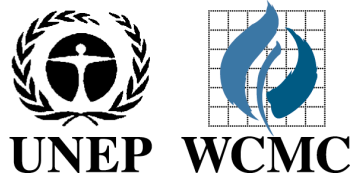


Using our data to help our business partners

Proteus annual meeting, Stavanger 16th June

Louisa Wood, Matt Jones & Mônica Barcellos Harris



Goal of the session

- Provide 3 brief examples of ways in which we have been using our data to help companies
- Raise awareness of the potential and application of the datasets compiled through the Proteus partnership and the expertise available in the Centre

Case study 1 – site level analysis

We have carried out site-scale analysis of biodiversity values

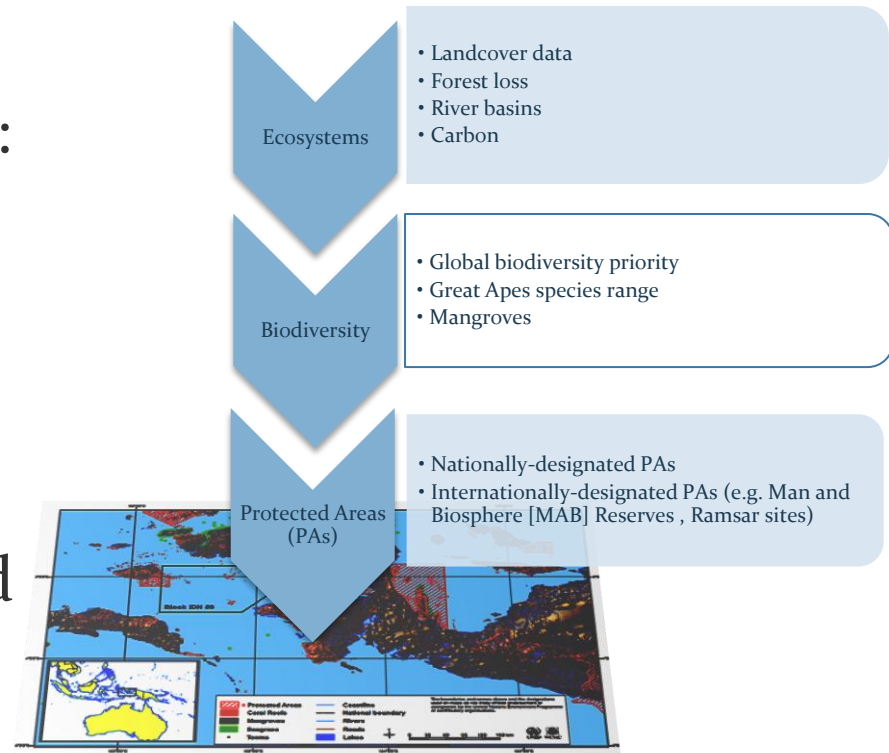
- Based on a provided polygon
- We are able to look at the expected biodiversity values present
- This generates maps and statistics
- We can then interpret and report on these in a consistent and comparable way

Reporting on these we can describe expected biodiversity values in detail

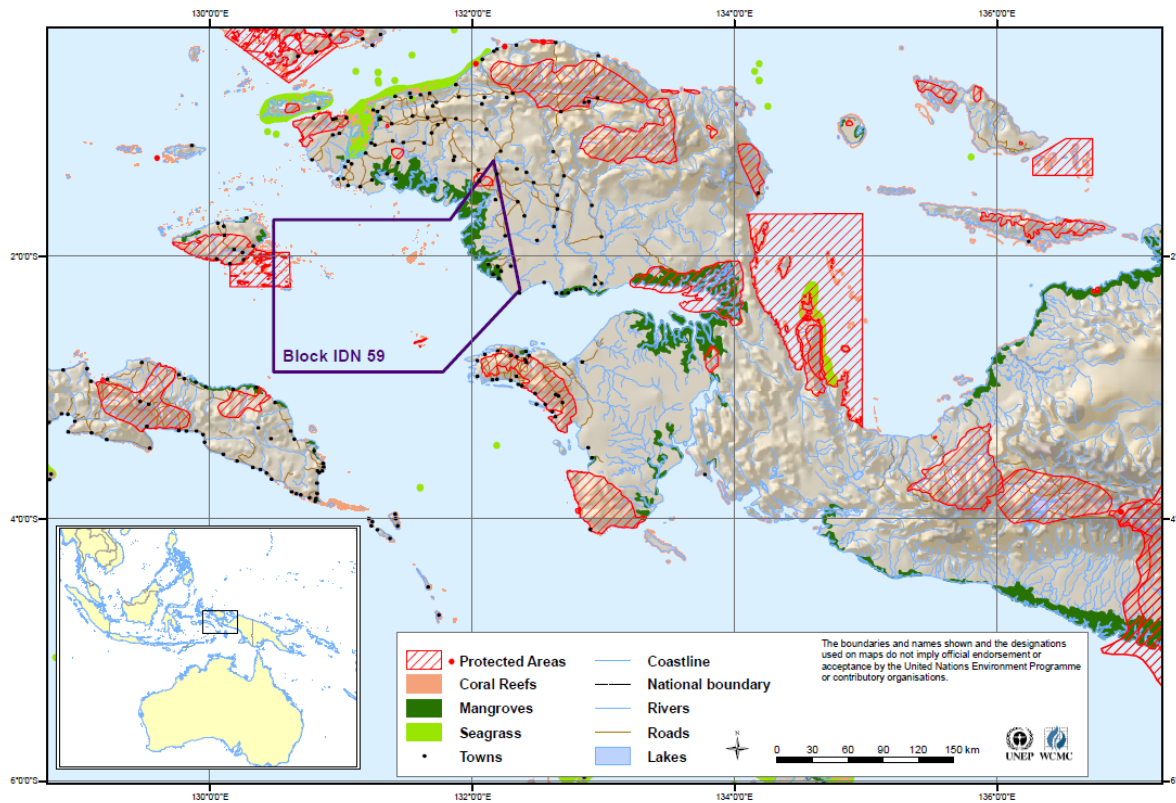
We combine different layers of data, including:

- Ecosystems
- Biodiversity
- Protected Areas

To produce analysis of the area overlapping and surrounding a polygon



The spatial outputs include different biodiversity layers



User-friendly interpretation

Biodiversity Priority Area	Proximity	Legal Compliance	Biodiversity Importance
Centre of Plant Diversity	Within 50 km	None	Areas of global plant diversity
Mangroves	Within 10-15 km	None	Areas of importance for bird species
Marine Protected Area	Inside block	National level legal protection likely to be in place	Maintained for sustainable fisheries
Ramsar site	Within 15 km	National level legal protection likely to be in place.	Wetland recognized as being of international importance

Recommendations

- Highlight findings
- Key recommendations of next steps (groundtruthing and improve data)
- Suggestions of main potential risks from desktop finding

Case-study 2 – prioritisation of sites

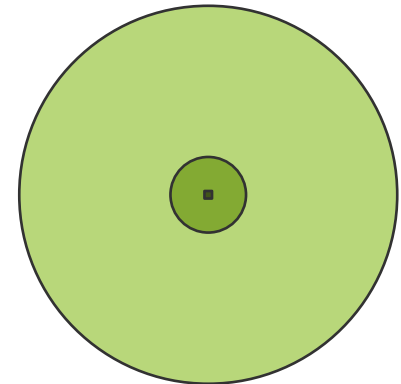
We developed a methodology for prioritising sites based on risk

- Our methodology combines different types of biodiversity data
- This allows us to look at the data in new ways to prioritise sites based on different attributes
- We recently tested this methodology for around 500 operating sites of an international company

The analysis of the biodiversity sensitivity was carried out at 3 scales

For each operating site – data were analysed:

- at the site, based on a single point
- within a buffer of 10km
- within a buffer of 100km



At each site we asked two questions

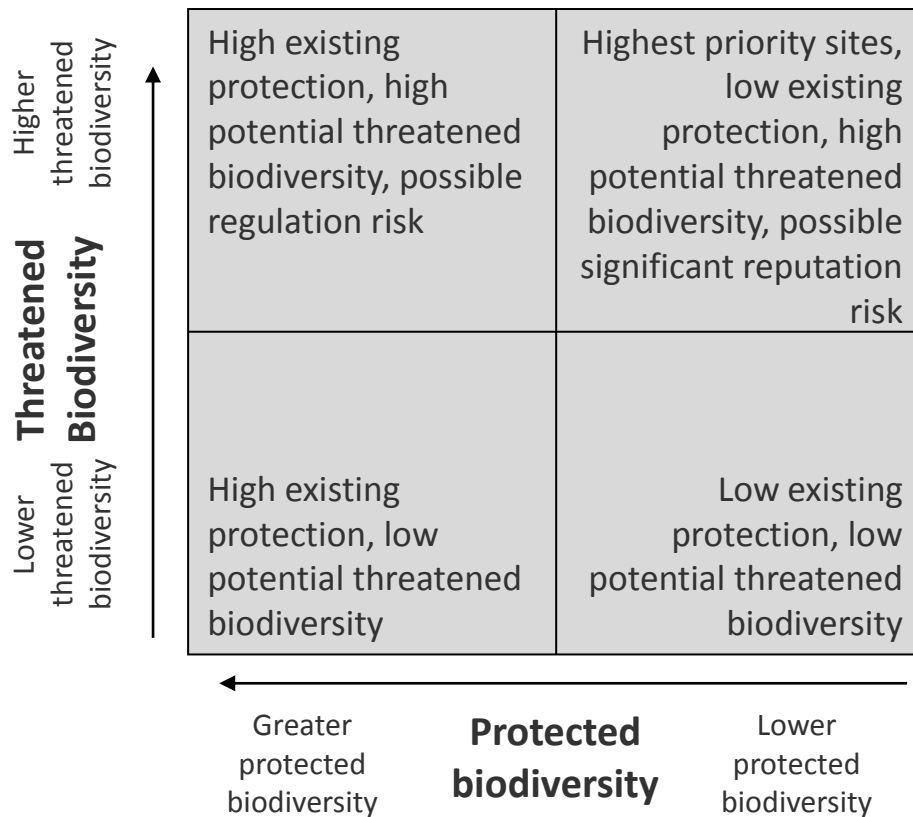
Are there biodiversity values that may be affected?

- Protected Areas
- Species
- Priority conservation areas

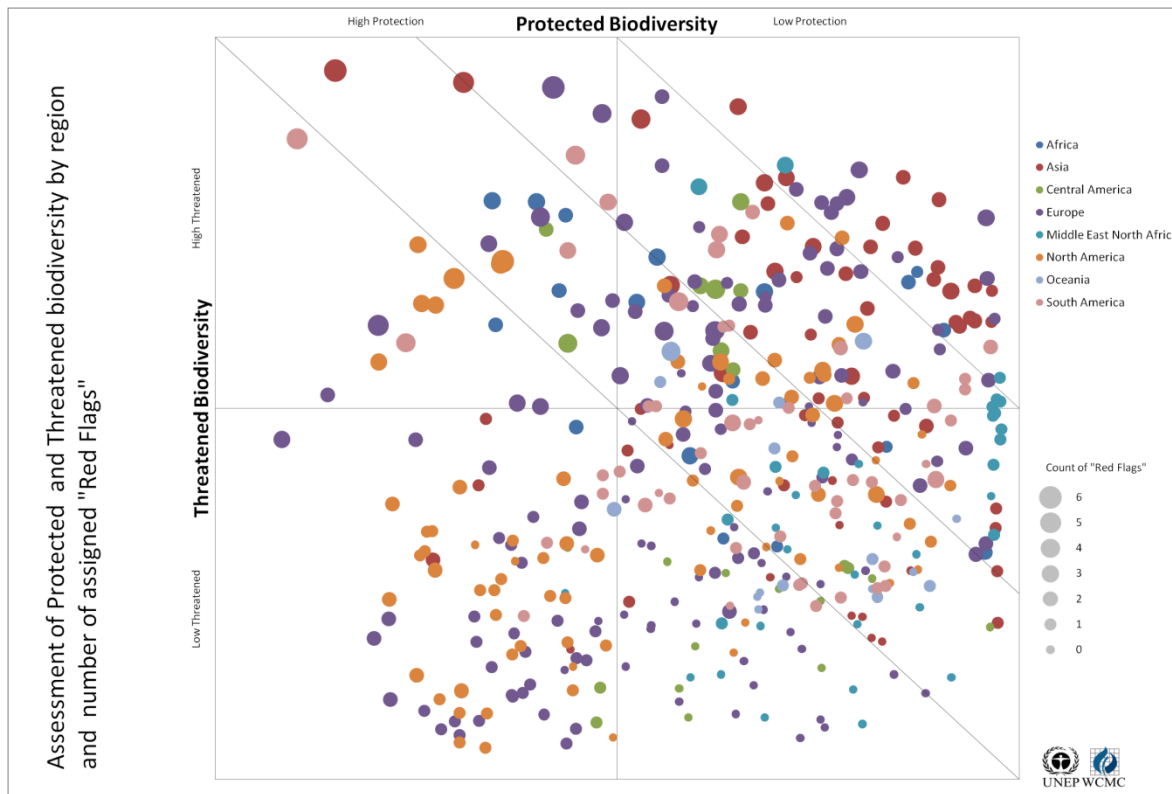
Are there local factors that might limit potential pressures?

- Urban landcover
- Cultivated landcover
- Low-risk countries

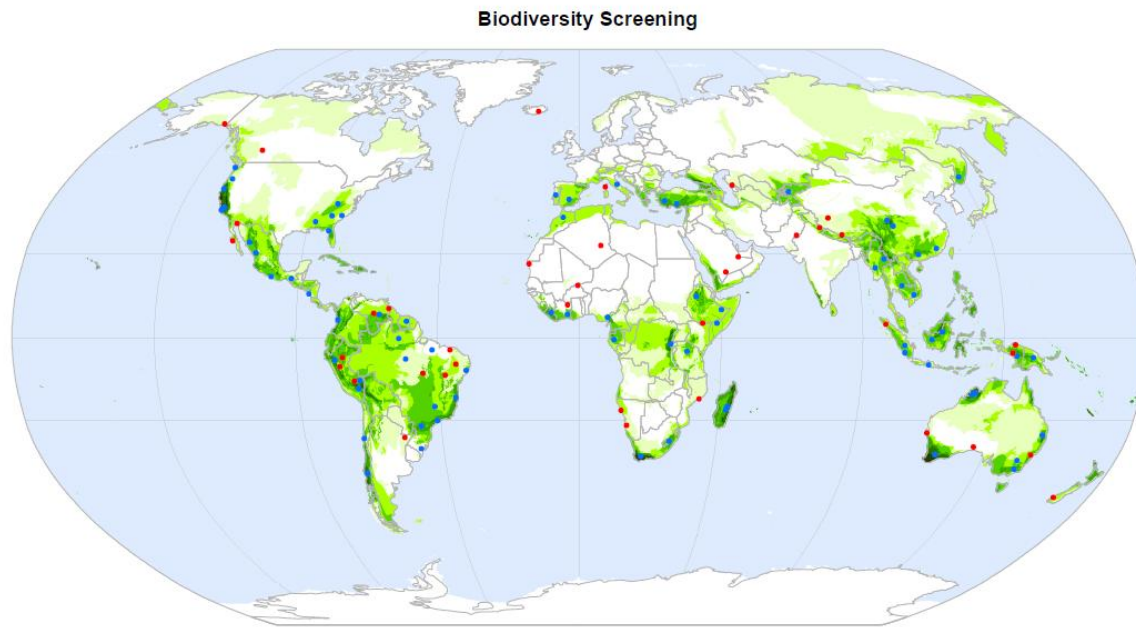
We then ranked the outcomes for Protection and Threat in a matrix



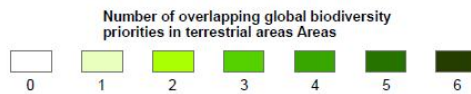
The priority sites are grouped in the top-right of the matrix



Sites can also be plotted spatially



Priority Sites •
Sites in Protected Areas •



The boundaries and names shown and the designations used on maps do not imply official endorsement or acceptance by the United Nations Environment Programme or contributory organisations.

Kapos V., Ravillous C., Campbell A., Dickson B., Gibbs H., Hansen M., Lysenko I., Miles L., Price J., Scharlemann J.P.W., Trumper K. (2008) Carbon and biodiversity: a demonstration atlas. UNEP-WCMC, Cambridge, UK



Case study 3 – Protocol and data assessments for coastal sensitivity

Goal

- Review existing guidance on coastal sensitivity mapping and adapt for a specific area
- Collate and verify existing data for sensitivity mapping
- Suggest next steps to address data needs and support with mapping

Methodological approach

**IPIECA / NOAA
Shoreline
Environmental
Sensitivity Index (ESI)**

**Environmental
Sensitivity Map =**

+

**Important Biological
and Socio-economic
Features representative
of area X**

Step 1: Functional requirements

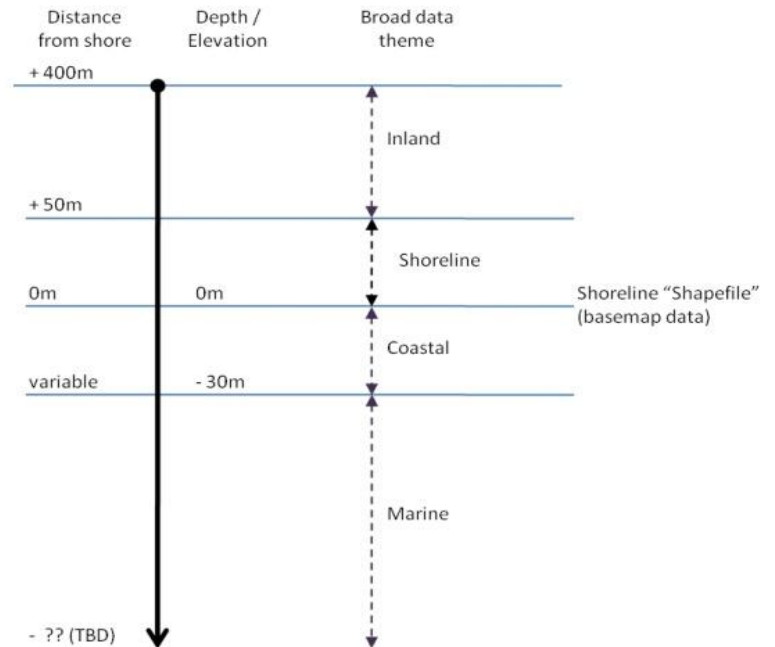
Data themes:

- biological
- socio-economic
- logistical / operational
- base map

Step 2: Define geographical area

Overall geographic limits

Coastal only or include offshore areas? How far?



Step 3: Identify features and gaps

Features identified of importance based on

- Scientific knowledge
- Areas of importance
- Time periods of importance

Step 4: Review available data: fit for use?

- Geometry
- Spatial and temporal resolution
- Completeness
 - Extent of coverage
 - Presence and absence (not just presence)
- Reliability
 - Metadata (including year of acquisition)
 - Ground-truthed
 - Peer-reviewed

Step 5:

- Recommendations on additional data needs to complete the analysis
- Review role of the process and data quality

Summary

- Useful to UNEP-WCMC team to go beyond data provision to support business use the information
- Greater understanding of companies' needs
- Develop new approaches that can be of help to a number of businesses
- Better insight on other datasets that may be of help