

# ***THE STATUS OF REEFS IN THE WIDER CARIBBEAN:***

## ***A CRITICAL SITUATION***



**NELSON ANDRADE COLMENARES, COORDINATOR**

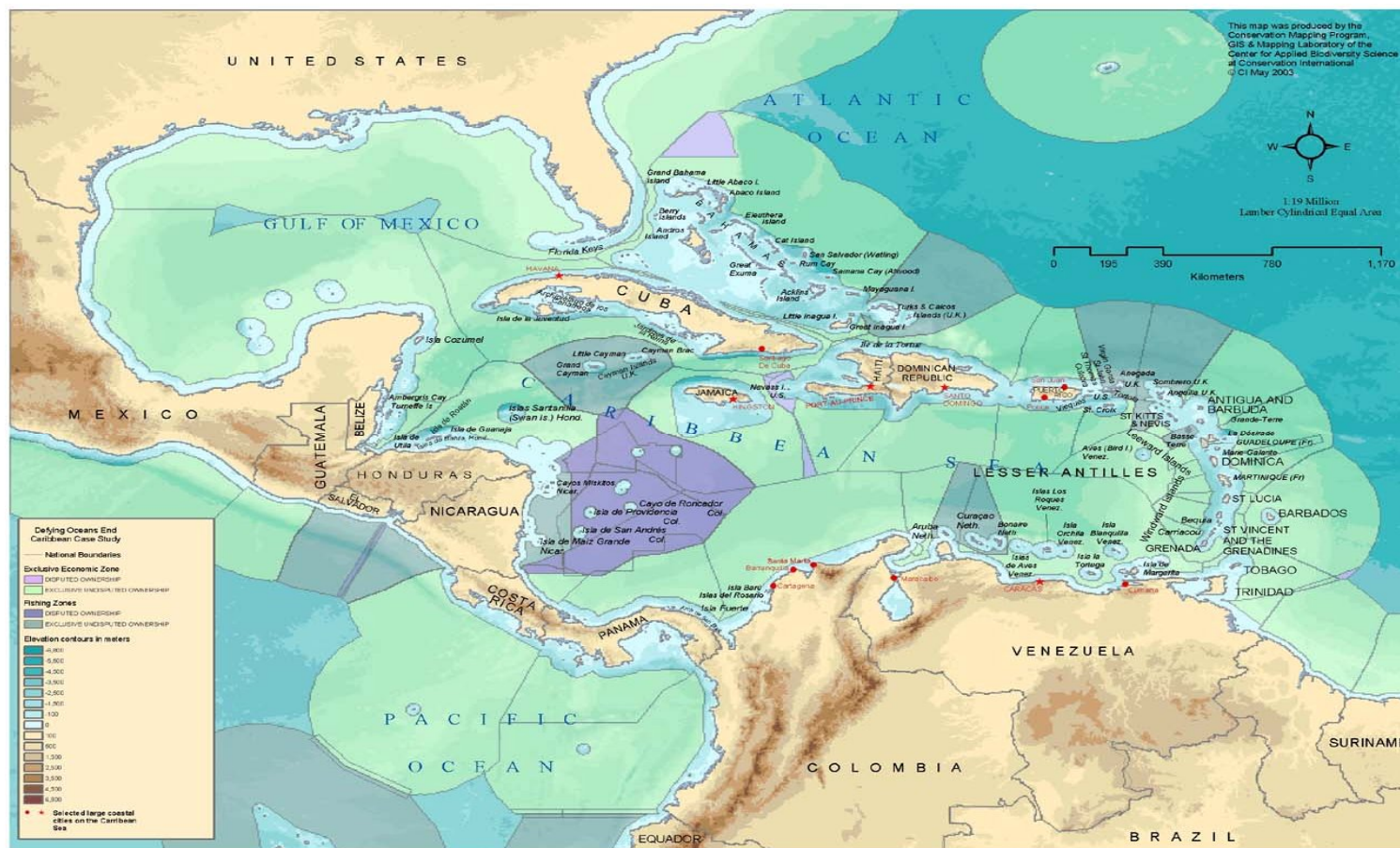
**ALESSANDRA VANZELLA-KHOURI, PROGRAMME OFFICER**

**Caribbean Environment Programme/Cartagena Convention Secretariat**

**UNEP - Caribbean Regional Coordinating Unit**



# The Wider Caribbean Region





# *The Wider Caribbean Region*



- **Great geographical and political fragmentation (28 States and 10 territories) (both Common and Civil Law, diverse political systems, 5 official languages)**
- **Disparity in development and economies**
- **Geographic diversity in size of island States (from 100 to >100,000 Km<sup>2</sup>)**
- **Over 200 million people, more than 50% less than 100 Km from the coast**
- **Influenced by major river systems of the world: Mississippi, Amazon and Orinoco**



# *The Wider Caribbean Region*

- > 5,000 islands ( 2-3% of all vertebrates and plant species)
- High terrestrial island endemism (~50% )
- Two of the 6 major bird migratory routes from N.A.
- One of the 4 biodiversity “hot spots” in the world



# Major Issues

- Land-based pollution
- Only 10-20% sewage properly treated and <20% of population on sewage systems
- Reef fisheries overexploited, (also spawning aggregations in trouble)
- Beaches are being lost and eroded
- Only 19% of Caribbean land covered by forests





# *Major Issues: coastal development*



- **Dredging, land filling and reclamation**
- **Mining of sand and coral**
- **Sand dune and beach vegetation removal**
- **Sedimentation and runoff from soil erosion and construction**
- **Inappropriate design (from location & size *facilities* to lighting of beaches)**

# *Major Issues*

- **Climate change (severe coral bleaching, sea level rise, acidification)**
- **Marine-based activities**
- **Invasive species (e.g. lion fish)**
- **Natural events (yearly hurricanes, storms)**



# Major Issues

- **Tourism largest employer (25%) and provides ~ 30% GDP (largest in the world, 25 million tourists/year)**
- **Cruise ship arrivals increased exponentially last 10 years (58% world wide)**
- **Four of the 6 major destinations are SIDS (DomRep, Bahamas, Jamaica and Cuba)**
- **Primarily “Sun, sand and sea” tourism**
- **Benefits from MPAs but MPAs don’t benefit systematically from tourism and only 6% of MPAs considered effective**





# *Impacts on coral reefs*



*Courtesy Dr. Jeremy Woodley*

- Coral ecosystems seriously deteriorated
- ~25% of region's coral reefs have been lost and possibly 50% by 2015
- Up to 80-90% corals died at specific sites from 2005 bleaching event
- Up to \$4 billion could be lost from coral reef services (fisheries, coastal protection, recreation)

# *Intergovernmental Processes*



## *The Caribbean Environment Programme*





# *Intergovernmental Processes*

- St. Georges Declaration & STS for OECS
- CTO's and ACS Sustainable Tourism Strategy, Plan of Action and Policy Framework
- UNEP's Global Programme of Action (GPA) and NPAs in several countries
- Regional climate change adaptation (CARICOM)
- FAO regional commission (WECAFC)
- CARICOM fisheries management programme



## *Some Regional and Global Initiatives*

- CAST (Better management practices for hotel industry, economic incentives)
- Blue Flag- certification beaches & marinas
- Practices and awareness for marine tourism recreation providers (CORAL, UNEP-CEP)
- Subregional GCRMN nodes (Invemar, UWI, MBRS)
- CaMPAM: network for strengthening MPAs, capacity building, exchanges and small grants





## *Some national actions*

- Integrated Coastal Zone Management Plans (eg Barbados)
- Integrated Oceans and Coastal Policy (Jamaica)
- Solid Waste (eg Grenada, St. Lucia, Dominica) and sewage management plans (St. Lucia, Dominica)
- National coral reef initiatives (a number of countries)
- Payment for environmental services (e.g Costa Rica's water use policy)
- Sustainable Tourism Plans, Master Plans (Dom Republic, Jamaica, etc.)
- More marine reserves, MPAs (e.g. Belize, Bahamas, Colombia, Jamaica) and incipient MPA networks

*Different levels of implementation and effectiveness. Some measures inadequate for issues at hand*



*... so what is missing?*





# Stronger and more decisive political will and commitment!

- Integrated Coastal Area Planning and Management
- Improve MPA management effectiveness and MPA networks
- Reduce and manage wastes
- Sustainable resource use, e.g. fisheries, mangroves
- Develop tourism sustainably and strategically *vis a vis* the natural resource base
- Climate change adaptation



Merci!

For more information please visit

[www.cep.unep.org](http://www.cep.unep.org)

