Report
Working Group / Disaster Impact Assessment & Plans: Weather and Water Data (WG/DIAP)

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WG/DIAP:

- Created post-Hurricane Andrew and sponsored/overseen by the Office of the Federal Coordinator for Meteorology (OFCM) .
- Originally composed of Federal partners, and, more recently, of non-Federal partners as well.
- Coordinates interagency activities related to the acquisition, dissemination, and exchange of weather and water data for environmental disasters., especially data that are highly perishable,
- Seeks synergies and efficiencies and describes types of useful data, but is not prescriptive about specific collections.

Membership

- OFCM
- FEMA
- NIST
- NOAA (NOS/NWS/NESDIS)
- USACE
- USDA
- USGS
- DOT
- DHC
- AAWE
- COPRI

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National Plan

National Plan for Disaster Impact Assessments: Weather & Water Data (NPDIA)

- Interagency document spearheaded in 2010 by OFCM
- Supercedes National Post-Storm Data Acquisition Plan (2003)
- Describes collaborative mechanisms and procedures for coordinating disaster impact assessment and planning activities for interagency response to significant weather and water related disasters
- WG/DIAP decided to restructure the NPDIA due to the requirements of the COASTAL Act

Consumer Option for an Alternative System to Allocate Losses (COASTAL) Act

- Part of the Federal Highway Bill in 2012
- Intended to decrease costs to FEMA National Flood Insurance Program by making a determination of water vs wind damage in "slab" cases
- NOAA conducts post-storm assessments.
- FEMA develops and applies the allocation formula.
- One of NOAA's deliverables is a data collection plan…hence a restructured NPDIA.

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Two WG/DIAP Actions

1. Restructuring of the NPDIA
   - NPDIA is well into the restructuring and rewriting
   - Three ssections:
     - Main body – Introduction and Guidance
     - Appendices – Terms of Reference, Participants
     - Annexes – Data Collection Protocols
       - Generic Data
       - COASTAL Act Data
       - Tornado/Windstorm Data
       - Tsunami Early Warning System Data
       - Glacially Dammed Lakes Data
2. Restructuring of the WG/DIAP leadership to include two co-chairs (one “water” co-chair, one “weather” co-chair)

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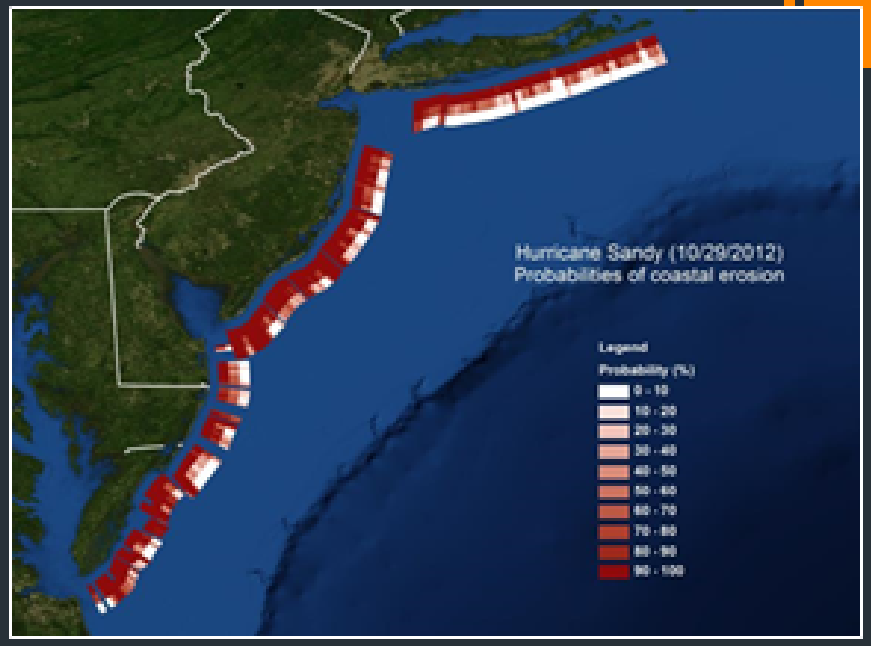
Capabilities Presentations

- FEMA highlighted an interest in Sentinel satellite SAR and Multi-spectral data
- USACE highlighted their national LIDAR coastline surveying on a 5-year repeat cycle as well as their storm surge modeling efforts
- NOAA NOS highlighted their National Geodetic Survey and National Water Level Observation Network as well as their System Wide Monitoring Program
- Digital Hurricane Consortium highlighted initial efforts for rapid-response meteorological, storm surge/wave and structural integrity monitoring
- NOAA NWS highlighted post-tsunami data collection efforts, glacially dammed lakes activities and Civil Air Patrol efforts
- NIST discussed their leadership role in National Windstorm Impact Reduction as well as their interest in structural engineering data related to disaster impacts
- Common threads included:
  - Data dissemination portals
  - Fixed networks of data collection stations
  - Mobile deployments of instruments out ahead of potential environmental disasters

The Interface with the Operational Forecasting Community

Forecast of Coastal Hazard – Hurricane Sandy

- Inputs:
  - Lidar-based shorelines, dunes (USGS, USACE)
  - Storm surge (NOAA)
  - Wave conditions (NOAA)
  - Wave runup (USGS)
- Output: Probabilities of
  - Dune erosion
  - Overwash
  - Inundation
- Assessments are posted online and updated with current NHC meteorology as the storm approaches landfall.



% of coast very likely to experience coastal change :

	Dune erosion (inner)	Overwash (middle)	Inundation (outer)
Long Island, NY	93	12	4
New Jersey	98	54	21
Delmarva	91	55	22

Courtesy of Dr. Joe Long, USGS

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