

# Applying an Ecosystem Services Approach to Inform Sustainable Coastal Area Management : **BELIZE**

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*“Implementing Rio+20: Integrated Planning for Sustainable  
Coastal Area Management in the Caribbean Region”*

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# THE VISION FOR OUR COAST



*A sustainable future where healthy ecosystems support, and are supported by, thriving local communities and a vibrant economy*

# Belize Integrated Coastal Zone Management Plan 2013

Coastal Zone Management Authority and Institute  
Ministry of Forestry, Fisheries, and Sustainable Development



*Promoting the Wise, Planned Use of Belize's Coastal Resources*

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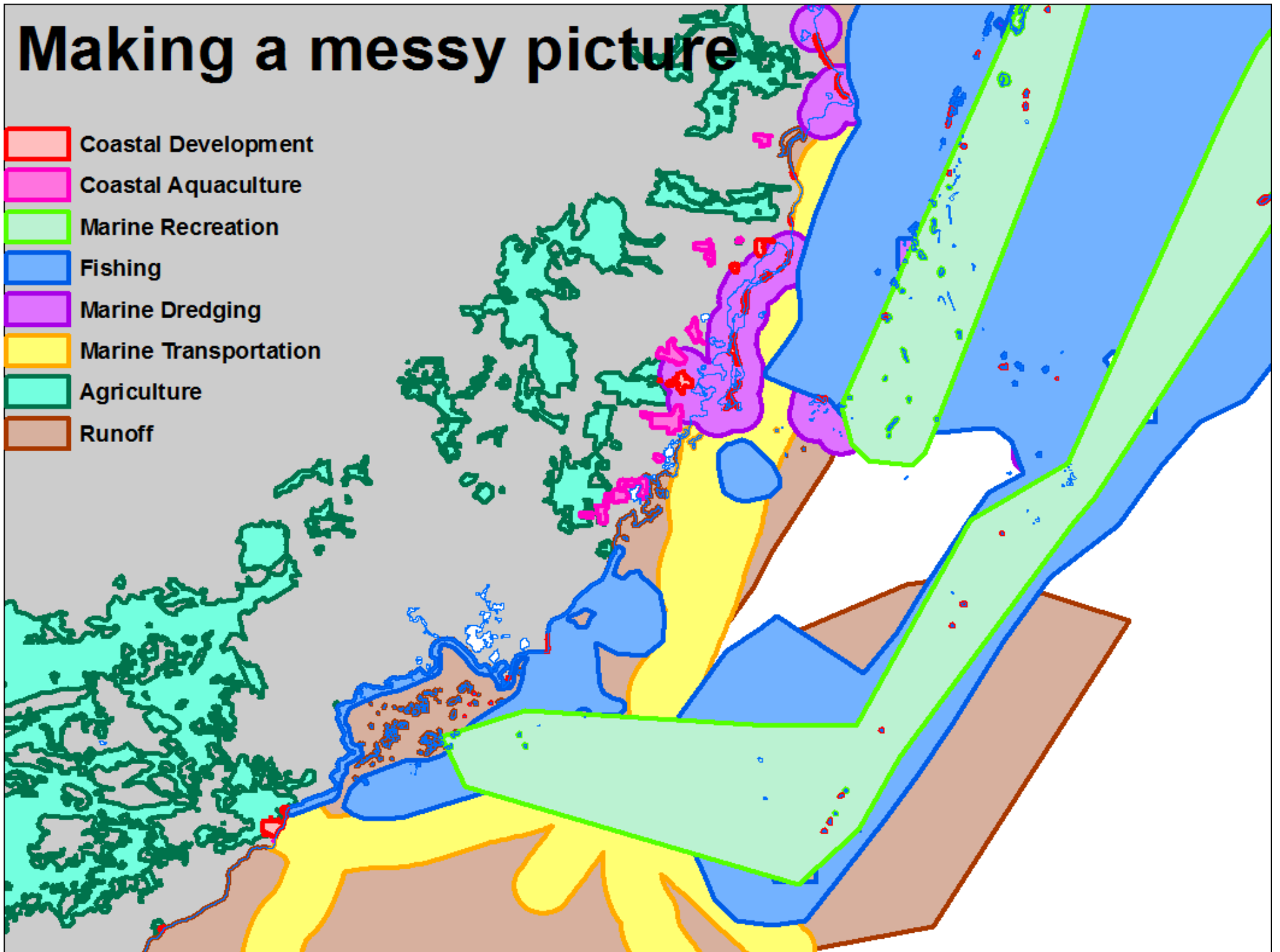
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A planning framework for national action to facilitate improved management of coastal and marine ecosystems so as to maintain their integrity while ensuring the delivery of ecosystem service benefits in perpetuity for present and future generations of Belizeans and the global community.

# Making a messy picture

- Coastal Development
- Coastal Aquaculture
- Marine Recreation
- Fishing
- Marine Dredging
- Marine Transportation
- Agriculture
- Runoff



# Benefits of using an Ecosystem Service Approach to Coastal & Marine Resources Management

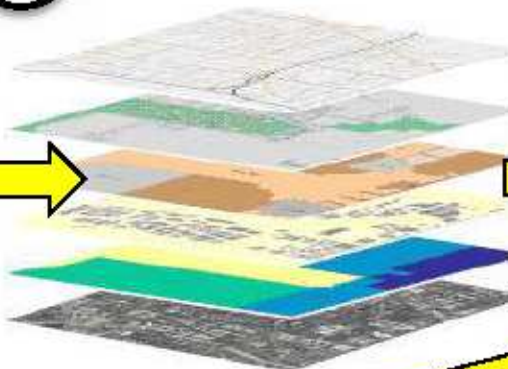
- Analysis of current and anticipated uses
- Identification of suitable areas for various activities to:
  - Reduce conflicts
  - Reduce environmental impacts
  - Achieve economic, social, cultural objectives
- Providing a process to better determine how the coastal & marine environment can be sustainably used, managed and protected



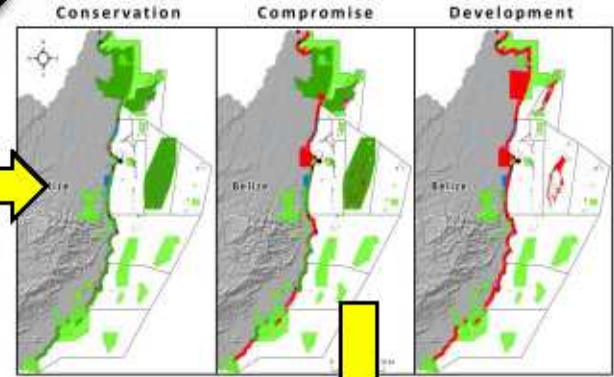
# 1 Set Objectives



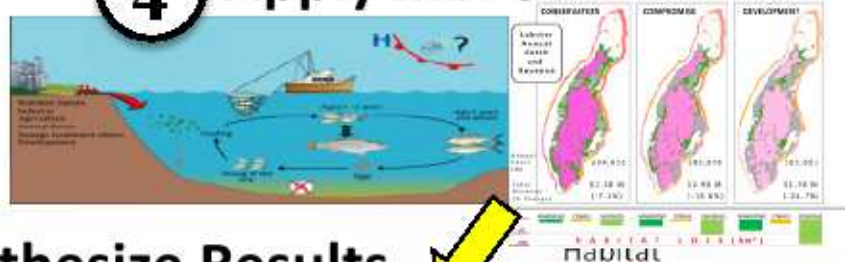
# 2 Compile Data



# 3 Baseline & Scenarios

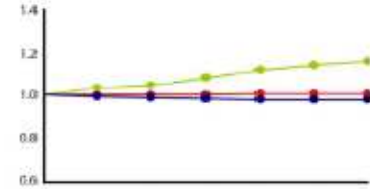


# 4 Apply InVEST



# 5 Synthesize Results

\*changes in flow and distribution of well-being

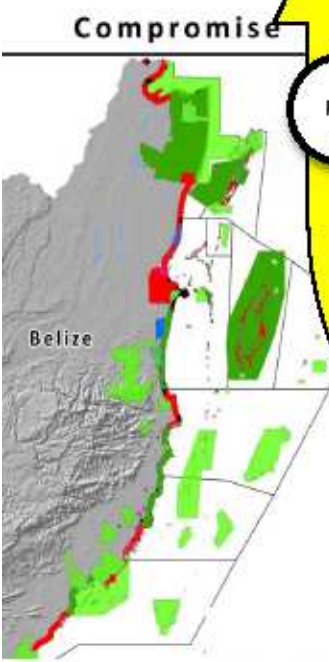


## Well-being metrics



\*SERVICESHEDMONEY HEALTH HAPPINESS SECURITY

# 7 Inform decisions



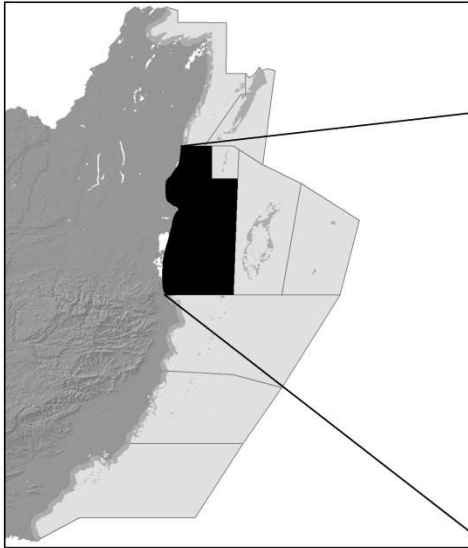
Iterate

# 6

# 5

# MULTIPLE RESOURCE USE

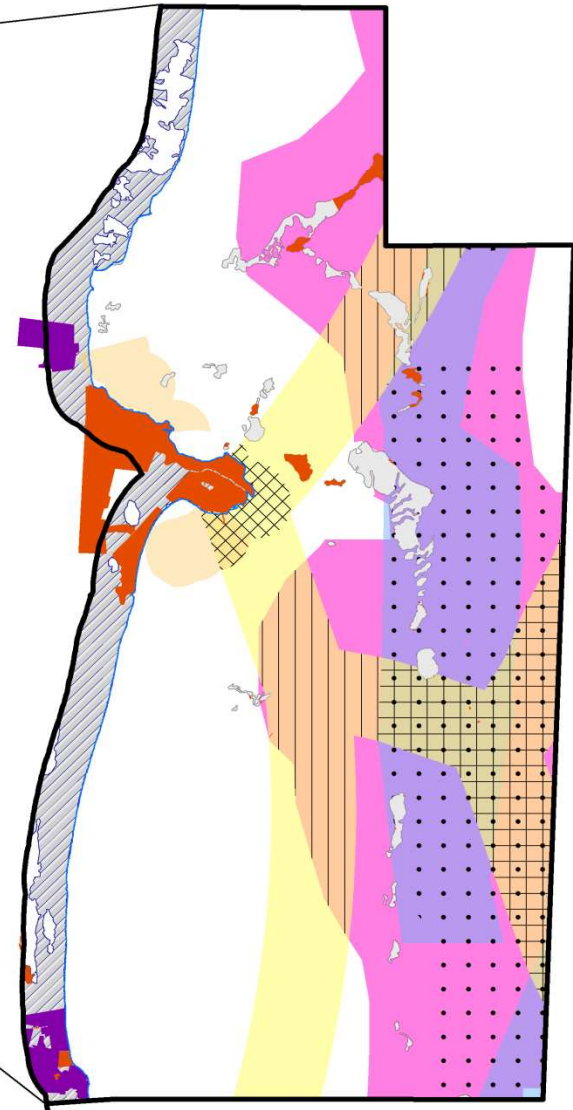
## CENTRAL REGION



## INFORMED MANAGEMENT



## MULTIPLE USE



# **KEY STRENGTHS OF THE PROCESS:**

## **An Ecosystem Services Approach to Spatial Planning:**

- (1) Refine and modify zone location and intensity of human use through iterative optimization
  
- (2) Allow policy makers to develop scenarios and compare alternative planning options through a participatory stakeholder engagement process
  
- (3) Achieve improved environmental and economic outcomes
  
- (4) Allow for a baseline to monitor changes and a foundation for future planning



# Coastal Zone Management Authority & Institute

*“Promoting the wise, planned use of Belize’s coastal resources”*



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