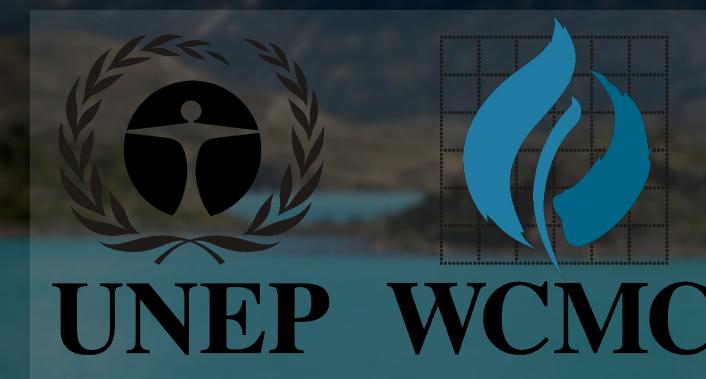


WELCOME

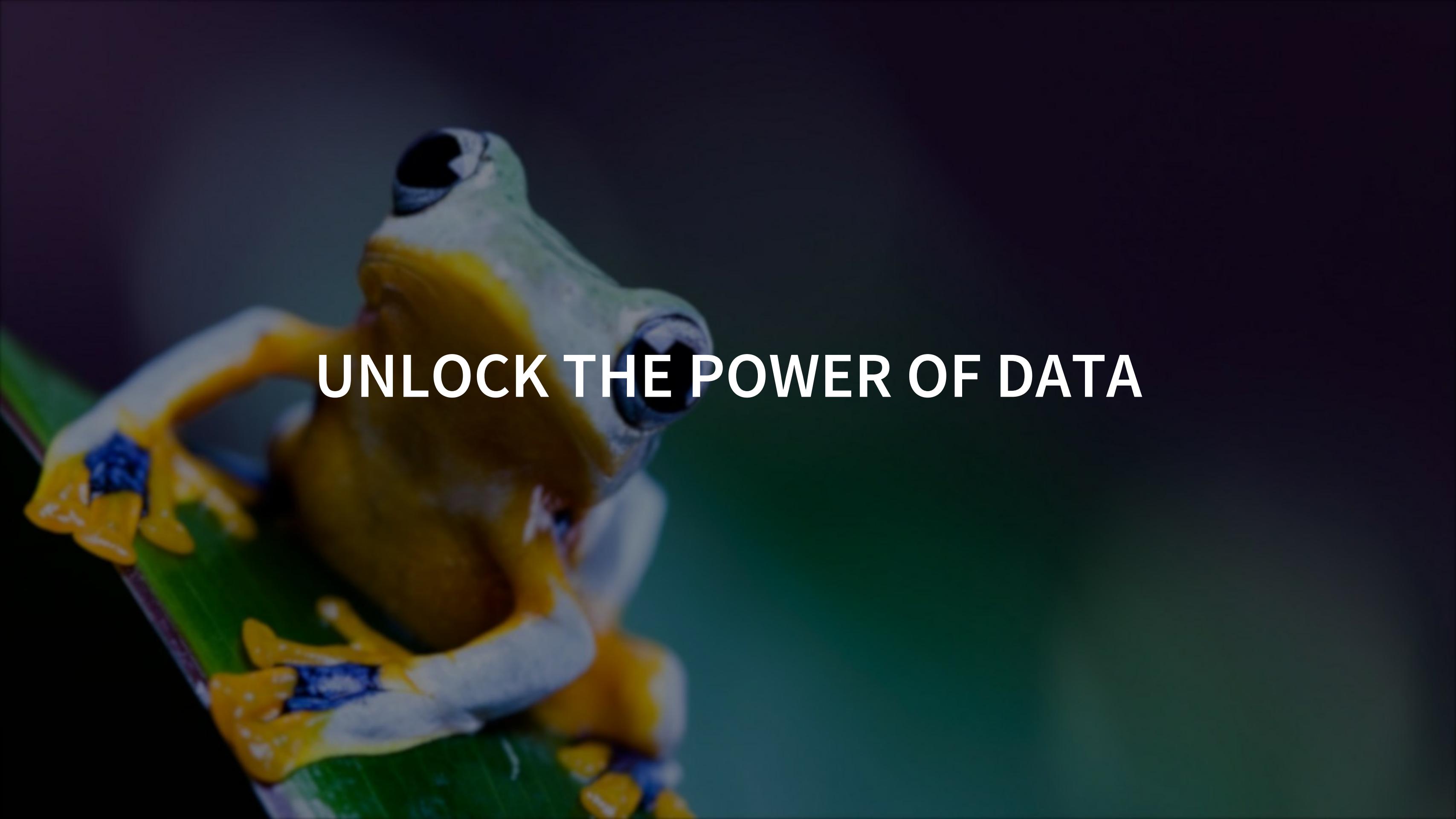
ABOUT US



United Nations Environment Programme
World Conservation Monitoring Centre
(UNEP-WCMC)

A close-up photograph of a bee pollinating a yellow flower. The bee is covered in pollen and is positioned on the left side of the frame, facing right. The flower has many small, yellow, star-shaped stamens. The background is dark and out of focus.

TO PUT BIODIVERSITY AT THE
HEART OF DECISION-MAKING



UNLOCK THE POWER OF DATA

A photograph of a lush green forest. In the foreground, there are several large, brown, tangled root systems or fallen branches. Behind them, a thick wall of green foliage and trees stretches across the background. A single, prominent tree trunk stands vertically in the center-right of the frame.

THE STRENGTH OF MANY

The background image shows a wide-angle aerial shot of a hillside covered in numerous green terraced fields. The fields are arranged in a series of concentric curves that follow the contours of the mountain. Interspersed among the fields are several palm trees and a small, simple wooden hut located in the bottom right corner.

SCIENCE AND POLICY INTERFACE

THE WORLD HERITAGE CONVENTION

Heritage is our legacy from the past, what we live with today, and what we pass on to future generations. Our cultural and natural heritage are both irreplaceable sources of life and inspiration

KEY ACTORS OF THE CONVENTION

- States Parties
- World Heritage Committee
- UNESCO (WHC)
- The Advisory Bodies

WHAT MAKES IT A WORLD HERITAGE SITE?

CRITERIA - MANAGEMENT - INTEGRITY

NATURAL CRITERIA

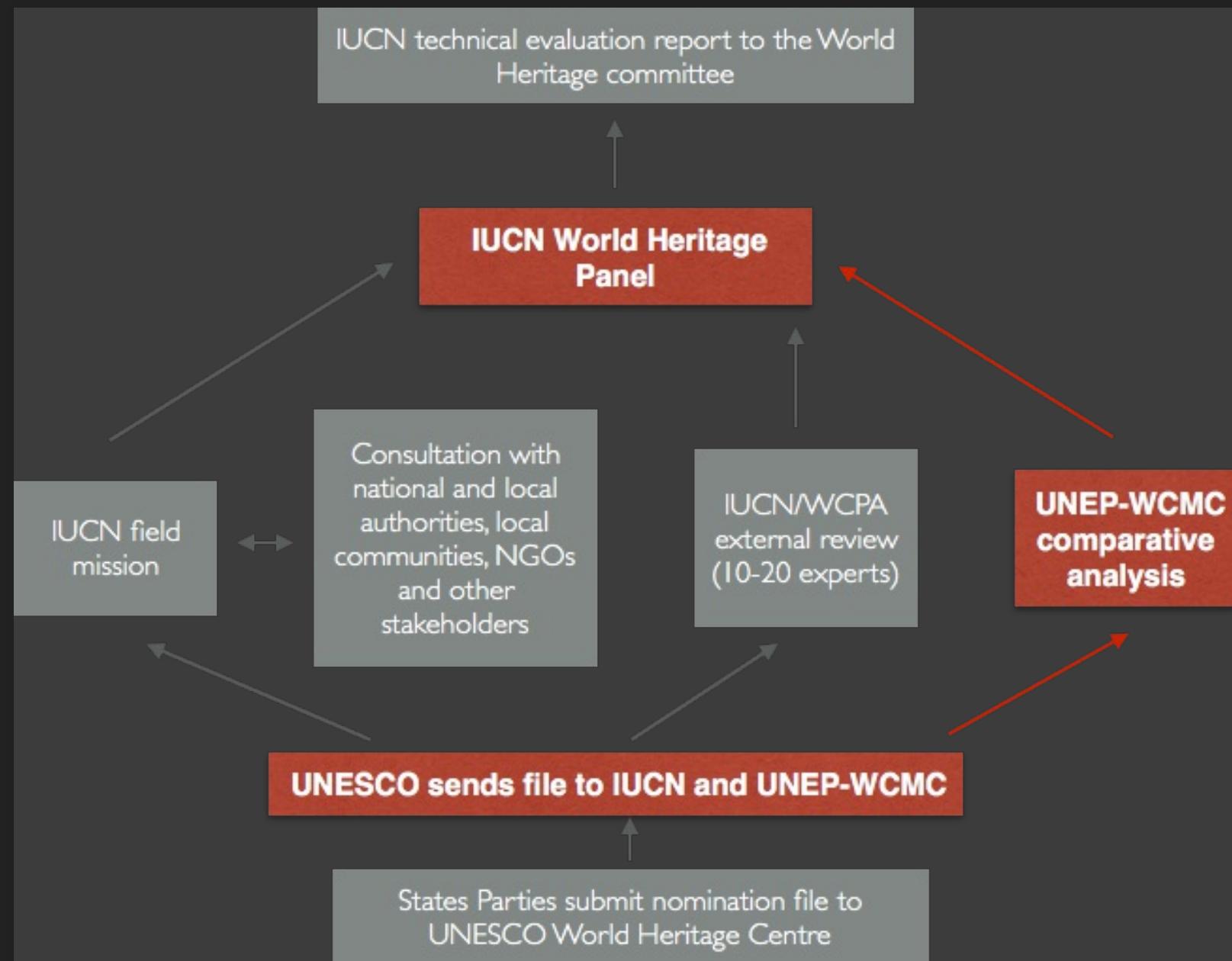
WORLD HERITAGE AT UNEP-WCMC

Support IUCN (International Union for Conservation of Nature) on biodiversity sites.

- Evaluation of new natural and mixed nominations
- Monitoring of existing sites
- Policy, guidance and research

1. EVALUATION

THE PROCESS



Terrain Satellite + -

Start Exploring

Search the protected areas of our planet

Search

Download
WDPA dataset



WORLD DATABASE ON PROTECTED AREAS

protected planet

The designations employed and the presentation of material on this map do not imply the expression of any opinion whatever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

COMPARATIVE ANALYSIS

For biodiversity nominations



ONLINE PROTOTYPE FOR SPATIAL SCREENING

comparative analysis

[Submit boundary](#)[Clear map](#)[How to](#)

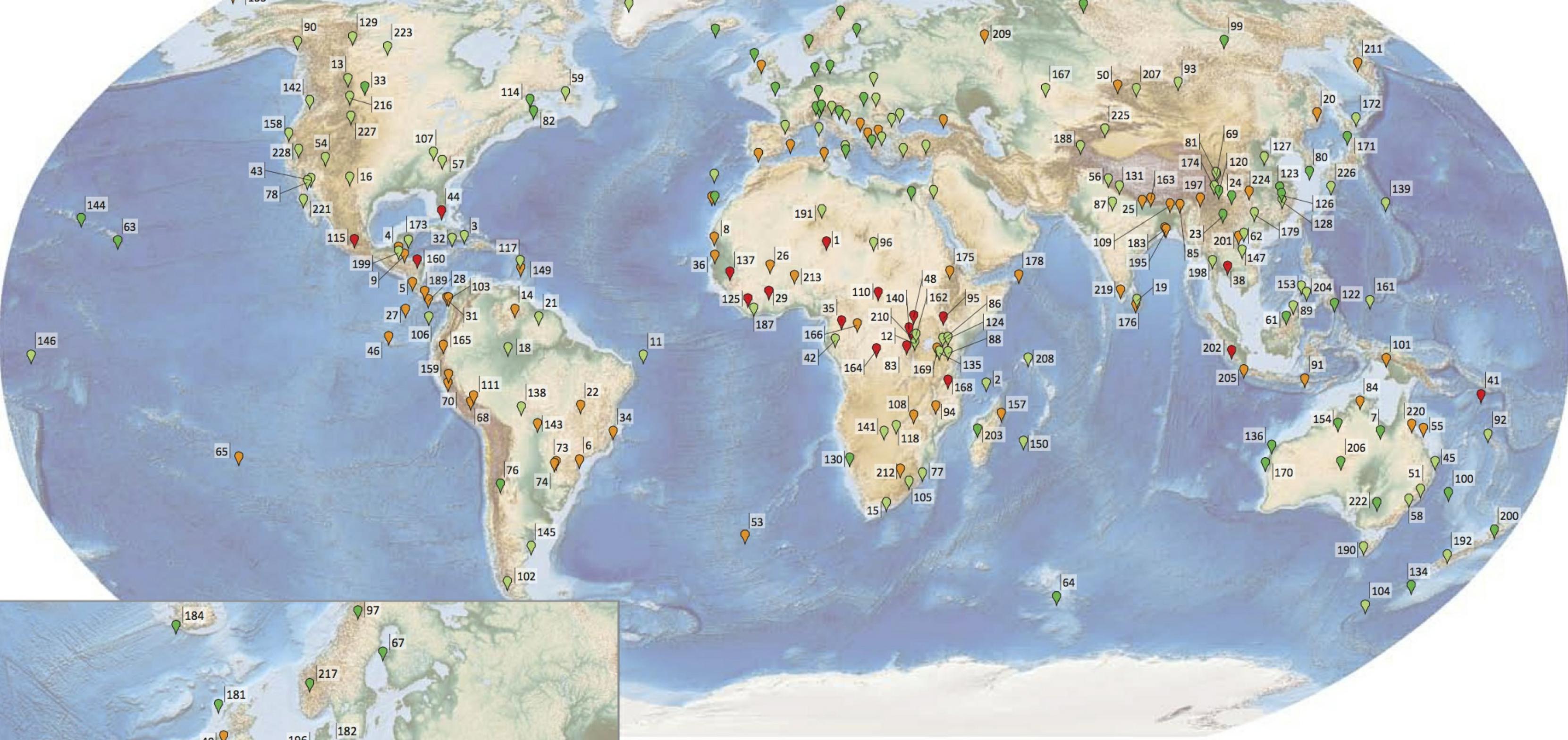
2. MONITORING

STATUTORY PROCESS

WE NEED TO BE PROACTIVE

WORLD HERITAGE OUTLOOK

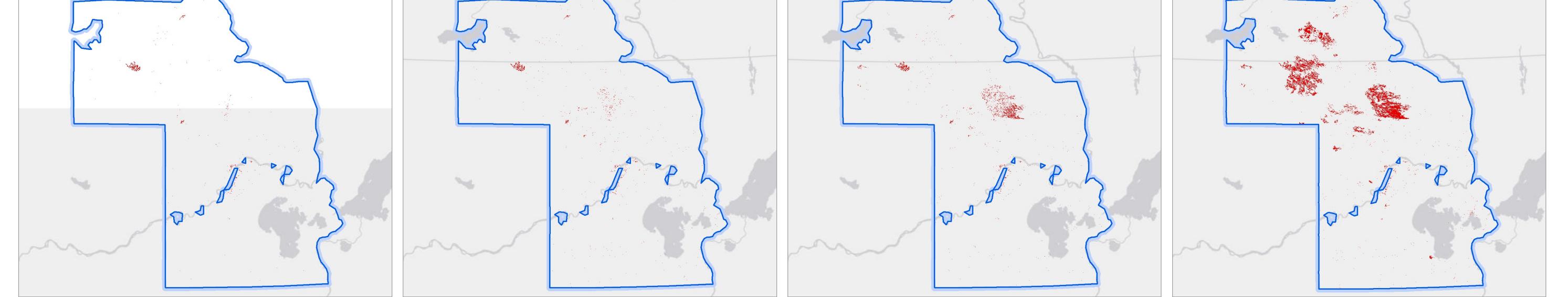
Example: [The Great Barrier Reef](#)



MONITORING FOREST LOSS

Global Forest Watch

Yellowstone
National Park

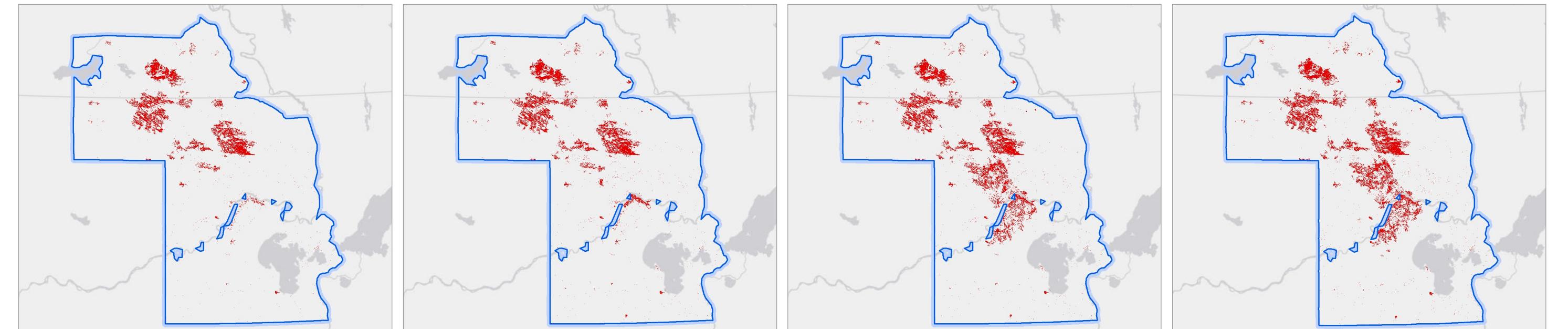


2000 - 2001

2000 - 2002

2000 - 2003

2000 - 2004

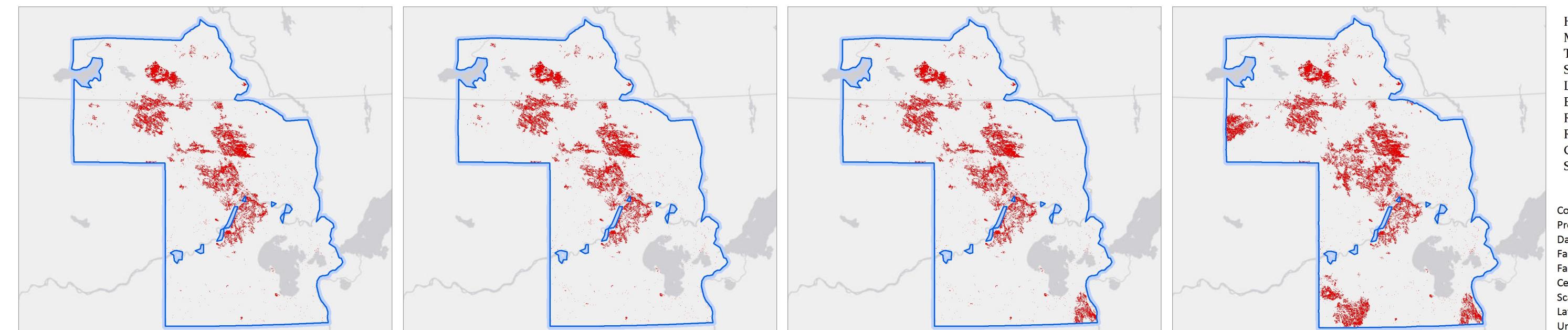


2000 - 2005

2000 - 2006

2000 - 2007

2000 - 2008



Hansen, M. C., P. V. Potapov, R. Moore, M. Hancher, S. A. Turubanova, A. Tyukavina, D. Thau, S. V. Stehman, S. J. Goetz, T. R. Loveland, A. Kommareddy, A. Egorov, L. Chini, C. O. Justice, and J. R. G. Townshend. 2013. "High-Resolution Global Maps of 21st-Century Forest Cover Change." *Science* 342 (15 November): 850–53.

Coordinate System: WGS 1984 UTM Zone 1N custom

Projection: Transverse Mercator

Datum: WGS 1984

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False Northing: 0.0000

Central Meridian: -114.0000

Scale Factor: 0.9996

Latitude Of Origin: 0.0000

Units: Meter



1985 250

REMOTE SENSING

10 km



21 May 2011



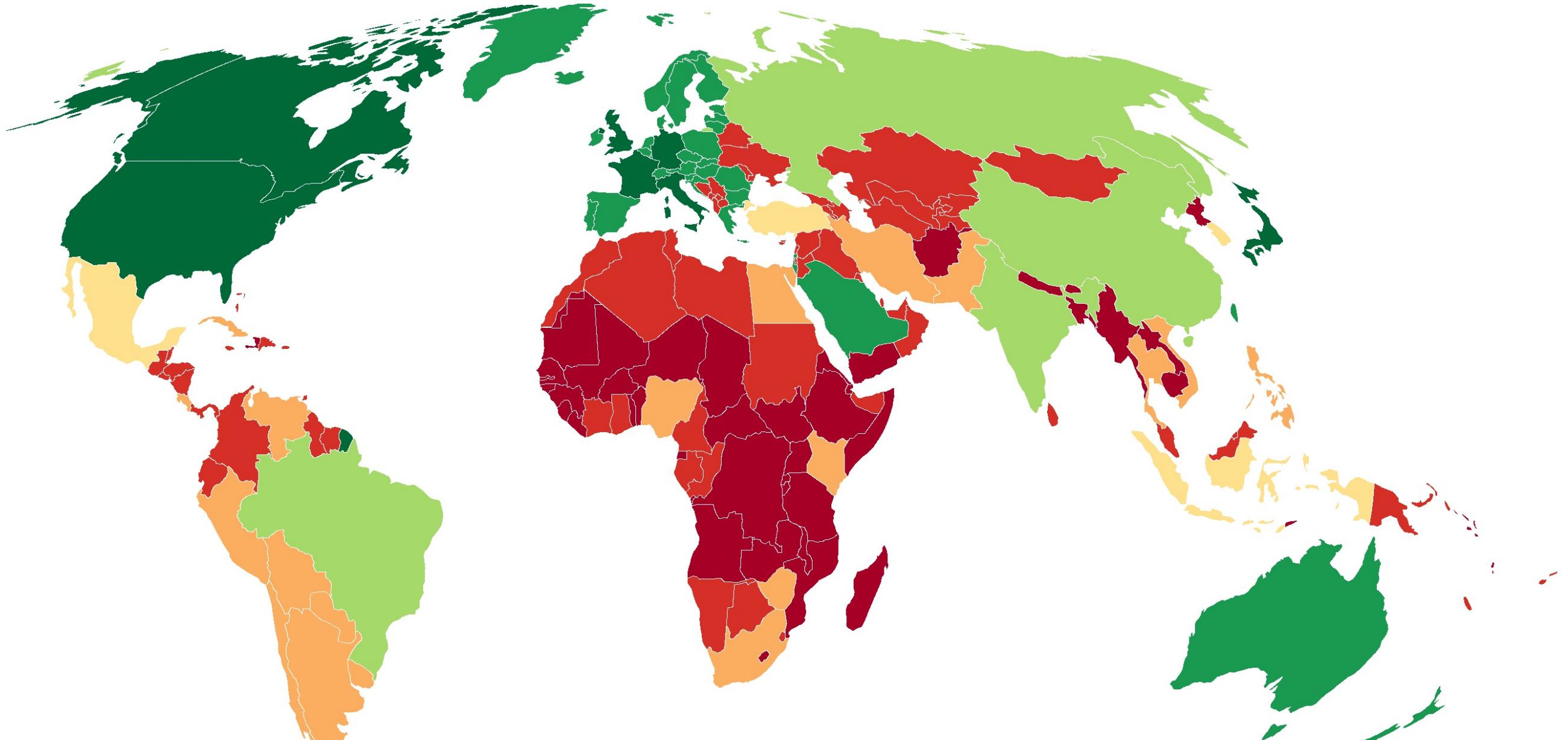
Sorry, but it looks like your browser is not currently supported by our viewer.

At this time, we support the desktop versions of [Chrome](#), [Safari](#), [Firefox](#) and [Internet Explorer 9+](#).

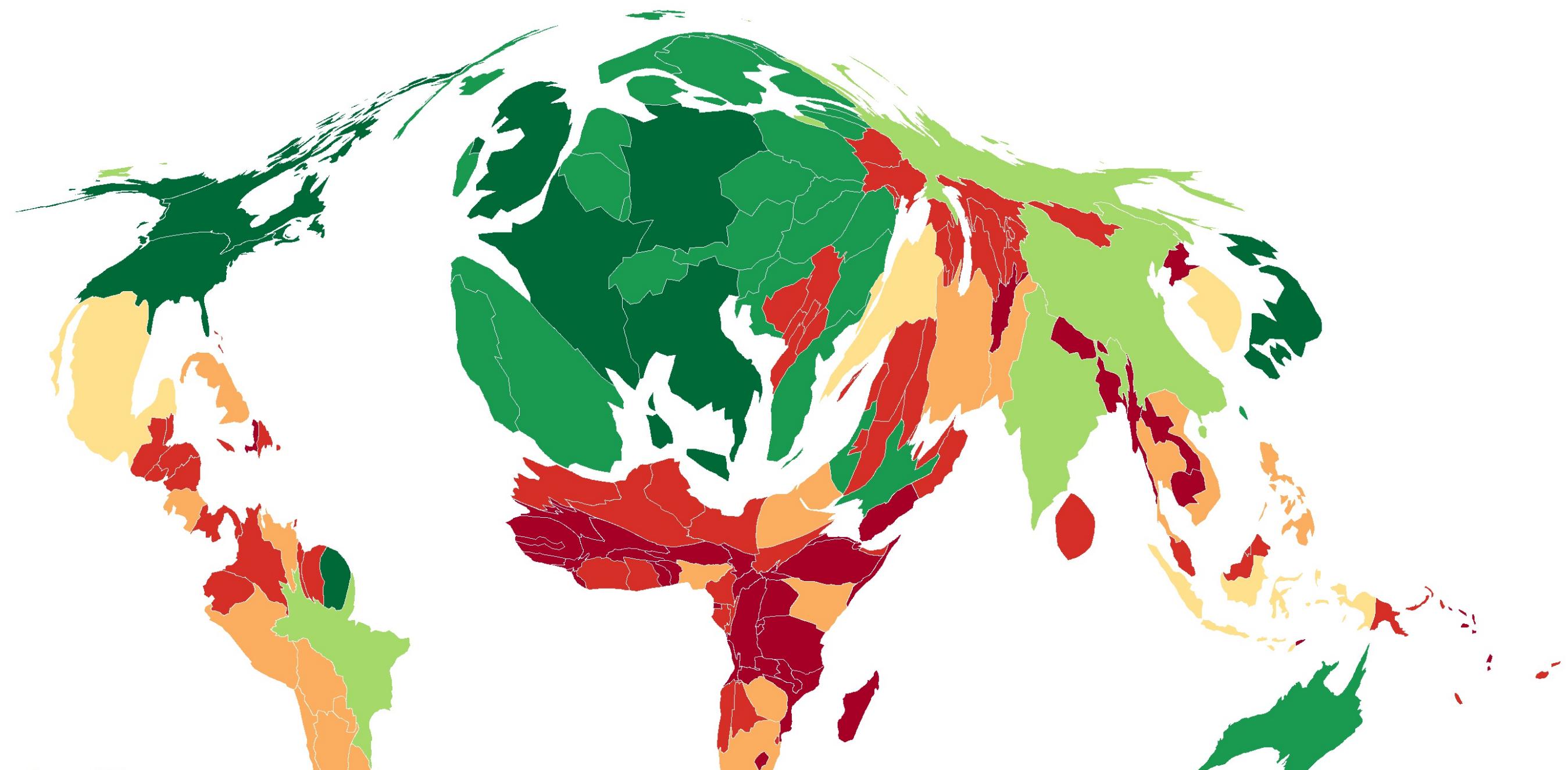
LAND COVER CHANGE

Natural World Heritage sites from 2000 to 2010

3. POLICY, GUIDANCE AND RESEARCH



- 1. Developed region: G7
- 2. Developed region: nonG7
- 3. Emerging region: BRIC
- 4. Emerging region: MIFT
- 5. Emerging region: G20



- 1. Developed region: G7
- 2. Developed region: nonG7
- 3. Emerging region: BRIC
- 4. Emerging region: MIKT
- 5. Emerging region: G20

BEST PRACTICES GUIDANCE DOCUMENTS

THEMATIC STUDIES

IUCN

Terrestrial Biodiversity and the World Heritage List

Identifying broad gaps and potential candidate sites for inclusion in the natural World Heritage network



WCPA **BPN** **MAVA** **protected planet** **UNEP WCMC**

IUCN

Marine Natural Heritage and the World Heritage List

Interpretation of World Heritage criteria in marine systems, analysis of biogeographic representation of sites, and a roadmap for addressing gaps



WCPA **CORDIO** **protected planet** **UNEP WCMC**

POLICYFORUM

Protected Areas and Effective Biodiversity Conservation

Sorin Le Saout,¹ Michael Hoffmann,^{2,3} Yichuan Su,^{1,2} Addie Hughes,² Cyril Bernard,⁴ Thomas M. Brooks,^{1,5} Barbara Bertley,^{1,6} Stuart H. M. Butchart,¹ Simon N. Stave,^{1,6,7,8} Badman,¹ Ana S. L. Rodrigues,¹

CONSERVATION

Although protected areas (PAs) cover 13% of Earth's land (1), substantial gaps remain in their coverage of global biodiversity (2). Thus, these PAs are often underfunded, underfunded, and beleaguered in the face of external threats (6), efforts to expand PA coverage should be complementary to appropriate management of existing PAs. Previous calls for enhancing PA management have focused on improving operational effectiveness of each PA [e.g., staffing and budgets (6)]. Little guidance has been offered on how to improve strategic effectiveness of many more basic biodiversity conservation goals (3). We provide guidance for strategically allocating management efforts among and within existing PAs to strengthen their collective contribution toward preventing global species extinction.

Strategic Management Across PAs

PAs vary in the extent to which they can contribute to preventing extinctions. The notion of "irreplaceability" reflects a site's potential contribution to conservation goals or, conversely, the extent to which options for meeting those goals are lost if the site is lost (4). We highlight a set of exceptionally irreplaceable PAs for which we recommend a particularly high-priority strategic effort to enhance their global recognition as World Heritage sites (see SI Text for details).

Credit: © Sorin Le Saout and Barbara Bertley (for the PolicyForum); © IUCN (for the other panels)

S2. Nearly all are located in biogeographic regions of exceptional levels of endemism (12) and nearly all have already been identified as key biodiversity areas (13). Collectively, they are responsible for the long-term survival of 40% of the world's 11,119 birds, 383 amphibians, and 123 mammals, including 304 globally threatened species (69 birds, 179 amphibians, and 65 mammals) that are found within only 10–50% (S2) within these sites. For 88 of these PAs, the conservation stakes are particularly high, as they overlap sites previously identified as holding ≥95% of the global population of at least one highly threatened species, where species extinctions are imminent unless effective conservation action is implemented (14).

The United Nations World Heritage Convention (WHC) seeks to encourage the identification and conservation of natural and cultural heritage of outstanding universal value.¹ Among currently inscribed World Heritage Sites (WHS), 132 have been inscribed under criterion (x) as having outstanding universal value for the in situ conservation of biodiversity (see SI Text). Their very low level of irreplaceability (S2) is remarkable given the 95% example of PA irreplaceability for all species and/or for threatened species examined here (table S1) suggests a remarkable agreement between outstanding universal value, as defined by the WHC, and

1. Convention of Biological Diversity, CBD, UNEP-WCMC, Paris, France. International Union for Conservation of Nature, CH-1196 Gland, Switzerland. National Park Service, Washington, DC, USA. 2. Institut des Sciences de l'Evolution de Montpellier, Montpellier, France. International Union for the Conservation of Nature, Gland, Switzerland. 3. School of Geography and Environment, Shandong University, Jinan, China. 4. Department of Biological Sciences, University of East Anglia, Norwich, UK. Conservation International, Washington, DC, USA. 5. University of Bristol, Bristol, UK. 6. University of Cambridge, Cambridge CB3 0ET, UK. Conservation International, Washington, DC, USA. 7. University of East Anglia, Norwich, UK. 8. University of Bath, Bath BA2 7JR, UK. *74 km², Abu Dhabi, United Arab Emirates.

Corresponding author: European Commission, Joint Research Centre, Institute for Environment and Sustainability, Ispra, Italy.

1Corresponding author: E-mail: anna.rodrigues@iucn.org.br

www.sciencemag.org SCIENCE VOL 342 15 NOVEMBER 2013

Additional data KAAS

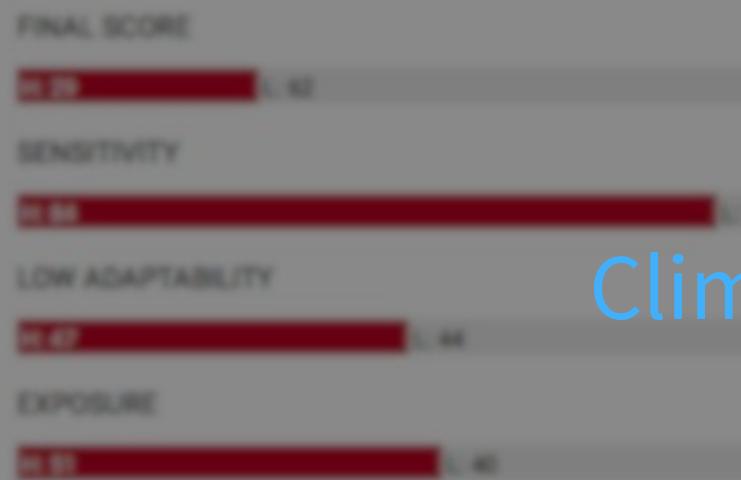
803

Central Amazon Conservation Complex

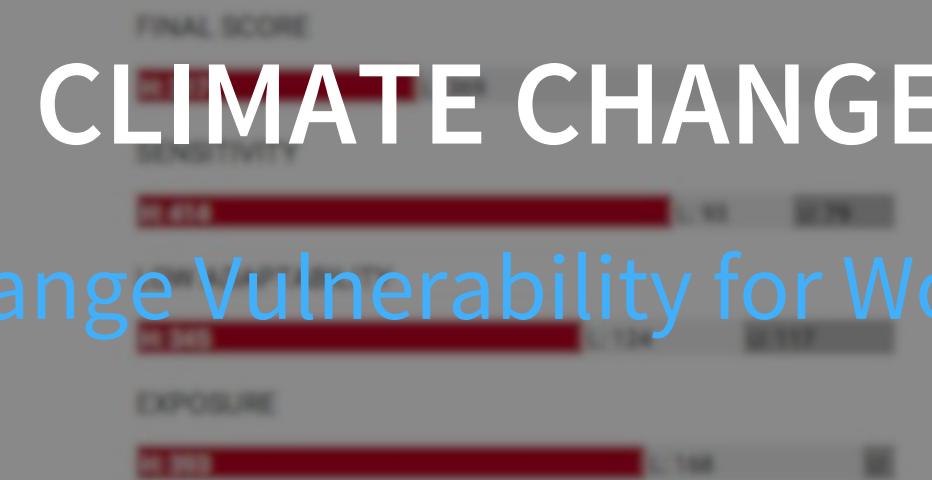


SPECIES CLIMATE CHANGE VULNERABILITY

Amphibian



Bird



Coral

No data available

CLIMATE CHANGE

Climate Change Vulnerability for World Heritage

SENSITIVITY, LOW ADAPTABILITY, AND EXPOSURE

Amphibian

SENSITIVITY



Bird

SENSITIVITY



Coral

No data available



QUESTIONS

THANK YOU

Yichuan Shi

yichuan.shi@unep-wcmc.org

restart