

Forging Partnerships – Examining the impacts of climate change

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Environmental Studies
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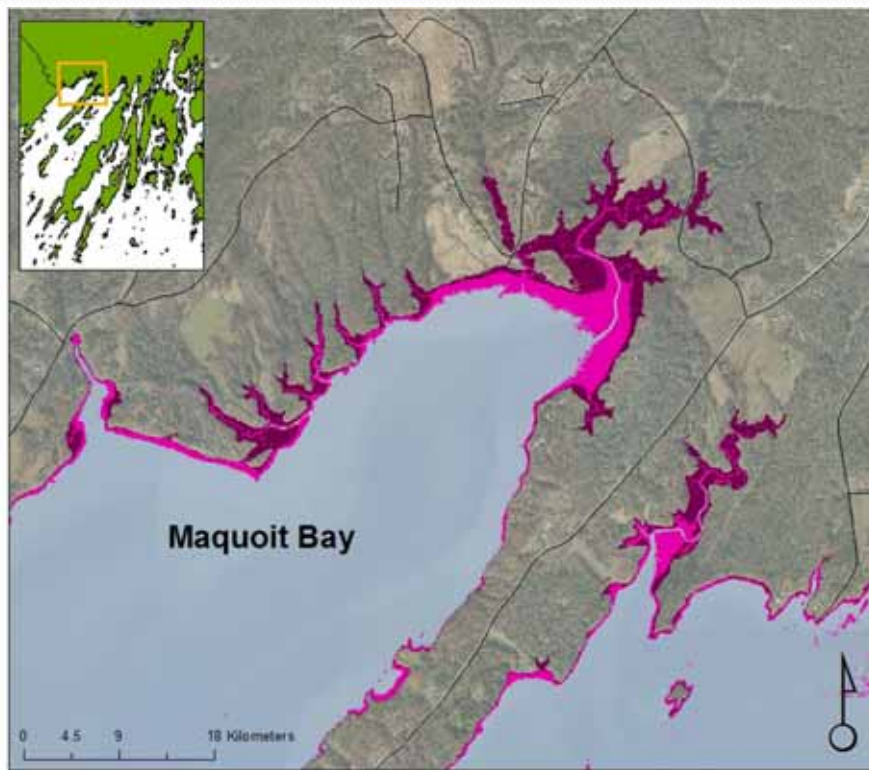
Melissa Anson, Liza LePage, Tom Marcello, Woody Mawhinney, Leah Wang,
Phil Camill, Eileen Johnson



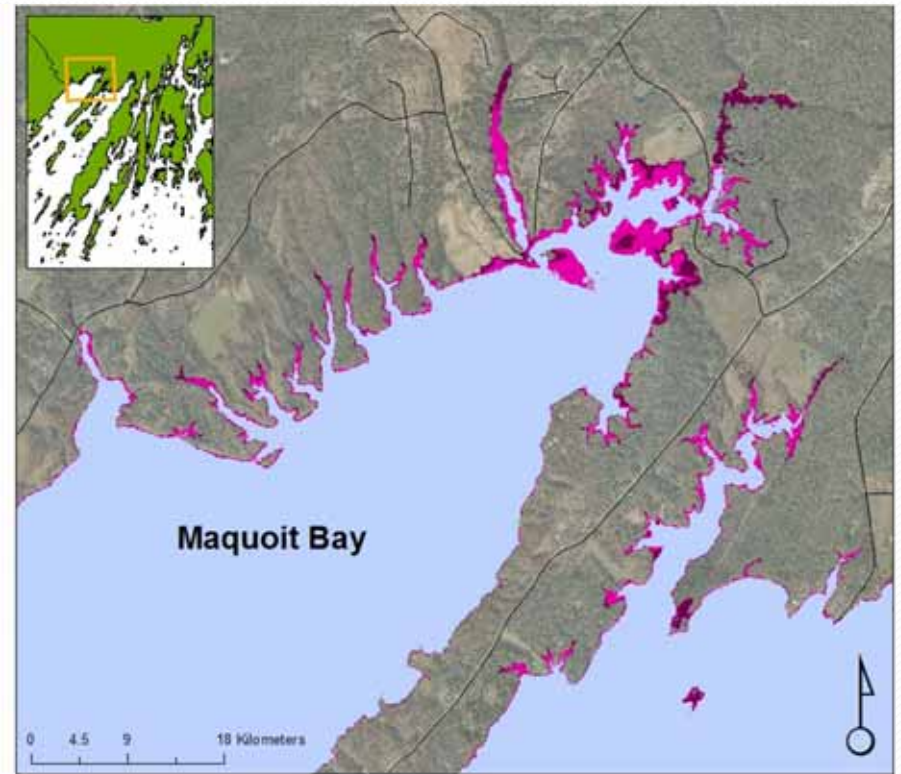
Project Goals: Fall 2010-Fall 2011

- Address State of Maine Climate Adaptation Plan
 - Analyze coastal vulnerability and sea level rise in the towns of Brunswick and Harpswell
- Develop a simplified methodology that can be replicated in other coastal communities
 - 85% of New England coastal communities have a population of 50,000 or less
- Outcomes: Technical report, community presentations, poster presentations,

Marsh Analysis: Maquoit Bay



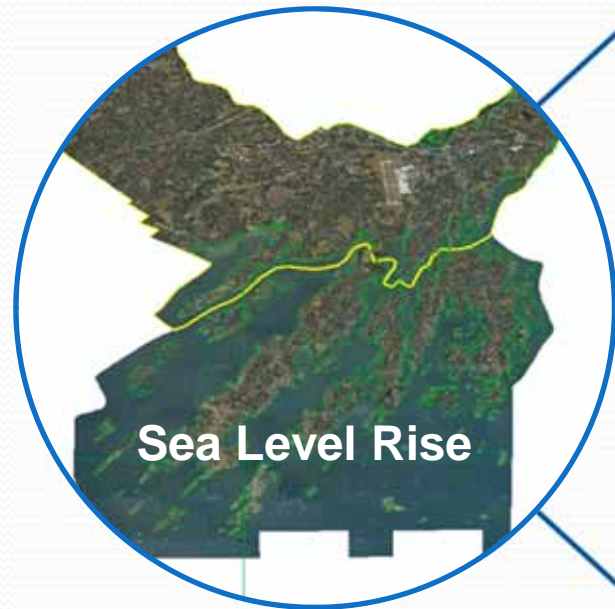
Current Scenario



2m SLR Scenario

Dark magenta: High Marsh
Light magenta: Low Marsh

Conclusions



Land

- SLR will impact towns differently depending on coastline
- Many landowners will be affected

Infrastructure

- Storm surge and sea level rise will obstruct roads
- Island communities may become inaccessible

Marshland

- Marshland will decrease in acreage due to sea level rise
- Marsh ownership may change

Partnerships

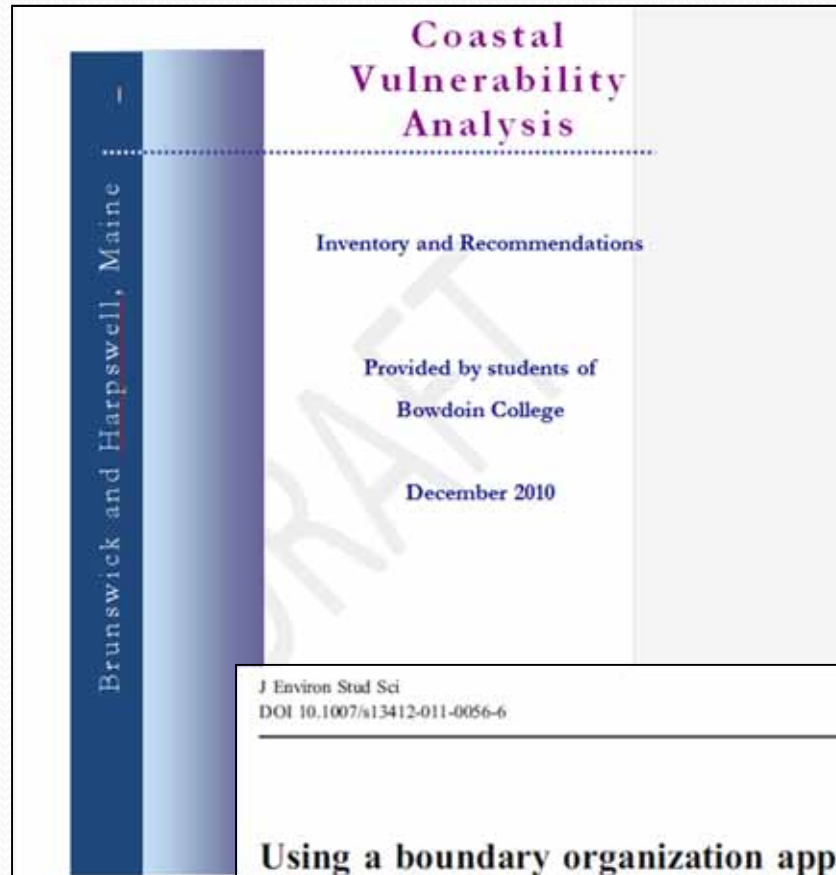
Student engagement and presentations opportunities

Training the next generation of planners, or planning board members

Research opportunities

Next steps:
Fall project looking at three area towns with county and

COO 10/3/12



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Using a boundary organization approach to develop a sea level rise and storm surge impact analysis framework for coastal communities in Maine

Philip Camill • Maryellen Hearn • Krista Bahm •
Eileen Johnson

Maine's Sustainability Solutions Initiative



**17+ disciplines ~ 11 colleges and
universities;
23 research projects**

Mission: Create an integrated interdisciplinary research program and build strong stakeholder partnerships to solve sustainability-related challenges in and beyond Maine.

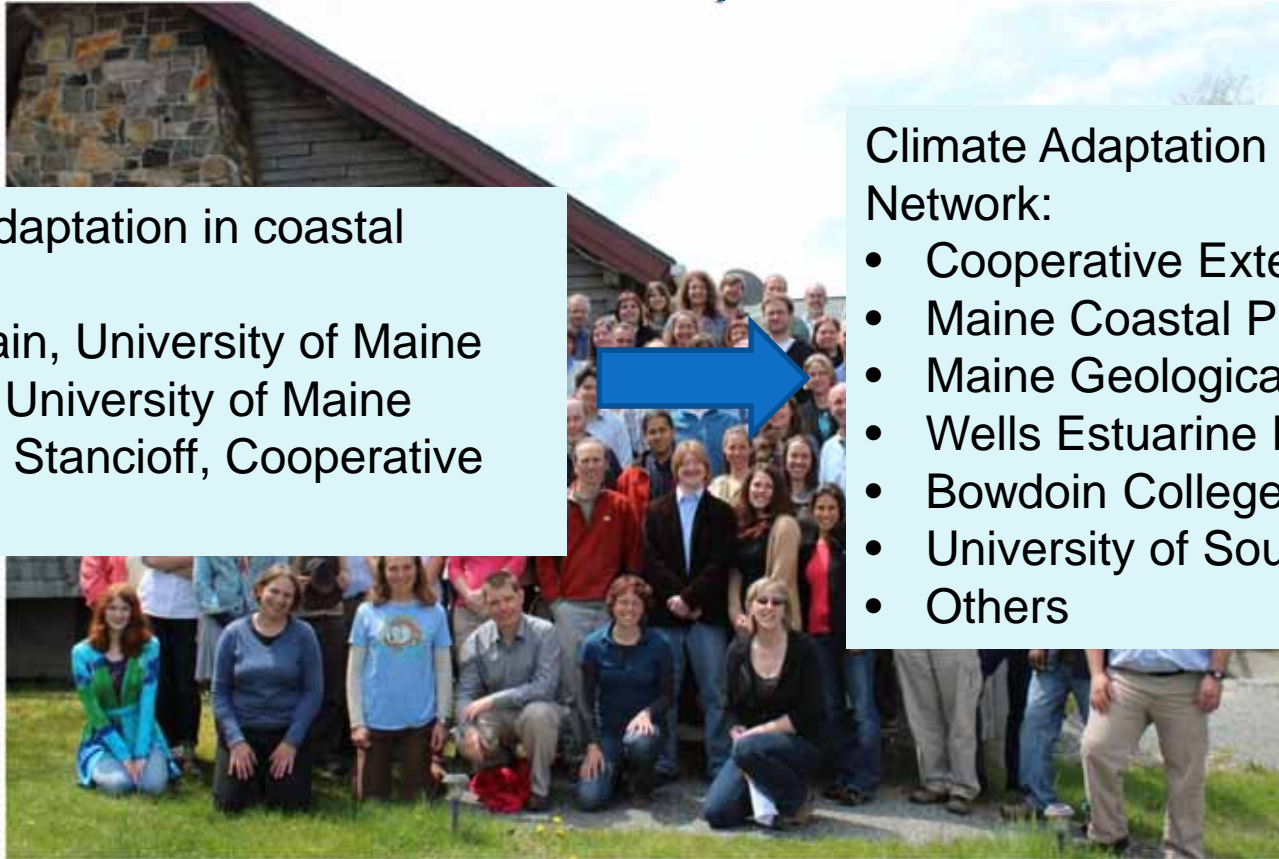
Maine's Sustainability Solutions Initiative

“Climate Adaptation in coastal Maine”

Shaleen Jain, University of Maine
Alex Grey, University of Maine
Esperanza Stancioff, Cooperative Extension

Climate Adaptation Provider's Network:

- Cooperative Extension
- Maine Coastal Program
- Maine Geological Survey
- Wells Estuarine Reserve
- Bowdoin College
- University of Southern Maine
- Others



Creating Partnerships

Acknowledgments

- Cathleen Donovan, Town of Brunswick
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