
- Government looking to develop large estate (for public servants?)
  - Moderately sloping
  - 1.5 acre minimum lot size
  - -protect water quality [safe from flooding]
  - o beginning to look inward; looking for land inland

# #5 2:00 p.m. Meeting with Kalingo Development Officer

Introduction by David Robin

- Intersectoral approach to ocean governance Government sanctioned process
  - 1. Identify the users
  - 2. What are the uses
  - 3. Optimize benefits for this and future generations

# **Comments from Kalinago Officer**

- familiar with World Bank process for development of indigenous people's plan
  - geographical designed spaces
  - marine space of territory not mapped out
  - We see foreign traffic and fishing in their space

Note: at least 50% of fish at largest lending site come from Kalinago fishers

- Kalinago fisherfolk land greater than 250,000 lbs per year
- -what are the areas of the Kalinago fishing
- -under water artefacts heritage

# **Points of Interest of Kalingo Council**

- Trade across borders "coastal seaborne empire"
- Kalinago Mariner document from chief has permission to trade with other territory
- 40 years ago affected by independence viz sovereign state; crushed the Kalinago spirit
- international borders with navigational rights
- 92% of households impacted
- "vernacular" architecture; Kalinago model designs survived hurricane Maria
   Observation by David Robin:
- CERMES, CLME+, OECS part of inter governmental governance framework]
- ECROP international best practice for regional ocean governance]
- EC ocean governance team; has national committees; need representation from Kalinago people

# #6 - 5:30pm Meeting with Coreen Prevost - PS Tourism & Urban Renewal, Environment, Climate Resilience & Disaster Management

#### **David Robin**

Intro CROP

- Requirements for SESA
- Coastal Master Plan; Marine Spatial Plan

Comments by Susanna Scott

- Tourism part of national ocean governance committee –not yet established
- Revised tourism master plan "trade off" –stakeholder engagement needed

Comments by PS

Tourism master plan, policy up to 2022 ministries strategic action plan
Post-hurricane Maria
Vision to be 1<sup>st</sup> climate resilient country

New approach for -coastal & marine tourism

- GOV of DOM/Min of Tourism had PSIP for yachting sector; -used budget for coastal clean-up, removal of debris from coral reef
- coastal protection verses product development
- Coast heavy impact from hurricane

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- \*\*support to communities to ensure proper coastal development
  - planning comes in for Infrastructure development along the coastline
  - Issues such as waste management in communities
  - Drainage

#### Review Master Plan

- Climate resilience & coastal and marine integrated
- Renamed yachting project to Coastal & marine tourism development projects
- Butting heads with fisheries in communities with strong fisheries activities;
   fight two cannot go together
- User conflict resolution needed
- Communities that depend on both need to co-exist e.g. Mayarou &
   Plymouth
  - –technical officer to deal with coastal & marine tourism (dive, yachting sector fisheries, community engagement) zoning of uses share space

#### e.g. Mayaro

- Community engagement
  - Beach enhancement plan
  - proper drainage, waste management

# PLAN FOR A MODEL COMMUNITY

need for support – no technical expertise

# **Dive Sector** (dive festival; women's dive day)

- Dive not heavily affected; reef above 40 feet
- Audit of main dive sites/Sebastien
- Whale Watching, universities

- Larger discussion with fisheries
- o Swim with whales?
- Carrying capacity
- o Permits
- o Footage video
- Yachting
- Dom water sports association/Investigations after hurricane
  - o Dive show in US
  - o Promotion open & ready for business
- CROP

National ocean policy & action plan aligned with 2030 development agenda

# **PS Comment on Ministry of Environment**

- Draft environment climate & national resource management Bill
- re-designation of portfolios
  - Beach control where it fits in

**George Maxwell** Technical Officer Coastal & Marine **Pascal** GEF OP Focal Point

# **Day 3 - TUESDAY JULY 17, 2018**

# #7 Meeting with Lloyd Pascal – Director ECU

1st 2 wks of budget

Social living conditions from Maria
[like the hyena – self-preservation]

- Unlocking Ocean Wealth
- WB package of loans & grants } to rebuild after hurricane/unacceptable to be offering loans at this time; each WB project have PMU

NGOs & UN Agencies UNDP } creation of another Haiti – lots of disenchantment If disaster hits again country will no longer be viable *i.e. failed state* UNEP (no show)

Social context: UNDB Barbados, Panama (Mr King) - to head

New Ministry of Environment Climate Resilience Disaster Management Urban Renewal

- Environment Department includes:
  - Met Services
  - Forestry
  - Wildlife
  - National Parks
- Department coordinated Post Maria debris management & clean-up

Prime Minister Office: CREAD (Climate Resilience Execution Agency for Dominica)

To manage big moneys for reconstruction

Transition Team for CREAD -

- Minister of Foreign Affairs
- PS Planning
- PM Advisor
- Persaud, Economist Chief Advisor on Climate Resilience (from Barbados)
- Cabinet Secretary
- Financial Sec (Accounting Officer)

Dominica selected as one of 16 most vulnerable countries in the world for implementation of a pilot climate resilient program

### GCF provides assistance to:

- Dominica Haiti Jamaica St. Vincent St. Lucia Grenada
- made request for assistance to CDB to prepare climate resilience project document for pilot
- Prepared 2012 low carbon development plan/strategy climate resilience strategy -\$16m for:
  - legislation to establish department
  - o retrofitting of hurricane shelters
  - building of model hurricane shelters
- Gov of Dominica asked WB to be implementing agency WB turned project into DVRP { Intestinal fortitude}
- Dom got US \$38m Climate Investment Fund
  - inventory of water resources
- funds from donors
- lydar \*monitoring \*prediction

David comment: OECS DGA leading on climate resilience strategy for OECS/Caricom

private sector interest (Richard Branson); need marshal plan for the Caribbean

#### Pascal continued:

- disaster management & climate resilience needs to be linked
  - Inter-agency
  - Petit Savrin relocation from 2015 not yet completed
  - o October 2017 20,000 persons left Dominica after the hurricane
  - 2015 –Erica \* 9 communities declared disaster risk

History of Environment Coordinating Unit: Ministry Health & Environment, then Ministry of Environment and Planning, Back to Ministry of Health & Environment, now new Ministry of Environment, Climate Change, disaster, urban renewal etc

- Manage natural resources,
- Land use is with Ministry of Housing
- Physical Planning with Economic Planning
- Fisheries → Agriculture
- Water → Public Workers, Ports, Energy

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# David comment:

[As GEF Focal Point gave Pascal official copy of project document; pages 35-45]
\*donor driven projects (guidelines for reports)
 \*Modules for training for decision making → part of CROP project

# #8 - Meeting with Ambassador to CARICOM & OECS

## David comments:

- Over view on project
- July 2018 Council of Ministers (COMs) meeting → urge accelerated Implementation of National ocean governance Committees
- Introduction of project coordinator and consultant
- Project aligned with 2030 development agenda

# Comments by Ambassador:

- Scott's head; severely damaged by hurricane Maria
- New environmental Bill to be promulgated
- Great speed in reconstructing & rehabilitation post Maria
- CREAD all positions outlined to be filled
  - o funded by Canada?
  - law & legislation to be passed (for CREAD)
  - coordination of Infrastructure development projects etc; national program managed
- Cultural issues as well very important/ paradigm shift / visualization of new future
- What you build?
  - o maybe not residential; can't abandon areas

# **#9 Meeting with Kalinago Council**

Chaired by Councilman Hill (in absence of the Chief Mr Charles Williams)

### Comments from Councilman Hill

Effects of Hurricane Maria

- housing damage
- farming
- fisheries
- livelihoods
- housing stock less damage for David →
   More relief after David than post-Maria
   Dissatisfied with relief

e.g. family of 6 with one day supply of food

#### Persons still in Shelter

Not self-motivated/dependent on government for relief

High Level of Dependency on Government

- Council needs to sit down and develop a plan of action; positive action
- The right assistance needed for community to be productive
- Services in Community
  - o schools
  - o resource center
- Activities engaged in: farming, tourism, fishing not on a commercial basis

#### Comments from David Robin

Intro on project →overview on OECS Ocean governance project

### Questions from consultant:

1) What is the Institutional Framework for the Kalinago Territory

Answer from Councilman Hill: (see diagrammatic representation)

 The Kalinago Council is separate from the Government of Dominica; not below but autonomous

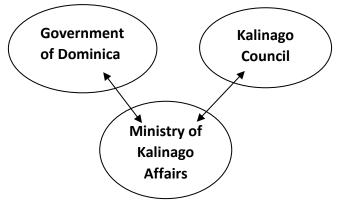
### **Government of Dominica**

- Now have a Ministry of Kalinago Affairs (MKA) which serves as a link to the government
- The ministry is fulfilling all the responsibility of the Council;
- MKA has parliamentary representative and staff
- Kalinago Development Officer/ Govt Employee

 Develop programs & initiatives from a government level to be implemented in the territory

### **Kalinago Council**

- Local governance for the territory
- 6 Councilors
- Chief
- Clerk



2) Resources, policies, plans strategies?

Answer from Councilman Hill:

- We know the challenges in the community but have not done anything about it;
- Nothing is in writing
- Two way process of development (with Gov't) does not always work
- Any Ministry has an annual budget but MKA has no annual budget and has not developed [plans/projects] in consultation with the Council
- Ministry answer will be "yes programs policies and strategies for the territory but NO involvement of Council"
- Council has no financial resources to develop, research any plans for the Community

This project (CROP) will be 3<sup>rd</sup> WB executed project in territory

- plans written;
- done only to satisfy UN objective
- numerous suggestions we have to do projects in community
- we have to do their project instead; WB project not want to change people's lives- in a real way; no transformation
- 3) What are the aspirations for Territory?
  Answer from Councilmen (Hill and Frederick):

- "lands" owned by Council; title for lands in the name of Council
- Seascape not demarcated

## Five major aspirations:

- 1. Want to maintain the integrity of lands & tribe as a distinct territory in the country
- 2. Want to develop an education system; curriculum, that is appropriate traditionally, culturally; with physical infrastructure in the territory (that is schools)
  - a. No high schools in territory
  - b. Youth are desensitized in process of education out of territory/assimilation
- 3. Health Services 2 clinics in territory
  - a. Territory categorized as its own health district –doctor; ambulance
- 4. Better protect forest, rivers, water, catchment areas (territorial lands)
- 5. Active economic base where commerce can be generated
  - a. See community as attraction for tourism but NOT as a commodity to put on show for tourists; people see the way "we live not something that is put on show" i.e. not Disney World Style
  - b. Agriculture (8 persons in territory are trained agronomist)
  - c. Construction company/best builders on island in territory; no capital or collateral to start business; empower people and then they can help themselves e.g. project funded by development agency in Kalinago territory; local builders were not able to qualify to do project; only 4 pers were hired paid @ minimum wage at \$40 per day (by contractor not from territory)
  - d. Make territory a tax & duty free zone/raising issue

### Councilmen highlighted major Issues/challenges for Kalinago Territory:

- institutional arrangement needed to access credit → communal lands
- In Dominica /Public workers once appointed can go to financial institution and obtain a loan; not so for Kalinago people working in the public service
- Banks & none of financial/institutional agencies will not give a loan to a Kalinago person
- Government can amend Act to give commercial application (for land)
- Health Services in Territory is [under resourced]
   Clinic has potential /built for full primary health care
- Clinic built by private NGO funds space for pharmacy /private
   [building leased to government for \$1 per year; for 10 years; need to renegotiate]
- → government pharmacy → prescription drugs only
- →room for private pharmacy vacant government stop use for private pharmacy
- Entrepreneur to operate/ business person from community

- People have to travel to Roseau for basic over the counter medication such as cough medicine; non sold in territory
- Kalinago people do not have the capacity to negotiate
- NGO Donated two dental chairs to facility took 3 yrs to set up and have a dentist in territory
- Government has a forestry department for policing forest reserves and **protected** areas
  - No rules for forest use in territory; indiscriminate use of forest cutting lumber etc
    - Furniture makers; joiners etc
  - o most of water catchment areas deforested for agriculture
  - Need for serious reforestation of watersheds
    - Bois revier; balata, gommier, lowea (VJ check spelling/scientific names)
  - No resources to enforce protection of forest
- Gommier tree → used for boat building →bleed for gum→incense
  - Sold to Guadeloupe and subsistence revenue;
  - no protection of those trees and they will disappear in 20 years unless they are protected
  - Wrote GEF grant \$25,000
    - → propagate Gommier plants [4,000] but destroyed by Maria

#### **Tourism**

- Visual only
- government recognized there is a benefit to market Dominica with image of Kalinago people
- economic benefits from tourism not felt in territory
- Government make investments that allow for overnight in territory
- agriculture always subsistence farming never on a commercial basis
- massive deforestation most of the trees cleared from the area
- Slash & burn practice of agriculture with negative impacts
  - $\rightarrow$  need to move away from subsistence farming to applying technology and science in farming
- Kalinago tradition more a seafaring people
  - \*not a traditional farming people → normally performed by women

    Became a necessity of life (in the name of development have to move away,

    deviate from certain things)
- 8 agronomists within the territory (degreed/qualified)
  - →unemployed
  - →working fields

- with government
- no database on community
- 3,000 people more than 20 years ago
- No real census on the number of persons
- Approximately 800 houses in territory [Mr Frederick Kalinago Development Officer should have better information]

# **2 primary schools** (one destroyed by Maria)

1 of which is outside territory that serves children

- Kindergarten to Grade 6
- Secondary School is out of territory [200 students government pays for buses]
- Several Churches in territory; main religions:
  - o Catholic,
  - o SDA, Adventist
  - Muslim,
  - o Church of Jesus Christ Nazarene
  - Christian church of SDA
  - Jehovah Witnesses,
  - o Bahia.
- Kalinago people are traditionally nature worshippers: Sun, Moon, Earth, Winds (1600+)
- Parliamentary Representative is Kalinago: for both Atkinson (nearby community) and Kalinago Territory (people in territory vote for parliamentarian in national elections)
- Opposition Candidate is not Kalinago
- Kalinago Minister "comes in and does what he wants"
  - Building 10 concrete houses without consulting the Kalinago Council; desecrated sacred site; tourism site
  - Fishing complex built in Marigot; Majority of fishing fleet more than 70% of fishermen come from Kalinago territory (no facility in territory).
  - Process of engagement lacking
- Hurricane Maria has exacerbated relationship between Government and Council

# Wednesday July 18 2018

# #10 Meeting with Forestry Officer and Coast Guard

Bradley Guye –Head of Forestry Management forestry engineer; acting research officer;

[Director of Forestry Minchinton Burton.]

Dominica still young and growing

9 active volcanoes

Have expended with certain phenomenon on the coast

- South east community after Tropical storm Erica (2015) significant amount of rock and debris caused expansion of coastline;
- Layou mouth of longest river significant land changed and coastline extended
  - consecutive build up
  - o Lenny 1999
  - o Trough in 2013
- Forest debris washed out
- Vines covering trees
  - Pioneer species; larger trees expelled them
  - wildings exposed.
  - Pruning of forest (balance between old and young)
- Wildlife feeding on farms:
  - crop degradation
- Certain observations in forests
  - Large trees not fruiting properly/hallow seeds
  - Older trees;
- Maria opened forests for new growth
- Planting important species to help build back habitat

#### IMO/DOMINICA

- -draft legislation to be promulgated
- Oil spill clear water program (CEO of Dominica Port Authority)

•

Impact of Hurricane Maria continued

- Access to eco-tourism sites difficult
- trees on ground every where; access difficult to do assessment
- GIS Unit for forestry under the disaster project

[have hardware software]

Lydar fly over after Maria

- Geospatial committee
- Forest resource assessment for FAO
- NO ICZM policy for Dominica
- National report on climate change (Third Report to be done)

Comments on forestry in Kalinago Territory

- -There are methods to bleed gommier (best practices) which do not affect:
- a) Integrity of wood
- b) life of the tree
- NEP (national employment program) used to assist/training
- -need to take ownership of what they have re forest resources (Kalinago people)

#### **LEGAL AFFAIRS**

RED + agenda

- o Reduction of emissions from deforestation and degradation
- Carbon Sequestration process;
- o Draft Strategy data collection & resources for the protection of forests
- Mapping of marine resources Mr Defoe
- Belfast waste to energy plant (soaps and alcohol); most waste oil on island/pick-up [solid waste authority –non-biodigestable waste]

Copy of Oil spill response plan provided to consultant

# #11 Meeting at Physical Planning

Lyn Baron - GIS specialist Annie Edwards - Physical Planner

Question from consultant on use of GIS Maps for planning

### Answer:

- people aware of it but not sure if they are using it/them
- development agencies use maps in their reporting
- have not revisited national physical development plan (NPDP) post hurricane Maria
- used disaster risk management approach in developing plan
- need coastal master plan in light of climate change; most of costal infrastructure and assets are located in coastal zone
- coastal zone management planning needed
  - o areas need to be relocated due to land degradation
  - Govt engaged in coastal zone dumping debris from hurricane clean-up
  - o natural coastal expansion; especially around major events/major storm event may remove or bring landwards
    - -Layou
    - -Grand Bay
    - -North East
    - -St. Joseph
    - can be stabilized with built structures; significant along the coastline and outwards from coast to sea.
    - o 2011 collapse of major dam contributed significant debris deposits on:
    - Fishing villages;
      - Lots of coastal erosion
      - Need projects to reclaim beachstabilize
    - Potential for development of built up areas for economic activities
      - People playing volleyball on it
    - o Portsmouth will be enhanced
      - -different type of businesses;
      - -water sports
      - -limited flat land
    - North East coastline wall from airport resulted in large expanse of beach build up after Maria.
    - Shift of activities to other areas

Mayorou expansion of beach; Small shops; part of tourist tours Cabrits

Very vulnerable to wind but not to flooding etc
 Marine reserve in Sourth/Soufriere;

- communities restricted in use of resources;
- need to sensitize and assist to maximize use of resources; CATS [GTZ funded] training with community persons; scuba diving etc [own business]

#### **Environmental Issues**

- Dumping v proper reclamation of the shoreline; Impact of silt on marine environment and coral reefs
- Dumping of solid waste [landfill capacity]

# Wastewater treatment by WASCO

Secondary treatment of waste; Water quality of coastline improved after installation of plant

Everywhere else (on island) use of septic tanks to treat wastewater High water table in **Portsmouth** 

# Kalinago Territory: Question - maps of territory

- Have something that can work with for CROP project
  - Still conquering lands? Questions about boundary disputes
  - Unresolved issues regarding boundaries
  - Project: delimited boundaries of territory about 3 years ago; specifically for the Kalinago territory

### Post Maria issues/coastal hazard risk and development:

- Insurance not reinsuring in hazard zone; high insurance premiums
   Write of as losses; difficulty with recovering loss
   Banks should be encouraged to also write off debt
- Note: Petit Savan residents are returning; government stp paying rent for persons; loss result in people moving
- o Relocation within constituency; difficulty to find new communities
- o land ownership/title approved sub-division; loss of assets;
- Squatters on fringes of government land e.g. Canefield, Bene Ravine;
- 50 years on private lands; Government regularized areas which are very susceptible to damage/vulnerable
- need data to inform plans e.g. sea level rise input; modelling studies, engineering;
   coastal engineers, hydrographers, coastal currents etc, bathymetric data;

Need integrated coastal zone management unit [USAID Study on Portsmouth available online]

# **#12 Meeting at Ministry of Economic Development**

# **Michael Savarin**

- national designated authority for GCF NDA (low carbon strategy))
  - -Project Coordinator Manager for GCF Programs Implementing agency ECU National Climate Change Committee
  - $\downarrow$  [sub-committee on ocean governance]  $\Rightarrow$  preparatory support programs capacity building
    - -ocean governance
  - -requested details on CROP national coastal and marine spatial plans
  - Consultant provided project document

# Thursday July 19, 2018

# **#13 Meeting at National Water Authority**

Consultant Inquiry on Waste water treatment in Dominica

Answer: WASCO Chief Engineer

- Collection systems for 3 areas
  - Roseau & environs
  - Canefield
  - -Gimmit

Baytown Treatment Plant – only 1° treatment

Treated waste pipe out to sea, pipe 200 ft deep and 1200 ft offshore Anchored pipe on sea bed HDPE line with concrete anchors

Communal septic tank – water discharged at coast

Onsite treatment/rest of country?

Some consideration given for package plants for some development

PPU in granting approval for development –contact Ministry of Health and the Environment Public Works – water resources management and ports

Plans for comprehensive collection system for Portsmouth & environs

- -soil, hydrogeologic factors makes on-site treatment undesirable
- -H<sub>2</sub>O quality in coast affected
- -3° level treatment plant, disposal of effluent back into environment
- -West Coast water project (2009)

EU Project: \$25m; design done/ final designs cost more than scope; water component done (2015 completed) but waste H<sub>2</sub>0 not done

- -seeking funding from GCF to do wastewater component
- -completing a component with storage tanks funding from WB  $\rightarrow$ completion by Sept 2018 with additional extensions
- Recommendations given for more robust treatment rather than septic systems; package plants etc
- Studies available for the west coast
- Cartegena Convention (land based sources of pollution)
  - o Dominica wants to ratify
  - Type of water and classes of water waste; standards used as a guide to prevent pollution of the environment
- Roseau plant 1° treatment → removal of solids, debris, grits, gravel fats and oils etc
  - Plant commissioned about 2002 no biological or chemical; level of aeration
  - Monitoring of BOD & COD, bacteria conducted annually by lab –

Question consultant: is there independent verification?

Answer: No

- Solids deposited automatically into large barrels
  - landfill disposal
  - small volumes
  - sludge removal
- 3 pumps in wetwell → fail safe mechanism
- Main line to plant broken after Erica and Maria;
- emergency situation/direct outfall; need to repair lines
- Under UNIDO –energy audit too much energy used; renewal energy to run Roseau
  - PV solar 75 kw system
  - About 60% energy demand;
  - pilot; hope to replicate for most of pumping systems
  - Grid tied with battery backup
  - CCCCC funded; mini hydro power

### Impact of wastewater treatment plant

- →positive impact, vast improvement in water quality at the coast
  - -only at 50% capacity (design could accept more)
  - -can upgrade system and increase level of treatment
  - -more space needed at existing site
  - o -need to relocate or reassign space [river and sea on either sides]
    - Will use some of available space for ground mount of PV system;
    - Roof can only take 50kw

#### Portsmouth

- More extensive/comprehensive treatment will need more space
  - waste stabilization ponds
  - constructed wetlands
  - uv treatment/disinfection
- Quality of effluent; at present discharge into a tributary that goes into river
- o Concerns of Town Council; physical development plan for Portsmouth
- Feasibility study and EIA for Portsmouth waste water
- Part of west coast project

# #14 Meet with Dr Lennox Honychurch at Cabrits National Park

- o Chairperson Portsmouth Citizen Dev Committee Master Plan
- Glad that plan is being looked at; thought forgotten
- Committee was approved by Prime Minister
- Presentation of plan was made to Cabinet
- Should consider as part of project to develop CSMP for Dominica

### #15 Meet with Developer of new CBI hotel project at Portsmouth/Cabrits National Park

- Providing assistance with rehabilitation of nature trails in area
- community rebuilding assistance
- eco-friendly project; using best practices; will treat wastewater etc

# Dominica Stakeholder Consultations July 16 – July 20, 2018

# Regional Strategic Environment and Social Assessment OECS Caribbean Regional Oceanscape Project

Name	Title/Department	Telephone	E-mail	Signature
Dr. Reginald Thomas	Permanent Secretary		psagricultre@dominica.gov.dm	
	Ministry of Agriculture,		agriculture@dominica.gov.dm	
	Food & Fisheries			
Harold Guiste	Maritime		maritime@cwdom.dm	
	Administration Office		maritime@dominica.gov.dm	
Peter Albert	MAO		Same as above	
Michael Savarin	Ministry of Planning &	(767) 265-3027	shuakiamichael@gmail.com	
	Economic Development			
Kelvin Rolle	Head Physical Planning		physicalplanning@dominica.gov.dm	
	Department		website: physicalplanning.gov.dm	
Shillingford	Senior Planner PPD		Same as above	
Cozier P Frederick	Kalinago Development	(767) 266-3377/	caribaffairs@dominica.gov.dm	
	Officer	266-3556	frederickc@dominica.gov.dm	
Coreen Prevost	Permanent Secretary			
	Ministry of Tourism &			
	Urban Renewal;			
	Ministry of Environment			
Lloyd Pascal	Director - ECU	767-266-5256	pascallloyd@gmail.com	
Simon Edwards	Commander Coast	767 225 1380	simonkedwards@yahoo.com	
	Guard			
	GIS Specialist – Physical		Lyn baaron@yahoo.com	
Lyn Baron	Planning Department	767 277 3244	baronl@dominica.gov.dm	
		767 266 3752/3138		

Name	Title/Department	Telephone	E-mail	Signature
Mrs Annie Edwards	Physical Planner –		annierose63@gmail.com	
	Physical Planning			
	Department			
Bradly Guye	Forestry Department		brad.g908@hotmail.com	
	Acting Research Officer			
Williams, M	Chief Engineer/WASCO		m.williams@dowasco.dm	
Lennox Honychurch	Cabrits National Park Chairperson Portsmouth Development Committee		lennoxh@cwdom.dm	
Kamila Ordrackova	Range Developments			

**Stakeholder Consultations at Kalinago Council** 

	Name	Title/Department	Telephone	E-mail	Signature
	Louis P. Hill	KALINAGO Council Administrative	767-275-7958	louis patrick hill agmail- com	Attel
		Administrative Assistant M.K.A	125-8158	Shernia Seraphin 1@hStmail.com	Scraphin
1	Sacqueline Corbette	Clerk, Kalinago	225-1946	Shernia Seraphin 1@ hotmail. Com Kalinago Councile gmail. com jacojaco Lo e yahoo. Com	g. Corbetto
	Jumadine Frederick	c kalinago Council	293 - 7660	frederidesumadia e @g mail. com	
(	Reny Anguiste	Kalinago Council	2764710/3/66/49	ranguisk & @ gmail. com	R. August
	Williams	Frankayo Chief	223- 10 33		
		-			

#### ANNEX IV GRENADA

Grenada Stakeholder Consultation July 24 2018

# Situation and Stakeholder Analysis Regional Strategic Environment and Social Assessment Caribbean Regional Oceanscape Project

Introduction and over view on CROP by Commander David Robins and Mrs Susanna Scott from OECS Oceans Governance and Fisheries Unit.

(other notes on priority areas and critical issues for attention added to power point presentation)

Consultant: Four dimensions and layers to consider (Geography of place – climate change & risk scenarios; Ecology of place; Human Ecology; Political Economy) plus external forces climate change and global economy

Comments on Blue Economy Master Plan (BGMP)

- Is plan law or already approved for implementation? What is it?
- Housing not addressed in plan
- Status of National Development Strategy 2030 and how it fit into BGMP
- Blue Growth
  - o Resources coming from where?
  - For Investors
- Top down: Architects vision and senior advisors; selective consultation
- Should be peoples plan from the bootm up
- Coastal zone task force has comments on BGMP; no evidence that comments were considered as no change to plan
- Absence of data to advise BGMP
- GIS, mapping lydar bathymetrty
- Ecosystems
- Lack of awarenedd
- All agencies asked to review document and give feedback
  - CSO/social compact
- Historical/heritage not considered
- National discussions needed
- Land use policy and BGMP
- Public participation PROCESS needs to be looked at
- GOG has US\$20M loan from World Bank to advance BGMP agenda (under very concessionary terms)
- Communications strategy needed for BGMP

- Villages etc to be affected must now more
- How much flexibility with plan?
- BGMP will be driven by market forces
- Economic assessment on yachting needed; Linkages with other sectors must be considered
- TOO Grand
- Targets only investors into Grenada
- Rep from Economic affairs department:
  - o 2 consultations were held with select interest groups
  - Comments received from 60 stakeholders
  - Focus groups were consulted on aspects of the document
- Wide cross section of stakeholders were not consulted
- No update of the document to reflect consultation
- Status of reports from consultations?
- Foreign Affairs coordinated the efforts on the BGMP; needs a home and agency to coordinate
- Input from Environmental Officer
  - Coastal zone task force reviewed report
  - Working on sediment transport project with support from CEFAS
  - o Gouyave and Levera Marine Protected Area proposed; to be launched soon
- Wider stakeholder engagement needed
- OCES comment:
  - CSMP team with have a social safeguard specialist to ensure that social issues are taken on board in developing plans

RENAUM

Name	Organisation	Contact Information (Email; Telephone)	Signature
Kolmal Bulder	Grenada Cord Reef Fandatur	rolandbaldes e gmil-es	Alles
Mongues	Crouyan Lishernen Coop	410-8845	and a
BEZNALD WILLIAMS	ENUSROWMENTAL HEALTH		Ben solins
Colin Henry	Puckly Bay Marina	Jassemhenry on took com	
HLBUR Francis ROXANINE	Evenoda Coast guad	Allo-9304 grail com	
KOXAMINE BONAPARTE	National Jisaster Managemen Syway	rbonaparte 1211 e gonasto	& Bone perte
BAKER	MINISTRY of CARRIACOUS PETITE MARTINIQUE AFFAIRS	Akmbaker Egmail: com 443-6026	AB.
Anicka Phillip	The Nature Conservancy	435-0231 /440-0231	Atholys
Tegur	Into Ageny Gupz Du.	456-8013(2) 129 do gn d 2013@ gneil. com 129 do O/C gneil. com	Sty

Name	Organisation	Contact Information (Email; Telephone)	Signature
Zoganchmire	Grenada fund for Conservation + Kido Foundation	gfcinca@ gmail.com Kido.ywf@gmail.com	Buchmire
CHILLS JOSEP4)	Energy	krispjægmail.com Als adab	Prio,
CHARCOTTE	CHARER DICHOLSOUS AND AND PORT	charlotte. bonine caportlouis marina. com	Ziouu.
DR RUSSELL D. STEELE	Rice. IAGDO	russell.d. Steele @gmail	The
Geilinde Scripel	GHTA	Seupel @ grail. com	Ghel
Russ Flower	GHTA	russfortrueblebuy com	
GERRGIA	CATA	generfépuegrerolocom (	Enis 4
HAYDEIS MEDHEAD	CANBREAN CHAMENOGE INHATIVE (C.C.I.)	HREPHRADE CAPIEZZANIANE	PATTUE ORGANIA
JEALLA .	THE NATURES CONSURVANCY	nfrederick Otoc. org	As T

Name	Organisation	Contact Information	Signaturo
Ivallie	Organisation	(Email; Telephone)	Signature
Neil		415-2680	
Roberts	G'de lacht Club	neilvoberts 9170 gmail. con	Dellas
JAMES	Private interest	jamesfinlag 1234 a	1
FINLAY	mPA.	james fin (201234 a) gmail.com (1234 a) 43404 753/443533	277
Danny	\$ MAYAG	409-3255	Donel
Dovelan		danny_dowlanl@hotmail	com
Andre Joseph	Environment Division.	534-0001	
-Witzig		ajosephwitzig@gmail.com	Ma
MAXINE	0 \ 1	maxine welsh@giz.de	
MELSH	C+ 12	415-0830	W Color
TUN HUEC	GIPA	403-934	
LATOTA VICTOR-MASON	SOLRC LTD ( GRENADA)	latoya.victor @ sol petroleum.com	Illict.
Titus Antoine	Ministry of Finance, Econ Deu, Plaining Economic of Technical Cooperation Dep.	titus_antoine@yahoo.com	The
Avia Storis	Ear Din son	1-473-4003k220 440-2708X	Al Stais

Charage Janger

### GRENADA Stakeholder Consultation July 24, 2018

## Regional Strategic Environment and Social Assessment OECS Caribbean Regional Oceanscape Project

Name	Title/Organization	Telephone	E-mail	Signature
KAREN RODEN.LAY	WE CASWMA	444-2019	Kirding Swan Con	Rosco
Trong Bulling	WE CISWMA GEC	404 8814	Stradene soma con gfcinc 1 agmail.ca	Tursichine
SUSANNA SCOTA	oses	758 4856327	susame as cotto secs	85
Darid Rolin	250	758 4556327	david . robin @ secs . int	
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#### ANNEX V – ST KITTS & NEVIS

St Kitts Stakeholder Consultation July 27 2018

# Situation and Stakeholder Analysis Regional Strategic Environment and Social Assessment Caribbean Regional Oceanscape Project

Introduction on project by focal point Mr Hobson;

- project launched in St Kitts & Nevis April 2018
- outcomes: enhanced CROP
- National Ocean Governance Policies and Strategies
- National CMSP
- Education & training platform/web-based

#### Introduction of participants; sectors represented:

- Public Service
  - o Physical Planning
  - Urban development/development planner
  - o Tourism; PS
  - Maritime affairs
  - Coast guard
  - o Customs
  - Immigration
  - o Fisheries/Nevis
  - MMA/marina
- Private Sector
  - Tourism Industry/marina
  - Consultant
- Community/resource user
  - o Fisherfolk

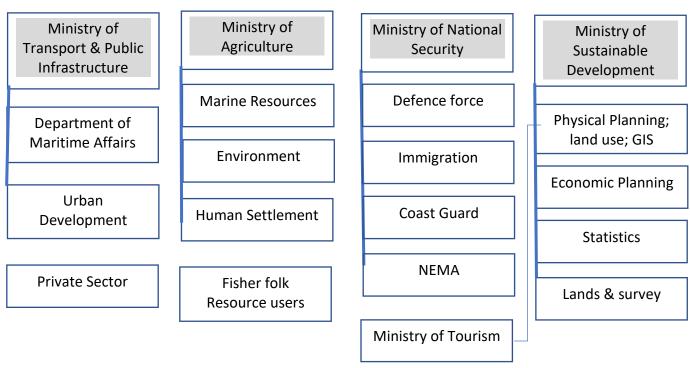
#### **Discussions and Comments from Stakeholders:**

Physical Planning (senior planner)

- Cause coastal and marine resources in a more sustainable manner
- Financial and political constraints affect decision making
- Cost recovery mechanisms for amenities and infrastructure not worked into projects
- How funded? Needs to be improved: Government resources, grants, loans for special projects; investment projects; CBI
- GIS Data available: assessing communities to develop profile; geospatial
  - Limited cadastral data; statistics for household socio-economic data available from the statistics department;

- using analysis sheets for improving time for data collection; interns studying geomatics/thesis doing most of work; from St Kitts on vacation;
- Physical/topo, ecology/environmental, human use system/infrastructure GIS data/layers available for analysis;
- Political economy not available for entire country; updating data sheets as part of continuous exercise;
- GIS staff assisting in data analysis; part of succession plan for the department; training next generation of resource managers
- Hazard risk maps available; need to develop a composite map
  - o Important for "conversation" on involuntary resettlement
  - NADMA has maps (Tsunamis risk maps on displace around meeting room)
  - o Stakeholder public awareness/communication is undertaken by NADMA
  - o Education activities for schools, hotels, developers;
  - o 8 districts with voluntary systems to do public awareness
  - Hazard mitigation and disaster planning is undertaken
- Climate change and sea level rise
  - Tidal gauges in place for monitoring by Dept of environment assisted by other agencies
- Historical data trends: pre and post hurricane Irma 2017
- GIS lab is repository for environmental data
- Changes in coastline noted overtime
  - Have climate change adaptation strategy
  - Country plan/development planning

Participants assisted in developing a map of key ministries and departments involved in CSMP



#### **Development Planner**

- Urban development implement challenges and issues with respect to:
  - transport/traffic,
  - o open spaces,
  - derelict and abandoned property;
  - street vending;
  - sewerage treatment; other agencies involved Ministry of Health; Planning; water; solid waste
  - septic systems; on-site treatment plants encouraged; large septic systems with disposal fields
  - Frigate Bay:
    - Stormwater runoff major issue
    - Primary treatment/re-use water for irrigation
    - Sewerage from yachts major issue (supposed to go out to 12Nmiles to empty holding tanks)
  - o Parts of Basseterre below sea level
  - Impact of pollution on nearshore marine resources; fisherfolk now have to go up to 30 miles to fish

#### Comments by Maritime Officers

- Yachts pump out waste: MARPOL requires must go out >3 mils is treatment plant on vessel; no treatment of sewerage out to 12 Nmiles
- Maritime authority inspection of vessel logs to tell it they are going out to pump out sewerage

#### Marine Resource officer

- Management strategy (fisheries)
  - o FAD
  - Conservation zones

#### **Private Sector**

- International LEGISLATION has not kicked in at the national/local level
- Christophe harbour still developing
- Have contingency plans for handling fires; spills; CSR plans; garbage; MARPOL, oils dust, paint
- Use USA guidelines/certification

#### Charlestown fisherfolk and Fisheries Officer

- Issues with jetty etc (competition with other users)
- No license
- Register fishing vessel; fees based on length
  - o 0-10 feet \$0
  - o 10-30 feet \$25
  - o 30-60 feet \$50
- Log book on fisheries catch (information collected by fisherfolk)
- New fisheries Act (Fisheries Aquaculture and Marine Act of 2016)

- Duty free on gear and equipment;
- o No business license; no taxation on fish and food caught locally
- Training to get license for fisherfolk; no fee up until January 2019
- FREE FOR ALL (concern of fisherfolk from Charlestown)
- Fishing for tourists/sport fishing on the rise; company/tour operator needs permit (NO quota on fish catch); issue temporary fishing license to customers

#### - Christophe Harbour

- o MOU with DMR (department of marine resources) for sports fishing licenses; pay fee
- Register boats and individual fishing interests;
- Rules published for tourist fishers/ease to understand; size of catch and species not to take etc;

#### PS Min of Tourism

- Concerned about losing beaches especially Frigate Bay
- Beaches have reached/exceeded carrying capacity
- Government is looking at initiating a beach nourishment/restoration project
- Scientific data shows destruction;
- New pier has implications
- SKN reached 1 million cruise tourists in 2017/2018 season
- >250,000 stay over visitors per year
  - o Christophe Marina had >5000 vessels 2017/2018 season
- Ships can recycle some wastes; problem with solid waste what they take from cruise ships is selective;
- Water shortages
- International waste MARPOL bins and data sheets at Port (IMO); reception receipt must be issues

#### Maritime boundaries an issue

- Sharing marine space with many countries
- Creates conflicts with other territories
- SKN fisherfolk have problems with fishing in territory of St Eus. Saba and nearby islands; yellow card from EU [other OECS state has red card from EU]
- When negotiating issues it is not with other small territory it is with the EU therefore issues of equity and power!

#### Public participation

- Consultations for development planning; responsibility of developer
- Public concerns change project; public access to EIAs
- Information access needs to improve/duty to publish and freedom of information
- NO demand and strong public interest for data
- Mechanisms to make information available/easily accessible needs to be improved
- Voluntary publication

- Consultations sometimes only with specific stakeholders
- DMR is using social media to communicate info to stakeholders; radio and TV
- Get feedback from social media; monthly reporting is done

#### Major issues:

- Illegal dumping of solid waste on beaches, coastal areas, ghauts and storm drains ending up in the sea
- National trust made tunnel with garbage from the sea as a public awareness/education campaign
- Sand mining
- Plastic free July campaign in SKN
- Abandoned sugar plantations; no maintenance of waterways and drainage system resulting in siltation of coastal zone
- Development planning and control board has representation from different parts of society

#### Tourism

- Sustainable destination council; multi-sectoral arrangement

Fisheries Act, advisory committee with fisherfolk

EIA vs ESIA – focus on jobs and economic; number of persons employed by project; not driven by environmental impact.

For eg 1,000,000 cruise tourists leads to problems with wastes; problems for new beach COCKSHELL

- No cost benefit analysis of projects
- Discharge permits are not required for industries; hotels, marinas etc
- U\$\$10 million wastewater treatment plant; capital cost; maintenance cost verses no treatment and waste into environment (value of ecosystem services); untreated waste has negative impact on environment.

#### Comment by PS of Tourism

- Islands are competition with each other for investors therefore relax environmental regulations; want to be able to grab investors so that they get them first; know that environment is being impacted negatively
- Need help to make argument on carrying capacity of natural resources;
- Need to educate next generation; this one already gone!!!

## Consultation - Strategic Environment and Social Assessment (SESA to implement the Caribbean Regional Oceanscape Project (CROP)

## NEMA Headquarters 27<sup>th</sup> July, 2018

NO.	NAME	ORGANIZATION	CONTACT	
	ONGANIZA	ONGANIZATION	EMAIL	PHONE
1.	Sheldon Jeffers	Immigration	sheldonjeffers@gmail.com	869 765-5549
2.	Wasim Richards	NASPA	captrichards25@live.com	663-9889
3.	Latoya Francis	Customs & Excise Dept.	latoyafrancis@skncustoms.com	664-4708
4.	Janice Hodge	CADENCO, Inc.	janicedhodge@yahoo.com	663-0735
5.	Aeneas Hollins	Christophe Harbour	Aeneas_hollins@christopheharbour.com	762-1785
6.	Giddel Smithen	Coast Guard	ggsmithen@gmail.com	465-8384
7.	Austin Farier	Dept. of Physical Planning	phyplskb@sisterisles.kn	467-1300/1305
8.	Clive Wilkinson	Dept. of Fisheries	cliwilks@gmail.com	764-9999
9.	Wilmot Alleynne	Dept. of Marine Resources	Wilmot.alleyne@gmail.com	764-5606

10.	Diane Richardson	Immigration		665-6542
11.	Bjorn Griffin	Customs	bjorndriffin@gmail.com	663-8950
12.	Rhon Boddie	Urban Development	rhonboddie@gmail.com	663-0421
13.	Tamica Lawrence	Min. of Tourism(Nevis)	tamica.lawrence@niagov.com	668-0617
14.	Maritza Queeley	Dept. of Marine Resources	maritzaqueele@gmail.com	663-3943
15.	Tricia Greaux	Dept. of Marine Resources	tricia.greaux@dmrskn.com	669-7301
16.	Winston Hobson	Nevis Fisherman Corp.	atta.fish4u@hotmail.com	663-8958
17.	Carlene Henry-Morton	Min. of Tourism	carlene.henrymorton@stkittstourism.kn	467-1391
18.	Bertill Browne	Energy Dept.	bertillb@stkittselectricitycoltd.com	467-4188
19.	McClean Hobson	Maritime Affairs	mcclean.hobson@govt.kn	663-8886
20.	Wayne Edmeade	Maritime Affairs	waynejrsm@gmail.com	762-9503
21.	Solomon Powell	Maritime Affairs	solomon.powell@hotmail.com	662-9307
22.	Nigel Williams	Maritime Affairs	deruder@hotmail.com	663-6133

#### ANNEX VI – ST LUCIA

St Lucia Stakeholder Consultation – July 26, 2018

#### SITUATION & STAKEHOLDER ANALYSIS

## REGIONAL STRATEGIC ENVIRONMENTAL & SOCIAL ASSESSMENT OECS CARIBBEAN REGIONAL OCEANSCAPE PROJECT

9:00 am	Welcome, Introductions
9:10 am	Overview on OECS Caribbean Regional Oceanscape Project
9:30 am	Framework of Analysis, Key Concepts, Synthesis of Key Findings
10:10 am	Environmental & Social Issues for Marine Spatial Planning & Coastal Master Plans; Best Practices and Lessons Learnt
10:30 am	Gaps and Priority Areas for Action
11:00 am	Framework for Public Participation Plan
	Close at 12 noon (refreshments)

Introduction - Dawn Pierre-Daniel, Deputy Director Environment

- National Ocean Governance Committee formally adopted (formerly coastal zone committee)
- Indicative measures for marine & coastal in NAPs/ SAP adaption
  - Agriculture
  - Water
  - Fisheries sector
- Communication Strategy
- Project concept notes: short, medium and long term measures
- Coastal and marine spatial planning
- Sectoral adaptation strategies and action plan: coastal & marine consultation in September
- Protection of fishing vessels in storms (areas for storage)
- Climate change Draft Strategy and action plan: coastal zone strategy and action plan (sectoral components) <a href="https://www.climatechange.govt.lc">www.climatechange.govt.lc</a> (resources)
- Chief Physical Planning is part of national climate change committee (co-opted if needed)
- GIS risk maps
  - Climate modelling;
  - geospatial/DVRP
  - sea level rise mapping (TORs for Geodata staff)
  - Bathymetry data; northeast coastal; CEFAS providing assistance

- Lydar information/regional components
- Surveys and mapping needed for spatial planning
  - NEMO has available risk maps, satellite imagery 2012/2014
  - o Ecosystem maps 2004

#### Economic affairs dept

- Working on project with CDB to improve planning process for better planning in PSIP
- Net present value of projects; measured approach to change;
- Sensitize public sector
- Use World Bank climate assessment tool

Question: what is the meaning of Public participation?

#### Answer from participants:

- Having a voice; airing concerns
- All levels, government and private sector
- Not information sharing; public participation not an event
- Access to information; timing, feedback, recourse
- Monitoring and evaluation on the principles
- Consultations for climate change held with permanent secretaries, ministers; public/private sector policy
- Private sector under-represented in consultations; need private sector strategy for climate change;
- NGOs, CBOs etc involved in consultations but less from private sector
- Journalists, artists (calypsonians)
- Need to involve ministers, permanent secretaries and deputies
- Developing National Environmental Information Management System
- Biodiversity project; took decision makers into the environment
- SDG Process civil society engaged; what they see as the key SDGs for their sector; priorities for the country;
- MEA project open data policy adopted by Government; as result need a)more information on environment, b) capacity building and c) environmental education
- Climate change bill, environment bill in final stages of finalizing for promulgation in August 2018. Attorney General involved in process
  - Specific provisions for public participation and information
- 1998 Cabinet committee endorsed by not in legislation; new legislation will recognize committees endorsed and promulgated by 2019

- CDB conducting training assistance on project cycle management, public policy analysis and management training
  - How to identify stakeholders and involve them in the process
- Endorsed by Government: coalition of civil society and NGOs
  - o Non-government actors involvement in decision making process
  - VISION OF COALITION: fully engaged as equal partners in sustainable development with government and private sector
  - o Launch July 31st 2018
- Access and benefit sharing biodiversity project; biodiversity used for product development:
  - Obligations under Nagoya Protocol
  - MOU between Forestry Division and Caribbean doctors association to get venom from a snake in St Lucia for medical uses/research
- IMF report June 2018: recommendations for coastal and marine sectors
  - [medium term development strategy]



#### DEPARTMENT OF SUSTAINABLE DEVELOPMENT

OECS Caribbean Regional Oceanscape Project (CROP)

Strategic Environmental and Social Assessment Consultation

Department of Fisheries Conference Room Pointe Seraphine, Castries, Saint Lucia Thursday July 26, 2018

#### ATTENDANCE REGISTER

NAME OF ORGANISATION	DESIGNATION	NAME	EMAIL	TELEPHONE
Department of Development	Deputy Chief Environ	Dann Pierre - Namonul	approachmid agrantion	4518746
Department of Economic Department of Economic	Social Klanning Spicer	no long to planted	dahna.mcharles@sovtlc	468-2584
Derclopment	Assistant Geonomist	Donette Charley	<i>U</i>	468 -558
Department of Sustainable	t Intern	Laurène Abbad	buvene abbad@mailon	716-8905
Development	Student Trileit	Shania M. Lebrun	Shania man'e 758@owHook/um	
Department of Sustainable	begal officer,	Kate Wilson	Kate wilson Cgnt.lc	4685848/
DECS Commission	Project Cordinator	SUBANNA SOSTI	DECS. WT	122-8181
OECS Communion	. /	1.	Herith Galriel @ OECS Int	
	Accountant Succial Analyst			7

NAME OF ORGANISATION	DESIGNATION	NAME	EMAIL	TELEPHONE
Deft of External Affairs	Research officer	Kexandra Kurelien	alexandra. auralizmagost. 1c	4684564
JECO Caribber / Co rept 3 & Snot. Deut (SDED COMM)	nsuetout	Valma Jessam	y Ujessamy Ejecocourist	len. com
(SOED CZMU)	SIPE Offices	Lavina Plexander	Jalexander. sole @ grail on	468-5833
Dept of Sidamable Development	SDE Officer	Maier Sifflet	maier sifflet@oout.lc	451-8746
Dept of Economic Des	senior capital Economist	Perle Alandor	perle al and so gout le	4683951
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#### **ANNEX VII**

St Vincent & the Grenadines Stakeholder Consultation
July 25, 2018

#### SITUATION & STAKEHOLDER ANALYSIS

#### **REGIONAL STRATEGIC ENVIRONMENTAL & SOCIAL ASSESSMENT**

OECS CARIBBEAN REGIONAL OCEANSCAPE PROJECT

9:00 am	Welcome, Introductions
9:10 am	Overview on OECS Caribbean Regional Oceanscape Project
9:30 am	Framework of Analysis, Key Concepts, Synthesis of Key Findings
10:10 am	Environmental & Social Issues for Marine Spatial Planning & Coastal Master Plans; Best Practices and Lessons Learnt
10:30 am	Gaps and Priority Areas for Action
11:00 am	Framework for Public Participation Plan
	Close at 12 noon (refreshments)

(Consultation started late about 9:30am; awaiting arrival of participants)

Introduction by Mr Johnson – National Focal Point

- Awaiting approval from Cabinet for formation of National Ocean Governance Committee
- Final National Ocean Policy
- National Fisheries and Aquaculture Policy

Remarks by Mr David Robin – Head OECS Oceans Govenance and Fisheries Unit

• Brief overview on CROP (project already launched in St. Vincent)

Power Point Presentation – Consultant, Dr Valma Jessamy,

- Results of Literature Review for Sitution and Stakeholder Analysis
- Discussions on legal framework for Public Participation Plan
  - St Vincent Freedom of Information Act not entered into force

## St Vincent Stakeholder Consultation July 25, 2018

## Regional Strategic Environment and Social Assessment OECS Caribbean Regional Oceanscape Project

Name	Title/Organization	Telephone	E-mail	Signature
Jerwayne Laidlow	NEMO	4562975	jerwayne. la illow agmail com	Maille
ZINZE ROBERTSON	CENTRAL WATER + SEWERAGE AUCHORITY - SOLID WASTE	. 456 2946	zirobertson@cwsasug.com.	Thebetson
NAKITA POON KONG	THE MUSTIQUE LO. LTD.	493 -4839	NAKISA @ MUSTIQUE.VL	R
CHEVANSEV CHARLES	RIC MARADIMARTIME	4561378	legal . Svomarad Ognail Com	« Chevenes
reger King	SETTIMATHO	4-2566222	Signal schedigen	ecoding
	Multi Trade Enterpri		Mares 860 @ yzhoo w	
	Customs+ E+415E		Imilling tou 22@ gmail-cm	(Marine
Jillianjoy Davis	MARITIME	45 -61378	regishar sugmaradagmail con	
ANDREW -	COOST GUARD NATIONAL PARKS RIVER & BEACUES ANTHORTY	4574578 453-1613	nogan 625 - wholmail la and lockhart Esetahoo. Cee and lockhart Esetahoo. Cee	n Egystenh
Janeel Graday	SDU	485-6997	jancelmille egmail com	Att
J. Mr.			January Com	

## PARTICIPANTS OF THE SESA STAKEHOLDERS CONSULTATION 25<sup>TH</sup> JULY 2018

	Name	Organisation	Phone No.	Email
1.	Dornet Hull	Physical Manning	4571588	dornet La gracil can
2.		, ,		
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#### **ANNEX IV**

September 20, 2018 Regional Consultation -

## Situation and Stakeholder Analysis, Priority Selection [Zoom meeting 9:00am – 1:00pm]

- 1. Introductions by Mr David Robin, Head OECS Oceans Governance and Fisheries Unit
- 2. Introduction of Participants from Member States, OECS, CRFM, World Bank (see participant list attached)
- 3. Presentation by consultant: Key findings of Situation and Stakeholder Analysis (see power point)
- 4. Comments on presentation of situation and stakeholder analysis by participants:

Participant from Grenada (Ian Noel – OECS Focal person on Oceans Governance Committee):

 Clarification provided, Maritime Administration is separated legally from the management of Grenada Ports Authority although the same person functions in both roles (Carl Felix – Director of Maritime Affairs)

#### Participant from Montserrat:

- Oceans Governance
  - O What is national priority?
  - Should take into consideration other activities
  - What is the priority of each member of the committee
  - Modelling needed from the regional ocean governance committee all the way down to the national
- Fisheries, Data
  - o How accurate is information?
  - o Are we going to take this into consideration/climate change, invasive species?
  - We are using literature that is questionable
  - Academia doing research; how accurate is the information?
  - Need for knowledge sharing

#### World Bank Environmental Specialist:

- Very comprehensive overview
- General observations:
  - Common strategy across countries

- Focus on low hanging fruits/no brainers, policy change that can create early wins for the project [CROP]
- Best practices sharing and adoption; knowledge products needed
- Institutional strengthening
- Barriers to implementing existing regulations, habitat protection policies
- Fish stock assessment on a regional basis
- o Tourism sector not pulling their weight; opportunities to engage better

#### World Bank Safeguard Specialist (Ramon):

- Important information on the Kalinago people in Dominica
- Recommendations for future action
- Discrepancies [between perceived and existing governance framework] want to clarify that;
- Safe guard; more robust analysis required
- Involuntary resettlement policy
  - Pre-caution; protected areas, coastal or marine, that may inhibit access to people
- Process framework
- Grievance redress mechanism
  - o PPU, information officer/ministry (freedom of information act)
  - Grievance register for the project; part of the responses for social impact (TOR)

#### Caribbean Regional Fisheries Mechanism (CRFM) – Dr Singh:

- Fisheries is a sector not often given priority attention
- There is low investment in the industry
- Policies are not implemented
- Need holistic approach to get attention; linkages to other sectors e.g tourism
- Fish stock assessment needed
  - Progress is slow
  - o Information systems needed to produce quantitative assessment reports
- When it reaches management level social and economic issues to be considered
  - Decision making, ideal trade-off
  - Decision support systems; trade-off scenarios
  - o There are challenges with information base

#### **OECS Comments:**

- Time constraints to complete assignment
- Need feedback and comments from stakeholders on situation analysis and priority selection by September 20<sup>th</sup>;
- Feedback to be provided to OECS Commission who will then pass on to consultant.

- NOTE: limited documentation, no maps of Kalinago Territory in Dominica
- Robust participation needed; ocean governance committees to be established in member states;
- Follow categories of stakeholders for consultations;
- Review questions, legal input from various sectors/coordination needed
- E.g SVG 29 agencies, 44 pieces of legislation

#### Dominica participant:

• Clarification needed: elaborate on reviewing basic legislation with garbage etc; no commercial fishers/small scale fishers mainly

#### World Bank Specialist:

- Robust gap analysis needed
  - o Government owned lands and squatting; Land title
  - o Involuntary resettlement assistance (informal settlements and squatters)
  - Compensation; World Bank safeguards supersedes local requirements (as it relates to the project)

NAME	TITLE	E-MAIL ADDRESS		
SESA SESSION (Country Stakeholders Via Video Conference – September 20, 2018)				
Calvin Samuel	Anguilla, OECS Oceans Governance Team			
Janil Vanterpool	BVI			
Mervin Hastings	BVI, OECS Oceans Governance Team			
Riviere Sebastien	Dominica, Department of Fisheries & OECS			
Riviere Sepastien	Oceans Governance Team			
Steven George	GND			
Deryck Ramkhelawan	Ministry of Health, GND			
Ian Noel	Grenada, OECS Oceans Governance Team			
I. Radix				
Allene Fonteen	Montserrat, OECS Oceans Governance Team			
Solomon Powell	Department of Maritime Affairs, SKN			
Nigel Williams	Department of Maritime Affairs, SKN			
Ticoya Conner	Department of Maritime Affairs, SKN			
Hyrone Johnson	SVG, OECS Oceans Governance Team			
Chevanev Charles	Maritime Affairs, SVG			
Annette Leo	Sustainable Development Department, SLU			
Lavina Alexander	Sustainable Development Department, SLU			
Cletus Thomas	Customs & Excise, SLU			
Kerwin John	Saint Lucia Air and Sea Ports			
Sharm-ion Henry	Saint Lucia Royal Police Force			
Tricia Cypal	Legal Drafter, SLU			
Allena Joseph	Department of Fisheries, SLU			
Jasmine Weekes	Physical Planning, SLU			
Nehemiah Charles	Operations Officer, SLU			
Donette Charlery	Economic Development Department, SLU			
Shirlene Simons-Jones	Saint Lucia National Trust			
Maier Sifflet	Sustainable Development Department, SLU			
Suzanna Aurelien	Physical Planning Department, SLU			
Sylvanus Davis	Director of Sea Ports, SLU			
Susan Singh-Renton	CRFM			
	WORLD BANK			
Sylvia Michele Diez	Senior Environmental Specialist, Project Team Leader	sdiez@worldbank.org		
Vinicius Lima Moura	Senior Procurement Specialist	vmoura@worldbank.orgv		
Jorge Barbosa	Ocean Consultant	Jbarbosa2@worldbank.org		
Arun Manuja	Senior Financial Management Specialist	amanuja@worldbank.orga		
Andrew Francis Drumm	Environment Safeguards Specialist	adrumm@worldbank.org s		
Ramon Anria	Operations Analyst for Social Safeguards	ranria@worldbank.org		