



Assessment of Science Needs Based on an Integrated Conceptual Ecosystem Model: The MARES Project

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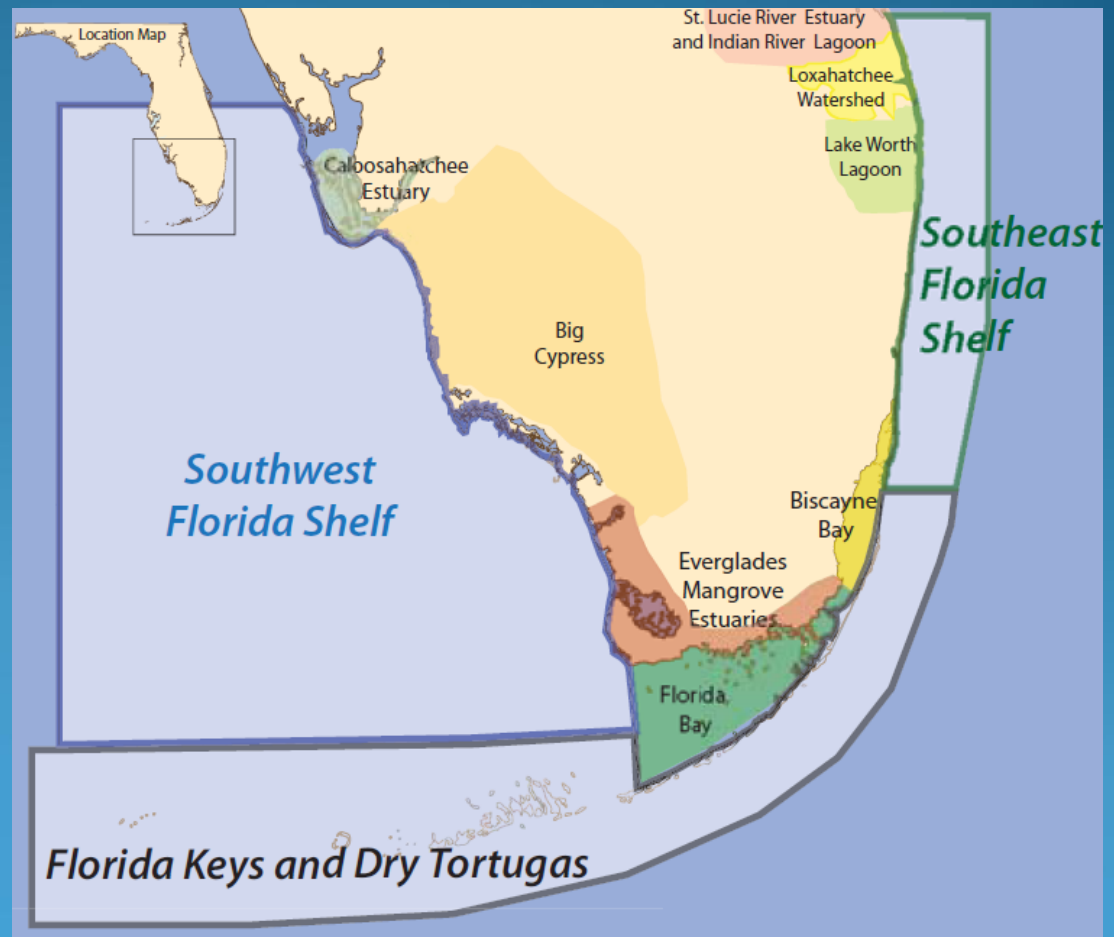
This talk . . .

- MARES approach
- Utility to managers
- How can it be used



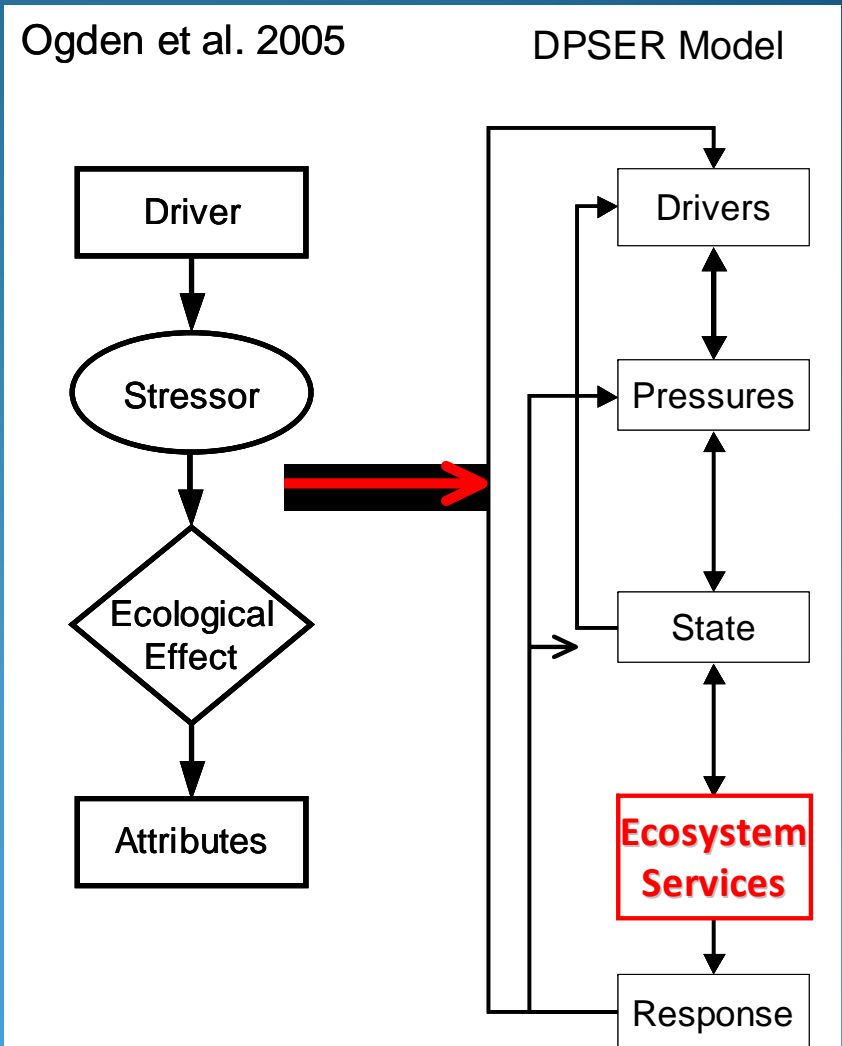
MARES Project (2009-2012)

- 3 marine regions
- Approach
 - Conceptual models
 - Indicators
 - Consult with managers, public
- Results
 - Report card
 - Synthesis of existing science
 - Identify needs



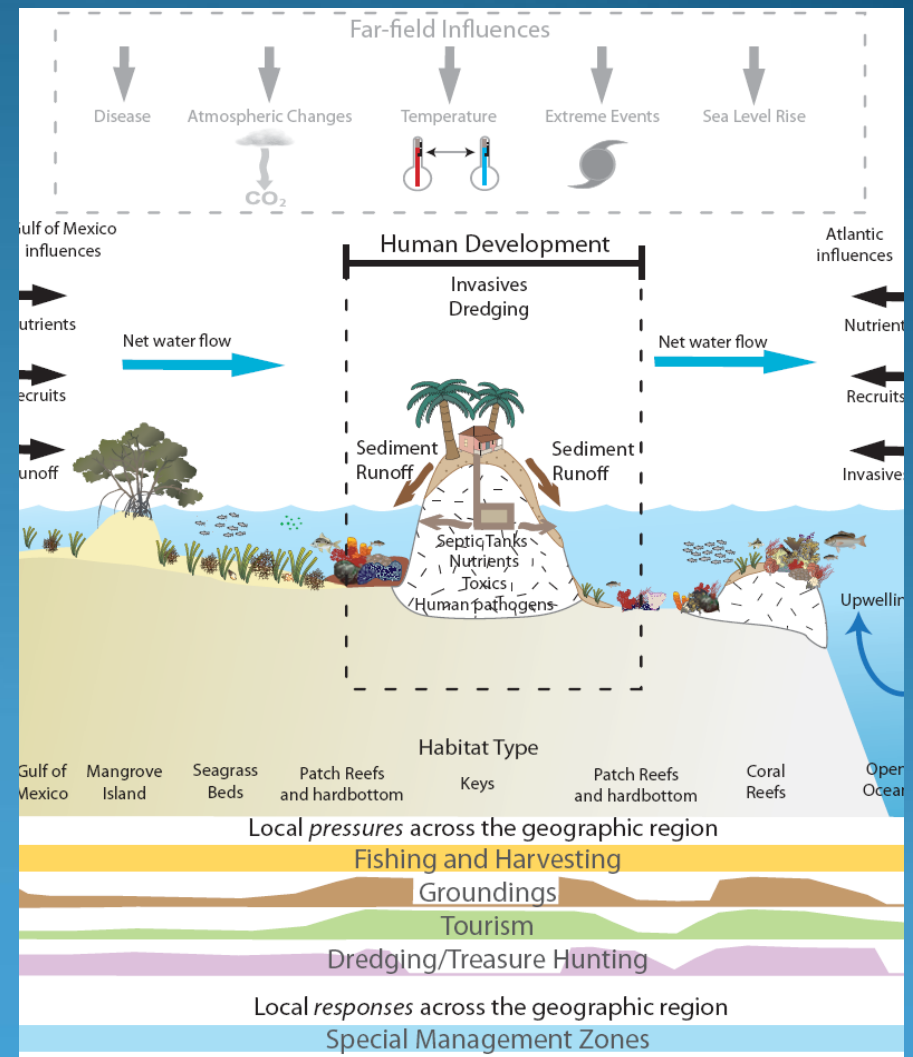
DPSEER Framework

- Builds on conceptual models developed in CERP/RECOVER
- Human dimensions incorporated in new elements:
 - Ecosystem services
 - Response



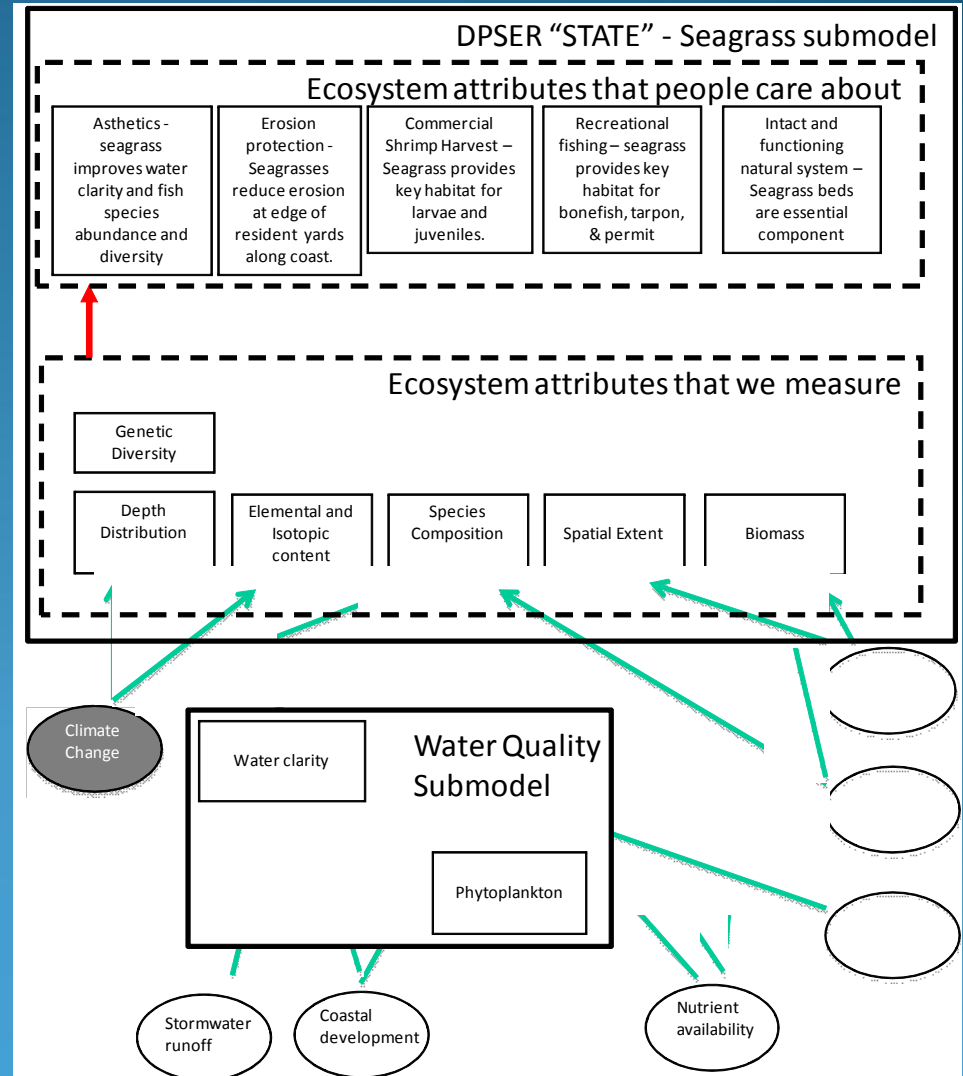
Drivers and Pressures

- Drivers
 - Global – climate change
 - Regional – inputs from South Florida region
 - Local – activities in Keys
- Pressures
 - Far-field
 - Near-field



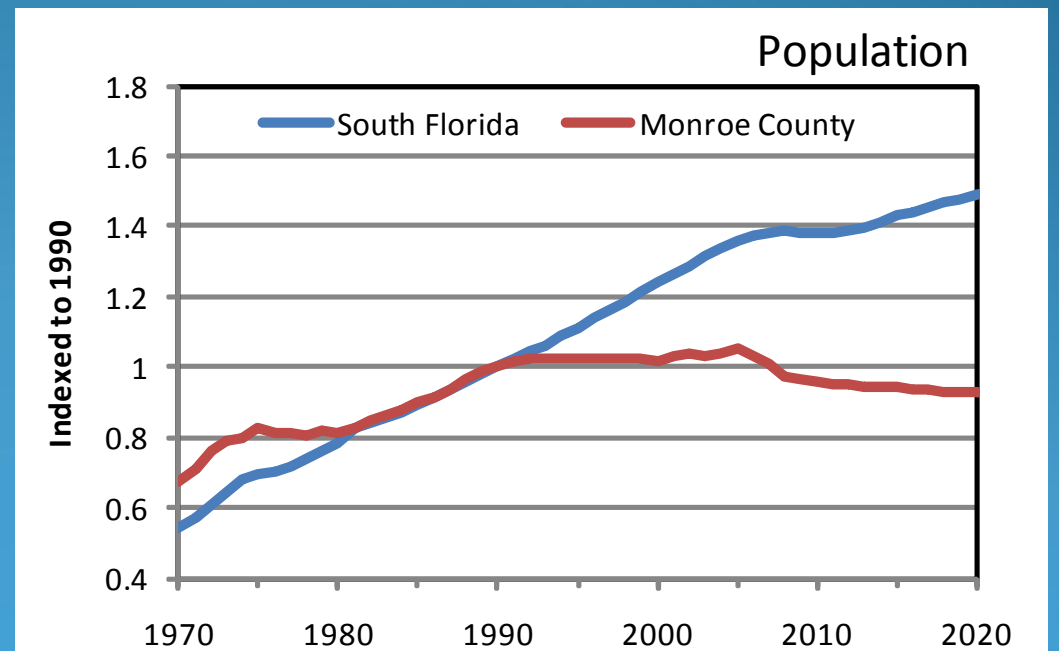
State – Define Attributes

- Represents conditions in the marine environment
- Divided into 5 components
- Detail at component level:
 - Pressures
 - Pathways
 - Measurable attributes
 - “Attributes that people care about”



Response

- Individual behavior
- Institutional (historical)
 - Controls on development
 - Regulation on marine activities
 - Ecosystem research and monitoring
- Ecosystem evolution and adaptation



How can it be used?

- Shared vision of South Florida marine ecosystems
- Develop indicators, report cards
- Identify science information needs
- Regional communication, collaboration, cooperation

