What We've Learned: Researcher Interests

Cameron Wake, Ph.D.

Institute for the Study of Earth, Oceans, and Space (EOS)
Josephine A. Lamprey Professor, Climate & Sustainability
University of New Hampshire

@TheClimateDr

2017 NH Coastal Climate Summit



Our Challenge: Co-produce a research agenda for New Hampshire's coastal watershed

Co-Production of Knowledge:

Collaborative process bringing together different types and sources of knowledge to address a defined problem

Engaged Scholarship: Mutually beneficial collaborations

Researcher workshop guiding questions:

Planned or existing research that meets community needs? Does your research align with these needs? Any ideas for new or emerging research?



Research Topics Discussed

Water: flooding (coastal & freshwater); dams

water quality & stormwater

water & energy (& food)

groundwater

Infrastructure: transportation

wastewater treatment

public health

Natural Resources:

land conservation & ecosystem services sand dunes

invasive species; riparian forests



Research Topics Discussed (cont'd)

Policy: prohibit development in high-risk areas buyback programs when do you close a street?

Communication: collect & share climate impact narratives create personal connections story maps

Economics: quantifying avoided costs & damage costs estimating value of ecosystem services flooding depth-damage functions financing

Business: continuity planning & supply chain disruptions insurance natural resource business (oysters, food, timber, etc.)

Research Topics Discussed (cont'd)

Strategic Interactions & Tradeoffs:

focus on specific risk recognize & map physical & social heterogeneity identify actions (e.g., hard vs. living shoreline) & explore tradeoffs associated with those actions role play?

Rapid response team(s) for individual disasters:

help communities gather data & information rapid development of policy responses

Synthesis of existing data & information

Human migration & decommissioning a community





Identified Community Information & Data Needs

Climate projections

Impacts to:

Economy

Built Landscape

Natural Resources and Ecological Services

Recreational Resources

Cultural and Historic Resources

Social Science

Outreach and Education

Collaboration

Assistance with:

Municipal Management and Policy

Municipal Planning and Regulation

Implementation and Implementation Projects

Additional Funding

