

Teaching U.S. Environmental
History to STEM (and History)
Majors at CSULB

Nancy Quam-Wickham

“Cognitive Constraints”

Strategies for Meaningful Teaching and Learning

- ① Establish a baseline: student goals & characteristics
- ① Utilize specificity in scientific concepts for definitional purposes
- ① Employ a range of disciplinary practices of historians



Strategies for Meaningful Teaching and Learning

- Use historical data to enhance understanding of current issues
- Acknowledge that both disciplines (history and science) bring value to the field of EH
- Exploit recognized high-impact pedagogical practices

Definitions: Deepening STEM students' disciplinary knowledge through historical inquiry



Employ methods of historians

- ◉ Interrogate meaning of “conservation” and “natural”
- ◉ Introduce human society and agency into a narrative of “protecting Nature”
- ◉ Mark Spence, *Dispossessing the Wilderness: Indian Removal and the Making of the National Parks*

Use historical data to enhance knowledge of current issues

Historical Coastal Wetlands of Los Angeles & Orange Counties - 1894



Acknowledge contributions of science and history to the field

- What role does human activity play in reestablishing species?



Use high-impact practices: Collaborative Inquiry

- Field inquiry: Environmental Inequality

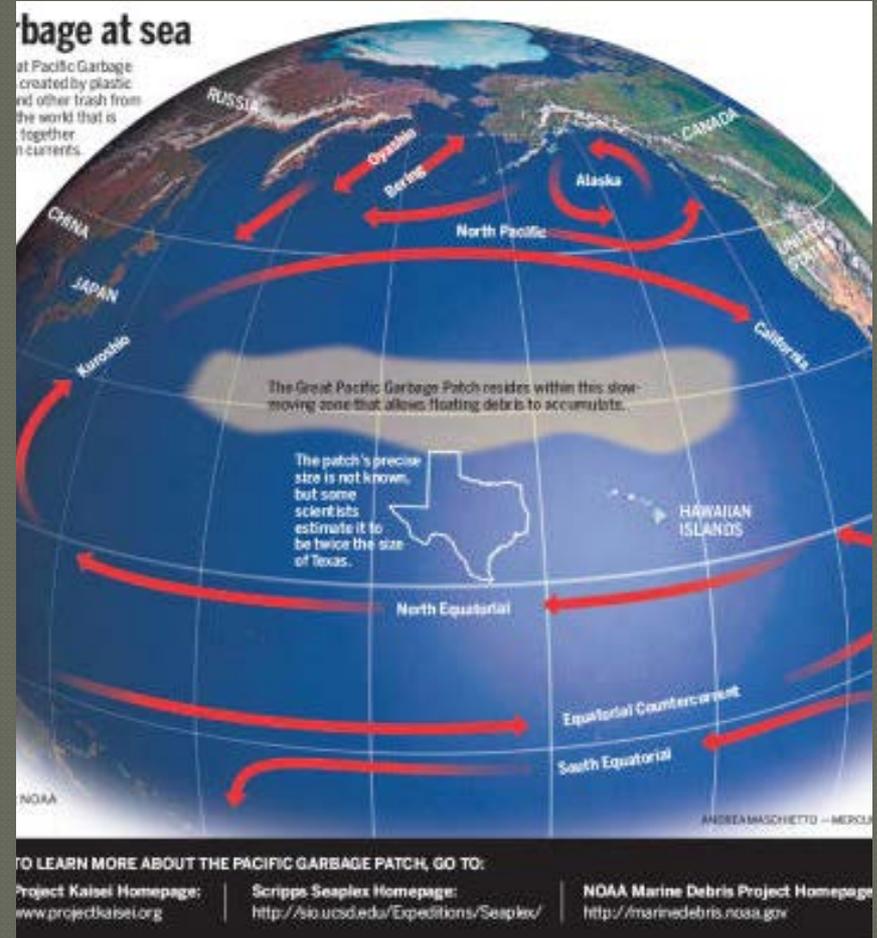
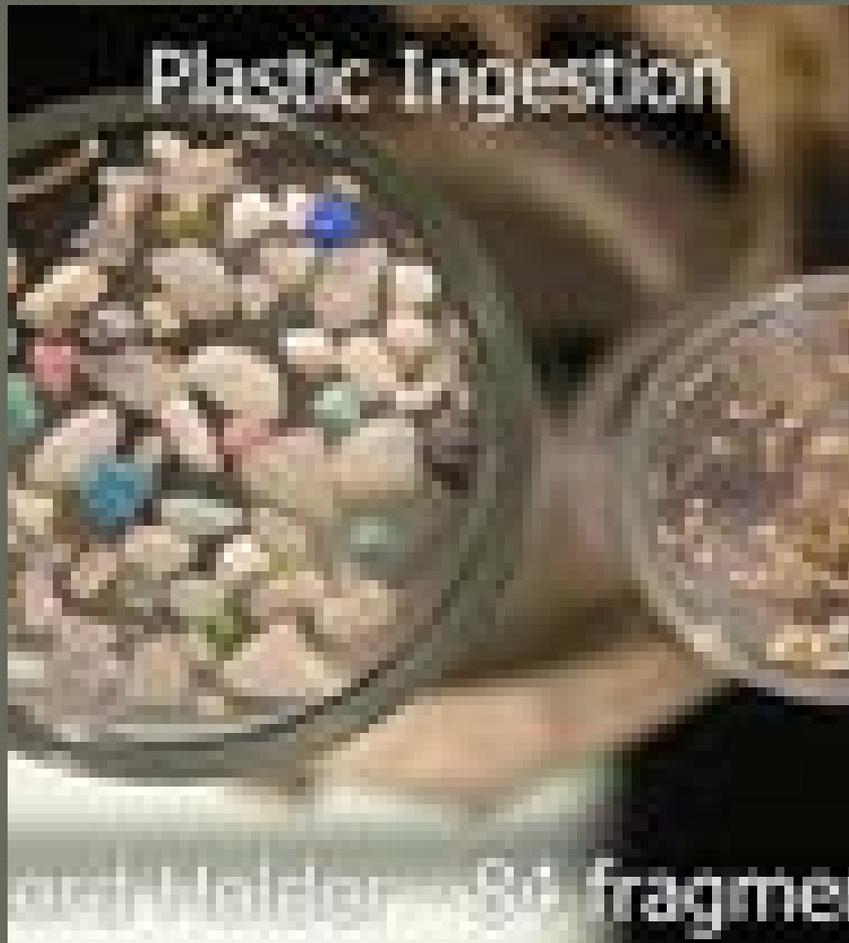


Use high-impact practices: Undergraduate Research

- Field Research: Environmental Planning



Use high-impact practices: Service Learning



Service Learning: FOLAR



Additional Service Learning sites



Service Learning Placements to suit career goals and skills





Benefits

- Appreciation of disciplinary methods
- Community engagement
- Reflective assignments → self-awareness
- Closer alignment of outcomes
- Re-conceptualize EH as a field