A photograph of a boat on the water under a cloudy sky. The sky is filled with large, white, fluffy clouds against a blue background. The water is a deep blue-green color with small ripples. In the foreground, the white hull of the boat is visible, along with some blue equipment. The horizon line is visible in the distance, with some land or trees on the right side.

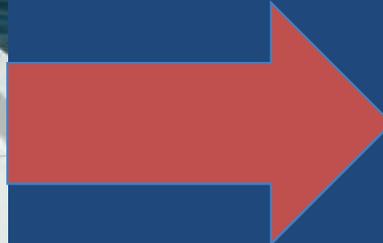
# NOAA Decision Support Approaches

Chris Kelble  
Science Coordination Group  
May 4, 2011

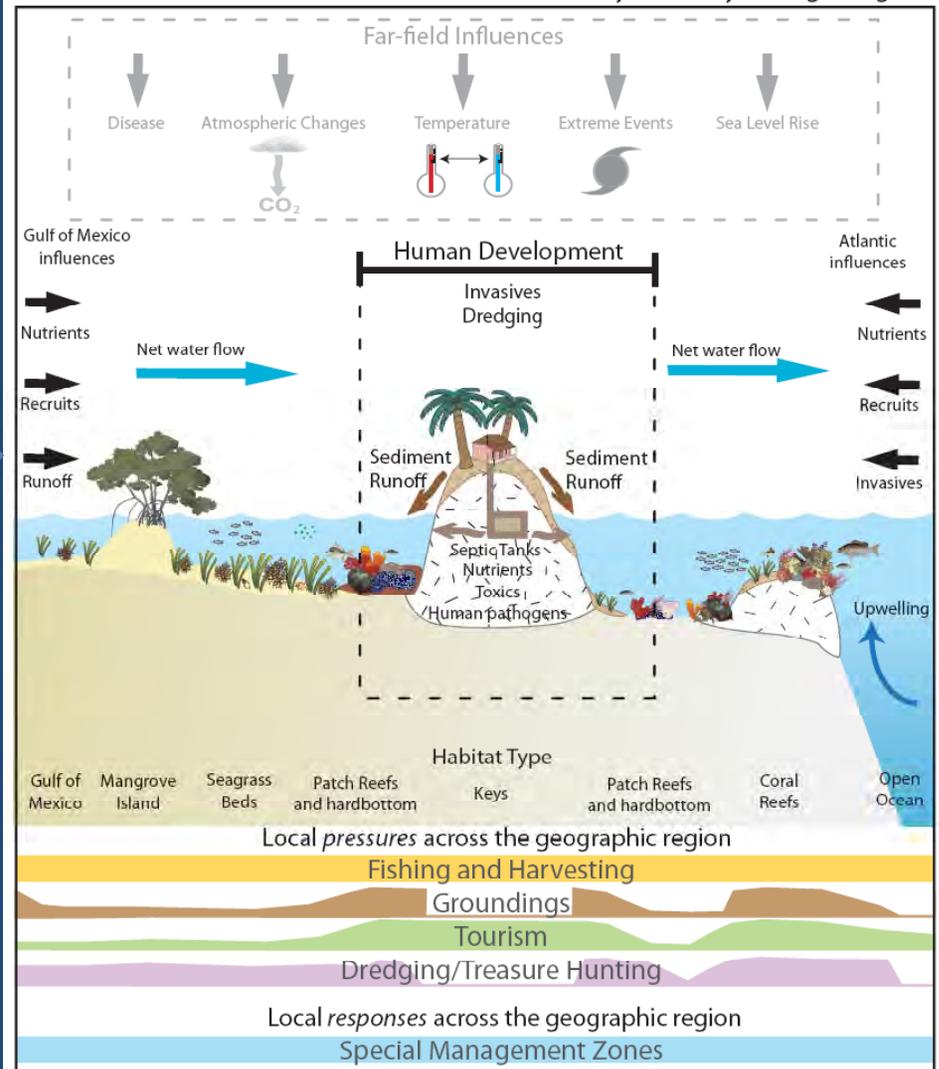
# Major NOAA Driver Magnuson-Stevens Re-authorization Ecosystem-Based-Management



Single Species  
Management



Near-field and far-field influences on the Florida Keys and Dry Tortugas region



# NOAA Decision Support Projects South Florida

- Marine and Estuarine Goal Setting (MARES)
- Integrated Ecosystem Assessments (IEA)
- Integrated Marine Protected Area Climate Tool (IMPACT)

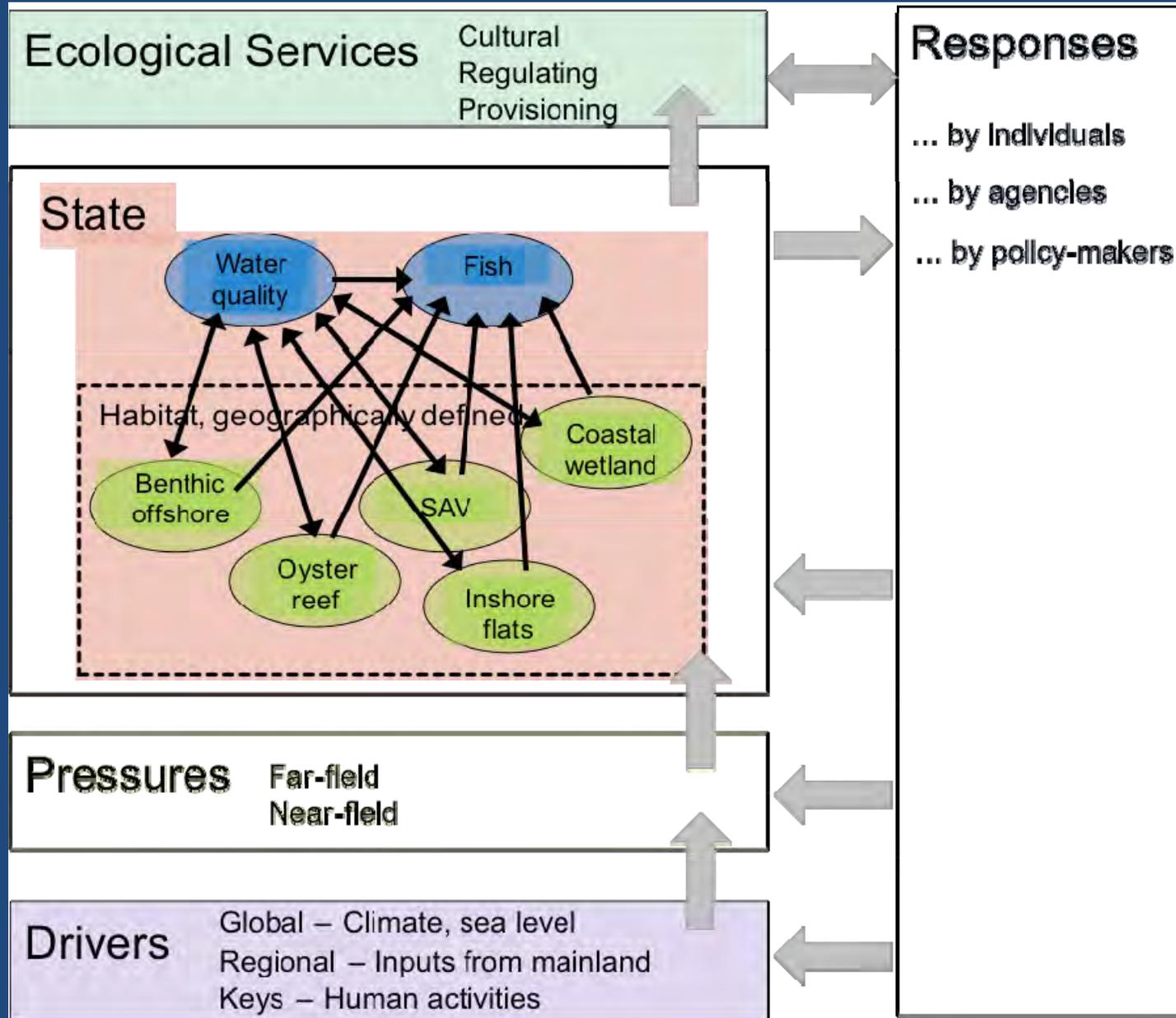
# **MARES Goals and Objectives**

**([www.sofla-mares.org](http://www.sofla-mares.org))**

**To elucidate and communicate desired future conditions of the coastal ecosystem of South Florida**

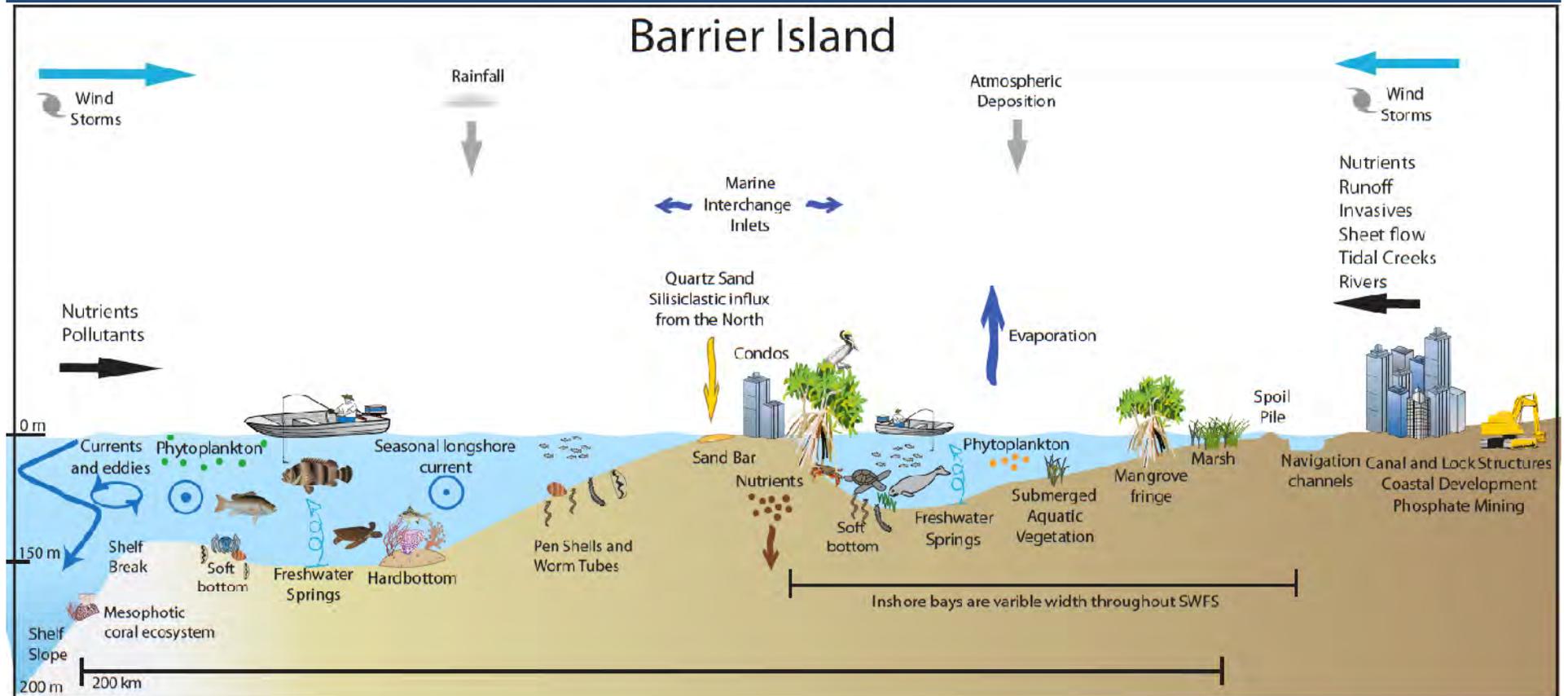
- Engage scientists (natural and human dimensions), managers, and policymakers in a systematic manner**
- Reach a “science-based” consensus about a sustainable marine ecosystem capable of providing the diverse ecosystem services upon which our society depends**

# MARES (Qualitative)



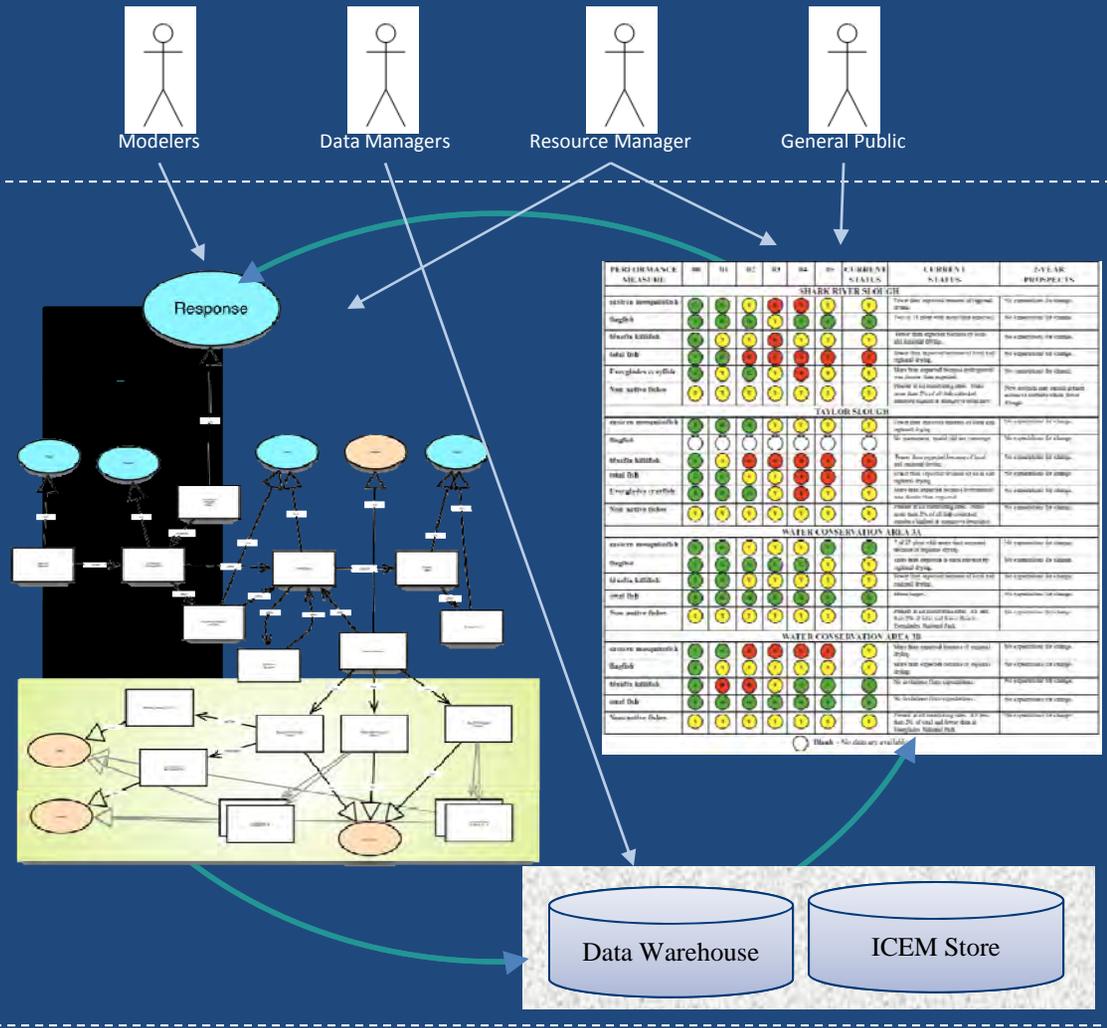
# MARES (Qualitative)

## Barrier Island



Project Acropora:

# Creating a MARES Legacy



Acropora's Key Features:

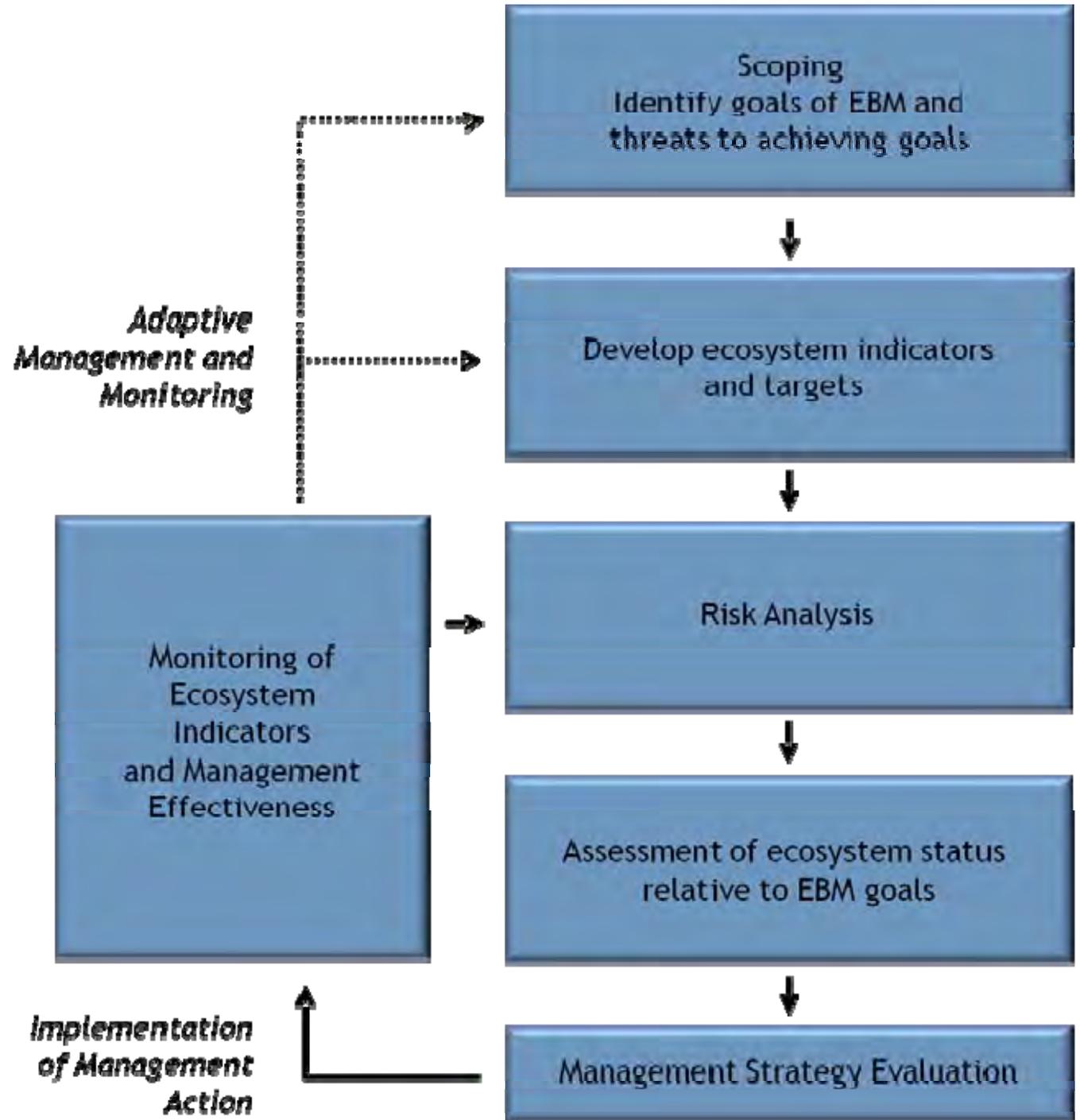
- Standard for ICEM representation and tools for model building
- Models are computationally available and searchable
- Tracking of observations and model evolution: Preservation of knowledge
- Enhanced ability to infer consequences of decisions and policies

# IEA Goal and Objectives

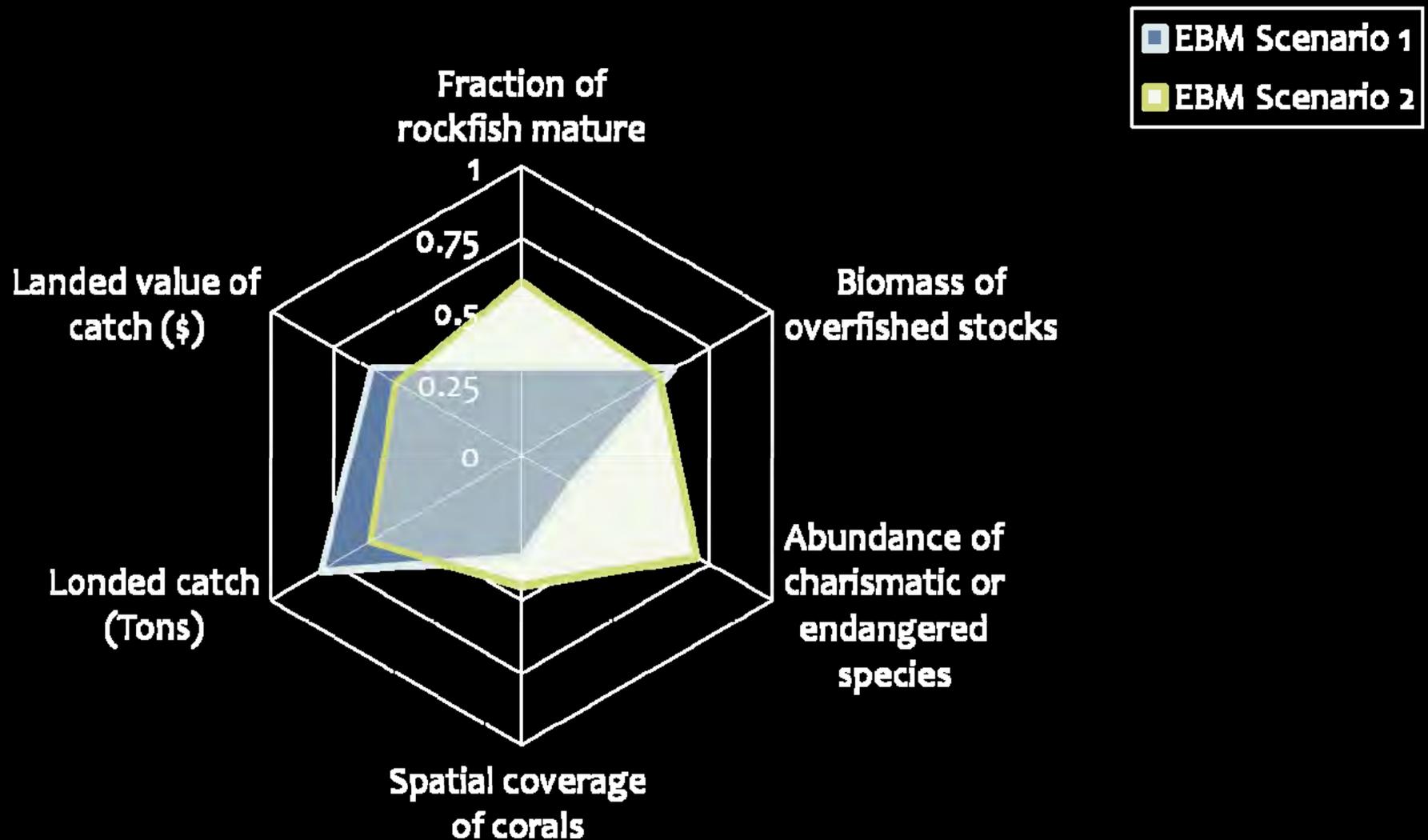
**NOAA's IEAs are “a synthesis and quantitative analysis of information on relevant physical, chemical, ecological and human processes in relation to specified ecosystem management objectives”  
(Levin, et al. 2008, 2009)**

**The primary objective of IEAs is to make comprehensive information available to inform management decisions.**

# IEA Process



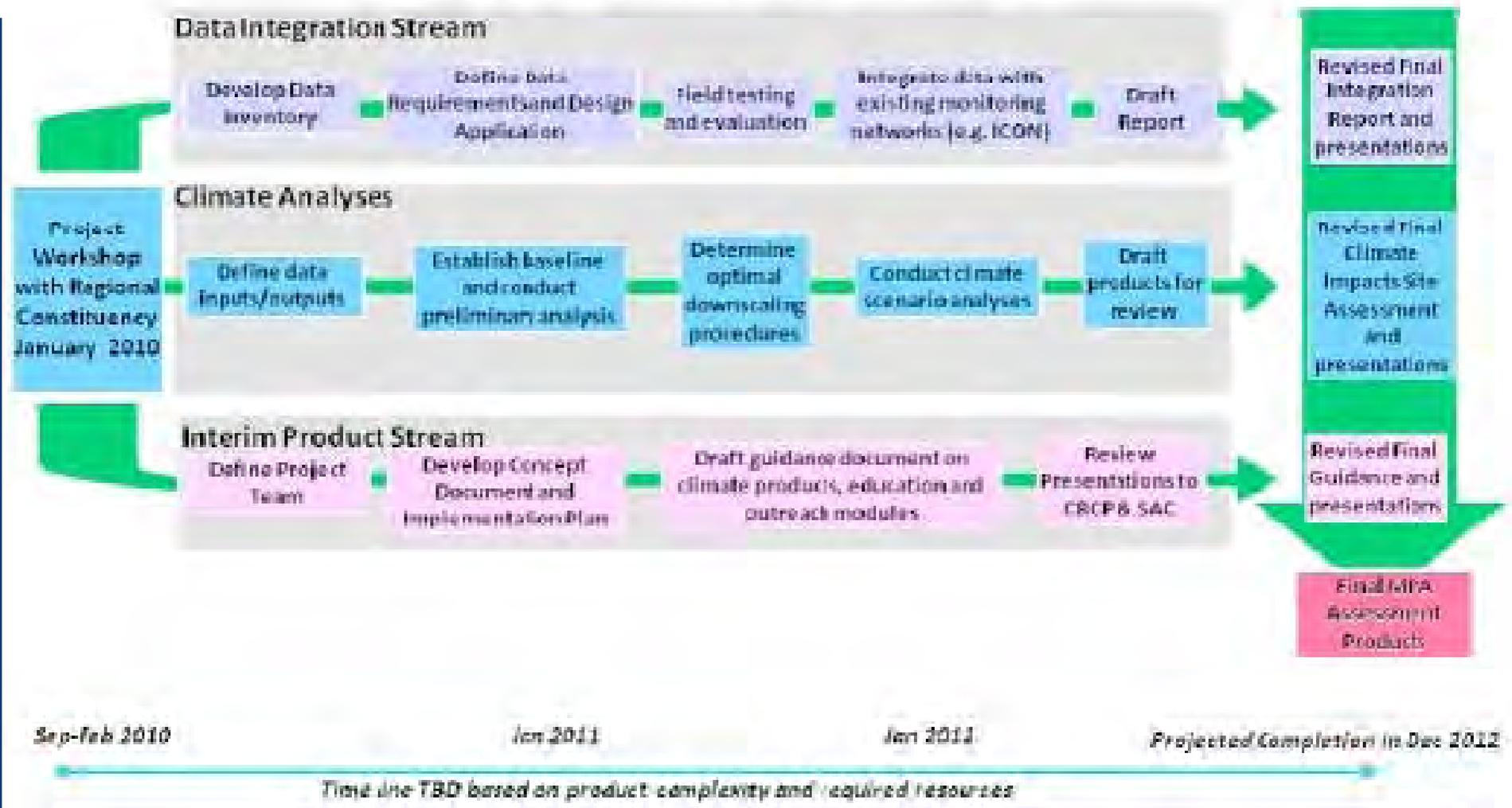
# Management Strategy Evaluations



# IMPACT

(<http://www.coral.noaa.gov/research/climate-change/impact-project.html>)

## Draft Project Implementation Framework



# Questions

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305-361-4330