THE CONTEXT FOR FEDERAL INTEREST IN COASTAL PROTECTION

- **Coastal storm risk management and resilience are critical issues for USACE and the nation.** Hurricanes Sandy and Katrina are the two most costly disasters in American history, together causing more than $150 billion in damage. Sea level change, coastal erosion, back bay flooding and subsidence are also of ongoing concern in coastal communities from rural Alaska to Norfolk, Virginia - highlighting the need for an array of approaches, including both nonstructural and structural solutions, to address coastal storm erosion and flood risks.

- **Shore protection/beach nourishment projects have shown themselves to be effective as one of the principle tools providing resilience.** During Hurricane Sandy, USACE shore protection projects that were well nourished performed exceedingly well. USACE projects that were at the design template level performed sufficiently. Areas that with no shore protection were devastated.

- **The government has insufficient funds to properly construct and maintain shore protection projects on its own.** $125 Million/year would be needed in the state of New Jersey alone to properly construct and maintain existing authorized USACE coastal projects.

- **No single policy fits all coasts.** Geophysical, biophysical, economic, social and demographic conditions vary regionally, setting a different problem and solution space for policy in each region. (See NSMS 101 document)

KEY POINTS TO CONSIDER IN A CONTINUING OR FUTURE POLICY FOR COASTAL PROTECTION

- **It is important to adjust federal authorization policies so that authorized projects can be adaptively managed as well as de-authorized and turned over to non-federal sponsors.** The current short funding cycle and long reauthorization process for USACE coastal projects is a hindrance to reducing project costs in the long run. For example, in Miami, Florida, the placement of modestly sized offshore structures could reduce erosion in existing USACE projects and therefore lengthen the time between nourishment cycles required for these projects. The Dutch Delta Commission provides an example of alternative framework through which shore protection projects are supported by a steady, known funding stream (roughly 1 billion euro/year).

- **All levels of government need policy that encourages alternative sources of funding for shore protection projects, including funds from the private sector.** Storm damage reduction benefits are important to the federal government, but also to the reinsurance industry. Recreation benefits are important to State and local governments, but also to the tourism and outdoor recreation industries. Public-private-public-private partnerships to finance coastal infrastructure could provide a needed new source of funding for shore protection projects.

- **It is important to take a scientifically and environmentally sound systems approach to regional management of coastal shore protection, navigation, and environmental restoration projects.** As an example, the Coastal Systems Portfolio Initiative has collected data relevant to shore protection, ecosystem restoration, shallow draft navigation and flood control with 5-25 year records. Using this database, it is possible to identify 'hotspots' where relatively small investments in shore protection could yield high returns in terms of risk reduction and reduced nourishment costs. Scientific metrics derived from CSPI can also be used to prioritize shore protection projects so that non-federal sponsors have information about the condition of their shoreline and the funding needed for their project, and others in the region, over the next 5 years.

- **It is important to encourage states and groups of states to take on a greater role in this regional systems approach, using federal leadership to get their buy-in.** This is especially relevant in the Mid-Atlantic, with its high density of population and a spatially continuous arrangement of coastal projects. In this context, projects must be considered in terms of their interdependencies with one another along the coastline.