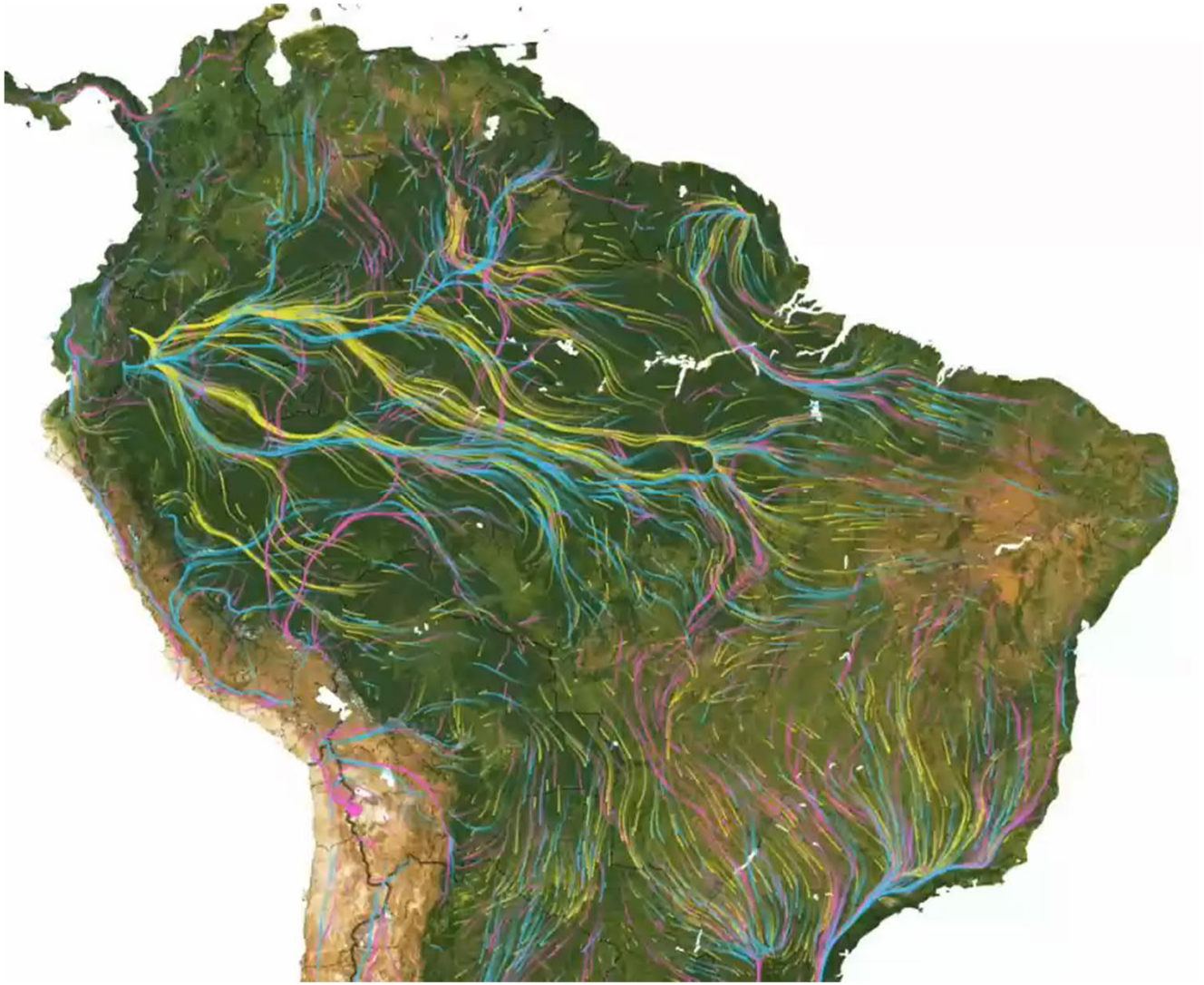
Ecological connectivity: global progress and opportunity

Wendy Elliott
Deputy Leader Wildlife Practice
WWF International



MIGRATIONS IN MOTION

As climate change alters habitats and disrupts ecosystems, where will animals move to survive? And will human development prevent them from getting there?

This map shows the average direction mammals, birds, and amphibians need to move to track hospitable climates as they shift across the landscape.

The Nature Conservancy
Protecting nature. Preserving life.

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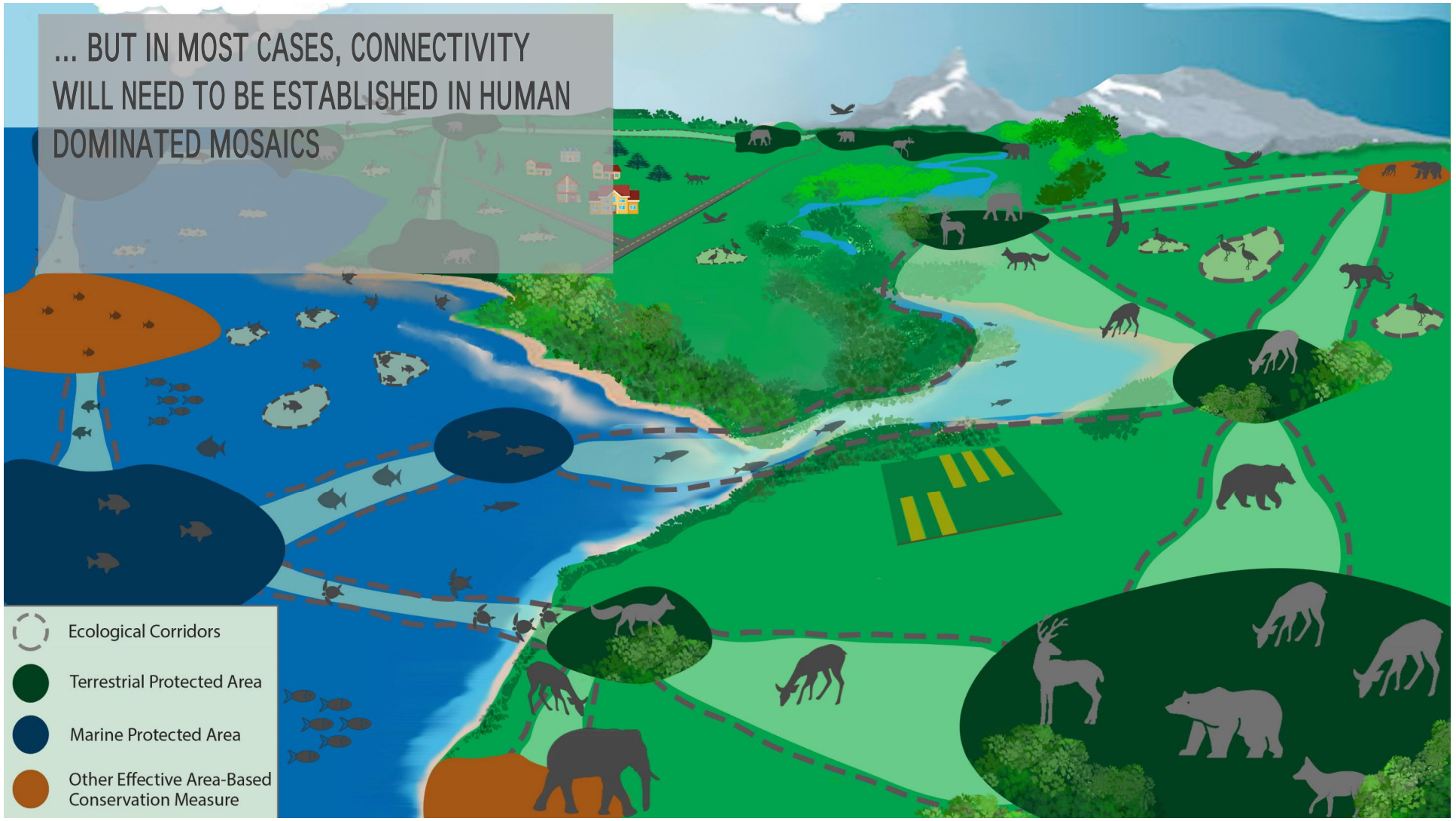
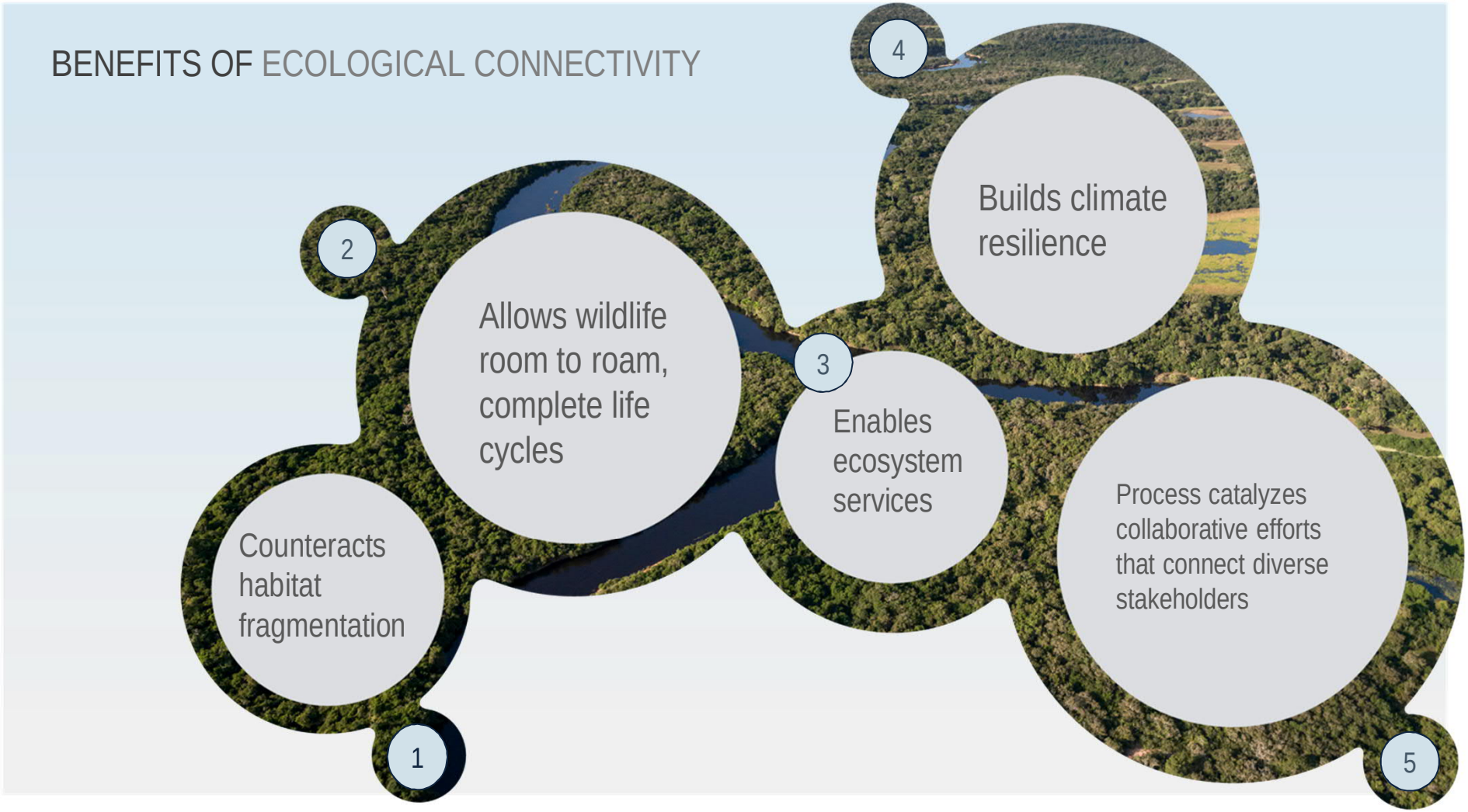
PROTECTED AREAS ARE PART OF THE SOLUTION…

"Nature's circulatory system"


... BUT IN MOST CASES, CONNECTIVITY WILL NEED TO BE ESTABLISHED IN HUMAN DOMINATED MOSAICS
Ecological Corridors
Terrestrial Protected Area
Marine Protected Area
Other Effective Area-Based Conservation Measure

BENEFITS OF ECOLOGICAL CONNECTIVITY



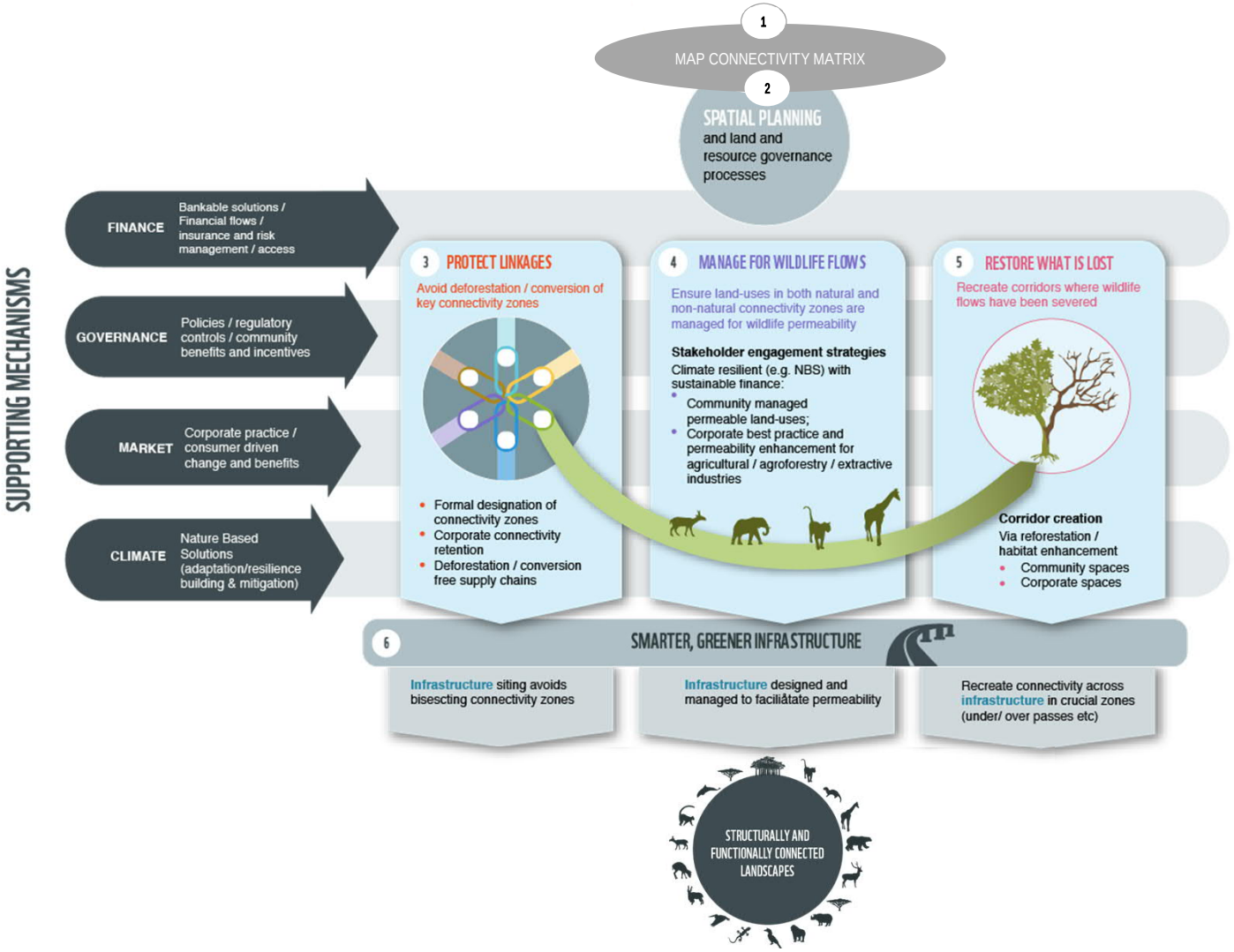
CENTER for LARGE LANDSCAPE CONSERVATION

WWF

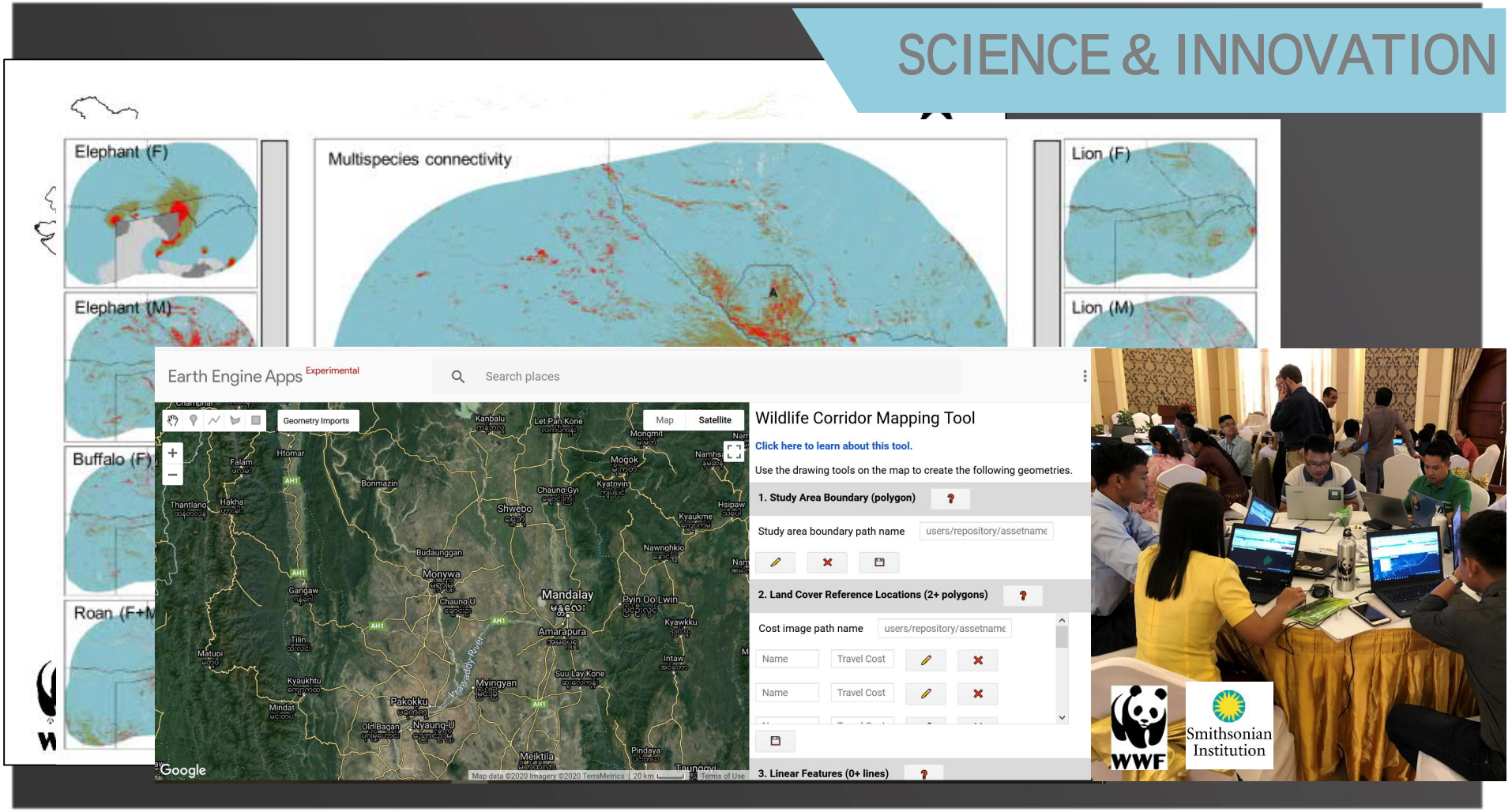
WILDLIFE CONNECT

THREE PILLARS

PROTECT linkages MANAGE for wildlife flow RESTORE what we have lost


1
MAP CONNECTIVITY MATRIX
2
SPATIAL PLANNING
and land and resource governance processes
SUPPORTING MECHANISMS
FINANCE
Bankable solutions / Financial flows / insurance and risk management / access
GOVERNANCE
Policies / regulatory controls / community benefits and incentives
MARKET
Corporate practice / consumer driven change and benefits
CLIMATE
Nature Based Solutions (adaptation/resilience building & mitigation)
3 PROTECT LINKAGES
Avoid deforestation / conversion of key connectivity zones
Formal designation of connectivity zones
Corporate connectivity retention
Deforestation / conversion free supply chains
4 MANAGE FOR WILDLIFE FLOWS
Ensure land-uses in both natural and non-natural connectivity zones are managed for wildlife permeability
Stakeholder engagement strategies
Climate resilient (e.g. NBS) with sustainable finance:
Community managed permeable land-uses;
Corporate best practice and permeability enhancement for agricultural / agroforestry / extractive industries
5 RESTORE WHAT IS LOST
Recreate corridors where wildlife flows have been severed
Corridor creation
Via reforestation / habitat enhancement
Community spaces
Corporate spaces
6 SMARTER, GREENER INFRASTRUCTURE
Infrastructure siting avoids bisecting connectivity zones
Infrastructure designed and managed to facilitate permeability
Recreate connectivity across infrastructure in crucial zones (under/ over passes etc)
STRUCTURALLY AND FUNCTIONALLY CONNECTED LANDSCAPES

SCIENCE & INNOVATION



POLICY

United Nations

General Assembly

Nature knows no borders

Convention on Biological Diversity

Goal: … increase of at least 15 per cent in the area, **connectivity** and integrity of natural ecosystems

Target 1: … all land and sea areas globally are under integrated **biodiversity-inclusive spatial planning**

Target 2: … at least 20 per cent of degraded .. ecosystems are under restoration, ensuring **connectivity among them**

Target 3: .. at least 30 per cent globally of land areas and of sea areas are conserved through … **well-connected systems** of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.

PRIVATE SECTOR

"Companies should consider the state of nature in locations throughout their value chain [including] extent of ecological connectivity"

"Businesses setting SBTs should always avoid impacts that would individually or cumulatively, directly or indirectly ... sever crucial ecological connectivity functions in a land/seascape, for example by converting the only remaining ecological corridor between two areas of natural habitat"

Agricultural commodity sourcing standards: *"Farmers shall .. maintain or create wildlife corridors"*

FINANCIAL SECTOR

"Implement measures to minimize habitat fragmentation, such as biological corridors."

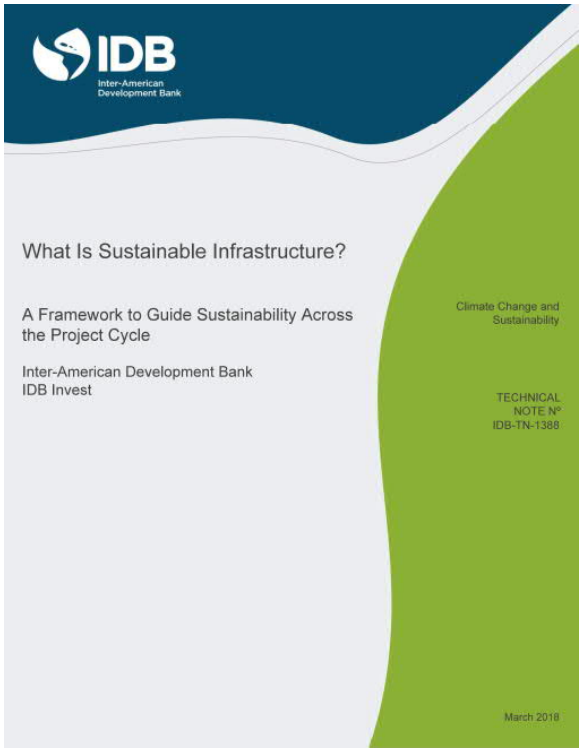
IFC | International Finance Corporation
WORLD BANK GROUP

Creating Markets, Creating Opportunities

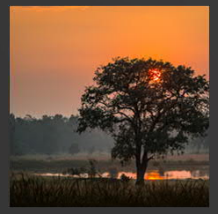
Biodiversity Conservation and Sustainable Management of Living Natural Resources (2012)

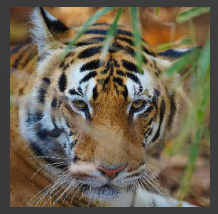
Biodiversity loss can result in critical reductions in the resources provided by the earth's ecosystems, which contribute to economic prosperity and human development. This is especially relevant in developing countries where natural resource-based livelihoods are often prevalent. PS6 recognizes that protecting and conserving biodiversity, maintaining ecosystem services, and managing living natural resources adequately are fundamental to sustainable development.

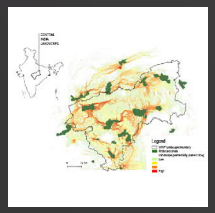
"Project design for maximum ecological connectivity"

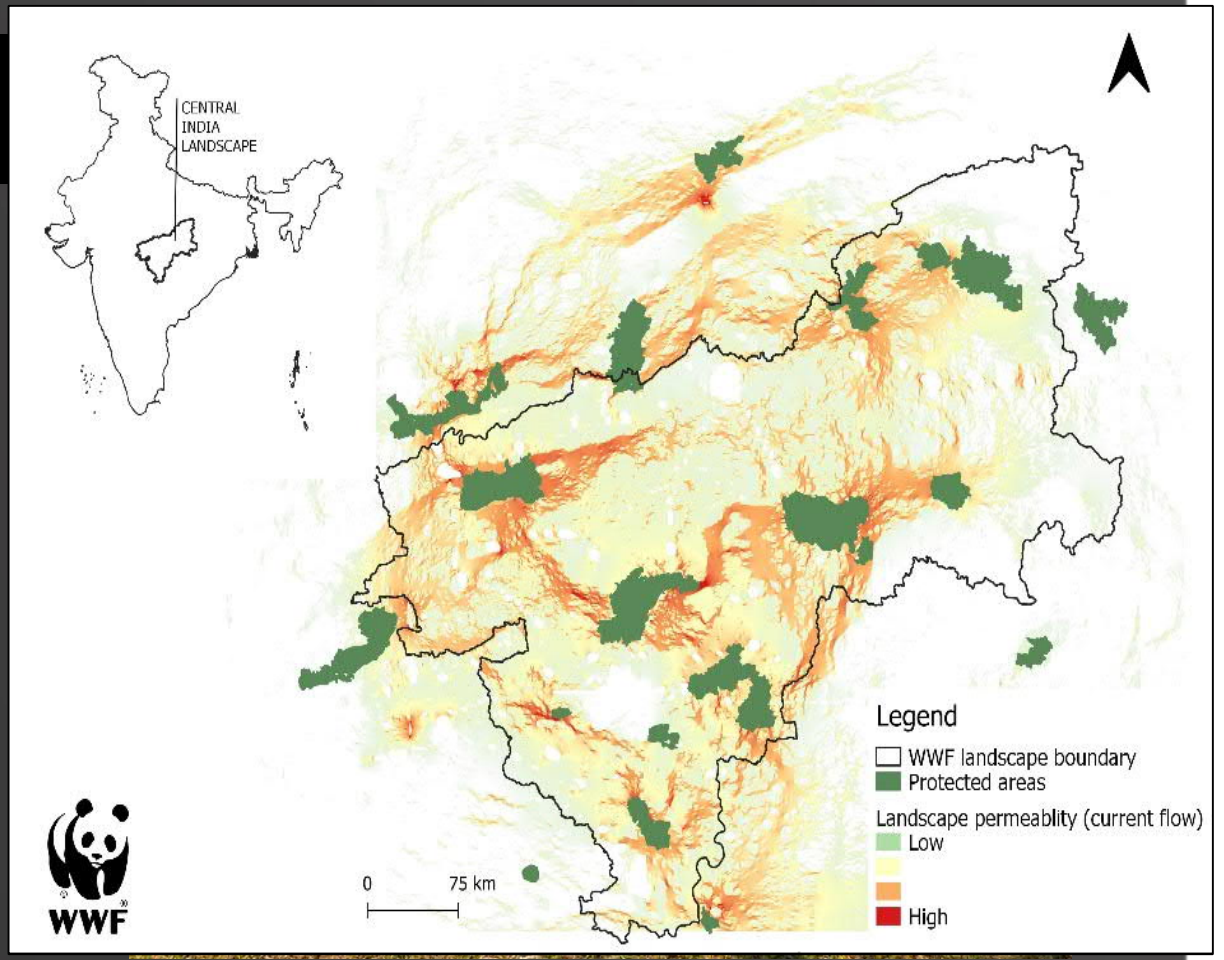


CENTRAL INDIA LANDSCAPE

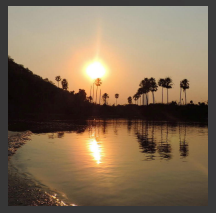


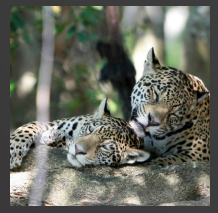


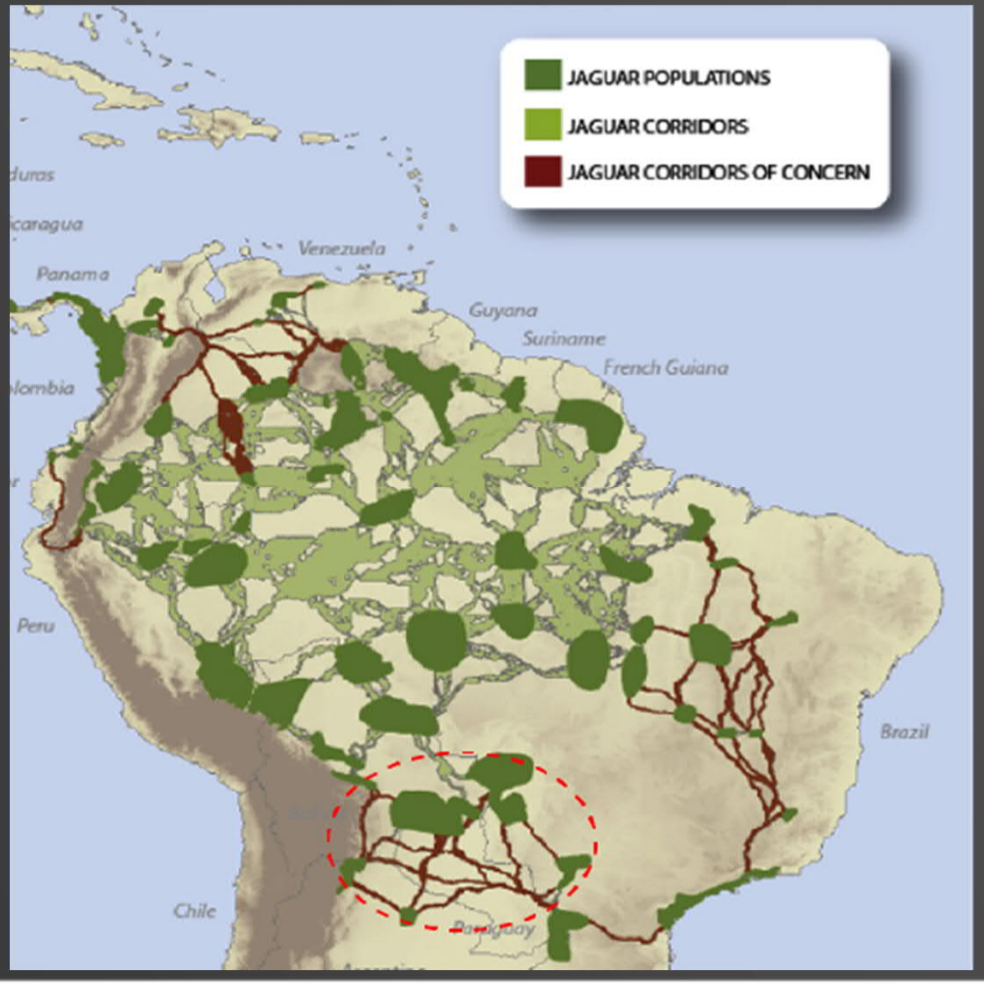




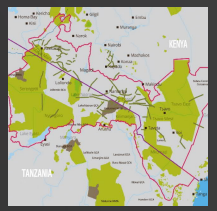
CHACO PANTANAL LANDSCAPE

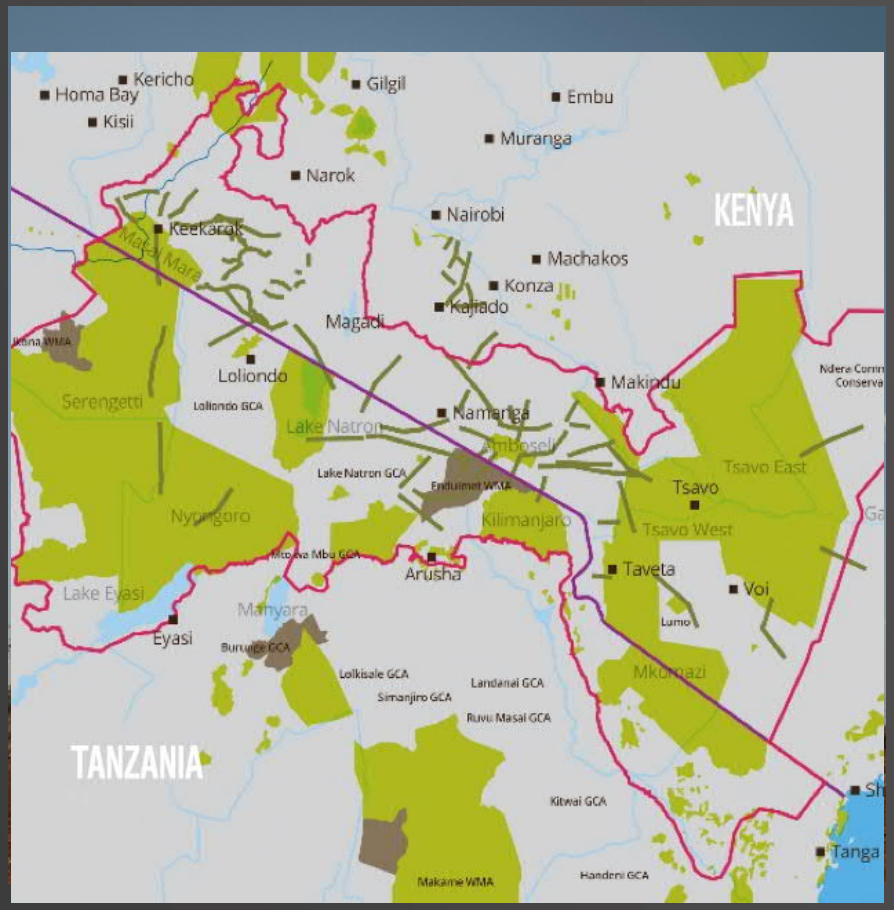






UNGANISHA LANDSCAPE





CARPATHIANS LANDSCAPE