



Leveraging NOAA Expertise to Address Regional Priorities: NOAA's North Atlantic Regional Team (NART)

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October 14, 2008



Why Regional Collaboration?

- NOAA established the Regional Collaboration effort to support integrated, regionally-tailored implementation of NOAA-wide programmatic priorities and provide [a more systematic approach to both internal and external communications.](#)
- Success in this effort will be measured by NOAA's ability to advance the work of the agency towards these goals:
 - *Improved internal communications efficiency across line offices and programs*
 - *Improved value and productivity of partnerships*
 - *Improved external stakeholder relations and support*
 - *Improved visibility and perceived value of NOAA*
 - *Improved services for the benefit of NOAA's customers*

See:

http://www.ppi.noaa.gov/PPI_Capabilities/regional_collaboration.html

The Teams

Regional Collaboration Teams, consisting of Line Office leaders, focus on stakeholder engagement and the priority areas specific to their region.

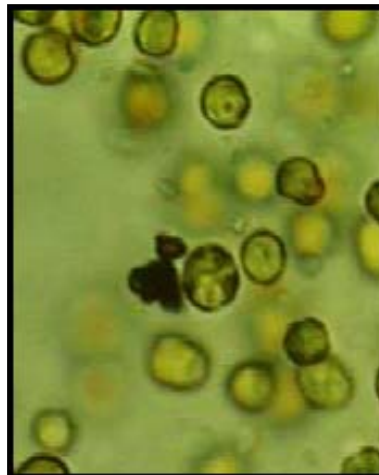
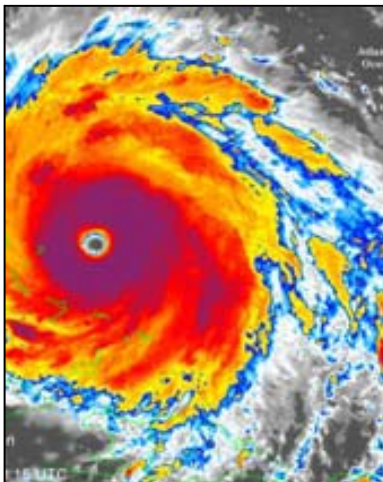
- Alaska
- Central
- Great Lakes
- Gulf of Mexico
- North Atlantic
- Pacific Islands
- Southeast & Caribbean
- Western



The Priorities

Priority Area Task Teams. At the national level, the Priority Area Task Teams are responsible for coordinating the NOAA effort among regions in four priority areas:

- Hazard Resilience Coastal Communities (Davidson)
- Integrated Ecosystem Assessments (Murawski)
- Integrated Water Resource Services (Carter)
- Outreach and Communication (Koch)



Role of Regional Teams

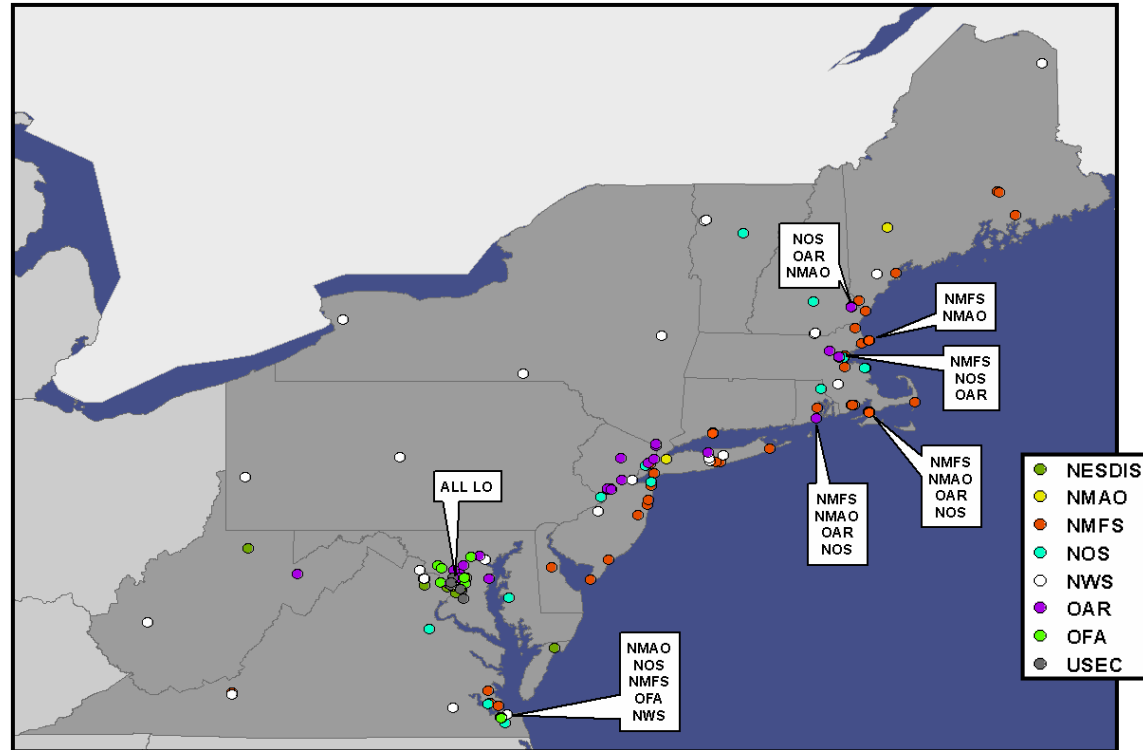
The roles of the Regional Teams in advancing these goals are to:

- *Engage regional partners, stakeholders, and customers on NOAA's behalf to foster dialogue regarding products and services required to meet NOAA's mission goals.*
- *Facilitate collaboration among NOAA entities and partners in the region to address national and regional priorities.*
- *Promote awareness and understanding of NOAA's capabilities, services, and programmatic priorities to targeted audiences.*



Overview of the North Atlantic Region

- Our 180 coastal counties (including DC) constitute 40% of the region's total land area and contain 77% of the region's population.
- 34% of Nation's coastal population
- Region's coast has 4 of the Nation's 10 largest metropolitan areas: New York, DC/Baltimore, Boston & Philadelphia.
- Region has 3 of the top 5 U.S. ports in terms of value of fish landed
- Over 1,000 sq. m. along the coastal Northeast are at risk from a 20-inch rise in sea level.
- 1997 MD harmful algal bloom event = \$50M. 2005 New England HAB event = \$15M in MA.
- Region has 5 of the Nation's top 20 ports for international cargo volume: NY/NJ, Hampton Roads, VA, Baltimore, Portland, ME and Philadelphia





North Atlantic Champions & Key Partnerships

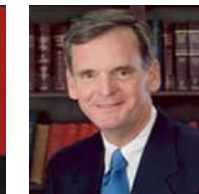
- **Specific Regional Constituents:** Northeast Regional Ocean Council, Gulf of Maine Council, Chesapeake Bay Program, Ocean & Coastal Observing Regional Associations, Fishery Management Councils, coastal resource management community.
- **International:** Gulf of Maine initiatives on seafloor mapping, fisheries management coordination and NOAA -Canada Dept Fisheries & Oceans ocean action plan collaboration.



Gulf of Maine Council on the Marine Environment



Examples of NOAA's North Atlantic Congressional Champions:

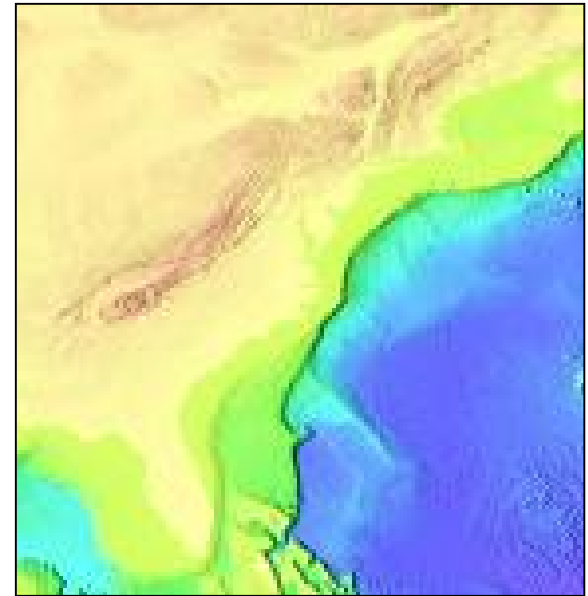


North Atlantic Problems and Challenges

- **Increasing population density on the coasts**
- Degradation and other human impacts
- Vulnerability to hazards (including storm surge & flooding) and resilience
- Diminished water & air quality and habitat loss

- **Expanding coastal uses**
- Commercial and recreational fishing
- Aquaculture
- Proposed alternative energy projects
- Ports and marine transportation
- Tourism and recreation

- **Expected climate change**
- Coastal inundation from sea level rise
- Water resource management under increased flooding & drought
- Habitat change and loss





Opportunities

- **Address population pressures / improve community resilience to hazards**
 - Inundation mapping for communities
 - Visualization tools for coastal and emergency managers
 - Federal interagency coordination
 - Smart growth, shoreline management, and community restoration efforts

- **Enhance regional collaborative approaches to management**
 - Integrated data and mapping resources
 - Aquaculture expertise for emerging use conflicts
 - Federal consistency to address energy development
 - Integration of expanding marine transportation needs with other coastal uses
 - Seafloor mapping to support state and federal ocean management
 - Scientific and policy expertise for new EAM efforts

- **Expand and enhance coastal observing & modeling capability**
 - Real-time water quality and hydrologic monitoring and modeling
 - Forecasts for environmental phenomena (e.g., HABs, extreme weather events)
 - Integrated products for recreational and fishery interests

NART Membership

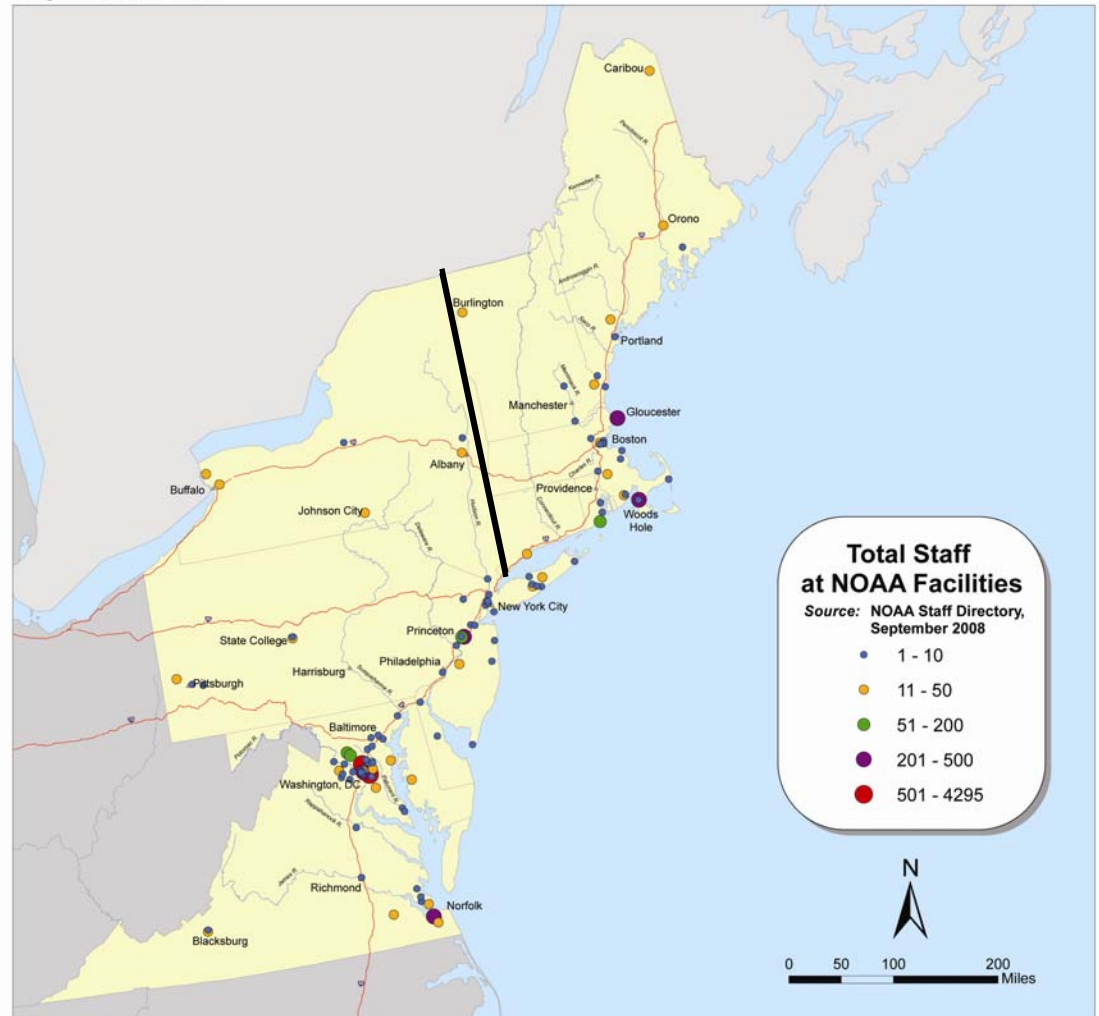
Team Member	LO
Dean Gulezian Team Lead	NWS
George McKillop	NWS
Reggina Cabrera	NWS
Tony Siebers	NWS
Bob Thompson	NWS
David Vallee	NWS
Peyton Robertson Mid-Atlantic Dep.	NMFS
Kathi Rodrigues	NMFS
Steve Giordano	NMFS
Betsy Nicholson New England Dep.	NOS
Adrienne Harrison	NOS
Darlene Finch	NOS
Ellen Mecray	OAR
Molly Baringer	OAR
Scott Mowery	NESDIS



How we Function

- Two subgroups:
 - Mid-Atlantic
 - New England

North Atlantic Region
September 2008





NART FY 2007 Projects

- Established the North Atlantic Regional Team (NART) and initial activities, including:
 - 12 conference calls held among NART members.
 - meeting of the entire NART in April to draft FY 2007-2008 work plans.
 - sub-regional meetings held in New England and the Mid-Atlantic.
 - NART Outreach and Communications plan was developed.
- Efforts began on following projects:
 - Identified a liaison to the NOAA IWRS PATT Water Quality Monitoring Network Pilot Study in the Delaware River Basin Estuary.
 - Coastal inundation projects in New England and Chesapeake Bay
 - In New England, implementing routine generation (2 to 4 times per day) of real time gridded storm surge fields at WFO Taunton.
 - In Chesapeake, gathered data to run an atmospheric model for an historical event (e.g., Hurricane Isabel). Subsequently ran the hydrodynamic model using data generated by the atmospheric model.
- Developed a draft directory of NOAA responders in the North Atlantic.
- Sponsored a NOAA 200th Anniversary Celebration in Gloucester.
- Gathered existing regional needs assessments with the assistance of all NART members.



FY 2008 Projects: Completed

- Inventoried stream gauge network in the Potomac River towards integrating NOAA and USGS data
- Data collection for an ecosystem assessment of the Penobscot River watershed and the Gulf of Maine
- Chesapeake Network for Education of Municipal Officials
 - Presentations completed and delivered on “Linking Land, Water and Growth”, “Planning the Direction of Your Community”, and “Forest Conservation and Stewardship.”



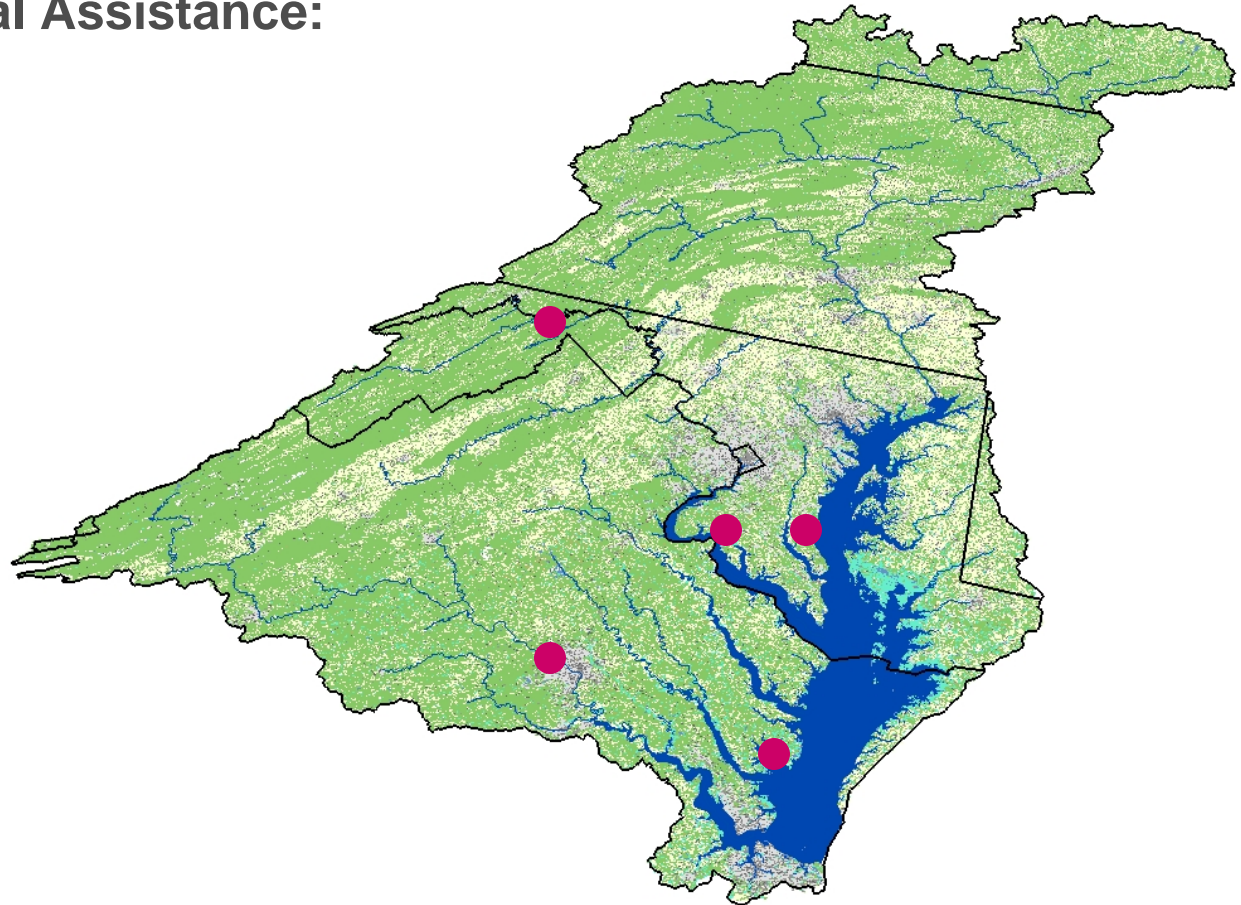
Helping Your
Community Link Land,
Water & Growth

Education & Technical Assistance:

Mathews County VA
Cumberland MD
Calvert County MD

**Technical Assistance
(LID Ordinance Reviews):**

Goochland County VA
Charles County MD



A satellite-style map of Mathews County, Virginia, showing a complex network of waterways and islands. The map is overlaid with a dark green gradient. Several islands are labeled: Berkley Island in the top left, Gwynn Island in the top center, and Rigby Island in the middle right. There are several blue and purple dots scattered across the map, likely representing specific locations or data points.

Mathews County

The Need:

- Upcoming comprehensive plan revision
- Prepare citizens & officials
- Bring GIS up-to-date



Talking About The Future

Second Tuesdays In Mathews

October 9: Linking Land, Water and Growth

November 13: Growth – What’s Happening In & Around Mathews?

December 11: Mathews Economy: Fostering Sustainable Economic Development

January 8: Mathews Valuable Resources

February 12: Planning the Direction of Your Community

Sponsors:



MCSEED



Mathews
Memorial Library

C H E S A P E A K E



Virginia

Helping Your
Community Link Land,
Water & Growth

Talking About The Future

Second Tuesdays In Mathews

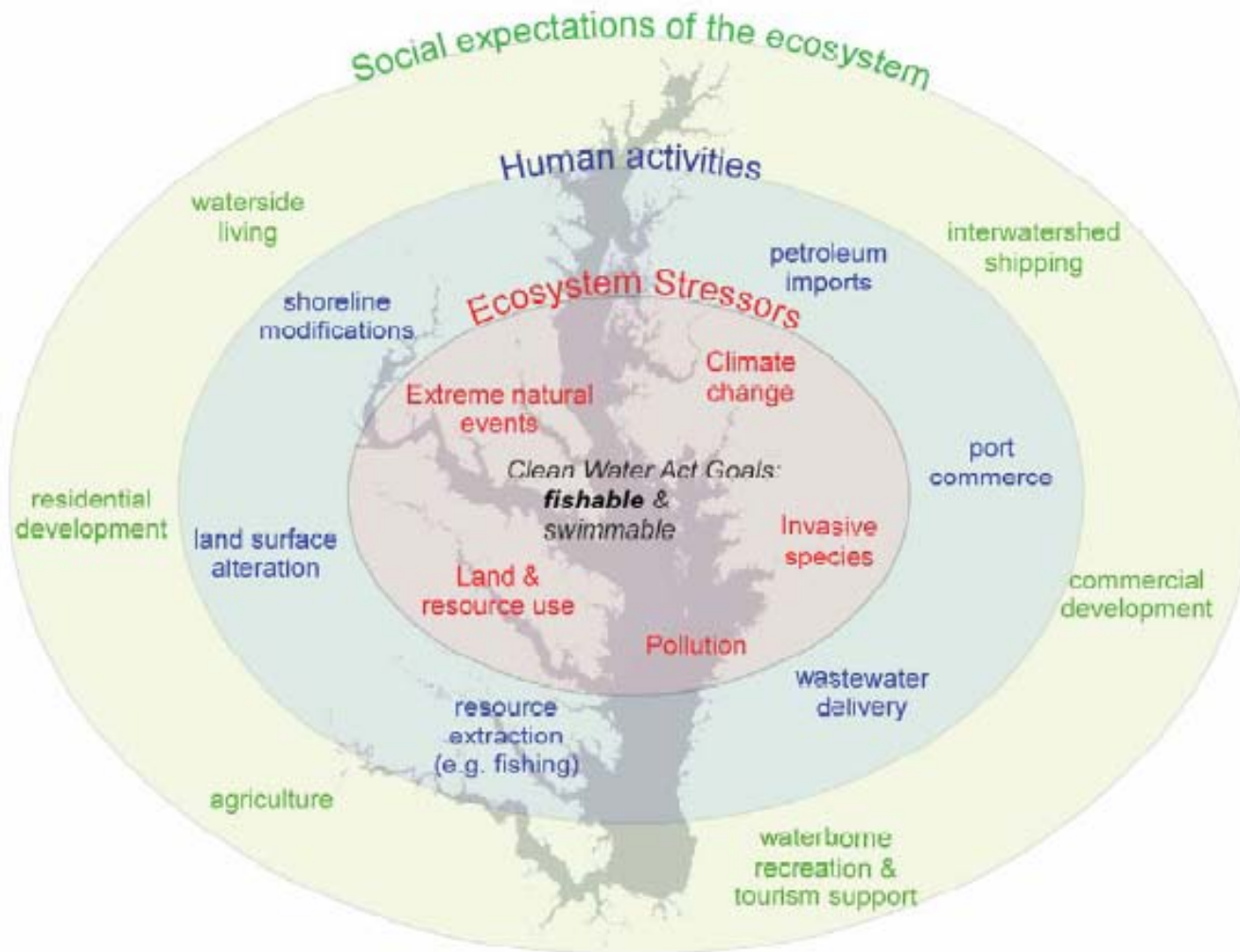




FY 2008 Projects: Ongoing

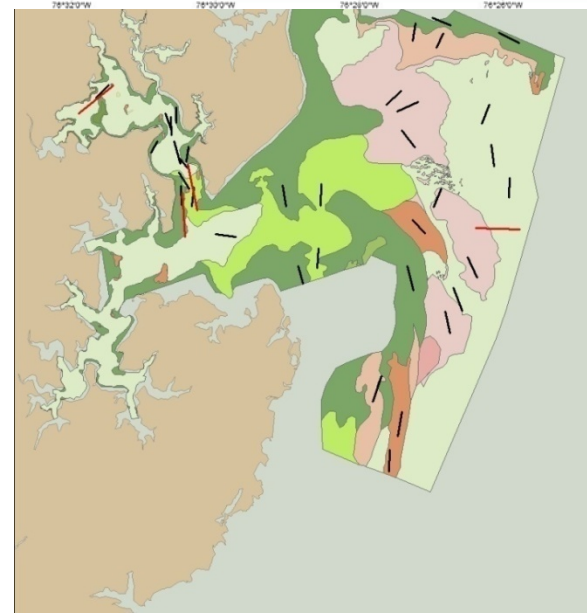
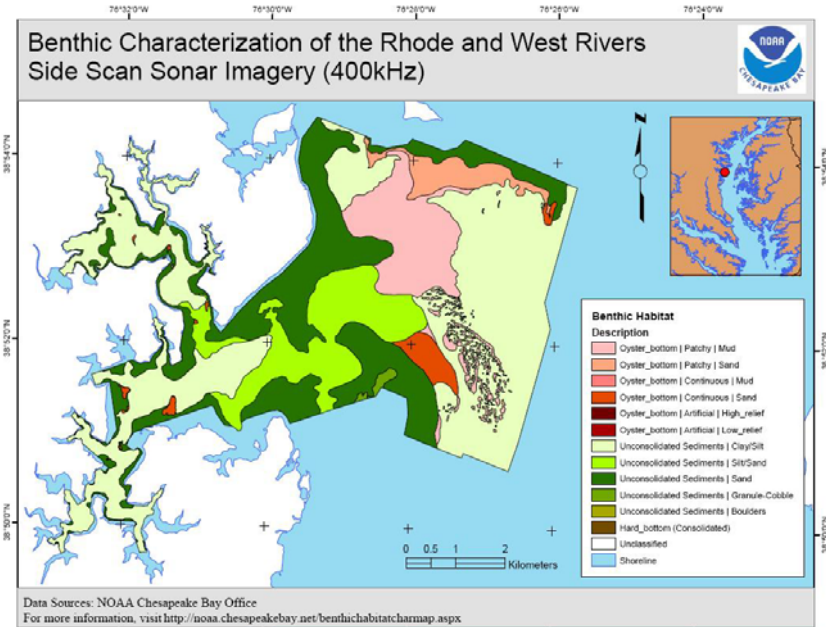
- Initiated Pilot Integrated Ecosystem Assessment in the Chesapeake Bay.
 - Scoping and design have been completed, data collection and some integration has begun.
- Coastal Inundation Visualization
 - Enhanced Prediction and Visualization of Coastal Inundation in Two New England Communities Highly Vulnerable to Extra-Tropical Storms
 - Coastal Flooding and Inundation Forecasts and Visualization in the Chesapeake Bay and Estuaries
- Needs Assessments for New England and the Mid-Atlantic and Partner/Stakeholder Engagement
 - Synthesis completed for New England and a draft will be completed by the end of FY 2008 for Mid-Atlantic.
- Northeast Regional Ocean Council (NROC)
 - NOAA staff in NE are engaged in NROC priority issue work groups covering the topics of energy, ocean & ecosystem health, and hazard resiliency. Work group action plans are due for completion by October 08.

Chesapeake Bay Integrated Ecosystem Assessment: A Pilot Study



Site selection & Sampling design

- Small sub-watershed (20-30,000 acres) without extensive upstream hydrology.
- Contrasting land use and reference site
- Similar salinity
- Located within working distance of laboratory



Habitat affinity/suitability analyses: Fish sampling stratified by habitat type

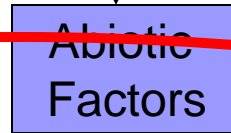
Conceptual Framework



Development
Agriculture



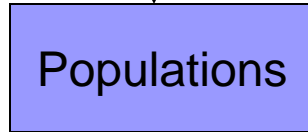
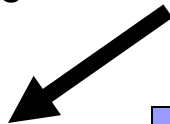
Contaminants
Nutrients
Habitat



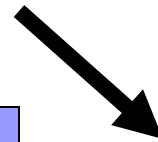
Microbial
Molluscs
Crustacea
Fish



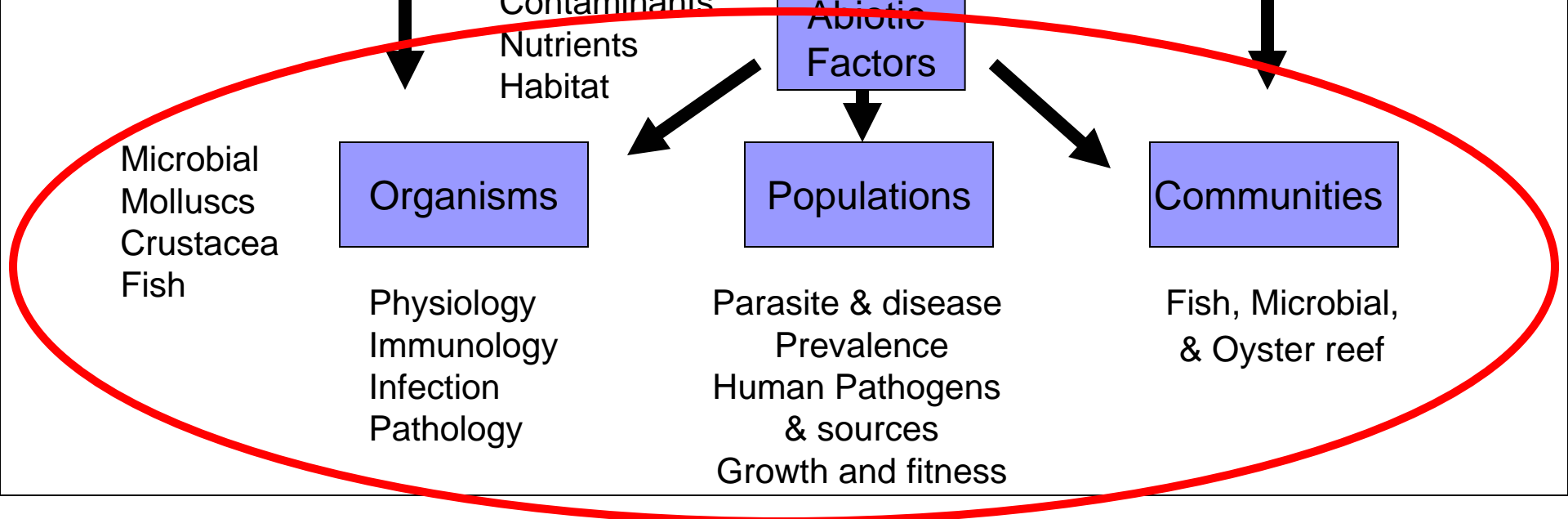
Physiology
Immunology
Infection
Pathology



Parasite & disease
Prevalence
Human Pathogens
& sources
Growth and fitness



Fish, Microbial,
& Oyster reef

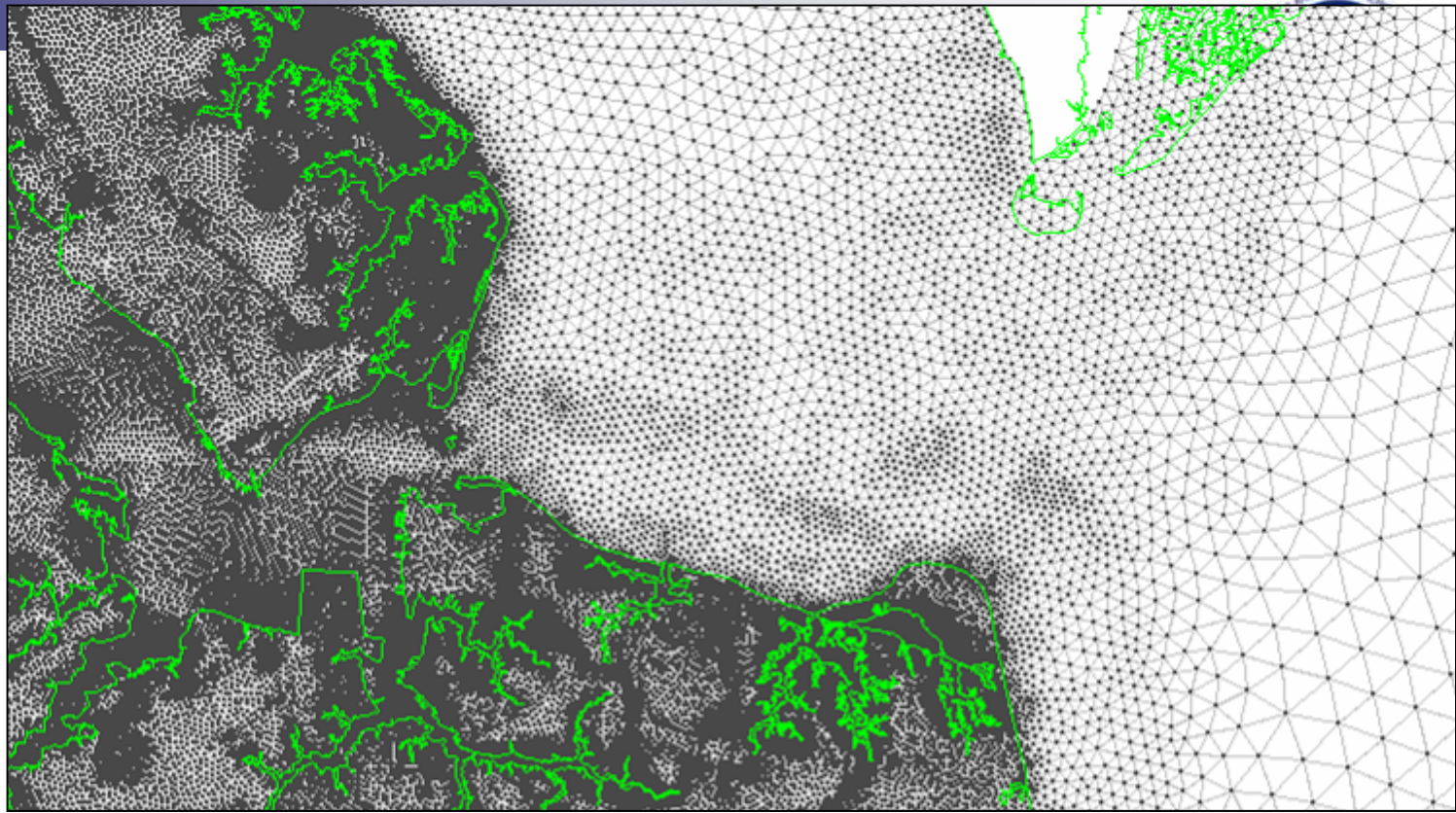




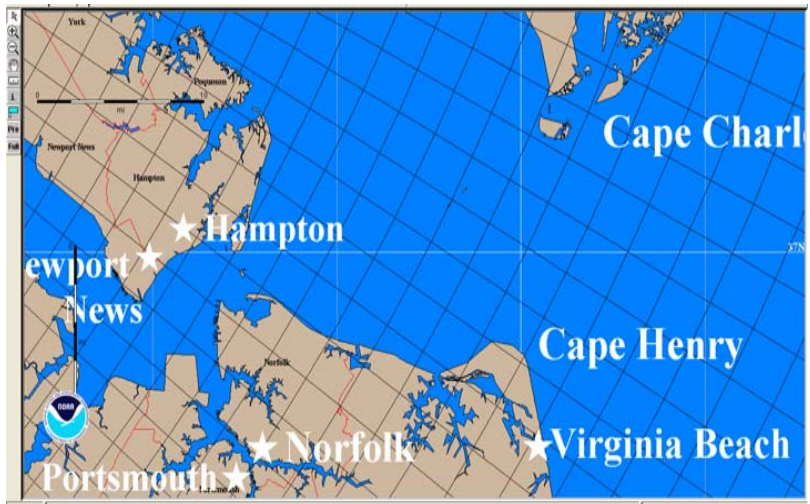
Chesapeake Inundation Prediction System (CIPS)



***Predicting the Next Storm Surge Flood:
A Regional Prototype for a National Problem***



SLOSH
Model
Grid



VIMS Model
Grid

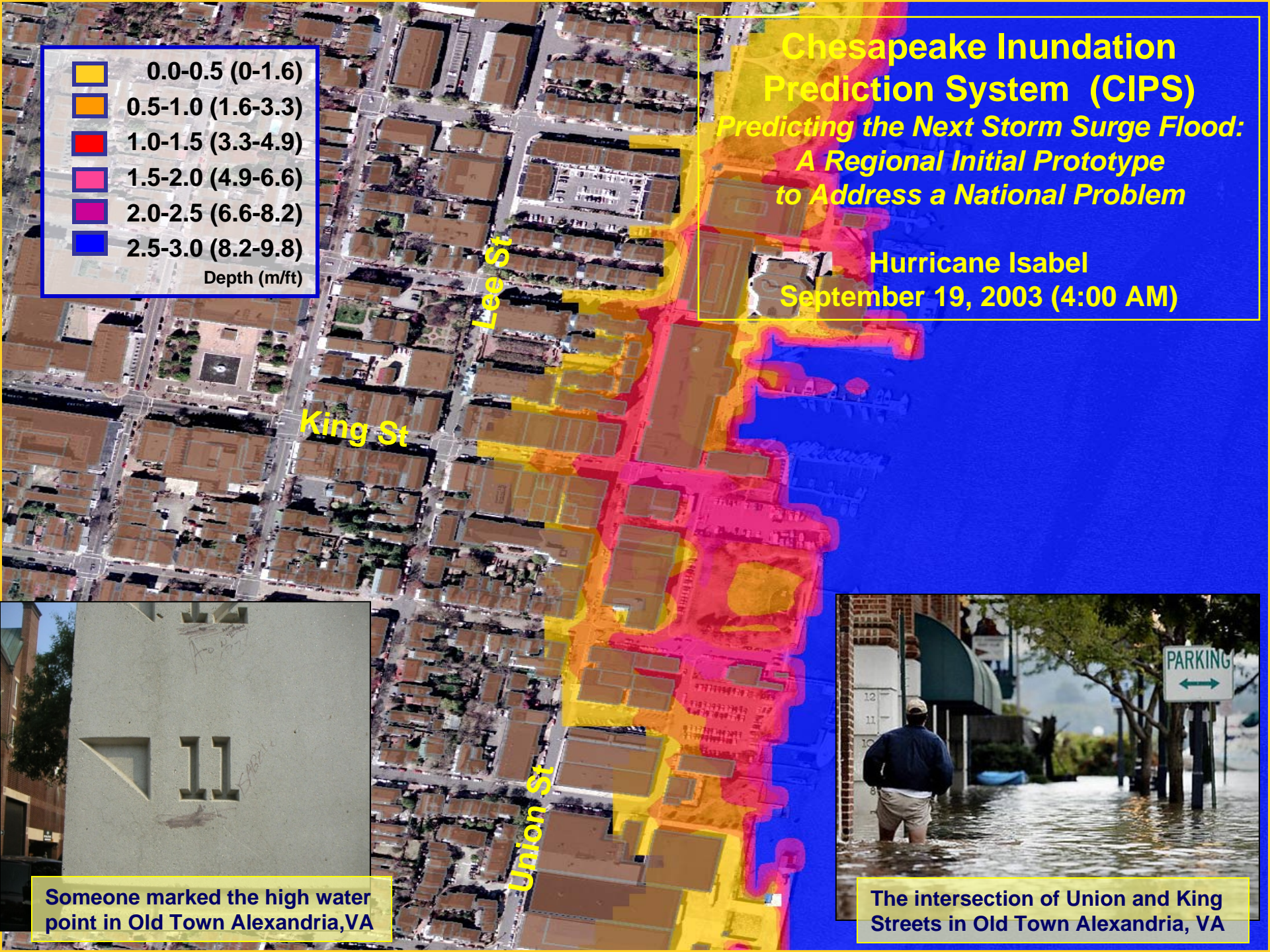




Depth (m/ft)

Chesapeake Inundation Prediction System (CIPS)
*Predicting the Next Storm Surge Flood:
 A Regional Initial Prototype
 to Address a National Problem*

Hurricane Isabel
September 19, 2003 (4:00 AM)

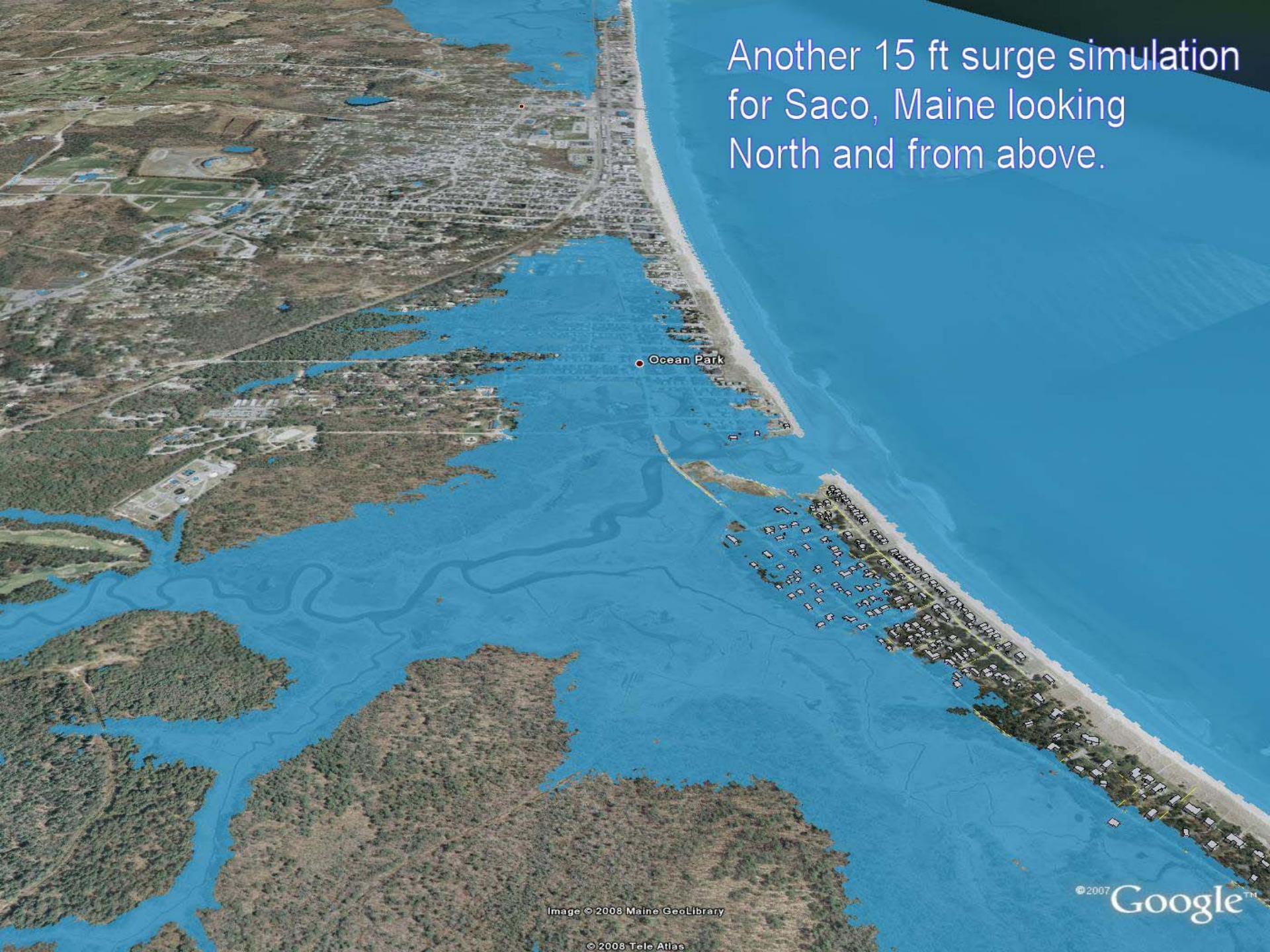


Someone marked the high water point in Old Town Alexandria, VA



The intersection of Union and King Streets in Old Town Alexandria, VA

Another 15 ft surge simulation for Saco, Maine looking North and from above.





FY 2009 NART Projects

- Areas of emphasis
 - Expanded outreach and communications, especially to external partners, stakeholders and customers.
 - Series of focus groups to ground truth regional needs in five priorities areas (i.e., EBM, climate, energy, hazard resilience, integrated water resources, outreach and communications)
 - Continuation of FY 2008 NART projects
 - Increasing interactions (e.g., project sharing, lessons learned) with other regional teams
 - Address regional priorities

What's ahead

- Transition to a new regional team lead and establish new regional coordinator.
- Sustain and expand engagement of regional team members.
- Develop forums for sharing lessons learned across the PATTs and regional teams.
- Identify and pursue mechanisms for influencing LO expenditures in the region based on regional partner needs.
- Develop mechanisms for sharing North Atlantic needs information with rest of NOAA (e.g., across teams, with LO leadership, with goal teams)



How you can help:

- North Atlantic Region includes Silver Spring – many relevant projects
- Help us be informed of your work – use the team to **COMMUNICATE!**
- Help us keep constituents informed of our work – use/share your outreach networks to help us **COMMUNICATE!**
- Bring new ideas and projects to the table
- Get involved – whether a formal team member or not
- “Talk amongst yourselves...”

