



Navigating Coastal Climate Adaptation: Freely Available Tools and Resources to Chart Your Course

Gwen Shaughnessy

IMSG for NOAA Coastal Services Center



NOAA Coastal Services Center
LINKING PEOPLE, INFORMATION, AND TECHNOLOGY

Presentation Outline



- Coastal Services Center
- Climate Adaptation for Coastal Communities training
- Where do tools and resources plug in?
- Questions



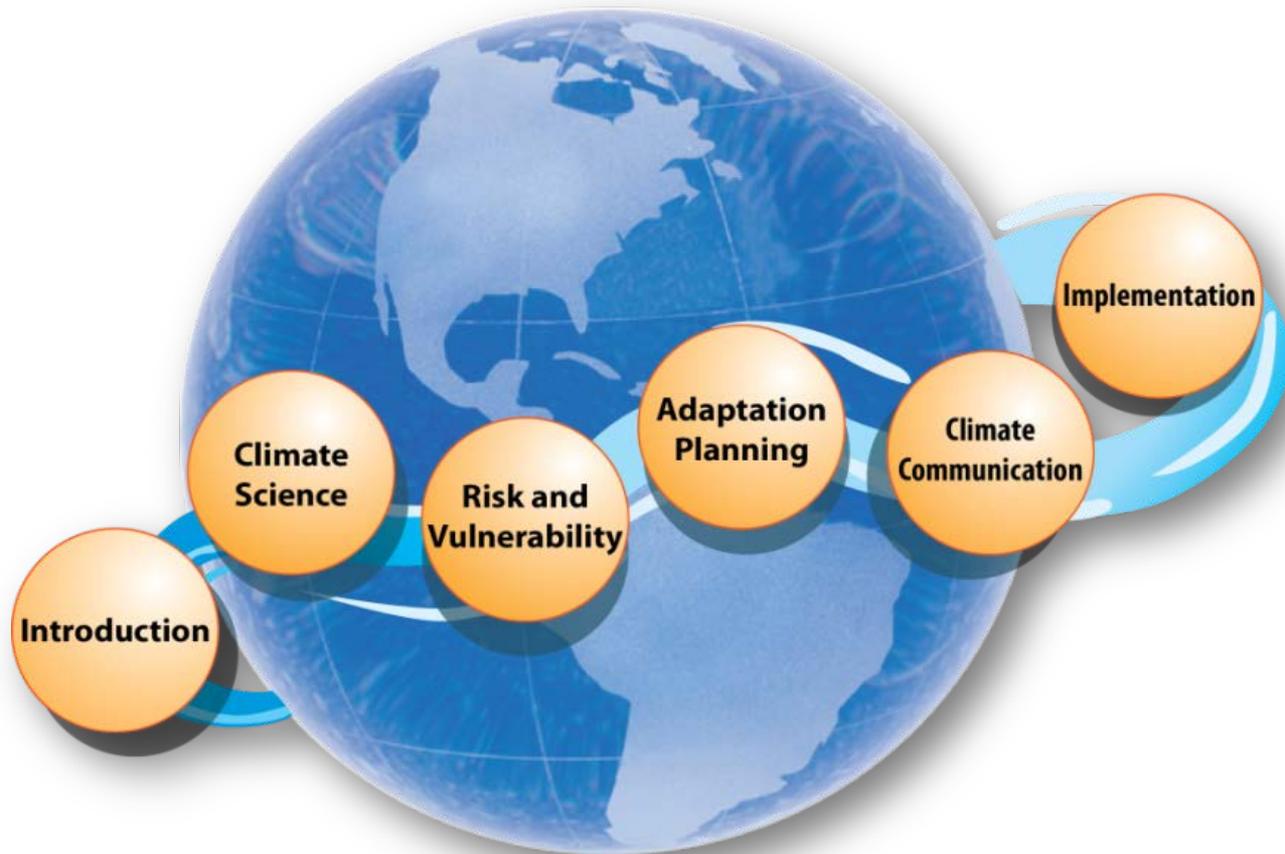
NOAA Coastal Services Center

**“Linking People,
Information, and
Technology”**



NOAA Coastal Services Center
LINKING PEOPLE, INFORMATION, AND TECHNOLOGY

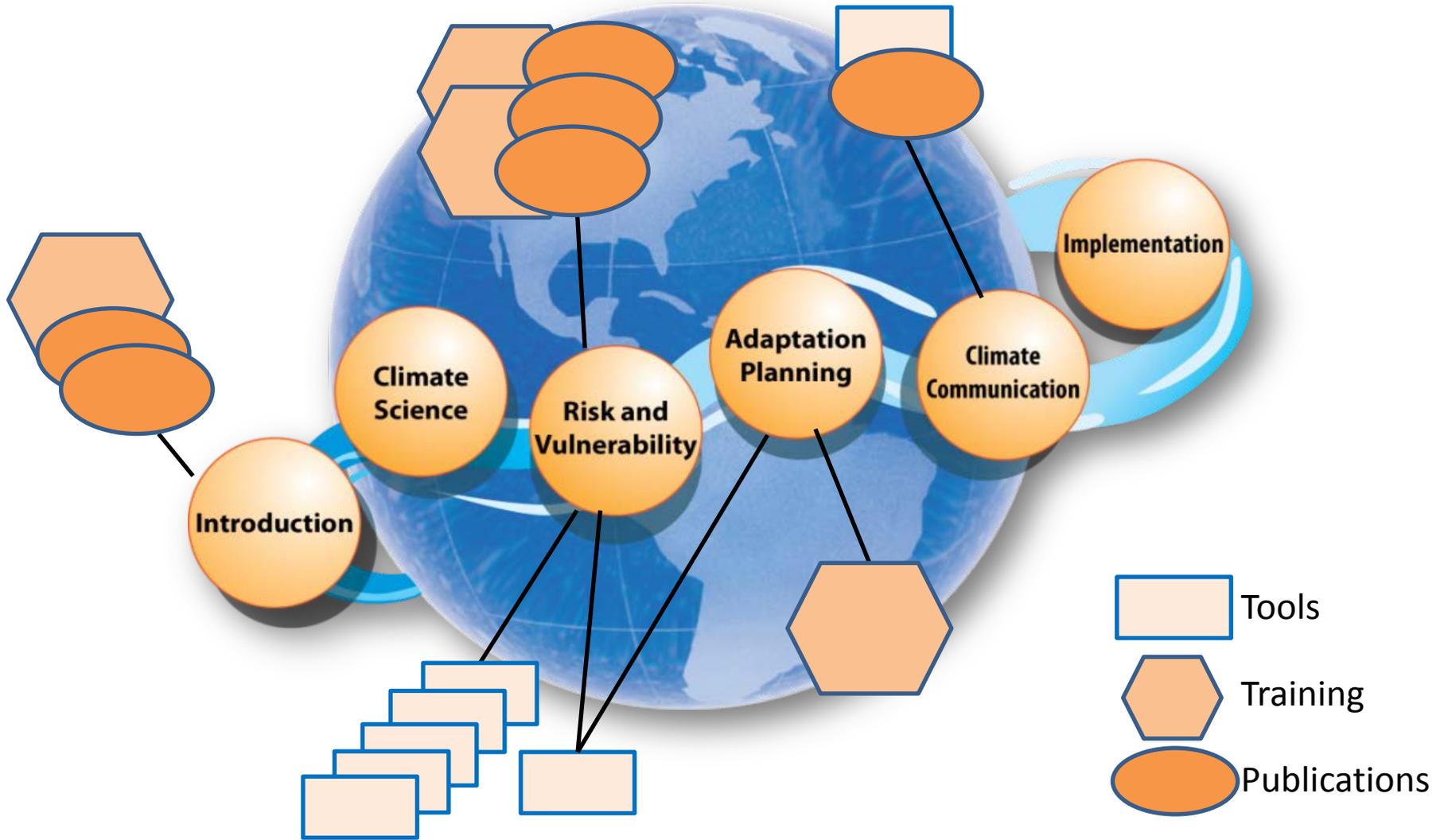
Climate Adaptation for Coastal Communities Training Course

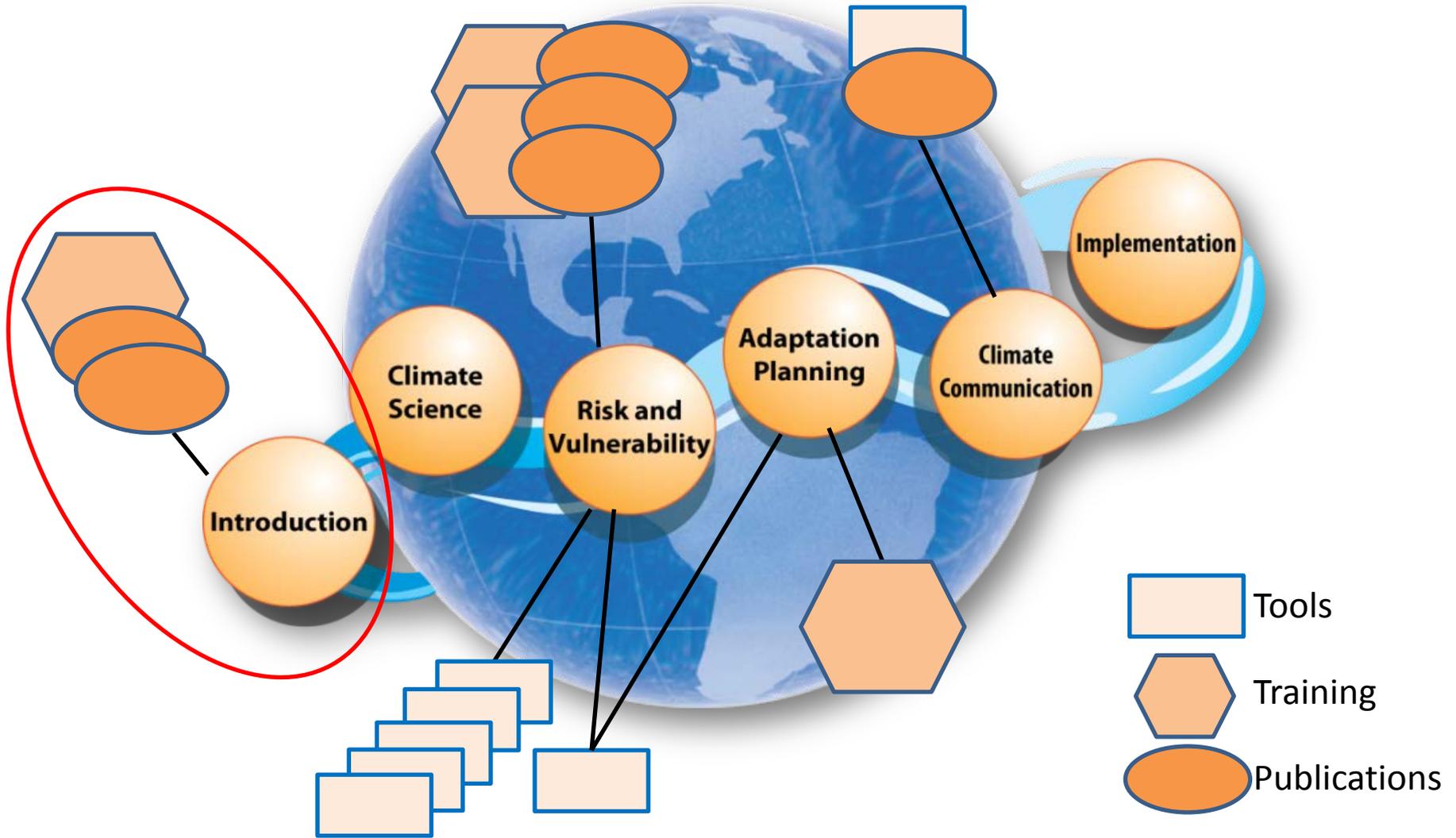


<http://www.csc.noaa.gov/digitalcoast/training/climate-adaptation>



NOAA Coastal Services Center
LINKING PEOPLE, INFORMATION, AND TECHNOLOGY



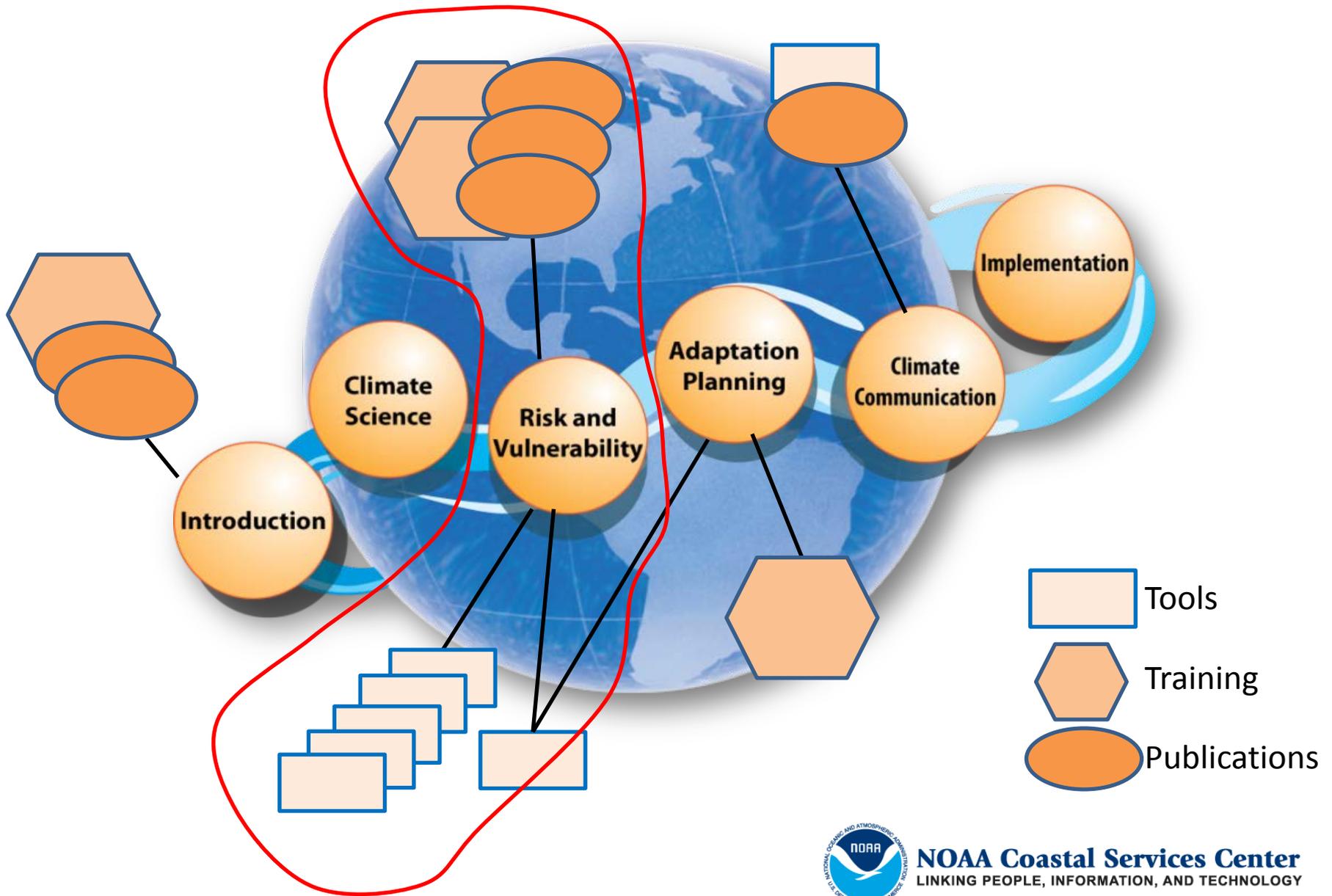


Best Practices for Stakeholder Engagement



- Introduction to Planning and Facilitating Effective Meetings
- Introduction to Stakeholder Facilitation





Roadmap for Adapting to Coastal Risk

May 8 1-4pm EST



RISK-WISE STRATEGIES

ECOSYSTEM PROFILE

Risk-Wise Strategies

INFRASTRUCTURE PROFILE

Ecosystem Profile



Infrastructure Profile

HAZARDS PROFILE

Societal Profile



Hazards Profile

Getting Started

Coastal County Snapshots

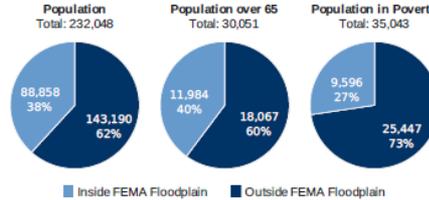
- Flooding impacts
- Demographics
- Environment
- Infrastructure

Flood Exposure Snapshot Chatham County, Georgia

COASTAL COUNTY SNAPSHOTS
www.csc.noaa.gov/snapshots/

**People + Floodplains = Not Good
High-Risk Populations + Floodplains =
Even Worse**

The more homes and people located in a floodplain, the greater the potential for harm from flooding. Impacts are likely to be even greater when additional risk factors (age, income, capabilities) are involved, since people at greatest flood risk may have difficulty evacuating or taking action to reduce potential damage.



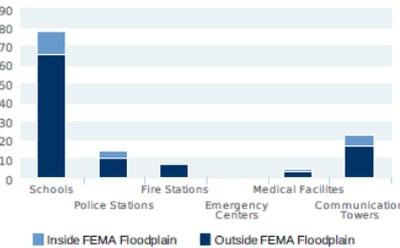
Based on 2000 U.S. Census records.

Community Infrastructure + Floodplains = Bad News

18% of critical facilities and 33% of road miles (679 miles) in Chatham County, Georgia, are within the floodplain.

Hospitals, Roads, Schools, Shelters. These facilities play a central role in disaster response and recovery. Understanding which facilities are exposed, and the degree of that exposure, can help reduce or eliminate service interruptions and costly redevelopment. Incorporating this information into development planning helps communities get back on their feet faster.

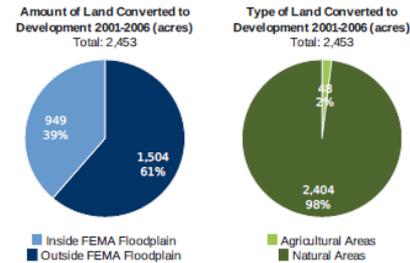
Critical Facilities in FEMA Floodplain



Based on Critical Facilities from FEMA HAZUS.

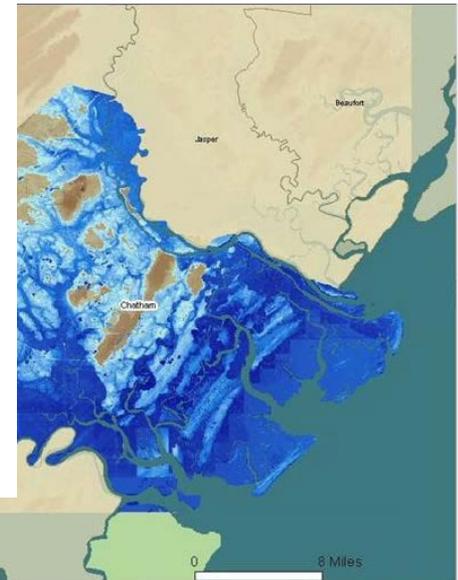
**Increasing Development in Floodplains =
More People in Harm's Way
Loss of Natural Buffers = Less Protection**

A county with more natural areas (wetlands, forests, etc.) and less development within floodplains typically has lower exposure to flooding. A county that monitors land cover changes within the floodplain will detect important trends that indicate whether flood exposure is increasing or decreasing. Armed with this information, local leaders can take steps to improve their safety and resilience.



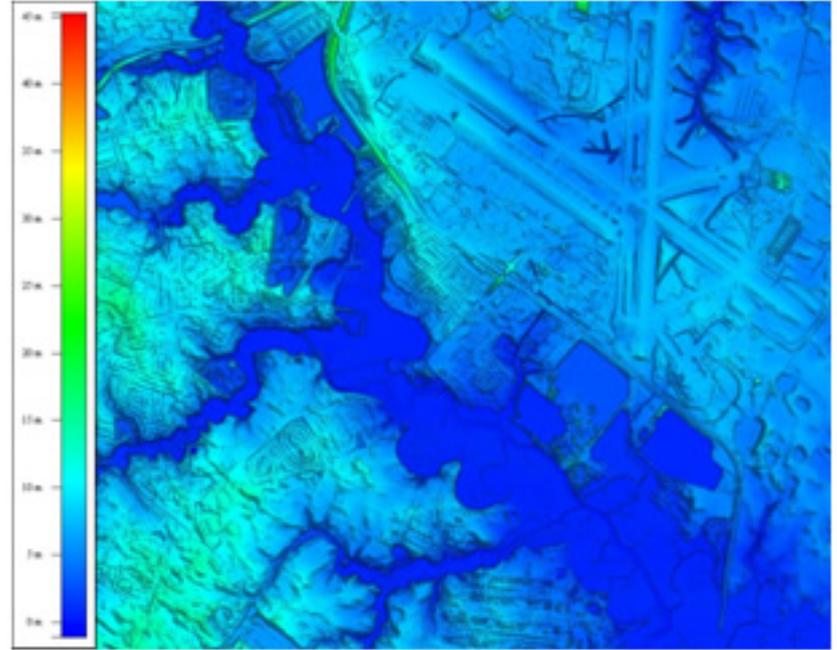
Based on NOAA Land Cover Data.

Date Printed: October, 2011



Inundation Data, Tools, and Training

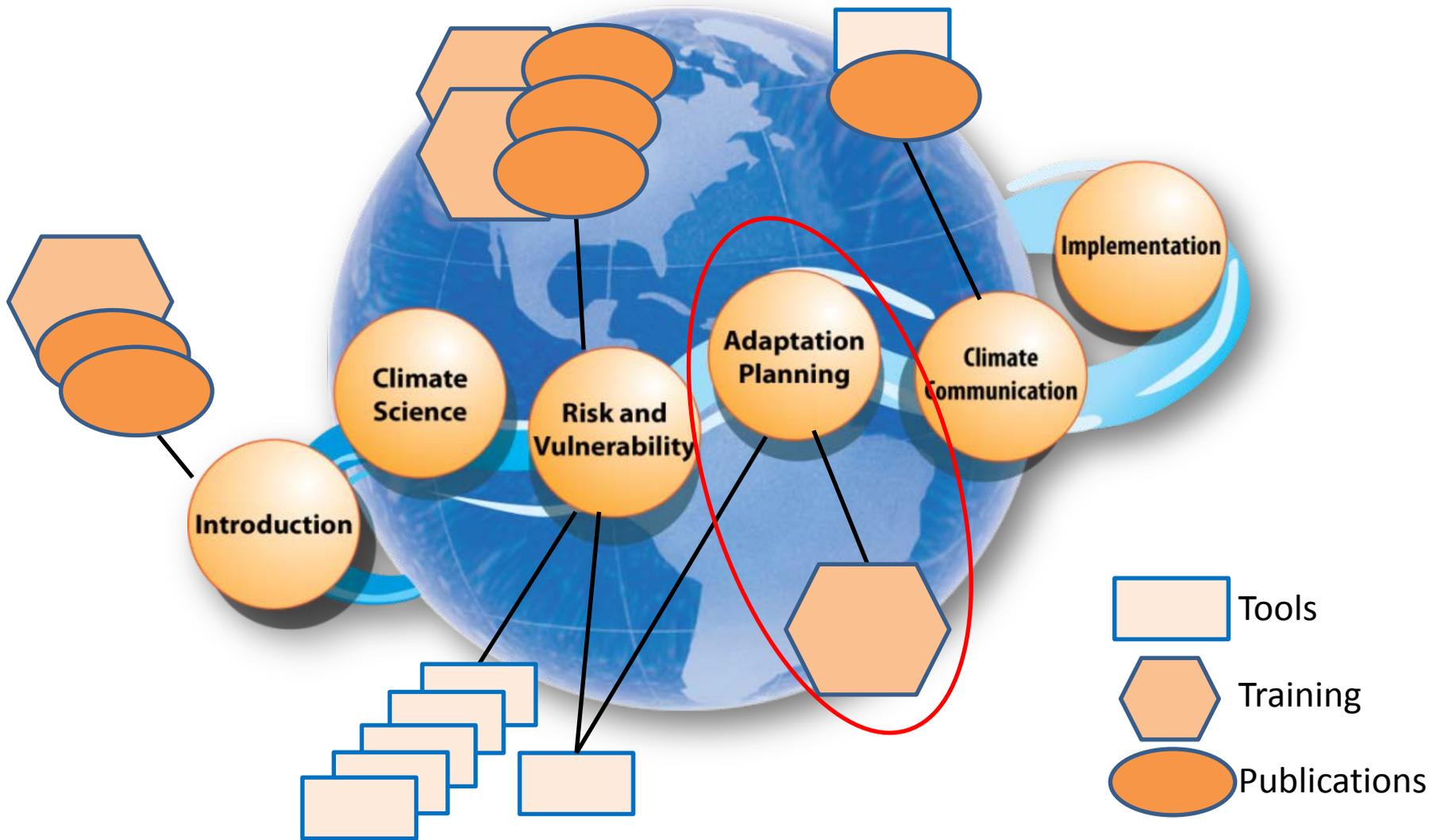
- Topographic and bathymetric data inventory
- Lidar elevation data
- Land cover data
- Socio-economic data
- Inundation mapping guidebook
- Coastal inundation mapping



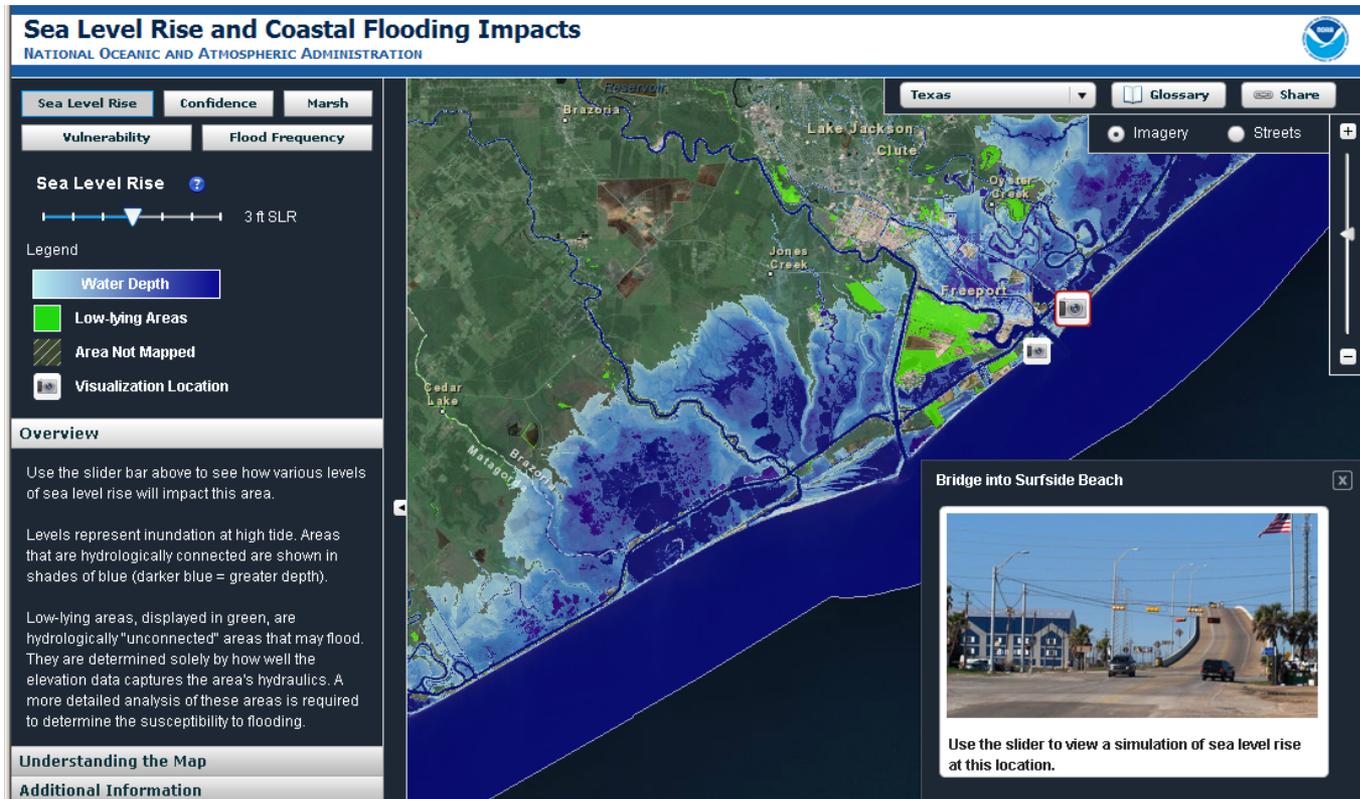
www.csc.noaa.gov/digitalcoast



NOAA Coastal Services Center
LINKING PEOPLE, INFORMATION, AND TECHNOLOGY



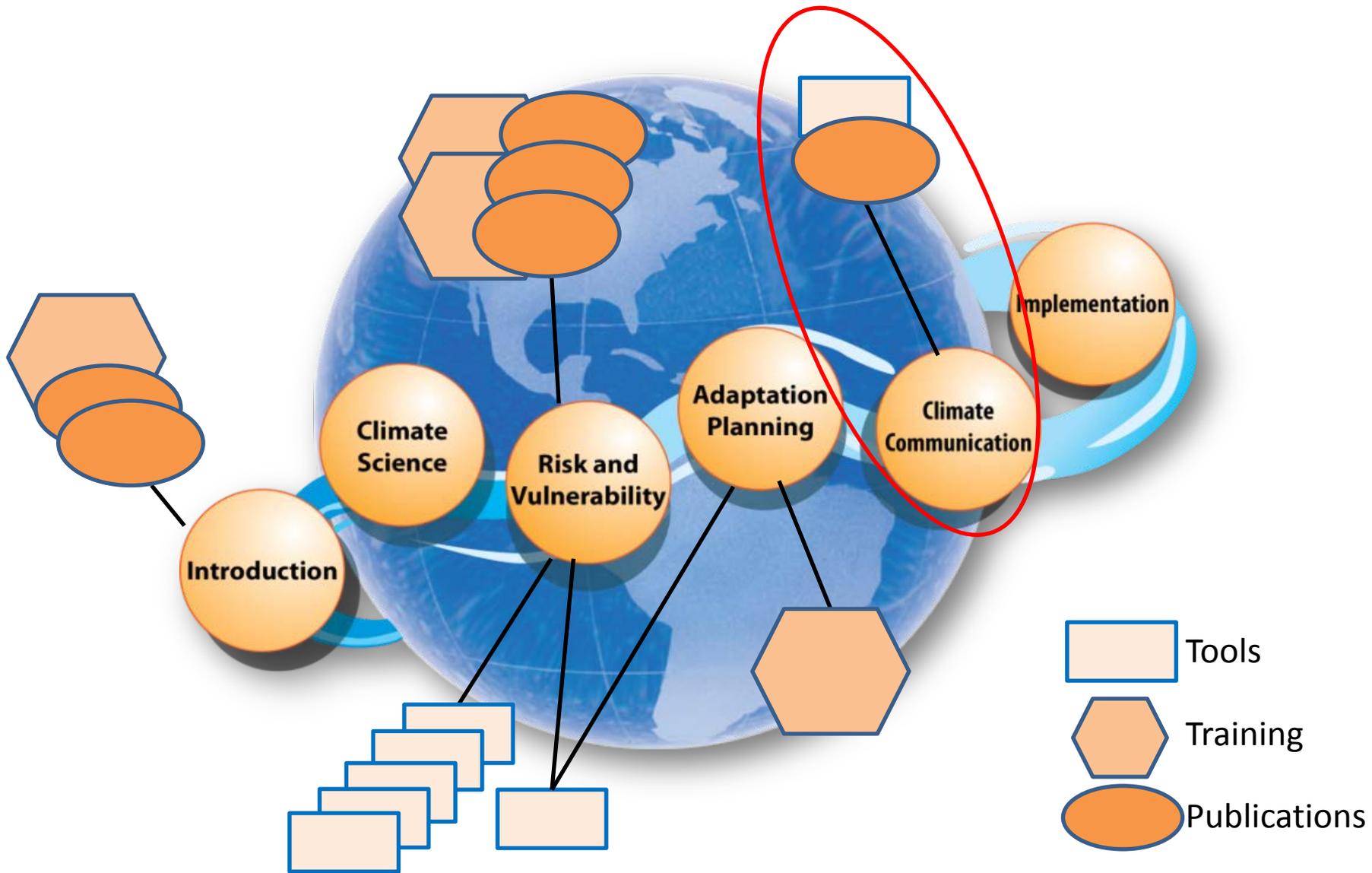
Sea Level Rise and Coastal Impacts Viewer



<http://www.csc.noaa.gov/digitalcoast/tools/slrviewer>



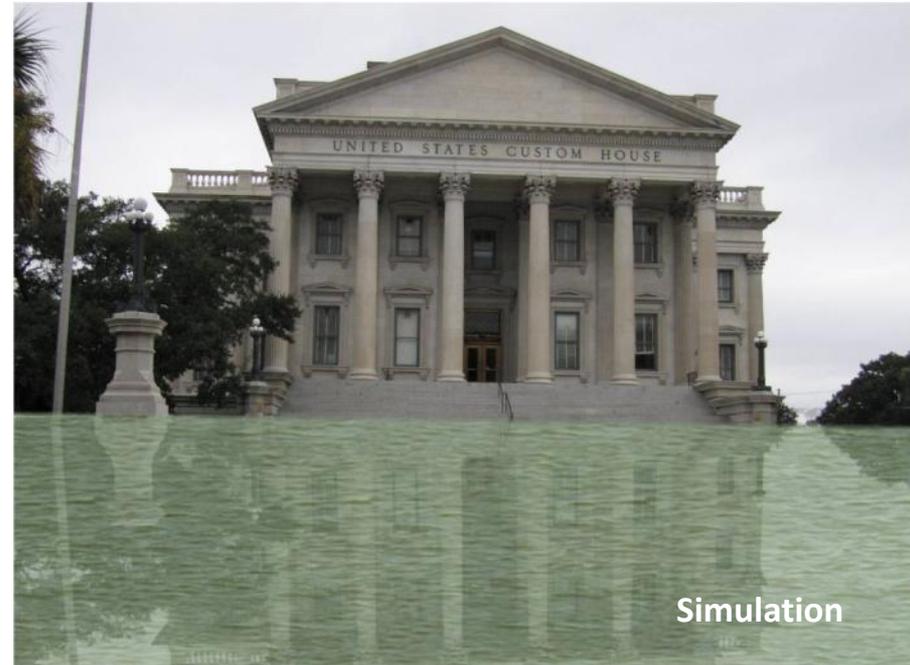
NOAA Coastal Services Center
LINKING PEOPLE, INFORMATION, AND TECHNOLOGY

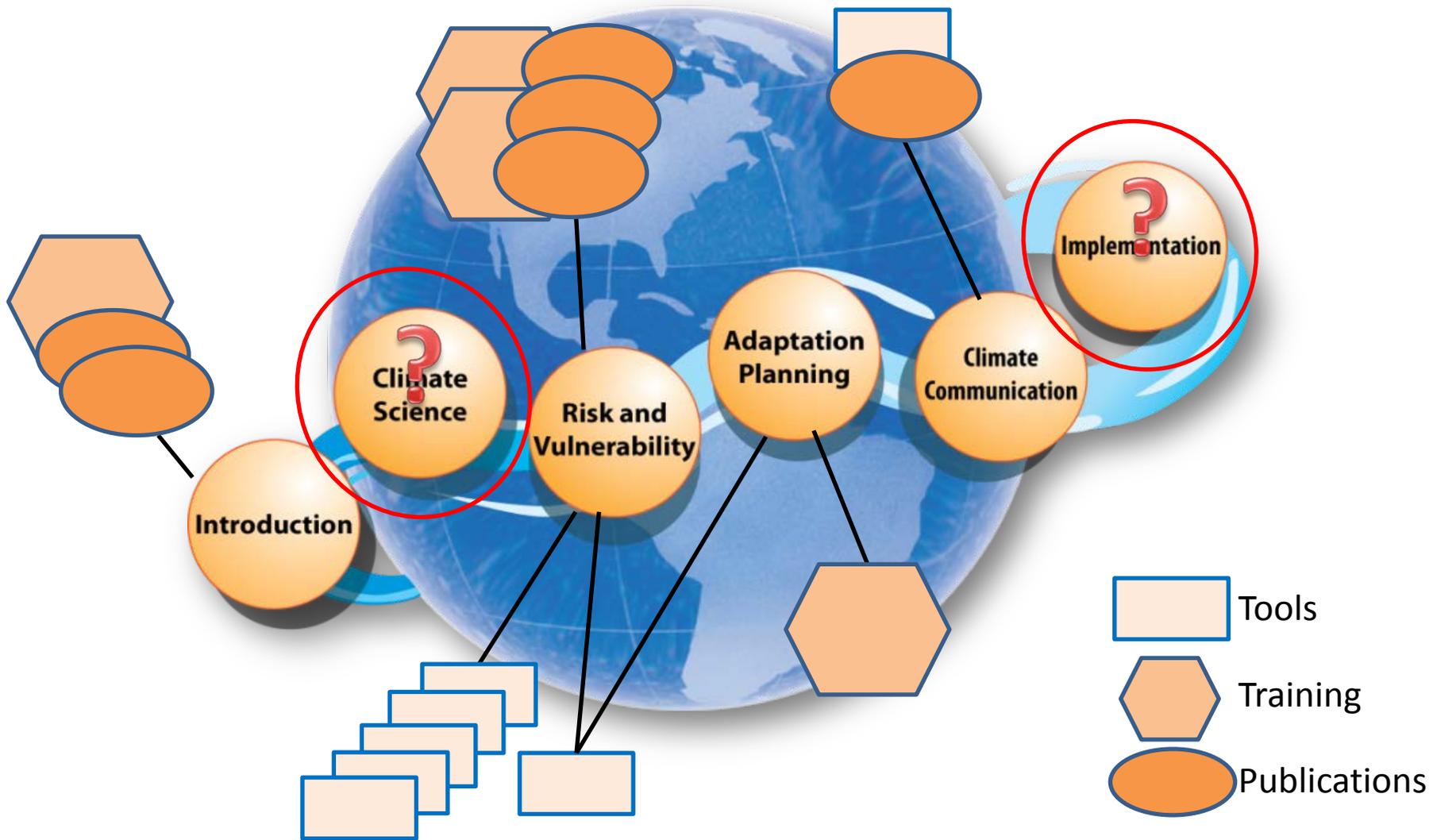


Visualize and Communicate Potential Impacts with CanVis



- Easy to use
- Geographic information system (GIS) not required
- Training and technical assistance available







Questions?

Gwen.Shaughnessy@noaa.gov



NOAA Coastal Services Center
LINKING PEOPLE, INFORMATION, AND TECHNOLOGY