

Coastal Impacts and Adaptation: Tools and Information

Rebecca Smyth

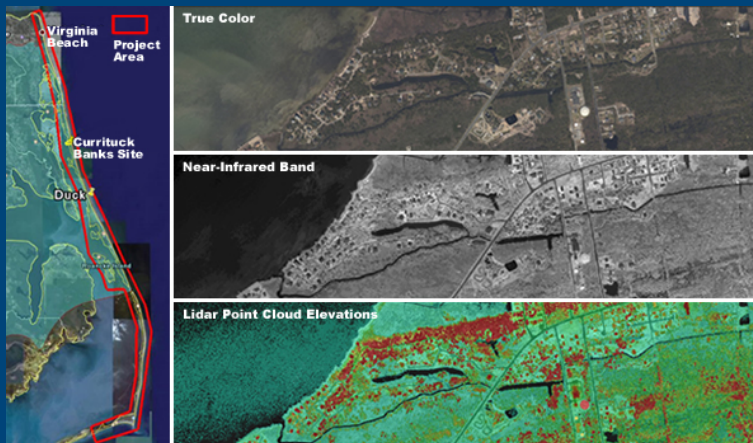
National Oceanic and
Atmospheric Administration (NOAA)
Coastal Services Center

Climate Prediction Applications
Science Workshop
March 2010



The Goal

To develop user-driven products and services for coastal climate adaptation



NOAA Coastal Services Center
LINKING PEOPLE, INFORMATION, AND TECHNOLOGY

User Needs

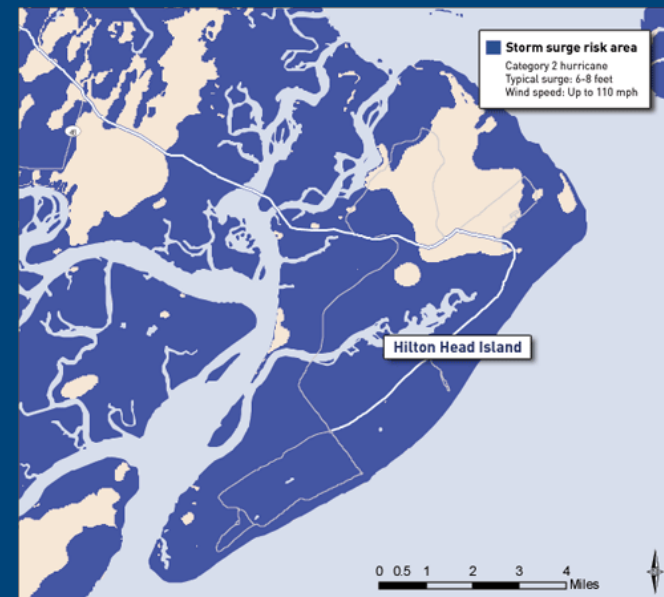
- Inundation mapping

Data and capacity

- Risk and Vulnerability assessments

- Risk communication

To decision makers



NOAA Coastal Services Center
LINKING PEOPLE, INFORMATION, AND TECHNOLOGY

DIGITAL COAST

[Home](#) [Data](#) [Tools](#) [Training](#) [In Action](#)



About the Digital Coast

"More than just data," the Digital Coast is a network of diverse partners working together to address coastal issues. Website content is growing with contributions and guidance from the partner network and the user community.

- [Digital Coast Details](#)
- [About the Partners](#)
- [How to Use this Site](#)
- [Submitting Content](#)

Data

Learn more about the kinds of data available and download data.

Tools

Use these tools to turn data into useful information your organization needs.

Training

Update your skills by participating in one of these training programs.

Digital Coast In Action

See how data and tools are used to address coastal management issues.

Digital Coast Website

This website provides data required by coastal resource management professionals, as well as the tools, training, and information needed to turn these data into useful information.

NEW RESOURCE

Coastal Inundation Toolkit

Helping communities identify and lessen flood-related risks.

FEATURED TOOL

Multipurpose Marine Cadastre

Providing a framework for marine spatial planning efforts.

PARTNER RESOURCE

Building Resilient Coastal Communities

See how coastal counties can use Digital Coast to build resilient communities.



NOAA Coastal Services Center
LINKING PEOPLE, INFORMATION, AND TECHNOLOGY

United States Department of Commerce
National Oceanic and Atmospheric Administration
National Ocean Service

[Contact Us](#) [Privacy Policy](#) [Link Disclaimer](#) [USA.gov](#)

In Action

Coastal Inundation Toolkit

[Home](#)

[About](#)

[Glossary](#)

[Resources](#)

Understand

Understand basic information about coastal inundation

Identify

Identify your county's exposure and examine potential impacts

Map

Map inundation to "see" potential impacts

Assess

Assess community risk, vulnerability, and resilience

Communicate

Communicate risk information to your community

Discover

Discover how real communities are addressing this issue

Highlighted Resources

[Building Resilient Coastal Communities: Counties and the Digital Coast](#)

This publication by the National Association of Counties highlights many of the Digital Coast resources that county officials can use to address coastal flooding, habitat conservation, and land use issues.



CanVis Visualization Software



- Easy to use
- No geographic information system (GIS) required



NOAA Coastal Services Center
LINKING PEOPLE, INFORMATION, AND TECHNOLOGY

Lake Level Drop Put-in-Bay, Lake Erie



Invasive Species Simulation

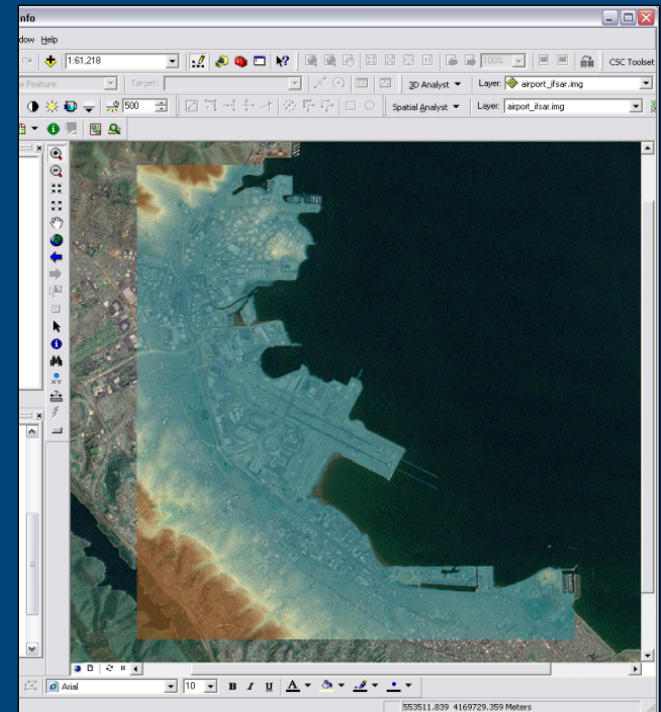
Photo Credit: Don Coles
www.aerialpics.com



Simulation

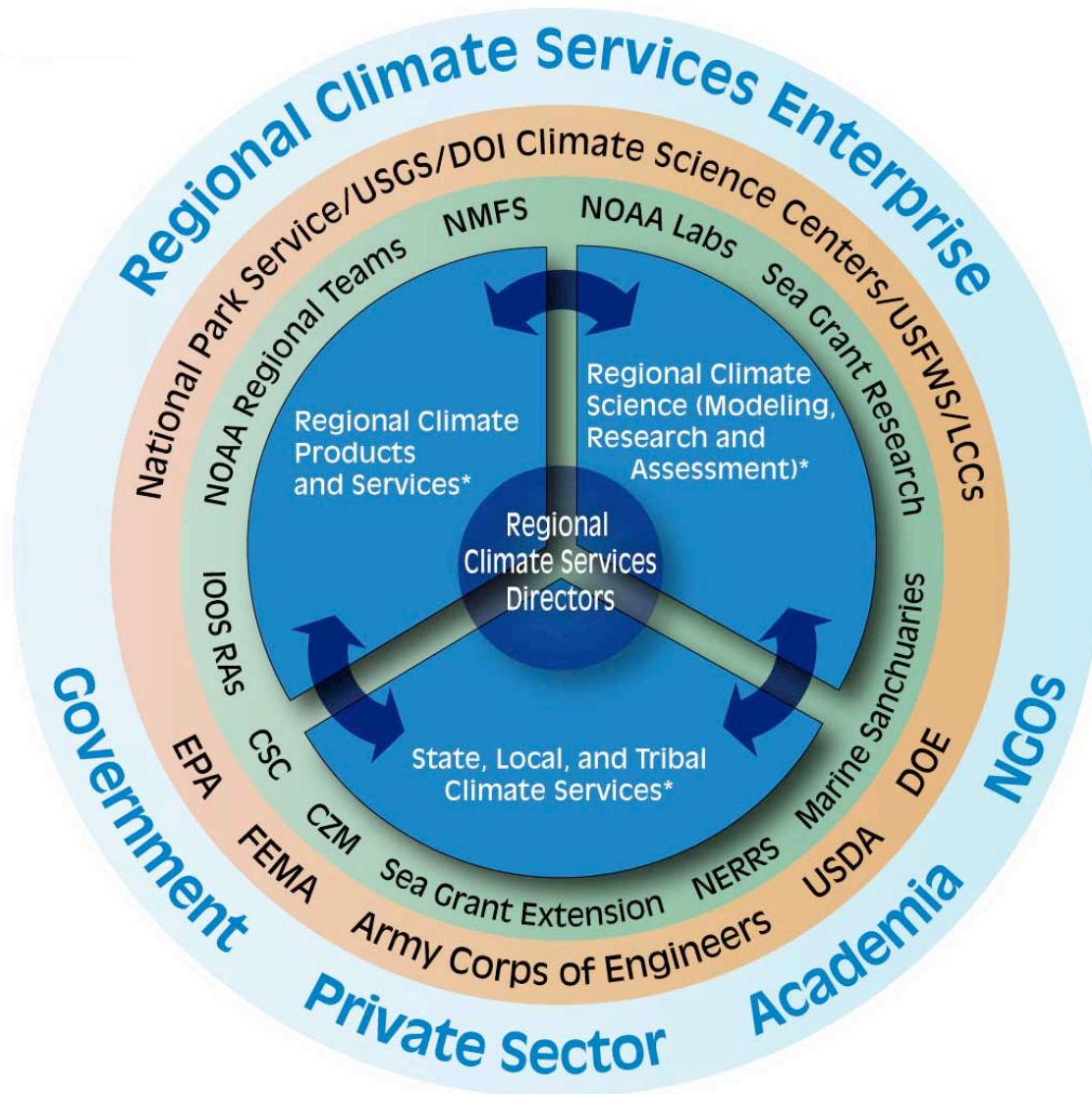
Training

1. Coastal Community Planning and Development
2. Adapting to Coastal Risk
3. Coastal Inundation Mapping
4. CanVis
5. Project Design and Evaluation
6. Public Issues and Conflict Management



NOAA Coastal Services Center
LINKING PEOPLE, INFORMATION, AND TECHNOLOGY

NOAA's Regional Climate Services Program



- National Partners
- NOAA Partners
- Interagency Impacts & Adaptation Support Partners
- Keystone CSO Partners



NOAA Coastal Services Center
LINKING PEOPLE, INFORMATION, AND TECHNOLOGY

What Does It Mean To Be User Driven?

- Engaging users
- Assessing user needs
- Defining the appropriate audience
- Working with them to build capacity



NOAA Coastal Services Center
LINKING PEOPLE, INFORMATION, AND TECHNOLOGY

Extra slides



NOAA Coastal Services Center
LINKING PEOPLE, INFORMATION, AND TECHNOLOGY

A National Climate Service

It would provide wide-ranging benefits to society and the economy, both nationally and internationally

- Improved understanding of the causes and impacts of climate variability and change will enable sound adaptation and mitigation strategies
- More accurate climate predictions will improve preparation for and response to heat waves, drought, coastal inundation, and other phenomena
- Policy makers and business leaders will be equipped with the most accurate and credible information to inform their decisions
- Relevant and reliable climate data will stimulate the private development of technologies and applications



NOAA Coastal Services Center
LINKING PEOPLE, INFORMATION, AND TECHNOLOGY