Preparing New Jersey for Climate Change

Watershed, Rivers and Coastal Adaptation to Climate Change Panel

> Tim Dillingham, Executive Director American Littoral Society <u>www.littoralsociety.org</u>

Where are we in terms of CC planning, preparedness and community resilience?

<u>Challenges</u>

- I. Knowledge of climate change impacts
- 2. Appropriate tools and models
- 3. Certainty-Uncertainty
- 4. Psychological and institutional barriers (goals, policies, and procedures)
- **5**. Resources
- 6. Political will

State of Knowledge

 "There is a clear and compelling need....to begin preparedness planning..." – Invitation to today's conference

- Morning speakers
- Studies in recent years:
 - EPA (and Barnegat Bay and Delaware NEPs)
 - Rutgers (and American Littoral Society)
 - New Jersey Department of Environmental Protection
 - CUNY, Columbia, Rutgers
 - New Jersey Department of Transportation

Appropriate Tools and Models

Planning tools:

- NJ DEP "Coastal Community Hazard Resiliency" tool and "Getting to Resiliency" questionaire/program
- A consortia of groups (JCNEER, Rutgers Center for Remote Center and Spatial Analysis, Barnegat Bay Estuary Program, and Sustainable Jersey Climate Adaptation Task Force, and NJDEP) working to identify and develop tools as guidance for local gvt use building upon NJDEP (Climate Vulnerability Assessment and Getting to Resiliency) and CRSSA projects (Mapping)

DOT: Transportation vulnerability and risk study
Climate Ready Estuaries programs

Psychological and institutional barriers Goals, policies, and procedures

The Legislature finds and declares that....the issue of global warming has caused alarm, awareness, and action concerning climate changes occurring around the globe attributed to the high level of certain gases called "greenhouse gases" – gases that increase temperatures in the atmosphere and the risk of catastrophic changes to the Earth's ecosystems and environment; and that, as a State, there are specific actions that can be taken to attack the problem of global warming.....

New Jersey Global Warming Response Act – 2007

Resources

Global Warming Solutions Fund*
Climate Ready Estuaries Programs

Political Will

 Politico.com May 26, 2011 - Chris Christie wants it known he's not a skeptic on global warming.

"In the past I've always said that climate change is real and it's impacting our state," Christie said... "There's undeniable data that CO2 levels and other greenhouse gases in our atmosphere are increasing. This decade, average temperatures have been rising. Temperature changes are affecting weather patterns and our climate."

 Politico.com November 18, 2011- GOP presidential candidate Mitt Romney admitted Friday that he's a serial exhaler of carbon dioxide..."I exhale carbon dioxide," he added. "I don't want those guys following me around with a meter to see if I'm breathing too hard." What can be the most effective approaches for advancing "best practices" for preparedness and community resilience?

"Point of Entry" Questions

- "Adaptation planning at all levels of government is key to minimizing the public health, environmental and economic damage that is expected" – GWRA Recommendations Report on Adaptation
 - State level development of science, metrics, modified regulatory requirements. guidance, implementation mechanisms through state authorities, new authority
 - Local level implementation, risk assessment/determination, reduction of vulnerability and enhancement of capacity to plan for, mitigate and adapt to climate change effects

Specific Tools Readily Available to Minimize Risk, Increase Resiliency

Building codes, local zoning

Coastal Area Facilities Review Act (wetlands) restoration, increased wetlands "retreat zones"), Tidal Wetlands Act, Waterfront Development Act, Water Quality Management Planning Act, Flood Hazard Act, Green Acres acquisition, federal and state investment in "shore protection/beach renourishment", transportation investments, dredged materials management, LIDAR surveys, Getting to Resiliency program and vulnerability model

