

# Beyond Aichi – space for nature

## Summary from block 1

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LIVING CONSERVATION



IUCN  
WORLD PARKS CONGRESS  
SYDNEY 2014

# How much should be protected?



## HOW MUCH OF THE WORLD'S LAND SHOULD BE PROTECTED?

WORLD'S LANDMASS

OPINION – % OF LAND IDEALLY PROTECTED

50%

17%

TRUTH – % OF LAND CURRENTLY PROTECTED

15%

TARGET – % OF LAND PROTECTED BY 2020

## HOW MUCH OF THE WORLD'S OCEANS SHOULD BE PROTECTED?

WORLD'S OCEANS

OPINION – % OF OCEAN IDEALLY PROTECTED

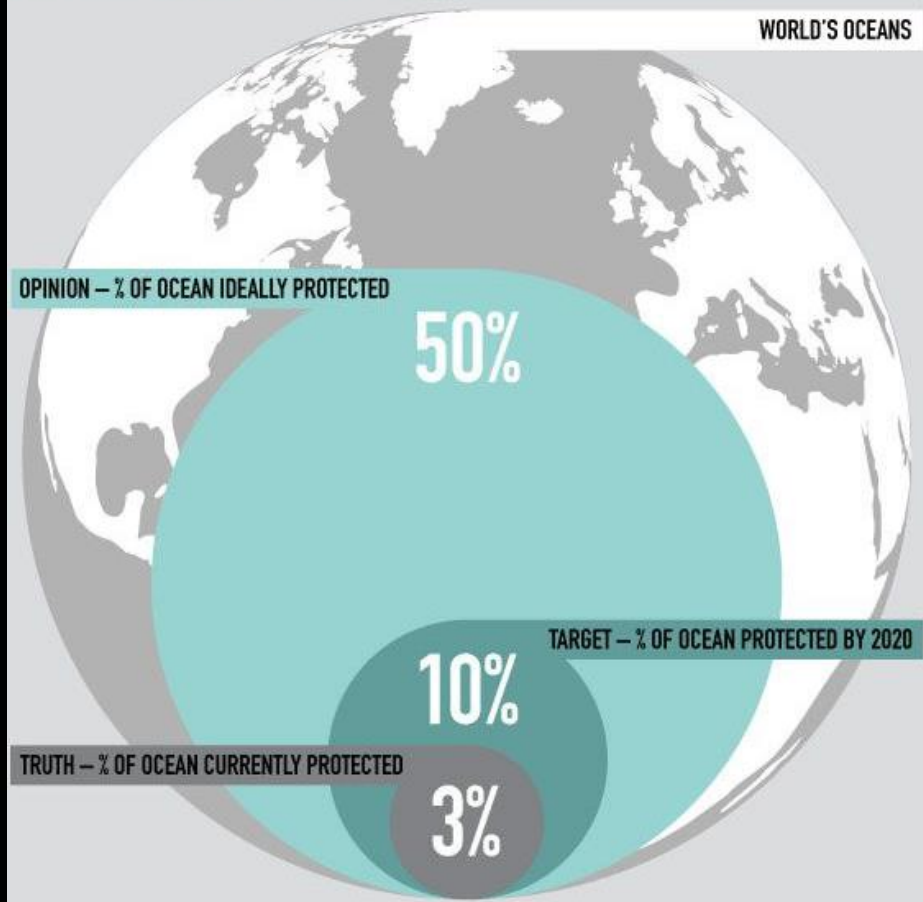
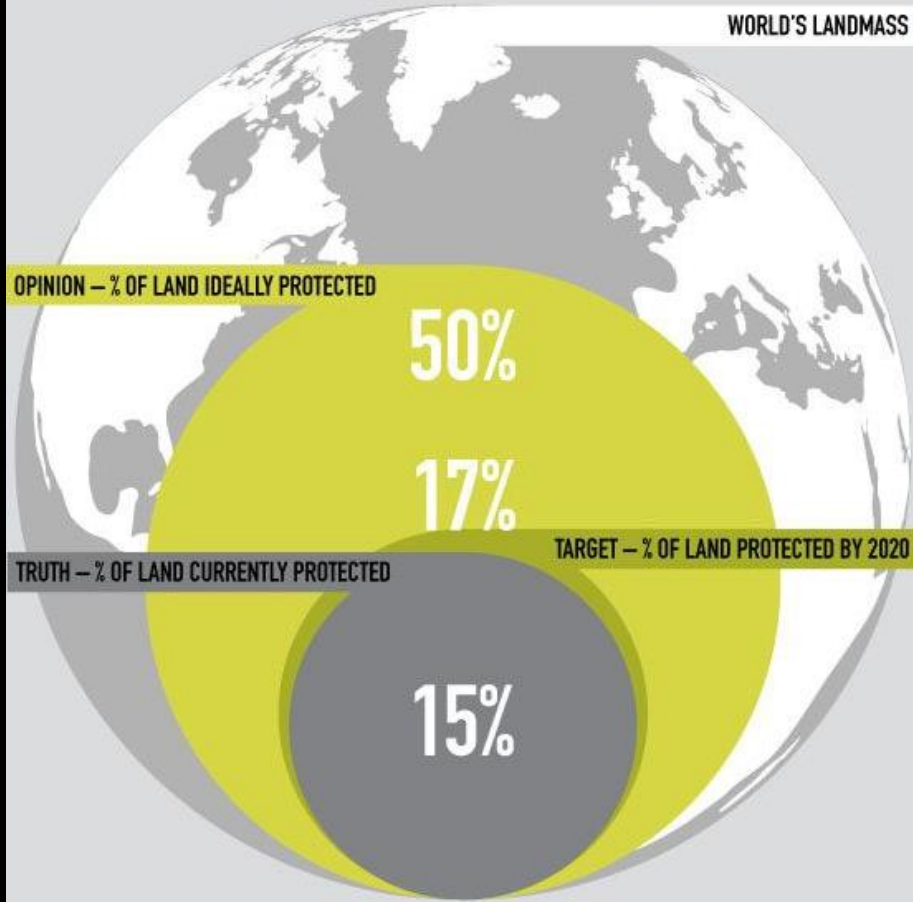
50%

10%

TRUTH – % OF OCEAN CURRENTLY PROTECTED

3%

TARGET – % OF OCEAN PROTECTED BY 2020



- To explore, in an interactive and participatory fashion, three dimensions of the question, ‘What space should we protect for nature post-2020?’:
  - Public opinion – how much space do people feel should be allocated to nature, and why?
  - Scientific advice – how much space do we need to protect, and where, to conserve the existence and utilitarian values and benefits that nature provides?
  - Political targets – what does this mean for informing the design and uptake of new targets for protected areas beyond 2020?

# Summary of block 1

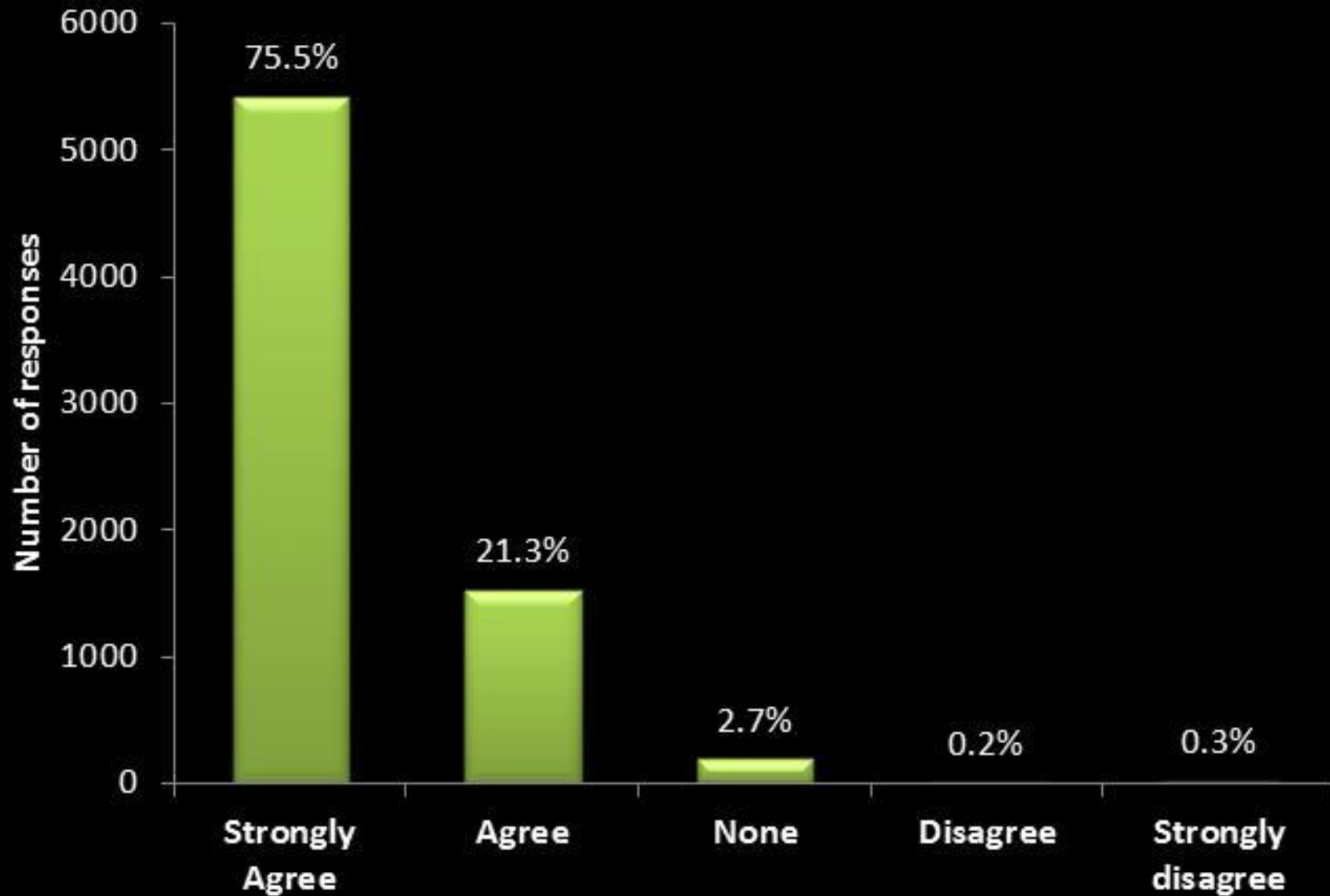


- CBD's Aichi Target 11: to protect at least 17% of the world's terrestrial and inland water areas and 10% of its coastal and marine areas by 2020
- Target largely agreed through a political process, but little consultation with public on what areas we should protect for nature, and why
- ZSL presented results of a survey asking people around the world – for the first time – their opinion regarding the space we set aside for nature
- Key experts then reviewed the latest science, and explored scenarios based on protection of biodiversity, cultural, and global and local ecosystem services values



- Short online questionnaire (21 questions) targeting a randomised, national-level cross-section of society
- 7 developed and developing countries (Australia, UK, USA, Brazil, China, India and South Africa) – all inhabited continents
- A total of 7189 questionnaires completed (~1000/country)
- Country samples considered representative of national population (in terms of age structure, gender, etc.)
- Further responses collected via an open global online call disseminated directly by ZSL and partners, but not included here

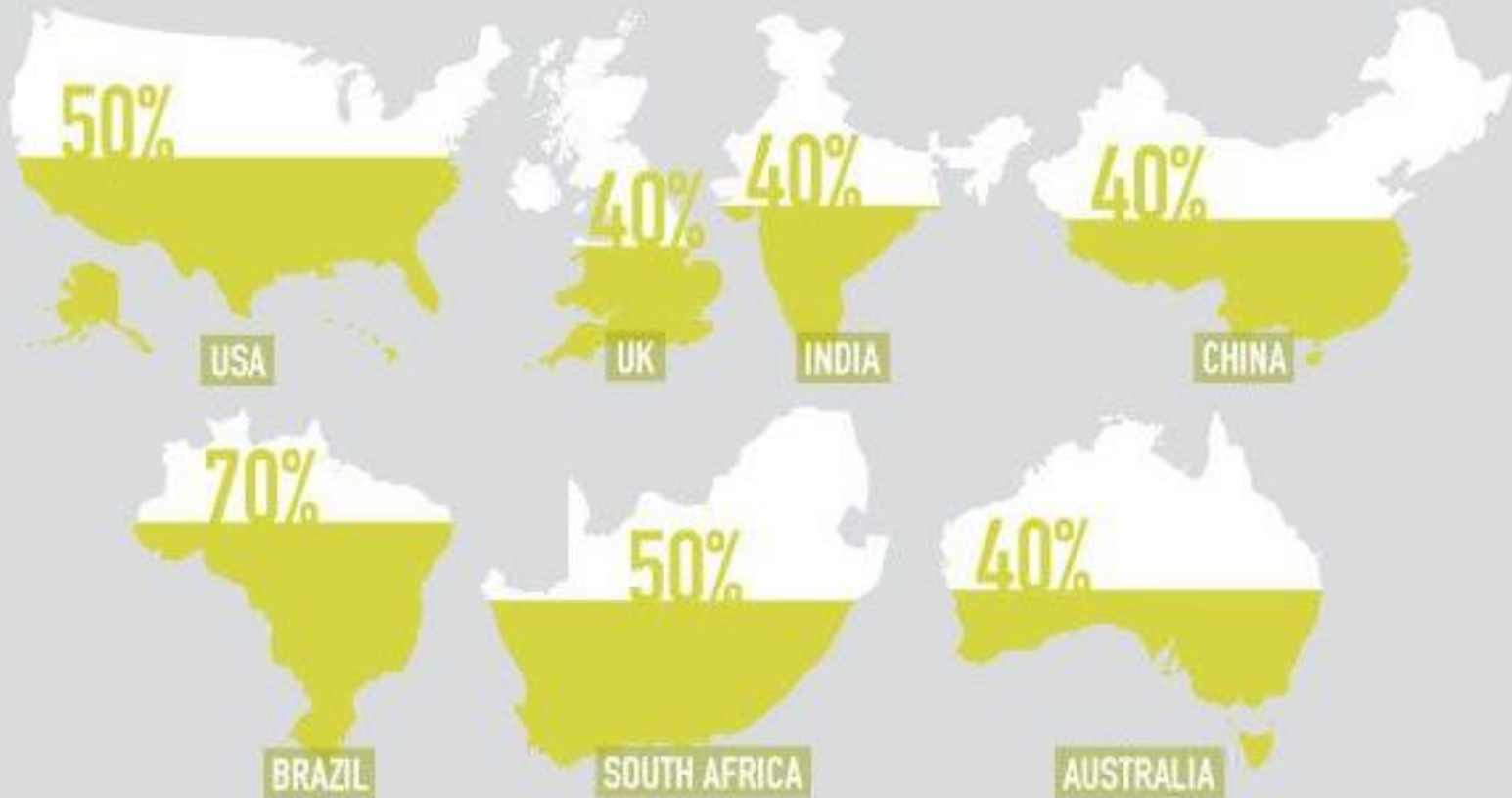
# Are protected areas necessary?



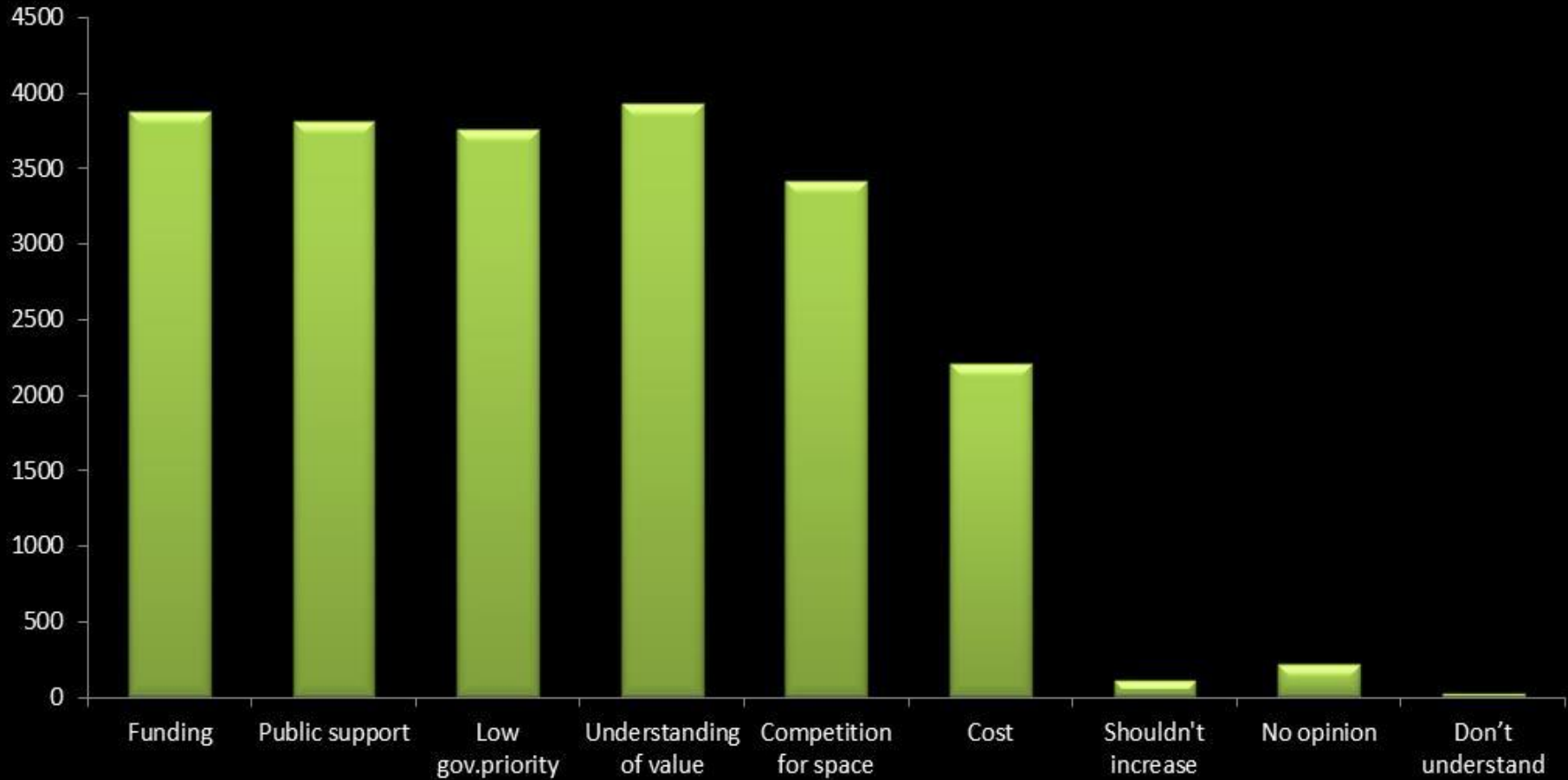
# How much should be protected?



## OPINION – % OF LAND IDEALLY PROTECTED

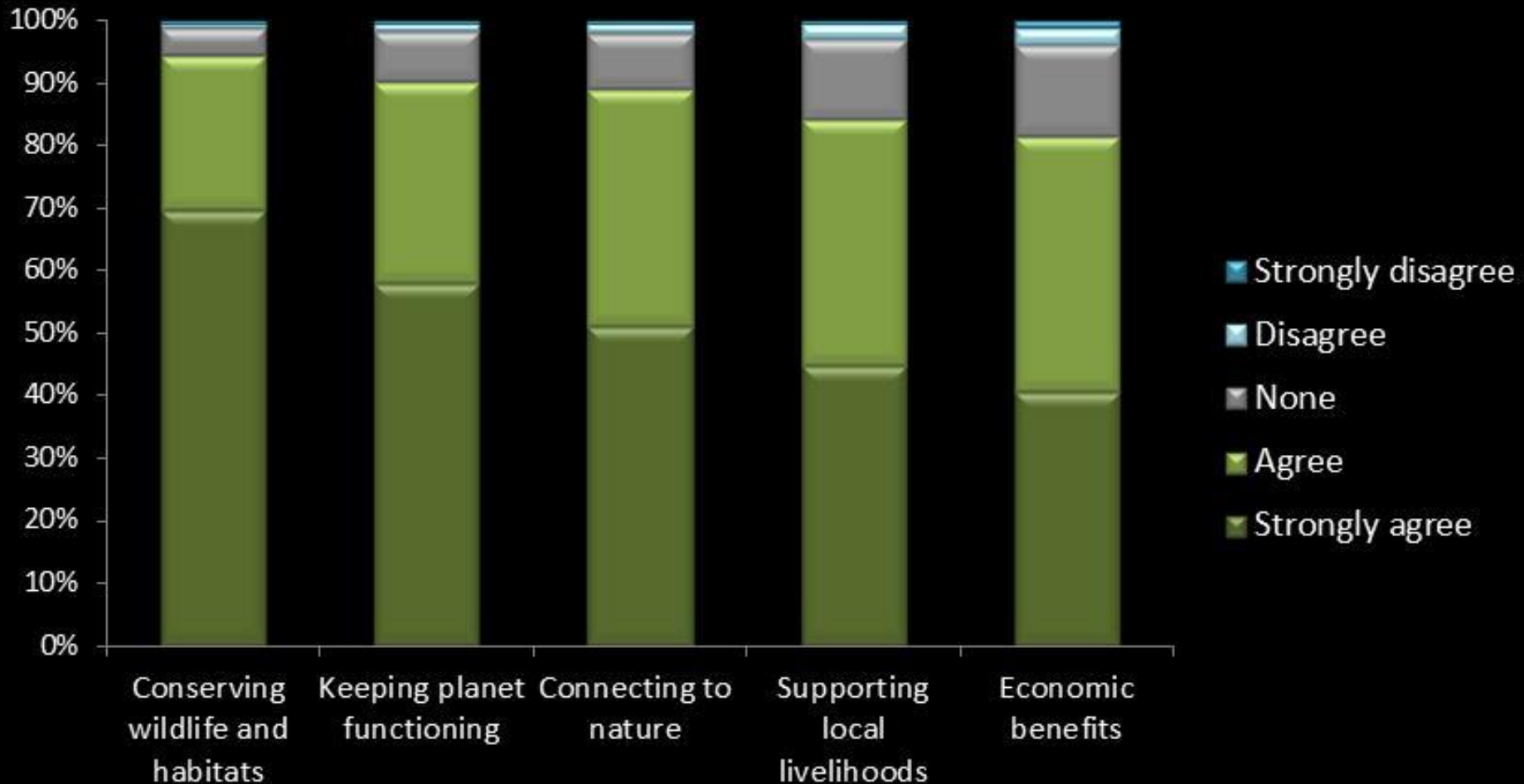


# Perceived barriers to increasing target





# Why are protected areas necessary?



# Survey summary



- People want 50% of land and ocean protected – considerably more than current targets of 17% and 10%
- People want slightly more ocean protected than land
- People want more of the planet protected than their own country
- People assume much more (30% for both land and sea) is already protected
- Females, younger people and those working outdoors >20 hours a week want more area protected
- People think PAs are most important for conservation of wildlife and habitats

- Future scenarios for our global PA network, matched with terrestrial and marine case studies:
  - Biodiversity
  - Global ecosystem services
  - Local livelihoods
  - Cultural values
- Modelling biodiversity and ecosystem services scenarios (current, 17% target and 50% desired) at global scale using Co\$ting Nature...

## What the 2014 PA estate protects

The co-location of richness and ecosystem service provision by protected area. Mulligan *et al.* KCL/UNEP-WCMC, using Co\$ting Nature

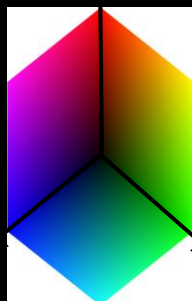
Endemism

Richness

ES Richness



ES



Endemism

## On a global scale:

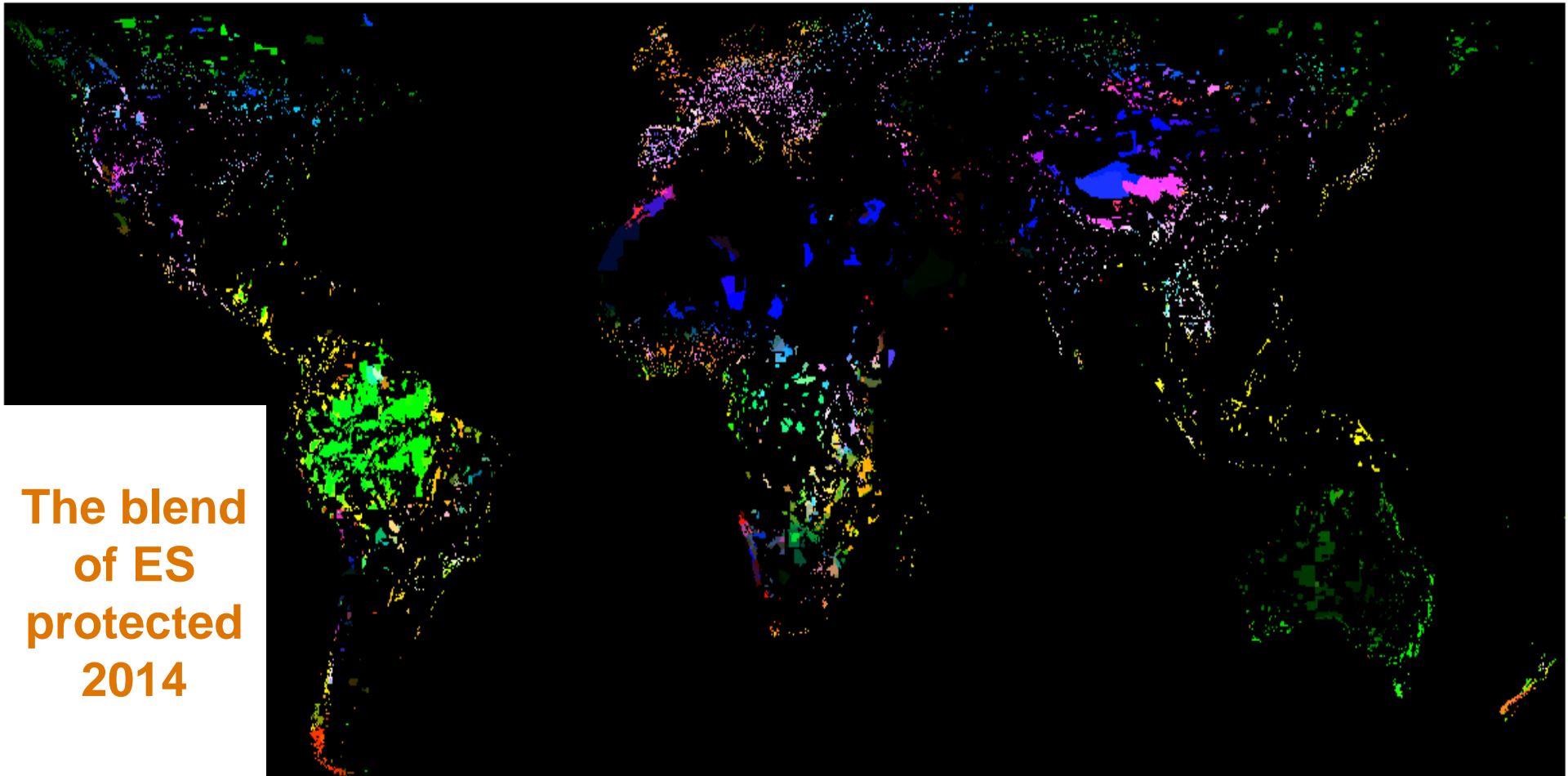
Green = endemism highest

Blue = ES highest

Red = richness highest

Yellow = richness and

endemism highest



**The blend  
of ES  
protected  
2014**

The blend of ecosystem services provided by protected areas. Mumigan *et al.*  
KCL/UNEP-WCMC, using Co\$ting Nature

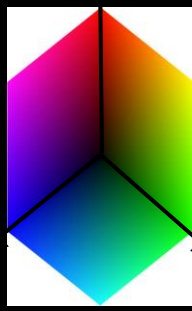
Hazard Mitigation

Hazard Mitigation

Water



Carbon



Water

Carbon

**On a global scale:**

Green=carbon highest

Blue = water highest

Red = hazard mit. highest

Yellow = hazard mit & carbon highest

Orange =

HM highest, water



# What we have secured to date, continentally



Around 16% of area currently secures 15% richness, 18% endemism, 21% tree cover, 21% carbon stock but only 15% realised water and 15% HM services

Some services captured better than others

Continent	Area protected (%)	% vertebrate species richness protected	% vertebrate endemism protected	% tree cover protected	% water provisioning services protected	% carbon stock protected	% hazard mitigation protected
GLOBAL	16.1	15.2	17.8	20.8	15.0	21.0	14.7
South America	23.3	29.6	30.1	39.0	15.1	43.6	11.3
Africa	21.80	16.03	18.47	15.52	6.05	15.82	13.20
Europe	12.41	13.28	13.59	20.59	13.76	19.72	16.93
Central America	13.90	13.68	18.37	20.75	7.63	20.72	14.13
North America	7.10	7.36	8.78	9.48	8.58	10.05	6.26
Asia	14.67	10.48	13.11	10.90	19.15	13.60	11.20
Australia	16.11	14.32	17.87	29.43	33.33	22.36	32.2

Table 1 Proportion of area, biodiversity and ecosystem services protected by continent for the current protected area system (% , red=below 17%, green= above 17%)

# What 17% would buy us



Based on WDPA 2014 targeting secures 16% richness, 19% endemism, 22% tree cover, 22% carbon stock but only 16% realised water and 15% HM services

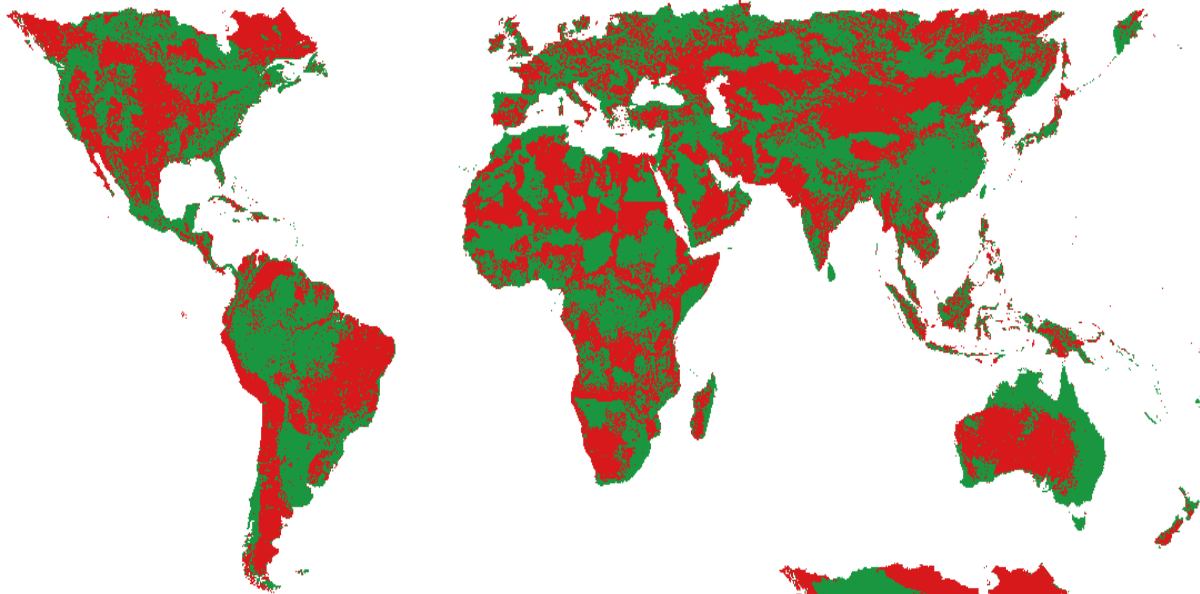
Not much given we use 100% of these ES

<20% of the biodiversity and ES upon which we depend likely captured at 17% target, except for some services on some continents

Continent	Area protected (%)	% vertebrate richness protected	% vertebrate endemism protected	% tree cover protected	% water provisioning services protected	% carbon stock protected	% hazard mitigation protected
GLOBAL	17	15.98	18.7	21.93	15.81	22.1	15.47
South America	17	21.59	21.93	28.39	11.05	31.79	8.33
Africa	17	12.58	14.45	12.07	4.76	12.41	10.37
Europe	17	18.19	18.7	28.22	18.87	27.03	23.12
Central America	17	16.66	22.44	25.33	9.35	25.33	17.34
North America	17	17.68	21.08	22.61	20.57	23.97	14.96
Asia	17	12.07	15.13	12.58	22.27	15.81	12.92
Australia	17	15.13	18.87	31.11	35.19	23.63	34

Table 1 Proportion of area, biodiversity and ecosystem services protected by continent for the Aichi 17% based on current PA targeting of variables (% , red=below 17%, green= above 17%)

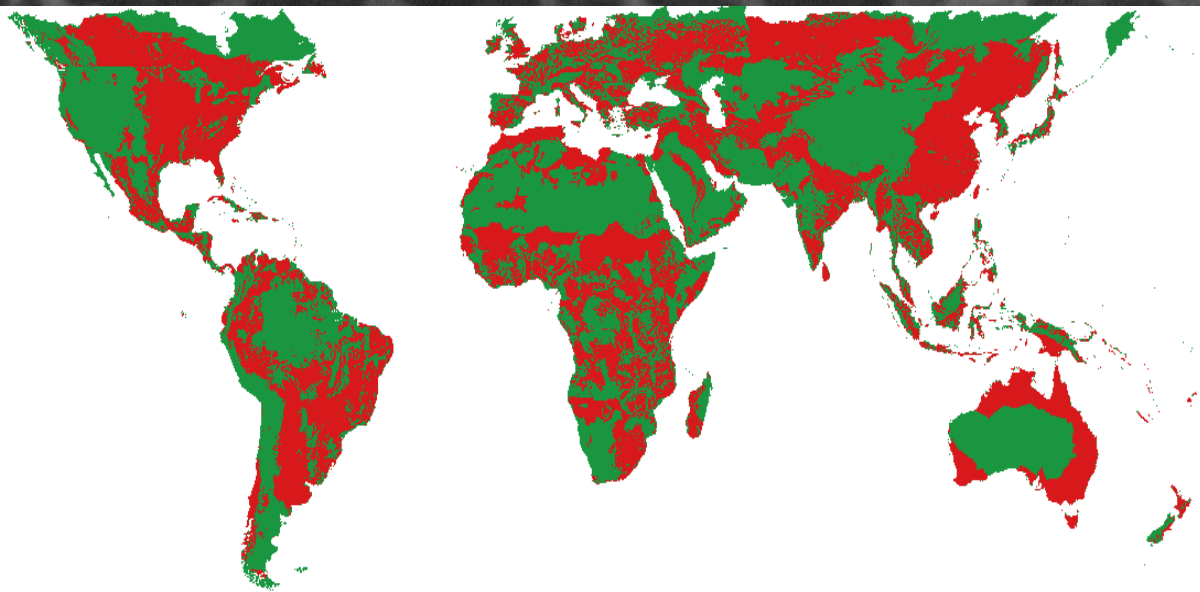
# What 50% would buy us: conservation scenarios



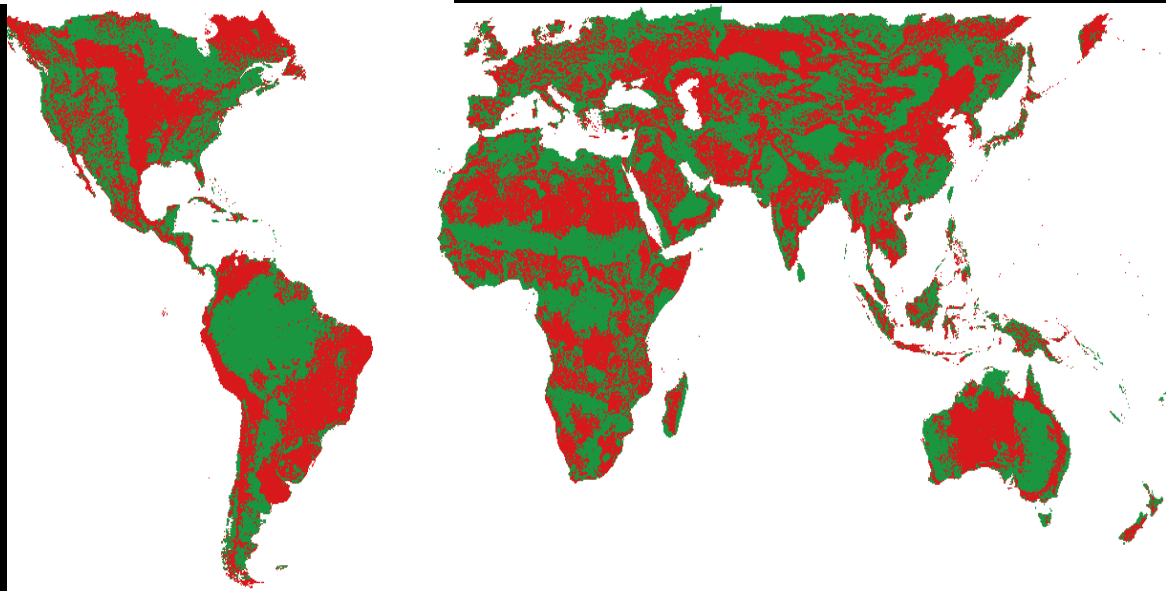
Highest 50% for total realised services, by country [ES]



Highest 50% for vertebrate species richness, by country [Rich]



Lowest 50% for agricultural suitability, by country [Ag.]



Highest 50% for conservation priority, by country [CN]

# Key messages



- We currently protect less than 16% of biodiversity and ecosystem services globally, with regional variations
- As the PA network has grown we have selected for more protection of carbon but less of water
- By targeting 17% of land, we will protect <17% of many of the ecosystem services we currently rely on
- If we follow “Half for Nature” then we protect 50-60% of richness, 50-65% of endemism and 50-70% of currently realised ecosystem services within PAs
- How much we protect depends on the location strategy for new PAs
- We will also have to carefully manage ES outside of PAs as even half-for-nature would not protect all the ES we use



Now for block 2...



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