

Marine Environmental Indicators and the Caribbean Environment Programme - a UNEP Regional Seas Programme

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Wider Caribbean Region States & Territories



CARTAGENA CONVENTION & PROTOCOLS

Cartagena Convention
Adopted in 1983
Entered into force 1986



Oil Spills Protocol
Adopted in 1983
In force since 1986



Specially Protected Areas and Wildlife Protocol (SPAW)
Adopted in 1990
In force since 2000



Protocol concerning Land-Based Sources of Pollution (LBS)
Adopted in 1999
Entered into force in 2010

Article 13

Scientific & Technical Cooperation

Cooperate in scientific research, monitoring & the exchange of data & other scientific information relating to the Convention

Article 16

Meetings of the Parties

Assess periodically the state of the environment in the Convention Area

Article VI & XII of LBS Protocol

- (vi) Identify & assess patterns & trends in the environmental quality of the Convention Area;*
- (xii) Report on the State of the Convention Area;*

CEP Reporting Mechanisms requiring Indicators

- Reporting template for the Cartagena Convention and its Protocols - process indicators relating to policy-(every 2 yrs)
- Report under SPAW Protocol (status of PAs, species, sensitive areas and policies) – awaiting biodiversity MEAs reporting process
- Development of the State of Convention Area Report (under LBS Protocol) – process underway (4-6yrs)

CEP Data Bases/Indicators

- CAMPAM database on MPAs and PAs listed under SPAW (biodiversity) Protocol
- GEF IWCAM Indicators Template for SIDS (PI, SRI & ESI)
- GEF RePCAR Project
- Marine Mammal database and maps, hosted by the SPAW RAC - www.car-spaw-rac.org
- LBS pollutants loads (CEP Tech Reports, LBS RACs)

Existing Supporting Mechanisms

- Government Experts: Scientific & Technical Advisory Committees (STACs) for Biodiversity & Pollution; Working Groups of Experts
- Regional Activity Centres (RACs) for the Protocols
- Regional Activity Networks (RAN): Collaborating Agencies & Partners
- Network of marine laboratories
- Links to relevant regional and global initiatives

State of the Convention Area Report (SOCAR) under Article XII of the Land Based Sources (LBS) Protocol

Under discussion by Parties:

- Condition of watersheds and coastal areas (US Nat . Coastal Condition Assessment program – “cut values” for **physical and water quality parameters** on *Good, Fair or Poor* ratings or Class I or II waters, (also report on HABs, fish kills etc.)
- Description of watersheds, coastal areas, and marine areas (GIS: discharge points, monitoring, urban centers, biological sensitive areas, economic activities, pollution areas)
- Comparison of current environmental information on watersheds and coastal area conditions compared to cut values and previous information (monitoring parameters proposed and “cut value” system)
- BMP to prevent, reduce and control pollution of the convention area
- Challenges for LBS implementation (policy, technical and information)
- Emerging issues

**To report every 4-6 years*

PROJECTS WITH A COASTAL AND/OR WATERSHED MONITORING COMPONENT



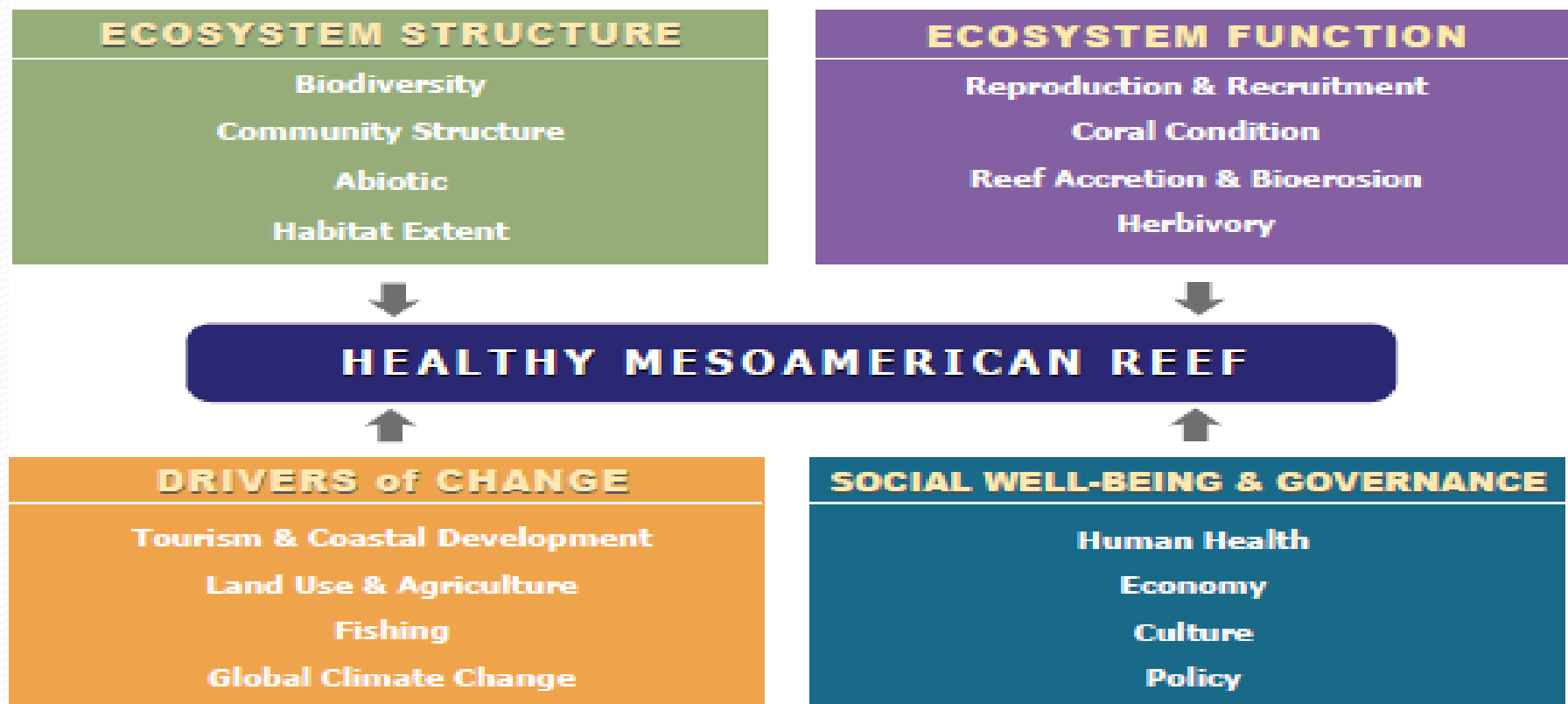
Sources: UNEP-CAR/RCU (www.cep.unep.org/), IWCAM Project (www.cep.unep.org/iwcam/), REPCar Project (www.cep.unep.org/repcar/), IAEA-partnership (www.iaea.org/)

Healthy Reefs for MAR - www.healthyreefs.org

Most comprehensive ecosystem-based set of indicators – 58 tailored to MAR, 4 main indicators for score card:

1. coral cover.
2. macroalgal
3. herbivorous fish
4. commercial fish (plus environmental conditions e.g., salinity, temperature, nutrients)

Figure 4.a. Healthy Reefs Conceptual Framework



Ongoing/Planned Projects

- **GEF CReW (IDB & UNEP) - Harmonized data base for wastewater & Visualization Tool**
- **GEF IWEco (UNEP & UNDP) – Implementing water, land & ecosystem management in Caribbean SIDS**
- **GEF CLME+ project (UNDP)**

- **SocMon for Coastal Managers in the Caribbean**
<http://www.cavehill.uwi.edu/cermes/publications/SocMonCaribbean.pdf>
- **Economic indicators of “Caribbean Coastal Capital Guide” (wri.org)**

Strategic Linkages

- Biodiversity Indicators Partnership *<http://www.bipindicators.net>*
- UNEP GPA Partnerships on Wastewater, Nutrients & Marine Litter
- UNEP Live – GEO Processes
- World Bank GPO - Pollution and Water Quality Assessment for Caribbean
- Caribbean Marine Atlas – IOC

- Regular Process of United Nations
- Post 2015 Development Agenda - Targets on Oceans
- Ocean Health Index

Major Challenges for the Wider Caribbean

- Limited systematic data collection and analysis (mostly basic water quality parameters, project oriented)
- EB indicators not widely used
- Lack of national and regional centralised databases
- Poor access and availability of data
- Water quality information is restricted (e.g. recreational waters)
- Lack of translation of data into useful information for policy /decision making
- Limited financial and human resources
- Integration of indicators and reporting with other regional, global initiatives (e.g MEAs)

EBIs agreed must not only be science-based and integrated but *useful* and *simple* (*realistic*). UNEP RS core set of EBIs is welcomed

