Atlas and The Catalogue

2.2.1. PROGRESS ACHIEVED
The methodology

• To advance the development of information products, the methodology was based on consultations with stakeholders. These consultations served to identify the technical needs related to what to offer the atlas.
• These consultations began to perform in previous committees.
• Information has been obtained through the surveys and meetings.
• with these two mechanisms, and the commitment of the countries with the agreed tasks (bring your own information for this course for example)
Survey analysis (October 2015)

CMA2 INFORMATION PRIORITIES
<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Environment</td>
<td>basemaps, land use, physical environment, hidrogeology, mining, soils, maps, geomorphology, coverage, conflict of use, oceanography, marine transport, bathymetry, infrastructure, landscape.</td>
</tr>
<tr>
<td>Biodiversity and Ecosystems</td>
<td>mangrove area, coral reef, cliff zones, sea turtle, Ramsar sites, biodiversity, ecological units, biological richness, marine ecosystems, Large Marine Ecosystem, shark sanctuaries, seagrasses, cetaceans</td>
</tr>
<tr>
<td>Protected Areas</td>
<td>protected areas, special areas, conservation objects, marine protected area, priority areas for conservation, nature reserves,</td>
</tr>
<tr>
<td>Socioeconomics Issues</td>
<td>sustainable use, population, environment politics, green economy, indigenous territories, human pressures</td>
</tr>
<tr>
<td>Hazards</td>
<td>human hazards, deforestation, natural hazards, coastal erosion, pollution, early warning</td>
</tr>
<tr>
<td>Indicators</td>
<td>Ocean Health Index, ODM, indicators</td>
</tr>
<tr>
<td>Fisheries</td>
<td>fisheries, fishing grounds, fishing areas, artesanal fisheries</td>
</tr>
<tr>
<td>Climate Change</td>
<td>vulnerability, adaptation, mitigation, global warming, greenhouse gases, biofuels</td>
</tr>
<tr>
<td>Integrated Coastal Zone Management (ICZM)</td>
<td>Marine Spatial Planning, zonification, land use, Environment management plan, environmental impact assessment</td>
</tr>
<tr>
<td>Environment</td>
<td>environmental resources, monitoring environmental, climate</td>
</tr>
</tbody>
</table>
Type of marine data, information, and products of interest
Survey analysis (October 2015)

CMA2 ATLAS NEEDS
Do you see a need for a National Coastal and Marine Atlas?

86%

Yes

14%

Yes, but we already have such a tool

No, we do not see a need

Other
What are the **most important features** the Atlas should have to make it useful for you?

- **Available in English**
- **Ease to use**
- **High resolution and local scale data**
- **Printable maps**
- **Access to downloadable data**
- **Access to metadata**
- **Available in Spanish**
- **Licensed access**

**Legend:**
- Very Important
- Moderately Important
- Not important
On Sharing Data: Does your organization have a webserver capable of serving maps and spatial data?

- **Yes, we operate a webserver with map serving capabilities:** 28%
- **No, we have no webserver but we partner with another organization to serve our spatial data:** 14%
- **No, we have no webserver, and no partnership or ability to share spatial data:** 29%
- **No sure, need to follow-up with this staff contact:** 29%
PRODUCTS: WEBSITE, ATLAS AND THE CATALOGUE
WEBSITE

CARIBBEAN MARINE ATLAS - CMA2

ATLAS
PRODUCTS
MEETINGS

RESPONSIVE DESIGN
Process to create the CMA2 tools

1. **Open Refine**: Debugging sources and export to interoperability data format

2. **SIMILE Exhibit**: Publishing catalog with advanced search and filtering functions

3. **GeoNode**: Geovisor and metadata online under collaborative scheme
THE CATALOGUE

1. The Excel source management

At all times, for the inclusion of new sources

1. Review the description and scope
2. Identify level (Global, Regional, National, Subregional)
3. Identify tools type (GIS, Website, Metadata)
4. Identify it provides geospatial information
5. Identify geoservice type (WMS, WFS, ArcGIS Service, etc.)
6. Identify language
7. Identify geographic coverage
8. Identify if it’s applied to existing categories
2. Dataflow #1
CATALOGUE

Debugging the project using *OpenRefine*

Export to interchange format using templates *OpenRefine*

Include the file in website catalogue
Dataflow #2
ATLAS

1. Review website to find geovisor
2. Detect geoservice URL used in website
3. Probe geoservices in GIS Tool to detect type (WMS or ArcGIS Service)
4. Evaluate layers offered
5. Include geoservice at geonode and make a new map
6. Complete the metadata
7. Include in Excel URL’s of geoservices
PRODUCTS – THE CATALOGUE

**Conservation Gateway**

The Gateway is a website for the conservation practitioner, scientist, and decision-maker. It shares the best and most up-to-date information we use to inform our conservation work.

- **Entity:** TNC
- **Type:** WEBSITE
- **Language:** english
- **Spatial tool:** Y
- **Spatial type of service:** ArcGIS Services
- **Spatial URL of service:**
  - `http://services.coastalresilience.org/6080/arcgis/rest/services/GSVG/GSVG/MapServer`
  - `http://services.coastalresilience.org/6080/arcgis/rest/services/US_Virgin_Islands/USVI/MapServer`
  - `http://services.arcgis.com/B7DSX1DSNSjWm0qG/arcgis/rest/services/RFWF/FeatureServer`
  - `http://tnc.usgs.edu/ArcGIS/rest/services/Caribbean_Challenge_Dashboard/Earth_Layers/MapServer`
  - `http://services.arcgis.com/B7DSX1DSNSjWm0qG/arcgis/rest/services/PRVI_CoralAssembly/FeatureServer`

- **Theme:** Hazards, ecosystems, y marine protected areas
- **Category:** protected areas, hazards, biodiversity, and ecosystems

- **Coverage:** Global
- **Web:** link

**Filters**

- Africa
- Antigua & Barbuda
- Arctic Sea
- Barbados
- Brazil
- British Virgin Islands

**Geoservice URL**

- `http://services.coastalresilience.org/6080/arcgis/rest/services/GSVG/GSVG/MapServer`
- `http://services.coastalresilience.org/6080/arcgis/rest/services/US_Virgin_Islands/USVI/MapServer`
- `http://services.arcgis.com/B7DSX1DSNSjWm0qG/arcgis/rest/services/RFWF/FeatureServer`
- `http://tnc.usgs.edu/ArcGIS/rest/services/Caribbean_Challenge_Dashboard/Earth_Layers/MapServer`
- `http://services.arcgis.com/B7DSX1DSNSjWm0qG/arcgis/rest/services/PRVI_CoralAssembly/FeatureServer`

**Description**

63 elementos filtered from 86 originally (Reset All Filters)

ordered by: etiquetas, luego por... • agrupar según orden
Welcome to the website of the Caribbean Marine Atlas Project. The purpose of the CMA2 is to develop a regional data, information and services sharing platform that will contribute to the development of national and regional atlases and related products and services to support Decision Making (DM) and Monitoring & Evaluation (M&E) processes for improved marine and coastal resources management in the Caribbean region.

408 Layers
Click to search for geospatial data published by other users, organizations and public sources. Download data in standard formats.
Add layers »

9 Maps
Data is available for browsing, aggregating and styling to generate maps which can be shared publicly or restricted to specific users only.
Create maps »

18 Users
GeoNode allows registered users to easily upload geospatial data in several formats including shapefile and GeoTiff.
See users »
ATLAS - Layers

External and remote services and official sources. 10 categories
ATLAS- Maps

Construction phase of thematic maps (10 at initial proposal)
ATLAS- Documents

Explore Documents

Cart
Add resources through the "Add to Cart" buttons.

Set Permissions

Filters
Clear

TEXT
Search by text

DOCUMENT TYPE
Presentation

CATEGORIES
KEYWORDS
OWNERS
DATE
REGIONS
EXTENT

Total: 6

HAZARDS

Cyclones tropicales (1998-2011)

La temporada de huracanes de 2005 fue la más activa en la historia desde que se llevan registros, con 28 tormentas tropicales y 15 huracanes. Entre estos, siete pasaron a ser huracanes de intensidad mayor, dos de categoría 3, uno de categoría 4 y cuatro huracanes de categoría 5 - Emily, Katrina...

leonardo.arias 22 Jun 2016 0 0 0

Download Metadata

- ISO
- FGDC
- ebRIM
- Dublin Core
- DIF
- Atom

Terrestrial_Ecoregions_A0.pdf

The map shows the percentage of coverage of the terrestrial ecoregions of the world, excluding lakes, rock and ice, by protected areas. The statistics were computed using the World Database of Protected Areas (WDPA) from August 2014 and ecoregions maps defined by Olson et al. (2001).

leonardo.arias 20 Jun 2016 0 0 0

Marine_Ecoregions_A0.pdf

The map shows the percentage of coverage of the marine ecoregions of the world by protected areas. The statistics were computed using the World Database of Protected Areas (WDPA) from August 2014 and ecoregions maps defined by Spalding et al. (2007).

leonardo.arias 20 Jun 2016 0 0 0
ATLAS- People

Managing profiles, roles and user groups.

Control access permissions and use of information
2.2.2. WHAT DO WE HAVE?
INFORMATION AVAILABLE

Atlas and The Catalogue
Data sources in Catalogue

83 sources

Included in catalogue:
- 23 (Spatial source)
- 24 (Alphanumeric source)

Included in atlas:
- 40 (Spatial source)

and we continue to grow ...
A source?

• a source generally includes many thematic layers,
  – for example, the OBIS service includes 28 thematic layers
  – others, including more than 200 layers 😊

  – Initially, the atlas had more than 800 layers, We have filtered and now this value has been reduced, we are cleaning, we are migrating, and we're giving more quality to the information provided
Spatial sources...

- NATIONAL: 19
- GLOBAL: 13
- REGIONAL: 8
remote resource availability

• sometimes remote sources are out of service (off, moved server, etc).

we can do so that the atlas does not fill gaps for this cause?

an alternative, making a harvesting information to keep connection with the sources
we reviewed in the datasource?

- Information associated with some of the proposed themes
- Information of the region or countries involved in the project
- the layer is not included previously
- show me the metadata about the content
- the scale of the information
Identifying sources

- **External** sources
  - ✔ External websites and services

- **National** sources
  - ✔ entered and administered by you
Initial maps

- Basemap of Caribbean
- Bathymetric map
- Map of coral reefs
- Map of seagrass
- Map of mangroves
- Map of MPA or protected areas
- Biosphere Reserves Map of the Greater Caribbean
- Hurricanes route map
- Map of oceanographic weather stations
- Map of major planning tools Caribbean
Atlas

Maps, layers

Documents (PDF, JPG, etc)
2.2.3. WHERE ARE WE GOING?

Indicators
Virtual work (Teleconferences)

20 Teleconferences

7 on indicators

13 on geospatial information
A handbook
for measuring the progress and outcomes of Integrated Coastal and Ocean Management
Based on the Unesco Manual.

Prototype (promotional) Marine Atlas on the Status of the Coastal Zone, existing and potential risks and threats, and its management, for each of the selected pilot countries (ProDoc ER1: D3.2).

19 Indicators *proposed* according to these categories
- Environment (pressure - state - response)
- Socioeconomic
- Governance

(*at least 4 selected*)

Lesson learn by regional and national project.
<table>
<thead>
<tr>
<th>ENVIRONMENT (Pressure - State - Response)</th>
<th>Sea level rise</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency of natural disasters</td>
</tr>
<tr>
<td></td>
<td>Coastal erosion</td>
</tr>
<tr>
<td>Ocurrence of anomalies on sea surface temperature (may be applied to other attributes (precipitation, maximum ambient temperature, maximum water temperature, etc))</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Coral health</td>
</tr>
<tr>
<td></td>
<td>Strategic ecosystems coverage</td>
</tr>
<tr>
<td></td>
<td>Fisheries total catch by country</td>
</tr>
<tr>
<td></td>
<td>Coastal and marine surface area</td>
</tr>
<tr>
<td></td>
<td>Protected coastal and marine area</td>
</tr>
<tr>
<td></td>
<td>Protected strategic ecosystems</td>
</tr>
<tr>
<td>SOCIOECONOMIC</td>
<td>Coastal / Housing infrastructure development</td>
</tr>
<tr>
<td>---------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>Coastal population density</td>
</tr>
<tr>
<td></td>
<td>Power generation</td>
</tr>
<tr>
<td></td>
<td>Ethnic composition and distribution</td>
</tr>
<tr>
<td></td>
<td>Food security</td>
</tr>
<tr>
<td></td>
<td>Coastal economic activities</td>
</tr>
<tr>
<td></td>
<td>Port capacity and operational status</td>
</tr>
<tr>
<td>Governance</td>
<td>Compliance with the Cartagena Convention</td>
</tr>
<tr>
<td>------------</td>
<td>-----------------------------------------</td>
</tr>
<tr>
<td></td>
<td>MSP-ICZM progress</td>
</tr>
</tbody>
</table>
THANKS!

http://www.caribbeanmarineatlas.net/