

Jamaica's National Ecological Gap Assessment Report

Capacity-building Workshop for the Caribbean on
Ecosystem Conservation and Restoration to Support
Achievement of the Aichi Biodiversity Targets

Belize, 28 April to 2 May 2014



National

Honouring our Commitments

Policy for Jamaica's System of Protected Areas (1997)

Goal: Environmental Conservation

“Preserve major representative stocks or areas of all Jamaica's biological resources...”

National Strategy and Action Plan on Biological Diversity in Jamaica (2003)

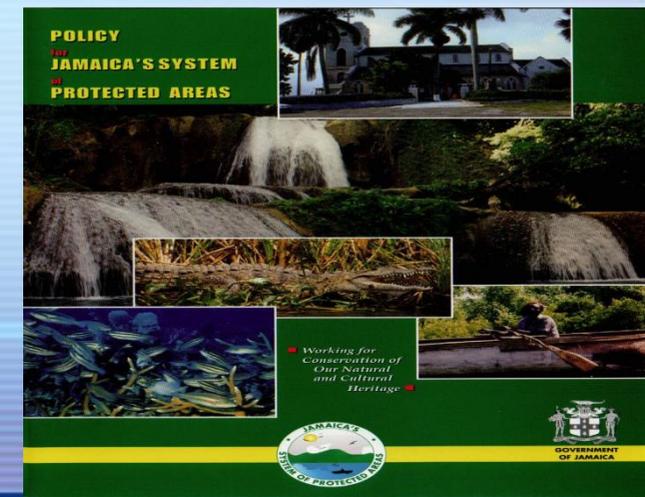
Goal: Conserve Biodiversity

“Expand the system of protected areas to ensure that it encompasses the country's diversity of natural resources, landscapes and seascapes”

Vision 2030 Jamaica: National Development Plan (2009)

Goal: Jamaica has a Healthy Natural Environment

“Develop and implement Mechanisms for Biodiversity & Ecosystem Management”



International & Regional

Honouring our Commitments

» International:

Convention on Biological Diversity

- ▶ Development of a protected area network which conserves at least 10% of its “naturally-occurring” ecosystems.
- ▶ Aichi targets

» Regional:

Caribbean Challenge

“To effectively conserve at least 20% of ... near-shore marine / coastal environment by 2020”.

Jamaica's National Ecological Gap Assessment

Primary Objectives

- » “Identify specific areas representing critical marine, terrestrial and freshwater biological diversity that are not presently under any form of protection...”
- » Provide recommendations for the design of a protected areas system that addresses these priority conservation area gaps”.



What: Conservation Targets

- » Jamaica's National Ecological Gap Assessment Report (2009) was informed by, *inter alia*, the Jamaica Ecoregional Plan (JERP) & protected area management effectiveness assessment.
- » Marine, freshwater & terrestrial conservation targets were selected based on criteria including endemism, ecological representativeness, threats, and vulnerability.
- » *Targets are an important first step for conservation as they represent key elements of biological diversity that are critical to maintaining significant ecological functions on which both man and nature depend*

Examples of Conservation Targets

Marine

- » Sandy shores
- » Rocky shores
- » Seagrass beds
- » Corals & Coral Reefs
- » Cays
- » Offshore banks
- » Seabird nesting and roosting areas
- » Turtle nesting beaches
- » Manatees



Examples of Conservation Targets

Freshwater

- » High-Altitude Headwater Streams
- » Large Low-Altitude Streams
- » Coastal Springs & Streams
- » Karstic Aquatic Systems: Karstic Streams
- » Freshwater wetlands
- » Endemic fish
- » Freshwater caves



Examples of Conservation Targets

Terrestrial

- » Dry Forest (on alluvium, limestone and shale)
- » Very Wet Forest (on alluvium, limestone and shale)
- » Black-billed Parrots
- » Jamaican Hutia
- » Giant Swallowtail Butterfly
- » West Indian Whistling Duck



Viability of and threats to conservation targets were assessed.

Major Threats to Biodiversity

Marine

- » Coastal development
- » Land run-off
- » Overfishing
- » Solid waste pollution

Freshwater

- » Nutrient Loading (agriculture and agro-processing)
- » Invasive species
- » Deforestation and removal of riparian vegetation
- » Unsustainable harvesting of freshwater biodiversity

Terrestrial

- » Mining
- » Invasive species
- » Unsustainable use of resources e.g. deforestation
- » Poor land use planning

Goals & Gaps

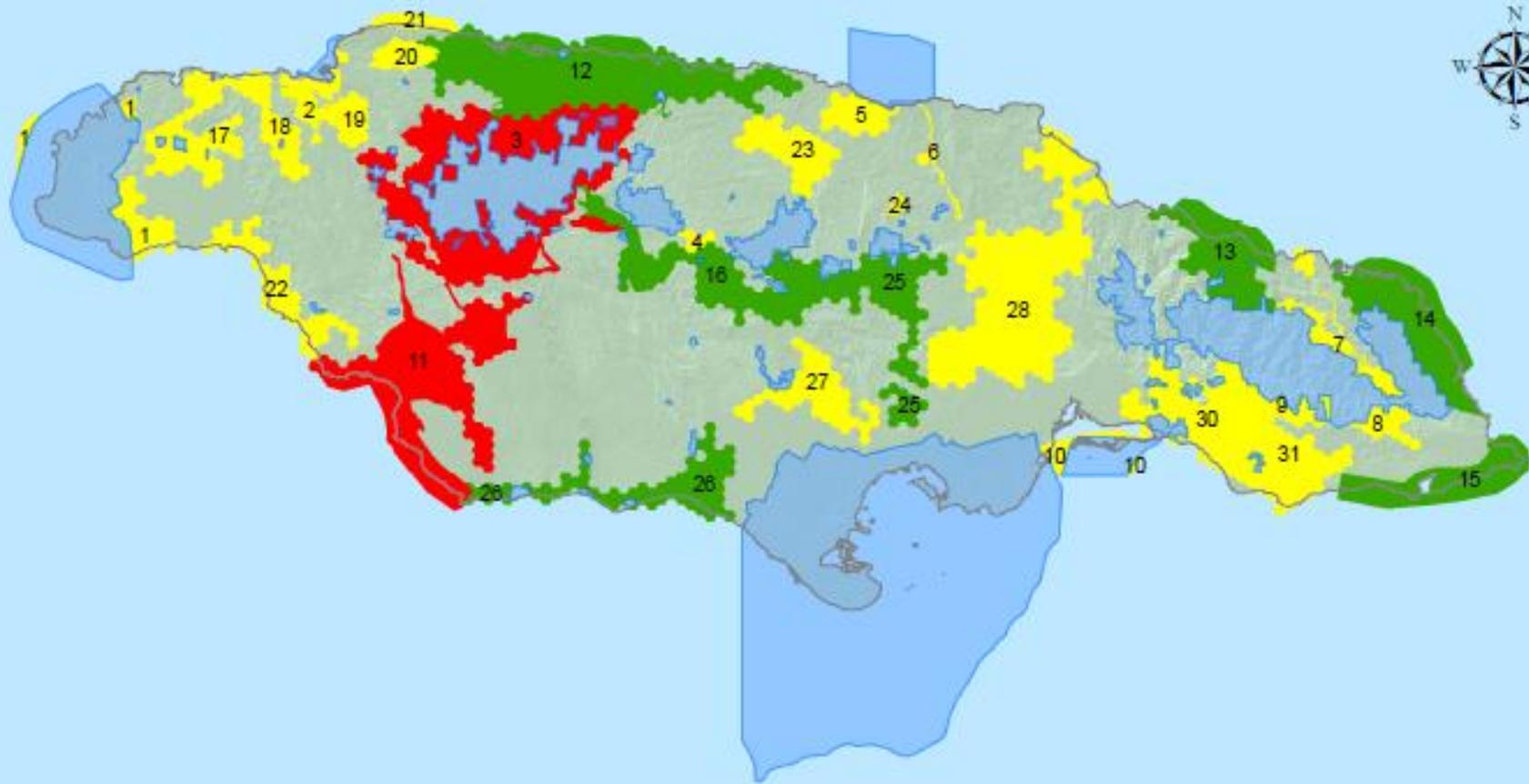
- » Conservation goals were defined.
- » Overlay analyses to determine degree to which Jamaica's protected areas provide conservation targets with adequate management and protection.
- » Shortfalls in present protected areas described as:
 - ▶ Representative gaps - *How much of critical biodiversity is protected?*
 - ▶ Ecological gaps - *Is that which is protected ecologically healthy?*
 - ▶ Management gaps - *Is that which is protected under effective management?*

Proposed Protected Areas

- » Resulting proposed prioritized portfolio of protected areas consists of 31 sites including additions to existing protected areas.
- » Recommendation for implementation on a phased basis focusing first on areas of highest priority with high feasibility and probability of success.

Jamaica National Ecological Gap Assessment

Proposed National Protected Areas Portfolio - Priority Ranking : Biodiversity



LEGEND

Priority Ranking

- High
- Medium
- Low
- Existing Protected Area

- 1 Negiti PA Add-on
- 2 Montego Bay Add-on
- 3 Cockpit Country Add-on
- 4 Litchfield Wetlands Add-on
- 5 Ocho Rios Marine Add-on
- 6 Ocho Rios Marine Add-on 2
- 7 SUCMNP Add-on Rio Grande
- 8 SUCMNP Add-on E. St. Thomas
- 9 SUCMNP Add-on W. St. Thomas
- 10 Portland Bight Add-on
- 11 Black River Complex
- 12 North Coast Forest
- 13 Buff Bay
- 14 Driver's River
- 15 St. Thomas Wetlands
- 16 Spiral Forest Manchester
- 17 Dolphin Head
- 18 East Dolphin Head
- 19 SE Montego Bay
- 20 Success St. James
- 21 St. James Coast
- 22 Bluefield Whitehouse
- 23 Middle Barton
- 24 Monague
- 25 River Head - Charleton
- 26 Canoe Valley Lovers Leap
- 27 Beaches Bottom
- 28 Sigoville - Robins Bay
- 29 Pedro Bank and Cays
- 30 Wilks
- 31 East Yallahs

Protected Areas System

Components

**Ecological
Gap
Assessment**

**Management
Effectiveness
Assessment**

**Capacity
Development
Planning**

**Sustainable
Finance
Planning**

Seeking to Honour Our Commitments

