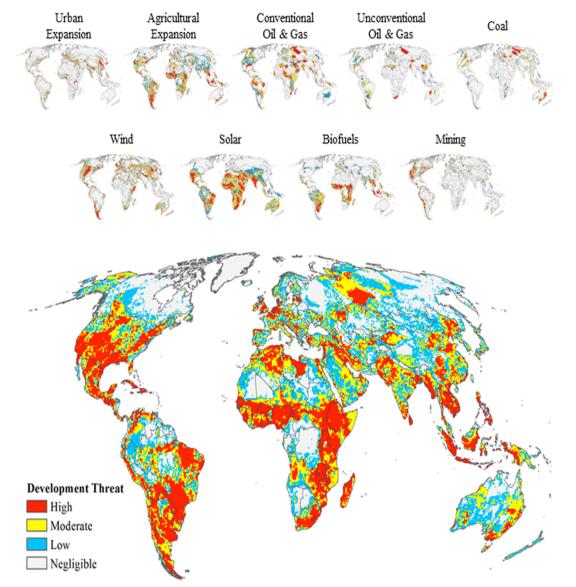


Sustainable Development at a Landscape Scale: Mitigation Principles and Policies

Bruce McKenney Director, Development by Design The Nature Conservancy

IAIA Meeting December 3, 2015

Global Future Development Threat: 20 Percent of Natural Lands at Risk

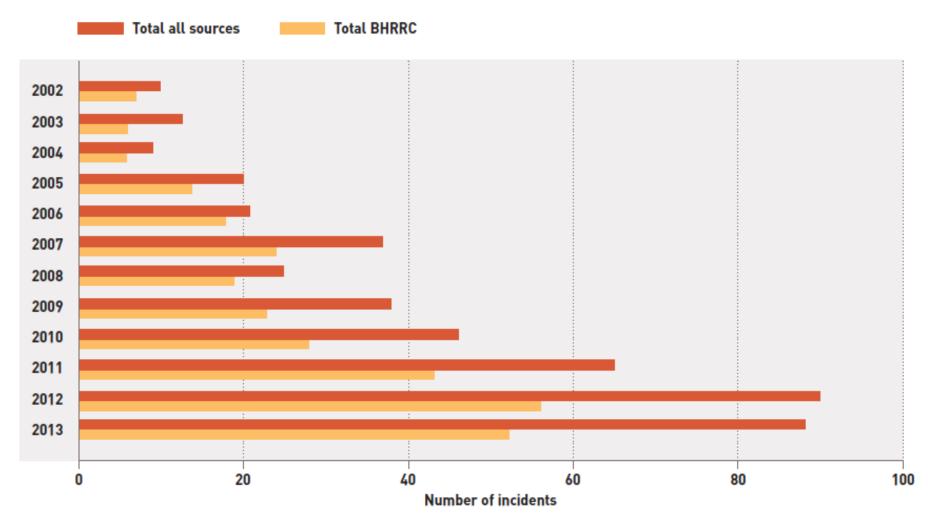


Oakleaf et al. (2015) A World at Risk: Aggregating Development Trends to Forecast Global Habitat Conversion. PLoS ONE 10 (10)

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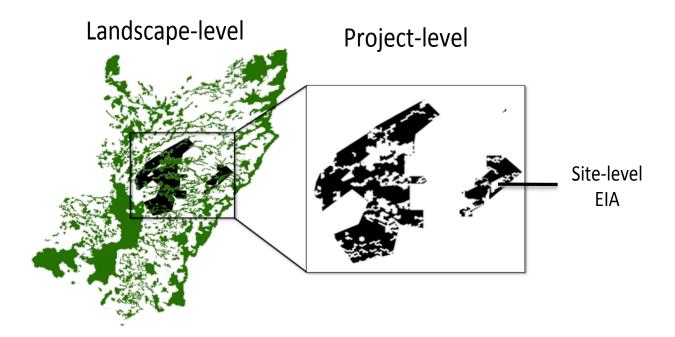
Increasing Conflict Around the World: Example of Mining Sector





Source: ICMM 2015

The ABCs: Landscape-scale planning benefits



Advance planning:

Planning at a landscape scale before initial project investments supports pro-active and comprehensive risk assessment for projects.

Bigger scale:

Planning for development at a larger scale moves beyond a project-by-project approach, making clear the potential cumulative impacts for a region.

Comprehensive:

Developing landscape-scale strategies supports avoiding impacts to high-value areas and incentivizing development in low-conflict areas.



10 Principles for Applying the Mitigation Hierarchy

- 1. Landscape context
- 2. Goals
- 3. Mitigation hierarchy steps
- 4. Limits to offsets
- 5. Sustainable outcomes
- 6. Stakeholder engagement practices
- 7. Additionality
- 8. Equivalence
- 9. Location
- 10. Temporal considerations



Achieving Conservation And Development 10 PRINCIPLES FOR APPLYING THE MITIGATION HIERARCHY

Bruce McKenney & Jessica Wilkinson | Development by Design Program, The Nature Conservancy





US policy: "The next generation of mitigation"

White House	DOI	FWS	BLM	USFS
 Executive Order 13604 (March 2012) Presidential Memorandum: Mitigating Impacts on Natural Resources from Development and Encouraging Related Private Investment (Nov 2015) 	 Secretarial Order on Mitigation (Oct 2013) Strategy for Improving the Mitigation Policies and Practices of DOI (Apr 2014) Departmental Manual: Implementing Mitigation at a Landscape Scale (Nov 2015) 	 Update to 1981 Mitigation Policy Update to 2003 Banking Policy Policy on Mitigation for Candidate Species 	 Regional Mitigation Policy (draft 2013, final late-2015) Handbook for Implementing Regional Mitigation Policy (late 2015) 	 USFS Chief Letter: National Landscape- Scale Mitigation Framework



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US Policies in 2015

The White House Office of the Press Secretary

For Immediate Release

November 03, 2015

Presidential Memorandum: Mitigating Impacts on Natural Resources from Development and **Encouraging Related Private** Investment

> **Department of the Interior Departmental Manual**

Effective Date: 10/23/2015 Series: Public Lands **Part 600**: Public Land Policy Chapter 6: Implementing Mitigation at the Landscape-scale **Requires agencies to:** •Follow full mitigation hierarchy •Avoid impacts to irreplaceable resources •Set a "net benefit goal" •Ensure mitigation is additional and durable •Set measurable performance standards

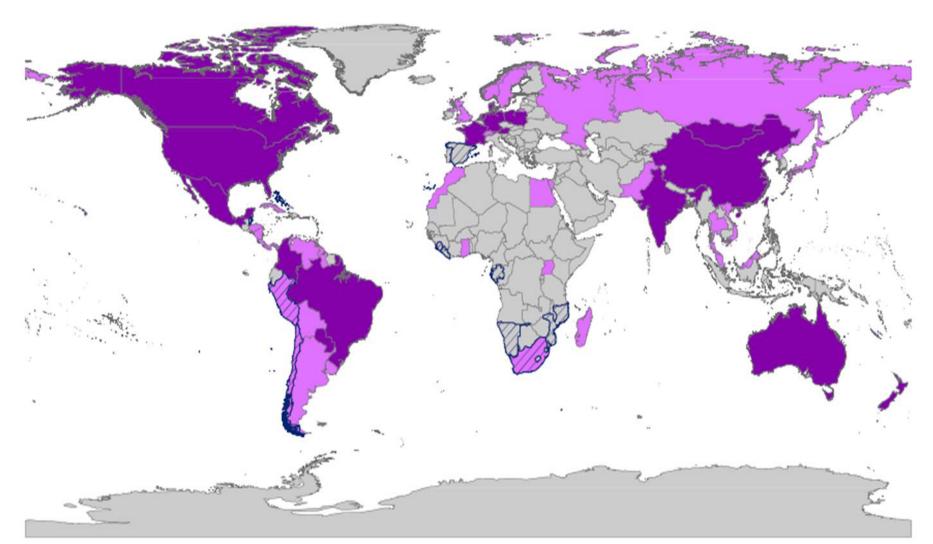
DOI:

•Use a landscape-scale approach to consider impacts and prioritize mitigation objectives •Promote mitigation actions that help address climate change effects; improve resilience

56 countries have or are developing policies for offsets

dark purple = current policies or regulations requiring offsets light purple = current policies or regulations enabling offset blue hatch = developing policies





Source: The Biodiversity Consultancy. 2013. Government policies on biodiversity offsets. Cambridge, UK



Rise of Offset Policies

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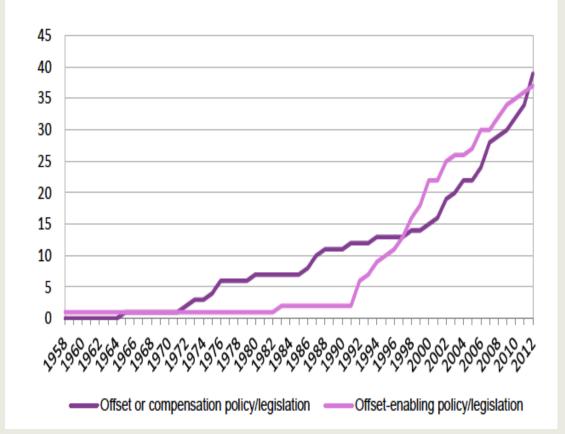
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PLOS ONE

Policy Development for Environmental Licensing and Biodiversity Offsets in Latin America

Ana Villarroya¹*, Ana Cristina Barros², Joseph Kiesecker³

1 The Nature Conservancy, Boulder, Colorado, United States of America, 2 The Nature Conservancy, Brasilia, Brazil, 3 The Nature Conservancy, Fort Collins, Colorado, United States of America



* Does not include 17 offset policies under development

Source: The Biodiversity Consultancy. 2013. Government policies on biodiversity offsets. Cambridge, UK



Call to Action

- Ensure key mitigation principles in development and mitigation policies
- Collective leadership to promote development and mitigation planning:
 - At a landscape scale;
 - In advance of major project decisions;
 - For a more comprehensive set of values, functions, and goals.

WORLD ECONOMIC FORUM
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Blueprints for a Greener Footprint: Sustainable Development at a Landscape Scale (December 2015)