

Seawalls and Wrecking Balls: Overcoming Barriers to Making CMSP Climate-Smart

National Adaptation Forum Denver, CO - April 2, 2013

Stephanie Moura, Director SeaPlan





Core concepts / principles of ecosystem-based ocean planning

- Coupled human and natural systems
- Ecosystem services
- Best available science and effective stakeholder engagement
- Cross-sector, multi-objective, cumulative impacts, tradeoffs
- Adaptive management

Not surprisingly....overlap with key climate change concepts



Shared concepts / principles

- Coupled human and natural systems
- Ecosystem services
- Best available science and effective stakeholder engagement
- Cross-sector, multi-objective, cumulative impacts, tradeoffs
- Adaptive management





The beginnings of a working "definition"

- Integrates principles from both frameworks
 - CMSP: considers full range of impacts
 - CCA: considers near- and long-term horizons
- Encourages coordination between initiatives and institutions, capitalizes on synergies
- To achieve shared / related objectives



| KEY QUESTIONS | COMPONENTS CONSIDERATIONS | EXAMPLES | | |
|--|------------------------------|----------|--|--|
| INVENTORY CONTEXT: DRIVERS, AUTHORITIES, RESOURCES, CAPACITIES | | | | |
| DETERMINE AREAS TO BE MANAGED | | | | |
| DETERMINE GOALS, OBJECTIVES, MANAGEMENT ACTIONS | | | | |
| ANALYZE AVAILABLE INFORMATION | | | | |
| PLAN DEVELOPMENT | | | | |
| IMPLEMENTATION | | | | |
| MONITORING AND PERFORMANCE EVALUATION | | | | |



| KEY | | T [• |
|-----|--|--------------|
| | | |
| | | |

COMPONENTS CONSIDERATIONS

EXAMPLES

INVENTORY CONTEXT: DRIVERS, AUTHORITIES, RESOURCES, CAPACITIES

- What issue, sector and timing is driving climate-smart CMSP?
- Particular use conflict?
- Govt? NGO? Other?
- Window of oppty? Is there a deadline with real consequences (e.g. political or fiscal)?

- Under what authority is plan being developed?
- Legislative, executive, informal?
- How to capitalize on existing capacities, coordinate with related efforts?

- Rhode Island:
- Offshore renewable energy – climate change
- Strong state leadership



| KEY QUESTIONS | COMPONENTS CONSIDERATIONS | EXAMPLES | | | |
|--|--|---|--|--|--|
| PLAN DEVELOPMENT | | | | | |
| What data / models/ tools are needed? What spatial approach is effective for shifting conditions? | Identify and characterize full range of impacts: SLR, flooding, acidification, sea temperature change, etc. Examine near and long term planning horizons Use best available data to characterize and map existing / baseline conditions and ecosystem services production and distribution | Mapping vulnerability and resilience in the marine environment Long-term horizon o examine multiple CC impacts | | | |

Boston Municipal Harbor Plan 2013-14

- MA CZM /municipalities Storm Smart Coast
- MA Ocean Management Plan (2009)
 - Advisors identified climate change as a key issue for Plan revision in 2014
- Boston initiating MHP
 - Aim: cross-cutting design/planning combining technology, tools, adaptation science, and water resources /infrastructure design concepts
 - Consulting team Utile, Durand & Anastas,
 Noble & Wickersham, SeaPlan, UHI

Boston Municipal Harbor Plan

- Drivers Capacity
 - Response to Sandy
 - Mayoral election year
 - Verbal priority ≠ allocating resources
- Multiple jurisdictions / scales synergies or disconnect?

