

## *USACE Climate Change Adaptation*

*NATO Advanced Research Workshop  
Hella, Iceland*

Kate White, PhD, PE  
Sr. Lead Global and Climate Change  
Institute for Water Resources  
US Army Corps of Engineers

7 June 2010



US Army Corps of Engineers  
BUILDING STRONG.



## ***USACE Climate Change Adaptation***

- Goal: Practical, nationally consistent, and cost-effective measures to reduce potential vulnerabilities resulting from global changes
- Approach:
  - Collaborative, include science agencies in developing policies and guidance for best available science
  - Parallel rather than sequential
  - Phased to allow for refinement



BUILDING STRONG.®

## Coastal

- Institute nationwide datum and perform comprehensive evaluation of project datums (2007-2009)
- Update existing sea-level change guidance (2009)
- Update coastal vulnerabilities index (now)
- Develop guidance on sea-level change impacts, response, and adaptation (now)



## Hydrology

- Defining user needs:
  - USGS Circular 1331 *Climate change and water resources management—A federal perspective* (Feb 2009)
  - Decadal to multi-decadal decisions: *Addressing Climate Change in Long-Term Water Resources Planning and Management: User Needs for Improving Tools and Information* (June 2010)
  - Sub-hourly to decadal decisions: *Use of Weather and Climate Forecasts in Near Term Federal Water Resources Management: Current Capabilities, Required Capabilities, and Gaps* (In progress, expected fall 2010)



# Hydrology

- Addressing user needs:
  - Science agency responses (2010-2011)
  - Nonstationarity workshop: *Nonstationarity, Hydrologic Frequency Analysis, and Water Management* (Jan 2010)
    - Proceedings (summer 2010)
    - Special issue JAWRA (16 papers)
    - Provide basis for consistent policies
  - Aug 2010 workshop: *Assessing a Portfolio of Approaches for Producing Climate Change Information to Support Adaptation Decisions*

