Proteus Partners Annual Meeting 2014

Hosted by BP at Jesus College, Cambridge 13th-14th May

The development of marine protected areas

Professor Richard Kenchington
Australian National Centre for Ocean Resources & Security

UNEP WCMC

proteus

MPAs, EBM and Blue Growth

Richard Kenchington
Professor, Ecosystem and Resource management

MPAs, EBM and Blue Growth

GBR case history

Governance of marine systems

MPAs as a governance component

Blue Growth – Marine EBM?

The GBR story

Iconic large marine ecosystem

Concern at impacts and risk

Royal Commissions

GBR Marine Park Act

Conservation and reasonable use

The GBR story

35 years experience

Management within boundaries OK
    Tourism, fishing, shipping,

Deterioration particularly of nearshore reefs

Management of trans-boundary generated human impacts major challenge

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Governance of marine systems

LOSC

Gaps and challenges in trans and multi-jurisdictional management capacity.

Multiple overlapping and competing arrangements at all levels. Acronym soup.

Limits to powers and capacities of governments to manage

Governance of marine systems

"The land dominates the sea?"

2D terrestrial solutions
– good fences make good neighbours

3D context – the active 3rd dimension
- fences don't work in the sea
- everything is connected to everything else

Marine lifecycles

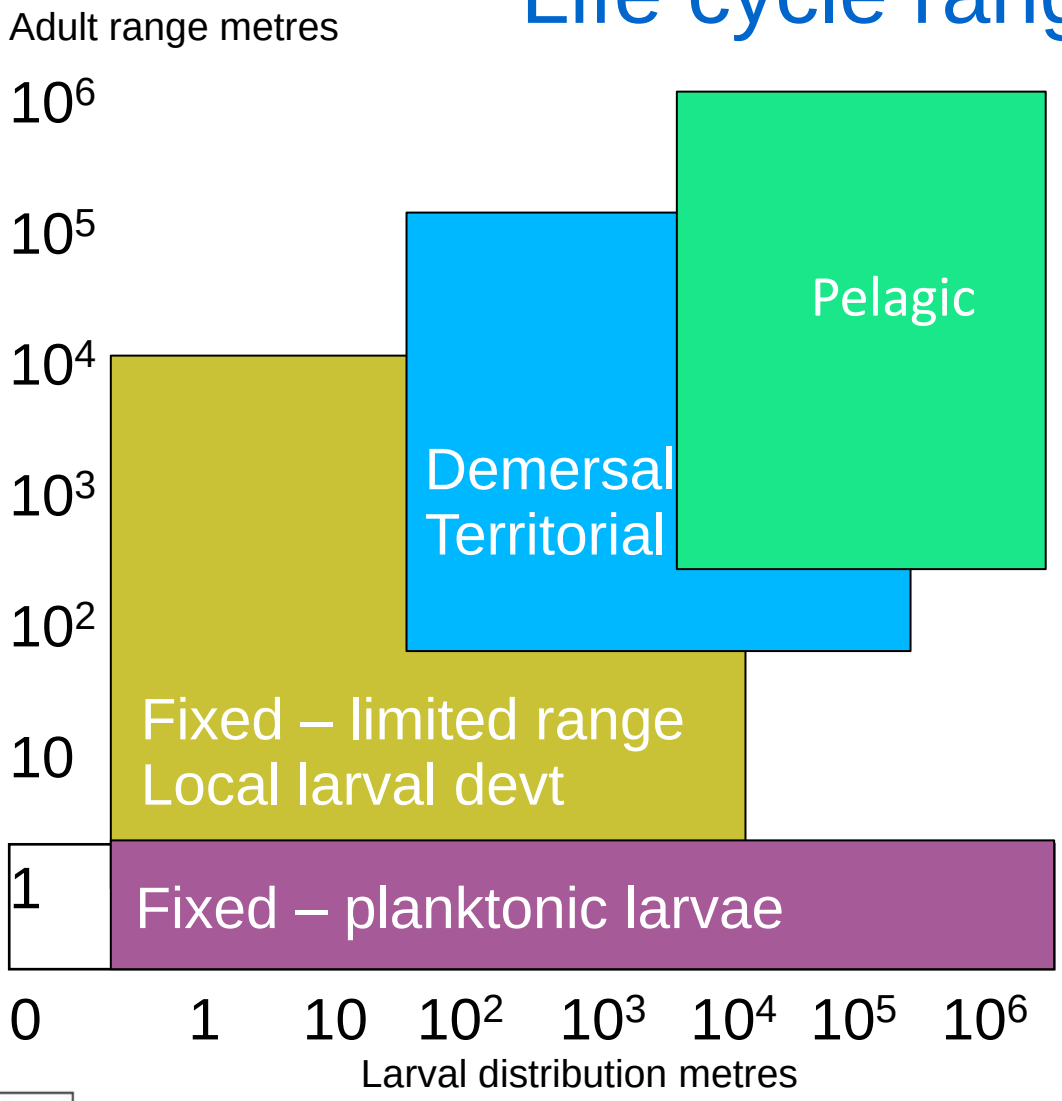
Drifting in the water mass - planktonic

Swimming through the water mass – pelagic/nektonic

Territories linked to seabed topography - territorial

Attached to or within the seabed substrate- fixed

Life cycle ranges



Terrestrial governance context

Primacy of use and sectoral regulation relate to land holding, spatial title with limited overlaps

Allocation/recognition of title/responsibility to nations, groups, individuals, entities or sectors

Good fences make good neighbours - separation through geographically defined boundaries

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Marine governance context

Fences not much use in the sea

Biodiversity depends on the water column

Title and activities at one location may have major distant connections and impacts

Primacy of use should consider that many different activities or uses may take place at the same location within a short time period.

1988 GRSMPA concept

protection, restoration, wise use, understanding and enjoyment of the marine heritage of the world in perpetuity through the creation of a global, representative system of marine protected areas

IUCN Resolution 1988

1988 GRSMPA concept

management in accordance with the principles of the World Conservation Strategy of human activities that use or affect the marine environment

IUCN Resolution 1988

MPA roles and primacies

Biodiversity conservation primacy – representative network of no-take protected areas (IUCN categories I and II).

Negotiated biodiversity/fisheries primacy
Protection of seabed habitat through zoning that excludes destructive methods of fishing (IUCN categories IV and VI).

MPA roles and primacies

An overarching regime of primacies for verifiable sustainable use consistent with conservation (IUCN category VI- incorporating areas of I,II and IV).

Can cover everything but how does this relate to other elements.

MPAs, Marine EBM, Blue Growth?

Integrated management of:

verifiably sustainable use of marine renewable natural resources

protection of biological diversity and ecosystem processes

other uses and impacts that can affect marine natural resources, biodiversity or ecosystem processes.

MPAs, Marine EBM, Blue Growth?

Objectives of EBM

Protecting biodiversity;

Conservation and integrity of ocean ecosystems;

Sustainable use of biodiversity;

Management of harvesting of natural resources;

Acceptable socio-economic progress.

Managing conflict, Enhancing well-being
Improving the quality of life;

Protecting biodiversity

Strategic Assessment and Planning

Understanding environmental constraints and opportunities for human uses and impacts on ecological systems

Protected Areas

Allocated to preserve representative and viable samples of biodiversity and the integrity of ecosystem services;

Specific Environmental Impact Management

Establishing and maintaining operational conditions for human uses and impacts of such that they do not compromise the sustainability of environmental systems and amenity

What might enable Marine EBM ?

An overarching independent and accountable framework that can integrate and oversee sectoral management

MPAs? Oceans legislation? Marine Spatial Plans? IMME, ICOM, ICZM, MBBNJ, what do these and dozens of overlapping terms mean?

Who should be responsible ?

The form of the delivery framework is a matter for governments in the context of their national and international responsibilities;

But the powers and capacities of governments are constrained and conflicted in the international economic and governance contexts.

Common Interests

The cumulative impacts on marine systems of land based and marine activities causing marine pollution, habitat damage and ecosystem change, are core environmental concerns

With the partial exception of fisheries, these are typically secondary economic concerns for managers of other human activities that use or impact on marine space.

The Task

To achieve a practical and effective framework for determining the purposes, locations and conditions of use or entry that may occur in a marine area and to ensure that individual, collective and cumulative uses and impacts from land or sea do not compromise the integrity and productivity of marine ecosystems.


Thank You

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Protected areas over the next decade

Professor Neil D. Burgess
Head of Science, UNEP-WCMC

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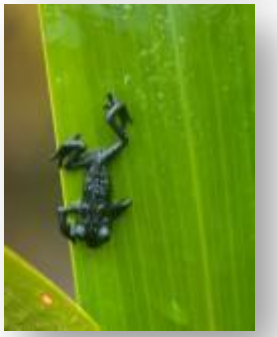
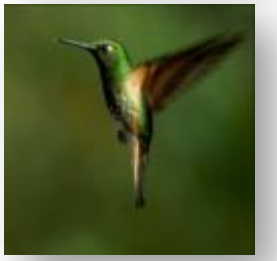

What are protected areas?

Different definitions exist

IUCN definition: **clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values**

Different types of PAs include marine / terrestrial, national / international, PAs in different IUCN management categories and governance types

IUCN protected area categories

CATEGORY Ia:	**Strict Nature Reserve**: protected area managed mainly for scie
CATEGORY Ib	**Wilderness Area**: protected area managed mainly for wilderness protection
CATEGORY II	**National Park**: protected area managed mainly for ecosystem protection and recreation
CATEGORY III	**Natural Monument**: protected area managed mainly for conservation of specific natural features
CATEGORY IV	**Habitat/Species Management Area**: protected area managed mainly for conservation through management intervention
CATEGORY V	**Protected Landscape/Seascape:** protected area managed mainly for landscape/seascape conservation and recreation
CATEGORY VI	**Managed Resource Protected Area:** protected area managed mainly for the sustainable use of natural ecosystems

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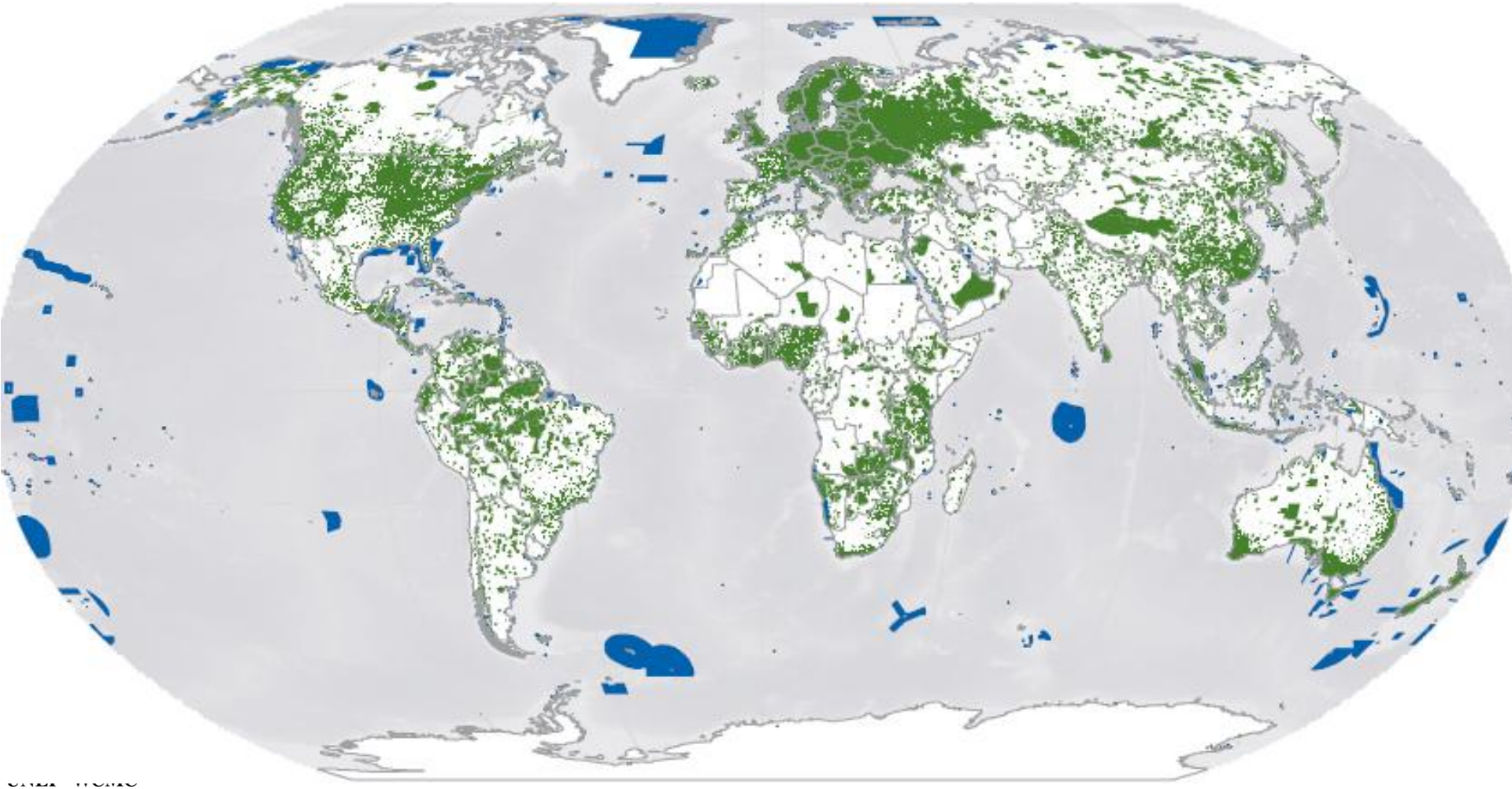
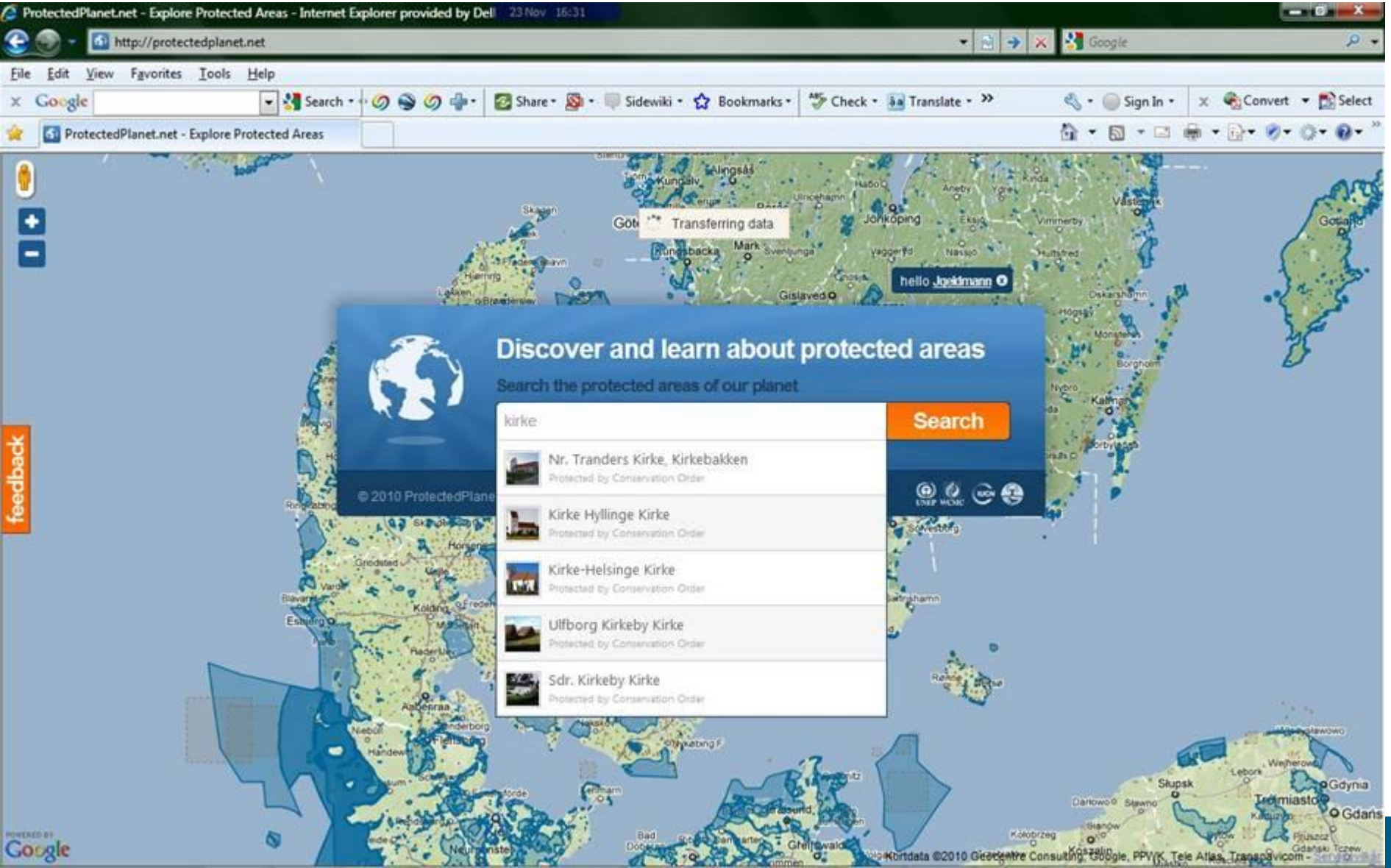
Global protected areas network – World Database on Protected Areas



The Protected Planet web interface



Where we start: The CBD Aichi Target 11

By 2020, at least

17 per cent of terrestrial and inland water areas, and

10 per cent of coastal and marine areas, especially

areas of particular importance for biodiversity and ecosystem services, are conserved through

effectively and equitably managed,

ecologically representative and well connected systems of protected areas and

other effective area-based conservation measures, and

integrated into the wider landscapes and seascapes.

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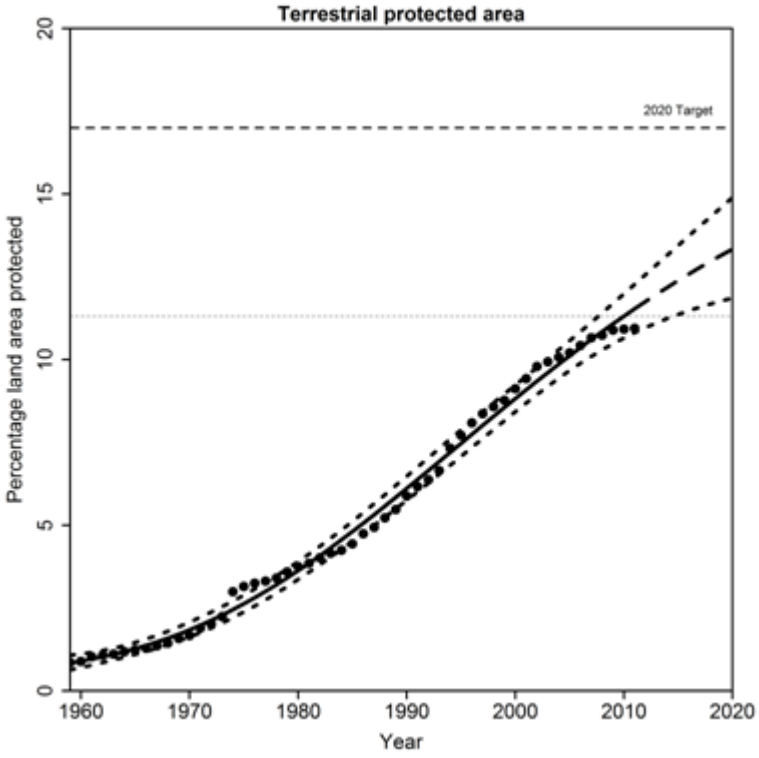
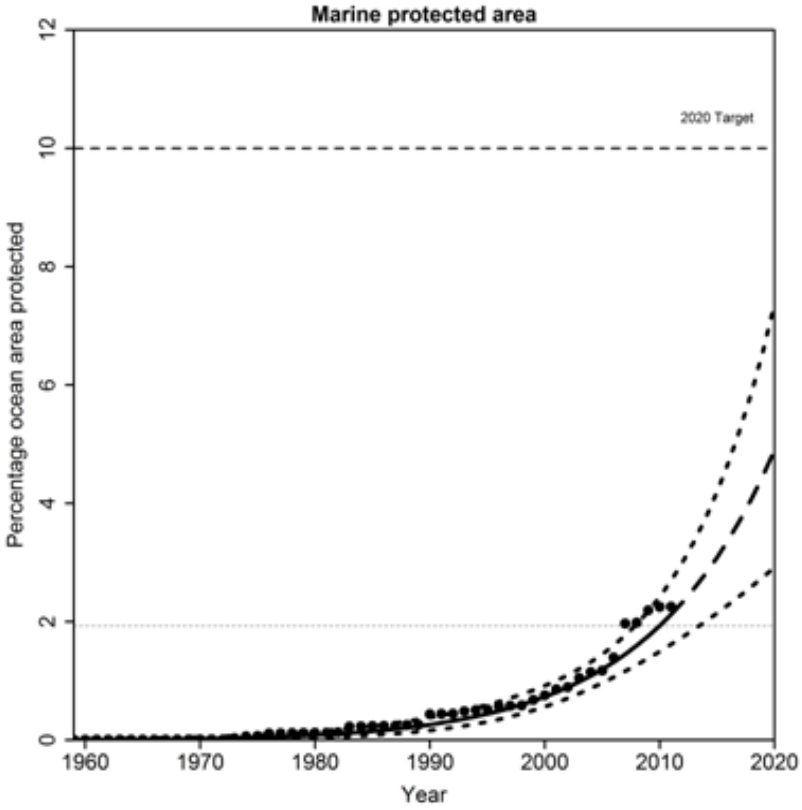
Past, Present and Future, trends in Protected Area coverage on land and in the sea: against the 17% CBD targets





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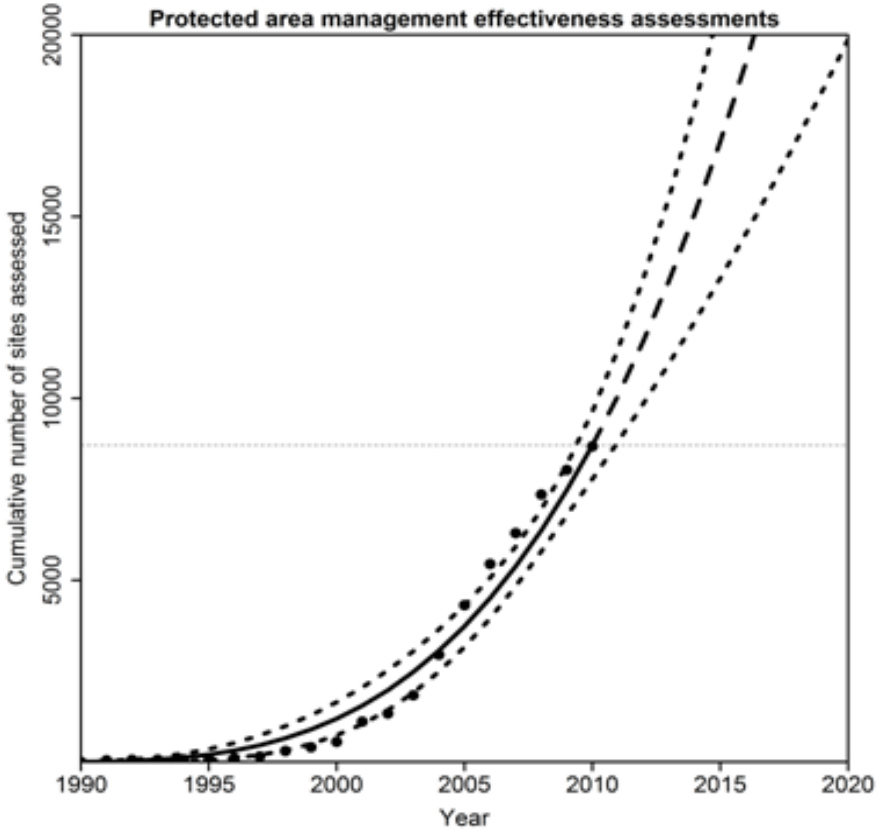
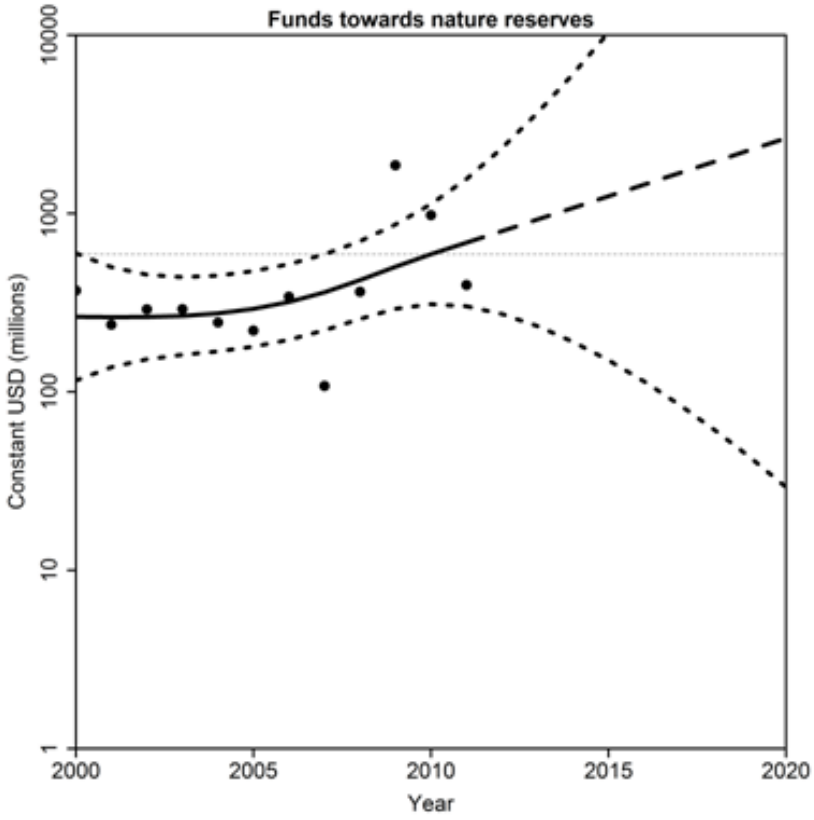
Past, Present and Future trends in protected area effectiveness and funding (not actual biodiversity impacts)





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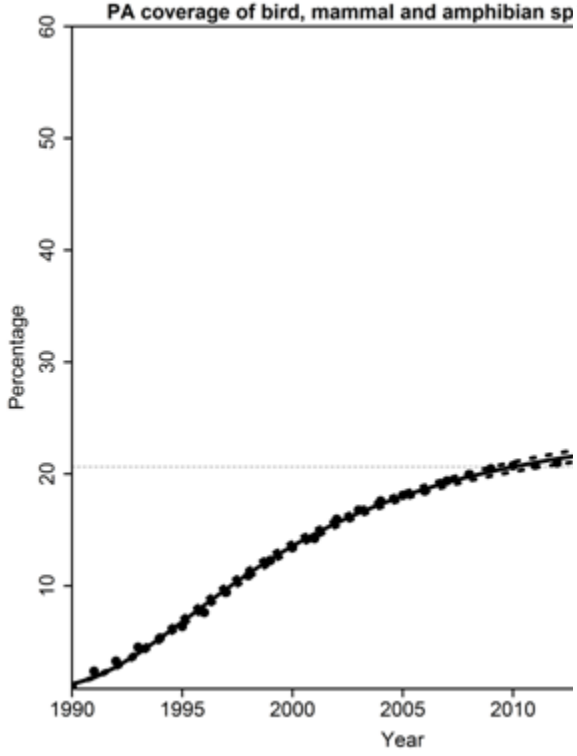
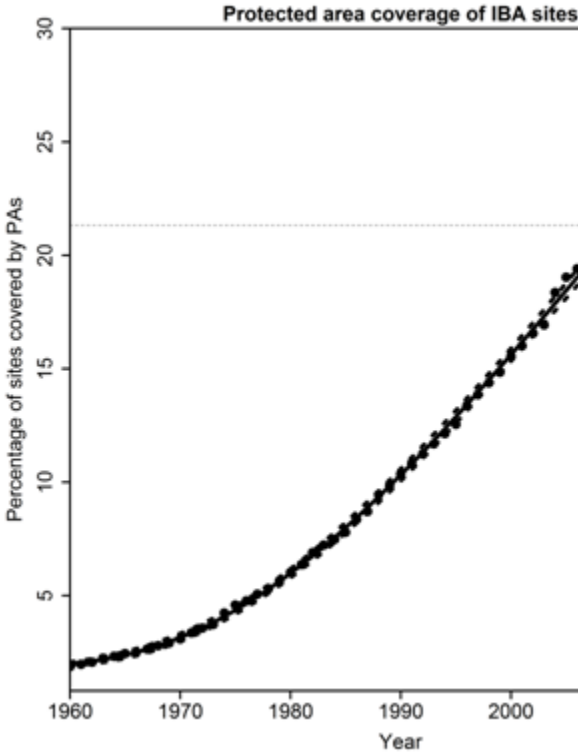
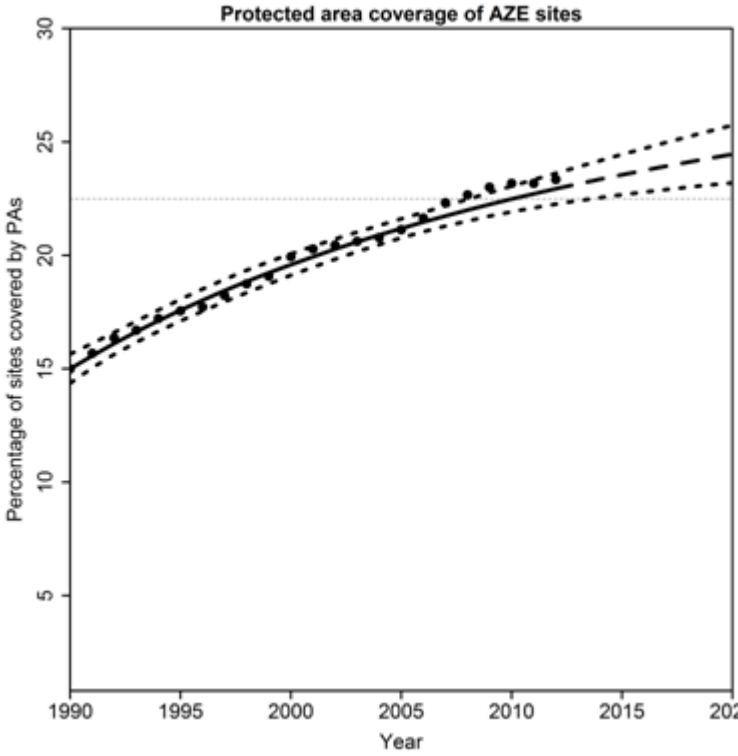
Past, Present and Future trends in Protected Area coverage of critical areas for biodiversity conservation







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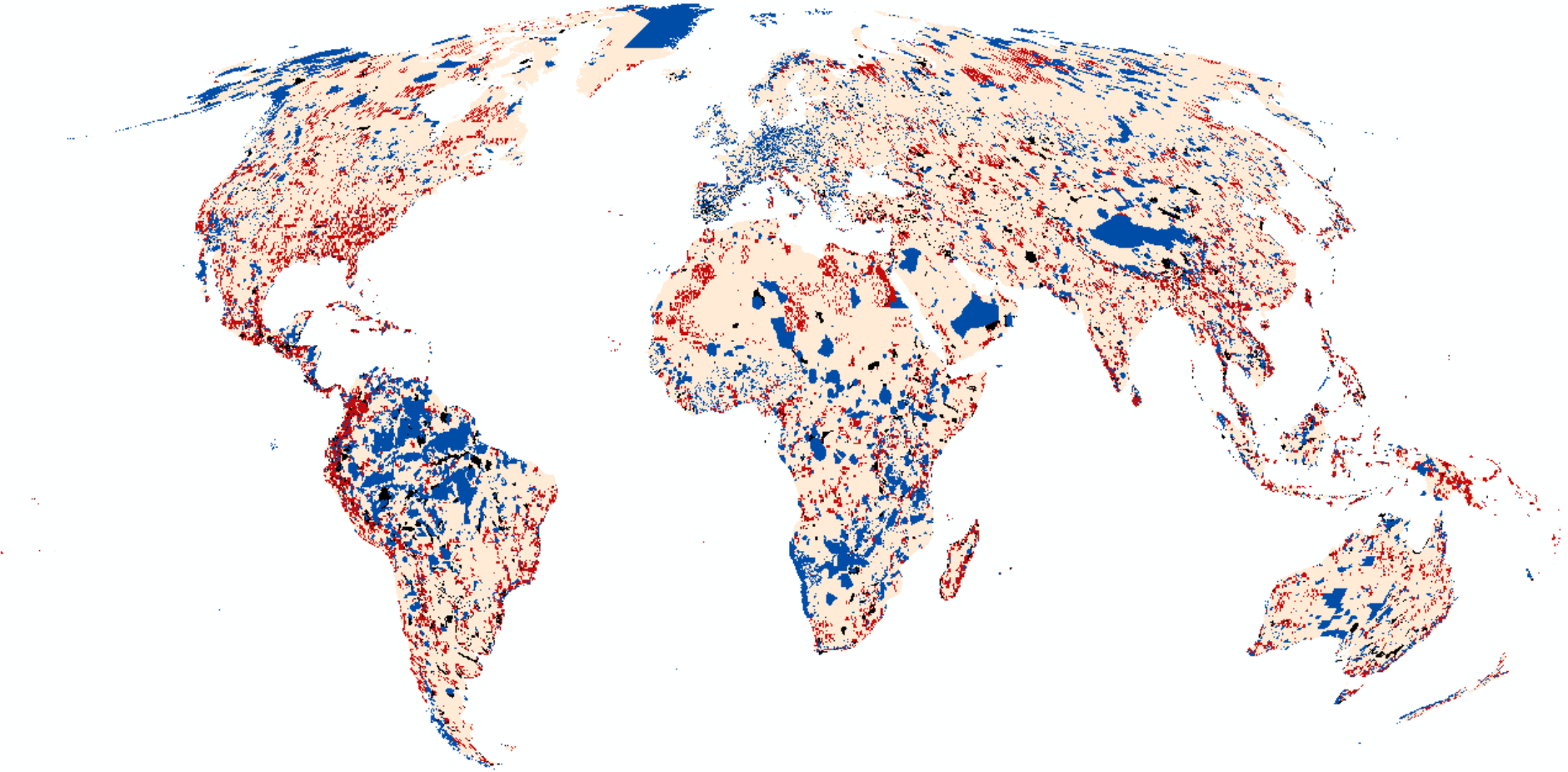
Have I been conserved?.....

Where on earth might new PA be located to meet 17% coverage targets and cover biodiversity (all species and all unprotected IBA/KBA/AZE)



Results of an unpublished analysis of PA gaps and how to fill them to meet targets

How might these predictions be achieved?

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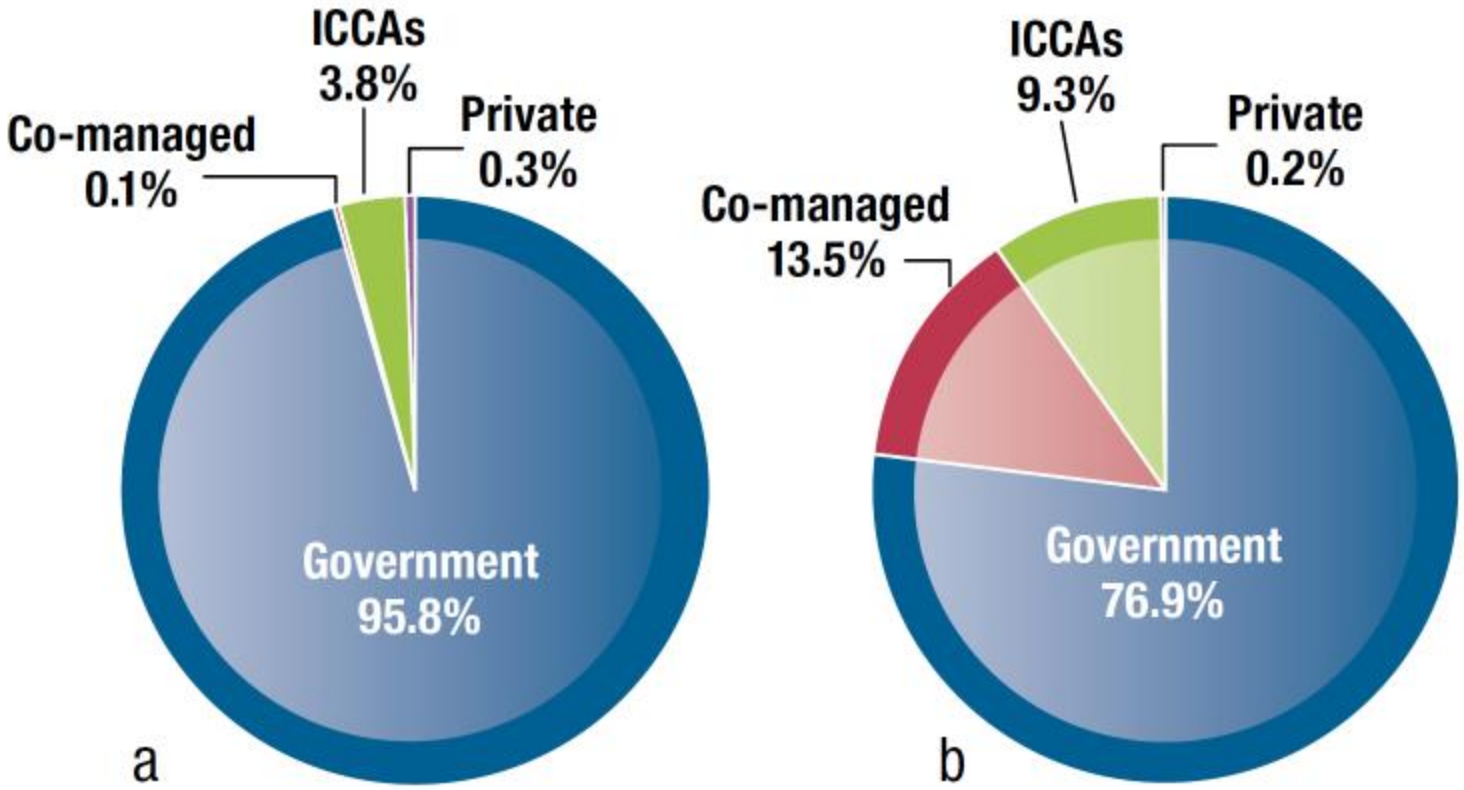
Changes in the type of PA being declared



1990

2010

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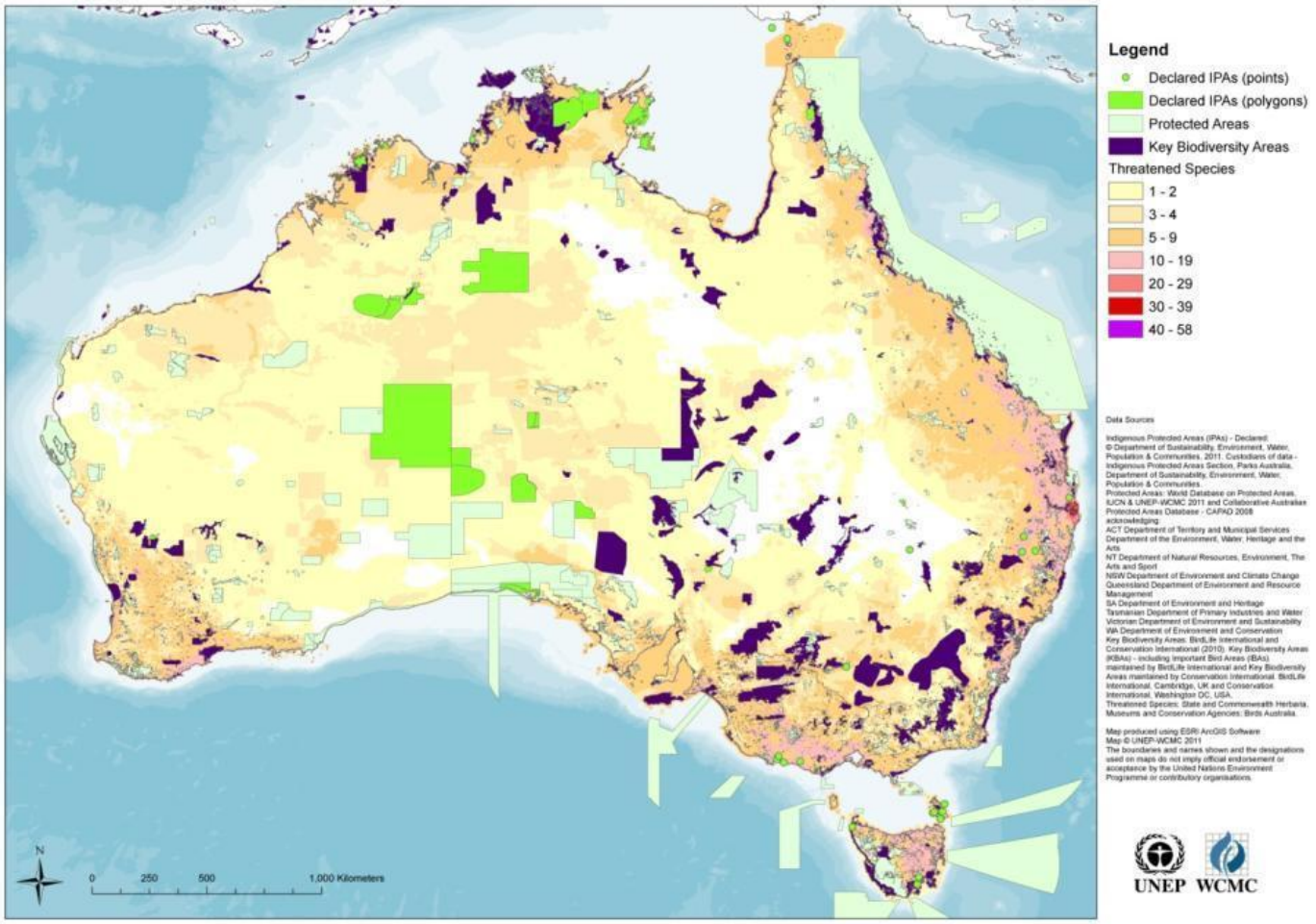
Community conservation: a paradigm shift in conservation?

Indigenous People and Human Rights

Community contribution to Protected Areas- an example from Australia



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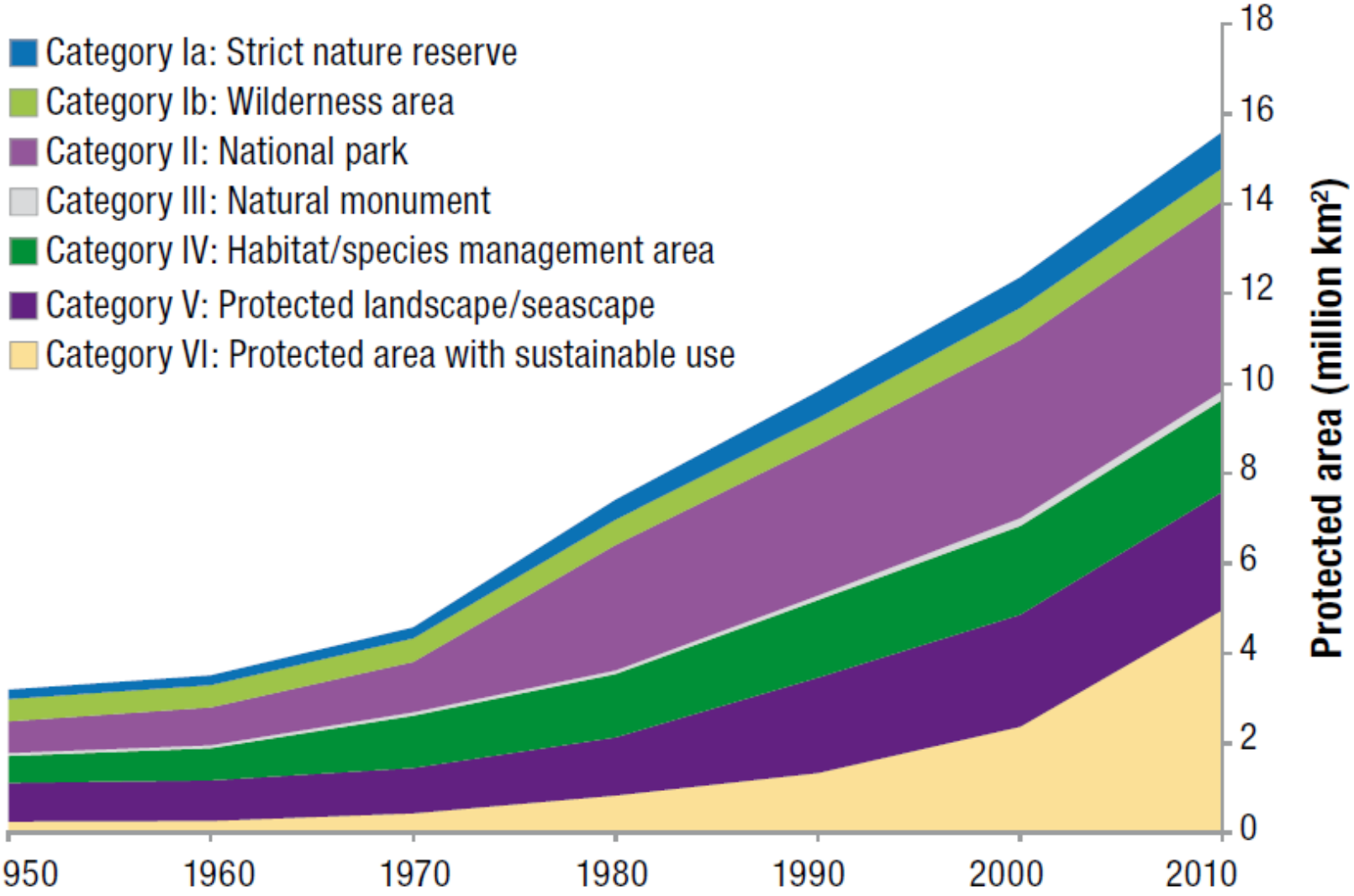
Temporal Changes in Protected Area uses




Can we now gather firewood in the reserve behind us?

Private Protected Areas : Another part of the future?

8,811 sites

A. Governance by government	Federal or national ministry or agency in charge	42997	37.6%
	Sub-national ministry or agency in charge	29631	
	Government-delegated management (e.g., to an NGO)	97	
B. Shared governance	Transboundary management		0.2%
	Collaborative management	381	
	Joint management	67	
C. Private governance	**Declared and run by individual land-owner**	2504	**4.6%**
	…by non-profit organizations (e.g., NGOs, universities)	5133	
	…by for-profit organizations (e.g., individual or corporate)	1111	
	Private governance	63	
D. Governance by indigenous peoples and local communities	Indigenous peoples' conserved areas and territories	1073	0.8%
	Community conserved areas	433	
Not reported		110093	**56.9%**

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Conclusions

- PA coverage increasing, especially in the sea
- Aim is to meet 17% target by 2020
- PA increasingly covering sites of high biological importance
- We can model where PA might be located in the future
- The new PAs of the future are (more) likely to allow use, maybe involve the private sector, and sometimes be managed by local people for their benefit
- The CBD Aichi Target 11 text 'Other Effective Means' includes the above and may include more types of land and sea still

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KBAs old and new – supporting protected areas and biodiversity conservation

Leon Bennun
Director of Science, Policy and Information, BirdLife International

UNEP WCMC

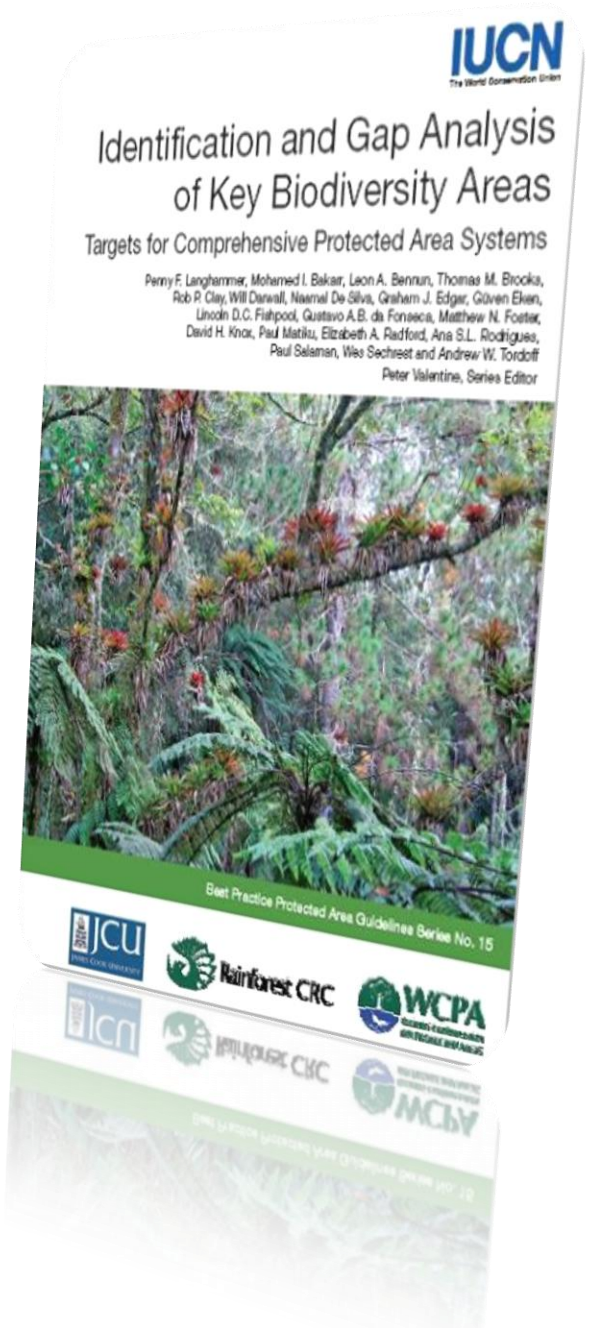
proteus

Key Biodiversity Areas new and old

Supporting Protected Areas and biodiversity conservation

Developing a global standard for key biodiversity areas

- What KBAs are, and aren't
- Update on progress
- What's changing – what's not?
- What happens after standard is launched this November?



Key Biodiversity Areas are:

- Sites contributing significantly to the **global persistence of biodiversity**
- For biodiversity at all levels (genes, species, ecosystems)
- Identified via scientifically robust, globally standard criteria and thresholds
- Delineated based on 'manageability'
- Designed to harmonise and build on (not compete with) existing approaches

Key Biodiversity Areas do NOT:

- Prescribe any formal designation or particular management approach
- Require perfect data (identified pragmatically using best available information)
- Represent systematic conservation priorities (but do inform them)

Key Biodiversity Areas have many uses, for example:

- Informing safeguards (eg Critical Habitat under PF6) and offsets design
- Informing Protected Areas targets and planning (eg Aichi Target 11 – include 'especially areas of particular importance for biodiversity')
- Informing conservation investments – eg Critical Ecosytem Partnership Fund, CEPF

Joint taskforce

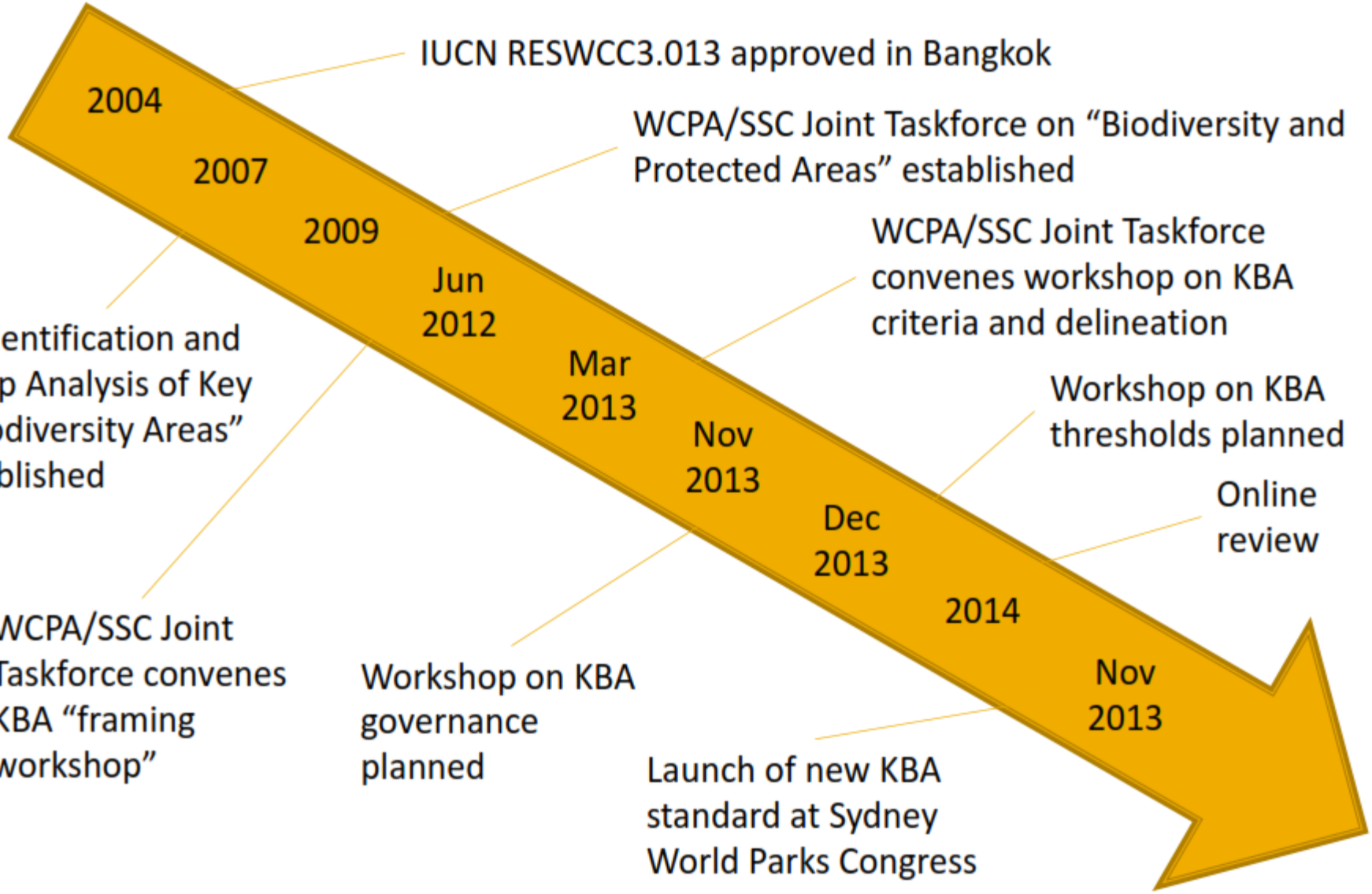
Five technical working groups:

1) A. Criteria & B. Delineation
2) Thresholds
3) Governance
4) End-user applications
5) Marine (joint with GOBI)

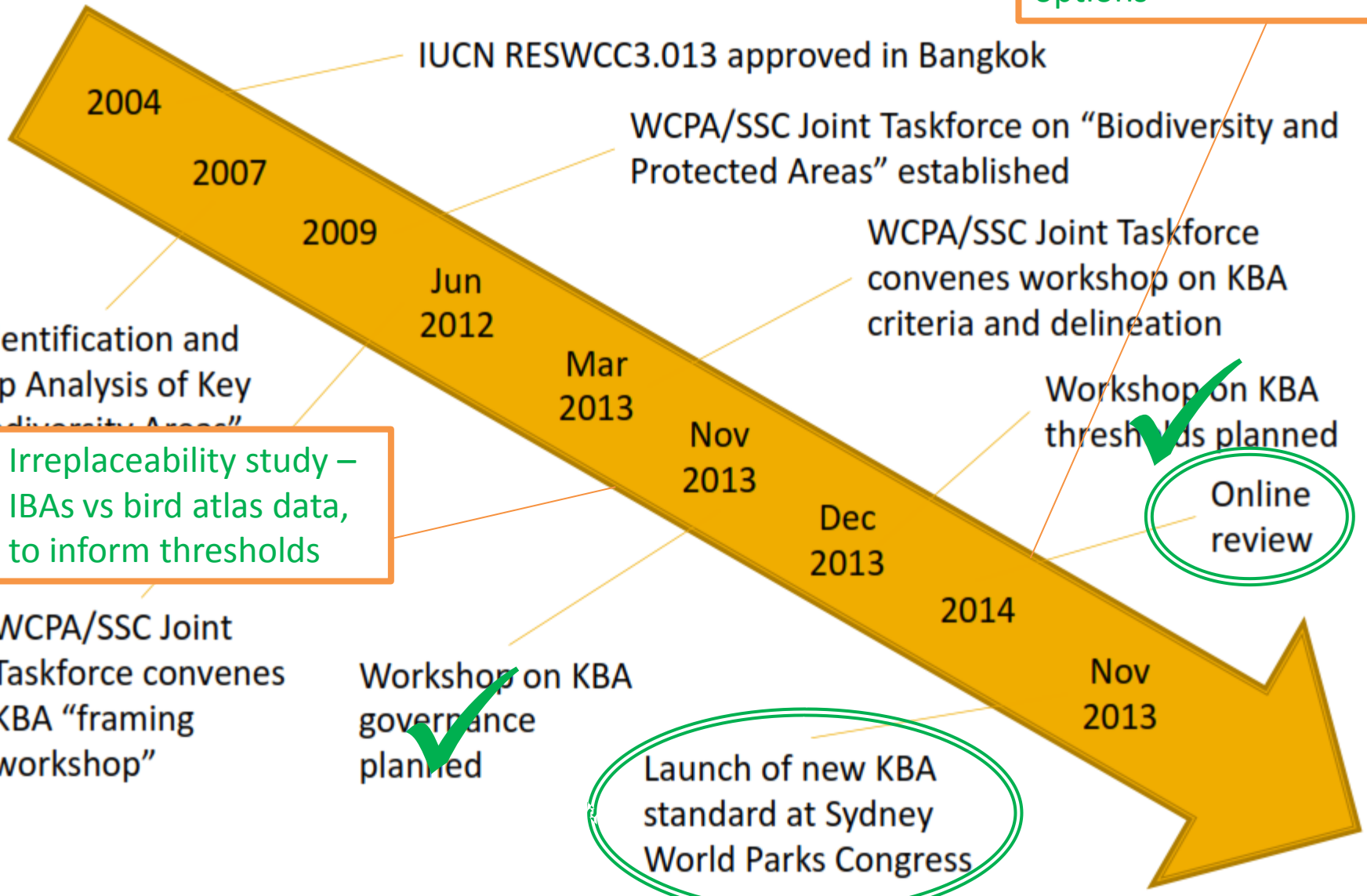
http://www.iucn.org/biodiversity_and_protected_areas_taskforce/

Thanks to:

Joint taskforce timeline



Joint taskforce timeline



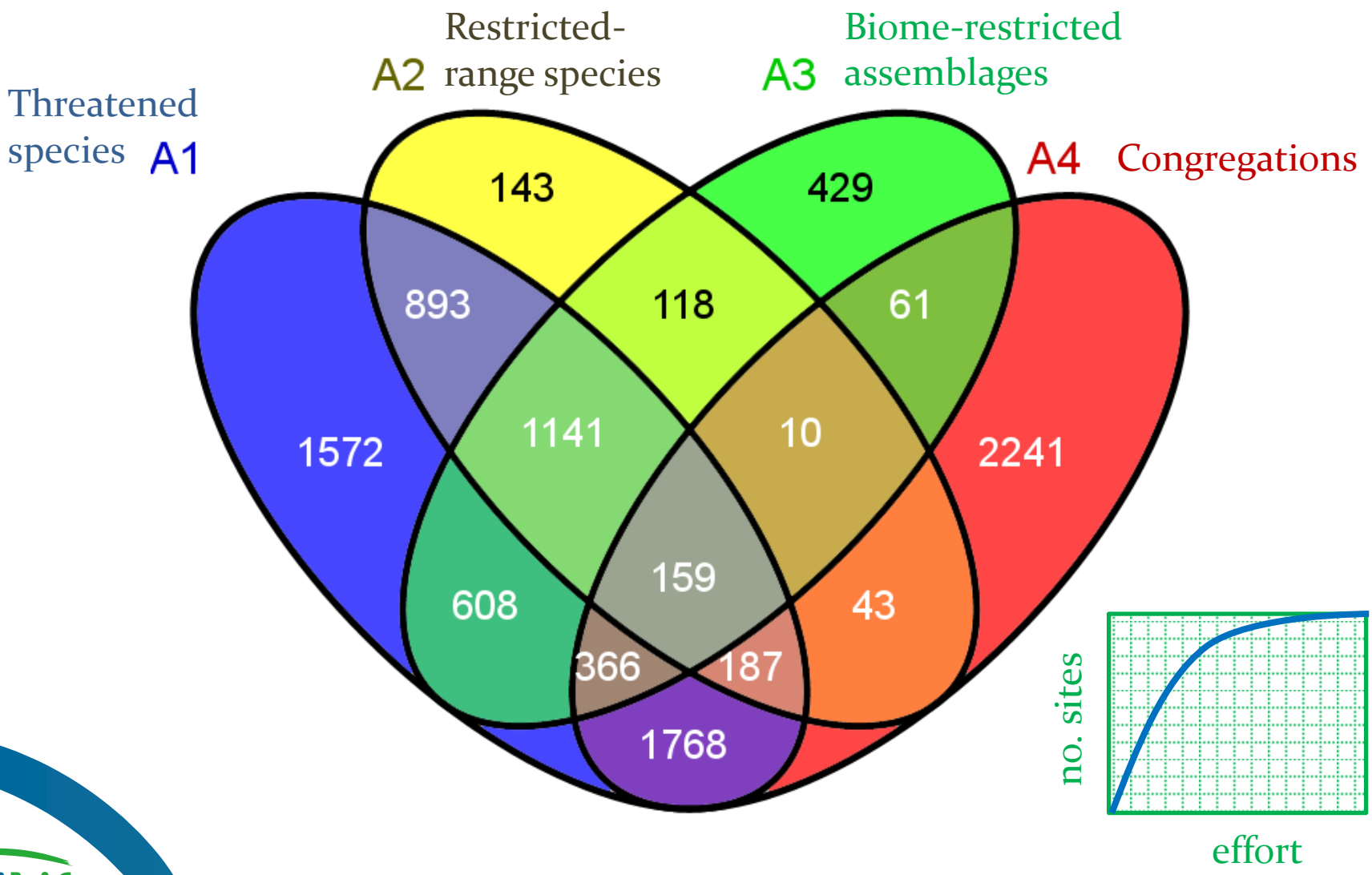
The new standard: what's changing?

- Overall governance (steering and technical committees led and supported by IUCN)
- Identification and review process (IUCN co-ordinated)
- Criteria – broadly similar, but include ecosystems (not just species)
- Thresholds – becoming tougher

New kinds of KBA

New criteria	Already applied?	
	Birds	Others
A Threatened biodiversity		
A1 Species	✓	✓
A2 Ecosystems	✗	✗
B Geographically restricted biodiversity		
B1 Individual species	✓	✓
B2 Species assemblages (centres of endemism)	✓	✗
B3 Ecosystems	✗	✗
C Biodiversity through ecological integrity		
C1 Intact species assemblages	✗	✗
C2 Relatively intact and regionally distinct		
C2a - assemblages	✓	✗
C2b - ecosystems	✗	✗
D Outstanding biological processes		
D1 Exceptional evolutionary processes	✗	✗
D2 Aggregations and congregations	✓	✗
D3 Exceptional ecological processes	✗	✗
E Biodiversity as determined by quantitative analysis	✗	✗

Overlap between IBA categories



Tougher thresholds

e.g. Threatened species: CR / EN / VU

- IBAs: 1 / 1 / 5 individuals
- New KBAs:
    - Min. .5 / 5 / 10 pairs AND
    - Min. 0.5 / 0.5 / 1.0 % of global population

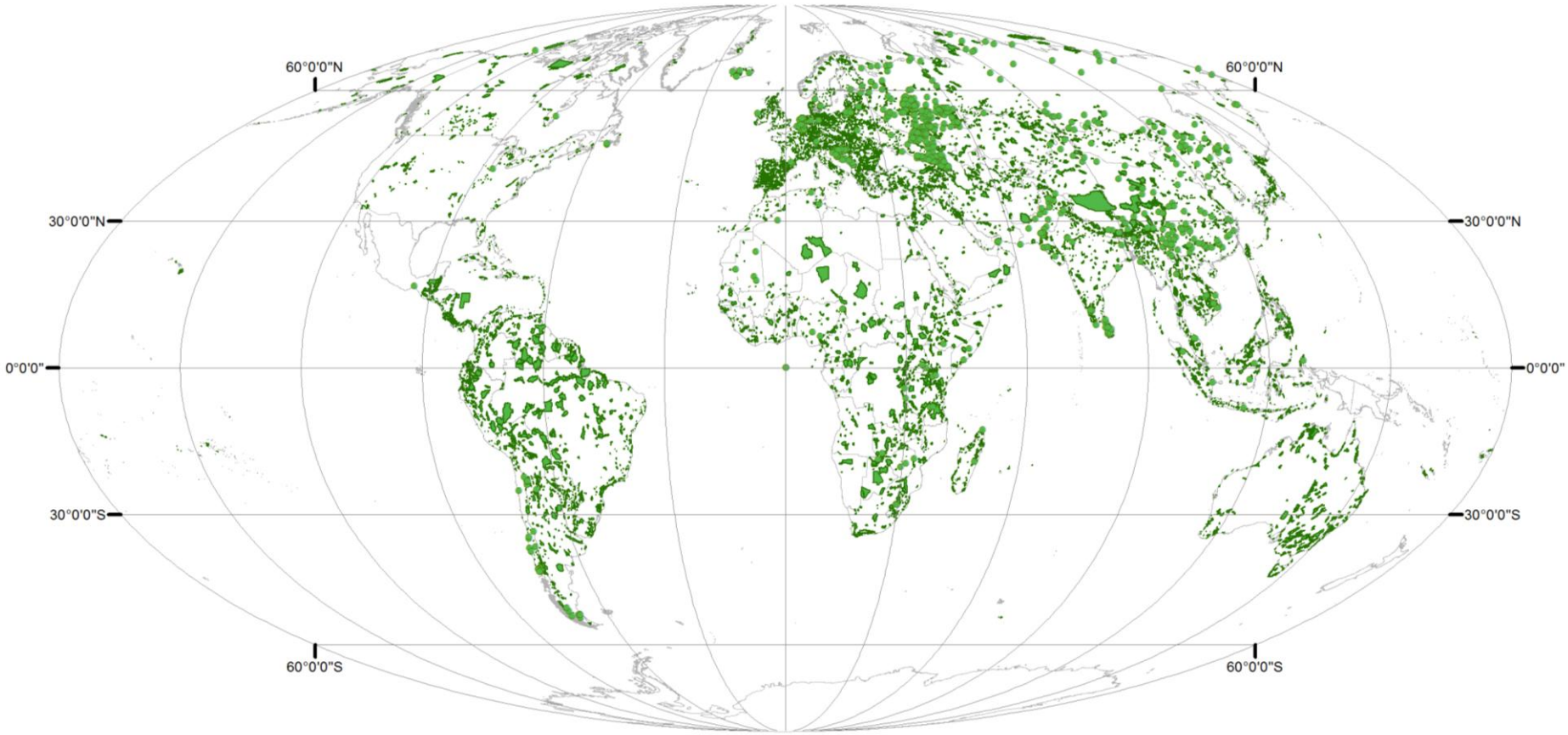
Existing data

- Current KBA data are managed by BirdLife in the World Bird and Biodiversity Database (WBDB) and made available through IBAT
- In the WBDB: 13,800 confirmed and 4,400 candidate KBAs
- 80% of total are Important Bird and Biodiversity Areas (IBAs)

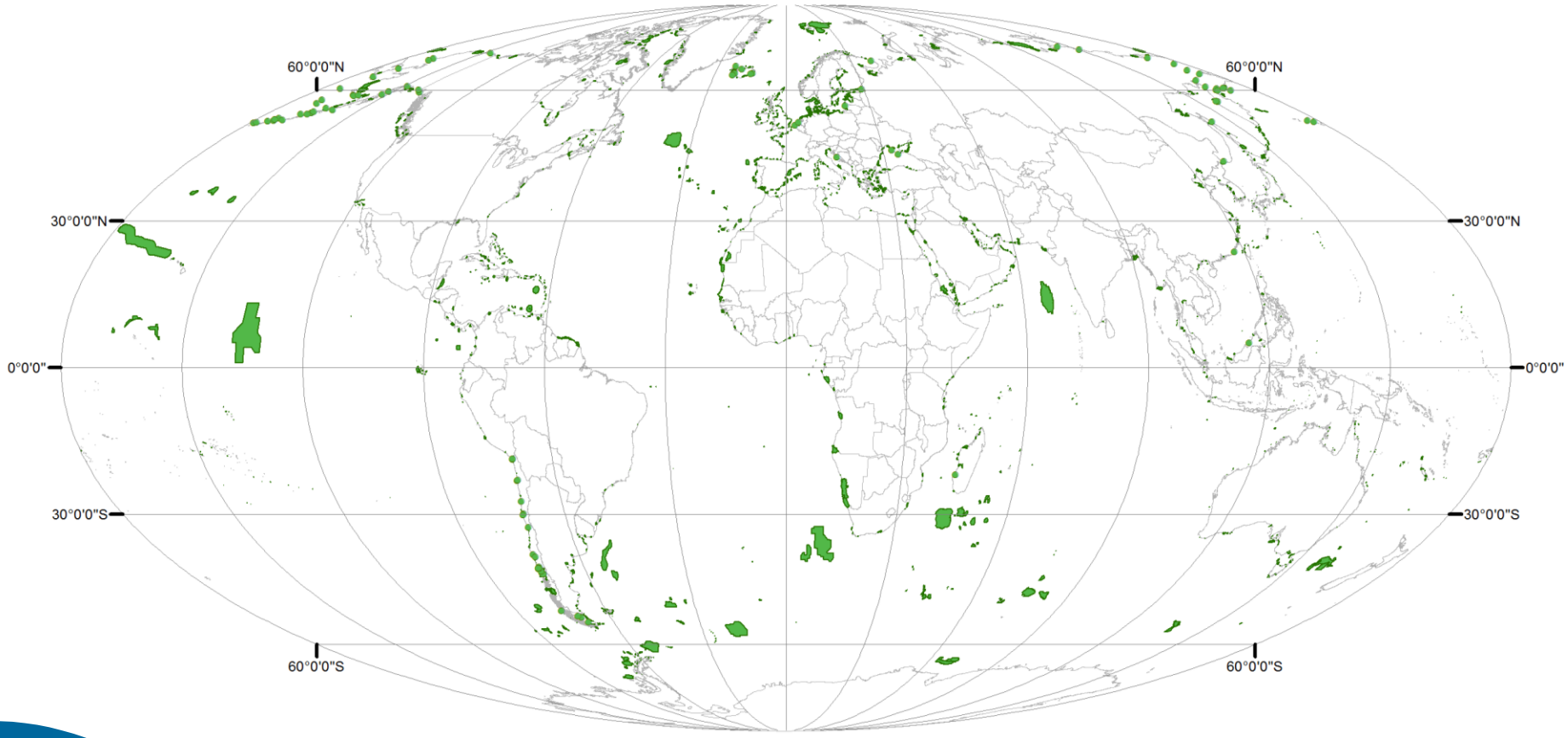
Existing datasets

- Confirmed terrestrial IBAs – c. 9,900
- Confirmed marine IBAs – c. 2,200
- Candidate marine IBAs c. 1,000+
- Alliance for Zero Extinction sites – 587
- 'Other' confirmed KBAs – c. 3,100
- IUCN Freshwater sites – to be added

Terrestrial IBAs



Marine IBAs



maps.birdlife.org/marineIBAs/default.html

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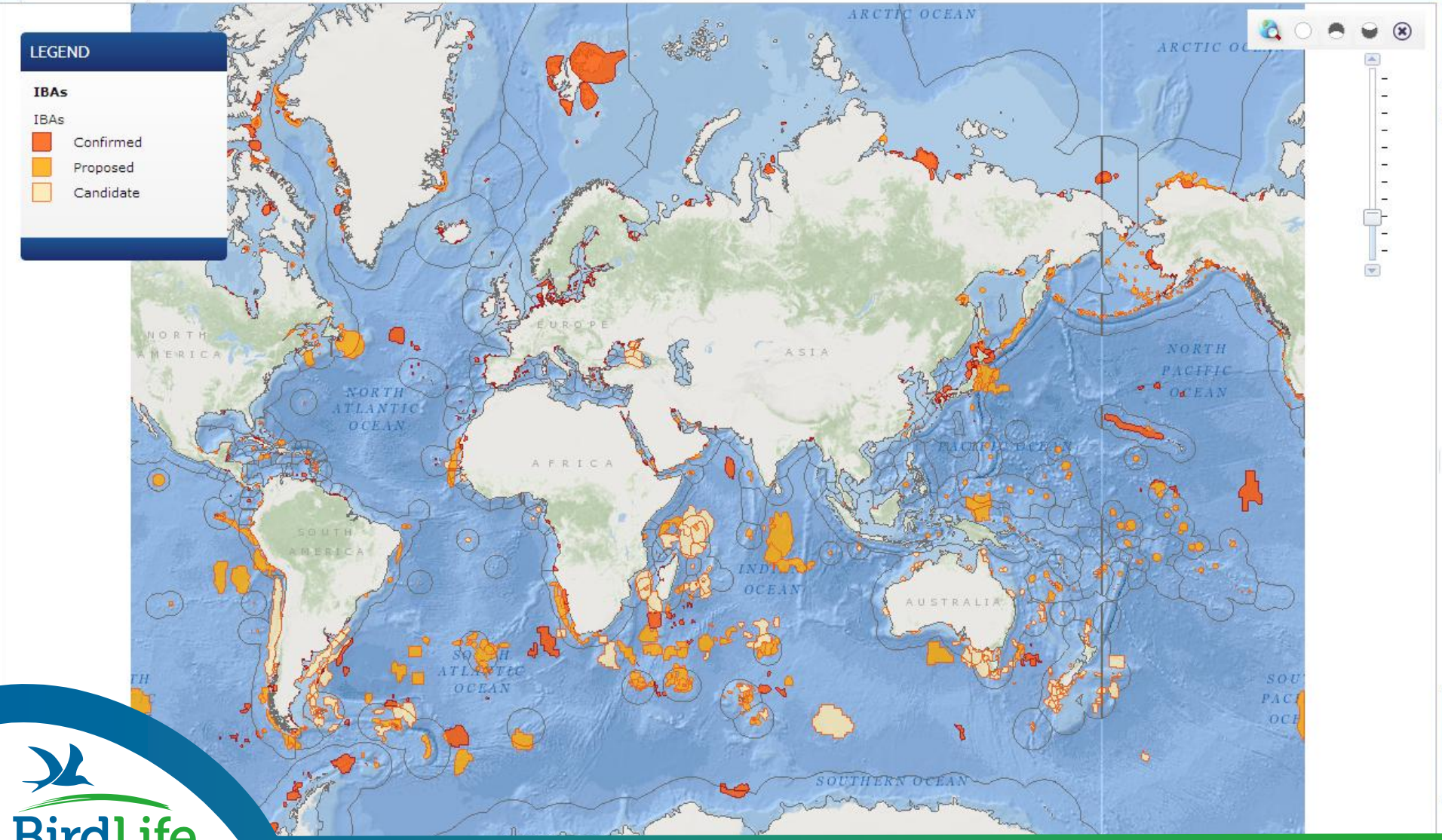
Marine IBA e-atlas

Delivering site networks for seabird conservation

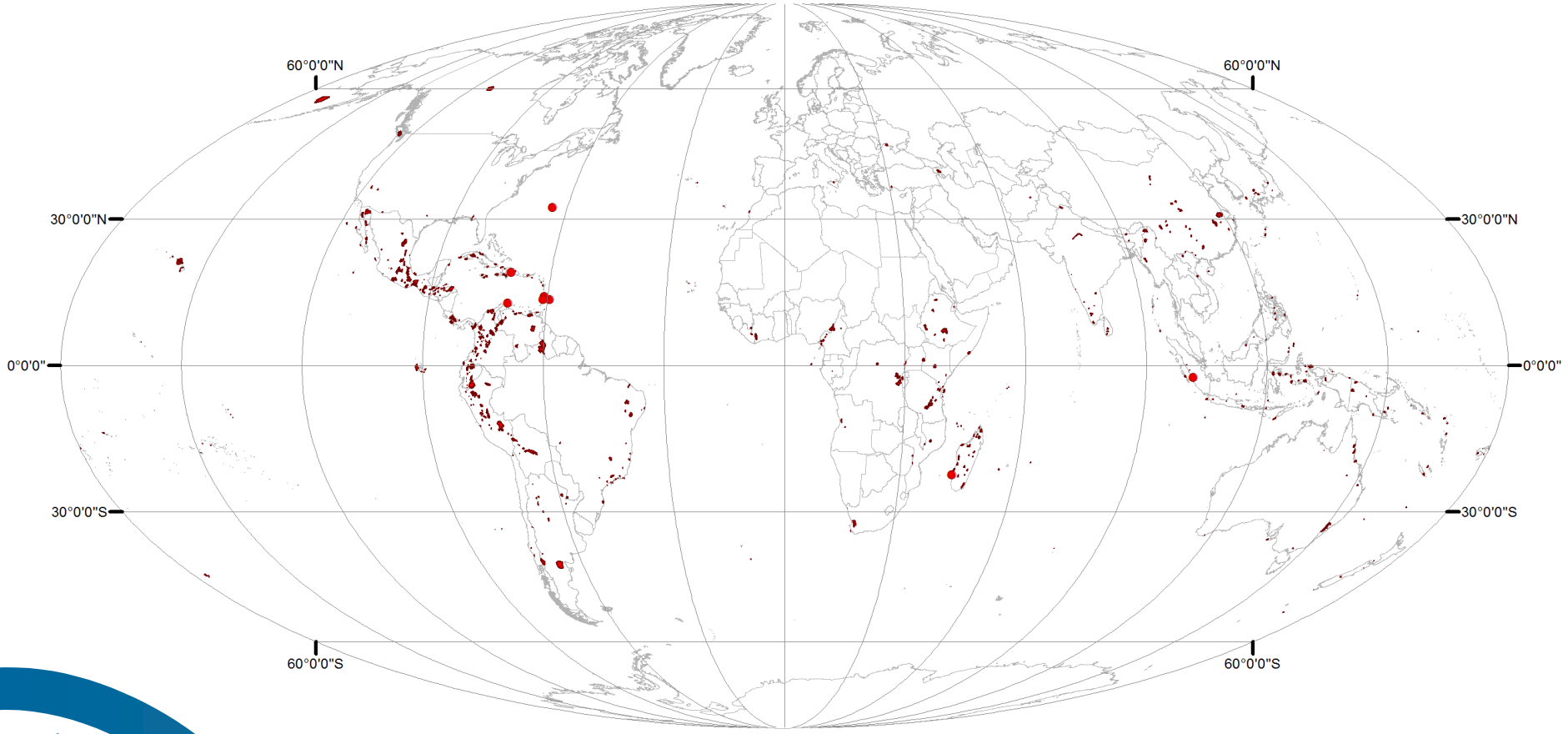
About | Methods | Policy Influence | Contributors | FAQs | Contacts



BirdLife INTERNATIONAL

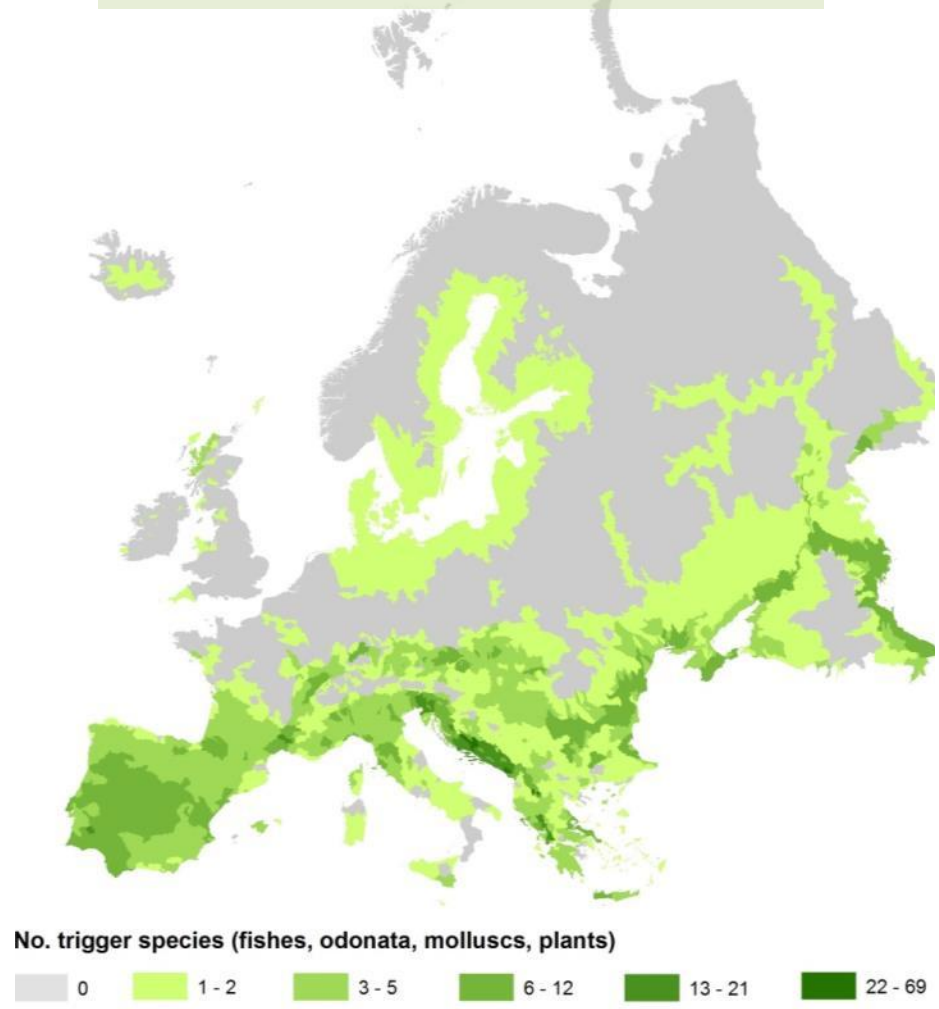
Partnership for nature and people

AZE sites

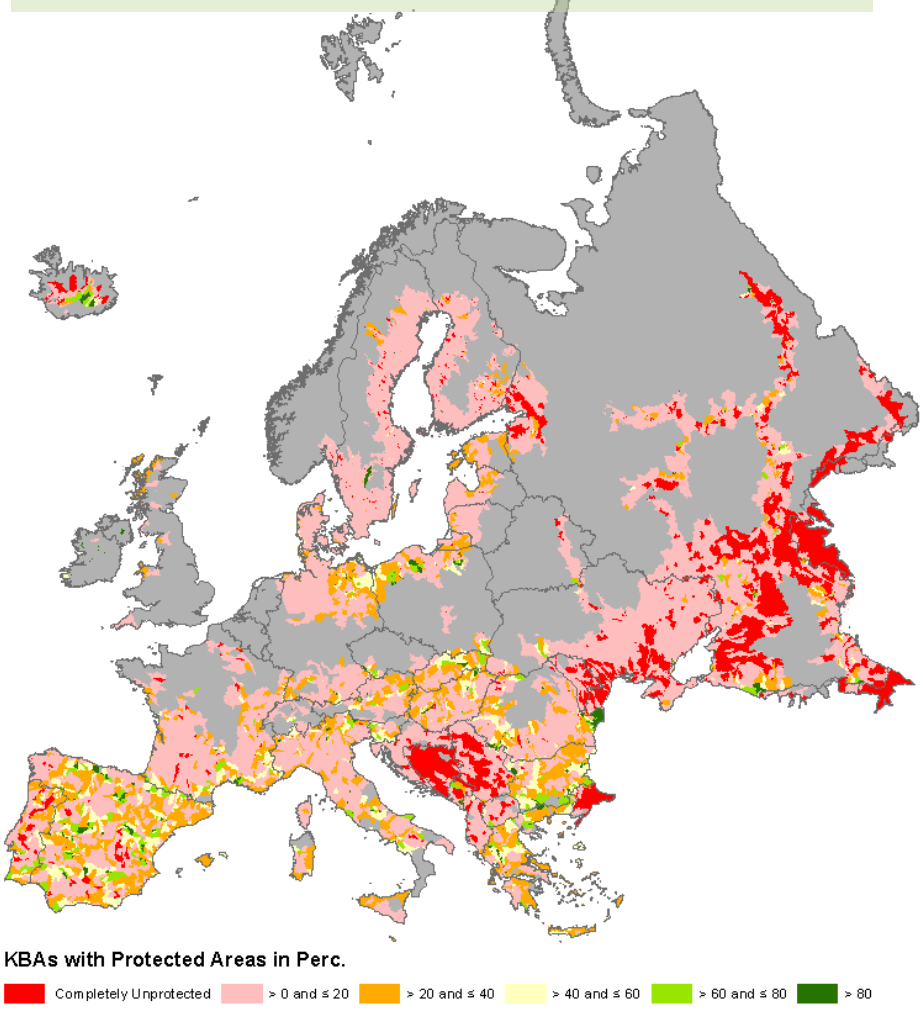


Freshwater KBAs – in progress

Locations of FW KBAs



Gaps in current protection



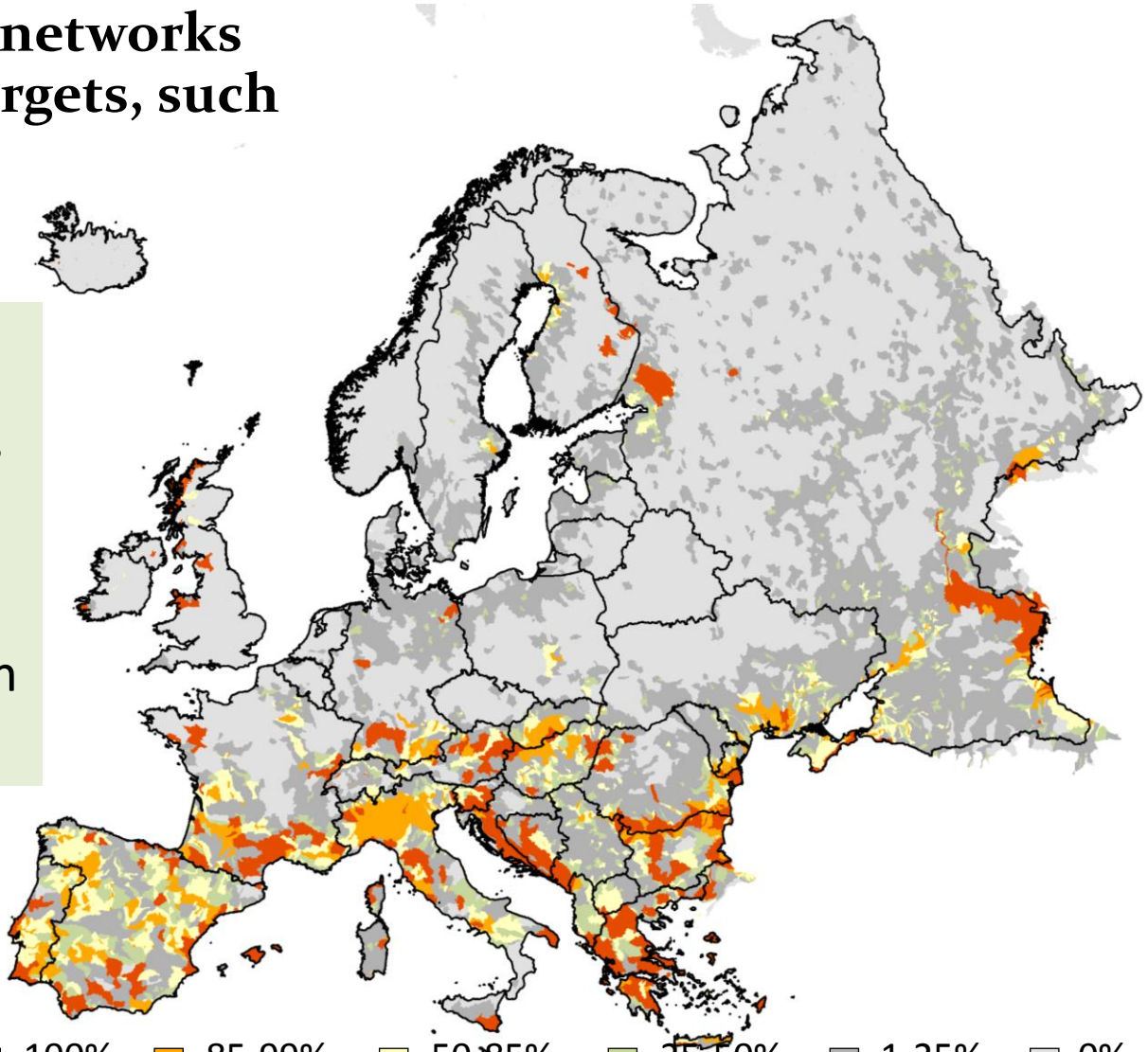
Freshwater KBAs

Create optimal KBA site networks meeting conservation targets, such as to:

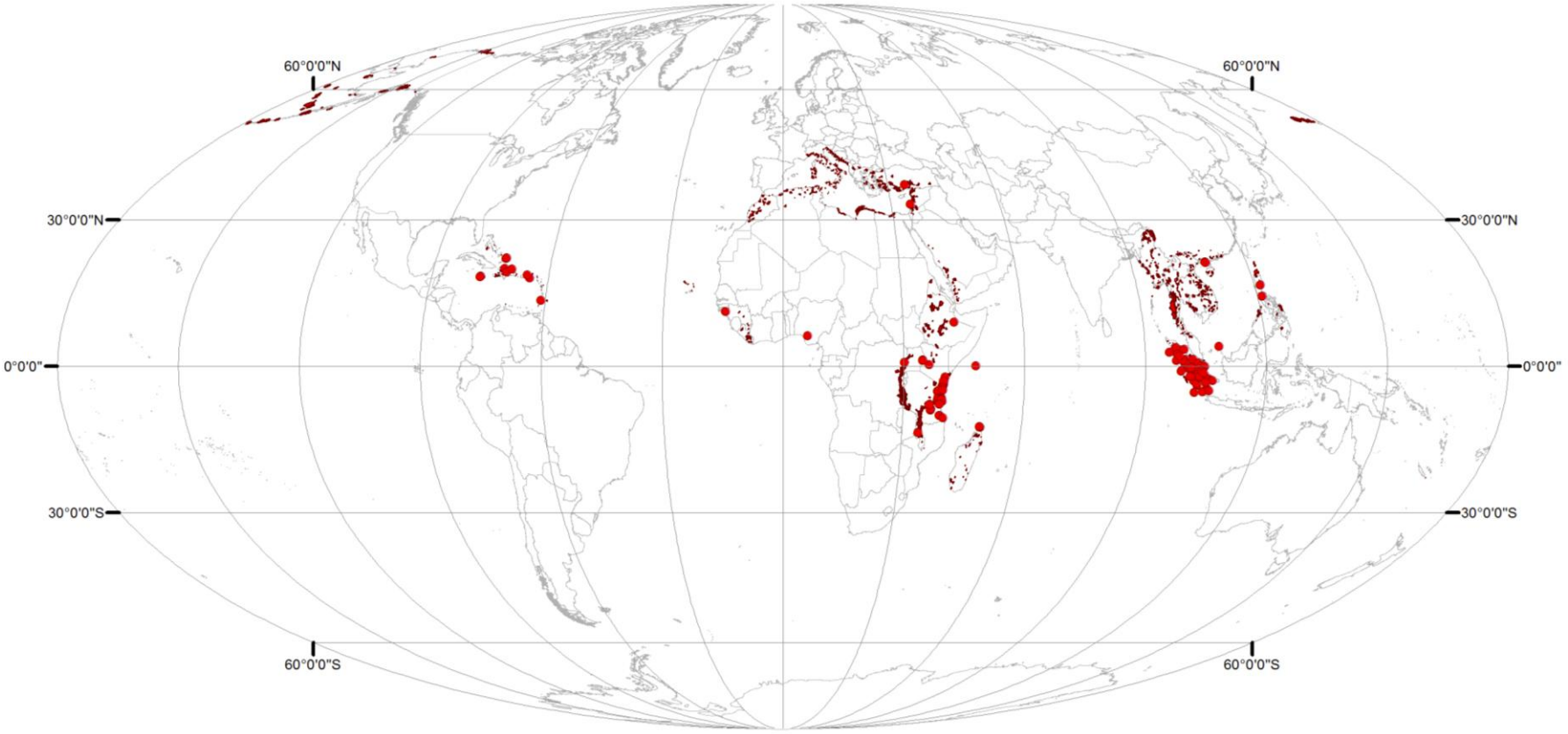
a) Minimise total area

b) Include all occurrences for CR species, 75% for EN, 50% for VU species

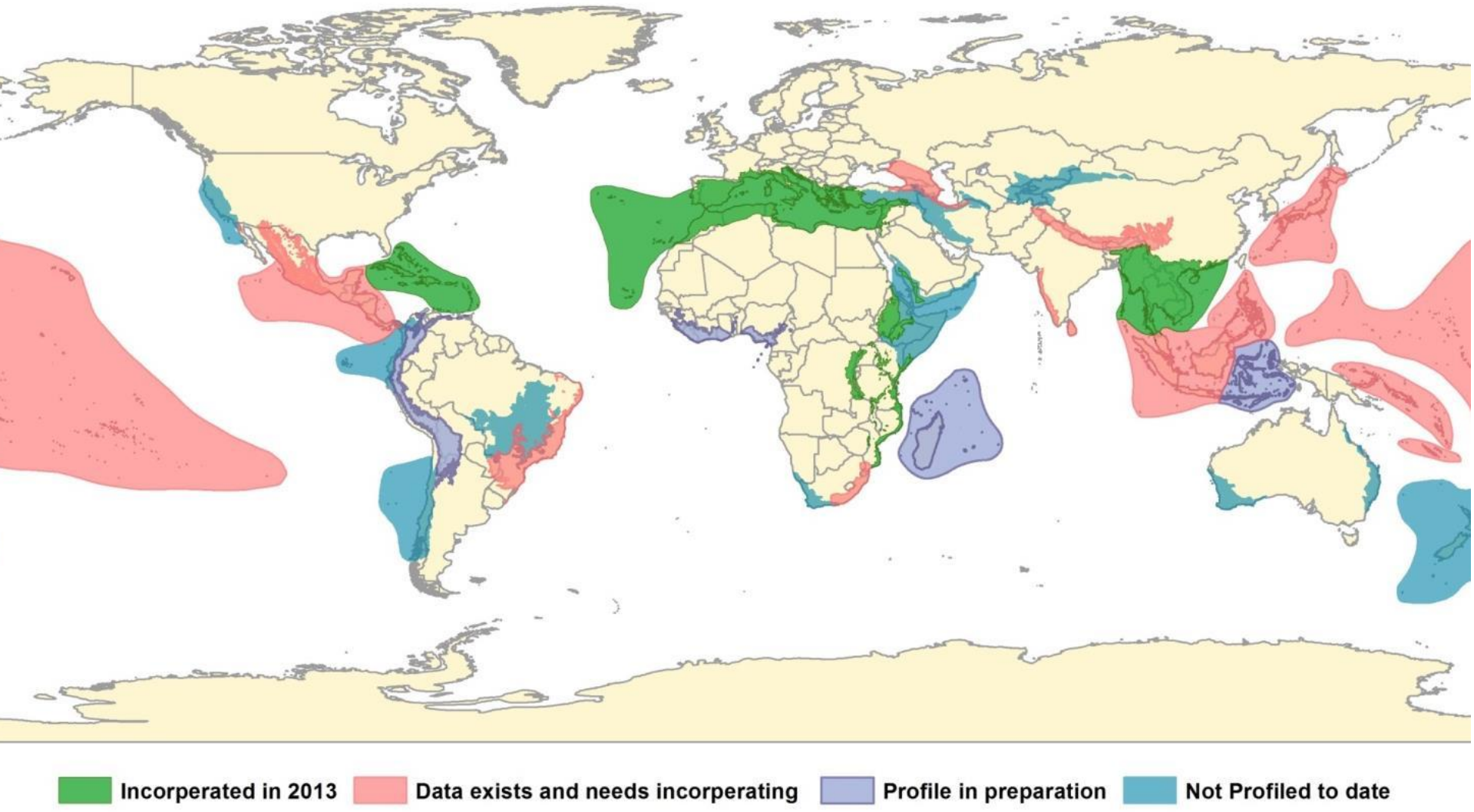
c) Include catchments rich in endemic species

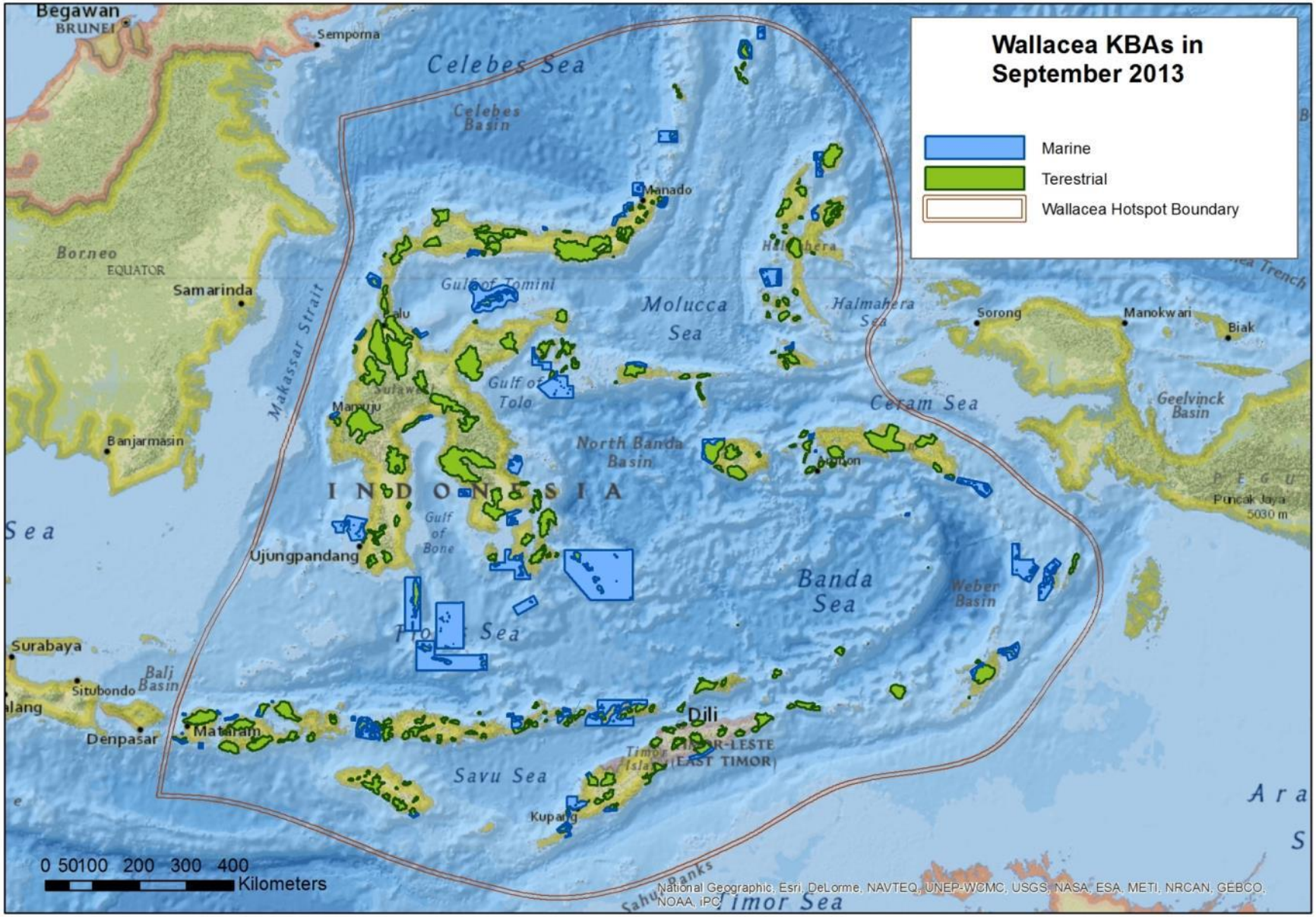


Other Key Biodiversity Areas



CEPF Hotspot Profiles – status





BirdLife INTERNATIONAL

Partnership for nature and people

IBA and KBA coverage to date

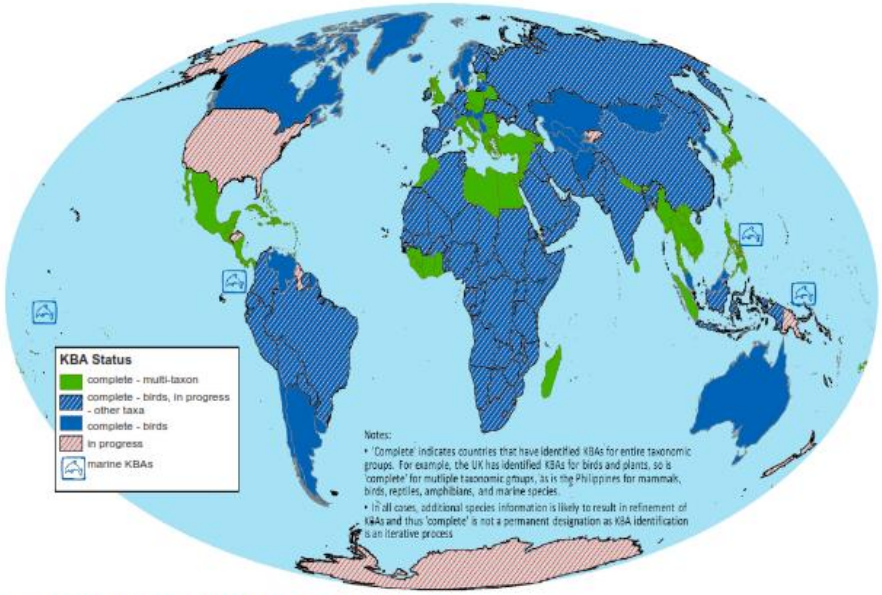
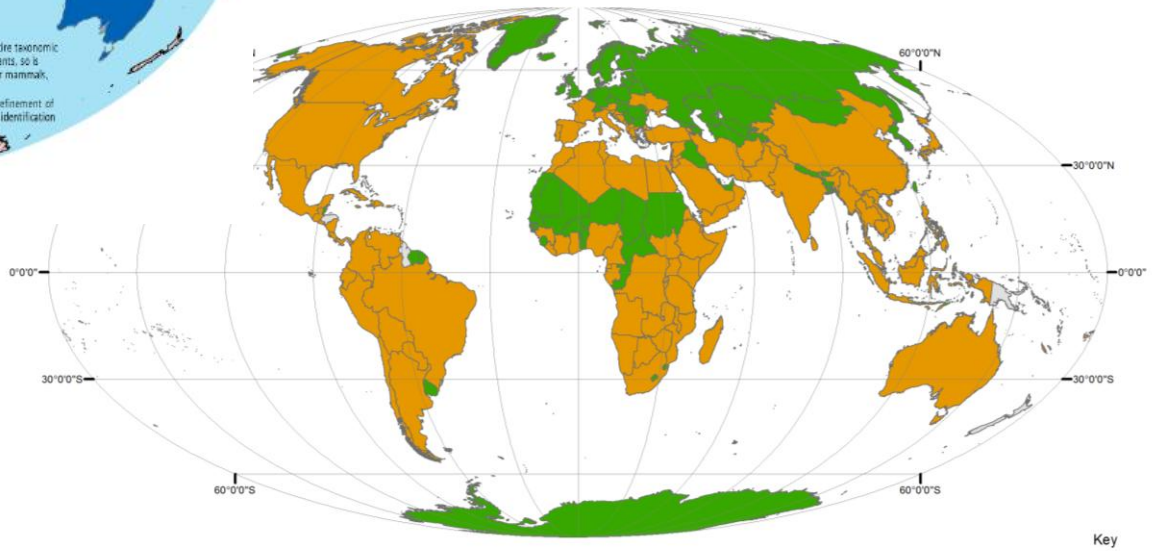


Image 1. Global Progress in Identifying Key Biodiversity Areas

Foster et al. 2012



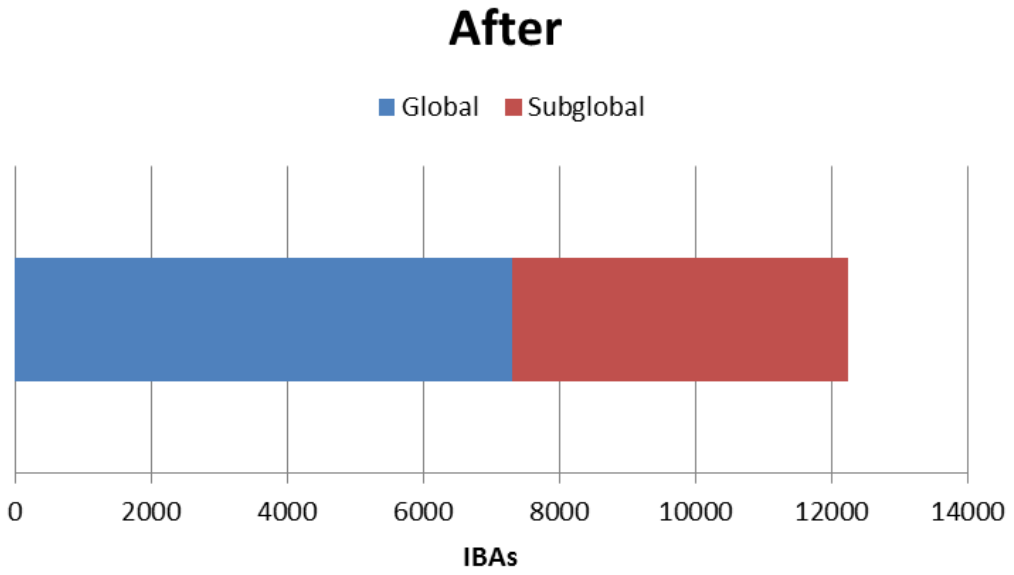
WBDB 2014

What happens to existing sites?

- Existing KBA network is the foundation for future work – must be built on
- Three existing datasets will retain identities: IBAs, AZE sites, IUCN Freshwater
- New sites will all be designated 'KBAs'
- Naming conventions and overlap rules to be developed – though congruence aimed for wherever possible

What happens to existing sites?

- New thresholds applied retrospectively — classify 'global' and 'sub-global' KBAs
- IBAs are already classed as global/regional
- ALL are internationally important sites for conservation
- ALL remain KBAs



Using existing site information

- IBAs are globally comprehensive and updated
- IBAs capture a large % of the wider KBA network – so are an excellent 'first cut' to work from, even if no other info is available

IBAs capture other biodiversity

- IBAs capture 80% of the area and 71% of the number of KBAs identified for other taxa (n = 12 countries)
- Global IBA network overlaps with distributions of 76% of 6,247 amphibian and 87% of 5,399 mammal species
- IBAs cover 86% of 825 terrestrial ecoregions and 84% of 232 marine ecoregions

IBAs capture other biodiversity

- 228 IBAs in Ethiopia, Kenya, Tanzania and Uganda captures 92-97% of the region's endemic mammals, snakes and amphibians
- Eastern Arc mountains and Coastal Forests hotspots of Kenya and Tanzania - IBA network includes 25/26 sites with ≥10 globally threatened species of mammal, bird, amphibian, gastropod or plant. All Critically Endangered species (19 non-birds) are in at least one IBA.

IBAs capture other biodiversity

- In Uganda, 13 forest IBAs hold 89% of 2,452 forest species of woody plants, birds, small mammals, butterflies and moths
- Uganda's 30 Important Bird Areas hold at least 82% of butterfly species of highest conservation priority and 86% of all dragonfly species
- At least 112 Important Bird Areas in Turkey (72% of the total, 93% by area) also hold internationally significant populations of plants, amphibians, reptiles, mammals, and/or freshwater fish

What next for KBAs?

- Standard to be launched November 2014 at World Parks Congress
- Next steps likely depend on IUCN leadership/co-ordination – resources key
- Ecosystem criteria – will take time before wide application – a global Red List of terrestrial, freshwater, marine and subterranean ecosystems expected in 2025
- Continued CEPF profiling, continued IUCN Freshwater Assessment

What next for KBAs?

- Important research question: which taxa **most efficiently complement** birds in identifying the full set of KBAs?
- Another research question: how well do marine IBAs capture wider ocean biodiversity?
- An applied question: how to interpret new KBA criteria for defining Critical Habitat?

In conclusion…

- Finalising standard important step in gaining wider recognition and endorsement of KBA approach
- Extensive KBA data already exist, including comprehensive IBA datasets for land and sea
- Existing data already include global and sub-global sites – will remain the case once new thresholds retrospectively applied
- Identification of new KBAs may be relatively slow and patchy to start
- Existing data provides excellent basis to inform decision-making – and will continue to be available through the IBAT

Proteus Partners Annual Meeting 2014

Hosted by BP at Jesus College, Cambridge 13th-14th May

UNEP-WCMC involvement in the World Parks Congress

Naomi Kingston
Head of Protected Areas, UNEP-WCMC

UNEP WCMC

proteus

IUCN World Parks Congress

Sydney 2014

Parks, people, planet: inspiring solutions

www.worldparkscongress.org

12-19 November 2014

Sydney, Australia

UNEP WCMC

What is the World Parks Congress?

- Convened by IUCN
- Brings together Protected Area Specialists from around the world
- Set the agenda for the next 10 years
- Influence and track perspectives in conservation and sustainable development
- Reveal paradigm shifts in thinking, policy and action

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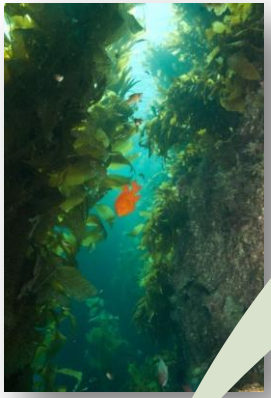
Tracking Ideas Through Time

Constant Themes:

- Ecosystem coverage
- Standards & definitions
- Threats, pressures & global change

Natural Resource Management Areas

Strict Exclusion Zones



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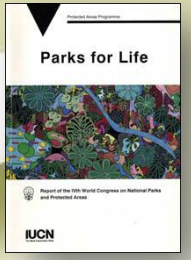
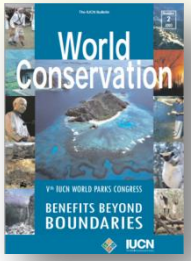
Protected Area Specialists
Governments
Policy Makers
Business
Community

UNEP WCMC





Seattle, USA
1962

Yellowstone, USA
1972

Caracas, Venezuela
1992

Bali, Indonesia
1982

Sydney Australia
2014

Durban, South Africa
2003

IUCN
WORLD PARKS
CONGRESS
SYDNEY 2014

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Fifth WPC Durban South Africa 2003

The Convention on Biological Diversity Programme of work on Protected Areas based on the Durban Action Plan

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Fifth WPC Durban South Africa 2003

President of Madagascar committed to protect 10% of Madagascar.

Protected area coverage has grown in Madagascar

2.6% in 2000 ➔ 8.3% in 2013

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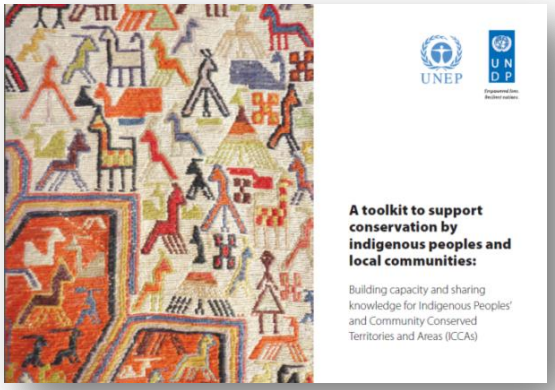
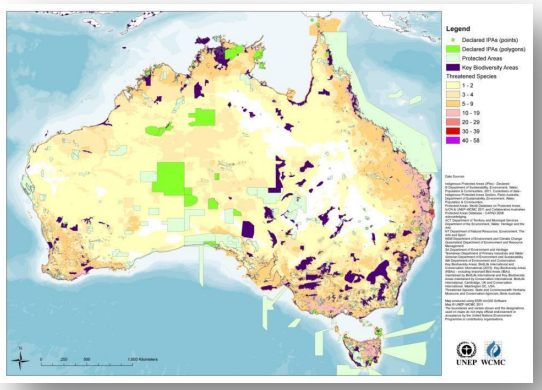
Fifth WPC Durban South Africa 2003

Increased recognition of community involvement in Park management.

Durban WPC precipitated policy on Indigenous & Community Conserved Areas (ICCA)





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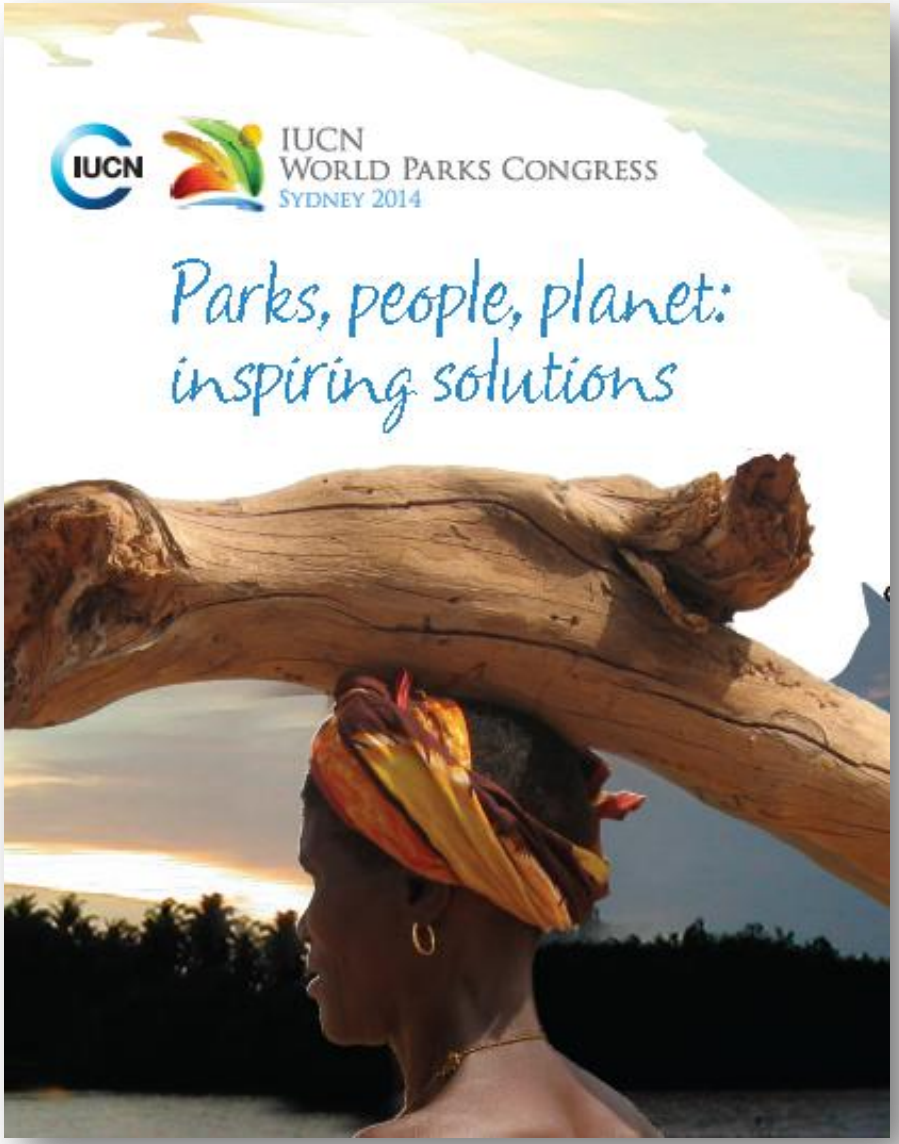
Sydney, Australia
12-19 November 2014

Protect the foundation of life and **enable nature-based solutions to profound challenges** facing the planet and inspire hope for the future.



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Catalyzing transformational change

Find better and fairer ways to conserve natural and cultural diversity, involving governments, businesses and citizens in establishing and managing **parks**;

Inspire **people** around the world and across generations to reconnect with nature;

Demonstrate nature's solutions to our **planet**'s challenges such as climate change, health, food and water security.

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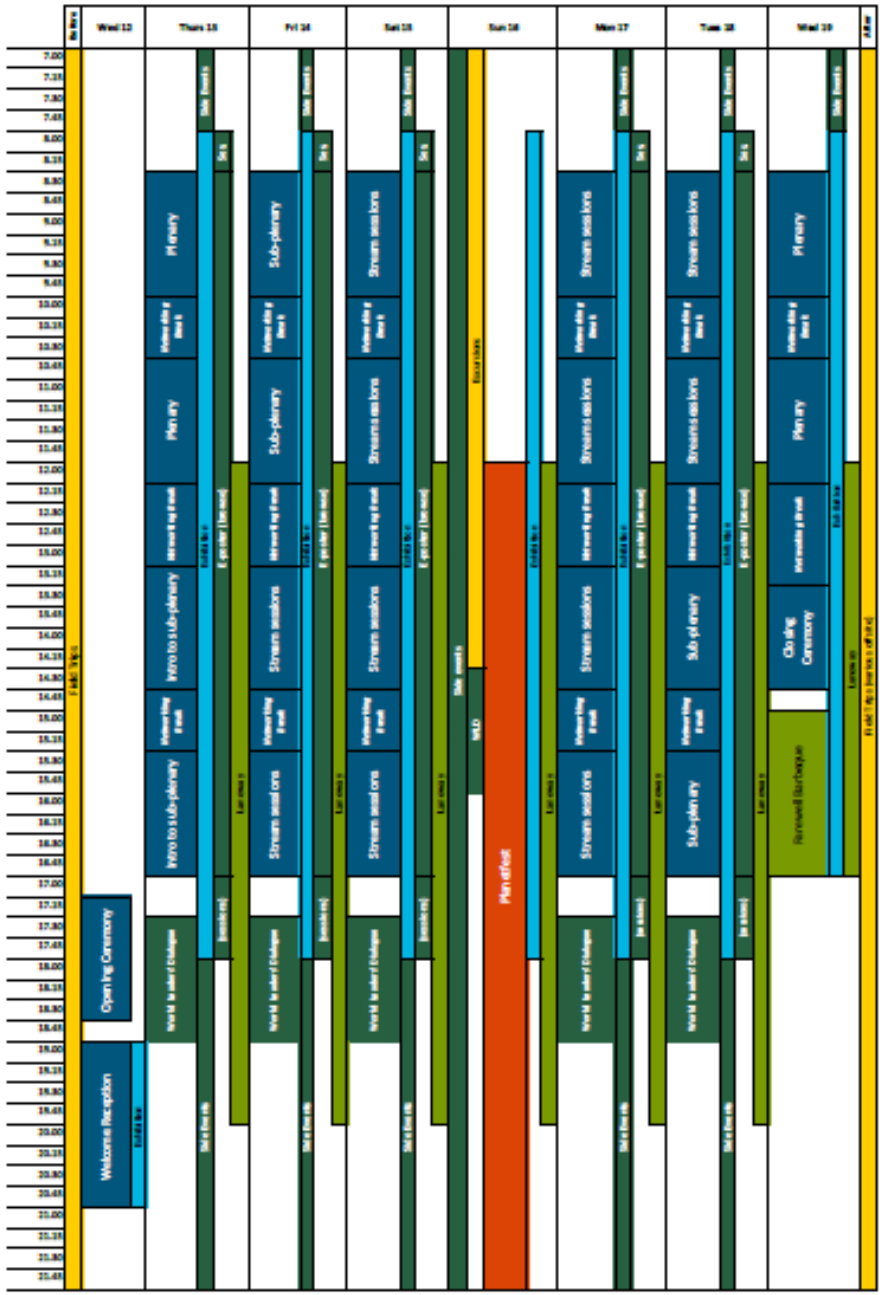
Schedule

- Opening & closing ceremony
- Plenary & sub-plenary
- 8 Streams (each with 3 concurrent sessions)
- High level dialogues
- Open-day
- Exhibition space
- Pavilion events
- The Laneway street market
- Pacific village
- Side-events



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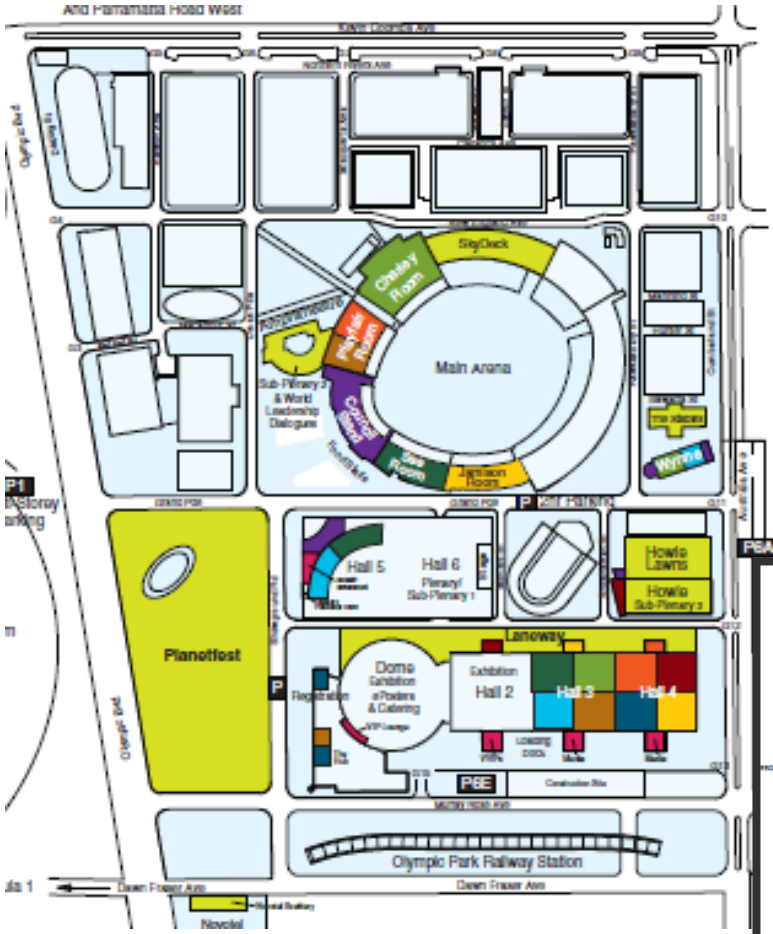
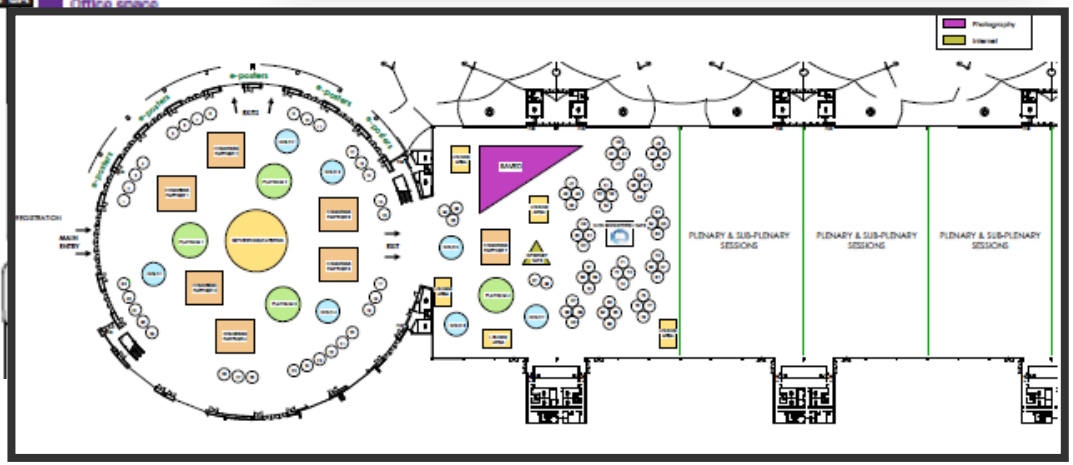
Sydney Olympic Park





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World Leaders' Dialogues

- High level panels on:
  - Global consumption
  - Food security and global hunger
  - Sustainable financing
  - Resilience
  - Social equity
  - Wildlife crime and illegal trade

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Eight Streams

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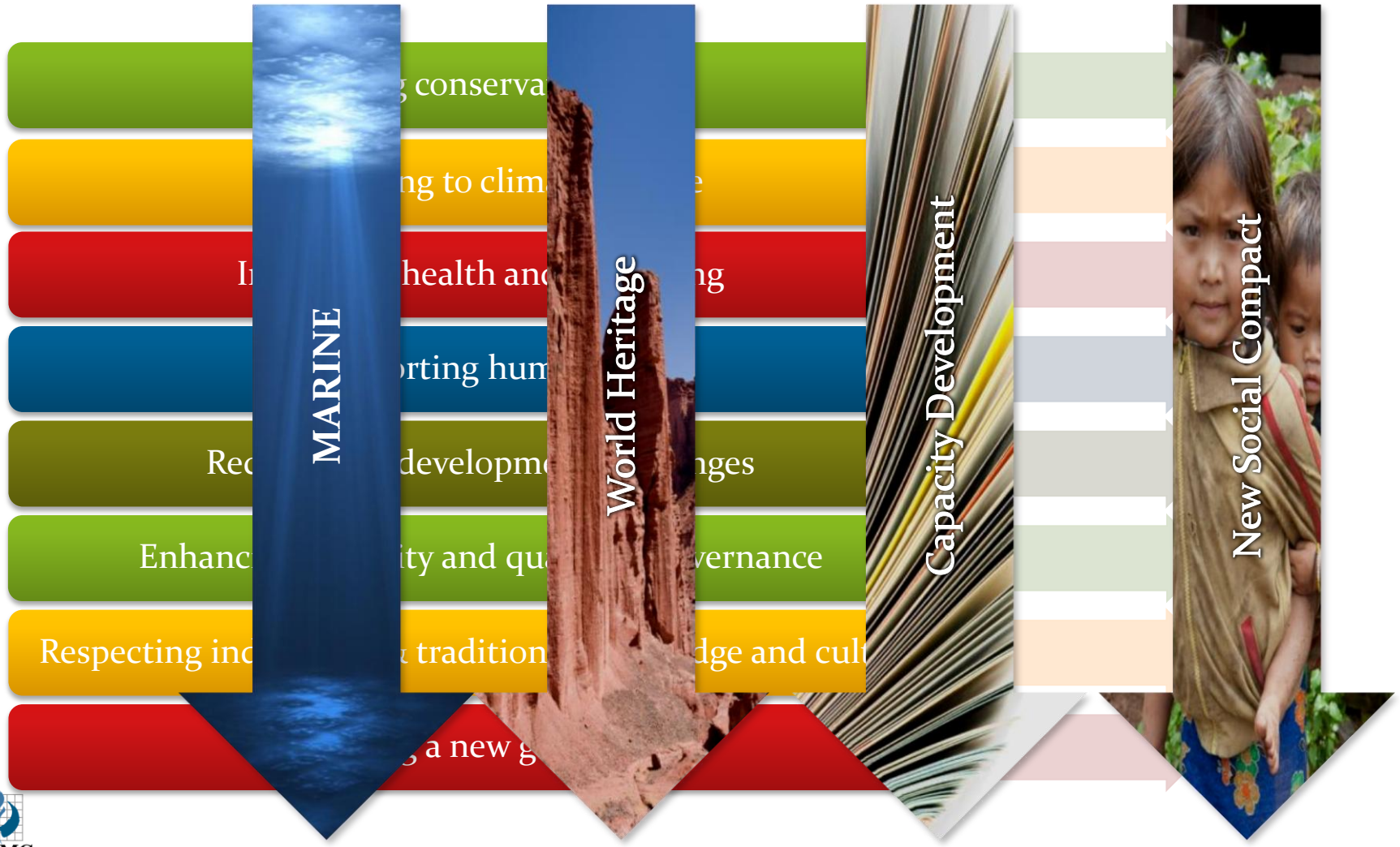
Four Cross Cutting Themes



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Stream 1: Reaching Conservation Goals

- Global progress towards achieving **Aichi target 11**
- First global discussion on moving beyond the Aichi targets to true sustainability
- Agenda for improving protected areas as key tools to halting biodiversity loss

By 2020, at least **17 per cent of terrestrial and inland water** areas, and **10 per cent of coastal and marine** areas, especially

areas of particular importance for biodiversity and ecosystem services, are conserved through

effectively and equitably managed,

ecologically representative and well connected systems of protected areas and

other effective area-based conservation measures, and

integrated into the wider landscapes and seascapes.

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Stream 5: Reconciling Development Challenges

- Protected areas can contribute to addressing the development challenges of the 21st Century
- Integration of protected areas and conservation into development policy and planning
- Trade-offs for sustainable development decisions and business practices
- Sustainable sourcing and supply chains for a wide range of businesses

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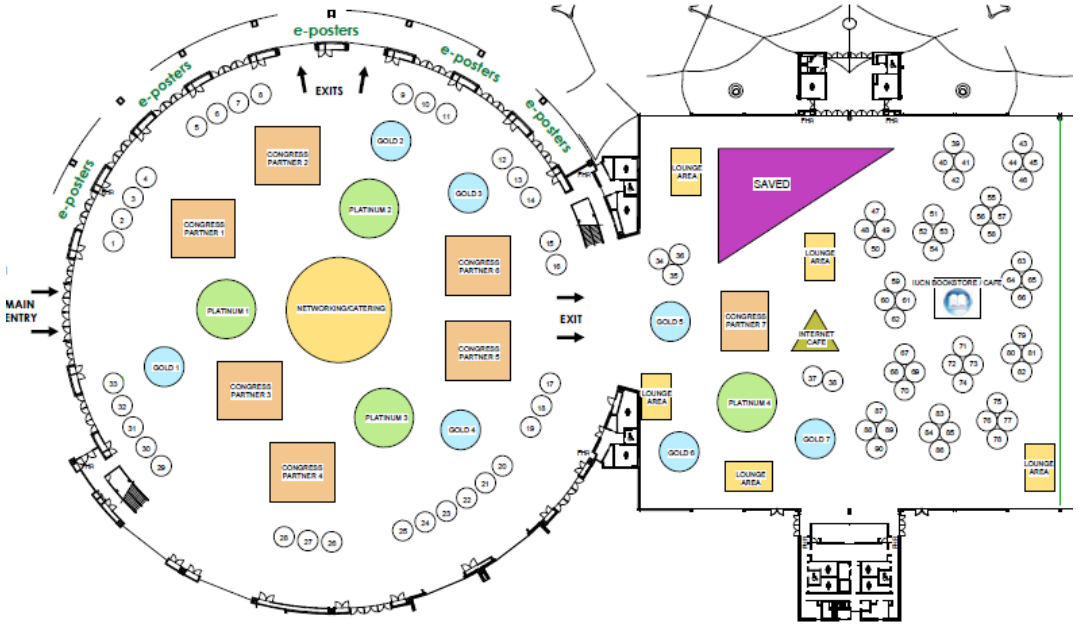
Exhibition space with 6 Pavilions

- Protected Plant
- Marine
- Business Solutions
- Conservation Finance
- Nature Based Solutions
- Communities Dialogue



KEY:

Pavilions (6) (brown rectangles) – 100m²

Platinum stands (4) (in green) - 80m²

Gold stands (7) (in blue) - 36m²

Booths (90) (small circles) - 9m²

Internet Café (1) (olive green)

Photo Exhibition (1) (violet triangle)

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"The Promise of Sydney"

- Transformative solutions at the level of policy, engagement and practice for **parks**, **people** and **planet**
- A web-based resource of case studies embedded in communities of practice
- A capacity-development plan of action that supports professionalism for protected areas
- Principles for a new social compact for effective and just conservation;
- Leadership initiatives, pledges, partnerships and announcements for implementation.

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UNEP-WCMC involvement

- Co-leading Stream 1: Reaching Conservation Goals
- Presentations across all Streams & cross-cutting themes
- Protected Planet Pavilion
- Input to "The Promise of Sydney"
- Participation in precursor meetings
  - *IMPAC3*
  - *Asia Parks Congress*
  - *MesoAmerican Parks Congress*
  - *Pacific Congress on Nature Conservation and Protected Areas*
  - *SADC High Level Dialogue on PA Governance*

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Protected Planet Pavilion

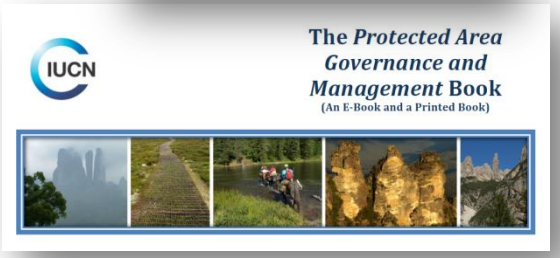
110 m²

3 main spaces:

- Stage area
- Demonstration area
- Poster & display area

Full agenda for 7 days

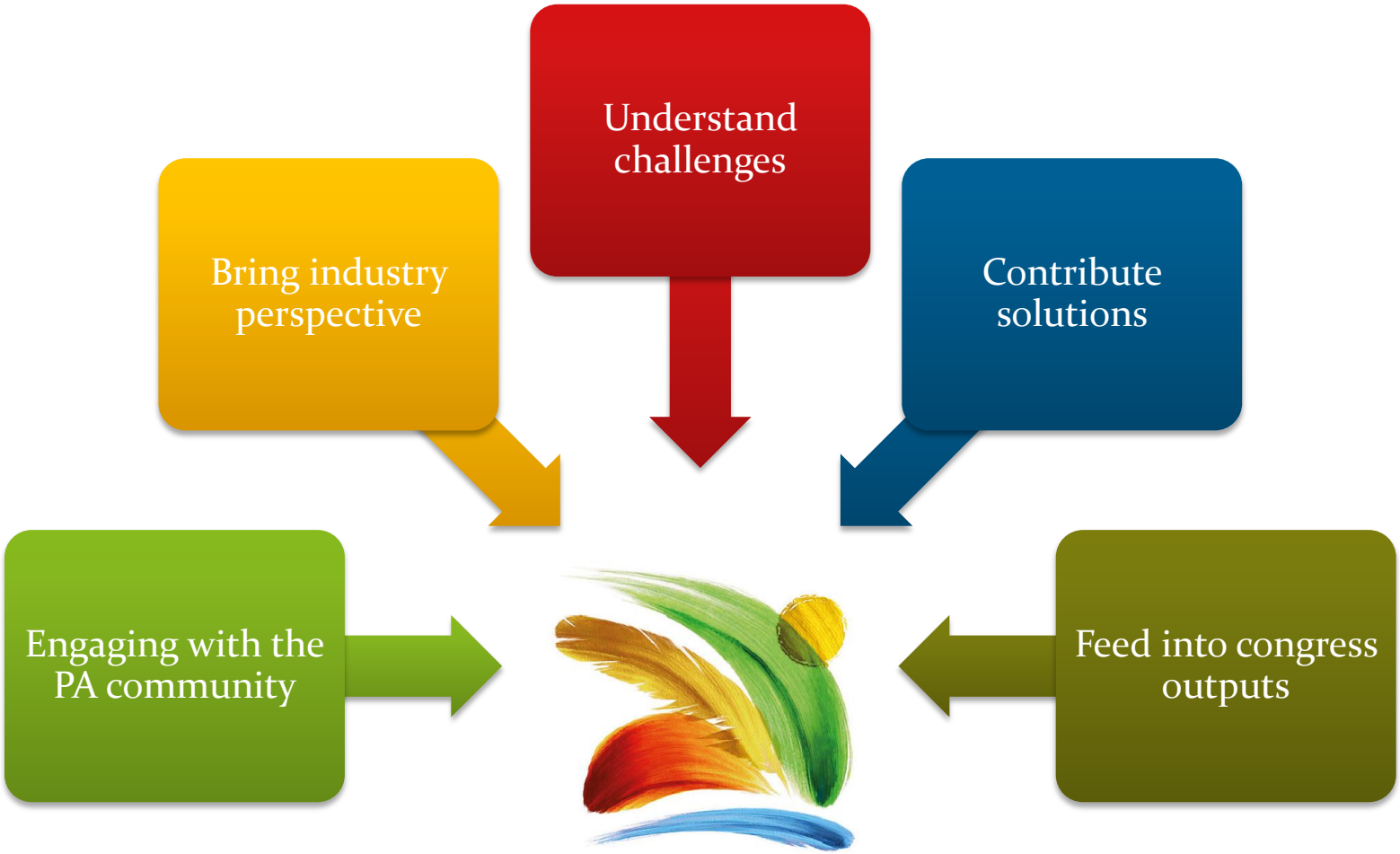
Protected Planet Pavilion



High Profile Events:

- Protected Planet Report 2014 launch
- New look Protected Planet website
- Red List 50th Birthday Party
- e-Book on Protected Areas Management
- Ranger celebration & award ceremony
- NASA Hyperwall
- Data visualisation clinics
- *Proteus evening*

Proteus engagement



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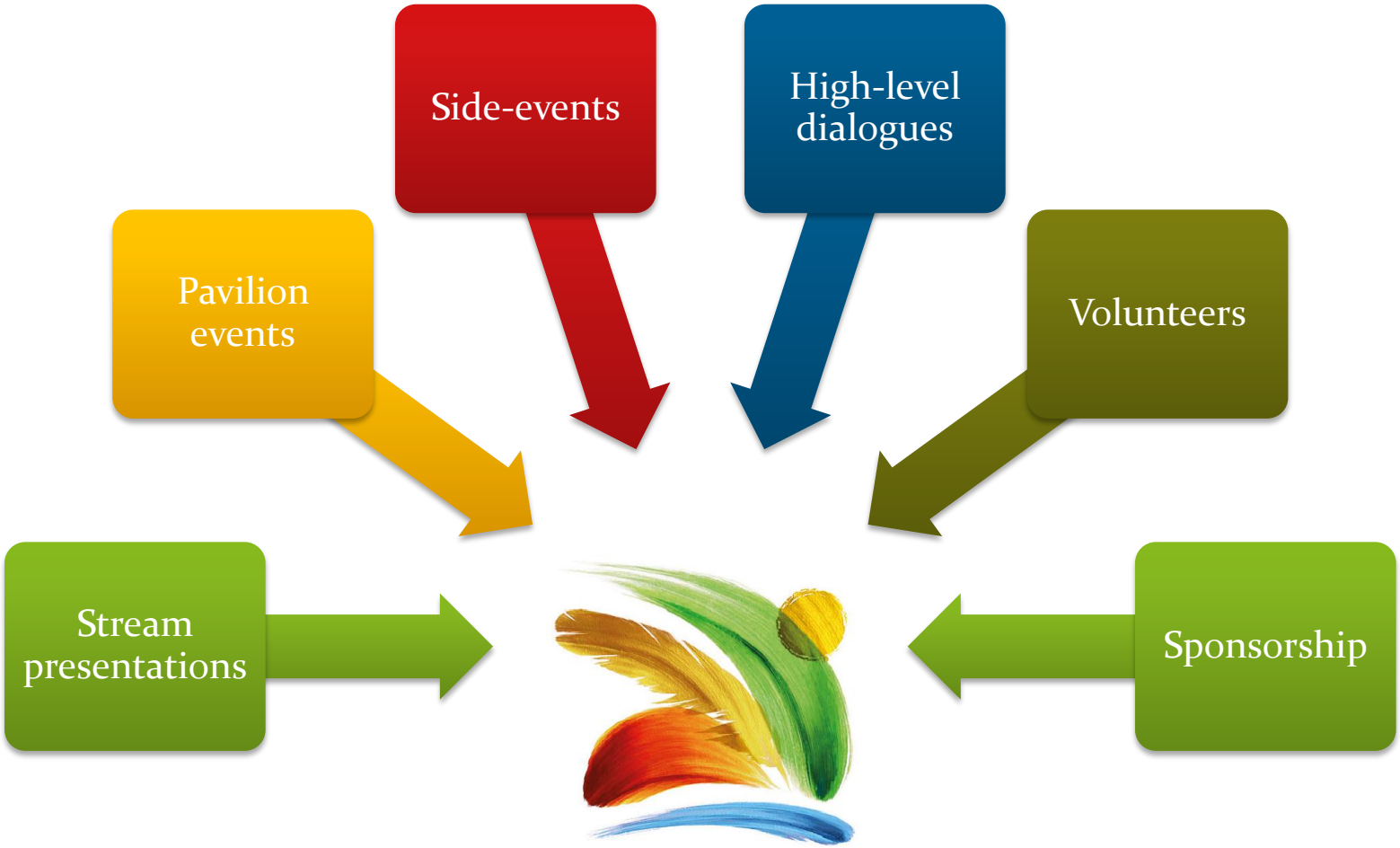
Proteus participation



Important dates

	May	June	July	Aug.	Sept.	Oct.	Nov.
Stream agenda's finalised							
Presenters notified							
Side event registration							
Early bird registration closes							
Pavilion agenda's finalised							
Travel to Sydney							

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Thank you!

naomi.kingston@unep-wcmc.org

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Proteus Partners Annual Meeting 2014

Hosted by BP at Jesus College, Cambridge 13th-14th May