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MAKING THE CASE

Ecosystem Valuation to Inform Decision Making

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Photo: Katina Rogers.

Why value ecosystem services?

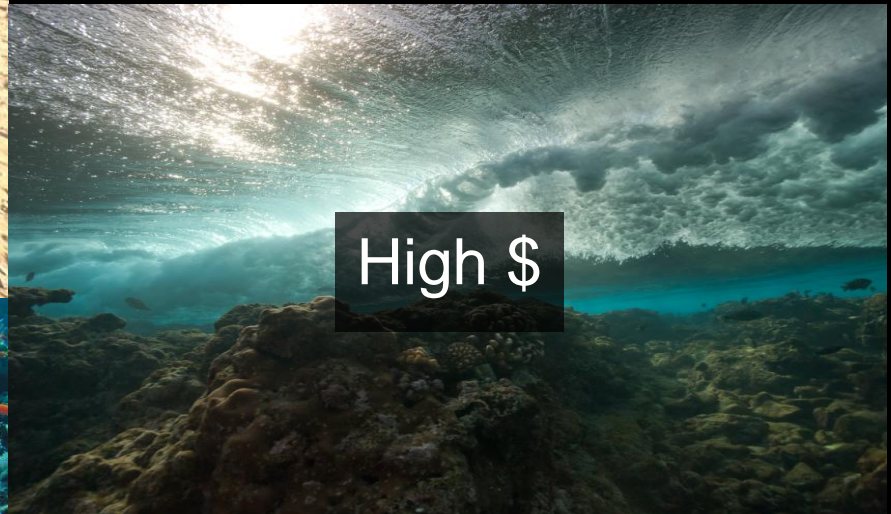


*Photos: Richie Deisterheft (forest and river),
Mark Lehigh (farmland), Kenny Mitchell (beach).*

Coastal Capital – Studies 2005-11



Coastal Capital – Studies 2005-11



Photos: Crispin Zeenam (fisherman),
Steve Linfield (wave break), K. Tkachenko (diving).

Coastal Capital – Impacts?



Main research questions

- Which coastal valuation studies have informed decision making in the Caribbean?
- What made those studies successful in informing decision making?

Use of coastal ecosystem valuation in decision making in the Caribbean

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Use of coastal economic valuation in decision making in the Caribbean: Enabling conditions and lessons learned

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ABSTRACT

Caribbean economies depend on coastal ecosystem services, including tourism, fisheries, and shoreline protection. However, coastal ecosystems continue to degrade due to human pressures. Many pressures arise from decisions that fail to take full range of ecosystem values and benefits into account. Economic valuation can contribute to better-informed decision making about coastal resource use and development. More than 100 studies in the Caribbean contain monetary values of coastal ecosystem goods and services. However, only a minority of these studies have had an observable influence on policy, management, or investment decisions. Through a series of interviews, we identified 17 valuation studies that have directly influenced decision making. Due to the difficulty of tracking influence, our review was not exhaustive. These 17 "success stories" highlight the potential for economic valuation to improve decision making. Building on literature on the challenges of integrating science into policy, we used these 17 cases to identify enabling conditions for informing decision making. These conditions include a clear policy question, strategic choice of study area, strong stakeholder engagement, effective communications, access to decision makers, and transparency in reporting results. Our findings suggest that valuation practitioners can and should do more to ensure that valuation studies inform decision making.

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1. Introduction

Perhaps the greatest rationale for conducting economic valuation – which puts a monetary value on ecosystems such as coral reefs or mangroves – is to encourage recognition of ecosystem services and their benefits in political and economic decision making. Valuation can be an influential tool to inform holistic decision making around development planning, conservation, and provision of public goods and services.¹ Because of its promise, economic valuation is increasingly emphasized in public policies, regulations, and investment decisions. The Economics of Ecosystems and Biodiversity study (TEEB), initiated by the G8+5 environment ministers; the World Business Council for Sustainable Development's guide to corporate ecosystem valuation; and the World Bank's Wealth Accounting and the Valuation of Ecosystem Services (WAVES) partnership are but three recent global examples.²

In the Wider Caribbean Region,³ there is also growing interest in economic valuation to inform smart choices about coastal conservation and management. For example, the Jamaican National Environment and Planning Agency is currently working to incorporate economic valuation into its environmental impact assessments, and the Caribbean Large Marine Ecosystem (CLME) project – which is working to promote an ecosystem-based management approach throughout the region – is gathering marine economic valuation data to support policy making.⁴ Furthermore, over the past 30 years, valuation literature on the Caribbean's coastal and marine resources has increased substantially. There are now more than 100

- Low observed use so far
- But, 20+ case studies offer lots of lessons

Valuation supports protected area establishment

St. Maarten, Haiti, Cuba, Bahamas, USA



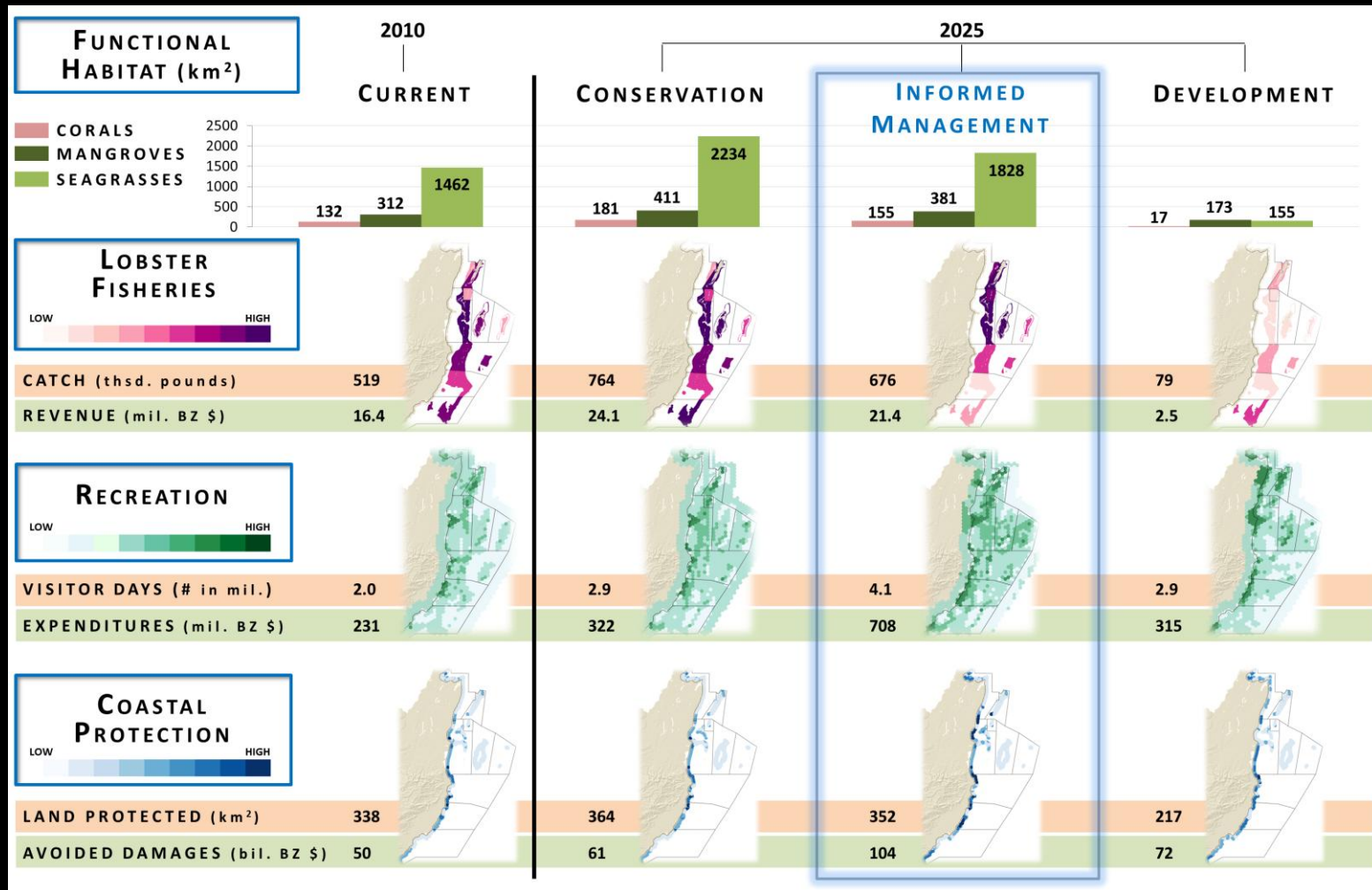
Valuation supports damage claims

Belize, Jamaica, St. Eustatius, St. Maarten, USA



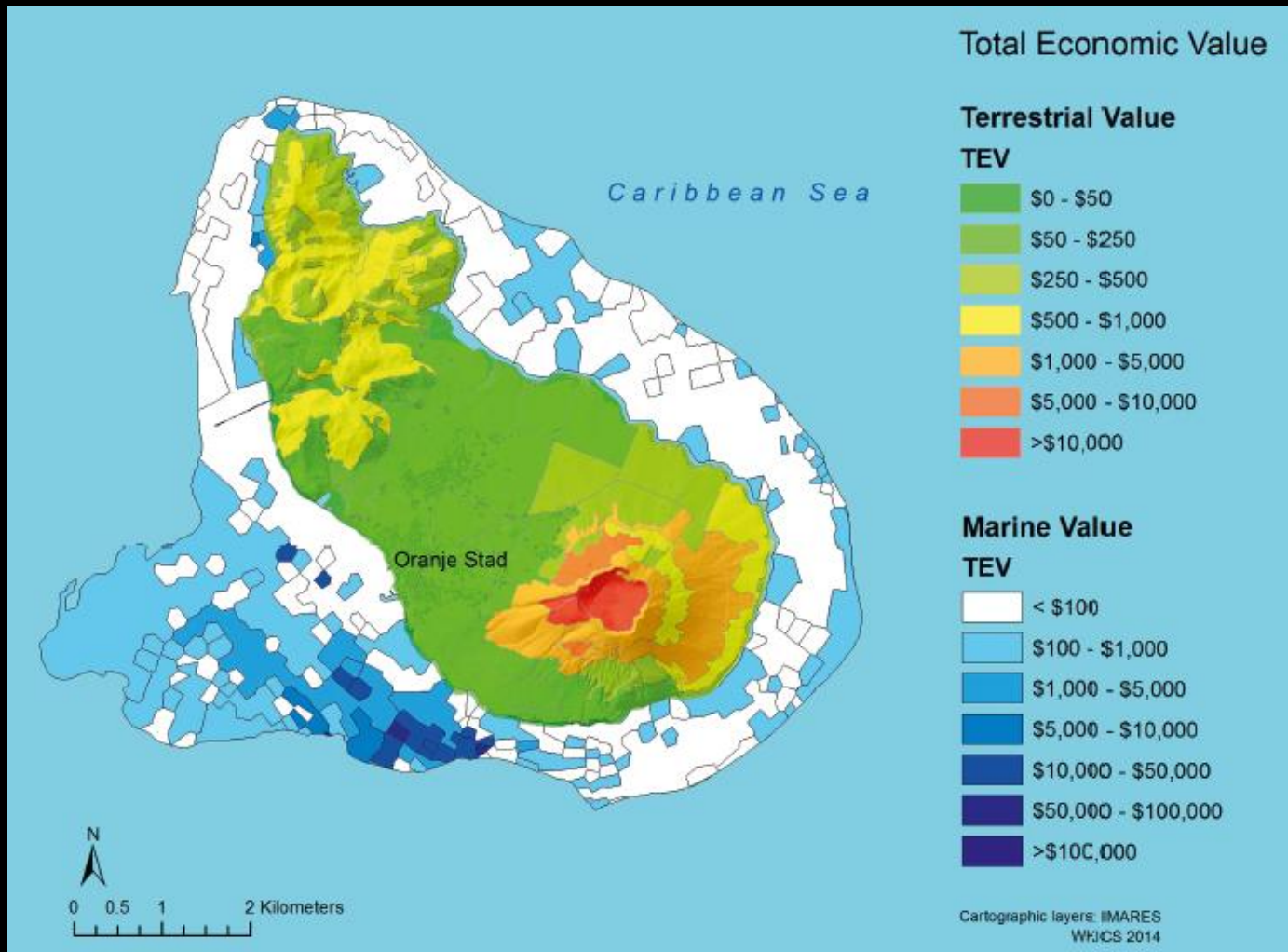
Valuation informs spatial planning

Belize



Valuation informs spatial planning

St. Eustatius



Valuation unlocks new finance streams

Bonaire, Dominican Republic, Mexico, Belize, St. Eustatius, Honduras



FISHING
WINDSURFING

PADDLE BOARDING
KAYAKING

YACHTING
SNORKELING

FREE DIVING
SWIMMING

WATER SKIING
SCUBA DIVING

SAILING
KITESURFING

WAKEBOARDING
MOTOR SPORTS

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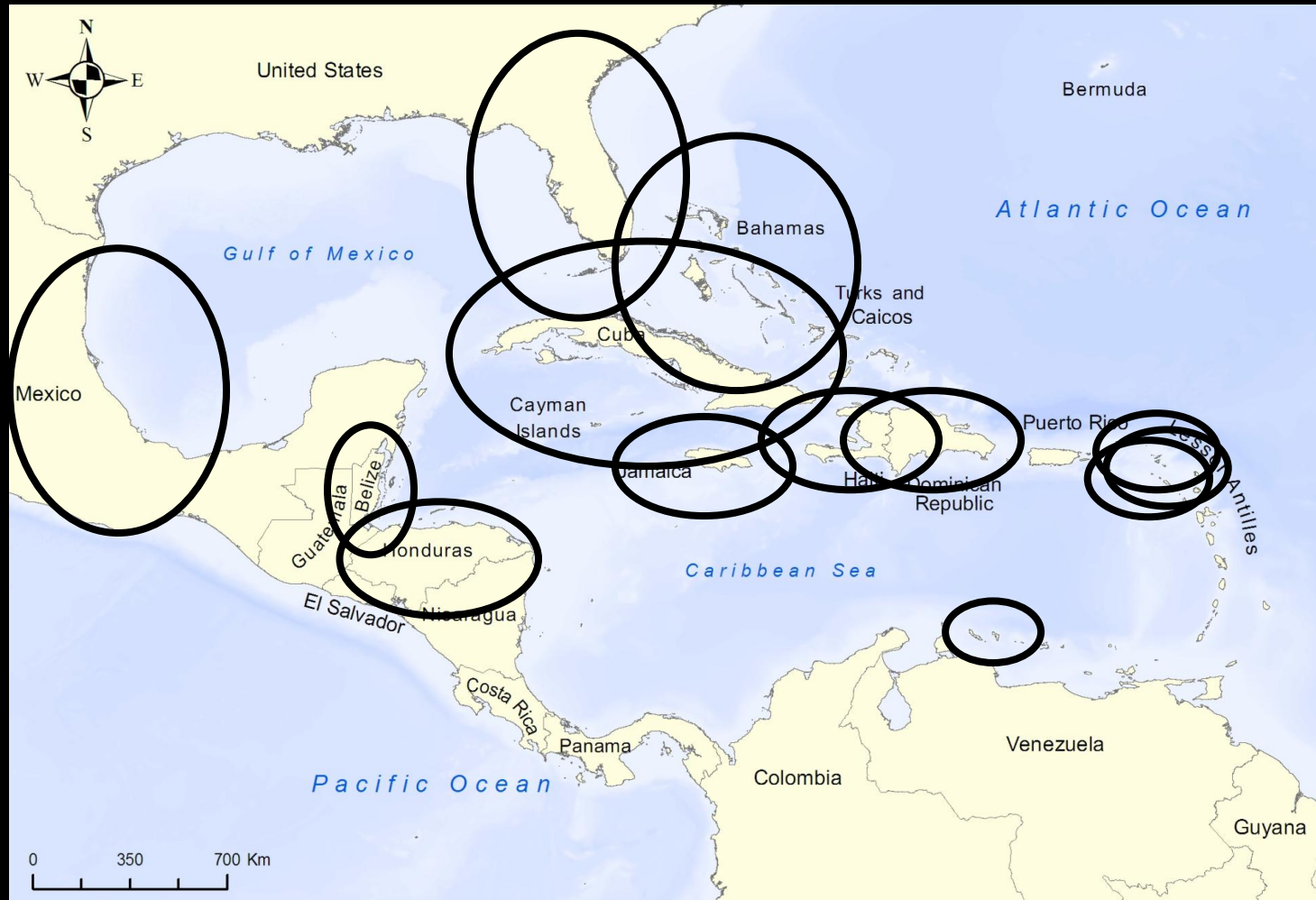
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How else have valuation results been used?

- Justify investment in management/conservation/enforcement
- Justify other policy changes (e.g., fishing regulations, offshore oil drilling ban)
- Raise awareness/highlight economic importance



Valuation results have informed decision making across the Caribbean



Note: Not exhaustive.

Why were these 20+ studies influential?

...enabling conditions for use in decision making

WHAT YOU CAN DO

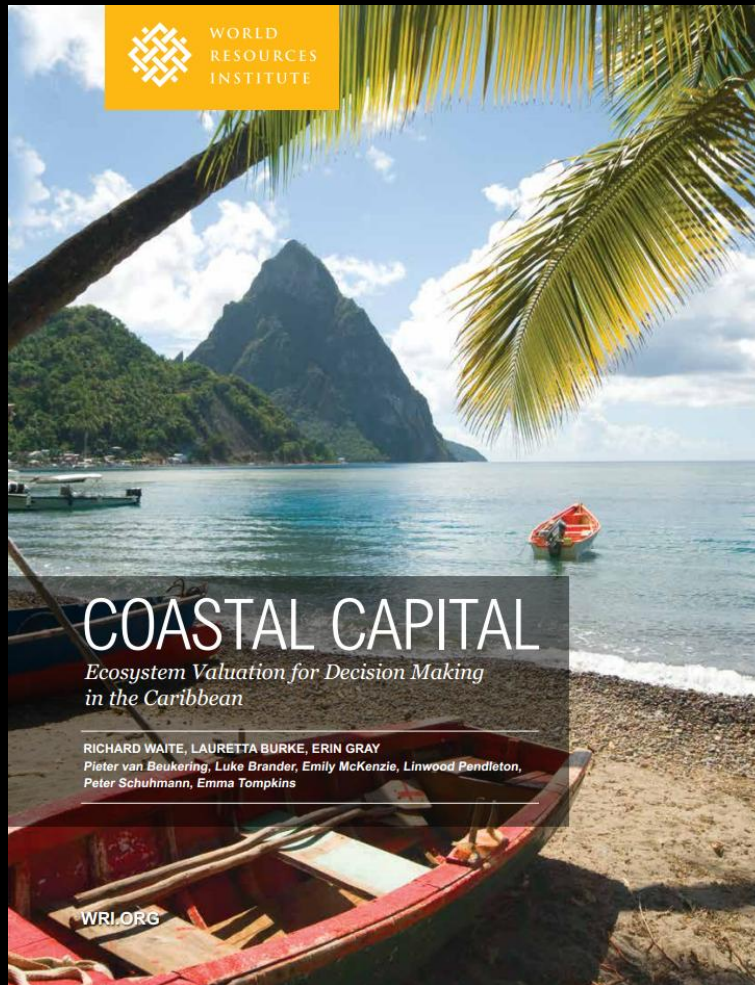
- ✓ Conduct a sound analysis
- ✓ Link to a clear policy question (use appropriate methods)
- ✓ Engage stakeholders and decision makers
- ✓ Value relevant ecosystem services
- ✓ Be transparent
- ✓ Communicate strategically

WHAT YOU CAN LOOK FOR

- ✓ Highly threatened ecosystems
- ✓ High economic dependence on natural resources
- ✓ Good governance
 - Transparency in decision making
 - Legal framework, enforcement ability
 - Local control over resource management / revenue

New Guidebook:

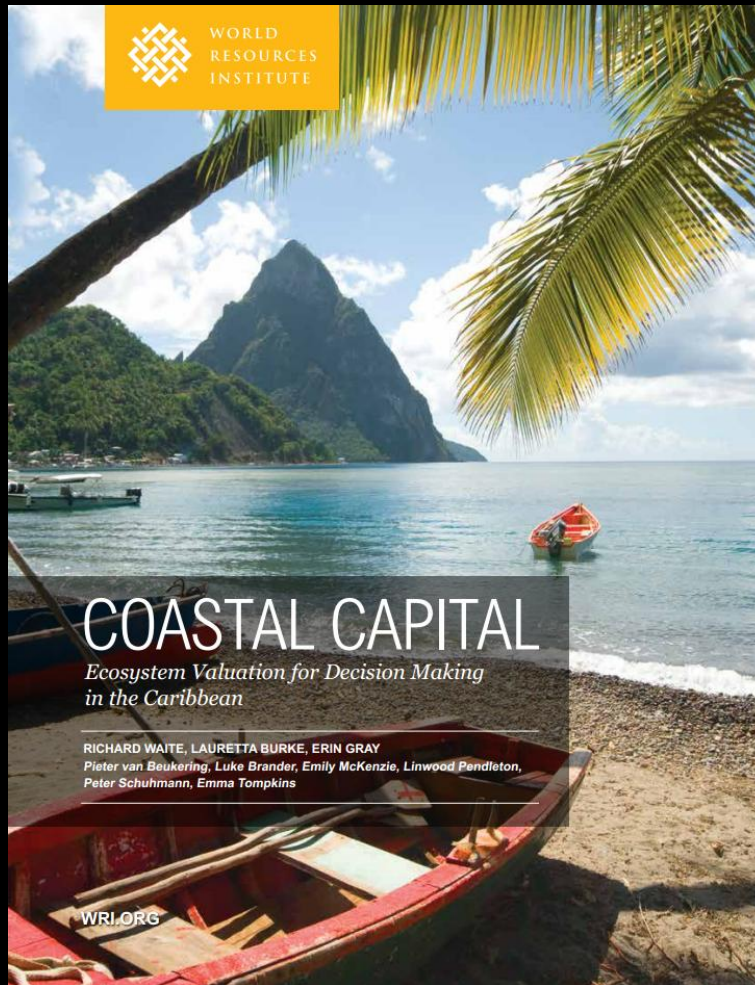
Replicating the enabling conditions



- The CARIBSAVE Partnership
- Centre for Resource Management and Environmental Studies (CERMES), University of the West Indies (UWI), Cave Hill, Barbados
- Authors 2007 International Conservation Strategy Fund toolkit...
- Coral Reef Alliance
- Valuing the Environment
- Marine Ecosystem Services Partnership (MESP)
- International Development Toolkit
- Natural Capital Project
- The Nature Conservancy
- Nicholas Institute for Environmental Policy Solutions, Duke University
- Organization of American States
- United Nations Environment Programme – Caribbean Environment Program (UNEP-CEP)
- University of North Carolina Wilmington
- WWF Conservation Science Network

New Guidebook:

Replicating the enabling conditions



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- Margaret A. Cargill Foundation
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- Netherlands Ministry of Foreign Affairs
- United Nations Environment Programme – Caribbean Environment Programme (UNEP-CEP)

New Guidebook:

Replicating the enabling conditions



1. Scoping

2. Analysis

3. Outreach
/ Use of
Results

Phase 1: Scoping

- 1.1 Identify policy question
- 1.2 Consider the context
- 1.3 Review previous valuation studies
- 1.4 Identify and begin to engage stakeholders
- 1.5 Identify decision makers and other target audiences and draft communications strategy

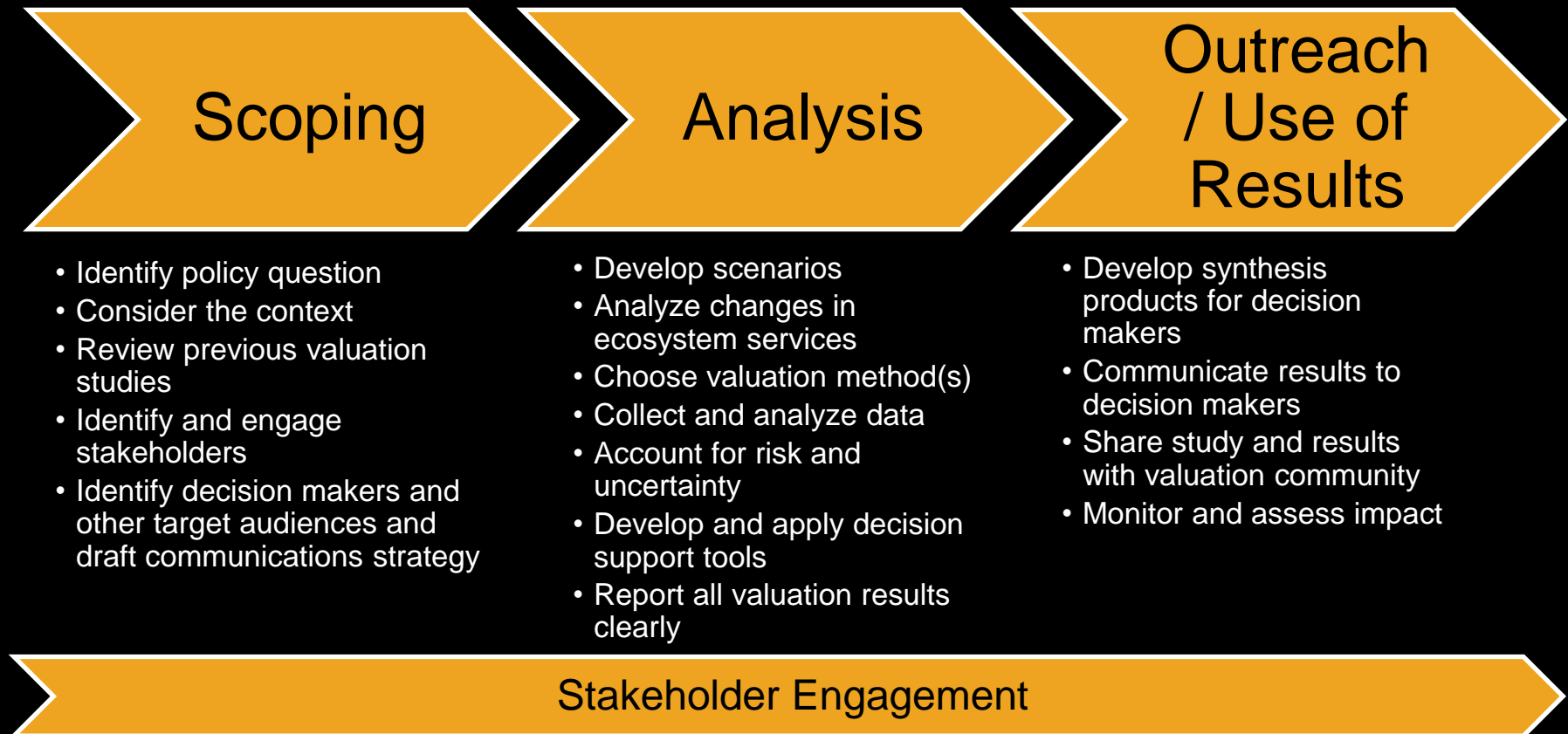
Phase 2: Analysis

- 2.1 Develop scenarios
- 2.2 Analyze changes in ecosystem services
- 2.3 Choose valuation method(s)
- 2.4 Collect and analyze data
- 2.5 Account for risk and uncertainty
- 2.6 Apply decision support tools
- 2.7 Report all valuation results clearly

Phase 3: Outreach and Use of Results

- 3.1 Develop non-technical products for decision makers
- 3.2 Communicate results to decision makers
- 3.3 Share study and results with valuation community
- 3.4 Monitor and assess impact

Steps in conducting ecosystem valuation to inform decision making



Steps in conducting ecosystem valuation to inform decision making

Scoping

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Analysis

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Outreach / Use of Results

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Stakeholder Engagement

Next steps at WRI...

- Outreach and capacity building
- Pilot applications
- Other opportunities for collaboration...



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Thank you!
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Photo: Olivier Langrand.