

Valuing Salt Marshes: The Importance of Linking Physical and Social Science Research

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Salt Marsh Symposium

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Waquoit Bay National Estuarine Research Reserve



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Outline

- Introduction
- Social Science in NOAA
- Ecosystem Services
- NOAA Ecosystem Research
- Coastal Blue Carbon
- Habitat



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Introduction

- NOAA is a science agency, but
 - Ultimate goals are related to people
- All research maps to social or economic outcomes



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NOAA Vision

**“Healthy ecosystems,
communities, and economies
that are resilient
in the face of change”**



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Key Questions

- ✓ How resilient our communities and economies are
- ✓ How people respond to weather forecasts
- ✓ How they derive benefits from the services provided by coastal and ocean ecosystems
- ✓ The impacts to society of climate change



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Social Science in NOAA

- Science Advisory Board
2003, 2009 reviews
- Social Science Needs Assessment
- Moving forward



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Ecosystem Services

- Framework at NOAA
- Economic Value and Jobs
- Explicitly connects social and physical science
- Relevance to those that control the purse strings



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Coordination of ES

- **National Ecosystem Services Partnership**
- **Marine Ecosystem Services Partnership**
- **A Standard Assessment Framework for Ecosystem Services (Duke, NCEAS, SESYNC)**
- **PCAST – Sustaining Environmental capital: Protecting Society and the Economy**



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Sequestration and Storage of Coastal Blue Carbon

- Emissions from conversion and degradation of coastal habitats
- Relative magnitude



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NOAA and CBC

- **NOAA leadership formed a team to analyze:**
 - The state of coastal blue carbon science
 - The state of Coastal Blue Carbon policy
- **CBC Work Plan**
- **Domestic Policy**



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Ecosystem Research

- White paper
- Ecosystem Research Agenda
- Ecosystem research priorities implementation



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Habitat

- Habitat Blueprint
- Habitat Focus Areas



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Conclusion

- Link between social and physical science
- Pressures on/Benefits of, salt marshes
- Relevance of research



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*“He is richest who is content with the least,
for content is the wealth of nature.”*

~Socrates

*“There are always flowers for
those who want to see them.”*

~ Henri Matisse



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Opportunities

- **Symposium is an opportunity to**
 - learn about each other's research,
 - make connections across institutions and across disciplines, and
 - explore how we can support joint research initiatives and support management decisions



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