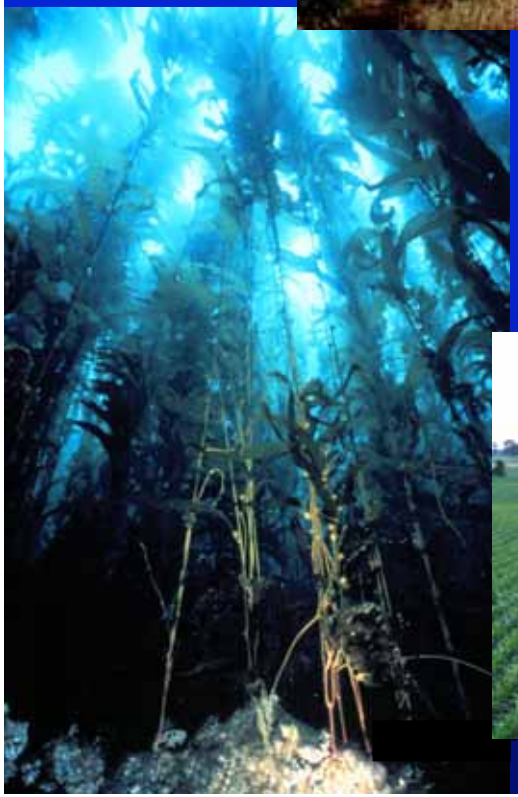
Synthesis: Understanding Social - Ecological Systems Through a Network of Sites

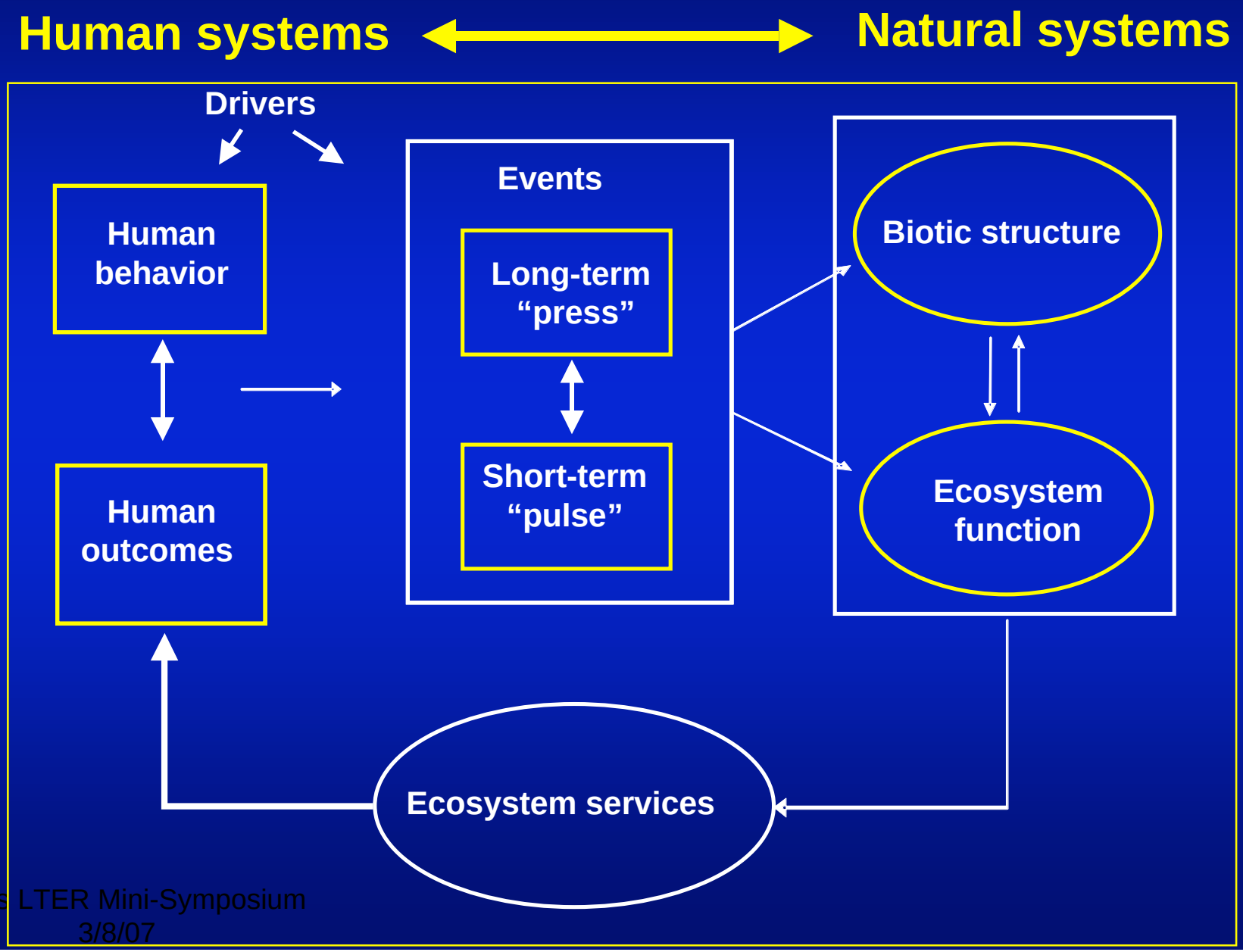
Debra Peters

Jornada Basin LTER

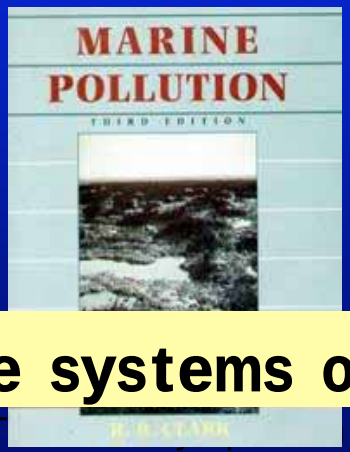
DIVERSE SYSTEMS ….

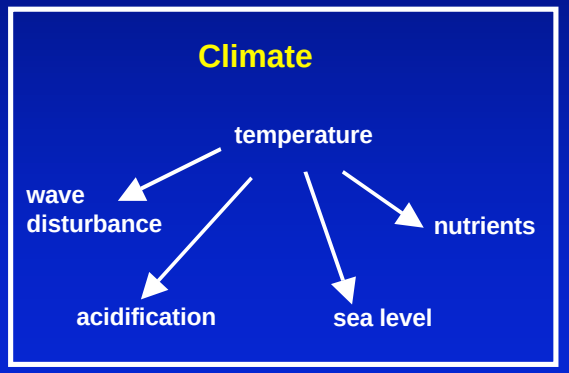


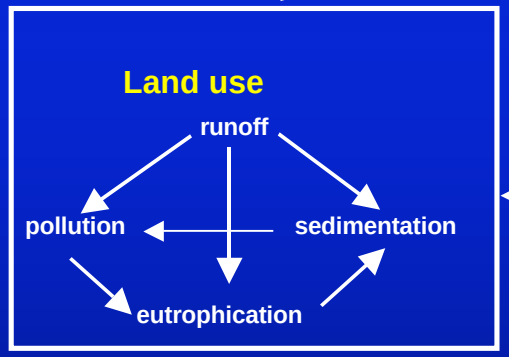
A COMMON GOAL ….

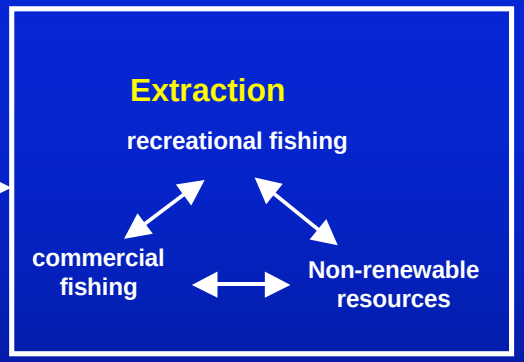


RESEARCH QUESTIONS ARE SYSTEM SPECIFIC, YET NATIONALLY RELEVANT



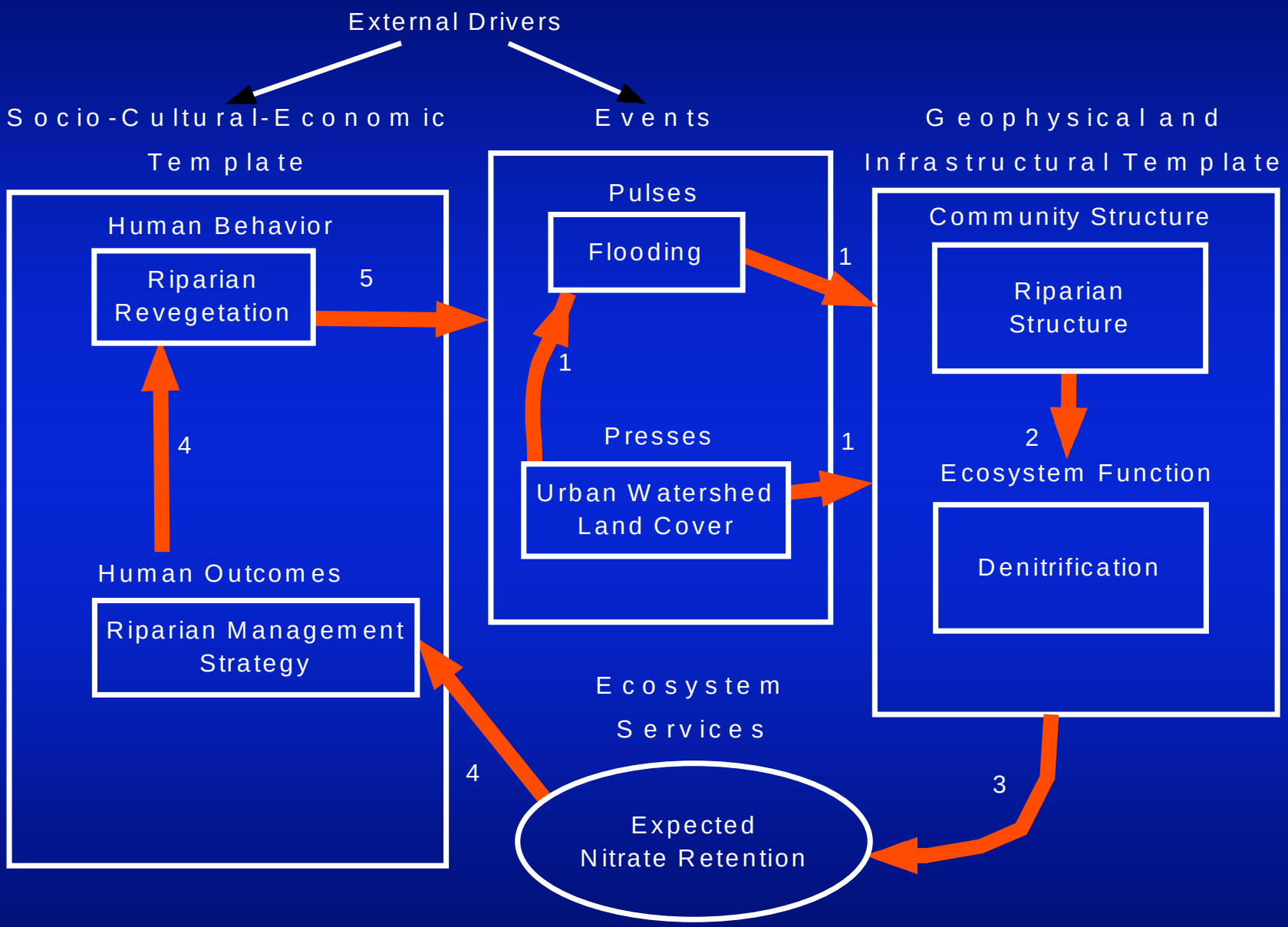




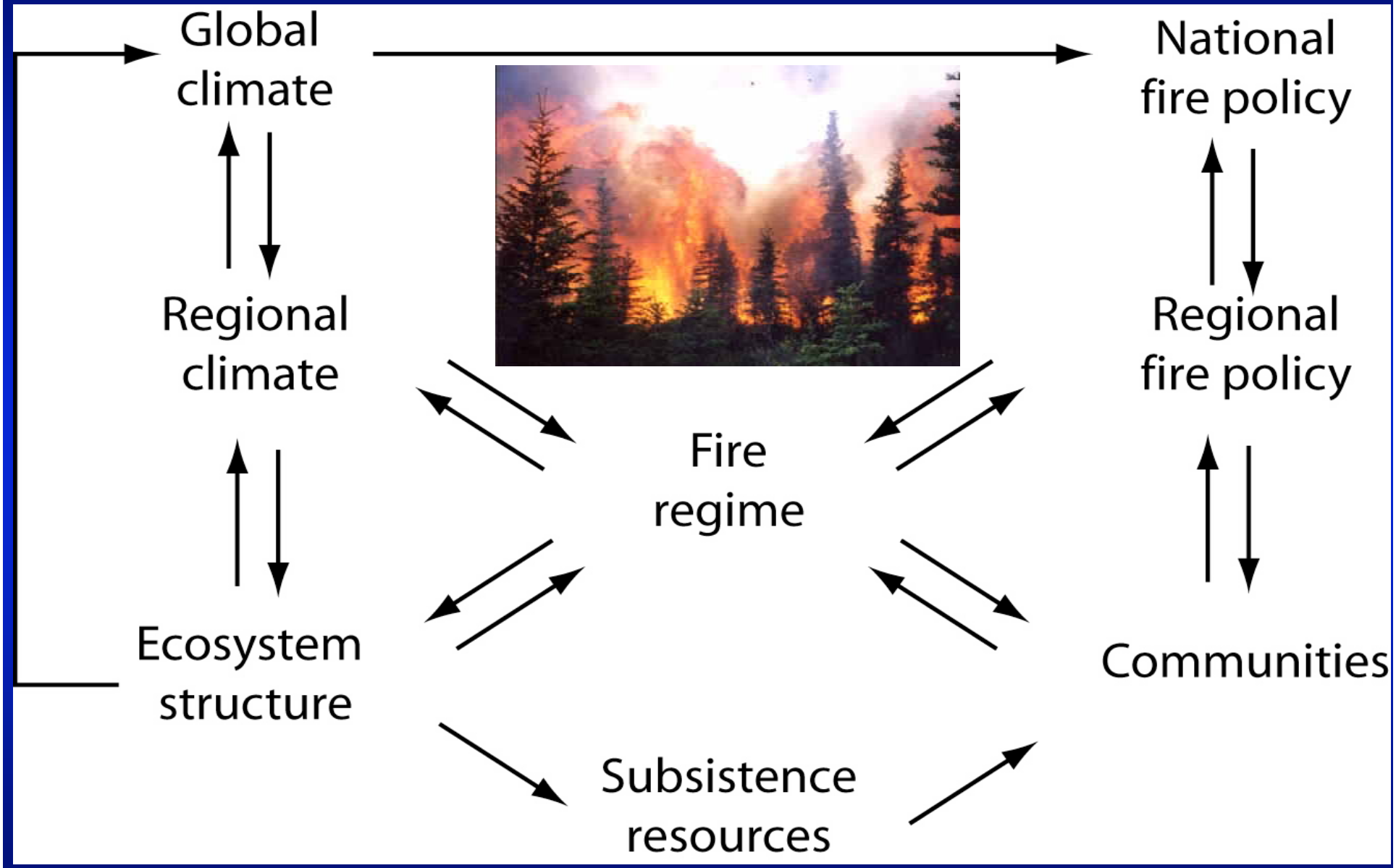


Marine systems off coast of California

Chesapeake Bay

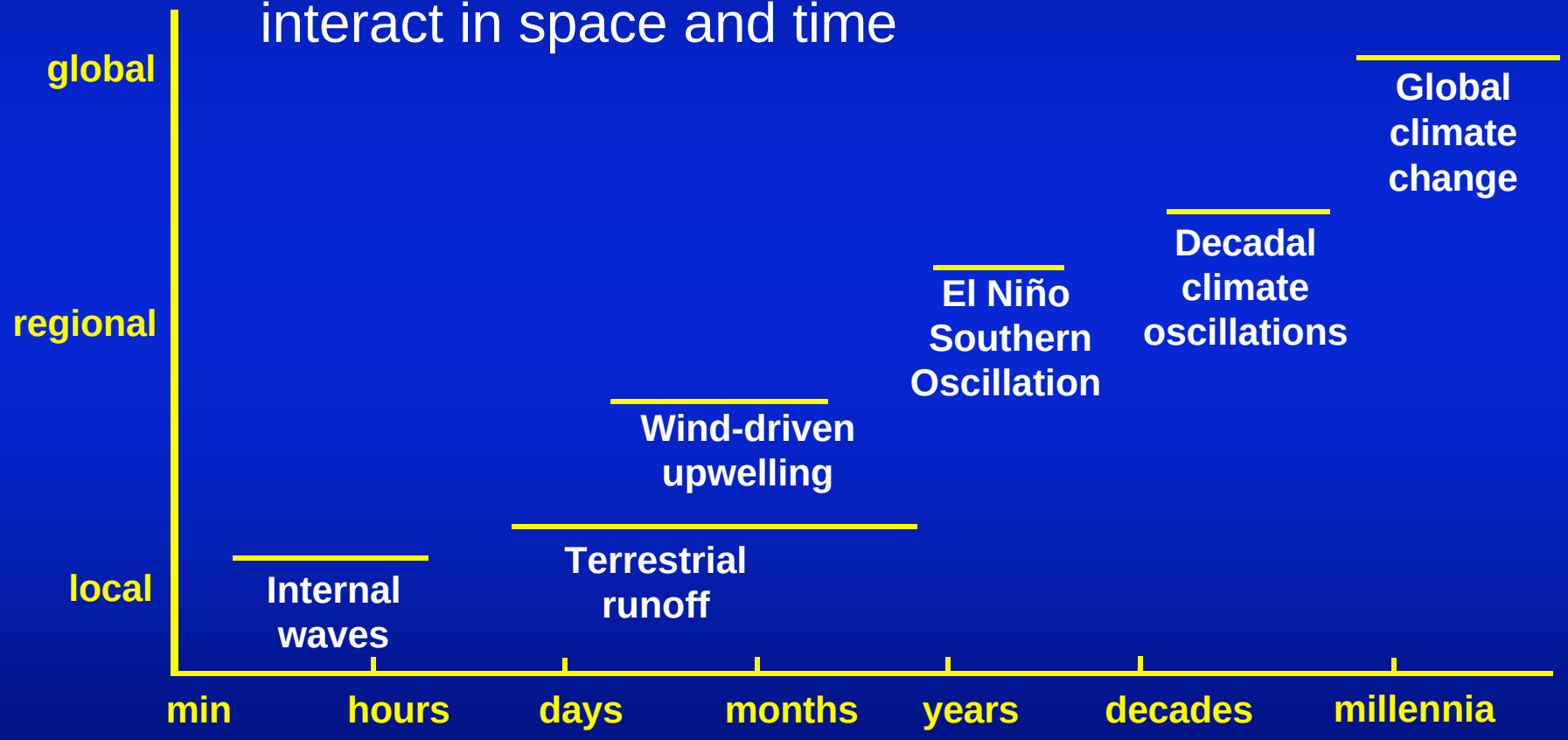


Alaskan systems

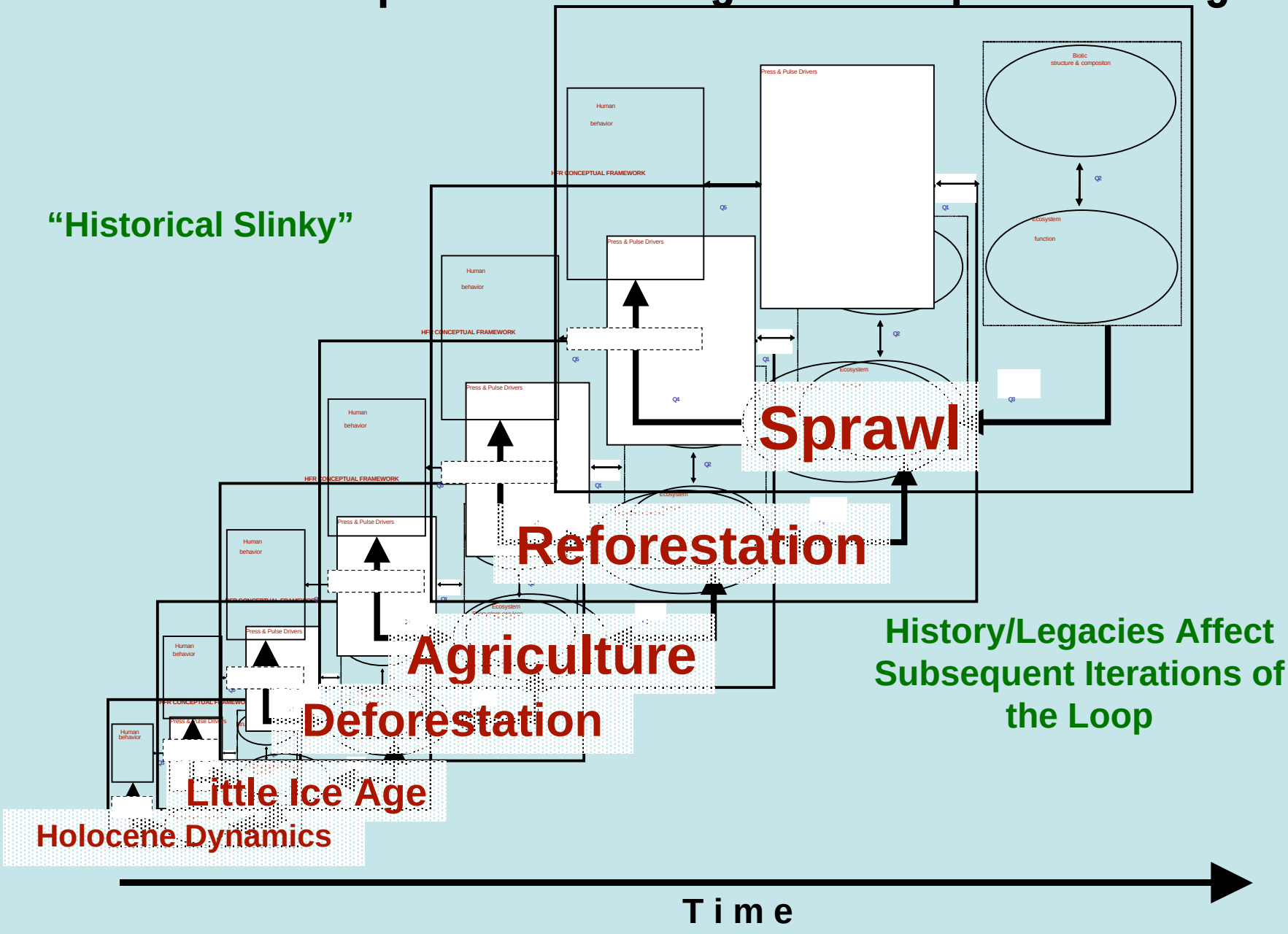


EACH SITE BRINGS A UNIQUE PERSPECTIVE TO THE PROCESS

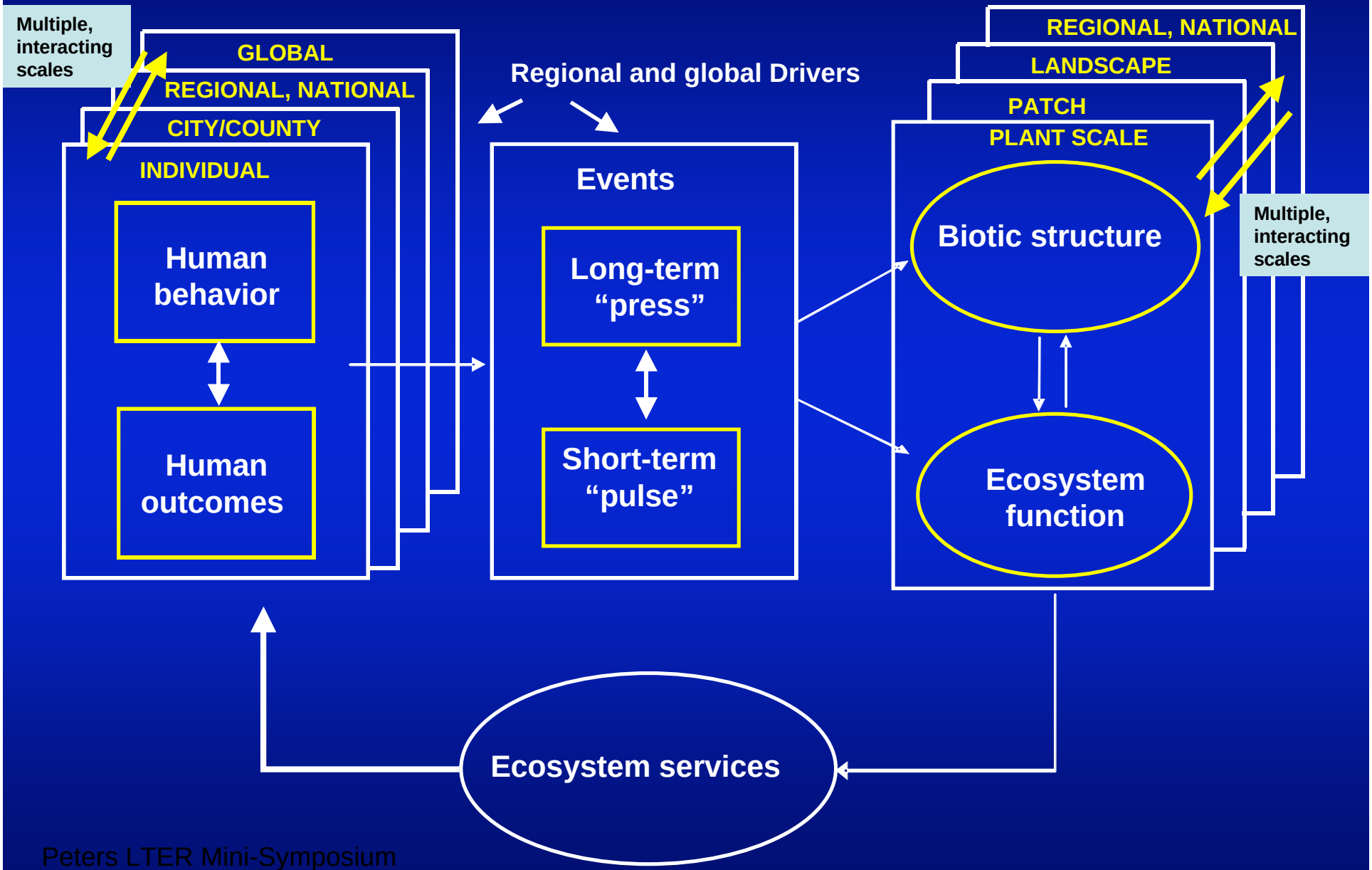
Coastal California: continuum of drivers that interact in space and time

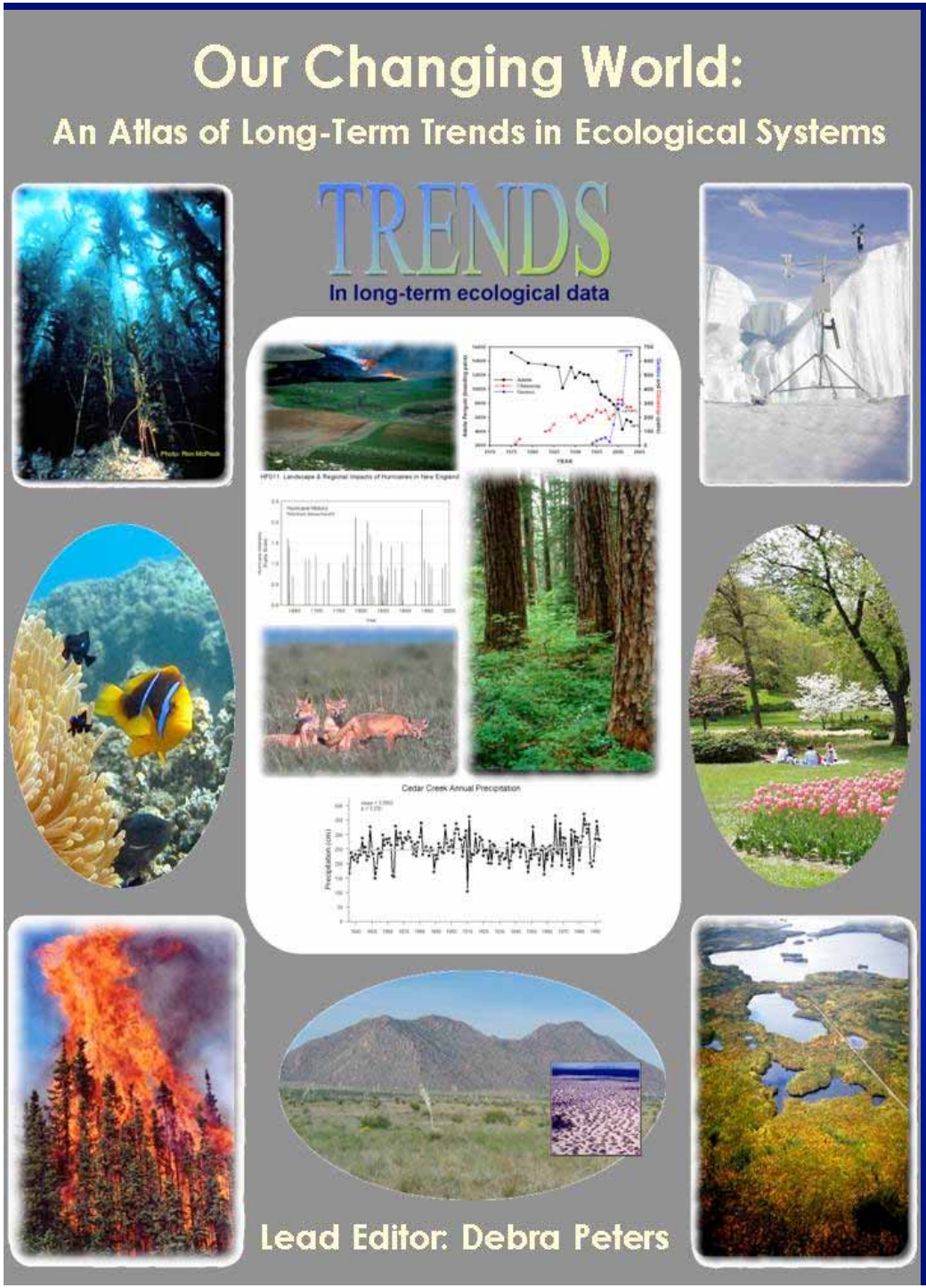


Forested landscapes of New England: temporal scaling



Desert landscapes of the Southwest: spatial scaling

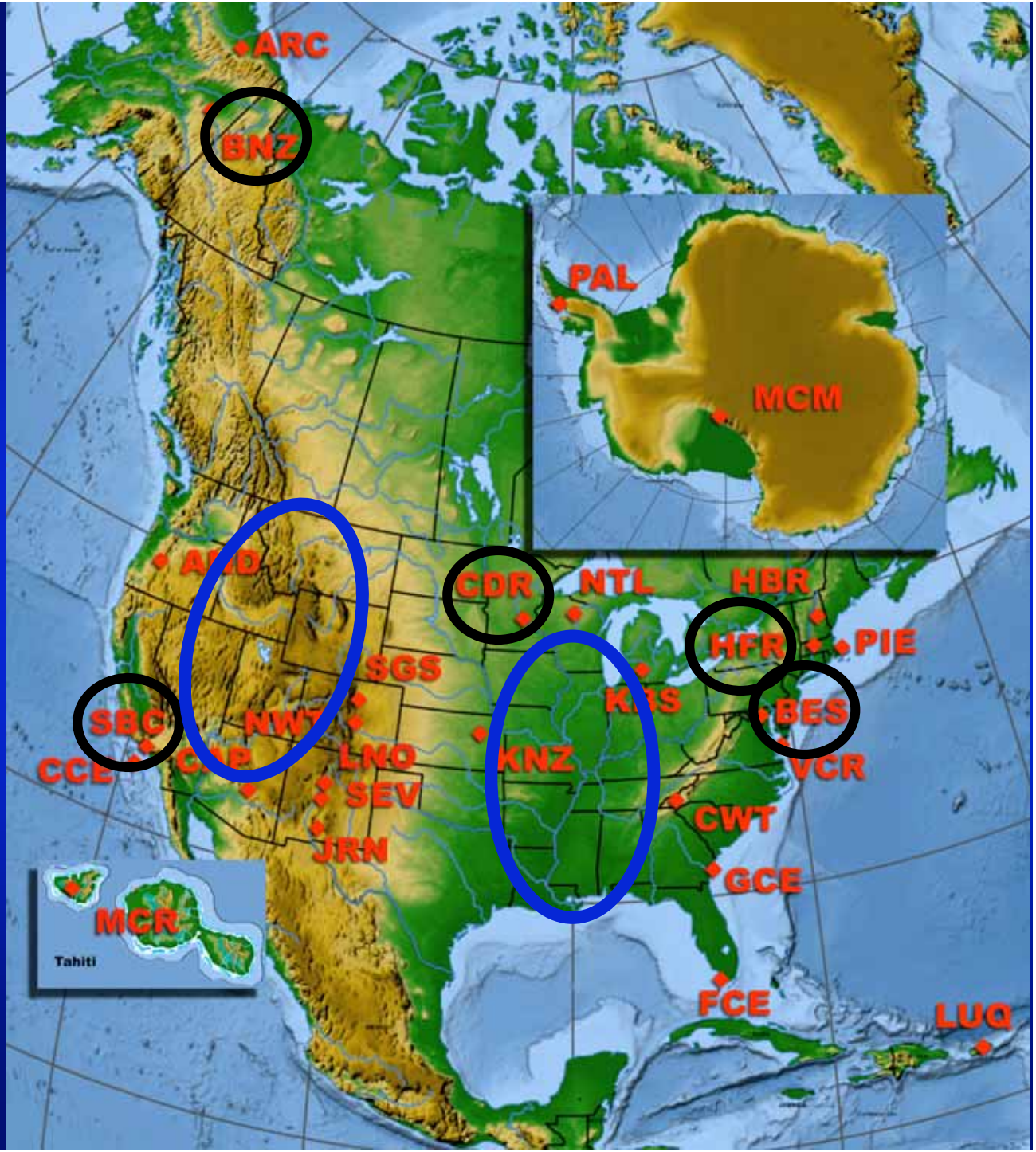




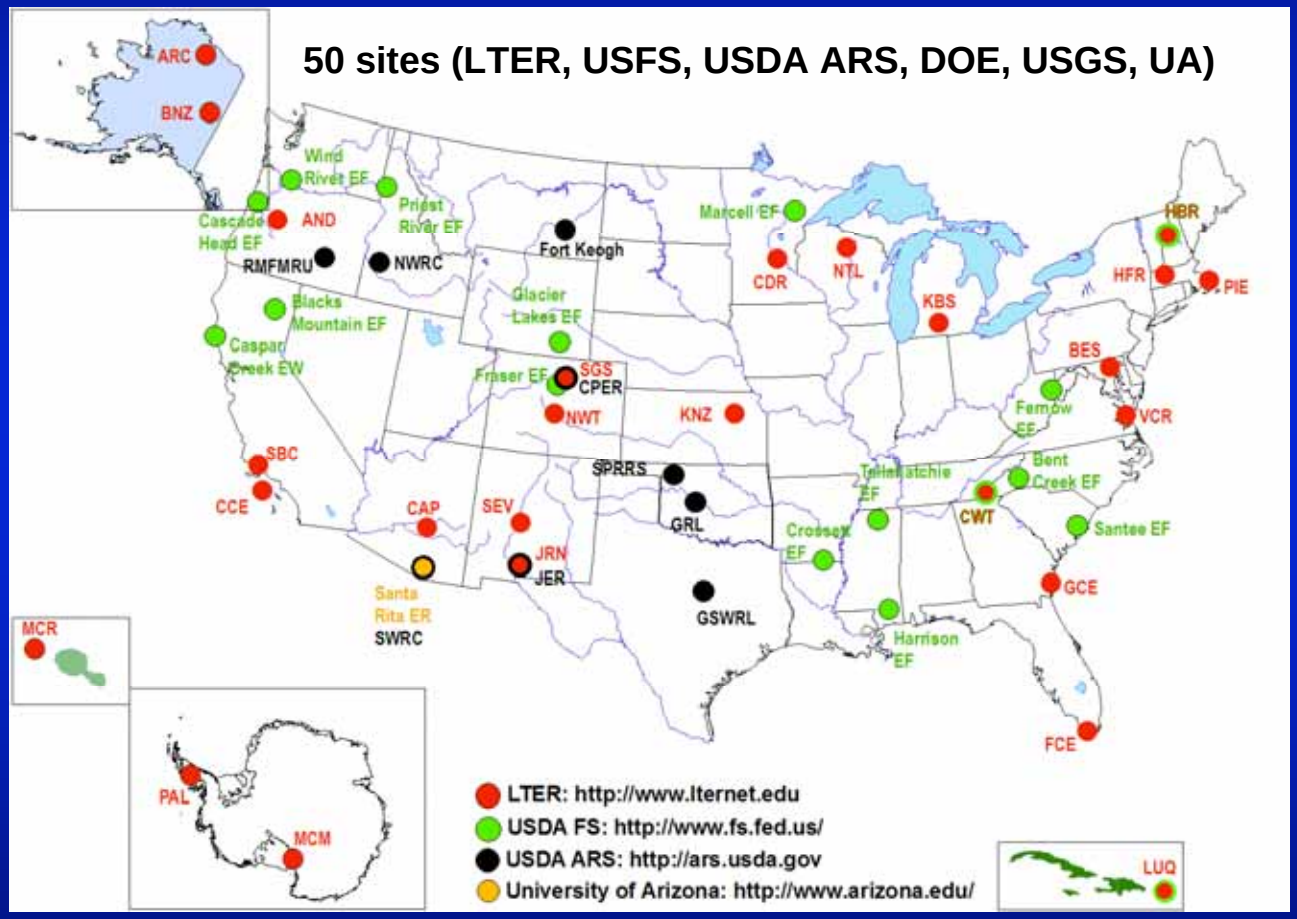
LTER sites build on long-term data and broad knowledge base.

Development of and adherence to information management standards allows synthesis.

Recognize limitations of 26 site network (gaps in spatial coverage).



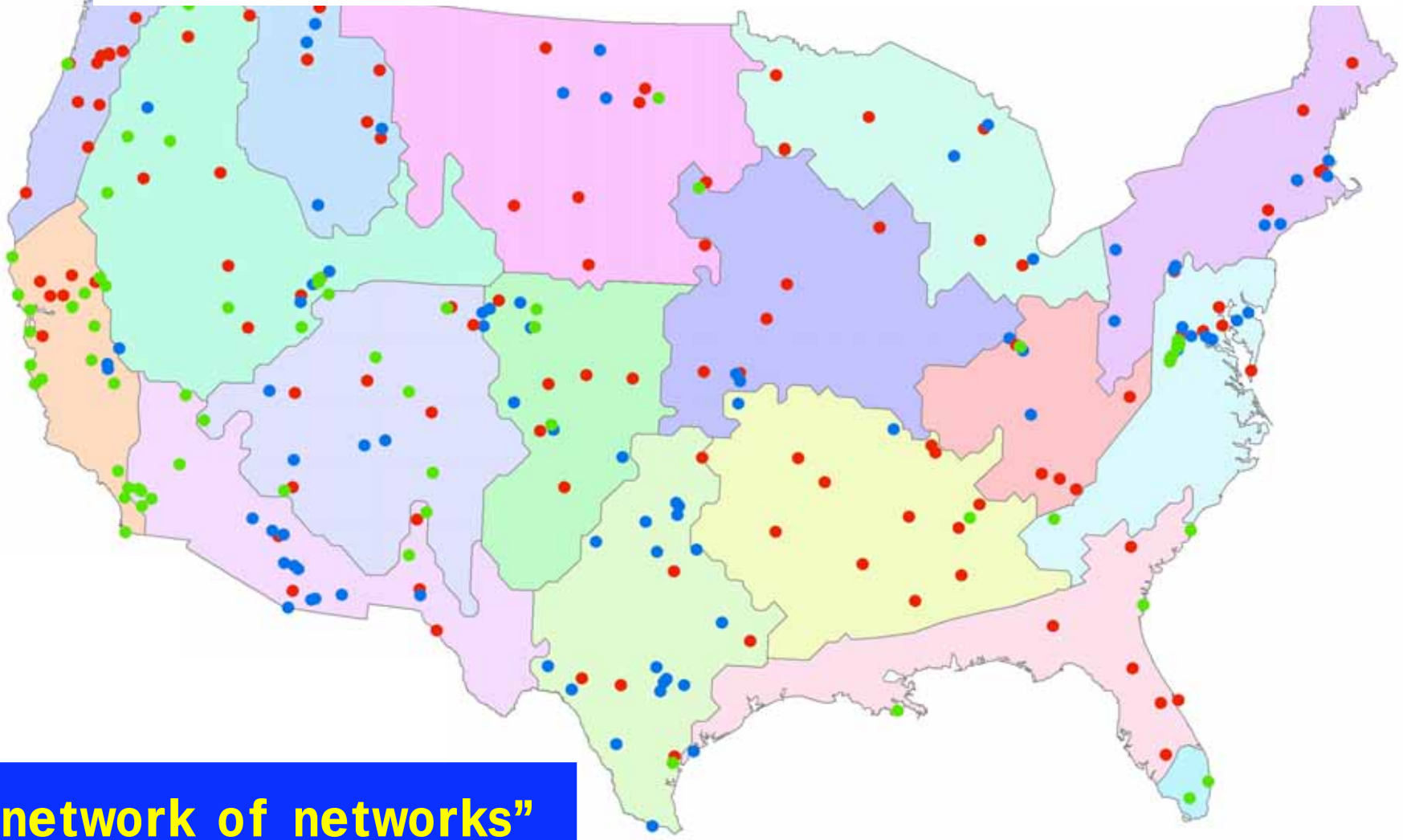
LTER network works with other sites to fill gaps across the country and leverage resources



(e.g., Trends project includes 50 sites to-date)

Gaps remain that need to be filled in other ways.

(e.g., 244 existing sites identified by the community for a continental-scale network using leveraged resources)



"network of networks"

Added value of a network: 26 LTER sites

- Diverse systems, yet common goal ("linked human-natural systems")

- Specific research questions relevant at local to national levels

- Unique perspectives strengthen the network-level product

- Build on long-term data and knowledge base

- Adherence to information management standards allows synthesis (e.g., Trends)

- Network with other sites, but gaps in spatial coverage remain

- Addressing critical questions requires a "network of networks"