

Tools for Biodiversity Conservation and Ecosystem-Based Adaptation

A tropical landscape featuring several palm trees in the foreground on a grassy slope. In the background, a large, lush green island is visible in the middle of a blue body of water, with distant mountains under a cloudy sky.

Nigel Dudley



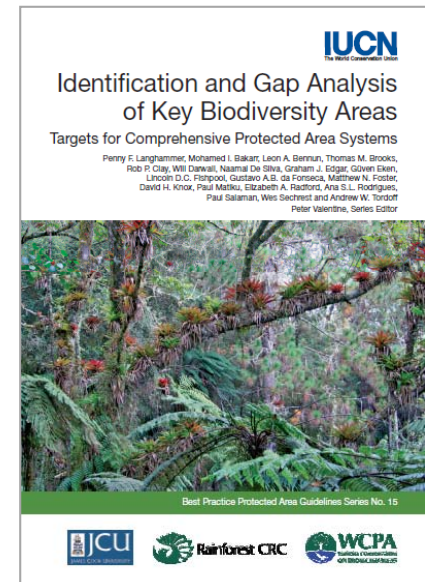
A review of tools for EBA

- What is available already
- What is needed
- Some initial proposals for the project

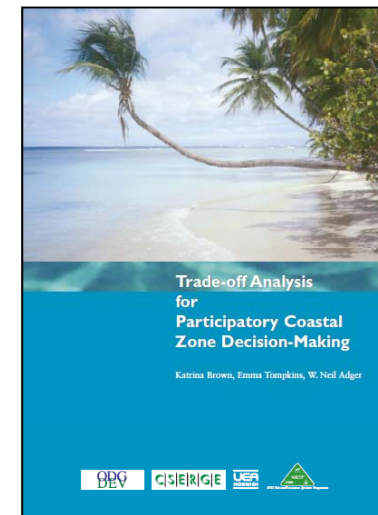
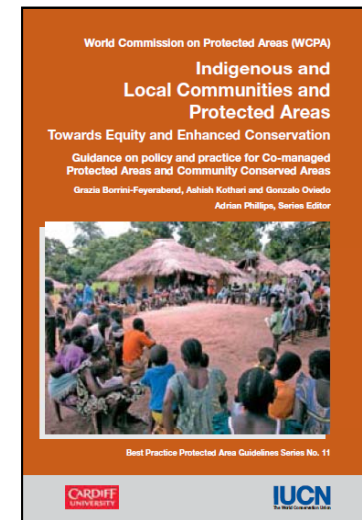
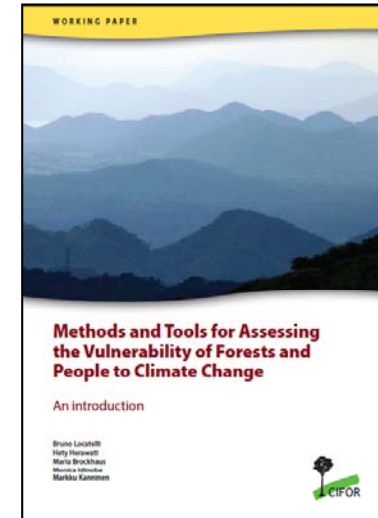
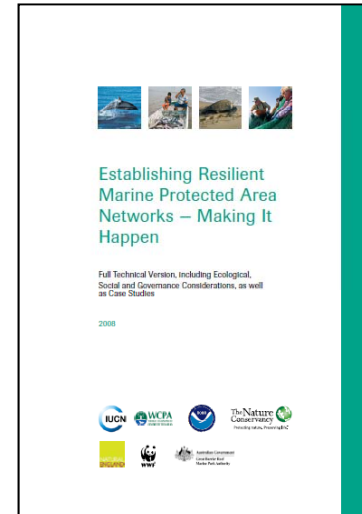
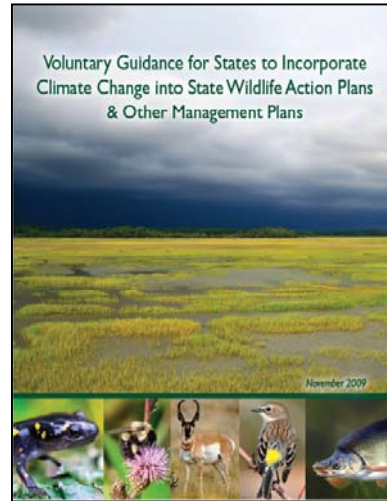


Existing tools

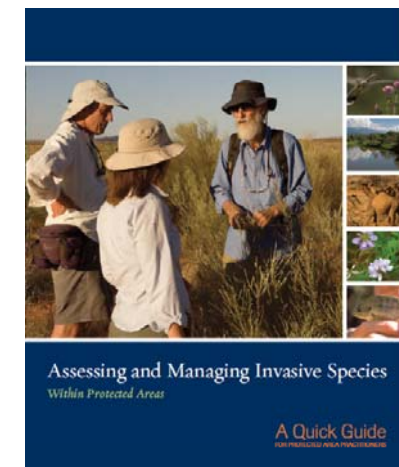
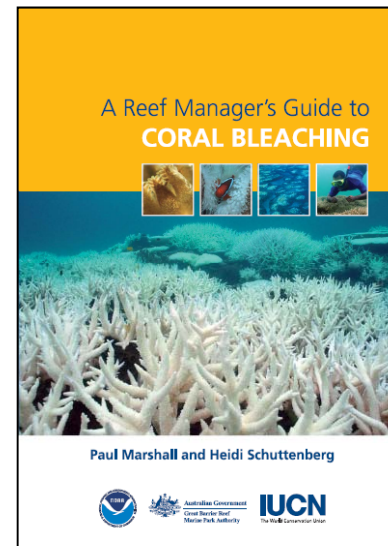
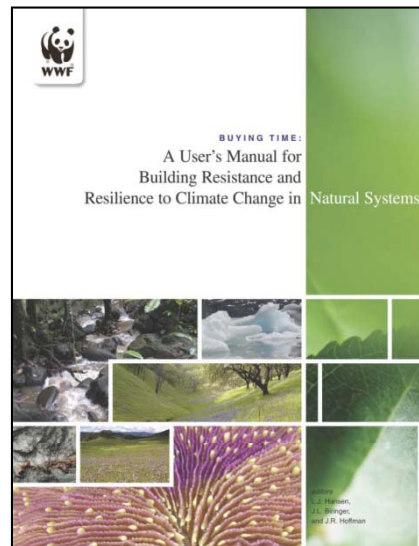
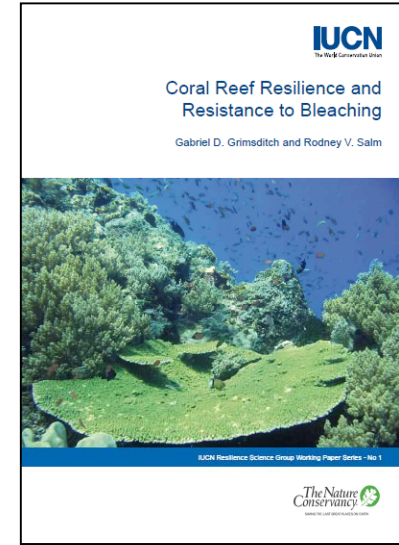
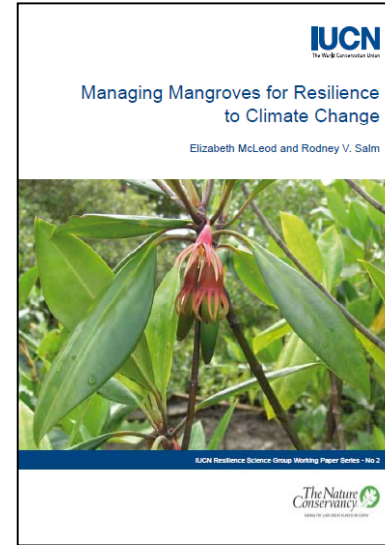
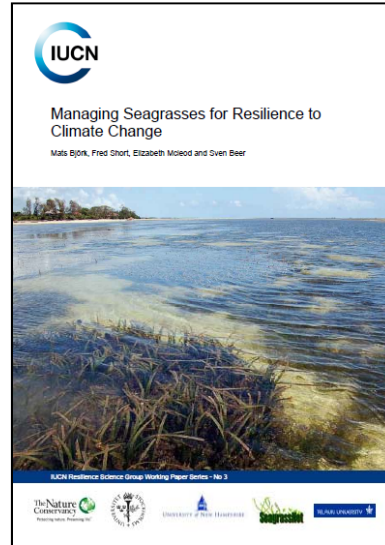
Global 200, Key Biodiversity Areas, Centres of Plant Diversity, Important Bird Areas, Important Plant Areas, Alliance for Zero Extinction etc



Existing tools



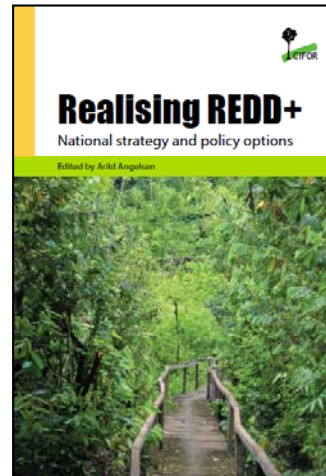
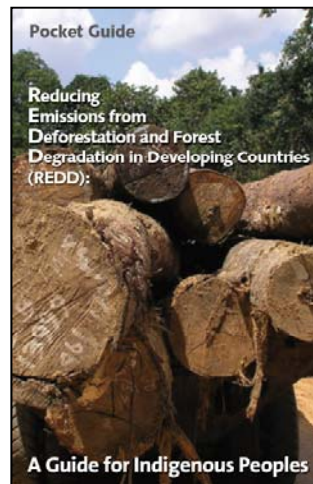
Existing tools





Existing tools

Also tools for mitigation –a meeting in Washington DC of the **Climate, Communities and Biodiversity Alliance** is discussing new social and environmental guidelines for REDD projects

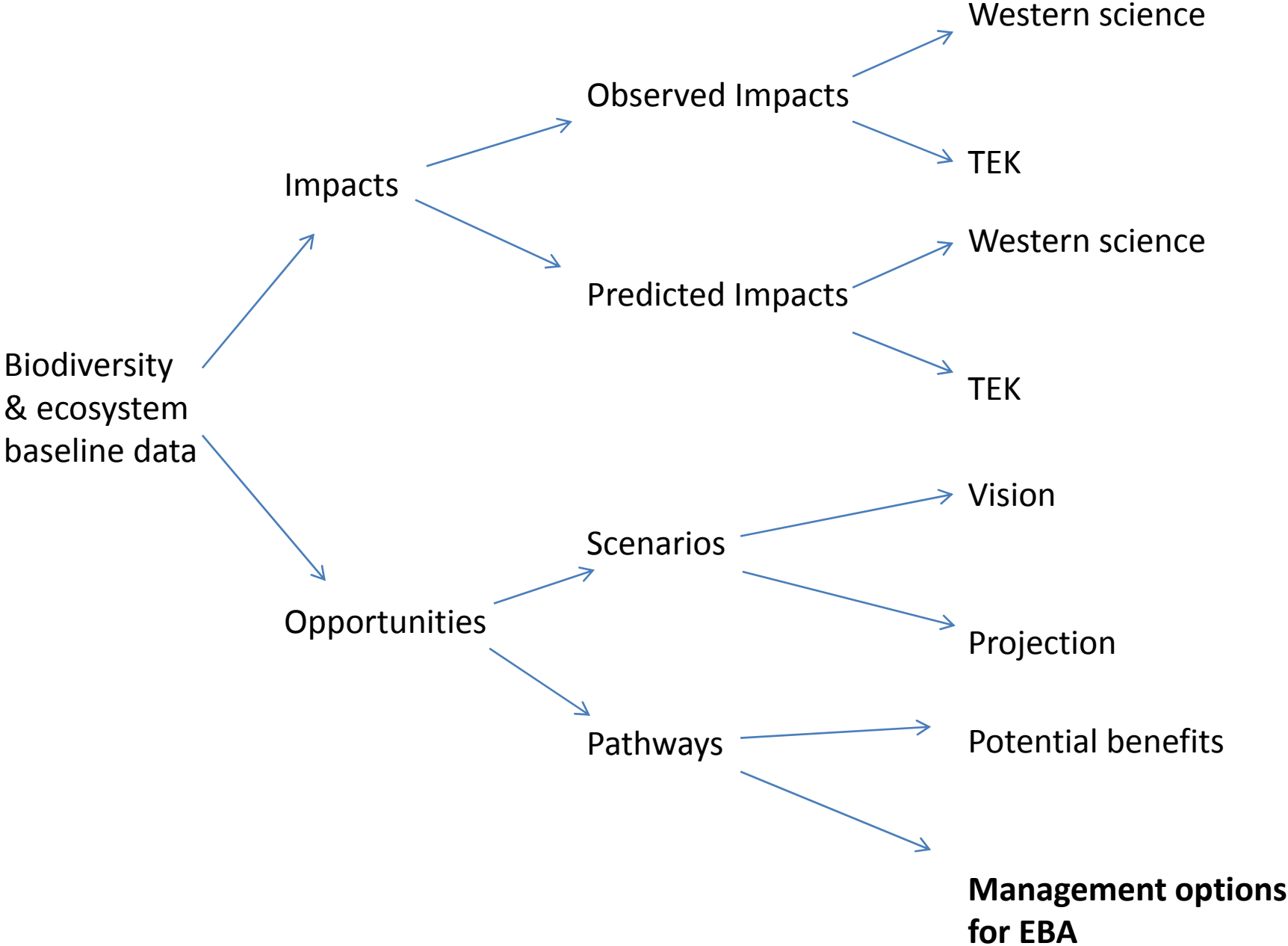


What is needed

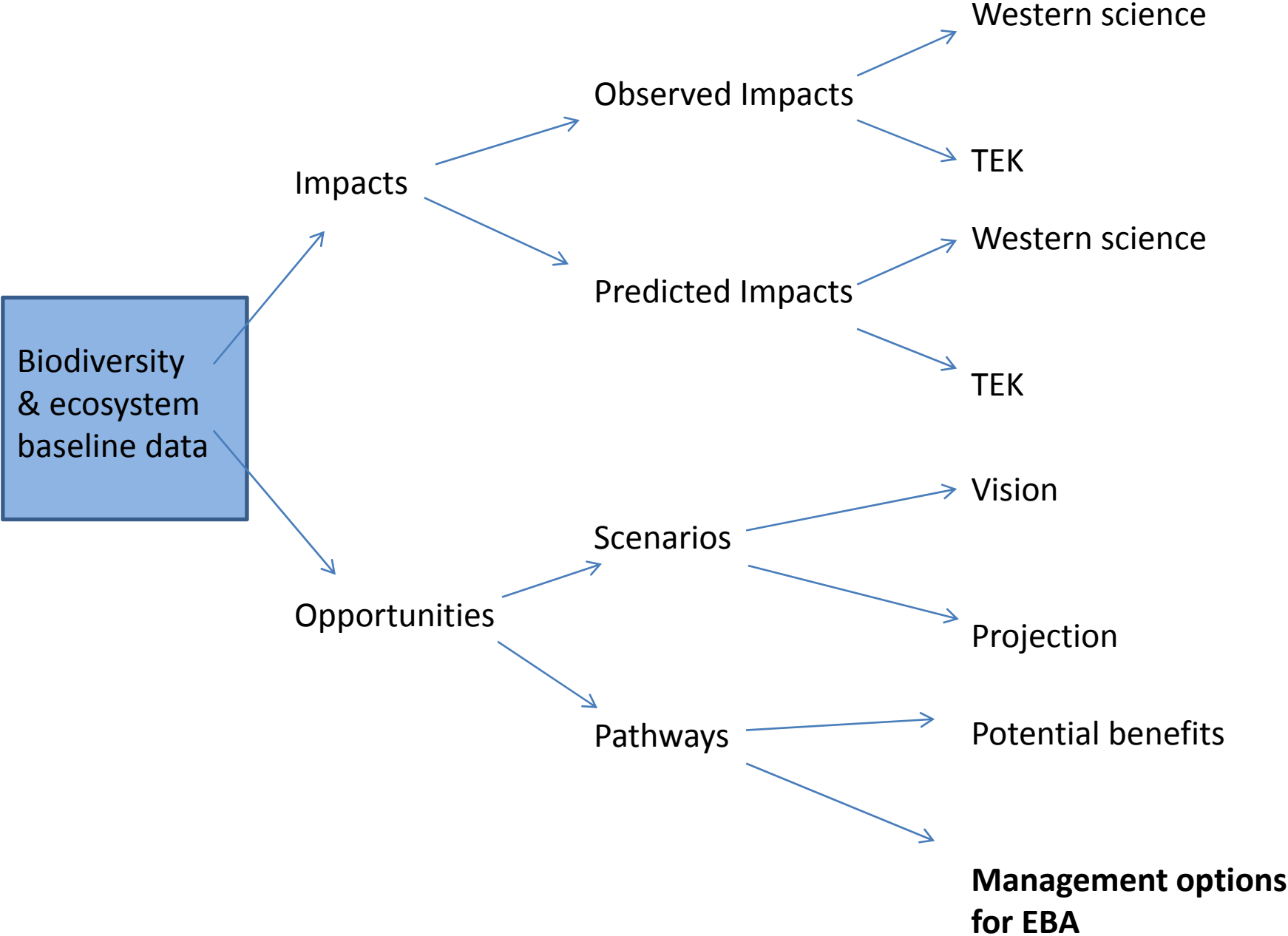


The range of tools needed for the current project will depend ultimately on project objectives – which we need to agree in the next couple of days...

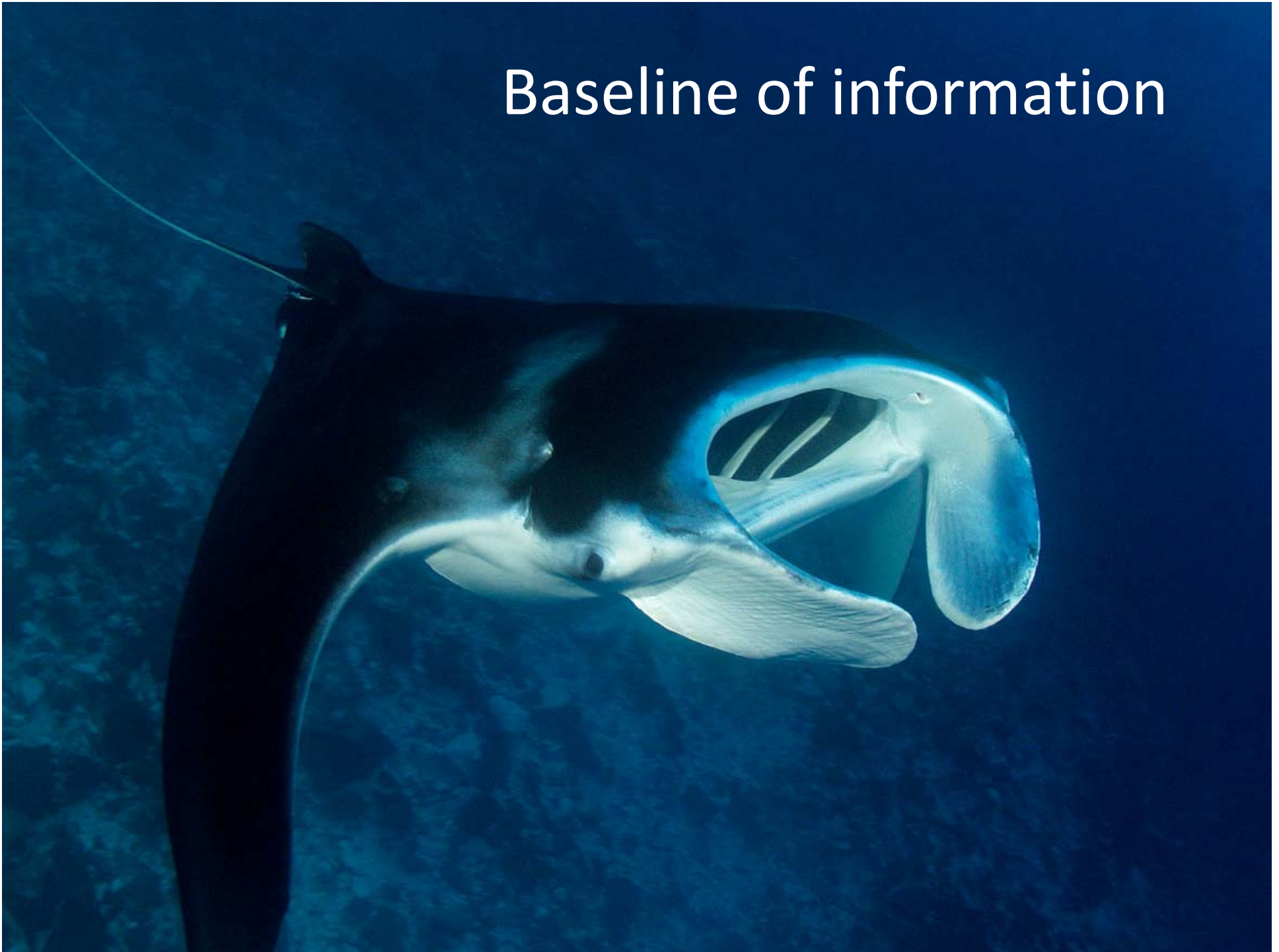
Information needed to run EBA



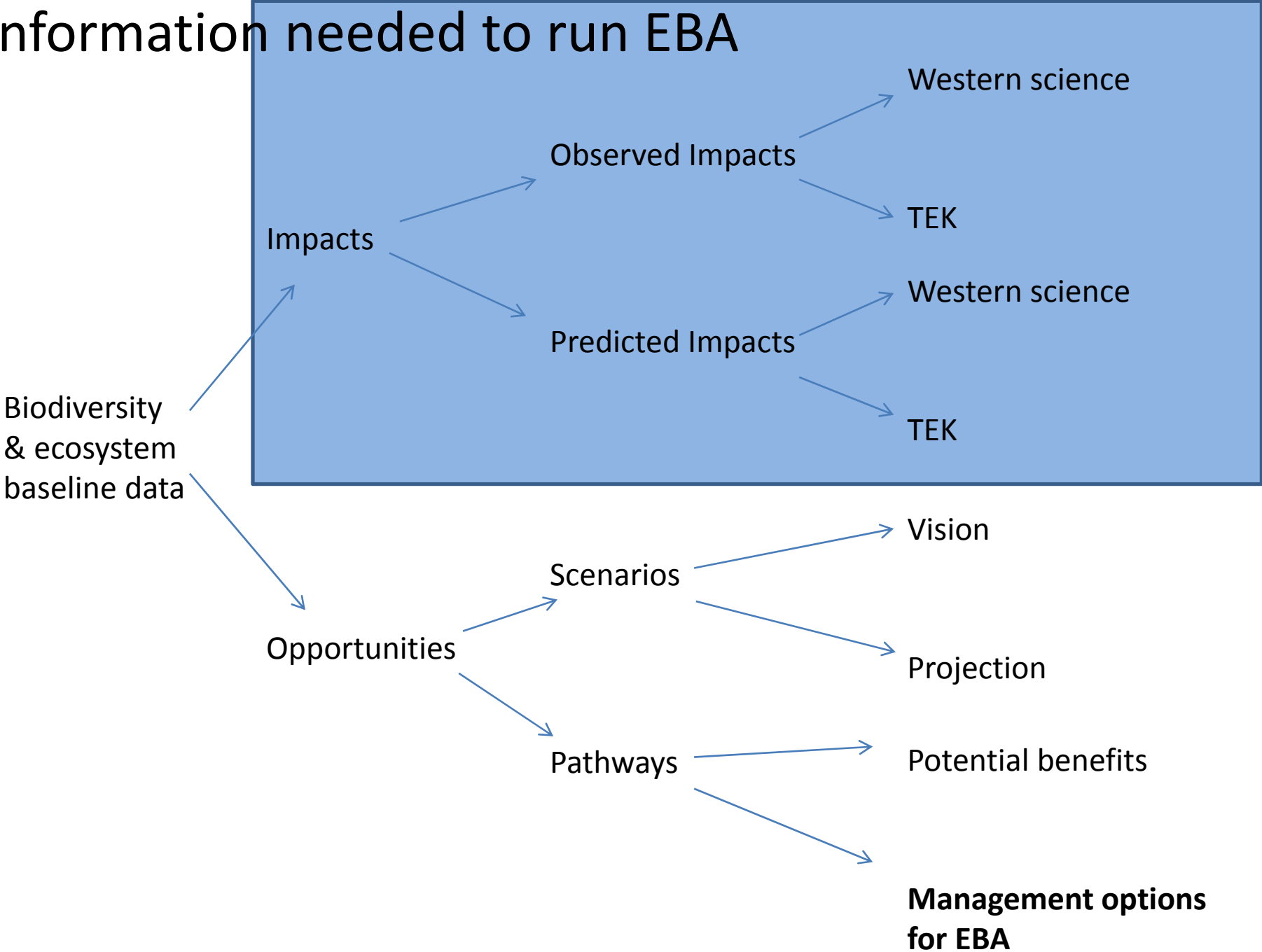
Information needed to run EBA



Baseline of information



Information needed to run EBA





Measuring impacts

- Prediction for individual Pacific island groups is inexact
- We need to know:
 - What global climate models say
 - Biodiversity information
 - What scientists have measured or predicted for individual sites
 - What local people have observed
- Information should be presented in an easily understood format
- Is the information already known or do we need more research?

Scientists



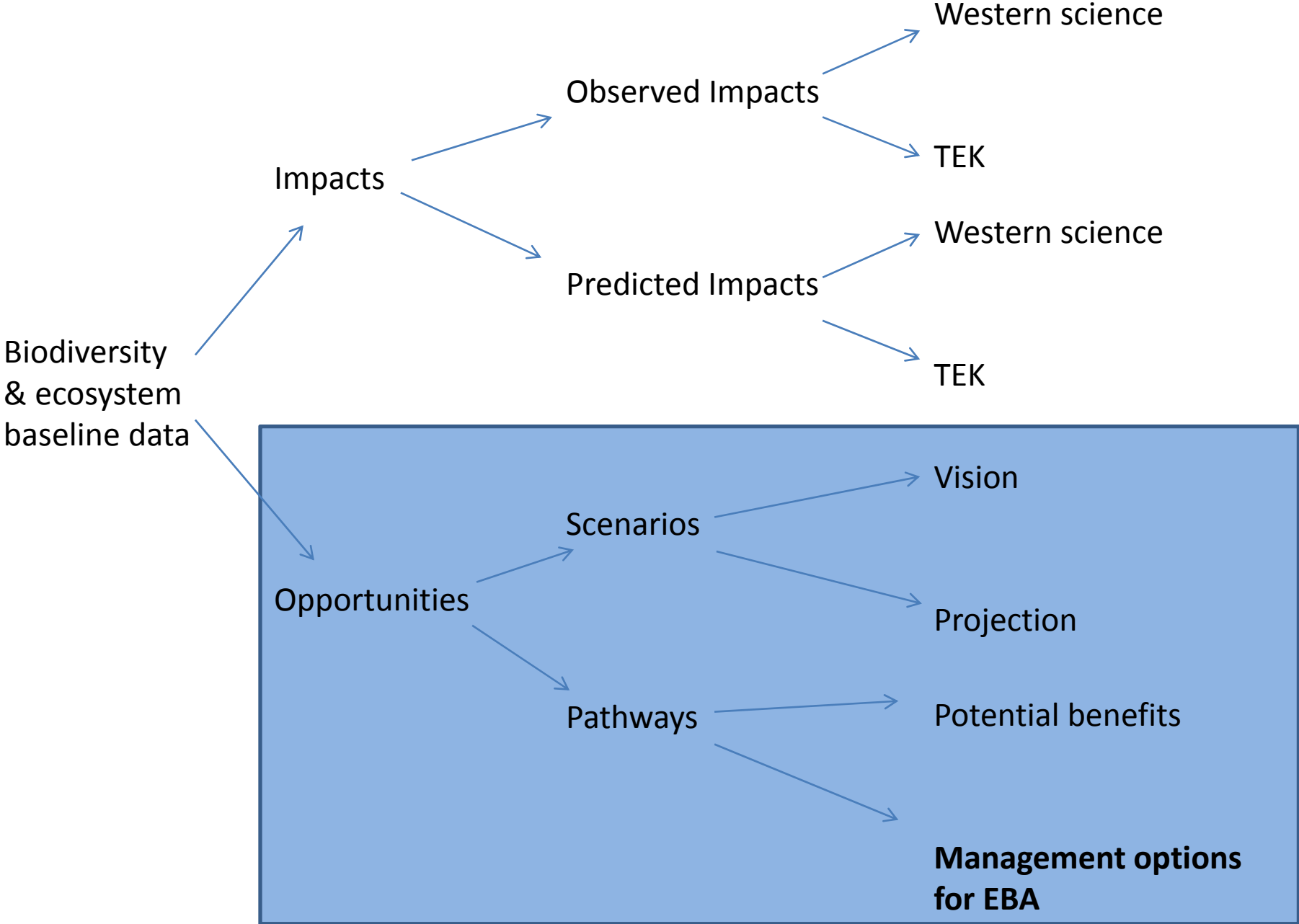


Managers

Local communities



Information needed to run EBA



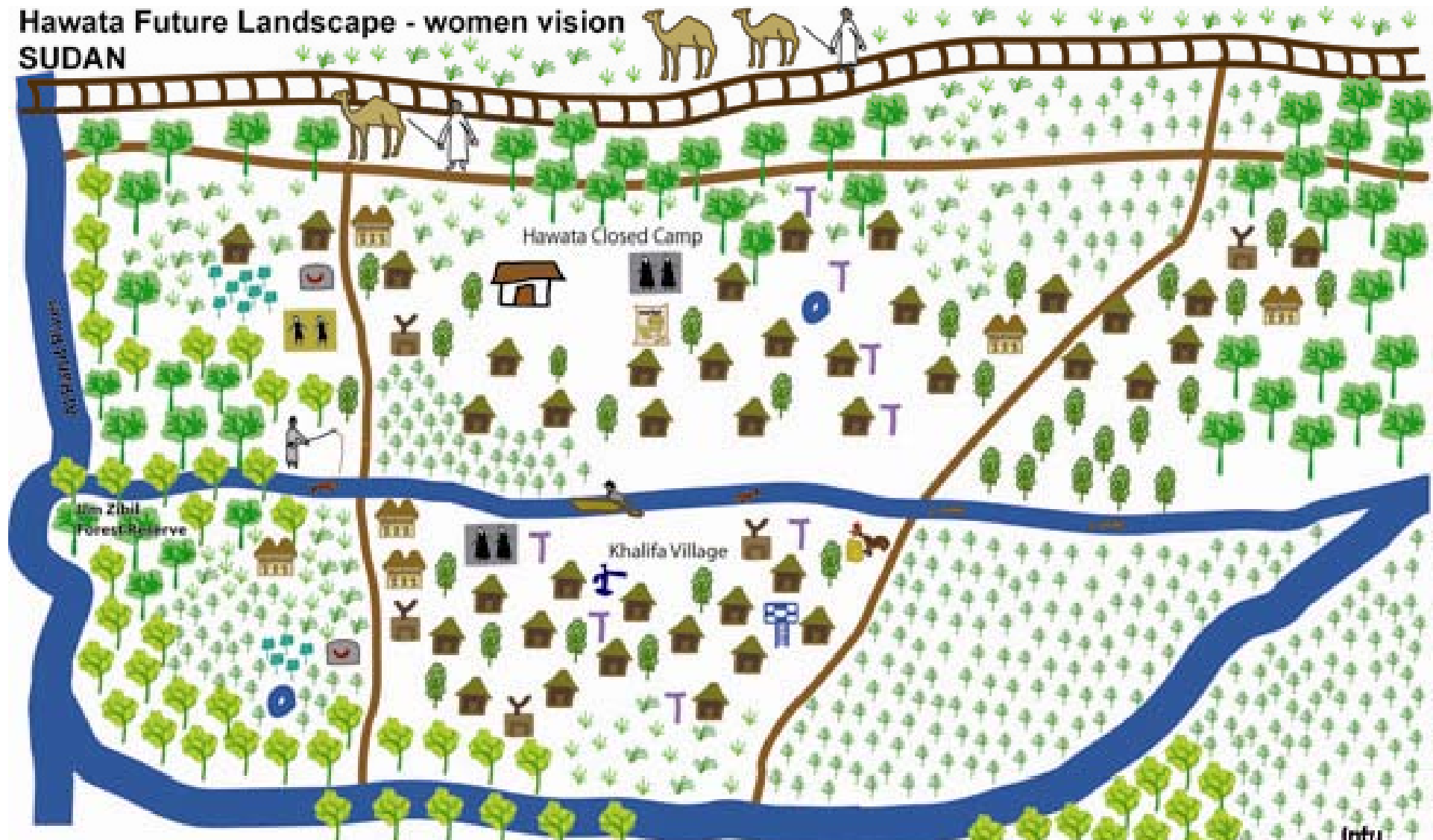


Scenarios

- Finding out what people want
- Scenarios can either be ideal visions or expectations of reality – both are useful
- They can be recorded discussions, maps, models or plans...
- A stand-alone component or EBA added into existing scenario building



Hawata Future Landscape - women vision SUDAN



KEYS

| | | | | | | | | |
|---------------|----------|--------------|---------------------------|-----------|-------------|-------------|--------------|---------|
| river | cemetery | market | government building | livestock | mango trees | nim trees | electricity | railway |
| road | school | women center | waterhole | poultry | other trees | agriculture | transport | market |
| mosque | house | youth center | water distribution system | fish | nursery | grass | fire brigade | 1 Km |
| health center | | | | | | | | N |







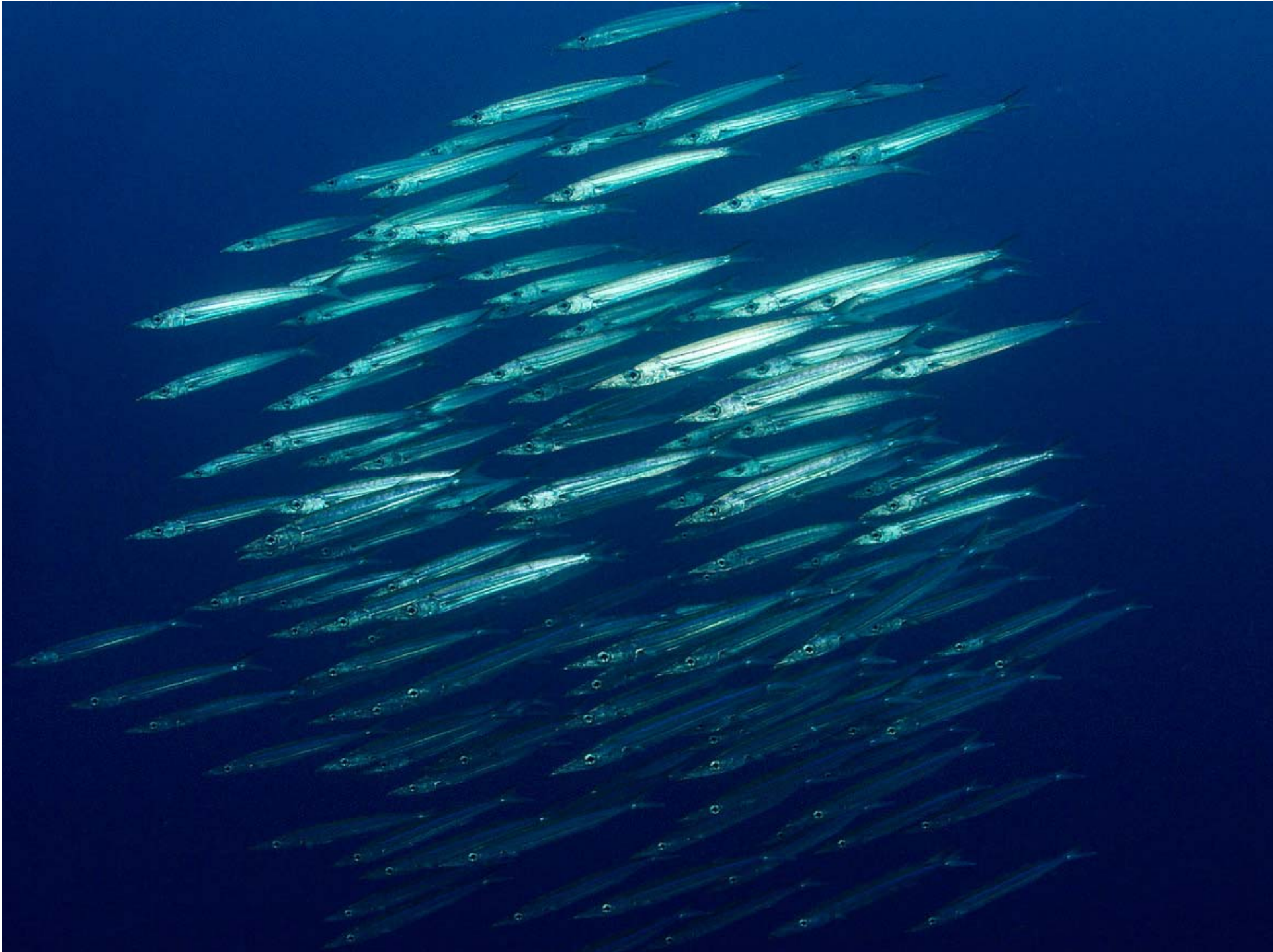
Pathways



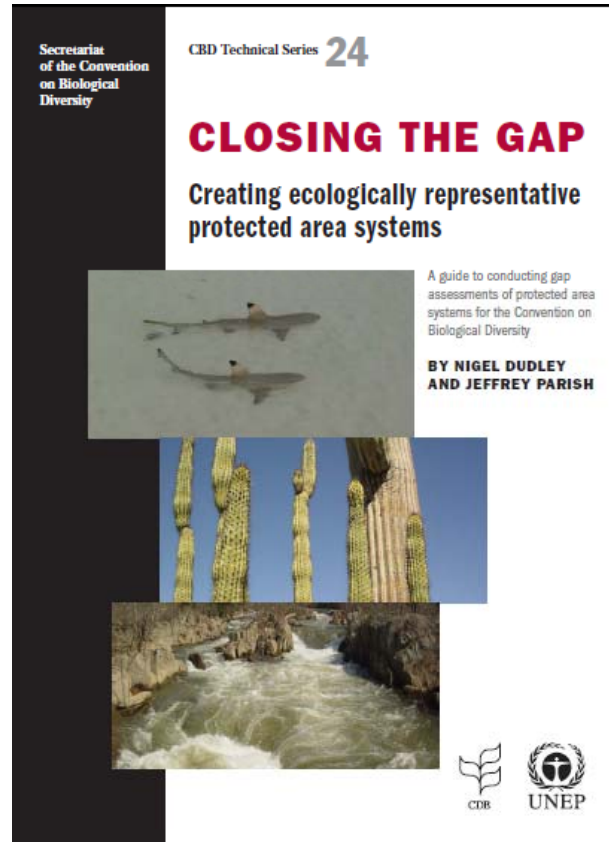


Identification of potential benefits

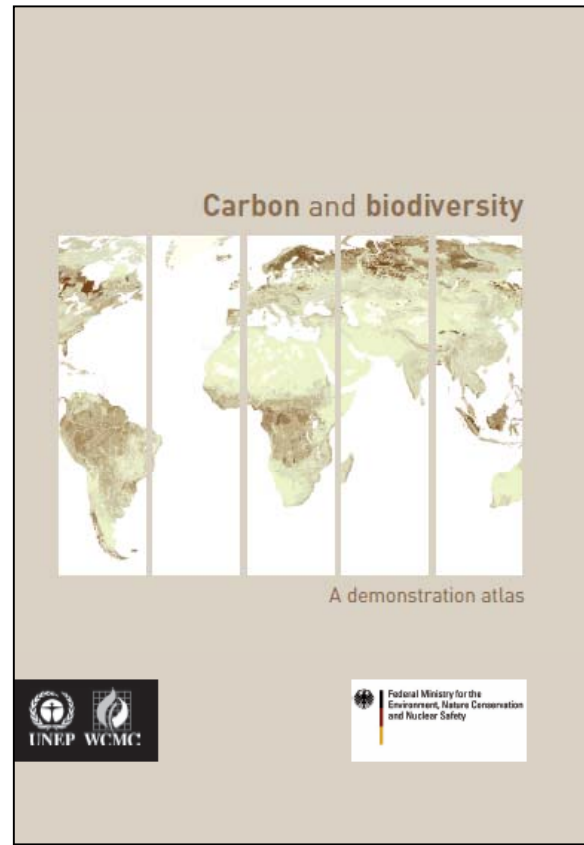
- Preventing floods
- Protecting shorelines
- Providing clean water
- Maintaining fish stocks
- Securing agriculture







Adapting protected area gap analysis to a system that can identify gaps in EBA and suggest possible solutions

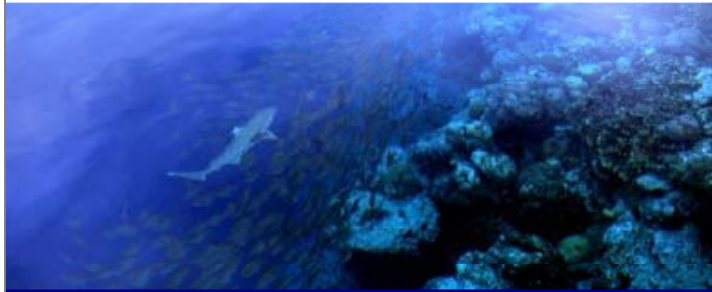


Overlaying carbon mapping with biodiversity and management options



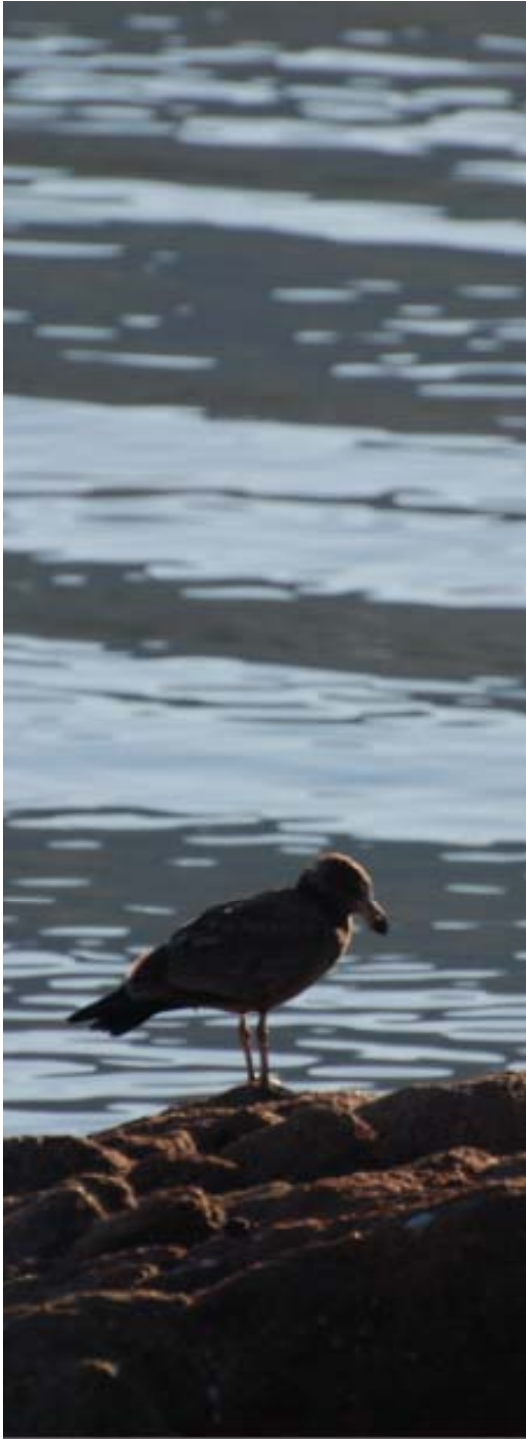
Marine Protected Areas Policy and Legislation Gap Analysis: Fiji Islands

*Frika J Techera, LLB (Hons), M Env Law, LLM
Shauna Tronick, BA, LLB*



IUCN Regional Office for Oceania



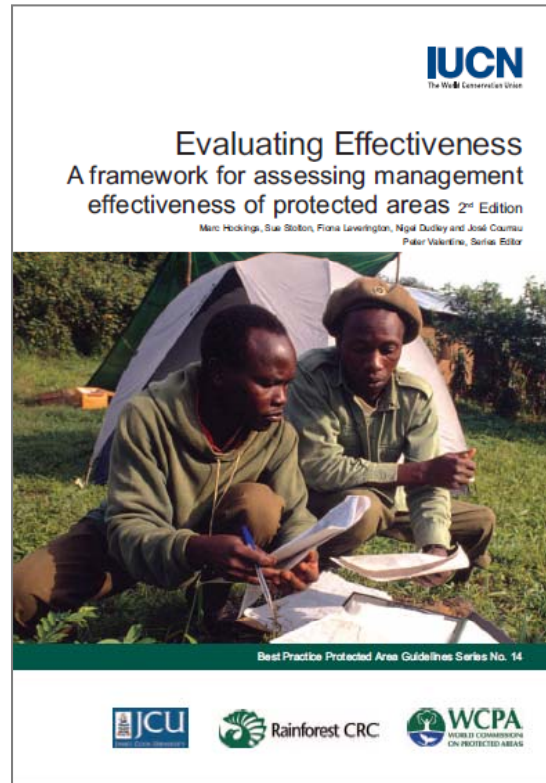


Also possibly legislative gaps – should we be looking for a legal gap analysis?

Management options

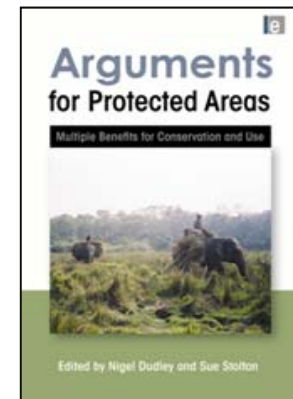
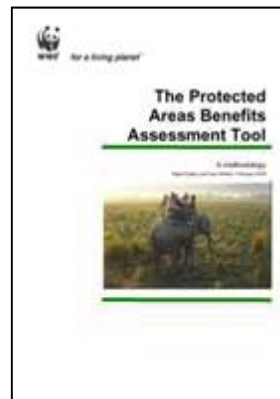
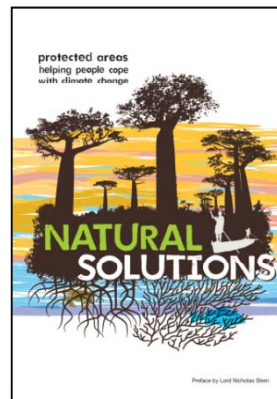
| | |
|-------------------------------|---|
| Protected area | State, private or customary agreement |
| Marine and freshwater fishing | Government and community no-take zones, certification, codes of practice, tradable fish quotas |
| Agriculture | Certification, voluntary codes, tax and incentives |
| Forestry | Government reserves and concessions, community management, certification, voluntary codes, tax incentives |
| Ecosystem services | Legal protection, Payment for Ecosystem Services schemes, tax incentives, community schemes |
| Hunting | Voluntary and legal hunting reserves, bushmeat controls |
| Tourism | Ecotourism, recreational parks |
| Cultural heritage | Voluntary and legal schemes |

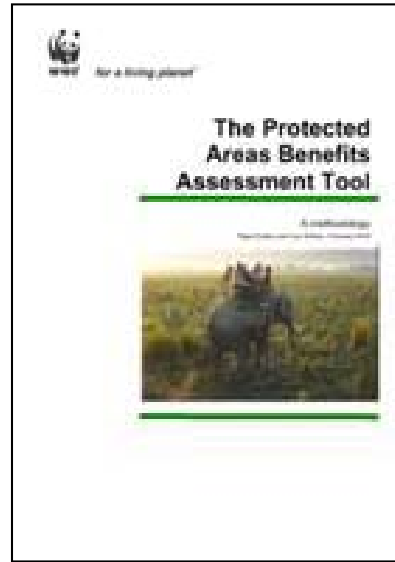




Should we also be considering management effectiveness of protected areas? And other conservation areas?

Values of protected areas





A simple way of capturing information about the wider values of protected areas (or other areas) suitable for use with scientists, managers or communities



| Information Baselines | Baseline requirement for EBA | | |
|---|------------------------------|--------------------------------|----------------------------|
| | Vital and present | Vital and priority to complete | Good to have but not vital |
| Conservation priorities (e.g. Key Biodiversity Areas; Important Bird Areas) | | | |
| Biodiversity monitoring (e.g. long term trend monitoring) | | | |
| Carbon (e.g. stores and sinks) | | | |
| Ecosystem services (e.g. watersheds; fisheries; storm protection) | | | |
| PA monitoring and assessment (e.g. management effectiveness, managing for climate change) | | | |
| Community status, vision and scenarios | | | |
| Climate impacts (e.g. long-term monitoring methodologies; modelling) | | | |