

Climate and Coastal Communities: Improving the Decision Making Process

Eileen L. Shea


East-West Center; Honolulu, HI
USCCSP Climate Science in Support
of Decision Making Workshop

November 15, 2005



Challenges from a Changing Climate

- **Vulnerability of coastal ecosystems, communities and infrastructure**
 - Extreme events
 - Changes in sea level
 - Multiple and interacting stresses (climate plus...)
- **Protecting public health and safety**
 - Extreme events
 - Water-borne and infectious diseases
- **Providing access to freshwater resources**
 - Direct *and cascading effects for key sectors* (e.g., agriculture, fisheries, tourism)

EL NIÑO IS HERE
KASOHTIK DOADOAHNGKI PIHL
CONSERVE WATER
PIHL EL MOUR 



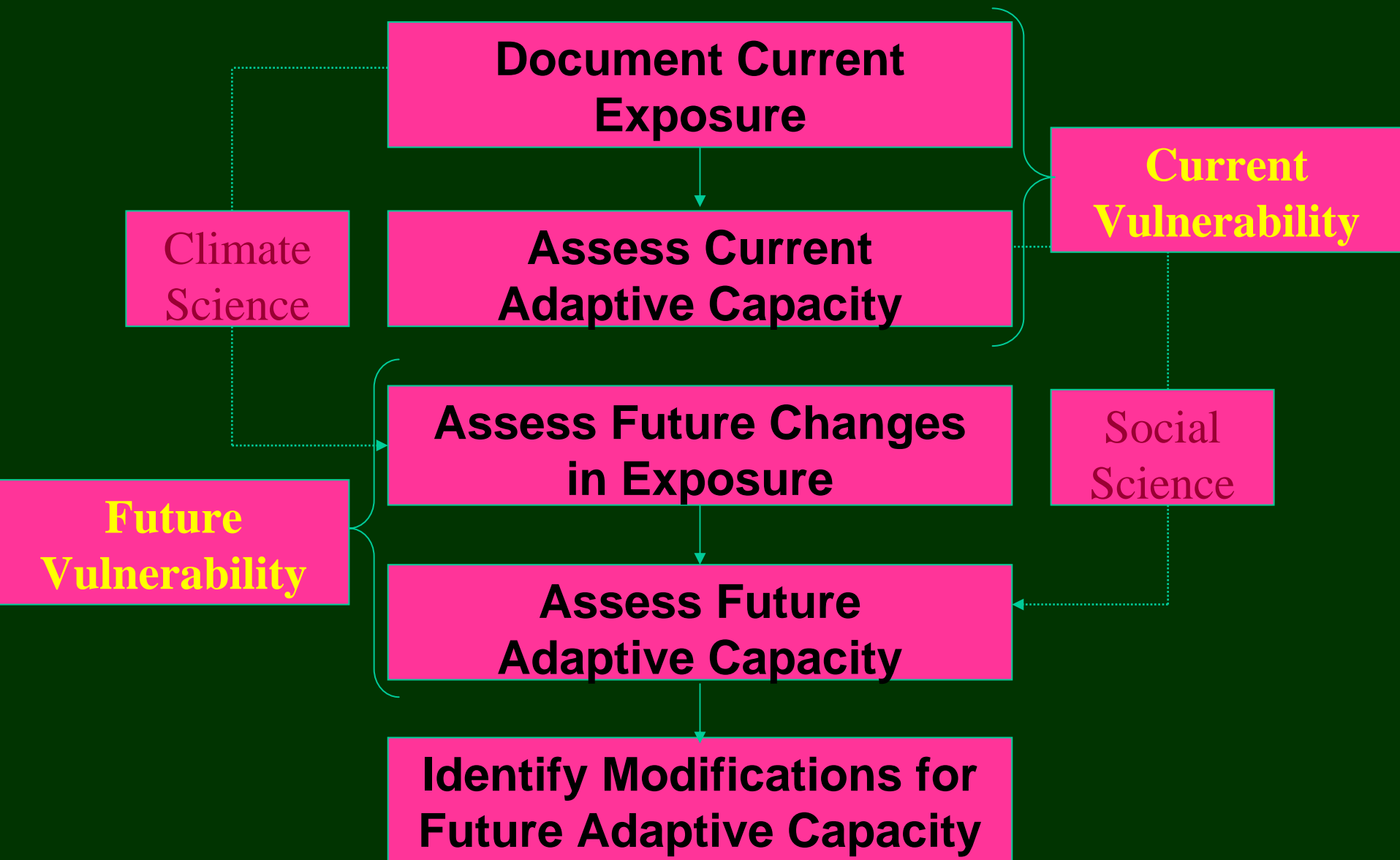


Improving Decision Making Processes

Some Guiding Principles

- Focus on **integrated climate-environment-society system**:
 - Recognize cross-sectoral impacts, linkages and opportunities
- **Problem-focused approach**:
 - Understand place, context, history and decision making process;
 - Useful & usable information responsive to user needs
- **Collaborative, participatory process**:
 - Continuous, interactive dialogue & engagement
 - Co-production of knowledge
 - Document and share experiences

Climate change vulnerability approach



Improving Decision Making Processes

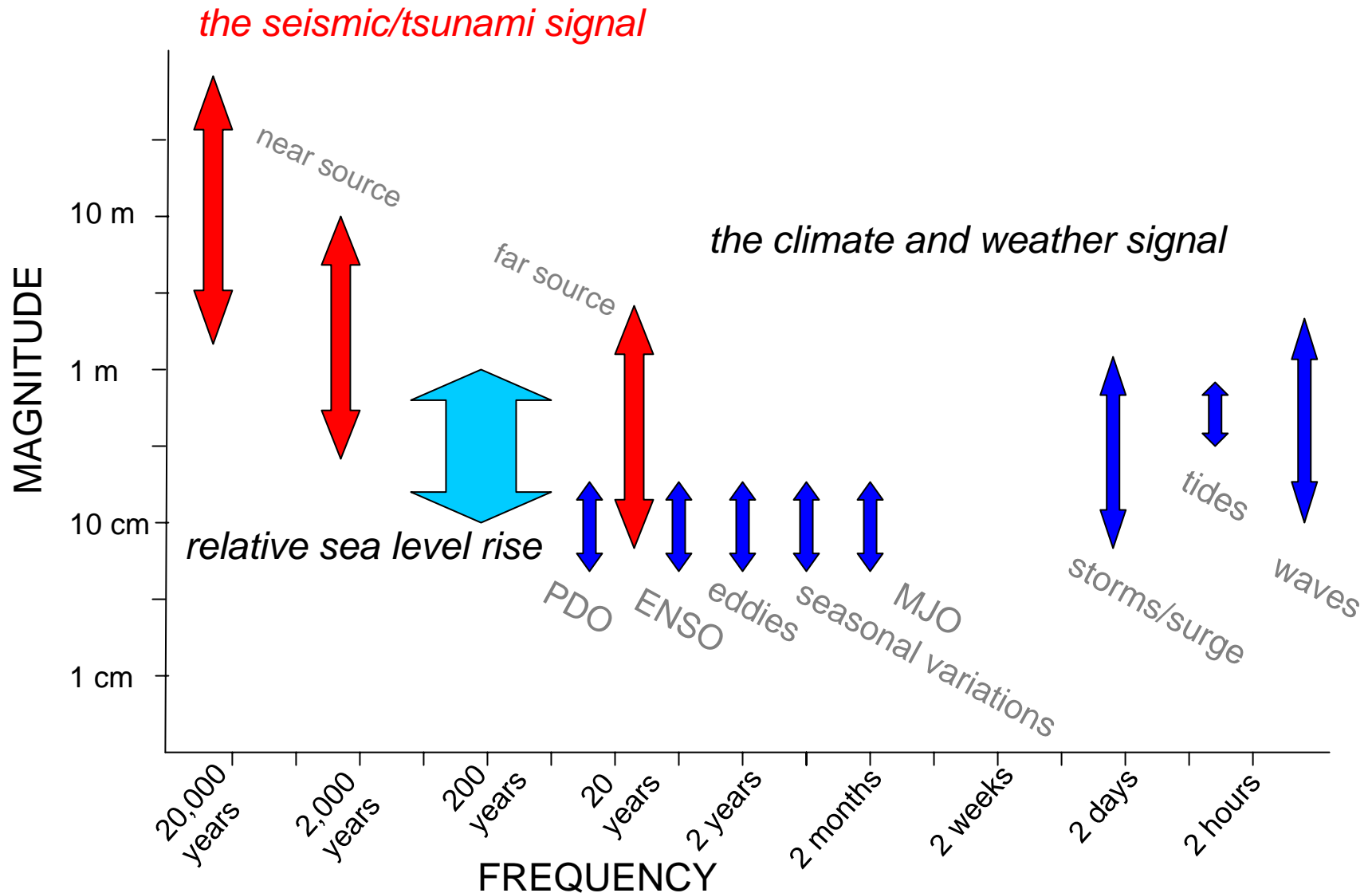
Some Guiding Principles

- **Facilitate proactive decision making:**
 - Recognize *dynamic, evolutionary* nature of climate, environment, society & policy
 - Address *climate risk management* along a continuum of timescales:
 - **Responding to today's variability**
 - **Adaptation to long-term change**
 - **Economic planning & community development**
 - *Integrated program* of observations, research, modeling, assessment, climate services, education

Coastal Inundation: Waves & Water Level

...truly End to End

site-specific water level signatures



Sustainable Development



Engagement
Empowerment

Individual, Institutional,
Community Capacity Building

Education
& Training
Equipment
(tools & technology)